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ARCHAEOLOGICAL INVESTIGATIONS AT ROUNDSTONE LANE, ANGMERING, WEST SUSSEX

FINAL REPORT

Project No. 1333

September 2003

by Neil Griffin BSc AIFA

with major contributions by Luke Barber, Chris Butler, Sue Hamilton, Pat Hinton, Malcolm Lyne, Mike Seager-Thomas, Lucy Sibun and Samantha Crawt

ARCHAEOLOGY SOUTH-EAST

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INTRODUCTION

The site (Fig. 1) is situated on land formerly occupied by nurseries and light industrial units immediately west of Roundstone Lane, Angmering, West Sussex (centred TQ 07200 03850) and occupies an area of approximately 254,520m^2. The site's boundaries are somewhat irregular, but can broadly be described as being formed by Roundstone Lane to the east, Shrubbs Nursery to the south, modern housing to the west (principally along Acorn Close, Ashdown Close and Foxdale Drive), allotments and early modern to modern housing fronting High Street and subsidiary lanes to the north.

Topographically the site lies on the West Sussex Coastal Plain, approximately 2km north of the present coastline and slopes gently from between approximately 15mOD at the north to 10mOD at the south. The underlying geology at the site according to the British Geological Survey, is Brickearth overlying Upper Chalk at the northern part of the site and overlying Middle chalk at the south.

ARCHAEOLOGICAL BACKGROUND

Planning permission was granted to a consortium of developers (principally Berkley Homes) for the erection of houses and associated infrastructure of roads, etc. Arun District Council imposed an archaeological condition as part of the planning consent under advice from West Sussex County Council due to the archaeological potential at the site.

Berkley Homes commissioned CgMs Consulting to undertake a desk based assessment in order to establish the archaeological potential at the site and assess the impact that the proposed development may have on any archaeological deposits (Hawkins 2000a). This assessment drew on information held at the West Sussex County Records Office and Sites and Monuments Record and is summarised below.

There was no artefactual evidence of earlier prehistoric activity within the immediate vicinity (2,000m search area) of the site at the onset of the initial phase of fieldwork. A Bronze Age flint axe is recorded approximately 140m south of the southern limits of the site. Subsequent archaeological evaluation and excavation by the Oxford Archaeology Unit on the Angmering Bypass to the east of the development site located extensive evidence of Middle Bronze Age settlement (Oxford Archaeology 2002). Moderate evidence for Iron Age activity, based on small dispersed pottery assemblages, approximately 150-200m north-east and north-west of the site was also known. Numerous Roman settlement and activity sites were identified within 2,000m of the site, including the 'Angmering Villa' and associated bathhouse (Scott 1938 and 1939; Keef 1945 and Wilson 1947), a cremation burial and isolated finds of pottery, metalwork and building material. Only two isolated Saxon metalwork finds are recorded in the vicinity and cartographic sources suggest that the site comprised of open agricultural land south of the settlement of Angmering during the medieval and post-medieval periods. An Anglo-Saxon enclosure was located *c.* 700m north-east of the site.

Based on the findings of this report, the University College London Field Archaeology Unit was commissioned by CgMs Consulting on behalf of the consortium of developers to undertake a Stage 1 archaeological field evaluation at the site in order to assess the character and quality of archaeological remains, should they be present (Griffin 2000). This evaluation revealed a number of features across the site that were primarily of either Bronze Age date (represented by ditches and cremation vessels) or Roman date (represented by ditches, pits, post-holes and a hearth/oven), with only a small number of Iron Age, medieval and post-medieval features.

The results of the evaluation identified four areas across the site (Areas A to D) that, due to the density of features, would require further (Stage 2) excavation fieldwork prior to construction at the site. A small number of dispersed features were also located within evaluation trenches that fell outside of the Subsequent Stage 2 excavation areas. Full details of these features are retained with site archive, which is held at Littlehampton museum.

METHODOLOGY

The Stage 1 archaeological evaluation of the site was undertaken between 31st October and 8th December 2000. This initially consisted of 50 trenches (numbered 1-50, Fig. 2) *c.* 50m in length and *c.* 1.8m wide excavated by a 13 ton tracked excavator equipped with a 1.8m wide toothless bucket.

Four further trenches (A to D) were added to the scheme to cover areas of the site that were not considered to have been adequately sampled by the initial trench layout. Their size and method of excavation were identical to that mentioned above. Two contingency trenches (E and F) were excavated in order to clarify the nature and extent of the archaeological features identified within Trench 22 and measured *c.* 45m and *c.* 23.5m in length respectively.

Excavation was taken down to the top of archaeological deposits or to the surface of geological drift deposits (whichever was uppermost). All archaeological features were planned at an appropriate scale in relation to the trench outline and at least 50% of features identified within each trench were sampled (1m wide slots across linear features, half sections of discrete features, etc.). All work was undertaken in accordance with the Specification provided by CgMs (Hawkins 2000b).

Owing to time constraints, only a summary of the findings was produced (Griffin 2000) and this was used to formulate a strategy for the Stage 2 excavation. This took the form of the stripping of disturbed deposits (topsoil, ploughsoil, rubble debris derived from recent demolition works at the site, etc.) down to the surface of archaeological features or geological drift deposits within four separate areas (Areas A to D, Fig. 2) and was carried out using both 15 ton and 13 ton tracked mechanical excavators equipped with 1.8m wide toothless buckets.

One metre wide sections at 10m intervals were hand excavated across linear features and discrete features were half sectioned or quadranted as appropriate. Additionally,

post-holes and artefact-rich discrete features were subsequently 100% excavated in order to recover as much dating evidence as possible.

All Stage 1 and Stage 2 work was carried out in accordance with a Risk Assessment and brief Method Statement prepared by Archaeology South-East and approved by CgMs and WSCC. The working methodology of the Stage 2 excavation had been formulated using the Stage 1 evaluation Specification and the standard WSCC *Recommended Standard Conditions for archaeological fieldwork* with a view to modifying the agreed methodology once the extent and nature of the archaeological deposits had been revealed.

A second scheme of evaluation was undertaken by ASE between 28th August and 6th September 2001 at the southern end of the main development site, at land off Mayflower Way, and comprised 16 trenches varying in length from between *c.* 25-70m and 1.8m wide (Fig. 2) (Griffin 2001). All were mechanically excavated using a 13 ton tracked excavator equipped with a 1.8m wide toothless bucket.

The CgMs Specification governing the Stage 1 Evaluation of the main site was also employed in the evaluation of the Mayflower Way site.

On the basis of the findings of the second evaluation, a limited archaeological watching brief was undertaken by ASE within the Mayflower Way area of the development during subsequent groundworks between 18th October to 16th November 2001 (Dunkin 2001). The results of these archaeological investigations are included below.

The initial archaeological evaluation and subsequent excavation were undertaken during very wet winter conditions, which created often difficult and at times impossible conditions on site. Flooding of evaluation trenches was commonplace and during the excavation the boggy ground conditions resulted in the dumper trucks sinking up to their axels and becoming stuck. Wheel ruts caused by continuous dumper traffic impinged on the archaeological deposits in some areas, making the subsequent excavation of affected features problematic.

Following the completion of all fieldwork the site files and artefacts were assessed and a post-excavation project design formulated (Griffin 2002).

RESULTS

Area A (Fig. 3)

Introduction

This was located within a small meadow at the extreme north of the site and consisted of an area of *c.* 1,520m^2 positioned to further investigate the features identified within Evaluation Trenches 1, 2 and 3. Topsoil and a former ploughsoil with a combined thickness of between 700-800mm was removed to reveal the underlying Brickearth and archaeological features. Limited hand cleaning was undertaken in order to confirm the presence of features or clarify any relationships that were uncertain.

Prehistoric

A *c.* 600mm wide linear gully, in excess of 52m long (Context 414, Fig. 4, Section 4A) and aligned north-east/south-west ran through this area. Ten 1m wide slots were excavated across this feature and these yielded over 58kg of burnt flint and 183 sherds of Late Bronze Age (LBA)/Early Iron Age (EIA) pottery weighing over 1.5kg from the main fill (Context 415). The burnt flint appeared to be concentrated into a number of discrete dumps irregularly spaced along its length (eg context 429). Further discrete fills (contexts 431, 433 and 440) also sometimes contained small amounts of LBA/EIA pottery. The former of these was also quite rich in charcoal and a sample was retained for palaeoenvironmental analysis (see below). A shallow flat-bottomed feature (Context 426) cut the southern end of this gully and its fill (Context 427) contained a further 393 sherds of broadly contemporary date weighing *c.* 2.7kg in addition to a further 3.9kg of burnt flint.

A post-hole (Context 420) adjacent to three intercutting linear features (Contexts 418, 422 and 424) contained 12 small prehistoric pottery sherds within its charcoal rich fill. The adjacent gullies may also have been of prehistoric date based on small assemblages of burnt flint (possible ditch 422), worked flint (gully 424) or physical relationships with these two features (gully 418). Two further linear features found within Evaluation Trenches 2 and 3 (Contexts 280 and 282) were also found to contain small assemblages prehistoric pottery and burnt and worked flint. These shared a similar alignment and it is thought may represent a single ditch.

Further features possibly dating to the prehistoric period based on similar assemblages were located and included the terminal end of a gully (Context 302) within Evaluation Trench 3 and a possible post-hole (Context 412) at the north-east corner of the area.

Romano-British

A 20m length of a Roman ditch (Context 408, Fig. 4, Section B) was present at the north-east corner of the area, terminating *c.* 3m east of prehistoric gully 414. This ditch had vertical sides that showed evidence of collapse (creating under-cut edges in places) and had a flat base. A number of residual prehistoric worked flints and pottery sherds were found within the two fills of this feature (Contexts 409 and 437), but a larger assemblage of early Roman sherds indicate that this ditch was probably of 1st-century AD date. Approximately 20m to the south and sharing the same alignment ran a 6m long linear feature (Context 416) with a rounded terminal at each end. A single sherd of Roman pottery in addition to two worked flints and 1.4kg of burnt flint were recovered from its fill (Context 417).

Post-medieval

A post-medieval ditch was located in both the excavation area (Context 406) and Evaluation Trench 2 (Context 278). A broad range of artefacts were recovered from its fill (Context 407), including brick, tile, pottery, glass, slag and animal bone, indicating that this feature was in use up until at least the 18th century.

Undated

A number of undated features were also located within this area and include post-holes 263 (Evaluation Trench 1), 276 (Evaluation Trench 2), 410 and 435, and a possible funerary/pyre deposit (Context 404) which contained 93g of burnt bone within its fill (Context 405). A sample of this fill was retained for palaeo-environmental analysis (See below).

Area B (Fig. 5)

Introduction

This area was located within a small, semi-wild grassed area approximately 300m south-east of Area A. The heavily truncated remains of two inverted cremation vessels (Context 568 and 569, Fig. 6, Section A) were located during the evaluation (Trenches 8 and 9) and an area measuring *c.* 3,000m^2 centred on these funerary deposits was investigated to ensure that all such remains were recovered prior to development. Topsoil and a former ploughsoil with a combined thickness of between 500-600mm was removed to reveal the underlying Brickearth and archaeological features. Careful hand cleaning was undertaken in a roughly 20m^2 area centred around the cremation vessels identified during the evaluation. Limited hand cleaning was undertaken elsewhere in order to confirm the presence of features or clarify any relationships that were uncertain.

Prehistoric

At the centre of this area a 13m long curvilinear ditch (Context 545, Fig. 6 Section B) was identified and contained a small assemblage of Middle Bronze Age (MBA) pottery in addition to worked and burnt flint. A single, apparently unused flint scraper was found within the fill (Context 546) at the eastern terminal and is more indicative of the Early Bronze Age (EBA) and may be a ritual deposit (Butler in Griffin 2002; *ibid* this report).

Clustered around the eastern end and central area of this ditch and entirely on its southern side were located a number of inverted MBA funerary vessels (300/569, 507, 508). Many centuries of plough damage had left only *c.* 20-100mm of rim surviving at best. Due to the obvious extent of this post-depositional damage, a number of possible inverted urns were initially identified (Contexts 570 and 572-576 inclusive) and charcoal-rich patches (509, 510 and 568), but subsequently regarded as dispersed fragments or fill from the surviving vessels. The remaining fills and soil around these vessels were retained in order to extract any calcined bone. It was only possible to distinguish a cut into which the vessel was inserted for one of the interments located during the earlier evaluation (Cremation 569, Cut 300, Section 6A).

A 13m long trench was excavated by machine into the Brickearth to the south of Ditch 545 in order to identify whether the cremation vessels were located within a rudimentary discontinuous ring ditch (Fig. 5, Machine Slot 4). No such feature was identified either in plan (after careful hand cleaning) or within the sections of the machined trench.

Approximately 2m west of the western terminal of Ditch 545 a post-hole (Context 558) was located at the northern end of an approximately north-east/south-west aligned shallow linear gully (Context 552). The form of this gully varied between being broad and shallow to narrow and steep sided. A pair of parallel shallow gullies (Contexts 541 and 543) extended at right angles to Gully 552 on its eastern side. No finds were collected from either the post-hole or Gully 543. A small quantity of burnt and work flint was found within the fill of Gully 552 (Context 553) and three small prehistoric pottery sherds, four worked flint and one foreign stone was collected from the fill of Gully 541 (Context 542). Based on the physical and special relationships of these features, it is suggested that they are broadly contemporary. Post-hole 558 obviously cut Gully 552, but this is thought to have happened when the linear feature was still visible (bearing in mind that most of the depth of this feature has been ploughed away) and the post may only have been inserted into the primary silt, which is all that remained at the time of excavation. Gullies 541 nor 543 did not extend beyond Gully 552 and the fills of all three gullies were identical, suggesting a contemporary in-filling of these three features. These features may be assigned a *terminus post quem* of the MBA based on the small assemblage of pottery from Gully 541.

A broad sinuous ditch ran through the northern half of the excavation area (Context 504), measuring up to *c.* 7m wide and continuing beyond the limitations of the excavation area. A distinct flint gravel-rich fill (Context 505) was present on the southern side of this ditch (Fig. 6, Section C). This was visible in plan as far west as the point at which the ditch headed north-west at the western edge of the excavation area. This fill formed a distinct slump of material, sloping down from the southern side of the ditch. Such asymmetrical infilling of the ditch was evidenced by successive fills (Slot 1, Contexts 506, 547, 548, 549, 550 and 551) that predominantly entered the ditch from its southern side suggesting an upcast bank had been formed on this side. The base of the ditch was cut into a flint gravel deposit that underlay the brickearth and it is likely that Fill 505 was heavily derived from this material, and other fills (i.e. 550) to a lesser extent. More fills were located within three further slots excavated either by hand or machine across this feature (Contexts 556, 564, 565 and 566). Unfortunately pottery sherds from within this feature were rather sparse and close dating of this large ditch is difficult. A small amount of Bronze Age pottery sherds were found within Contexts 505 and 506, Context 549 contained pottery of LBA/EIA date and the flint assemblage from this feature, predominantly from Contexts 556 and 557, would fit a Late Bronze Age date (see specialist report below). Over 3kg of burnt flint was also recovered from the fills of ditch.

A roughly oval shaped, steep sided pit (Context 515) measuring up to 2.8m across was cut into the southern side of Ditch 504. This contained a single fill (Context 516) that contained two Bronze Age pottery sherds, 12 worked flints (predominantly hard hammer flakes) and 715g of burnt flint.

Undated

Two areas of a differentiated Brickearth at the western and southern areas of the site (Contexts 514 and 563 respectively) were classified as shallow, in filled geological undulations after consultation with a geoarchaeologist (Chris Pine *pers. comm.*). Dating evidence for both features was scarce and predominantly comprised either

burnt and/or worked flint. A single abraded sherd of either Romano-British or medieval pottery was found within the fill of the western undulation (Context 514). This fill also masked a narrow linear feature (Context 554) that was also interpreted as being of likely geological origin (C. Pine *pers. comm.*) and contained two burnt flints fragments.

Area C (Figs 7, 8 and 9)

Introduction

This was located in an area of rough pasture and scrub within the southern half of the development site and consisted of an area of *c.* 6,920m^2. A stand of laylandii trees was present towards the eastern end of the excavation area and this area was not stripped, leaving an island that was not investigated. A small number of semi-derelict, wooden and brick pig sheds were also present towards the eastern end of the site. Approximately 600mm depth of topsoil/old ploughsoil (Contexts 801 and 802) was machined away, revealing a complex of intercutting ditches, pits and post-hole alignments that became less concentrated within the western half of the area. A copper alloy coin dating to AD 352 was recovered from the base of the ploughsoil during machining (see Rudling, this report) With the exception of a 15m wide strip at the western end of the site area, the entire site was hand cleaned in order to confirm the presence of features or clarify any relationships that were uncertain. Despite this a number of stratigraphic relationships remained uncertain. The artefactual dating was frequently found to be ambiguous or at odds with some of the stratigraphic relationships and highlighted the presence of residual, or intrusive, elements in the finds assemblages. This problem was found to be most acute in the, usually, small finds assemblages in the ditches situated at some distance from the main focus of domestic activity. The repeated cleaning out of the ditches while they were in use has added to these problems and as such some assumptions have had to be made based on features spatial relationships.

Prehistoric

Only two features containing sufficient quantities of datable artefacts to securely date them to this period were located within this area. These were located at opposite ends of the excavation area. At the extreme south-west corner (Fig. 8), an elongated, shallow oval pit (Context 1207) was located and found to contain a small assemblage of MBA pottery in addition to 13 worked flints (including five blades/bladelets) and 15g of burnt flint. The western end of this feature was cut by a later ditch (Context 1213) whilst its eastern end cut an earlier, but undated, curvilinear ditch (Context 1211).

A north-west/south-east aligned ditch that crossed the extreme eastern end of the site (Context 976, Figs 9 and 10, Section 10A) contained 92 sherds of possible pre-Belgic Late Iron Age pottery within its fill (Context 977). A small assemblage of burnt clay, worked flint, burnt flint and five intrusive Romano-British sherds were also found within this feature. Ditch 976 cut a smaller ditch (999) which was also of prehistoric origin though not closely datable.

Romano-British - c. AD 43-150

The earliest datable Romano-British features were concentrated towards the south-eastern corner of the site (Fig. 9). Two parallel ditches were partially exposed and the southernmost of these (Context 1042, Fill 1043, Fig. 10, Section B) contained unabraded 1st century AD pottery from a limited number of vessels (Lyne, this report, Assemblage 1) in addition to a small quantity of slag and burnt flint. Approximately 3m to the north, Ditch 988 (Fill 989) was found to contain a larger assemblage of fresh, late 1st-/early 2nd-century AD sherds of pottery (*ibid.*, Assemblage 4) in addition to five fragments of tile. Three intercutting pits cut through the western end of Ditch 1042. Pit 1009 (Fig. 10, Section C) contained a large assemblage of mid to late 1st-century AD pottery (*ibid.*, Assemblage 2) and also 3.2kg of tile (floor, imbrex and tegula) within Fills 1010, 1011 and 1033. A further four fills within this feature (Contexts 1024, 1037, 1038 and 1040) are interpreted as cess deposits. Pit 1029 (Fill 1030) contained a small assemblage of mid to late 1st-century pottery and a few fragments of tile and was cut by Pit 1009. A third, steep sided pit (Context 1031) was located on the eastern side of and truncated by pits 1009 and 1029. Unfortunately it was not realised that this feature was separate from Pit 1009 until it was too late to establish with certainty its relationship with either of the other two pits. However, Ditch 1042 was truncated by all three pits. All of these features were sealed beneath an occupation horizon (Context 1041) that contained a large assemblage of pottery spanning the period *c.* AD43-150 (Lyne, the report, Assemblage 3).

To the north of the easternmost exposure of Ditch 988 a discrete patch of flint cobbles (Context 1015) was located and was cut by a later post-hole (Context 926). This cobbled area lay within a shallow depression and the flints themselves were within a silty matrix. A small assemblage of pottery dating to *c.* AD70-150, a few tile fragments (including floor tiles) and a number of iron objects were found within this context.

Approximately 25m to the north-west of the ditches a rectilinear post pit alignment was located (Contexts 1091, 1181 (Fig. 10, Section D), 1185, 1191, 1201). The size and form of these features were very similar, being roughly oval shaped, steep sided and with flat bases. Within the fills of these features (Contexts 1092, 1182, 1186, 1192 and 1202) darker coloured post pipes could be discerned (Contexts 1125, 1183, 1187, 1229, 1232 and 1195). All post pits had one post pipe with the exception of Context 1191, which had two and all were set off centre, generally close to the outer edge. Although not all of these features contained dateable artefacts, those that did suggest a construction date of between *c.* AD 70-120 (*ibid.*, Assemblage 5). It is quite probable further related post-holes lay to the south, outside the excavation area, the whole forming a rectangular timber building. A small rectilinear ditch (1193, Fig. 10, Section F) ran around the post-holes to the east and north and probably formed an enclosure in which the structure was set.

A pit (Context 846) approximately 3m to the east of the probable building contained an assemblage of late 1st-century pottery within its primary fill (Context 950). A secondary fill (Context 847) contained moderately high amounts of burnt clay and charcoal. A second feature in this area (Context 854, Fill 855) contained a modest assemblage of 2nd- century pottery (Lyne, this report, Assemblage 6) in addition to a small amount of roof and floor tile. Approximately 20m west of this feature, an

amorphous shallow scoop (Context 1101) contained a very small assemblage of pottery dated to *c.* AD 43-85 within its fill (Context 1102).

Ditch 1133 (Fig. 8) (Fill1134) at the north-west corner of the site was dated to this period based on two small sherds of pottery of *c.* AD 50-70 date. However, its spatial positioning to Ditch 1136 to the north suggests this pottery may be residual. The line of Ditch 1133 further to the east was allocated Context 812. Although not closely datable, this ditch cut a number of late deposits confirming the pottery in Ditch 1133 to be residual. Despite this, it is quite possible this apparent ditched trackway had an early origin but had a long period of usage and thus subjected to constant cleaning out.

At the centre of the site, a rectangular pit (Context 1097) cut an earlier feature which was only visible in section (Context 1111, Fig 10, Section E). This latter feature contained 11 fills indicating a slow infilling process, and Fill 1121 contained a single fragment of "early" Romano-British pottery.

A feature (Context 1297, not illustrated) partly truncated by later activity within an area of possible gravel extraction at the centre of the site (by 1278) contained several fills (Contexts 1298, 1299 and 1300). The latter of these contained four small sherds of pottery dated to *c.* AD 50-100.

A number of features across the site, based on the pottery dating evidence, transcend this and the following date range. These included a length of ditch (Fig. 8, Context 1135, Fill 1136) at the north-west of the site that contained 19 worked flints and a single small sherd of pottery dated to *c.* AD 50-250+ though it is likely this pottery is residual; a shallow, roughly oval pit (Fig. 9, Context 1099, Fill 1100) 5m west of the corn dryer that contained a single glass fragment, a piece of iron and seven sherds of pottery dated to AD 50-250; a re-cut (Context 1199, Fill 1200) of rectilinear gully 1193 enclosing post-pit grouping 1091 etc. contained a small fragment of glass a four sherds of pottery dated to *c.* AD 50-250; and an irregular pit (Fig. 9, Context 1020, Fill 1021) contained two worked flints five tile fragments (including floor tile) and seven sherds of pottery dated to *c.* AD120-200+.

Romano-British - c. AD 150-270

A large number of linear features were dated to this period. A *c.* 45m length of ditch (Context 1095) ran through the site on a west-north-west/east-south-east alignment terminating at its eastern end just north of large Pit 1048 and its eastern end did not continue beyond Ditch 1131 (Fig. 8). Unfortunately the relationship between these two features was removed by a later sinuous ditch (Context 1258, see below). Forty one sherds of 3rd- century pottery were recovered its fill (Context 1096) in addition to a coin (probably dated AD 177-192), a single fragment of floor tile, some burnt and worked flint and some iron fragments. A narrow linear gully (Fig. 8, Context 1074, Fig 10, Section G) was located to the south of the western end of Ditch 1095 and contained a small assemblage of pottery dated to *c.* AD200-270 within its fill (Context 1075).

At the eastern end of Ditch 1095, an oval pit (Context 1225) in excess of 2m in diameter contained a range of pottery indicating a date range of between *c.* AD 200-

270 (*ibid.*, Assemblage 10), in addition to a tile fragment and a small assemblage of cattle bone. A roughly rectangular, vertical sided pit (Context 1177) with a depth of 1.10m to the east of pit 1225 contained seven distinct fills (Contexts 1178, 1252-57 inclusive). The lower fills suggested slow silting (possibly water-lain), whereas the upper fills more resembled deliberate dumps of material, including some cattle and pig bone. The pottery from this feature suggests that it was infilled during the late 2nd- to early 3rd centuries.

Approximately 10m to the north-west of this pit, a north/south aligned, flat bottomed gully (Context 818) was found to contain within its fill (Context 819) two sherds of pottery that probably pre-date AD 250. A later ditch (Context 812) truncated the northern terminal of this gully. A probable post-hole (Context 888), containing some chalk and limestone packing, at the eastern end of the corn dryer appeared to have been reused as some kind of storage receptacle as a large dished fragment of a Rowlands Castle beehive vessel was set into the surface of the feature (Context 889). This vessel is of 3rd-century date, and sherds of 2nd- to 3td- century date were found within the silty fill within the Rowlands Castle vessel (Context 943).

A short length of ditch (Fig. 9, Context 1089, Fig 11, Sections A and B) draining into the western side of large Pit 1048 contained multiple, interdigitating fills and was probably recut at least twice (eg Context 850). A small assemblage of pottery was recovered from the fill of the latest recut (Context 850, Fill 851) and dated to AD 200-270.

To the east of this feature, Ditch 979 (Fill 980) aligned *c.* north-east/south-west cut earlier ditches 846, 879 and 971. A small assemblage of pottery from within this feature has been dated to between AD 150-270. To the north-east of this ran Ditch 864 which contained a small assemblage of pottery dated to *c.* AD 200-270 within its fill (865). An alignment of post-holes lay immediately east of Ditch 864 (Contexts 858, 860, 862, 866, 868 (Fig. 11, Section C), 870 and 874, Fills 859, 861, 862, 867, 869, 871 and 875 respectively). The northernmost four of these were all roughly square in shape, with rounded corners, very steep sides and generally flat based. A small amount of flint nodules were found in each of these and Post-hole 868 also contained a large fragment of floor tile weighing 862g. Dating evidence from these features was sparse, or sometimes undiagnostic, but fell within a date range of mid 2nd to 3rd century (*ibid.*, Assemblage 7). Post-hole 862 was re-cut at its north-western corner by a deeper post-hole Context 872, Fill 873) which contained four sherds of pottery dated to *c.* AD 200-270.

A pit with evidence of *in-situ* burning was located in the vicinity of the post-hole alignment. Oven 884 (Fig. 11, Section D), *c.* 2m west of Post-hole 874, had burning in its western side and its fill (Context 885) contained further fragments of burnt clay, and a modest assemblage of mid to late 3rd-century AD pottery.

Towards the south-east corner of the site a series of intercutting ditches and gullies was located. Gully 957 (Fill 958) contained an assemblage of early 3rd-century pottery and a tile fragment, Gully 896 (Fig. 11, Section E) contained mid to late 3rd-century pottery though this is probably residual judging by its relationship with Gully 898 (see below), Ditch 984 (Fill 985) contained 63 sherds of mid 3rd-century pottery in

addition to 612g of tile (including floor tile) and Ditch 986 (Fill 987) contained only 30g of heavily broken ?3rd-century pottery and a single tile fragment.

A flat-bottomed circular depression (Context 930) was located a little to the north of these latter ditches. Its fill (Context 931) contained moderate amounts of burnt clay and charcoal (although no evidence of *in situ* burning) in addition to 39 sherds of pottery dated to *c.* AD 200-270.

A large linear ditch (Context 944, Fig. 11 Section F) that ran in a north-west/south-east alignment. Within the primary fill of this feature (Context 970, Slot 1) a broken jar (base missing) was found lying on its side, apparently with the remains of its contents of charcoal and a small quantity of burnt bone spilling out. A number of iron nails were found aligned in a rough arc to the south-west. A fragment of rotary quern lay to one side of this jar and a second vessel lay crushed beneath it. A single tile fragment was also found elsewhere within this context. The pottery from this context dated mainly to the early 3rd century, although the date range could be as wide as AD 200-270 (see Lyne, this report, Assemblage 8). The upper fill (Context 945) contained in excess on 2.5kg of pottery, including a mortarium fragment, with a date range of *c.* 200-300+ (*ibid.*). A recut (Context 822) of this feature was visible within Slot 3, excavated at the northern edge of the excavation, but was not seen elsewhere. A number of fills were noted within this later feature (Contexts 823, 830, 831-835, 838 and 839) and contained a modest amount of pottery that spanned the period *c.* AD 180-300. As such, although this ditch probably originally dated to this period, or before, it almost certainly continued in use into the 4th century as did the associated ditch to the north-east (932) on the other side of the trackway (see below).

Approximately mid way along this ditch, a shallow undulating depression (Context 1034) cut into its western side. The fill (Context 1035) was moderately charcoal rich and also contained a small quantity of burnt clay. Nearly 3kg of pottery dated to *c.* AD200-270+ was collected in addition to 44 tile fragments, including tegula and floor tile. To the east of the extreme northern visible extent of Ditch 944, a possible post-hole (Context 912) was located. Its fill (Context 913) contained 33 sherds of pottery dated to *c.* AD 200-270, small quantities of tile and burnt clay, some iron fragments (including a possible wedge), and some residual prehistoric pottery, burnt and worked flint.

Romano-British - c. AD 270-400+

Features falling within this date range, based on the ceramics dating, were present across much of the site, but tended to become less common to the west. Ditch 1131 (Figs 8 and 11, Section G), at the western end of the site, contained 88g of pottery dated to *c.* AD 270-400 and nine iron fragments, in addition to residual prehistoric pot, worked flint and in excess of 2kg of burnt flint within its upper fill (Context 1132). A discontinuous primary fill (Context 1155) contained five further contemporary sherds and smaller quantities of burnt and worked flint. The iron hobnails of a sandal were also found *in-situ* at the base of this ditch. A more sinuous ditch (Context 1258) crossed the northern end of Ditch 1131. This contained 12 sherds of pottery dated to *c.* AD300-370, a fragment of tile and residual burnt flint and a single prehistoric pot sherd within its fill (Context 1154).

At the approximate centre of the site, a large irregular area with unclear edges was identified (Context 1278) and resembled a spread of flint gravels mixed with brickearth. Two machine cut trenches, crossing at right angles were excavated across the two main axes of this feature in order to identify its nature and extent. This established that at least ten intercutting cuts and/or dumps of fill were present (Contexts 1278, 1292, 1293, 1295, 1297, 1301, 1305, 1307, 1311 and 1314). Unfortunately the methodology imposed due to time constraints was not particularly conducive to the recovery of finds or the exact inter-relationship of all the individual features/fills. Fill 1302 within Cut 1301 contained pottery dated to *c.* AD 270-400, Fills 1275 and 1277 from the overall cut 1278 contained a large assemblage of pottery dated to *c.* AD 300-370 (Lyne, this report Assemblage 12) in addition to 24 tile fragments (including tegula mamata), some animal bone and a number of iron objects including a possible sickle or knife blade, and Cut 1297 (a stratigraphically early feature) contained 28g of pottery dated to *c.* AD50-100 within its uppermost fill (Context 1300). No artefacts were recovered from any of the remaining fills of any of these features.

To the north-east of these features, a further large pit was located (Context 1290) and found to contain a number of fills. Only one of these (Context 1282) contained any dating evidence and that consisted of only one abraded sherd dated to *c.* AD270-400. An approximately north-south aligned, shallow, gully to the west of this (Context 1236) contained a fragment of floor tile, five abraded pottery sherds dated to *c.* AD 270-400 in addition to a small quantity of residual prehistoric pottery and both burnt and worked flint.

Some 30m to the east of the gully, the southern extent of a terminating linear ditch (Fig. 9, Context 806) was excavated and found to contain a large assemblage of pottery dated to *c.* AD 270-400. A total of 15 fragment of imbrex, tegula and floor tile were also recovered in addition to *c.* 320g of burnt clay, a small number of iron objects and residual prehistoric material. Seven metres to the east, a shallow, roughly oval shaped pit (Context 946) was excavated and contained pottery sherds dating to *c.* AD 270-400. Approximately 6m to the east of this pit ran a linear ditch (Context 932, Fig. 11, Section H) that was parallel to and 6m to the east of Ditch 944. An upper fill (Context 1012) was only observed in the southern most two slots that were excavated across this ditch, and was found not to contain any artefacts. The lower fill (Context 933) contained in excess of 0.5kg of pottery dated to *c.* AD 270-400. A coin issued AD 218-222, a lead spindle whorl, some iron fragments, one piece of tile and some cattle bone in addition to a small amount of residual prehistoric material was also recovered from this fill.

A number of ditches and gullies were located within the south eastern area of the site. A north/south aligned gully (Fig. 9, Context 914) cut across Ditches 988 and 1042 and contained abraded late 3rd- to 4th-century pottery sherds, three tile fragments, one piece of slag and a scrap of iron. The northern end of this feature did not continue beyond a north-west/south-east aligned gully (Context 898/1005), and the relationship between these two could not be established during excavation. A number of fills were present within this feature (Contexts 899, 955, 981, 983 and 1006) and were found to contain pottery dated to *c.* AD 270-400 in addition to scraps of lead and iron, tile fragments, a single piece of iron slag and a small amount of residual prehistoric material.

The northern end of Gully 898/1005 was cut by a two roughly parallel gullies aligned in an east/west direction (Contexts 896/968 and 902/908). These features converged gradually to the east, but the relationship between the two could not be established during excavation. Their respective fills (Contexts 897/969 and 903/909) contained small assemblage of comminuted sherds dating mid to late 3rd to late 4th century and mixed early and late Romano-British sherds, some of which were obviously residual. The western end of these features were sealed beneath an occupation layer (Context 956, not illustrated) which contained a large assemblage of late 4th-century (or later) pottery in addition to fragments of floor tile, tegula and imbrex, a probable forge bottom, small quantities of slag and animal bone and residual prehistoric material. A short length of gully (Context 928) extending from the western end of Gully 902 contained a small amount of heavily comminuted late Romano-British pottery within its fill (Context 929). It was not possible to establish the relationship between these two gullies during excavation.

Immediately to the west, of these features were located the southern terminal ends of two adjacent north/south aligned ditches (Contexts 890 and 886). The fills of these features (Contexts 891 887) contained modest assemblages of pottery dated to *c.* AD 270-400 and the 4th century respectively in addition to small amount of tile. The western ditch (Context 890) extended further than the other and an earlier, narrow gully extended eastwards from its southern end (Context 974). Its fill (Context 975) contained a small amount of late 3rd-/early4th-century pottery, a few fragments of tile and burnt clay.

To the south of these ditches and gully, two further ditches were located. Ditch 962 curved from a north/south to an east/west alignment and was partially cut by Ditch 890. The fill of this feature (Context 963) contained a small assemblage of late 3rd-century pottery. A generally north-east/south-west aligned ditch (Context 900) cut across Ditch 962, before turning northwards where it became obscured by later features (Contexts 890, 886, 902, 896, etc.). The fill (Context 901) contained late 3rd-century pottery in addition to some tile and slag fragments.

To the east of the northern terminal of Gully 898 were a series of pits and post-holes. The western of these (Post-hole 904, fill 905, Fig. 11, Section I) contained a number of flint nodules in addition to small assemblages of late 3rd-century pottery and slag. This lay next to a shallow elongated oval feature (Context 906, Fig. 11, Section J) that had a flat base and burnt east and west sides. Its fill (Context 907) contained common charcoal flecks, burnt clay, some fragments of iron and a small amount of late 3rd-century pottery. A shallow, roughly circular depression (Context 910, Fill 911) was found next to Context 906. This contained 670g of pottery dated to *c.* AD 270-300+ in addition to a small amount of slag and iron.

A linear alignment of post-holes (aligned north/south), probably representing a fence-line, was found to the south-east of Pit 910. Post-holes 924, 918 and 922 (Fills 925, 919 and 923) all contained chalk post packing, Post-holes 997 and 926 (Fills 998 and 927) contained flint post packing, Post-hole 920 (Fill 921, Fig. 11, Section K) contained a mixture of chalk and flint post packing, whereas Post-holes 1018 and 1013 (Fills 1019 and 1014) contained no packing. Post-hole 924 contained possible 3rd-century pottery and three tile fragments; Post-hole 926 contained pottery dated to

c. AD 270-400 in addition to 31 fragments of tile (including tegula, floor and box flue), 26 pieces of burnt bone and a small amount of unburnt bone; Post-hole 997 contained a small amount of late 3rd-century pottery as did Post-holes 920 and 1025. Post-hole 922 contained pottery dating to *c.* AD 200-350.

At the northern end of this alignment (between post-holes 1025 and 922) an oval pit (Context 993, Fig, 11, Section L) was found that had *in situ* burning on the south-west side. The upper fill (Context 994) contained a modest assemblage of late Romano-British pottery and a single tile fragment, in addition to a remains from the bow of a simple fibula brooch and part of a rotary ring-key, both made of copper alloy. The lower fill (Context 967) was charcoal-rich and also contained a *c.* 3.5kg of burnt clay and *c.* 1kg of early 2nd-century pottery.

A corn dryer (Fig. 12 Plan, and Plate 1) was located at the east central area of the site and this was sealed beneath an occupation spread (Context 1050) that contained 71 sherds of mid to late 4th-century pottery, 15 tile fragments, burnt clay and two pieces of iron. The corn dryer was T-shaped in plan, with a *c.* 4m long main chamber (Context 1063) with a flue to the west (Context 1060, Fig. 12, Section A) and a probable stock-hole to the east (1065). The structure had been cut into the Brickearth and survived to a depth of *c.* 0.5m. The sides of the T-shaped trench had been predominantly lined with flint nodules and roughly faced flint fragments up to a thickness of *c.* 0.3m (a small number of chalk fragments were also present) (Context 1061). The flints were roughly coursed and survived to a maximumof six courses. There was no obvious bonding agent, although a friable mid-brown silt-clay matrix (Context 1062) surrounded the flints and contained three small sherds of pottery dated to *c.* AD 270-400. In places the surviving upper course of flints were stepped in slightly in relation to the lower courses, which had a generally vertical face, possibly evidence that the structure had a vaulted roof (Fig. 12, Section B). At the eastern end of the corn dryer the 0.6m deep stoke hole/pit (Context 1065) had cut the southern edge of Post-hole 888 (see above).

The upper fill of the main chamber (Context 1064) contained frequent pieces of burnt material, including clay, flint and also sooting of the exposed internal structure. This fill became more charcoal-rich and deeper (up to *c.* 0.45m) towards the west, where more tile fragments (including 13 imbrex fragments (five of which were conjoining), two tegula and one floor tile) and calcined animal bone were also more common. Additionally, *c.* 1kg of late 4th-century pottery, a fragment of bottle glass and scraps of iron were also collected. A sample of this fill was retained for palaeoenvironmental analysis (See below). This overlay a charcoal-rich fill (Context 1072) that extended approximately half way into the central flue chamber and had a maximum thickness of 0.5m. This contained a small assemblage of pottery dated to *c.* AD 270-400 in addition to *c.* 1kg of burnt clay, a small quantity of burnt bone and burnt flint. Below this was a *c.* 20mm thick dark, slightly sandy layer (Context 1073) containing a modest assemblage of pottery dated to *c.* AD 270-400. This also contained further burnt clay and flint pieces in addition to a fragment of imbrex and a small amount of burnt bone. The very base of the central flue chamber consisted of burnt Brickearth (Context 1104) that was generally black in colour, but became lighter with depth when excavated.

The T-shaped flue on the western end was filled with a dark, charcoal-rich, silt-clay (Context 1156) that was also found to contain a high percentage of charred arable seeds and some bird bone. A large amount of tile fragments were also recovered including floor tile and imbrex pieces, but no pottery was forthcoming. This context was also sealed beneath occupation layer 1050.

The stoke hole/pit (Context 1065) was situated at the entrance to the main flue chamber at the eastern end of the structure. Context 1064 (see above) formed the uppermost fill of the stoke-hole and lay over a dark, silty, less charcoal-rich fill (Context 1109) that was up to 350mm thick and contained an assemblage of late 4th-century pottery. A number of quern stone fragments of different types and geologies (see below) were also collected in addition to four imbrex fragments and 290g of burnt clay. A sample of this fill was retained for palaeoenvironmental analysis (See below). This overlay a firm layer resembling fragmentary *opus signinum* (Context 1137) that also contained larger fragments of tile (floor, tegula and imbrex), 842g of burnt clay, fragments of quern stone and charcoal, a small amount of burnt bone, and *c.* 2.5kg of late 4th-century pottery. A sample of this context was retained for palaeoenvironmental analysis. The primary fill of the stoke-hole (Context 1067) comprised mainly of burnt material – predominantly charcoal, with a little burnt clay. Only a small amount of pottery was found within this context and falls within a date range of *c.* AD 270-400. A sample of this context was retained for palaeo-environmental analysis. This stoke hole cut the southern edge of an earlier post-hole (Context 888, see above) that had been re-used and incorporated into the use of the corn dryer.

After the complete removal of all the fills within this flint structure and associated stoke hole, it was established that the base of the feature sloped down gently from the two western T-shaped flue/s (*c.* 10.80mOD) to the eastern stoke hole (*c.* 10.55mOD). A *c.* 80mm deep depression was also evident approximately mid way along the main flue chamber that had a straight, vertically cut eastern end and more gently sloped and rounded western end.

A drainage gully (Context 844, Fig. 12, Section C) ran south-west from the stoke hole before turning westwards at its southern end. This contained a single silty fill (Context 845) that contained a small amount of pottery dated to *c.* AD 270-300+ in addition to a small amount of burnt and worked flint. A recut at the northern end of this feature (Context 848, not illustrated), adjacent to the corn dryer contained pottery dating to *c.* AD 300-370 within its fill (Context 849). This fill also contained moderate amount of burnt material (clay, flint and charcoal) in addition to *c.* 2.2kg of tile fragments (including imbrex and floor) and some worked flint.

The southern end of this gully ran into a circular pit (Context 1225) that contained pottery dating to *c.* AD 150-270. This feature had been recut by a smaller, shallower oval pit (Context 1138, Fig. 12, Section D) that was filled by a dark, silty charcoal and charred grain-rich fill (Context 1139), a sample of which was retained for palaeo-environmental analysis. Pottery found within this fill dates to *c.* AD 270-350 and was found in association with an iron split pin, a large number of quern stone fragments and a small amount of burnt bone.

A large circular pit with a diameter of *c.* 10m (Context 1048, Fig. 13, Sections A and B) was located immediately south of this feature (Lyne, this report, Assemblage 9). Opposing quadrants (Quadrant A: north-west, Quadrant B: south-east) were stratigraphically excavated initially by hand, but a JCB 3CX was used to excavate lower deposits once the sections became too deep. Additionally, time constraints resulted in the north-western quadrant being less fully excavated.

The sides of the upper *c.* 1.8m of the pit were sloped quite uniformly at approximately 30-45° and below this point the sides became abruptly steeper at *c.* 80°. The largest assemblage of artefacts was collected from the upper fill (Context 1049), a mid to dark grey-brown clay-silt that contained moderate amount of flint fragments and nodules. Also found was a wide variety of material including small amounts of slag, glass, burnt and worked flint and three fragments of copper alloy. Approximately 6kg of late 4th-century pottery was collected in addition to two coins dating to AD322 and AD351, a copper alloy pin head, iron nails/nail fragments, part of an iron knife blade, *c.* 2kg of animal bone (predominantly cattle, but including horse, sheep and pig), fragments of rotary quern stones and 2.2kg of broken tile (including floor and tegula). This fill extended across the entire feature (becoming generally thicker towards the centre) and also sealed an earlier pit (Context 1052 (see below) and Ditch 850 (dated to *c.* AD 200-270, see above)) at the south-east edge. A discrete area of densely packed flint up to *c.* 180mm in size and including occasional smaller chalk pieces (Context 1058) was located on the gently sloped western edge of the pit, sealed beneath Fill 1049. Ten sherds of pottery dating to between *c.* AD 150-200 were found within the silty matrix surrounding these stones.

Just to the west lay Context 1069, which was positioned off-centre to the north-west within the pit. This was darker and noticeably moister than Fill 1049 and contained common chalk flecks and charcoal fragments. A small amount of 3rd-century pottery and cattle bone was collected from this context. At the eastern side of the pit, below Context 1049, a different fill was encountered (Context 1051) and this contained a small amount of pottery dated to *c.* AD 270-400.

The two quadrants below this level took on different appearances. Quadrant A sunk down at a steeper angle and was assigned a new cut number (Context 1071). This also appeared to cut through an earlier fill (not excavated) rather than undisturbed geology at the edge of Pit 1048. A distinct moist fill with patches of green within it (Context 1070) was initially hand excavated, but its depth meant that machine excavation of its lower levels was subsequently required. A small assemblage of 3rd-century pottery was recovered, in addition to a single piece of (?)floor tile, a scrap of iron and 32 fragments of both cow and horse bone. This fill was excavated to a depth of *c.* 3.7m below reduced ground level (*c.* 7.25mOD) (the limit imposed by the reach of the JCB) but appeared to extend deeper.

Below Contexts 1069 and 1051 within Quadrant B, Fill 1056 (resembling redeposited Brickearth) was found to contain a small assemblage of 4th-century pottery in addition to a few fragments of burnt flint. This overlay a deposit (Context 1057) that thickened considerably towards the centre of the pit and contained moderate amounts of flint gravels and less common degraded chalk pieces. A broad range of artefacts were collected including small amounts of burnt clay, burnt and worked flint and iron. Larger quantities of 4th-century pottery, tile, shell, animal bone (cattle, sheep, pig and

dog) and some fragments of quern stones were also found. Successive fills were noted below this context (Contexts 1153 and 1217-1224), becoming more steeply sloped with depth and predominantly originally infilled into the pit from its eastern side. The small amount of pottery collected from two of the lower fills (Contexts 1217 and 1221) date to *c.* AD 100-250 and *c.* AD 270-400 respectively. Machine excavation within this quadrant failed to locate the base of the pit and it was impossible to discern any further fills than those identified during hand excavation, although undoubtedly more did exist. During hand excavation of Quadrant B this pit was cut through successive strata as follows: Brickearth containing occasional flint gravels to a depth of *c.* 9.89mOD; 50% sub-angular flint gravels within an orange clay-silt matrix to a depth of *c.* 9.77mOD; slightly sandy, clean Brickearth to a depth of *c.* 9.58mOD; and densely packed flint gravels in a clay-silt matrix to beyond the limit of excavation.

At the eastern side of Pit 1048, a shallow, feature (Context 1052) was located (Fig. 13, Section A only). No obvious cut could be discerned, its extent was clearly defined by the presence of densely packed flint nodules and animal skulls. A total of four complete cattle skulls and one complete horse skull were recovered from amongst 150kg of large stones. The majority of these were flint nodules, but chalk was also present in addition to a little Upper Greensand. Worked flint (including one end scraper) and a small assemblage of pottery dating to *c.* AD 270-370 were also recovered from this fill (Context 1053).

Approximately 18m to the east of Pit 1048, a single post-hole (Context 882, cutting Gully 864) was located. Its fill (Context 883) contained small amounts of charcoal and burnt clay in addition to a small assemblage of pottery dated to *c.* AD 270-300 and a scrap of iron. To the south-west of this feature, two post-holes (Contexts 1215 and 1232, not illustrated) within Post-pit 1091 of the rectilinear structure contained very small amounts of pottery dated to *c.* AD270-400 and were also probably of late Romano-British date.

Romano-British

A number of features across the site could not be closely dated within the Romano-British period due to the quantity/quality of artefacts recovered. At the western end of the site these included two long ditches: Ditch 1129 (Cut by Ditches 1095 and 1258) cut Ditch 1209. The relationship between 1209 and 1131 suggests Ditches 1209 and 1129 to both be late, perhaps representing a shifting field boundary. Post-hole 1244 (Fill 1245) *c.* 11m east of the terminal of Ditch 1209 contained a single sherd of pottery that could not be closely dateable. To the north-east of this, two parallel ditches (Contexts 812 (Fig. 14, Section A) and 810) were located. These appeared to be the continuation of the probable trackway located further west (Ditches 1133 and 1135) and it is considered probable all are of a late date. Ditch 810 cut Gully 1240 but was cut by Gully 936, both of which also contained small quantities of 'Romano-British' pottery.

To the south of these features, further gullies (Contexts 1171 and 1093) were located which were not closely datable by the ceramics themselves. However, the stratigraphic relationships of 1093 suggested a 2nd- to 3rd- century date. Two of the post-holes (Contexts 1262 and 1189) within the early Romano-British post-pits that were located to the east of Pit 1048 also contained small amounts of undatable

pottery. Post-hole 852 to the east of these features (cutting Ditch 846) contained a single sherd of pottery and *c.* 28m to the east an irregular pit (Context 916, Fill 917) contained five Arun Valley sherds, a tile fragment and some residual prehistoric material. Pit 1022 (cut by undated Ditch 914) contained a number of flint cobbles up to *c.* 90mm in size pressed into its base and also a small amount of Romano-British pottery, tile and iron within its fill (Context 1024).

A metalled flint surface (Context 935, Fig. 14, Section B, and Plate 2) was found lying between Ditches 932 and 944 within a slight depression (Context 934) that generally retained more moisture than the surrounding Brickearth. The flints used in the construction of this feature generally comprised of larger cobbles and broken nodules at its base, with smaller pieces lying on the surface. A number of artefacts were found on the surface of this feature during hand cleaning including a number of tile fragments totalling *c.* 1.2kg (including floor and tegula), 54 sherds of Roman pottery of a wide date range and a single intrusive late medieval sherd (AD 1450-1550). In addition a copper alloy and iron lynch pin of Romano-British date was recovered. Excavation through the flint metalling revealed that this sealed two parallel narrow gullies (Contexts 1001 and 1003), which unfortunately contained no artefacts. Both of these gullies contained small flint gravels at their bases, covered with larger flint cobbles.

Undated

A number of features contained either no artefacts or only artefacts that could not reliably be used as dating material. At the western end of the site, Ditch 1213 (Fill 1214) contained a single possible (intrusive) medieval pottery sherd in addition to burnt and worked flint. This ditch was cut by Romano-British Ditch 1209 at its southern end where it also cut Pit 1207 which contained MBA material. It became ephemeral at its northern end and its relationship with Ditches 1133 and 1135 could not be ascertained.

Further east, a number of linear features (Fig. 8: Contexts 1250, 1266, 1142, 1264 and 1140), a post-hole (Context 43) and two pits (Contexts 1248 and 1271) were present. The first three of these were all cut by Gully 1258 suggesting they pre-dated *c.* AD 300-370. Gullies 1140 and 1142 were also cut by Ditch 1095 suggesting a pre 3rd-century date for these two features. Ditch 1095 also cut Pit 1271 (west of large Pit 1278, etc.) and Gully 1107 near to its eastern terminal. Gully 1107 bisected a rectilinear arrangement of post-holes (Contexts 1205, 1169, 1203, 1167 (Fig. 14, Section C), 1173, 1165, 1163, 1161, 1157 and 1159). With the exception of a small amount of burnt clay, burnt flint and three worked flints, most of these features did not contain any artefacts at all. An undatable pit (Context 1175) was located at the western end of this post-hole alignment.

A linear gully (Context 1238) was cut by the large pit (Context 1278) and by a further gully (Context 1236, Fig. 14, Section D), which cut perpendicular across its eastern end and contained pottery dating to *c.* AD 270-400.

East of this at the northern edge of the site, two post-holes were located (Fig. 9, Contexts 938 and 824). Gully 826 ran through the extreme north-east corner of the site and to the south of its western exposure an articulated pig burial (Context 836)

was found. A number of undated features were located in the vicinity of Ditches 900 and 962 (east of large Pit 1048), including Contexts 856, 972, 892, 940, 991, 995, 1016 and 1045.

South of the corn dryer, undated Gully 1179 was cut by drainage gully 844, suggesting it pre-dated *c.* AD 270-300+. Post-hole 1197 lying within the post pit grouping also contained no dating evidence.

Area D (Fig. 15)

Introduction

This was located towards the southern end of the development site and consisted of an area of *c.* 4,630m^2. Topsoil/ploughsoil in this area was up to *c.* 800mm thick. The entire area was hand cleaned in order to confirm the presence of features or clarify any relationships that were uncertain.

Prehistoric

A circular feature with *in situ* burning (Context 666) was found within the north-western quadrant of the site. This survived to a maximum depth of 130mm and was lined with MBA pottery that was sealed within a burnt organic layer (Context 740). Later fills (Contexts 736 and 667) contained further charcoal and burnt clay fragments. Approximately 18m to the east of this feature, the southern end of a linear ditch (Context 642, Fig. 16, Section A) was revealed with a rounded terminal. A primary silt (Context 643) contained MBA pottery, worked and burnt flint. A secondary fill (Context 709) was located only at the terminal end (slot 1) and contained small quantities of burnt clay. The lowest fill encountered (Context 769) was more charcoal rich (some of which was in discrete lenses) and also contained a small quantity of bone and burnt flint. A sample of this fill was retained for palaeoenvironmental analysis (see below).

Towards the eastern end of the site a circular feature (diameter *c.* 2.1m) was found (originally located within Evaluation Trench 27) and was half sectioned (Context 614, Fig. 16, Section B, and Plate C). The diameter of the shaft narrowed with depth to *c.* 1.05m wide at a depth of *c.* 1.9m. At this point it became too confined to excavate the feature any further, but a screw auger identified that a hard gravel layer was encountered a further 2m down and it assumed that this was a geological strata, although a dense gravel fill cannot be ruled out. The uppermost fill (Context 615) formed a distinct cone shape, sloping steeply down into the shaft, but did not extend as far as the edges of the cut. Over 6kg of burnt flint was collected from this context in addition to assemblages of MBA pottery and worked flint and a small number of uniform sized, water worn pebbles. A sample of this fill was retained for palaeoenvironmental analysis (see below). The tip of the cone of this fill was noticeably more charcoal rich and also contained burnt clay and therefore assigned a separate context number (767). At the very base of this fill, and following its profile, a further group of 12 uniform sized rounded pebbles were found in addition to much smaller amounts of MBA pottery, burnt and worked flint. A lens of redeposited brickearth (Context 766) was found between Contexts 615 and 767 on the northern

side of the feature. A lighter fill (Context 768) was present below the cone shaped upper fill and this contained a further 37 rounded pebbles with a weight in excess of 3kg. A further 2kg of burnt flint and small assemblages of MBA pottery and worked flint were also found within this context. A sample of this fill was also retained for palaeoenvironmental analysis. Patches of charcoal were also found to be adhering to the sides of the shaft during excavation. Below this was a further fill (Context 769) containing charcoal but no pottery.

Towards the south-western corner of the site a roughly oval shaped area of 'colluvium' could be discerned. Careful machine excavation of this feature (Context 624) yielded a small quantity of Bronze Age pottery, worked and burnt flint from its fill (625). This feature had very gently sloping sides and a generally flat base with a depth of *c.* 250mm below the surface of the Brickearth. A number of linear, discrete and amorphous features were found to be sealed beneath this deposit. A large amorphous feature (Cut 648) with moderately steep, undulating sides contained two fills (Contexts 649 and 774), within both of these were found assemblages of MBA pottery, burnt and worked flint (including two hammer stones). Two further features within this depression contained sufficient MBA pottery to confidently date them. These were a broadening pit (Cut 742, Fill 743) at the western edge, and a circular, steep sided pit (Cut 752, Fills 753 and 775) pit towards the eastern side. Both these features also contained small assemblages of burnt and worked flint.

Further gullies and pits were present within this shallow depression that also contained MBA pottery, but in insufficient quantities to securely date them. These include Contexts 638, 744, 746, 770 and 776. Most of these features also contained quantities of burnt and/or worked flint. Two intercutting linear features were also located within Evaluation Trenches 24 and 27 (Contexts 115/62 and 81) and also fell just within the north-east of the excavation area.

A number of discrete features were spread over the site that also could not be securely dated due to the paucity of MBA pottery found within them. These include the terminal end of a truncated (?)linear feature towards the north-west corner of the site (Context 714) and adjacent linear ditch (Context 644), a pit and an irregular linear feature (Contexts 646 and 634 respectively), the terminal end of a possible linear feature (Context 680) and a circular pit (Context 606) at the north-eastern corner of the site, and two further pits (Contexts 618 and 760) within the south-western area of the site.

A small number of features dated to the Late Bronze Age/Early Iron Age (LBA/EIA) were dispersed across the site. At the north-western corner, a shallow pit (Context 722) was found to contain pottery, burnt clay (many with wattle impressions), 0.95kg of burnt flint and five worked flints within its fill (Context 723). Approximately 22m to the south-east of this feature a large, two metre deep, steep-sided pit (Context 656) was quadranted and found to have seven distinct fills (Contexts 657 and 730-735) which indicated successive deliberate deposition rather than slow silting. A number of these fills also contained flint gravels and charcoal that was often evident in discrete tip lines. The majority of the dating evidence was retrieved from the uppermost fill (Context 657) and included, 3.7kg of burnt flint, 48 worked flints, a copper alloy awl fragment in addition to nearly 0.5kg of LBA/EIA pottery. The side of the south-west excavated quadrant was slightly irregular and appeared to have been deliberately

stepped in places. No such 'steps' were found within the opposing quadrant, and the pit's base was flat.

A linear feature (Context 748) of LBA/EIA date was found within the shallow depression approximately 20m to the south of Pit 656. This feature also cut MBA Pit 648 where it terminated to the north, and its southern terminal stopped just short of the southern boundary of the site. A moderately steep-sided pit (Context 678, Fig. 16, Section C) with a flat base was located within the north-eastern area of the site. This contained two fills (Contexts 679 and 708), the latter (lowest) of these contained small amounts of charcoal and burnt clay and a small amount of burnt and worked flint was found throughout the feature. Three stake holes (Contexts 702, 704 and 706) were positioned around the north-eastern side of Pit 678. The former and latter of these were angled at *c.* 45° towards each other whilst the middle stake hole was positioned vertically.

A small fragment of LIA East Sussex Ware pedestal base was found within small pit/post-hole (Context 620, Fill 621) at the central southern area of the site and two further Iron Age sherds were located in Ditch 672 in the extreme north-west of the area. Ditch 672 was so truncated that hand cleaning removed the last traces of it. Two north-south gullies (Contexts 660 and 616), possibly demarcating a field, also contained very small quantities of probably Late Iron Age pottery.

Romano-British

With the exception an irregular oval pit (Context 688) at the north central area of the site and a gully (668) to the west, all features of this date were located within 25m of the eastern boundary of the excavation area. Four sherds of an Arun Valley greyware store-jar were recovered from the fill of Pit 688 (Context 689) while a single Arun Valley sherd was recovered from Gully 668..

A Romano-British urned burial (Context 610, Plate 4) was located at the extreme south-eastern corner of the site and was slightly disturbed on its northern side by a later ditch (Context 700, see below). Two vessels had been interred into a steep sided and flat bottomed oval pit. The lower of the two vessels (Vessel B) was quite fragmented and laying at an angle, with the curved body of Vessel A (complete except for some small damage on its rim) lying within its opening. The fill of the cut (Context 611) was heavily derived from brickearth, but slightly darker, and containing charcoal and burnt clay fragments at its western side. The contents of both vessels were retained for the extraction of calcined bone and charcoal. During this process, a possible 1st- century AD fibula brooch fragment was recovered from Vessel A. The vessels themselves fall within a date range of between AD 150-200+.

Two adjacent ditches (Contexts 604 and 608) ran on a generally north/south alignment and converged gradually to the south. Both of these features became more ephemeral to the south and also generally narrowed and were shallower in this direction, possibly indicating a higher degree of truncation. The sides of Ditch 608 were angled at *c.* 45° and the base was slightly concave. The fill (Context 609) contained a small assemblage of pottery with a date range of *c.* AD 190-270. Ditch 604 was more steep sided and had a flatter base and contained a similar sized pottery assemblage with a date range of *c.* AD 250-300+ in addition to two fragments of

tegula. The northern end of this feature turned slightly to the east and at this point appeared to be cut by a discrete feature (Context 710) that was filled by a much darker, charcoal-rich clay-silt (Context 711) that contained pottery dated to AD 200-300. A series of stake holes (Context 628) ran alongside the western edge of Ditch 604 in the same area as Context 710. The diameters of these varied from between 40-90mm and their depths ranged between 30-120mm. Their fills (Contexts 629) were charcoal rich and also contained flecks of burnt clay.

A further linear feature was located within Evaluation Trenches 24 and 27 (Contexts 117 and 64) and contained an assemblage of pottery with a date range of AD 180-290. Any relationship between this feature and Ditches 604 and 608 fell outside of the agreed excavation area.

Medieval

The western end of a possible early Anglo-Saxon ditch (Context 700, Fig. 16, Section D) was excavated at the south-eastern corner of the site and clipped the northern edge of the Romano-British urned cremation burial (Context 610). The fill (Context 701 contained a small assemblage of MBA pottery, 31 worked flints, 2.7kg of burnt flint and four sherds of refired Roman and Atrebatic Overlap or Early Saxon pottery, although based on the stratigraphic relationship with the 2nd-century AD urned burial the later date seems most likely.

An approximately east/west aligned ditch (Context 612) crossed the entire excavation area, cutting all other features that it crossed. This had moderately shallow sloped sides and a rounded base. A single silty fill was present (Context 613) and this contained four abraded Saxo-Norman or LIA pottery sherds, 15 worked flint waste material, 1.4kg of burnt flint and a piece of foreign stone weighing over 1.5kg. Immediately south of the centre of this ditch an oval feature (Context 640) was located and its fill (Context 641) was very similar to Context 613 and contained a single small sherd of medieval or LIA pottery.

Undated

A large number of features cannot be closely dated within this area due to a lack of securely datable artefacts being found and the lack of any stratigraphic relationships with other dated features. Where stratigraphic relationships exist, a *terminus post quem* may be inferred. Features that contained no artefacts at all include a number of discrete and linear features at the western end of the site (Contexts 674, 670, 716, 720, 718, 664, 658, 712 and 662). Within depression 624 further features were artefactually sterile, including Contexts 750, 676, 754, 756, 758 and 762 though most can probably be considered as 'prehistoric'. Further features were located to the east (Contexts 684, 686, 636 and 682), whilst two pits (Contexts 728 and 652) were located close to LBA/EIA Pit 656. Six further pits (Contexts 690, 692, 694, 696, 698 and 724) were located around Romano-British Pit 688 at the central northern area and a short length of a linear feature (Context 650) ran to the north of and was cut by Saxo-Norman Ditch 612. At the centre of the site Pit 738 was cut by Gully 764 (devoid of artefacts), but the pit was also cut by Context 634, which contained a small assemblage of MBA pottery, so Pit 738 at least is likely to be MBA in date.

Features containing unreliable or inconclusive dating evidence include Gully 654 (Fill 655) which was cut by LBA/EIA Pit 656. A linear ditch (Context 622) running roughly north-south through the site and cut by possible Saxo-Norman Ditch 612 contained a small mixed assemblage of artefacts within its fill (Context 623) including one prehistoric and one Romano-British pottery sherd and a leaf-shaped arrowhead. Immediately east of Ditch 616 was a circular pit (Context 630) containing a small amount of burnt flint.

Mayflower Way Evaluation and Watching Brief (Fig. 2)

An archaeological evaluation of land to the west and south of Mayflower Way (west of the southern end of Roundstone Lane) (centred TQ 0712 0332) in advance of further development was undertaken in 2001 (Griffin 2001).

Three basic stratigraphic units were observed across the site: topsoil, overlying ploughsoil, overlying Brickearth. Quantities of building debris within the topsoil varied across the site and a few small areas where raised gravel beach deposits appeared through the top of the brickearth were observed. A general scatter of burnt and worked flint was collected from the topsoil and ploughsoil of each trench with much lower occurrences of pottery, bone and shell. The combined depth of topsoil and ploughsoil within each trench ranged between *c.* 600-750mm.

Trenches 1-4, 7, 9 and 11-16 were devoid of archaeological features. Trenches 5 and 6 were excavated through an area where slag, clinker and crushed brick rubble had been used to in-fill a shallow-sloped depression with a maximum depth of 320mm. This deposit also contained moderate amount of burnt and worked flint. This depression was filled by a compact clay-silt (Context 5) that contained a moderate amount of burnt and worked flint towards its upper extent. Within Trench 8 a linear feature (Context 6) was located *c.* 36m from the eastern end of the trench and orientated approximately north-south. A small quantity of burnt and worked flint was recovered from the fill (Context 7) of this flat bottomed cut. Within Trench 10 a narrow linear feature (Context 8), aligned *c.* north-east/south-west was located *c.* 5m from the western end of the trench. This 780mm deep feature had very steep sides, a flat base and was filled by three distinct contexts. The upper of these (Context 9) was flecked with charcoal and heavily derived from Brickearth and contained occasional burnt and worked flints. Below this lay a fill (Context 10) that contained large amount of burnt flint and charcoal fragments <25mm in size and including whole roundwood pieces. A number of LBA/EIA pottery sherds were also found within this context. A primary silt (Context 11) contained very rare small burnt flint fragments and occasional charcoal fragments.

A subsequent targeted watching brief undertaken within this area during topsoil stripping (Fig. 2) did not relocate any of the features found during the evaluation, although this is likely to be due to the amount of site traffic that had already rutted the site prior to stripping (Dunkin 2001).

THE FINDS

Prehistoric Pottery by Mike Seager Thomas (Figs 17-20)

Introduction

Summary

The prehistoric pottery assemblage from Roundstone Lane, Angmering, comprises 1,481 sherds weighing 15,318 grams. Amongst it there are *c.* 26 dateable feature assemblages. These belong to two chronological groups, Middle Bronze Age (*hereafter* MBA), dated to between the 12th and 16th centuries Cal BC, and transitional Late Bronze Age/Early Iron Age (*hereafter* LBA/EIA), dated to around the 7th century Cal BC. Owing to the absence from them of significant finds of later material and the unabraded condition of many of the sherds comprising them, which suggests burial soon after breakage, most of these feature assemblages date the features from which they come. MBA dated features occurred in Areas B and D and in evaluation trench T42. These include seven ditch-like features, a shallow pit, and cremation burials. Well 614 has a *terminus post quem* of this date. LBA/EIA dated features occurred in Areas A, B and D and in evaluation trench 10 (Mayflower Way Evaluation). These include a major ditch, a number of shallow gullies, and a number of pits. MBA and LBA/EIA (or possibly LBA) material also comes from undated and post prehistoric features in Area C. A single feature in Area C (gully 976) yielded an additional 90 sherds weighing 600 grams which may belong to the beginning of the Late Iron Age (*hereafter* pre-Belgic LIA).

Method of analysis

The pottery was analysed using the pottery recording system recommended by the Prehistoric Ceramics Research Group (1992). All sherds were ascribed a fabric type on the basis of macroscopic examination. These were counted and weighed to the nearest whole gram and each diagnostic sherd was assigned to morphological/ decorative and technological type. Dating of fabrics was by association with chronologically diagnostic feature sherds and other, associated fabrics.

Interpretative context

Previous work in Sussex west of the Adur has yielded at least 12 significant assemblages of MBA date and 11 of LBA/EIA date. These comprise pottery belonging to, respectively, the Deverel-Rimbury (*hereafter* DR) and post Deverel-Rimbury (*hereafter* PDR) pottery traditions. For Sussex these traditions have been discussed in detailed by Barrett (1980, 311), Ellison (1972, 1978 and 1980), and Hamilton (e.g. 1977, 1987, 1993, 2002c). The present report compliments this study by considering the relationship of the Roundstone Lane assemblage to the broadly coeval assemblage from the Angmering Bypass excavations nearby, and by placing it in the context of the MBA and LBA/EIA pottery traditions of Sussex as a whole. The site assemblages to which the present assemblage is most closely related are, for the MBA group, Mile Oak, Shoreham (Hamilton 2002a) and Plumpton Plain (Hawkes 1935), and, for the LBA/EIA group, Chanctonbury Ring (Hamilton 2002c) and Slonk

Hill, Shoreham (Morris 1978a). The possible pre-Belgic LIA group is not closely paralleled.

Middle Bronze Age and Early First Millennium BC Pottery Fabrics

Summary

The Roundstone Lane prehistoric pottery assemblage comprises 16 fabric types. Most incorporate burnt flint and varying amounts and grades of quartz sand, and a few – all of them minority fabrics – incorporate shell and pisolithic Fe-oxide or glauconite-rich sand. Many also incorporate unquantifiable amounts of organic material. Most of these fabrics occur in chronologically diagnostic forms within the Roundstone Lane assemblage, have closely dated regional parallels, or were consistently associated on site with dated material. Five belong to the MBA. This group comprises fine, intermediate and coarse wares. In terms of sherd numbers, however, it is dominated by coarse wares. The remaining 11 belong to the early first millennium BC. Three do not occur in forms which can be precisely dated and could belong to any period between the LBA and the EIA. The remainder, which includes all those with shell and pisolithic Fe-oxide or glauconite inclusions, belong to the LBA/EIA. Like the earlier group, these comprise fine, intermediate and coarse wares. Most common are intermediate wares, but, unlike the coarse wares in the earlier group, these are not obviously dominant.

Middle Bronze Age Fabrics

For strength MBA fabrics tend to rely upon bulk rather than firing technology. Close Sussex parallels for Roundstone Lane MBA fabrics occur in assemblages from the Angmering Bypass (Seager Thomas and Hamilton 2002), Cock Hill (Ratcliffe-Densham, H B A and M M 1961, 97), Mile Oak (Hamilton 2002a, 42-44), New Barn Down (Curwen 1934, 61), East Beach, Selsey (Kenny 1989, 17), and many other sites. All of these are poorly fired. By contrast similar grade flint tempered wares from early first millennium BC sites are both better fired and thinner (e.g. Durrington, fabric F4) (Seager Thomas 2002).

Fine ware

Fine flint, FF4
Moderate to common (15 to 20%) coarse sand sized burnt flint, and very rare (<1%) fine quartz sand. Friable. Body sherds at *c* 6mm thick. No chronologically diagnostic forms occurred in this fabric but it was stratified below MBA vessel no 30. It is both finer and thinner than is usual in Sussex MBA assemblages.

Intermediate ware

Medium to coarse flint, F4
Sparse to moderate (7 to 15 %) medium sand sized to small granule sized burnt flint, and rare (1%) fine quartz sand. Friable. Body sherds from *c* 9 to 12 mm thick. The principal forms in fabric F4 are represented by vessel nos 28 and 38. Vessel no 38 is of MBA date. Vessel no 28 could be of MBA or LBA date.

Coarse wares

Coarse flint, CF2

Moderate (10 to 15%) coarse sand sized to small granule sized burnt flint, and rare (not precisely quantifiable) quartz sand. Very friable. Body sherds from *c* 9 to 12 mm thick. The principal forms in fabric CF2 are represented by vessels nos 21 and 30. Both of these are of MBA date.

Very coarse flint, CF3

Sparse to moderate (5 to 10%) coarse sand to granule sized burnt flint (with a greater proportion of fine grade material than CF4). Friable. Body sherds at *c* 16mm thick. The principal form in fabric CF3 is represented by vessel no 25. It is of MBA date.

Very coarse flint, CF4

Sparse to moderate (5 to 10%) coarse sand to granule sized burnt flint. Friable. Body sherds from 10 to 13mm thick. The principal forms in fabric CF4 are represented by vessels nos 26, 27 and 46. These are of MBA date.

Early First Millennium BC Fabrics

Owing to the differences between MBA and later pottery firing technology, it is easy to distinguish early first millennium BC from MBA fabrics. This applies irrespective of grade. If there is an overlap it is with later first millennium BC pottery. However, the three principal findspots of early first millennium BC pottery yielded only one later prehistoric feature sherd, and it is probably unnecessary to look outside this period (and more specifically the LBA/EIA) for dating. The early first millennium BC fabrics exactly reflect the wide range of forms associated with early first millennium BC pottery. Close Sussex parallels come from LBA Steyning, Mile Oak and Thundersbarrow Hill, which, in addition to an equally wide range of fabric types, yielded minority fabrics incorporating shell and pisolithic Fe-oxides similar to those from Roundstone Lane (Hamilton 1988, 64; 1993, 482-483; 2002a, 45).

Fine wares

Fine flint, FF1

Rare (2%) medium sand sized burnt flint, common fine to medium quartz sand, rare (1%) carbonaceous material, and rare (not precisely quantifiable), red, Fe-oxide nodules. Body sherds at *c* 6mm thick. No chronologically diagnostic forms occurred in this fabric, nor was it reliably associated with other dated sherds, but it is similar to fine wares in the LBA/EIA assemblage from East Beach, Selsey.

Fine flint, FF2

Sparse (3 to 5%) fine to coarse sand sized burnt flint, and ?moderate fine to medium quartz sand. Body sherds from *c* 6 to 8mm thick. The principal form in fabric FF2 is represented by vessel no 4. This is of LBA/EIA date.

Fine flint, FF3

Moderate (15%) medium sand sized burnt flint, ?moderate (15%) medium quartz sand, rare (<1%) carbonaceous material, and rare (not precisely quantifiable), red, Fe-oxide nodules. Body sherds at c 7mm thick. The principal forms in fabric FF3 are represented by vessel nos 5, 6, 11, 36 and 41. Vessels 5, 6 and 7 are of LBA/EIA date. Vessels 36 and 41may be LBA.

Fine flint with glauconite, FFG

Sparse (5%) medium sand sized burnt flint, sparse to moderate (7-10%) medium glauconite or pisolithic Fe-oxide sand, rare (1%) carbonaceous, and rare (not

precisely quantifiable), red, Fe-oxide nodules. Body sherds from c 6 to 7mm thick. No chronologically diagnostic forms occurred in this fabric but its on site associations are primarily LBA/EIA. Sussex glauconite or pisolithic Fe-oxide rich fabrics date from the LBA. The closest site to Roundstone Lane to have yielded them, Chanctonbury Ring, is of LBA/EIA date (Hamilton 2002c).

Intermediate wares

Shelly, S

Sparse to moderate (5 to 10%) decalcified coarse sand sized to small pebble sized shell, sparse (5 to 10%) fine to medium quartz sand, ?common (not precisely quantifiable) carbonaceous material/chaff, and rare (not precisely quantifiable), red, Fe-oxide nodules. Body sherds from 6 to 9mm. The principal form fabric S is represented by vessel no 7. This could be of LBA or LBA/EIA date. The fabric's on site associations, however, are primarily LBA/EIA.

Medium flint with shell, FS

Sparse (5%) medium to very coarse sand sized flint, patchy, rare to sparse (1 to 3%), coarse sand sized shell, and rare (1%) carbonaceous material. Body sherds from *c* 7 to 10mm thick. The principal form in fabric FS is represented by vessel no 8. This could be of LBA or LBA/EIA date. The fabric's on site associations, however, are primarily LBA/EIA.

Medium flint, F1

Rare to sparse (2 to 5%) medium sand to (very rare) small granule sized burnt flint, moderate (15%) fine to medium quartz sand, rare (1%) carbonaceous material, and rare (not precisely quantifiable), red, Fe-oxide nodules. No chronologically diagnostic forms occurred in this fabric, but, although it is present in small quantities in two probable MBA contexts, its principal chronological associations are LBA/EIA.

Medium flint, F2

Sparse to moderate (5 to 10%) medium to very coarse sand sized burnt flint, and rare (not precisely quantifiable), red, Fe-oxide nodules. A minority of sherds (not quantified separately) also include varying quantities of pisolithic Fe-oxides or glauconite. Body sherds from *c* 6 to 12mm thick. The principal forms in fabric F2 are represented by vessel nos 1, 9, 10, 13, 16, 17, 31, 37, 42 and 47. All but vessel nos 37, 42 and 47 belong to the early first millennium BC. The most precisely dated of these are LBA/EIA. Vessel no 47 is MIA or pre-Belgic EIA. Vessel no 37 comes from a probable MBA context but it is thought to have been intruded. Vessel no 42 is probably LBA/EIA but may be slightly later.

Medium flint, F3

Moderate (10 to 15%) medium sand sized to very coarse sand sized burnt flint, and very rare (<1%) medium granule sized burnt flint. Some sherds incorporate unquantifiable shell and/or carbonaceous material. Body sherds from *c* 9 to 11mm thick. No chronologically diagnostic feature sherds occurred in this fabric, but, although absent from MBA features, it was stratified below the principal LBA/EIA deposit. It may be LBA/EIA or LBA.

Coarse wares

Medium to coarse flint, CF1

Moderate (10%) coarse sand sized to small granule sized burnt flint. Body sherds from *c* 8 to 12mm thick. The only chronologically diagnostic feature sherd to occur in this fabric is the heavily gritted base (no 23). It is dated to the early first millennium BC.

Medium to coarse flint with glauconite, CFG

Sparse (3-5%) coarse sand to small granule sized burnt flint, moderate (10 to 15%) medium glauconite or pisolithic Fe-oxide sand, and rare (not precisely quantifiable), red, Fe-oxide nodules. Body sherds at *c* 10mm thick. No chronologically diagnostic sherds occurred in this fabric, but its on site chronological associations are wholly LBA/EIA. Identical fabrics occur in the LBA/EIA assemblage from Chanctonbury Ring.

Possible Later Iron Age fabrics

Three intermediate fabrics are without dated parallels. It is suggested here that they belong to the pre-Belgic LIA. However, both more and much better dated parallels will be required before this can be stated with certainty.

Chalk, C

Moderate to common (15 to 20%) medium to coarse sand sized ?chalk, and rare (not precisely quantifiable), red, Fe-oxide nodules or grog. Body sherds from *c* 7 to 9mm thick. The principal forms in fabric C are represented by vessel nos 49 and 50. These may be of pre-Belgic LIA date.

Greensand, GS

Common (20%) medium to coarse sand sized greensand. Fabric GS is represented by a single body sherd from undated pit 1225. This sherd was 10mm thick and weighed 20 grams. It was associated with single sherds in fabrics C and G.

Grog, G

Sparse (7%) medium to coarse sand sized grog (including some of a vivid red colour). Fabric G is represented by a single body sherd from Pit 1225. This sherd was 5mm thick and weighed 1.5 grams. It was associated with single sherds in fabrics C and GS.

Clay Sources, Pottery Fabrics and Early First Millennium BC Site Resource Procurement Strategies

The fabrics with pisolithic Fe-oxides or glauconite inclusions are thought to be non-local. Most likely the clays comprising them come from north of the Downs. Similar fabrics have been identified in pottery assemblages from at least 12 Sussex early first millennium BC sites (Roundstone Lane is the western-most), and, together, are taken as an indicator of craft specialization during the period (Hamilton 1997, 42; 2002a, 46). A non-local source may also be suggested for fabric S. Similar shelly fabrics have been quantified from four West Sussex early first millennium BC sites, Mile Oak, Roundstone Lane, Thundersbarrow Hill and Steyning (Tables 1 and 2; Hamilton 2002a, table 2.9; 1993 and 1988, 46). In each case they comprised a minority of the whole. By contrast, at their principal East Sussex find spot, Bishopstone, they comprised the majority (Hamilton 1977, table 5). Either these fabrics originated at Bishopstone, or, more likely, they related to a particular role with which that site was associated. The implication is that they too are a product of craft specialization. The natural inclusions present in the remaining Roundstone Lane fabrics are consistent with what would be expected of local clays. Possible sources occur in the clay-with-flints, local Tertiary strata and in the fossil channels of the coastal plain, but none of these have been studied in sufficient detail to provide a match. However, differences

between the amount, grade and presence of natural inclusions, such as quartz sand, present in fabrics belonging to the MBA and the early first millennium BC fabric groups show the principal local source of potting clay to have changed between these two periods.

Typological Context of the Middle Bronze Age Pottery Assemblage

Deverel-Rimbury Pottery

The MBA pottery from Roundstone Lane includes a wide range of forms belonging to the DR pottery tradition. Seven 'everyday' and 'heavy duty' forms within it are linked by Ellison with food preparation (Ellison types 1 to 4, 6) and storage (Ellison types 8 to 10) (Ellison 1978, 32; 1980, 38). Forms belonging to a 'fine ware' group, linked by her with food consumption, are absent but may be represented by fabric FF4. Forms with Sussex parallels include a large 'bucket urn' with an applied, finger-tip impressed cordon (no 21), a sherd with a simple, finger-tip impressed cordon, also probably belonging to a 'bucket urn' (no 22) (Ellison types 9 and 10), an ovoid bossed jar (nos 26 and 27) (Ellison type 2), a flared, convex-sided base (no 25), a small 'bucket urn' with an undecorated, raised or applied cordon (possibly incorporating a boss) (29), two thin rim sherds from a bag-shaped or ovoid bossed jar (nos 24 and 28) (Ellison types 1 and 2), a flat-topped, in-turned rim and a flared, straight sided base possibly belonging to a bi-conical urn (no 44) (Ellison type 6), and a straight-side vessel with a lightly finger-tip impressed cordon and a slightly in-turned, finger-tip impressed rim (no 38). No single Sussex assemblage incorporates all of these forms. Published feature groups containing two or more, however, come from at least three sites: the Angmering Bypass (ditch 4500) (Seager Thomas and Hamilton 2002), Coldean Lane, Brighton (Varley Halls, hut terrace 1) (Hamilton 1997, fig 14), and Mile Oak (hut terraces 1 and 3) (Hamilton 2002a, figs 2.29-31). Important individual parallels occur in assemblages from Amberley Mount (Ratcliffe-Densham, H B A and M M, 1966, fig 6), New Barn Down (Curwen 1934, fig 19), Plumpton Plain (Hawkes 1935, fig 2), Selsey (Musson 1954, figs 6 and 7; Kenny 1989, fig 5) and other Sussex sites.

Unusual Middle Bronze Age Traits

Three forms that have not hitherto been recognized in Sussex DR assemblages are also present in the MBA assemblage.

Urns

Two new urn forms are in indisputably MBA fabrics (*CF2 and CF4*) and can confidently be dated to this period. One of these, vessel no 30, is straight-sided and bossed with a notched cordon. Though utterly unlike any of Ellison's Sussex types, its bosses and small size place it in her 'everyday' group. A notched cordon occurs in the 'doubtful group' of pottery from MBA New Barn Down (Curwen 1934, fig 21). Vessel no 30 was directly associated with fabric FF4. The other, vessel no 46, is bi-partite with a vertically finger-tip impressed line between its rim and shoulder angle. It is a variant of Ellison's types 6 or 8.

Post firing perforations

Also unusual are perforations between the rim and cordon of vessel no 21. Post-firing perforations are common in DR assemblages from Sussex (*cf* no 29) and are

generally interpreted as repair-holes (Ellison 1972, 111; Hamilton 2002a, 48). The perforations in vessel no 21, however, were made *prior* to firing. It is thought that they relate either to suspension, or, in view of the probable size and weight of vessel no 21, a means by which a cover may have been attached.

The Date of Sussex Deverel-Rimbury Pottery

The referencing of MBA features by probable later Bronze Age features and deposits and the close association of MBA and LBA-type wares on the Angmering Bypass site suggests that parts of the assemblage from it may relate to a late phase of the DR tradition (Seager Thomas and Hamilton 2002). The same has been suggested of the Mile Oak assemblage (Hamilton 2002a, 36, 48) to which that from Roundstone Lane is related typologically. Horizontal grouping of different DR forms from MBA cemeteries at Kimpton in Hampshire (Dacre and Ellison 1981, 190) and Ardleigh Rings in Essex (Couchman 1975) suggest additionally that bosses, a recurrent Sussex DR trait, belong to a late phase of DR activity. This is broadly supported by radiocarbon dates associated with Sussex DR pottery which focus on a period between *c* 1500 and 1150 Cal BC but include some atypically late dates (notably that from Itford Hill) (Hamilton 2002b, 180, fig 7.30). Indications of a date towards the end of the MBA for some of the Roundstone Lane DR pottery include fabric FF4, which, although not exactly paralleled in the later Angmering assemblages, is unusually fine for a Sussex MBA fabric, the unparalleled vessel no 30 below which it was found, and the co-occurrence in ditch 642 of both MBA and later pottery. When the MBA occupation commenced remains open.

Regional Importance of the Angmering Middle Bronze Age Assemblage

The wide range of feature associations of the two Angmering MBA pottery assemblages suggest that a variety of activities occurred on site – in addition to those indicated by the urned cremations. What these activities were cannot be inferred from the pottery alone since it was neither 'structured' nor present in obvious primary contexts (e.g. hut platforms), but, if Ellison's interpretation of her 'everyday' and 'heavy duty' wares is correct, we can assume that they include some of a domestic nature. Both the number and the variety of vessel forms indicate that this was similar to that which occurred on downland sites during the period (*see* parallels cited above) and thus close an interpretative gap between the two regions resulting from the absence of evidence for settlement on the Coastal Plain. Both sites also yielded feature assemblages comprising several different vessel forms (Roundstone Lane, ditch 545, and Angmering Bypass, ditch 4673) (Seager Thomas and Hamilton 2002). These are important because they improve the internal phasing of DR pottery. For example, ditch 545 shows bag-shaped jars, ovoid bossed jars and jars with raised, undecorated cordons to have been coeval. Finally, the forms present and absent from the two assemblages place Angmering in a regional context. Two of Ellison's vessel types, both of which she considers specific to Sussex (5 and 7) (Ellison 1978, 34), were absent from Angmering and do not occur in other Coastal Plain assemblages. It is possible, therefore, that the Coastal Plain fell outside a definable style zone. On the other hand, type 7 was present at Highdown Hill nearby (Wilson 1940, fig 1), and both assemblages have extra-regional parallels including a set previously thought not to have been shared with West Sussex (Ellison type 9) (Ellison 1980, fig 12). Overall this confirms the broad regional credentials of Sussex DR traditions.

Typological Context of the Early First Millennium BC pottery

Post Deverel-Rimbury Typology

Most of the LBA/EIA pottery from Roundstone Lane belongs to a late, 'decorated' phase of the PDR pottery tradition. It comprises a wide but incomplete range of the known forms associated with this tradition, including, in terms of the number of individual vessels represented, a high proportion of fine wares associated with the consumption of food (Barrett 1980, 303), and rather fewer intermediate wares associated with other forms of domestic activity. Forms with Sussex parallels include the neck of a shouldered jar (no 1), a possible tri-partite jar (no 4) and two narrow shouldered tri-partite bowls (5 and 11), all of which are finewares, and the finger-tip or tool impressed shoulder angles of three shouldered jars (nos 7, 8 and 31), and an externally slashed rim of a tri-partite shouldered jar (no 18). Once again no Sussex assemblage incorporates all of these forms but published feature groups containing two or more come from Slonk Hill (pits 4 and 5) (Morris 1978a, fig 12) and East Beach, Selsey (Well 112) (Seager Thomas 2001a, fig 12), and groups of parallels occur in 'decorated' PDR site assemblages from Chanctonbury Ring (Hamilton 2002c) and Highdown Hill (Wilson 1940, figs 4-6). Four vessels, a heavily gritted base (no 34), a convex jar (no 37) and two possible hemispherical bowls (nos 36 and 41), could belong to an earlier, plainware phase of the same tradition. With the possible exception of the narrow shouldered tri-partite bowl, the distribution of which is restricted to the south coast and the continent, these vessel forms also occur widely elsewhere in south east England.

Non-Sussex Forms

Three forms are new to Sussex. These include a third narrow shouldered tri-partite bowl (no 6), a large jar with an upright, flat-topped and massively internally expanded rim (no 9), and the two 'rusticated' sherds (nos 10 and 17). In order to find parallels for vessel no 6 and the 'rusticated' sherds it is necessary to turn to Kent or the continent. Sherd 9, which may be part of the same vessel as the two 'rusticated' sherds, is without parallel.

Narrow shouldered tri-partite bowl
The key characteristic of vessel no 6 is its very narrow, acutely angled shoulder. This form is associated with obtusely angled shoulders, similar to those of vessel nos 5 and 11, in assemblages from Dolland's Moor near Folkestone (Macpherson-Grant 1990, 61) and Compiègne 'Le Fond Pernant' in Oise, France (Malrain et al 1996, fig 5). Both forms occur separately in assemblages from other French sites including Neuville-sur-Escaut in Nord (Hurtrelle *et al* 1990, 18), Duisans in Pas-de-Calais (*ibid*, 27) and Conde-sur-Suippe 'Le Deprofundis' in Aisne (La Brieffe and Sidéra 1988, fig 32).

Applied 'rustication'
This finish consists of roughened clay slurry, usually applied below the shoulder. Prior to the present find it was known only in Kent and on the near continent. Near contemporary parallels occur in assemblages from, for example, Hawkinge in Kent (Seager Thomas and Hamilton 2001b), Coquelles 'RN1' in the Pas-de-Calais, France (Blancquaert 1998, fig 5), and Vlaardingen in Holland (Van Heeringen 1987, plate 42). It is conceivable, given the evidence for the movement of other early first

millennium BC pottery outlined above, that the present find was imported from one or other of these regions.

The Dating of the Post Deverel-Rimbury Assemblage

At least four hundred years separate the DR and the bulk of PDR pottery from Roundstone Lane, although, as noted above in the sections on fabrics and PDR typology, a handful of sherds may be of intermediate date. Typologically, 'decorated' PDR pottery falls somewhere between plain PDR pottery, dated to the LBA, and a less well defined group comprising assemblages such as those from Green Street, Eastbourne (Hodson 1962), and Findon Park (Fox and Wolseley 1928) currently dated to the EIA. Radiocarbon dates associated with 'decorated' PDR pottery focus on the 7th century Cal BC (Needham 1996, 137). This is consistent both with continental radiocarbon dates, such as that from Vlaardingen in Holland (Van Heeringen 1989), which show applied 'rustication' to have become common there between the 7th and 6th centuries Cal BC, and Sussex dates on earlier, plain PDR pottery which focus on the 9th century Cal BC. Sussex dates associated with 'decorated' pottery come from Yapton, Chanctonbury Ring and Harting Beacon. The earliest is from Yapton, which yielded no parallels for the present assemblage. It spans the 10th and 6th centuries Cal BC. Much closer typologically is Chanctonbury Ring which has a date spanning the 8th and the 2nd centuries Cal BC. Latest is that from Harting Beacon. It spans the 4th/5th and the 1st century Cal BC (Hamilton 1993; Hamilton and Manley 2001, 14).

The Regional Importance of the Early First Millennium BC Assemblage

Roundstone Lane is only the third or fourth site on the Sussex Coastal Plain to have yielded LBA/EIA pottery. Twice as many are known on the West Sussex Downs. The reason for this difference is unknown, but, given the *opposite* distribution of LBA finds pots (Seager Thomas 2001a, fig 14), it seems likely that it reflects the real distribution of settlement during the two periods. The present assemblage provides an insight into that settlement. The form and probable role of the vessels comprising it are similar to those from contemporary downland sites, many of its feature associations are similar, and it was richly augmented by craft specialization and far-reaching site resource procurement strategies similar to those associated with downland sites. By contrast the much more extensive LBA settlement of Coastal Plain appears culturally impoverished (e.g. Climping: Seager Thomas 2001b). This suggests not so much a shift in settlement as a reorganization of resources, which, given their common culture, are best associated with the coeval establishment of the first archaeologically visible land boundaries and hill forts on the Downs (Hamilton and Manley 2001, 25, table 1).

Later Iron Age and Undated Pottery

Five feature sherds are later or of uncertain date. These include an undiagnostic rim sherd in either fabric FF3 or FF4 (no 32), a large pedestal base (no 42), the base of a probable saucepan pot (no 48), and two sherds in fabric C, one with an 'S' shaped profile and slightly thickened neck (no 49) and one with an out-turned rim/vestigial neck (50).

Out-turned rim

The form and fabric of vessel no 32 can be accommodated in both of the principal traditions comprising the Roundstone Lane assemblage, and, although its associations are primarily MBA, its precise date remains unknown. The feature from which it comes, well 614, has an MBA *terminus post quem* at best.

Pedestal base

The closest parallel for the present example comes from Slonk Hill (Morris 1978a, fig 14). Slonk Hill yielded LBA/EIA, EIA and MIA assemblages. The fabric of the Slonk hill vessel, however, was consistent with an LBA/EIA date. There are two interpretative options, either the Roundstone Lane assemblage incorporates a later Iron Age component, or the 'decorated' PDR pottery comprising it belongs to the end of the tradition.

Saucepan pot

Vessel no 48 is unusually flared for a saucepan pot and has only two close Sussex parallels, one from Torberry (Cunliffe 1976, fig 20) and one from Shopwyke (Seager Thomas and Hamilton 2001a). Sussex saucepan pottery is thought to date from the 3rd century BC (Cunliffe 1991, 567). Both parallels, however, were associated with LIA forms and may belong to slightly later, pre-Belgic LIA group.

'S' shaped profile

The key characteristic of vessel no 49 is the combination of its 'S' profile and thickened neck. 'S' shaped profiles occur throughout the early first millennium BC (and later), but, outside the region, this combination is primarily associated with pre-Belgic LIA forms (e.g. Bigbury, Kent: Thompson 1983, fig 11). Possible Sussex examples occur in the LIA assemblage from North Bersted (Morris 1978b, figs 19-21).

Out-turned rim

Vessel no 50 has two Sussex parallels. One is from the same Torberry was as the saucepan pot parallel referred to above (Cunliffe 1976, fig 20). The closest is from Bishopstone (Hamilton 1977, fig 48). The feature from which it came, Pit 790, is not closely dated but is thought to be intermediate between the site's LBA and LIA occupations (Hamilton *pers comm.*). A Kent parallel for another vessel from this feature occurs in the pre-Belgic LIA assemblage from Hawkinge (Seager Thomas and Hamilton 2001b).

Catalogue (Figs 17-20)
* - illustrated

Area A

Ditch 280, fill 281

1. *Upper shoulder, short, upright neck, and flat squared to slightly expanded rim of shouldered jar. *Fabric F2.* Finger pinched neck. Dark grey core and interior surface, and orange exterior surface.

2. Finger-tip impressed shoulder. *Fabric F2.* Dark grey core and interior surface, and Dark grey to red brown exterior surface.

Gully 414 (261), fill 262

3. *Round shoulder, ?upright neck and flat, squared rim of shouldered jar. *Fabric S.* Dark grey core and, orange surfaces.

Gully 414, fill 415

4. *Flared neck and flat, squared rim of tri-partite or round shouldered bowl or small jar. *Fabric FF2*. Burnished interior and exterior surfaces. Dark grey surfaces and core.

5. *Convex lower body, rounded, obtusely angled shoulder angle, short upper shoulder, upright or slightly flared neck and internally rounded rim of tri-partite bowl. *Fabric FF3*. Burnished interior and exterior surfaces. Dark grey core and interior surface, and orange to grey buff exterior surface. Same as vessel as vessel no 12.

6. *Slightly convex lower body, rounded, acutely angled shoulder angle, short upper shoulder, upright or slightly flared neck and rounded rim of tri-partite bowl. *Fabric FF3*. Burnished interior and exterior surfaces. Grey brown to dark grey core and surfaces.

7. *Finger-tip impressed shoulder. *Fabric S*. Orange (burnt) core and surfaces.

8. *Convex lower body, and angular, finger-tip impressed shoulder of shouldered jar. *Fabric FS*. Dark grey core, and brown grey surfaces.

9. *Upper shoulder, upright neck and flat, massively internally expanded rim of very large, probable shouldered jar. *Fabric F2*. Orange core and surfaces.

10. Body sherd. *Fabric F2*. Applied 'rustication' (clay slurry) on exterior surface. Orange core and surfaces. ?Same vessel as vessel nos 9 and 17.

Gully 426, fill 427

11. Convex lower body, rounded, shoulder angle, short upper shoulder, and internally rounded rim of tri-partite bowl. *Fabric FF3*. Burnished interior and exterior surfaces. Dark grey core and interior surface, and orange to grey buff exterior surface.

12. Convex lower body, rounded, obtusely angled shoulder angle, short upper shoulder, upright or slightly flared neck and internally rounded rim of tri-partite bowl. *Fabric FF3*. Burnished interior and exterior surfaces. Orange to grey buff core and exterior surface, and dark grey interior surface. Same as vessel no 5.

13. *Flat, slightly expanded base, and flared, concave to straight sided lower body. *Fabric F2*. Orange core and exterior surface, and dark grey interior surface.

14. *Flat base, and flared, very slightly convex sided lower body. *Fabric F2*. Roughly fingered exterior. Dark grey core and interior surface, and dark grey to orange exterior surface.

15. Flat, slightly expanded base, and flared, concave sided lower body. *Fabric F2.* Brown core and exterior surface, and dark grey brown interior surface. ?Same vessel as vessel no 16.

16. *Flat, slightly expanded base, and flared, concave to straight sided lower body. *Fabric F2.* Finger smeared exterior surface. Brown core, and orange surfaces. ?Same vessel as vessel no 15.

17. Body sherd. *Fabric F2.* Applied 'rustication' (clay slurry) on exterior surface. Orange core and surfaces. ?Same vessel as vessel nos 9 and 10.

Area B

Ditch 504, fill 505

18. *Flared neck and flat-topped, externally finger-tipped rim of tri-partite shouldered jar. *Fabric F2.* Dark grey core and exterior surface, and buff interior surface.

Ditch 504, fill 506

19. Heavily gritted base (very small fragment). *Fabric F2.* Dark grey core and surfaces.

Cremation 507

20. *Upright upper body and flat, very slightly internally bevelled and expanded rim. *Fabric CF2.* Finger smeared exterior. Dark grey brown core and interior surface, and dark grey exterior surface.

Cremation 508

21. *Upright upper body of bucket urn with applied, finger-tip impressed cordon, and flat, squared rim. Two pre-firing perforations, one above the other, between rim and cordon. *Fabric CF2.* Dark grey brown core and dark grey surfaces.

22. *Finger-tip impressed body sherd/cordon. *Fabric CF2.* Dark grey core, dark brown interior surface, and red exterior surface.

Gully 541, fill 542

23. Flat, heavily gritted base and flared lower body. *Fabric CF1.* Dark grey to grey brown core, and dark grey surfaces.

Curvilinear ditch 545, fill 560

24. Rounded rim of thin bodied, possible convex jar. *Fabric F4.* Dark grey core and surfaces.

25. *Flat base and convex to straight sided lower body. *Fabric CF3.* Orange core and surfaces.

26. *Rounded rim of possible convex jar. *Fabric CF4.* Buff core and surfaces. ?Same vessel as vessel no 27.

27. *Body sherd with circular boss. *Fabric CF4.* Dark grey core, red brown to dark brown exterior surface, and buff to dark brown interior surface. ?Same vessel as vessel no 26.

Curvilinear ditch 545, fill 561

28. *Rounded rim. *Fabric F4.* Dark grey core and surfaces.

29. *Upright upper body of bucket urn with ?applied cordon with boss, and rounded rim. Post-firing perforation immediately above cordon. *Fabric CF4.* Dark grey core, dark brown to orange exterior surface, and buff to dark grey interior surface.

Cremation 300/569

30. Upright upper body with notched cordon and flat, squared rim. Two possible bosses. *Fabric CF2.* Finger smeared. Dark grey core and surfaces.

Area C

Scoop 995, fill 996

31. *Diagonally tool (?bone) impressed, obtuse shoulder angle of shouldered jar. *Fabric F2* (glauconitic). Dark grey core and interior surface, and dark grey to buff exterior surface.

Area D

Well 614, fill 767

32. *Upper shoulder/body and internally rounded and bevelled out-turned rim/vestigial neck. *Fabric FF3* or *FF4.* Light brown core and orange surfaces.

Oval feature 626, fill 637

33. Body sherds (thin) with applied, finger-tip impressed cordon. *Fabric F4.* Dark grey core, and dark grey to orange surfaces.

34. Body sherds (thin) with applied, finger-tip impressed cordon. *Fabric F4.* Dark grey core and interior surface, and dark brown exterior surface.

35. Flat, slightly expanded base and flared, slightly convex lower body. *Fabric F4.* Dark grey to grey brown core, dark grey to brown exterior surface, and orange to buff interior surface.

Linear feature 642, fill 643

36. *Very slightly convex upper body and flat rim of possible hemispherical bowl. *Fabric FF3*. Burnished. Dark grey core and surfaces.

37. *Very slightly convex upper body and rounded rim of convex jar. *Fabric F2*. Finger smeared interior. Dark grey core and interior surface, and dark brown exterior surface.

38. *Straight sided upper body of straight sided jar with finger tip impressed cordon and rounded, in-turned rim. *Fabric F4*. Dark grey to brown core, and grey to buff surfaces.

Linear feature 648, fill 649

39. Rounded rim. *Fabric CF2*. Dark grey core and surfaces.

Linear feature 648, fill 649

40. Flat base and slightly flared, straight sided lower body. *Fabric CF4*. Grey to orange core, dark grey to orange exterior surface, and dark grey interior surface.

Pit 656, fill 657

41. *Rounded rim of possible hemispherical bowl. *Fabric FF3*. Burnished. Dark grey core and surfaces.

42. *Very large pedestal base. *Fabric F2* (fine). Burnished. Dark grey to brown core and surfaces.

43. Heavily gritted base. *Fabric F2*. Light brown core, orange interior surface, and grey exterior (gritted) surface.

Burnt feature 666, fill 740

44. *Flat base and flared, convex to straight sided lower body, and convex to straight sided upper body and flat, squared rim of bucket urn or convex jar. *Fabric CF4*. Dark brown core and dark grey to dark brown surfaces.

Oval feature 722, cut 723

45. Flat base and flared lower body. *Fabric F2*. Dark brown core, dark grey to dark brown exterior surface, and dark grey interior surface.

Linear feature 742, fill 743

46. *Obtuse shoulder angle and high upper body/shoulder and rounded rim of very large bi-partite jar. Vertical line of finger-tip impressions between shoulder and rim. *Fabric CF4*. Dark grey to dark brown core, orange to dark grey brown exterior surface, and orange to grey brown interior surface.

Circular feature 752, fill 753

47. Rounded rim. *Fabric F4*. Orange core and surfaces.

Catalogue of possible pre-Belgic LIA sherds

Area A

Ditch 408, fill 409

48. *Flat base and convex to straight sided flared lower body of possible 'saucepan pot' with four horizontal furrows immediately above base. *Fabric F2* (fine). Dark grey core and interior surface, and buff exterior surface.

Area C

Gully 976, fill 977

49. *Flat base, flared, slightly thickened neck and rounded rim of jar with 'S' shaped profile. *Fabric B*. Dark grey core and dark grey to brown surfaces.

50. *Upper body or shoulder and rounded, out-turned and internally bevelled rim/vestigial neck. *Fabric B*. Dark grey core and orange surfaces.

Overall conclusion

Interpretatively, Roundstone Lane is tied to the adjacent Bypass site. The importance of the prehistoric pottery assemblages from both lies in, firstly, their position on the Sussex Coastal Plain, secondly, the co-occurrence on them of pottery belonging to the MBA and the early first millennium BC, and, thirdly, its presence at both in a variety of feature types. Angmering is one of only two locations to fulfil these criteria (the other is Selsey), and, with it, it provides a unique opportunity to examine a range of issues relating to contemporary settlement similar to that possible in Sussex's better known downland region. Of primary interest is the precise dating of activity in the area, achieved through a detailed fabric analysis of the two assemblages, and its context within the Sussex MBA and first millennium BC as a whole. This shows how settlement at Angmering, although probably continuous, shifted through the period. The same thing occurred both on downland sites and on sites outside the region and suggests that all belong to a common settlement tradition. Much the same is suggested by the pottery forms present, and, with the possible exception of the well (a feature category which is as much geographically as culturally determined) their feature associations. For the whole period these are similar to those from downland sites. This puts paid to any assumptions regarding MBA and early first millennium BC settlement predicated on a perceived difference between the two areas. Work on the possible later first millennium BC pottery from the site is on-going.

The Romano-British Pottery by Malcolm Lyne (Figs 21-23)

Introduction

The site produced a total of 5,545 sherds (79,052g) of pottery, ranging in date between the Latest Iron Age and the medieval period: the initial evaluation trenches produced 307 sherds (3,218g), Area A 22 sherds (144g), Area B 5 sherds (34g) and Area D yielded 119 sherds (1811g) of pottery. By far the largest amount of pottery, however, came from Area C and amounts to 5,068 sherds (73,819g) of almost entirely Roman material, with a strong emphasis on the period *c.* AD 200-400. Four further sherds were recovered during the second evaluation to the south of the main site.

Methodology

All of the assemblages were quantified by numbers of sherds and their overall weights. Vessel forms and their fabrics, as well as the condition of the sherds, were also noted for dating purposes and are listed in the archive. The assemblages selected for publication were further quantified by numbers of sherds and their weights per fabric. These fabrics were classified using a x8 magnification lens with built-in metric scale in order to identify the natures, forms, sizes and frequencies of added inclusions. Finer fabrics were further examined using a x30 magnification pocket microscope with artificial illumination source.

Only two assemblages were large enough for quantification by Estimated Vessel Equivalents (EVEs) based on rim sherds (Orton 1975).

The Fabrics

A numbered fabric series was drawn up as follows: the equivalent fabric coding for the 1985-2000 excavations at Bignor are placed in brackets after each entry (Lyne 1996):

1. Handmade buff-pink fabric with profuse up-to 0.50mm. multi-coloured quartz and occasional up-to 2.00mm. calcined flint filler.
2. Handmade black fabric with profuse up-to 2.00 mm. rounded vesicles from the leaching out of chalk filler.
3A. Handmade and soot soaked very-fine-sanded Atrebatic Overlap pottery
3B. Similar but with coarse, up-to 2.00 mm. multi-coloured quartz sand filler.
4A. Sandy grey Arun Valley ware with dark ferrous inclusions (1A/B).
4B. Similar but oxidised (1E).
4C. Sand free Hardham 'London ware' fired grey to red with polished micaceous black surfaces (1C).
4D. Hardham 'London ware' fabric variant with very-fine up-to 0.10 mm. quartz-sand filler (1D).
4E. A coarser version with up to 1.00 mm. quartz sand (1D).
4G. Sand free pale-orange fabric fired cream. A Wiggonholt product used mainly for flagons (25A)
4H. Similar but with profuse up-to 0.20 mm. multi-coloured quartz filler and occasional up-to 1.00mm red ferrous inclusions (25B)

4I. Hardham imitation South Gaulish Samian (26)
5. Rowlands Castle Ware (10)
6A. Alice Holt/Surrey greyware (8B)
6B. Alice Holt/Farnham very-fine-sanded greyware with profuse up-to 0.10 mm. quartz sand filler (8C).
6C. High-temperature fired blue-grey Alice Holt/Tilford fabric with coarse sand.
7. Sandy Alice Holt/Farnham Ware imitation with profuse up-to 1.00mm quartz and black/white slip.
8. Overwey/Portchester D fabric (9)
9. East Sussex Ware (14)
10. Hampshire Grog-tempered ware with profuse up-to 2.00mm white and orange grog filler (Lyne 1994, Industry 6A).
11. Handmade orange fabric with up-to 1.00mm brown, red and black grog and silt-sized quartz, fired rough grey. A storage-jar fabric.
12. Dorset Black-Burnished ware BB1 (11).
13. Imitation BB1 (12).
14. Very-fine-sanded white to pale-grey fabric fired flecky blue-grey to black. A Wickham Barn kilns product (Butler and Lyne 2001) (7B).
15. Pimply blue-grey fabric with very-fine quartz and up-to 2.00 mm. crushed brown, black and white grog filler (16B).
16. Highgate Wood C fabric (31).
17A. South Gaulish Samian (17).
17B. Martres-de-Veyre Samian
17C. Central Gaulish Samian (18).
18. Central Gaulish Whiteware (28B).
19. Moselkeramik (24).
20. Rhenish
21. Oxfordshire Red Colour-coat (23)
22A. New Forest Purple Colour-coat (22)
22B. New Forest cream fabric with red-to-brown colour-coat
22C. New Forest Parchment Ware (34).
23. Lower Nene Valley Colour-coat (21).
24. German Marbled Ware.
25. Miscellaneous greywares

The Assemblages

Late Iron Age

Amounts of pottery which could relate to this period are very small and confined to a heavily abraded but early-looking East Sussex Ware sherd (2g.) from linear feature 660 and two sherds in Atrebatic Overlap Fabric 3A from 672 in Area D. It is quite possible that these three sherds are in fact post-Conquest in date.

c. AD43-150

The focus of activity during this period was in the south-east corner of Area C.

Assemblage 1. From the fills of Ditch 1042 beneath occupation layer 1041 (Contexts 1043 and 1044).

The 69 sherds (2096g) of pottery from this feature are large and fresh and come from a limited number of vessels, nearly all of which are in coarse grey to black Hardham Fabric 4A. The only fragments from other sources are a jar bodysherd in Alice Holt greyware Fabric 6A and another bodysherd in oxidised Atrebatic Overlap Fabric 1 (*c.* 0 - AD50).

1. Necked bead-rim jar in grey-brown Fabric 4A fired rough grey externally. Ext. rim diameter 160 mm. Paralleled at Ounces Barn, Boxgrove (Middleton 1996, Fig.14-12). *c.* AD30-60. Context 1043

2. Similar vessel in similar fabric fired rough grey. Ext. rim diameter 160 mm. Paralleled in Phases 2 and 3 at the Horticultural Research International kiln site in Littlehampton (Lyne 2000, Figs 4-2 and 3). *c.* AD50-70. One of three. Context 1043.

3. Necked-jar in similar fabric fired polished black externally. Ext. rim diameter 120 mm. Similar to Fishbourne Type 181 (Cunliffe 1971). *c.* AD43-70. Context 1043.

4. Gallo-Belgic platter copy in coarse black Fabric 4E with surface polish. Ext. rim diameter 200 mm. *c.* AD50-120. Context 1043.

5. Everted-rim jar in patchy black/brown/red Atrebatic Overlap. Fabric 3A. Ext. rim diameter 140 mm. *c.* AD30-50. Contexts 1043 and 1044.

6. Everted-rim jar in coarse pink-grey Fabric 4A fired flecky grey-brown. Ext. rim diameter 150 mm. One of the sherds has a rivet hole where repair has taken place. Paralleled at Ounces Barn, Boxgrove (Middleton 1996, Fig.19-31). *c.* AD50-100. These various vessels indicate a date of *c.* AD 30-60 for this assemblage.

Assemblage 2. From the fills of Pit 1009 sealed by occupation horizon 1041 (Contexts 1010,1011 and 1033).

The 138 sherds (3950g) of pottery from this feature are heavily broken up and unsuitable for detailed quantification but include the following:

7. Necked-jar with undercut rim in grey Fabric 4A fired black. Similar to Fishbourne Type 162 (Cunliffe 1971). *c.* AD43-100. One of two. Context 1010.

8. Handmade necked-jar in similar fabric oxidised orange-brown. Ext. rim diameter 180 mm. Paralleled at the Littlehampton kilns in Phase 3 (Laidlaw and Lyne 2000, Fig.4-6). *c.* AD 70-100. Context 1010.

9. Unusual platter with lid-seated rim in very-fine grey Fabric 4A fired polished black. Ext. rim diameter 180 mm. Context 1010.

10. Bead-rim jar in black East Sussex Ware fired brown externally with two bands of square-toothed rouletting around the neck. External rim diameter 240 mm. Context 1011.

Assemblage 3. From occupation layer 1041 sealing Ditch 1042 and Pit 1009.

The 152 sherds (3058g) of pottery from this horizon tend to be large and fresh but unfortunately come from too few vessels for meaningful quantification in detail. What can be said, however, is that coarse Arun Valley greywares make up more 90% of the assemblage by sherd count and reflect the total domination of pottery supply to the site at this period by the products of that industry. The contemporary Horticultural Research International kiln site in Littlehampton is only three kilometres to the west and may well have been the source of most, if not all, of this Arun Valley industry material (Lovell 2000). The pottery from other sources comprises a jar fragment in Atrebatic Overlap Fabric 2, eleven Gallo-Belgic platter imitation and jar sherds in Atrebatic Overlap Fabric 3A and a basal sherd from a Central Gaulish Samian platter with the stamp C]OCVRO.F (*c.* AD120-160). The presence of the latter fragment indicates that rubbish continued to be added to this occupation deposit well into the second quarter of the second century and that the assemblage as a whole spans the period *c.* AD43-150.

11. Large carinated beaker in patchy grey/buff/black Fabric 4A. Ext. rim diameter 180 mm. A similar form was made in the Chapel Street kilns at Chichester (Down 1978, Fig.10.4- 8.10). *c.* AD50-60.

12. Bead-rim jar in similar fabric fired polished black. Ext. rim diameter 130 mm. Paralleled at Wiggonholt (Evans 1974, Fig. 11-48). *c.* AD43-70.

13. Another example with undercut bead in similar fabric fired grey with external black patches. Ext. rim diameter 120 mm. Paralleled in Phase 4 at the Littlehampton kilns (Lyne 2000, Fig. 4-14). *c.* AD70-140.

14. Bulbous jar with stiff everted rim in similar fabric. Ext. rim diameter 120 mm. Jars of this type appear in the early-second century at the Littlehampton kilns (Lyne 2000, 15).

Assemblage 4. From the fills of Ditch 988 (Contexts 989 and 990).

These fills produced a total of 153 fresh-looking sherds (2,170g) of late-1st- and early 2nd-century pottery. The assemblage is again too small for quantification by EVEs but Arun Valley coarsewares are overwhelmingly predominant by sherd count (92%) and include the following:

15. Necked-jar in rough-grey Fabric 4A. Ext. rim diameter 130mm. Paralleled at the Horticultural Research International kiln site at Littlehampton in Phase 2 assemblages (Lyne 2000, Fig. 4-5). *c.* AD50-80. Context 989.

16. Necked-bowl in similar fabric. Ext. rim diameter 100 mm. Paralleled at Ounces Barn, Boxgrove in assemblage dated *c.* AD50-100 (Middleton 1996, Fig. 17-87). Context 989.

17. Larger necked-jar rim in flecky blue-grey Fabric 4A. Paralleled at Wiggonholt, where dated *c.* AD60-100 (Evans 1974, Fig. 14-91). Context 990.

18. Bulbous everted-rim jar in similar fabric fired rough-grey with surface blackening. Ext. rim diameter 130 mm. Vessels of this type first appear in Phase 4 at the Horticultural Research International kiln site in Littlehampton (Lyne 2000, Fig.4-9). *c.* 100-150. Context 989.

19. Jar with internal lid-seating in similar fabric. Ext. rim diameter 170 mm. Jars of this type also first appear in Phase 4 at the Horticultural Research International site (Ibid.). *c.* 100-150. Context 989.

The ditch also produced fragments from a South Gaulish Samian Dr.29 bowl (*c.* AD43-85), a basal sherd from a bowl in Hardham imitation South Gaulish Samian and a copy of a Gallo-Belgic platter in Hardham 'London ware' Fabric 4C and 1042 produced 69 sherds (2,096g) of *c.* AD50-100 dated pottery respectively; made up very largely of Arun Valley industry (Hardham) greywares with just a few sherds of South Gaulish Samian.

Assemblage 5. From the fills of post-pits 1091, 1181, 1187, 1191 and 1201 for the earth-fast post built structure to the west of Ditches 988 and 1042 (Contexts 1092, 1182, 1188, 1192 and 1202).

Amounts of pottery from these post-pits are quite small. Post-pit 1181 lacked pottery altogether, 1091 and 1188 produced one featureless sherd and three featureless sherds in Hardham greyware Fabric 4A respectively and 1201 yielded a jar basal sherd in much abraded miscellaneous greyware. Post-pit 1201, however, produced two sherds from a hairpin beaker in Central Gaulish Whiteware with black colour-coat (*c.* AD60-120), a fragment of Hardham 'London ware' (*c.* AD50-140) and a necked-jar rim in oxidised Arun Valley coarseware: the latter is paralleled quite closely in vessels from Phase 2 contexts at the Littlehampton kilns (Laidlaw and Lyne 2000, Fig.4-5, *c.* AD50-80). This suggests that the building was constructed at some time between AD70 and 120.

The enclosure around this structure (Ditches 1199 and 1193) produced very little pottery (6 sherds, 42g) and can only be dated imprecisely to the early Roman period.

c. AD150-400.

Assemblage 6. From the fill of Feature 854 (Context 855)

Feature 854 yielded 89 sherds (1154g) of pottery. The assemblage is too small for meaningful quantification but includes fragments from two second-century jars in Arun Valley coarseware Fabric 4A with internal lid-seating, paralleled at Hassocks (Lyne 1995, Fig.8-32). Other wares include a Rowlands Castle industry dish of Fishbourne Form 204.1 (Cunliffe 1971, *c.* AD100-150), a storage-jar of Form 165 from the same source and the following:

20. Jar with lid-seated everted rim in coarse, micaceous Fabric 4E. Ext. rim diameter 180 mm.

Assemblage 7. From the fills of the constructional post-pits 860, 862, 866, 868, 870, 874 and 997 (Contexts 861, 863, 867, 869, 871 and 875).

Amounts of pottery from these contexts are small and comprise two tiny fragments of miscellaneous greyware (1g) from Post-hole 860, three similarly undatable fragments from Post-hole 868 (10g) as well as a fragment of a Central Gaulish Samian Dr.31 platter (*c.* AD150-200) and three sherds of Hardham greyware (18g) from Post-hole 874. Post-hole 862 lacked pottery but the three sherds from Post-hole 870 (18g) include third-century BB1, Rowlands Castle and coarse late Alice Holt jar fragments. The inference is therefore that the building was constructed no earlier than the mid-third century and possibly somewhat later.

Assemblage 8. From the fill of Ditch 944 (Contexts 945 and 970).

The 407 sherds (5732g) of pottery from this feature, although a large assemblage, are unsuitable for quantification by EVEs because of the inclusion of a large number of sherds from just three vessels.

The presence of Moselkeramik beaker (*c.* AD200-276), New Forest colour-coat beaker (*c.* AD260-400) and Overwey rilled jar fragments (*c.* AD330-420) indicate that the rest of this assemblage accumulated over an appreciable period of time. The bulk of the material does, however, appear to be third-century in date and includes the following pieces:

21. Everted-rim jar in rough blue-grey Fabric 4A. Ext. rim diameter 150 mm. Context 970.

22. Jar of Fishbourne Type 341 (Cunliffe 1971) in similar fabric fired rough grey with black patches. Ext. rim diameter 160 mm. Context 970.

Many large, fresh sherds from the above two vessels are present.

23. Lid-seated jar in patchy black/orange Fabric 4A. Ext. rim diameter 220 mm. Context 945.

24. Developed beaded-and-flanged bowl in similar fabric fired grey. Ext. rim diameter 160 mm. Context 945.

A fragment from an incipient-beaded-and-flanged bowl in similar fabric is also present.

25. Cavetto-rim jar or bowl of Lyne Class 2 (Butler and Lyne 2001) in rough white Wickham Barn Fabric 14 fired flecky blue-grey. Ext. rim diameter 150 mm. *c.* AD270-370. Context 945.

26. Cooking-pot in grey Rowlands Castle Fabric 5 with a 'batch mark' incised on the shoulder before firing. Ext. rim diameter 150 mm. *c.* AD200-270. This vessel was found largely intact apart from its base and laid on its side in the bottom of the ditch. Context 970.

27. Necked and cordoned jar of Lyne and Jefferies Type 1.31 (1979) in grey Alice Holt/Farnham Fabric 6B. Ext. rim diameter 180 mm. *c.* AD200-300. Context 970.

This assemblage supports the impression given by the somewhat small and earlier Assemblage 6 that the Arun Valley industry went into decline during the late-2nd to 3rd centuries and that some of its market was taken over by the Rowlands Castle and Alice Holt/Farnham industries. Other sherds include a large part of a Central Gaulish Samian Dr.31 dish (*c.* AD150-200).

Assemblage 9. From the fills of Pit 1048 (Contexts 1049, 1051, 1054, 1056, 1057, 1058, 1059, 1217 and 1221)

Pit 1048 produced a large 656 sherd (7,444g) assemblage: the pottery suggests that the feature was back-filled at the end of the 4th century with a mixture of contemporary and residual mid-3rd to early 4th century material. The largest assemblage (460 sherds, 6,010g) comes from Context 1049; the uppermost fill of the feature and is large enough for quantification by EVEs:

Fabric	Jars	Bowls	Dishes	Beakers	Store-jars	Others	Total	%
	EVE	EVE	EVE	EVE	EVE	EVE	EVE	
4A					0.07		0.07	1.2
5	0.41				0.05		0.46	8.2
6B	1.56	0.01	0.10		0.02	Lid 0.05 Strainer 0.11	1.85	32.9
10	0.05	0.10					0.15	2.7
12	0.12		0.06				0.18	3.2
14	0.21						0.21	3.7
15B	1.15		0.05				1.20	21.4
17C		0.05	0.15			Dr.33 0.20	0.40	7.1
21		0.25				Mortarium 0.07	0.32	5.7
22B				0.11			0.11	2.0
25	0.62					Lid 0.05	0.67	11.9
Total	**4.12**	**0.41**	**0.36**	**0.11**	**0.14**	**0.48**	**5.62**	**100.0**

Table 1: Quantification by EVEs of Romano-British pottery from Context 1049

A striking feature of this assemblage is a near absence of local Arun Valley coarsewares. The only rim sherd comes from an everted-rim storage-jar: the sort of vessel which could have had a long life in use. We may conclude from this evidence that the Arun Valley industry had ceased to operate by the late-3rd-century.

The most significant single component of this assemblage is late Alice Holt/Farnham ware: the vessels from this source have a wide date-range and include both 3rd-century self-slipped and *c.* AD270-400 dated black/white slip decorated wares. The bulk of the vessels consist of Class 3B everted-rim and Class 3C cooking-pots (Lyne and Jefferies 1979) but other forms include Type 5B.4 beaded-and-flanged bowl (*c.* AD270-330), a Type 6C.2 beaded-and-flanged dish (*c.* AD350-400+) and a Type 5C.2 strainer (*c.* AD270-400+). The presence of the late beaded and flanged dish type and fragments from Overwey/Portchester D horizontally-rilled jars (*c.* AD330-400+) indicate that some at least of the assemblage is of late-4th-century date.

The second most significant component of the assemblage is a group of sherds in Fabric 15B with grog, chalk, ironstone and sand filler. Vessels in a similar fabric occur in late-4th-century assemblages at Chilgrove, Batten Hanger and Cross Roads Field villa sites as well as the similarly-dated Well 3 at the Chichester Cattlemarket site (Lyne 1994, 184) and Bignor villa (Lyne 1996, Fabric 16). Such wares account for a mere 5% of the pottery from both the H4 oven complex within the aisled building at Chilgrove and the final occupation at Batten Hanger but here make-up a somewhat more significant 21% of the assemblage. This high percentage may, however, be misleading in that most of the sherds in this fabric come from one vessel:

28. Everted-rim jar in pimply blue-grey fabric with acute-lattice decoration on the body. Ext. rim diameter 180 mm. The sherds from this vessel are the freshest in the assemblage. One of two examples.
Other wares include the following:

29. Beaded-and-flanged bowl of Lyne Type 6A.19 (1994) in Hampshire Grog-tempered ware Fabric 10 fired black. Ext. rim diameter 150 mm. This is a very late form dated to *c.* AD370-400+.

30. Oxfordshire Red Colour-coat bowl of Young's Type C75 (1977) in Fabric 21. Ext. rim diameter 160 mm. *c.* AD325-400+

31. Necked jar in very-fine-sanded creamy-grey fabric with rim edge blackening. Ext. rim diameter 160 mm.

Small amounts of abraded BB1 and Central Gaulish Samian (including a rivetted Dr.33 cup) are also present, as are slightly fresher looking Rowlands Castle, New Forest purple and red colour-coated beaker fragments. A small number of *c.* AD270-370 dated jar sherds of Type C1.6 in the Wickham Barn coarse whiteware Fabric 14 (4%) are of particular interest and must be from near the edge of the distribution zone for that small industry based near Lewes (Butler and Lyne 2001).

Assemblage 10. From the fill of the sump, Pit 1225, at the far end of Gully 844 draining the corndryer (Context 1226).

The 48 sherds (418g) of pottery from this feature include four fresh fragments from a Rowlands Castle cooking pot dated *c.* AD180-270, 15 self-slipped Alice Holt/ Farnham industry jar sherds of *c.* AD200-300 and two fragments from a Lower Nene Valley indented colour-coat beaker of *c.* AD180-300. This suggests that either the corndryer or previous version was constructed during the period *c.* AD200-270 and kept clean of rubbish or that old, admittedly fresh, sherds were put in the sump to help with drainage.

Assemblage 11. From the fills of the corndryer (Contexts 1062, 1064, 1065, 1072, 1073, 1109 and 1137), the occupation spread over the feature (Context 1050) and the fill of Ditch 844 (845) draining the corndryer.

The fills of this feature produced a total of 221 sherds (5,468g) of late 4th century pottery dumped at the time of its abandonment. The assemblage is too small for

meaningful quantification by EVEs but appears to be of similar date to Assemblage 9. A number of fresh sherds from the following vessels are present:

32. Beaker of Young's Type C25 (1977) with barbotine hunting scene in heavily burnt Oxfordshire Fabric 21. Ext. rim diameter 70 mm. *c.* AD270-400. Much of this beaker is present scattered through Contexts 1072,1073,1109 and 1137.

33. Handmade everted-rim storage-jar with narrow neck in pimply dark grey fabric with up-to 0.50 mm. quartz-sand filler. Ext. rim diameter 140 mm. A number of large fresh sherds came from Contexts 1109 and 1137. The general feel of this vessel suggests that it comes from the same source as Nos 28 and 34.

34. Everted-rim jar in pale-grey Fabric 37 fired black. Ext. rim diameter 140 mm. Context 1109.

The Alice Holt/Farnham wares include the following:

35. Small cavetto-rim jar fired grey with white slip decoration. Ext. rim diameter 100 mm. Context 1137.

36. Beaded-and-flanged bowl of Lyne and Jefferies Type 5B.4 with internal white slip extending over the rim but stopping short of the internal base of the vessel. Ext. rim diameter 220 mm. Context 1137. *c.* AD270-330.

37. Beaded-and-flanged dish of Type 6C.1 refired buff with internal white slip. Ext. rim diameter 160 mm. Context 1064.

The late Roman grog-tempered wares are probably all from the Isle of Wight and Hampshire Basin and include:

38. Convex-sided dish in black Fabric 10 with polished surfaces. Ext. rim diameter 200 mm. *c.* AD270-400. Context 1109.

39. Beaded-and-flanged bowl of Lyne Type 6A.18 with stubby flange in brown Fabric 10. Examples of this rare type are known from Brading villa on the Isle of Wight (Lyne 1994) and Covehurst Wood just east of Hastings (Moore 1974). The two examples from the latter site were accompanied by a Pevensey ware Dr.38 bowl, suggesting that the type dates to the late-fourth century and was traded by sea with other Hampshire Grog-Tempered ware vessels from Vectis along the Sussex coast.

The other wares include fragments from horizontally-rilled jars in Overwey/Portchester D Fabric 8, a Rhenish beaker in Fabric 20, a flagon in ?German Marbled Ware Fabric 24 and New Forest colour-coat beakers.

A further 71 sherds (1136g) of late 4th century pottery came from Context 1050 over the corndryer and include Alice Holt/Farnham industry Types 1C.5 (*c.* AD270-350) and 5B.8 (*c.* AD270-400+). Fragments from bowls of Fulford's Type 67 (1975 *c.* AD300-370) in Fabric 22B and Young's Type C49 (1977, *c.* AD240-400) in Fabric 21 are also present as is the following:

40. Dr.38 bowl copy in badly refired black fabric with very-fine quartz-sand filler fired patchy grey/pink/red. Ext. rim diameter 240 mm. The base of this vessel is in the assemblage from Context 1064 within the corndryer and part of the rim from Context 1050. The fabric is badly discoloured but is probably the same as Young's 'Local red-slip ware' identified at Chichester (1981, 289) and Chilgrove (1979,196) and by this author in the AD270-370 dated assemblage from the Findon ritual shaft (Lyne forthcoming).

The 14 sherds (82g) of pottery from the fill of Gully 844 draining the feature (Context 845) can only be broadly dated to the period *c.* AD270-400: it lacks rim and other diagnostic sherds but includes three fragments from a New Forest purple-colour-coat indented beaker.

Assemblage 12. From the fills of Pit 1278 (Contexts 1275 and 1277)

The fills of this large pit or quarry near the west end of Area C yielded 315 sherds (3674g.) of pottery, which were quantified by EVEs:

Fabric	**Jars**	**Bowls**	**Dishes**	**Beakers**	**Store-jars**	**Others**	**Total**	**%**
	EVE	EVE	EVE	EVE	EVE	EVE	EVE	
4A		0.10					0.10	1.9
5	1.58						1.58	29.9
6B	1.89	0.24	0.23		0.31	Lid 0.08	2.75	52.0
7		0.06					0.06	1.1
10	0.12	0.19					0.31	5.9
12	0.17	0.05	0.05				0.27	5.1
14	P						P	P
17C			0.06				0.06	1.1
21		P					P	P
22B				P			P	P
23				0.01			0.01	0.2
25						Flagon 0.15	0.15	2.8
Total	**3.76** (71.1%)	**0.64** (12.1%)	**0.34** (6.4%)	**0.01** (0.2%)	**0.31** (5.9%)	**0.23** (4.3%)	**5.29** (100%)	**100.0**

Table 2: Quantification by EVEs of Romano-British pottery from Pit 1278

This assemblage has Alice Holt/Farnham ware products making up more than half of all the material that is present and of forms datable to *c.* AD200-370. The pottery is well mixed and lacks the percentage distorting presence of near complete vessels as was the case in the part-contemporary Assemblage 9. Very little needs to be later than *c.* AD370. The Alice Holt/Farnham wares include the following:

41. Cordoned jar of Lyne and Jefferies Type 1.33 (1979) with black slip decoration. Ext. rim diameter 160 mm. *c.* AD270-350. Context 1275.

42. Cordoned jar of Type 1.31 with burnished self-slipped bands. Ext. rim diameter 180 mm. *c.* AD200-300. Context 1275.

43. Necked liquid storage-jar of Type 1A.17 with black slip decoration. Ext. rim diameter 110 mm. *c.* AD270-350.

44. Lid of Type 7.6 fired black. Ext. rim diameter 220 mm.

The Alice Holt material also includes fragments from at least seven everted-rim cooking-pots decorated with white/black slip bands and one Class 3C hook-rimmed jar. The following vessel is in a coarse-sanded fabric imitating Alice Holt ware:

45. Beaded-and-flanged bowl in coarse grey Fabric 7 with internal white slip. Ext. rim diameter 180 mm. The Findon ritual shaft contained quantities of vessels in this coarse imitative Alice Holt fabric as well as vessels imitating Rowlands Castle, BB1, East Gaulish Samian and Oxfordshire Parchment Ware forms in association with some prepared potters' clay. The inference is that some at least of such imitative Alice Holt vessels were manufactured in the Findon area during the period *c.* AD270-370. Context 1277.

Rowlands Castle wares are the second most important component in the assemblage (30%) and appear to consist entirely of jars of the period *c.* AD270-370 fired to a lower temperature than earlier products from this source:

46. Everted-rim jar in pale-grey Fabric 5 fired flecky black with the vertical rim-edge flattening characteristic of the latest Rowlands Castle ware products. Ext. rim diameter 160 mm. Context 1277. One of four examples.

47. Everted-rim jar in buff-grey Fabric 5 with rim edge blackening. Ext. rim diameter 200 mm. Context 1275.

The few other wares include fragments from a late-3rd to early-4th-century BB1 developed beaded-and-flanged bowl, an Oxfordshire Red Colour-coat Dr.38 bowl copy and a Hampshire Grog-Tempered Ware beaded-and-flanged bowl similar to Fig.29.

Post-Roman

There are four possible Early Anglo-Saxon sherds from linear feature 700 in Area D but this is uncertain: the fragments may be from Atrebatic Overlap vessels of early to mid 1st- century date.

Ditch 612 and oval feature 640 in the same area produced probable Saxo-Norman sherds but no rims or other diagnostic fragments.

The ploughsoil sectioned by the various assessment trenches produced a scatter of medieval sherds from field marling, ranging in date from Saxo-Norman to 15th century.

The changing patterns of pottery supply to the site.

c. AD 43-150

Although none of the late-1st and early-2nd-century assemblages from the site are large enough for accurate quantification, it seems clear that an average of 90% or more of all of the pottery in use on the site consisted of Arun Valley industry sandy greywares. A percentage as high as this implies very local production and probably from the nearby Littlehampton kilns (Lovell 2000). There is no evidence for the manufacture of Hardham and Wiggonholt type finewares at the Littlehampton site and it is probable that the few sherds in Hardham 'London ware' and imitation South Gaulish Samian Fabrics 4C and 4I and Wiggonholt cream ware Fabric 4H originate in the Arun Valley kilns north of the South Downs rather than in more local ones. The remainder of the pottery comes from a variety of sources and includes Central Gaulish Whiteware beaker, Alice Holt jar, early Rowlands Castle, South Gaulish and Central Gaulish Samian sherds: none of these sources can be said to account for much more than one per-cent of the pottery being supplied to the Roundstone Lane site at this time.

The lack of significant quantities of finewares during this period suggests that the site was of fairly low status.

c. AD 150-300

Pottery production at the Littlehampton kilns ended during the mid-2nd century: the initial effect of this on pottery supply to Roundstone Lane is difficult to determine because of a lack of significant late-2nd-century sherd assemblages from the site. During the early-3rd-century, however, Arun Valley industry products appear to have accounted for a somewhat lower percentage of all the pottery and were probably supplied entirely by kilns in the Pulborough area. Much of the pottery in use at Roundstone Lane now came from the Rowlands Castle kilns west of Chichester and consisted almost entirely of coarseware cooking-pots.

This expansion of the Rowlands Castle industry marketing area during the early-3rd-century is particularly noticeable west of the River Arun where most pottery assemblages of that date have such wares accounting for up-to half of all of the pottery present (Lyne 1994, 88-92).

Another new supplier was the Alice Holt/Farnham industry on the Hampshire/Surrey border. Small quantities of pottery from these kilns had been traded in the Chichester area during the late-1st century before a decline in the industry that lasted for nearly 100 years. The Alice Holt industry acquired new kiln technology around AD200 and steadily expanded its marketing area through the 3rd and 4th centuries: wares were being marketed in quantity across the whole of Sussex by the end of the 3rd-century.

Other longer distance minor suppliers to the site during the 3rd century include the Wickham Barn kilns near Lewes, the BB1 kilns around Poole Harbour and a small centre of production in the Brighton area imitating BB1 wares (Lyne 1994, Industry 2A). Fineware imports of early-3rd-century date are restricted to a single

Moselkeramik beaker: after *c.* AD260 small quantities of New Forest colour-coated beakers are in evidence at Roundstone Lane.

c. AD 300-400

The Roundstone Lane site is rather unusual in that most of the rural sites on the West Sussex coastal plain such as Angmering villa, Rustington Bypass (Barber 2001), West Blatchington (Norris and Burstow 1952) and Sidlesham (Collins et al 1973) show a termination of or striking fall off in the level of activity during the period *c.* AD270/300. Roundstone Lane bucks this trend in having more intense activity than previously during the 4th century.

The bulk of the pottery from the ?quarry Pit 1278 dates mainly to the period *c.* AD270-370. The assemblage from the pit suggests that pottery production in the Arun Valley had largely terminated by AD270 and its niche in the market largely taken up by an ever-expanding Alice Holt/Farnham pottery industry. Wares from this source make up more than half of all of the pottery from the pit (Table 2) and include jars, bowls, dishes and storage-jars.

The Rowlands Castle kilns seem to have maintained their share of the Roundstone Lane market acquired during the previous century: other minor pottery suppliers include the Hampshire-Grog-tempered ware industry of the Hampshire Basin and the Isle of Wight (6%) and the BB1 kilns around Poole Harbour (5%). The low numbers of open forms and pitiful percentage of finewares (1%) suggest that the inhabitants of the Roundstone Lane site continued to be of low social status during the late Roman period.

The period after AD370 is represented by the assemblages from Pit 1048 and the corndryer and suggests further changes in pottery supply. It is unfortunate that the quantification of Assemblage 9 from the top of the well (Table 1) is heavily distorted by the presence of most of a jar in Fabric 15B and that the corndryer assemblage is too small for any sort of meaningful analysis: the impression is given that the Alice Holt/Farnham industry maintained its dominant share of the Roundstone Lane market and that the Rowlands Castle industry had terminated supply by AD370.

Small numbers of horizontally-rilled jars in buff Overwey Fabric 8 had already appeared on site before AD370 and they are also present in the assemblages from the top of the well and the corndryer. Insignificant quantities of Hampshire Grog-Tempered ware cooking-pots and bowls are also present in both assemblages, as are similarly small amounts of BB1 and Wickham Barn kiln wares. The sherds in the latter two fabrics are abraded, however, and probably residual.

Although the significance of vessels in the sand, grog and ironstone tempered Fabrics 15A and 15B is somewhat overstated by the quantification-distorting presence of most of one cooking-pot in Assemblage 9, they appear to have made their appearance during late 4th century: the fresh nature of the sherds in these fabrics from both the top of the well and the corndryer suggests that they were among the last wares in use on the site during the early years of the 5th century.

Finewares are restricted to small quantities of Oxfordshire Red Colour-coat and New Forest Colour-coat bowls and beakers.

The Metalwork by Luke Barber (Fig. 24)

Introduction

The excavations produced a relatively small metalwork assemblage: 540 pieces, weighing a little in excess of 5kg, from 96 separately numbered contexts. With the exception of a Bronze Age copper alloy awl fragment and two post-medieval pieces all the metalwork from dated contexts is of the Roman period.

The overall assemblage consists of 525 pieces of iron, 13 pieces of copper alloy and two pieces of lead. The assemblage is fully characterised by period in Table 1. The ironwork from the site was heavily corroded and frequently exhibited thick corrosion products. Despite this, most pieces were diagnostic of basic form without x-ray. A small selection were less diagnostic and as such 17 iron objects were x-rayed, though in most cases this did not help in their identification. The copper alloy from the site is in fair condition as is the lead (only two copper alloy objects were x-rayed).

Excluding hobnails, no large groups of metalwork are present. The largest single group consists of 38 pieces of ironwork from Context 1049 (Pit 1048) though 37 of these are nails/nail fragments.

All the metalwork has been fully listed on Metalwork Record Forms which, along with the x-ray plates, are housed with the archive. Following listing the majority of the ironwork was discarded. A representative sample was retained along with all the non-ferrous material. The aim of the current report is to outline the nature of the assemblage and where possible use the metalwork to help refine context dating and establish site status and function.

Period	Iron Nails/Nail frags	Iron Hobnails	Iron Objects	Non-Ferrous	*Totals*
Prehistoric	-	-	-	3 Cu All (1 context)	*3*
C1st-C2nd	39 (18 contexts)	26 (2 contexts)	8 (6 contexts)	-	*73*
C2nd-C3rd	17 (4 contexts)	2 (2 contexts)	10 (3 contexts)	-	*29*
C3rd-C4th	191 (47 contexts)	179 (13 contexts)	13 (10 contexts)	9 Cu All (5 contexts) 2 Lead (2 contexts)	*394*
Post-Roman	1 (1 context)	-	1 (1 context)	-	*2*
Undated	24 (8 contexts)	2 (1 context)	12 (6 contexts)	1 (1 context)	*39*
Totals	***272***	***209***	***44***	***15***	***540***

Table 3: Characterisation of metalwork assemblage showing quantity of different categories of material, and number of contexts containing such categories, by period.

Ironwork

Nails

Nails dominate the ironwork assemblage, though less than 10 complete examples are present. Only two types were noted. Type 1 consists of general-purpose nails with round flat, or low domed, heads and square-sectioned shanks (head diameters are usually between 14 and 23mm, with overall lengths up to 80mm). Type 2 is identical to Type 1 but is simply larger, presumably for heavier duty fixings. Head diameters for these usually range between 23 and 30mm, with overall lengths in excess of 100mm. Both types appear in Roman contexts of all periods across the site.

Hobnails

The excavations produced a relatively large assemblage of hobnails. However, the bulk of this is accounted for by only three contexts. These produced 186 hobnails out of the site total of 209. The three notable concentrations were all found in Area C and it is likely each represents the location of one or two rotted sandals: Context 943 (Post-hole 888) has 25, Context 970 (Ditch 944) has 87 and Context 1155 (Ditch 1131) has 74. Those from the latter context were still in their original position suggesting they came from the front of a sandal with a width of 105mm. Hobnail dimensions are usually as follows: head diameter – 8-15mm, head heights 5-9mm, overall lengths to 18-21mm. As can be seen from Table 1, hobnails are found in Roman contexts of all periods.

Objects

The majority of items under this category consist of undiagnostic pieces with no discernible form (22 out of a total of 44) or plate/strip fragments (11 out of a total of 44). The remaining pieces include two badly corroded knife blade fragments (Context 439: Post-medieval Ditch 406 in Area A and Context 1049: Pit 1048 in Area C) together with a suspension hook (Gully 848, Fill 849), hooked rod (Context 895), a possible wedge (Pit 912, Fill 913, dated 3rd century) and a split pin from Pit 1138 (Fill 1139, dated late 3rd to 4th century).

Three objects are of particular interest. The first is a double-sided wool comb (Fig. 24 No. 1. Ditch 878, Fill 879, dated late 2nd to 3rd century: drawn from x-ray). Similar examples are known from Worth in Kent and Great Chesterford, Essex (Manning 1985, Types D1-D3). The other item is a fragment of a possible knife or sickle (Pit 1278, Fill 1275, dated 4th century. Fig. 24, No. 2). Although of a similar general form to known latch-lifters (i.e. Manning 1985, Type O1) the present example appears to consist of a rectangular-sectioned straight handle/tang which gives way to a flattened curving blade similar to a sickle. However, the cutting edge of the Angmering example is on the convex, rather than concave, edge. In addition the badly fragmented and heavily corroded remains of an iron fibula brooch were located in Pot A of cremation 611. Unfortunately the brooch is too fragmentary for close identification (only part of the spring is notable), however, it appears to be of an early type, probably of the 1st century AD (Hattatt 1989).

Non-Ferrous Material

Copper Alloy

The only pre-Roman metalwork located at the site consists of three fragments from a round-sectioned (4mm diameter) rod in excess of 70mm long (Area D. Pit 656, Fill 657). Although no features are present and the object is highly corroded it is probably from a small Bronze Age awl.

The Roman assemblage is dominated by fragmentary pieces of jewellery. These include the following:

- the badly fragmentary remains from the bow of a simple fibula brooch (Pit 993, Fill 994, dated late 4th century). Unfortunately the piece is too fragmentary to classify by type. However, it is likely to be of 1st- to 2nd- century date and thus residual in 994.
- part of a rotary ring-key (Pit 993, Fill 994. Fig. 24, No. 3). Similar examples are known from Colchester in the 3rd and 4th centuries (Crummy 1983, No. 2169).
- finger ring with 'D' sectioned round hoop with thickens slightly for an applied square bezel on which is incised decoration in the form of a swastika motif (Pit 1048, Fill 1054. Fig. 24, No. 4). Further incised line decoration is on the hoop either side of the bezel. Internal diameter 20mm. Square bezels of this type are typical of the late Roman period (British Museum 1964, 26, Group F).
- Three fragments from round/oval-sectioned wire bracelets were also recovered from Context 1049 (Well 1049).
- A solid copper alloy acorn-type terminal (20g) was also recovered from the same deposit (Fig. 24, No. 5).

One other item of note was located: an iron lynch pin with decorative copper alloy head (Fig. 24, No. 6). The iron shaft spays out to become a crescent-head. Welded onto the front of this head, and in the same form as it, if thicker, is a copper alloy crescent-head with incised line decoration and a raised fixing. This type is well known of in Roman Britain and equates with Manning's Type 1b with turned over loop on the head (Manning 1985, 74). It is interesting to note that the examples listed by Manning are all or iron, suggesting the Angmering example may be from a wheeled vehicle of higher status.

Lead

Two pieces of lead were located, both from late 3rd- to 4th- century contexts. The first consists of a waste piece (10g) from Gully 1005 (Fill 955) while the second consists of a 32mm diameter cylindrical spindle whorl (146g) with asymmetrical sloping upper surface (Ditch 932, Fill 933. Fig. 24, No. 7). Despite its apparent asymmetry the whorl does not gyrate excessively when spun.

Discussion

Due to the paucity of objects in the assemblage little can be said regarding the activities carried out at the site. Nails and hobnails can be expected at any Romano-British site and add little to overall interpretations unless present in large quantities

and/or specific concentrations. Neither apply to the current site. The few identifiable objects are slightly more interesting. The presence of the wool comb and spindle whorl are good evidence that pastoralism and cloth production formed a part of the economy of the site.

The site appears to be that of a peasant agricultural settlement though of enough standing for its occupants to be wearing jewellery, albeit of rather basic types. The lynch pin may be from a more prestigious wheeled vehicle though it is quite possible this was passing through the settlement rather than actually belonging to it.

The Metallurgical Remains by Luke Barber

The excavations produced a small quantity of slag: 59 pieces, weighing a little over 1.2kg from 20 different contexts. The assemblage is characterised in Table 4. With the exception of three post-Roman contexts all the material is of Roman date.

Periods	Clinker	Fuel Ash	Hearth Lining	Iron (smithing)	Iron (undiagnostic)	*Totals*
C1st-C2nd	-	5/72g	3/54g	-	6/110g	***14/236g***
C2nd-C3rd	-	4/34g	-	3/150g	-	***7/184g***
C3rd-C4th	-	7/20g	1/8g	8/362g	11/191g	***27/581g***
Post-Roman	8/72g	1/6g	-	-	1/164g	***10/242g***
Undated	-	--	-	1/40g	-	***1/40g***
Totals	***8/72g***	***17/132g***	***4/62g***	***12/552g***	***18/465g***	***59/1,283g***

Table 4: Characterisation of slag assemblage from site by period and type.

A number of different categories of slag are present, not all of which were necessarily generated from metal-working. The clinker from the site is unsurprisingly from post-Roman contexts. The fuel ash slag could have been generated from any high temperature process, including ovens and kilns. This material is present throughout the Roman period. Evidence of metalworking is confined to the very low quantities of iron slag at the site. The presence of at least one hearth/furnace is attested by the presence of four pieces of hearth lining with adhering slag. A reasonable proportion of the iron slag appears to be from secondary working/smithing. This is confirmed by the presence of two probable forge bottoms. One is from Context 943, slot 3 (Cut No. 888), dated to the 2nd to 3rd centuries. This oval shaped example is small and incomplete (150grams) and measures approximately 63 by 50mm. The other example is slightly larger, measuring 60 by 72mm with a thickness of 28mm and weighing 236grams (Layer 956).

No definite smelting slag is present and it is probable that the undiagnostic pieces of iron slag on site also relate to smithing. Low levels of iron smithing slag, from the reworking and repair of objects is quite common on most Roman sites.

Partly due to the small quantity involved there are no particular concentrations of slag across the site. However, the material is largely confined to the cluster of pits and ditches to the east of enclosure Ditch 1189 and west of trackway Ditch 944 and level with/to the south of Feature 934. The only Roman slag that falls outside this area is actually in Feature 934 to the east and in Pit 1048, to the west. This scatter, which

includes all types of Roman slag suggests this area, or slightly to the south of it, was the area in which some smithing took place.

The Roman Coins by David Rudling

Introduction

Five Roman coins were recovered during the excavations. Although their periods of issue span the late 2nd to mid. 4th century, the very small size of this assemblage makes further discussion difficult. All the coins are fully described below.

The Catalogue

Probably Commodus, AD 177-192. Ae sestertius (29mm diameter). Very worn, and a typical late sub-circular flan. This coin could have been lost as late as the mid-3rd century.
Obverse: Legends missing, laureate head right.
Reverse: Legends missing, ?Apollo, standing front, head right, ?holding plectrum downwards in right hand and lyre on column in left hand.
Reference: Type possibly as RIC 578 etc.
Special Find 5: Context 1095.

Julia Maesa, grandmother of Elagabalus and Severus Alexander. Issued under Elagabalus (AD 218-222). Large fragment of a silver denarius. Rome.
Obverse: IVLIA MA[ESA AVG], draped bust right.
Reverse: PIET-[AS AVG], Pietas standing left, raising right hand over lighted altar.
Reference: As RIC 263.
Special Find 10: Context 933.

Commemorative Issue: Urbs Roma. Ae 16mm. AD 332. Lyons.
Obverse: VRBS ROMA, helmeted bust left, wearing imperial cloak.
Reverse: She-wolf standing left, suckling twins; above, two stars; in exergue: serial mark - horizontal crescent containing a dot, PLG.
Reference: RIC 257.
Special Find 11: Context 1049, Quadrant A.

Magnentius, AD 350-353. Large fragment of an Ae coin (17+mm). AD 351.
Obverse: Legends missing, bareheaded bust right.
Reverse: [FELICITAS REIVBLICAE], emperor standing left, holding Victory on globe in right hand and standard in left hand.
Reference: Type as RIC (Trier) 264.
Special Find 14: Context 1049, Quadrant A.

Constantius II, AD 337-361. Large fragment of an Ae coin (21+mm). AD 352. Trier.
Obverse: [DN CONSTAN-TIVS P F AVG], pearl diademed and draped bust right.
Reverse: [SALVS AVG NOSTRI], Chi-Rho, flanked by alpha and omega.
Reference: Type as: RIC (Trier) 332; CK (Carson and Kent 1972, 46), 67.
Special Find 3, Area C, Context 802.

The Ceramic Building Material by Luke Barber

The excavations at the site produced a small assemblage of ceramic building material: some 466 pieces, weighing just over 46kg, from 88 individually numbered contexts. The majority of the assemblage is from Area C. The assemblage is virtually exclusively composed of Romano-British tile, with only a few examples of post-medieval brick and peg tile being located across the site. The whole assemblage has been recorded and quantified by type and fabric on Tile Record Forms, which are housed with the archive. No further consideration of the post-Roman assemblage is given here. After recording the majority of the assemblage was discarded. The aim of the current report is to briefly outline the size and nature of the excavated Roman assemblage with a view to establishing the nature of tile usage at the site.

The Roman material is in variable condition. Although some large pieces are present most fragments range from the small (i.e. 40-60mm across) to medium (60-100mm across) size ranges. Most show some signs of abrasion and attack from the acidic subsoil. However, a few larger less abraded pieces are also present. The tile was divided into six fabric groups based on a visual examination of texture and inclusions. A sample of each fabric has been retained with the archive. Fabrics can be summarized thus:

Fabric 1 – Moderate medium-coarse quartz sand (often white/milky grains).
A common fabric usually used for floor tiles. Present in all periods.

Fabric 2 – Fine powdery fabric with sparse grog pellets to 4mm. Underside sanded/gritted.
A distinctive but rarer fabric only found in later contexts.

Fabric 3 – Sparse fine to medium sand, with occasional iron oxide pellets to 3mm.
A common fabric used for all types in all periods.

Fabric 4 – Abundant fine to medium sand with occasional iron oxide pellets to 3mm. Granular texture.
Rare fabric only noted in an imbrex in a later period context.

Fabric 5 – Hard fired fine sand with numerous white clay swirls and iron oxide pellets to 6mm.
Rare fabric only noted in floor tiles in the later period.

Fabric 6 – Abundant medium sand (granular texture) with large off-white clay pellet inclusions to 12mm.
A very distinct fabric only noted in association with tegula, but more commonly imbrex tile, in the later period.

The tile assemblage from dated Roman contexts (i.e. those containing enough pottery to provide a date to the nearest 150 years) is characterized in Table 5 below.

Period	Tegula	Imbrex	Flat/Floor	Box Flue	Other	Uncertain
C1st – C2nd (12 contexts)	5 Fabric 1 – x4 Fabric 3 – x1	3 Fabric 3 - x3	9 Fabric 1 - x9	-	-	45 Inc. Fabric 1
C3rd – C4th (53 contexts)	20 Fabric 1 –x 9 Fabric 2 – x3 Fabric 3 – x6 Fabric 6 – x2	38 Fabric 3 – x20 Fabric 4 – x1 Fabric 6 - x17	48 Fabric 1 – x35 Fabric 2 – x3 Fabric 3 – x9 Fabric 5 - x1	3 Fabric 2 – x2 Fabric 3 - x1	Tegula mammata 1 Fabric 1 – x1	221 Inc. Fabrics 1-4

Table 5: Characterization of Roman tile from dated contexts by type, period and fabric.

The 1st- to 2nd- century assemblage, collected from 12 different contexts, contains only low quantities of tegula, imbrex and flat/floor tile, always in Fabrics 1 and 3. Too little material is present for any meaningful distribution analysis and no large groups are present (the largest being from Pit 1009, Fill 1010, which consisted of 21 pieces weighing 3.2kg).

The 3rd- to 4th- century assemblage is much larger than that of the earlier period though is still generally small for a Romano-British site. Again the assemblage is dominated by flat/floor, tegula and imbrex tile. There are only three pieces of probable box flue tile (all heavily abraded) and a single piece of tegula mammata was noted in Context 1275. As with the earlier period, the small size of many of the pieces does not allow them to be classified to type.

No particularly large groups are present: the largest including Context 1035 (shallow depression 1034, Area C) and Context 1064 (Corn dryer, Area C). The former context contained 44 pieces (seven tegula, seven floor and 30 uncertain) weighing *c.* 3kg while the latter contained 35 (20 imbrex, three tegula, two floor and 10 uncertain) weighing *c.* 3.9kg. Seven of the imbrex tiles from 1064 are from the same tile.

A rapid appraisal of the distribution of the tile across Area C shows it to be spread across a wide area with no obvious zonation apparent. However, there is an obvious concentration of tile associated with the corn dryer 1063. Fills associated with this feature included 1064 (see above) and 1156 (containing five imbrex, three floor and six uncertain weighing *c.* 3.3kg). As such it is likely that the tile had been used during the construction of the corn dryer's super-structure and/or internal divisions.

The relatively small size of the tile assemblage strongly suggests the buildings were likely to have been roofed with either thatch, reeds or wooden shingles rather than tile. The fact that a lot of the tile is flat/floor tile would tend to back up this observation. The tile is likely to have been brought to the site, probably scavenged or robbed from elsewhere, to help build other smaller structures such as ovens and the corn dryer etc. The presence of a little box flue tile would strongly support the suggestion that material was being brought to the site from a nearby building of some consequence. The source of the tile was probably the villa at Angmering, which may have been used as a source for such material when the villa fell into dis-use. This may account for the increase in the amount of re-used tile on the site during the later Roman period.

The Burnt Clay by Samantha Crawt (Fig. 25)

Introduction

The excavations at the site produced 1,880 pieces of burnt clay from 116 individually numbered contexts, weighing approximately 25.5kg (see Table 6). The assemblage was extracted from a wide range of features including post-holes, pits, ditches and gullies. The majority of the assemblage is comprised of undiagnostic pieces, ranging in size from small (<20mm) to medium (20-50mm). The fragments came from features ranging in date from the Middle Bronze Age to the 3-4th centuries AD. Three fragments from one context were dated to the medieval period. The largest concentration of burnt clay was found in the 3rd to 4th centuries AD features. The assemblage also contains two probable loom-weight fragments weighing 42g and one possible fragment of hearth lining. A reasonable quantity of daub totalling 166 fragments weighing 3,484kg was also identified in three contexts.

The aim of the report will be to characterise the type of fired clay on the site and distinguish between objects or parts of objects and irregular, undiagnostic pieces. By doing so it may be possible to identify any distribution patterns and 'craft' or domestic activities. All the material has been fully quantified by type, number, weight and context on detailed archive record sheets, which include sketches and measurements. The main fired clay assemblage is summarised in table 1 below.

Results

The burnt clay from the assemblage predominantly consists of natural Brickearth, although some fragments have filler deliberately added. The pieces vary in colour from dull orange to brown/black.

Below is a summary table of the burnt clay assemblage, which lists the pieces by type and period.

	MBA	LBA/EIA	R-B. *c.* 1-2nd	R-B. *c.* 3-4th	MED.	Undated	Totals
Undiagnostic	102/500g (2 cons.)	8/42g (2 cons.)	288/4,857g (29 cons.)	1106/ 14,651g (64 cons.)	3/18g (1 con.)	204/ 1,832g (18 cons.)	1,711/ 21,900g (116 cons.)
Daub		45/950g (1 con.)		65/834g (1 con.)		56/1,700g (1 con.)	166/ 3,484g (3 cons.)
Loom-weights				2/173g (2 cons.)			2/42g (2 cons.)
Hearth lining						1/4g (1 con.)	1/4g (1 con.)
Totals	102/500g (2 cons.)	53/992g (3 cons.)	288/4,857g (29 cons.)	1173/ 15,527g (67 cons.)	3/18g (1 con.)	261/ 3536g (20 cons.)	

Table 6: Burnt Clay – Summary

MBA = Middle Bronze Age LBA/EIA = Late Bronze Age/Early Iron Age R-B = Romano-British Med = Medieval cons. = contexts

Middle Bronze Age

The site produced 102 fragments of undiagnostic burnt clay weighing 500g from two contexts (667 and 740) see Table 6 above.

Late Bronze Age/Early Iron Age

Two contexts produced eight undiagnostic fragments weighing 42g (Contexts 237 and 657). Context 723 produced 45 pieces of clay weighing 950g which is probably daub. A good proportion of these fragments had wattle impressions ranging from 7-20mm in diameter.

1st-2nd centuries AD

There is a considerably larger concentration of burnt clay from this period in comparison to the two which have already been discussed. However, the 288 fragments recovered are all irregular, undiagnostic pieces weighing a total of 4,857kg. The clay was obtained from a range of features including pits, gullies and post-holes (contexts include 855, 909, 950, 1024 and 1184). No obvious pattern of distribution was identified.

3rd-4th centuries AD

The features dated to this period produced, by far the largest and most diverse range of burnt clay from the site. A total of 1,173 pieces of clay weighing 15,527kg were extracted from 67 contexts. There were 1,106 undiagnostic pieces weighing 14,651kg. 65 pieces of fired clay that can probably be identified as daub were found in Context 1137, Cut 1063 (the corn dryer) weighing 834g. These fragments are interesting because they may represent evidence of the superstructure. Two loom-weight fragments were found in Contexts 1109 and 1067, both associated with the corn dryer. The fragment from Context 1109 weighs 28g and is chalk tempered (Fig. 25). The second loom-weight fragment weighs 145g. A large concentration of fired clay appears to be associated with the corn dryer, some 347 pieces weighing 3,197kg. However, there is no other obvious distribution pattern that can be identified on the site relating to this period.

Conclusion

The most interesting period in terms of the fired clay assemblage retrieved from the site is the 3rd to 4th centuries AD, in particular the contexts associated with the corn dryer. This period on the site has produced the biggest quantity of fired clay fragments as well as some objects. Apart from the concentration associated with the corn dryer, 1063, there is no obvious distribution patterns apparent in any of the periods. Furthermore, the majority of the assemblage is comprised of irregular undiagnostic

fragments which cannot reliably be attributed to a singular activity. The presence of loom-weights however, does suggest cloth making could have taken place on the site.

The Flint by Chris Butler

Introduction

The assemblage comprises a total of 1,217 pieces of worked flint, which are summarised in Table 7.

Hard hammer-struck flakes	743
Soft hammer-struck flakes	50
Hard hammer-struck blades	4
Soft hammer-struck blades	6
Soft hammer-struck bladelets	8
Bladelet fragments	4
Axe thinning flake	1
Chips	28
Fragments	187
Shattered pieces	79
Chunks	4
Core rejuvenation flake	1
Crested blade	1
One platform flake cores	13
Two platform flake cores	11
Three platform flake core	1
Discoidal core	1
End scrapers	46
Side scraper	1
Hollow scraper	1
End/side scrapers	2
Button scraper	1
Backed knives	3
Piercer	1
Notched flakes	6
Misc. retouched pieces	3
Leaf shaped arrowhead	1
Polished chisel	1
Flaked axe fragment	1
Chopper	1
Core reused as hammerstone	1
Hammerstones	6
Total	**1,217**

Table 7: The flint

The assemblage was sorted by context, with each piece being examined by eye and, where necessary, with the aid of a magnifying glass to establish its classification, technological features and the extent of any modification. A full list of the assemblage is held in the archive, together with a summary on an Excel database.

The assemblage generally appears in fresh condition. There is little evidence of pieces having been damaged by being rolled, ploughed or moved since their deposition. This means that those pieces from excavated features are likely to have been deposited there shortly after being struck or manufactured. Pieces from earlier periods of prehistory (Mesolithic and Neolithic) do appear to be residual, and are likely to have been on the ground surface until they were incorporated into later features, although these too exhibit little evidence of damage. Some pieces, including a scraper, have been burnt after manufacture.

Raw Material

The raw material comprises five types of flint, and are listed in order of their relative occurrence:

a) A grey speckled flint with buff to light brown cortex, possibly derived from local gravels;

b) A black flint with buff to light brown cortex, from local gravel or clay-with-flints deposits;

c) A grey flint with grey to brown coloured rough cortex, derived from beach pebbles;

d) A light blue-grey or grey patinated flint with a creamy coloured cortex, probably from a downland source;

e) An orange to yellow-buff patinated flint from a gravel source (one example only).

All of the raw material types can be found in the immediate vicinity, or within a few kilometres of the site. It is clear from the flintwork found at Angmering that flint types b) and d), which are derived from downland sources and comprise a better quality flint for knapping purposes, appear to have been the preferred flint types used during the Mesolithic and Neolithic. During the Bronze Age less care was taken in selecting raw materials for knapping, and we can see that flint of varying, and generally poorer, quality was being collected from more local beach and gravel deposits.

The Debitage

The majority of the assemblage (61%) comprises hard hammer-struck debitage, predominantly flakes, together with large numbers of fragments (15% of the assemblage) and shattered pieces (6.5% of the assemblage). There are few chips or other small pieces, which may be a result of the retrieval techniques used. The hard

hammer-struck debitage contains many mis-hit pieces and hinge fractures, which together with the fragments and shattered pieces would suggest a knapping strategy that involves little care or control over the size and shape of the flakes being removed from the cores.

Of the 26 cores recovered, only one has evidence of platform preparation. The remainder are fairly rough single or multiple platform flake cores, with no real evidence of a methodical knapping strategy having been employed. A number of the cores have been reduced to a small size, but this is likely to be a result of the small size of the raw material being used rather than the knapping strategy employed.

Soft hammer-struck flakes, blades and bladelets make up a much smaller part of the assemblage, and many of these, together with a few of the hard hammer-struck flakes have evidence of platform preparation on their dorsal side. Those pieces exhibiting platform preparation, soft hammer percussion or which are bladelets make up less than 4% of the assemblage, and indicate Mesolithic activity. Other soft hammer-struck flakes and blades are typical of earlier Neolithic pieces. Together the flintwork from these earlier phases of activity makes up some 6% of the assemblage, which appears to be entirely residual.

A total of 28 flakes, blades and fragments have been retouched (2.5% of the debitage). The extent of the retouch varies with each piece, and it is likely that a number of these were utilised as implements.

Implements

The implements comprise some 6% of the assemblage, with retouched debitage making up a further 2%.

End scrapers are the most common type of implement found, and come in a variety of shapes and sizes, including some manufactured on broad flakes and some with crude retouch around the distal end of the flake. One larger end scraper manufactured on downland flint, and with careful retouch around its distal end, is likely to be Neolithic (Fig. 26, No. 1), whilst a button scraper (Fig. 26, No. 2) and a few more carefully retouched scrapers fit a Later Neolithic/early Bronze Age date.

A single scraper carefully manufactured on a hard hammer-struck flake with invasive retouch, executed with a soft hammer, around its distal end (Fig. 26, No. 3) was found in Ditch 545. This piece has been carefully made, and there is no evidence of it having been utilised. Its invasive retouch is unusual, as this gives the piece a cutting edge, and although it is the shape of an end scraper, it would have been unsuited to a scraping task. The care with which it has been made, its lack of use and its location in a ditch suggests that it may have been a ritual deposition.

There are other similar depositions of well-made scrapers in Bronze Age contexts (e.g. Butler 1991, 16). A second broken scraper and two hard hammer-struck flakes also came from this context.

Other implements include a number of typical Neolithic types, including a leaf-shaped arrowhead (Fig. 26, No. 4), a flaked axe fragment, a polished (and subsequently re-flaked) chisel (Fig. 26, No. 5), and some backed knives (Fig. 26, Nos 6, 7 and 8).

If these Neolithic implements are removed from the equation, then the remaining implements are a restricted range of scrapers (e.g. Fig. 27, Nos 9, 10, 11 and 12), piercers and notched pieces (Fig 27, Nos 13 and 14), all manufactured on hard hammer-struck flakes. This assemblage would be typical of the restricted range of flint implement types found on a later Bronze Age site.

Flintwork from Excavated Contexts

Apart from the unusual and possibly ritual deposition of a scraper in Ditch 545, there are a number of other contexts that produced small groups of flintwork:

The fill (Context 59) of Ditch terminal 58 produced a small number of pieces of hard hammer-struck flakes, which may all be from the same knapping episode. However, it was not possible to refit any of them. Context 227, which was the fill of Ditch 226, contained a small assemblage of flintwork, including a residual Mesolithic bladelet. Within this a group of three hard hammer-struck flakes may have come from the same beach pebble, although again, none could be refitted.

Context 514, which is the fill of 513, contained some 22 pieces of worked flint, mostly hard hammer-struck flakes, two of which were retouched. Three well-worked scrapers also came from this fill.

Contexts 556 & 557 produced an assemblage of some 60 pieces of worked flint, mostly comprising rather crude hard hammer-struck flakes and fragments from one or more flint knapping episodes. A core and some of the flakes are beach pebble flint. Apart from a few residual earlier pieces this assemblage would fit a Later Bronze Age date.

Context 956 produced two similar notched flakes and an end scraper, together with a core rejuvenation flake and crested blade; the only two examples of core rejuvenation found during the excavations.

Pit 1207 produced an interesting assemblage of soft hammer-struck flintwork, including two blades, three bladelets with prepared platforms one of which was retouched along one edge and three flakes. This feature may well represent Mesolithic or Early Neolithic activity.

Discussion

Mesolithic activity is evidenced by the residual pieces found across the site, with no particular concentration in any area. All of the pieces are debitage, with no implements being recovered, and probably represents the occasional manufacture and repair of hunting equipment by hunter-gatherer groups moving through the area.

In the Neolithic there is more evidence of activity represented by the implements found. Again there is no apparent concentration of material on any part of the site, and the pieces are therefore likely to be residual. Most of the implements (arrowhead, scraper and knives) could be associated with continued hunting activities in the earlier Neolithic, but the flaked axe and polished chisel suggest other non-hunting activities in the area.

Elsewhere on the Coastal Plain similar assemblages of Mesolithic and Neolithic flintwork have been recovered (Butler 1999).

The majority of the flintwork recovered can be dated to the Bronze Age due to the predominantly hard hammer-struck debitage, numerous mis-hits, the selection of poor quality flint and a limited range of implement types. There is no apparent concentration of flintwork in any area or feature, except as indicated above. The mixture of debitage and implements shows that the initial knapping of flint nodules, the manufacture of implements, and the use and subsequent discarding of implements was taking place at the site.

This fits in with evidence from elsewhere, which shows that during the Bronze Age, there was little curation of flint (Butler 1996, 231). When a flint implement was needed, a suitably sized nodule or pebble was picked up and flakes removed with a hard hammer (another flint nodule or pebble perhaps picked up at the same time) until a suitably sized flake came off that could be used to make the required implement. The remains of the nodule/pebble and any flakes (and the fragments, chips and shattered pieces that would have been produced at the same time) would then be discarded, as would the hammerstone. The implement would be utilised for the task in hand, and then it too would be discarded.

This type of activity would explain the dispersal of cores, flakes and other debitage, together with the implements, in small numbers across the site, and would perhaps be typically associated with farming and other activities around a settlement, possibly in the associated fields. Within a settlement, the disposal and activity areas are likely to be more controlled, which would result in concentrations of debitage, close to flint manufacturing areas. There would perhaps be slightly more curation within a settlement area, leading to higher concentrations of implements disposed of close to their place of use (Underwood 2002a, 2002b).

The Burnt Flint by Neil Griffin

The evaluations and excavations at Roundstone Lane, Angmering produced a total of 5,984 pieces, weighing *c.* 167.5 kg from 259 individually numbered contexts. The assemblage was extracted from a wide range of features including post-holes, pits, wells ditches and gullies. Burnt flint was recovered from features spanning a broad date range from the Middle Bronze Age to the post-medieval period and was widespread across the whole development site.

By far the largest assemblage was collected from the ten *c.* 1m wide slots excavated across LBA/EIA Gully 414 (Fill 415) where 1,226 pieces weighing in excess of 63 kg, representing nearly 38% of the total weight from the site, was recovered. However

this represents only a relatively small part of the total quantity actually within this feature as only approximately one quarter of its visible length was excavated. Other notable concentrations (i.e. >*c.*2.5kg) were found in Contexts 409, 427 (Area A), 514 (Area B), 615, 627, 657, 701, 774 (Area D), 967 and 1136 (Area C).

Burnt flint is generally regarded as the waste product of cooking (so called "pot boilers"), but other uses have been suggested such as for saunas (Barfield and Hodder 1987) and bathing (O'Drisceoil 1988). The large quantities of burnt flint within Gully 414 may indicate that such activity was taking place, and may indicate the presence nearby of a 'burnt mound'. Such burnt flint concentrations are not common on the Coastal Plain, but are increasing in number as fieldwork (generally fieldwalking) identifies potential sites, such as at Bilsham, Ferring and Sompting (Dunkin 2000, 63, 69 and 75). An excavated example at Patching *c.* 1.5km north-east of the site being the nearest known (Stevens 1997).

The Geological Material by Luke Barber (incorporating comments by Bernard Worssam) (Fig. 28)

Introduction

The various phases of fieldwork at the site produced a relatively large assemblage of geological material: 427 pieces of stone (other than worked and fire-cracked flint), weighing a little under 162kg, from 96 individually numbered contexts. All this material has been fully quantified by stone type and context on Geological Record Forms which are housed with the archive. The material was located in prehistoric, Romano-British, medieval and post-medieval contexts though by far the majority was from the Romano-British period (319 pieces, weighing just under 136kg from 63 individual contexts). The main aim of the analysis was to establish the range of stone types exploited by the site, the reason why the stone was exploited if discernible, and to see if the sources of exploitation changed through time. The assemblage has been fully characterised by period in Table 8.

The Stone Types

In all 27 stone types were identified from the site. However, a number of these are simply variants of the same general type and probably simply reflect different outcrops, or indeed variation within one single outcrop, of the same geological rock type. A full list, with descriptions, of all the stone types is housed in the archive. For the purposes of the current report they are combined together into their related groups and are briefly outlined below. As will be seen, the majority of the stone would have been available either locally or regionally. Very little material can be classified as being the result of long distance trade from outside the region.

Ferrugenous sandstones: Tertiary

Six variants of this group are present from the site. All are brown to purple iron-rich sandstones of varying coarseness and sometimes with much larger flint pebble or quartz inclusions. These are almost certainly derived from Tertiary deposits and were probably available, albeit in secondary geological contexts, on or close to the site.

They occur in virtually all periods. The stone is not suitable for iron smelting and as such it is probable that the majority at the site has derived through natural, or unintentional human, processes. One probable rotary quern fragment in a well-cemented variant is present indicating some of the stone in this group could be put to use.

Bognor Rock: London Clay (Tertiary)

This medium grained yellow brown calcareous sandstone is frequently filled with large fossil shells and is well known from the Bognor Regis area (Barber 1994). Only three unworked pieces, all from 3rd- to 4th- century Roman contexts, are present from the site. It is possible this material travelled from the west as ship's ballast, a curiosity or naturally through Longshore Drift.

Sarsen sandstone

Only one piece of this sugary medium-coarse grained quartzitic sandstone was located. A source on the South Downs is likely though the piece could have got onto the Coastal Plain through geological reworking.

Chalk

A small scattering of middle/upper chalk is present in the assemblage. Most is water-rounded suggesting it has been reworked. As such it may have been available closer to the site than the chalk downland. It occurs in small amounts in prehistoric and Roman contexts.

Flint pebbles/cobbles

Although there were numerous downland flint nodules at the site (i.e. those used to construct the corn dryer), due to their quantity they were not collected on site. However, flints which had been rounded by water-action were collected. These would have been available from the beach and in localised fluvial deposits of the Coastal Plain. Most examples however, appear to be from the beach. Although the flint pebbles appear in both prehistoric and Roman contexts those in the former are much smaller and more perfectly round suggesting they were selected for sling shot. Those from Roman contexts are much larger, and more ireegular, cobbles.

Upper Greensand

Two variants of this group are present. One is the typical finely glauconitic, fine grained calcareous sandstone (malmstone) while the other is similar but notably harder. This material was readily available just to the north of the South Downs and was frequently used as building stone in the area of its outcrop, an example being the villa at Bignor. Only four pieces are present in the current assemblage, three of which are from Roman contexts.

Glauconitic sandstone: Lower Greensand

Three variant types of this group are present in the assemblage. All are from the Hythe formation and two at least are probably from the Lodsworth area (Peacock 1987). Lodsworth stone is widely distributed across the south and Angmering falls very much within the densest distribution of the stone. At the current site this stone group is present in prehistoric and Romano-British contexts though is by far more notable in the latter. Although most pieces are small and have no diagnostic features a number of pieces are from querns. As such it is probable that all of the glauconitic sandstones of the Lower Greensand were brought to the site as querns.

Bedded sandstone: Lower Greensand

Two variant types of this group are present. They consist of yellow/brown/purple laminated non calcareous medium grained sandstones. It is likely these are of the Hythe formation of the Lower Greensand. Similar material is present as roofing slates at Bignor (Barber in prep.) though no diagnostic pieces are present in the current assemblage. All from the current site is from Roman or later contexts.

Chert and Quartzite type: ?Lower Greensand

Three variants of this group are present from the site though their exact origin is uncertain. One variant is a medium grained chert-cemented sandstone almost certainly from the Hythe formation of the Lower Greensand. However, the other two variants consist of very hard fine-medium grained non calcareous quartzitic sandstones/ quartzites with very rare ?glauconite flecks. It is possible these are from the Hythe formation of the Lower Greensand, however, the fact all are water-worn suggests they may have been collected from the beach. Similar material was noted at Bognor Regis Community College in Roman contexts (Barber 1998). Although ideal for whetsones no pieces with use-wear were located, though this is probably due to the hard nature of the stone. The material appears in prehistoric and Roman contexts.

Puddingstone

Conglomerate consisting of flint pebbles in a fine grained light grey Sarsen matrix. Reading Beds in Hertfordshire. Only one piece of this rock was located on the site. It came from a Romano-British quern (see below).

Coal

Only two small fragments were located: one in a post-medieval context and one in a Roman context. Although coal was used in the Roman period, the current piece is probably intrusive.

Shale

The two pieces of this Jurassic black laminar shaly mudstone from the Kimmeridge area of Dorset are both from a post-medieval context though they could represent residual Roman material.

Granite

Only two small pieces of water-worn granite were located from the site. Both are likely to be from the south-west though only one is in a dated Roman context.

Lava

Two variants of this rock type are present but both consist of dark grey fine to medium grained dense/heavy lava. The source is probably Germany and it is likely all pieces were brought to the site during the later Roman period for use as querns or millstones (see below).

Unknown

Two variants of this group are present. Both are very fine grained non calcareous sandstones. One variant is mid to dark grey while the other is slightly more siliceous and is clearly banded. All examples of this stone group are in the form of water-worn pebbles indicating they were collected from a beach. Whether they could have been collected on the nearest beach to Angmering, or have come from a beach further afield is uncertain. Although they appear in Roman contexts their function, if any, remains uncertain.

Stone Type	**Prehistoric** (13 contexts)	**C1st AD** (4 contexts)	**C2nd AD** (12 contexts)	**C3rd-C4th AD** (43 contexts)	**'Roman'** (4 contexts)	**Medieval** (1 context)	**Post-medieval** (4 contexts)	**Un Dated** (13 contexts)	**Totals**
Ferrugenous Sast	6/1,932g	3/24g	4/252g	24/13,222g	3/404g	-	1/2g	6/1,844g	**47/17,680g**
Bognor Rock	-	-	-	3/1,846g	-	-	-	-	**3/1,846g**
Sarsen	-	-	1/124g	-	-	-	-	-	**1/124g**
Chalk	3/1,092g	-	4/218g	6/10,510g	-	-	2/10g	-	**15/11,830g**
Flint pebbles	58/4,938g	-	6/1,032g	9/1,050g	-	-	4/3,500g	1/10g	**78/10,530g**
Upper Greensand	-	-	-	3/18,600g	-	-	-	1/40g	**4/18,640g**
Glauconitic Sast Lower Grsd	4/1,368g	6/2,160g	15/5,855g	182/52,130g	5/3,456g	-	-	6/9,796g	**218/ 80,765g**
Bedded Sast Lower Grsd	-	-	1/76g	17/934g	-	1/2g	5/126g	4/414g	**28/1,552g**
Chert/ Quartzite Lower Grsd	1/116g	-	2/206g	5/5,136g	1/726g	-	-	-	**9/6,184g**
Pudding stone	-	-	-	1/3,000g	-	-	-	-	**1/3,000g**
Coal	-	-	-	1/6g	-	-	1/1g	-	**2/7g**
Shale	-	-	-	-	-	-	2/64g	-	**2/64g**
Granite	-	-	-	1/50g	-	-	-	1/472g	**2/522g**
Lava	-	-	-	11/8,222g	-	-	-	1/216g	**12/8,438g**
Unknown Sast	-	-	1/148g	4/366g	-	-	-	-	**5/514g**
Totals	**72/9,446g**	**9/2,184g**	**34/7,911g**	**267/ 121,072g**	**9/4,586g**	**1/2g**	**15/3,703g**	**20/12,792g**	**427/ 161,696g**

Table 8: Geological Material: Characterisation of assemblage

The Prehistoric Assemblage

The geological material from this period is combined due to the relatively small quantities involved and the limited range of stone types represented. There does not appear to be any notable differences between the assemblages from Middle Bronze Age or Late Bronze Age/ Early Iron Age contexts and if there were, the small size of the current assemblage precludes the meaningful identification in a change of exploitation of the natural resource.

The majority of prehistoric stone consists of well rounded flint beach pebbles averaging between 70 and 90g in weight each. A notable concentration of these pebbles was present in Area D, Pit 614. Two fills within this pit produced 12 and 37 flint pebbles (Contexts 767 and 768 respectively). The generally uniform size and elliptical/spherical nature of these flint pebbles suggests they had been specifically selected from the beach for use as sling stones. These range in size from 22g to 214g but the vast majority fall between 50 and 90 grams. The mean weight of the pebbles from these contexts is 80.6 grams.

Very few quernstones were identified in the prehistoric assemblage (Table 9). These consist of a single grain rubber/saddle quern fragment from the 2nd evaluation (Trench 4, Context 2) and a probably intrusive piece of Roman rotary quern in Context 657. The fragment of Lower Greensand/ quarzite (Pit 656, Fill 657) has particularly smooth surfaces on two opposed sides and is likely to have been utilised as a polishing or sharpening stone.

The Romano-British Assemblage

This assemblage is considerably larger than the prehistoric one and consists of a number of different contexts well dated by ceramics. As such the material has been sub-divided into closer period groups as summarised in Table 8.

The 1st- century assemblage is very small and comes from only four different contexts. With the exception of a little, probably naturally occurring, ferrugenous sandstone all the stone is of the glauconitic Lower Greensand and derives from querns. More contexts dating to the 2nd century were located (12 in number). These include the stone types noted for the 1st century but also now include chalk and flint pebbles/cobbles as well as a stray Sarsen piece. New variants of the Lower Greensand are present in the form of two pieces of quartzite and a single piece of bedded sandstone, though the latter may be intrusive, particularly when considering how common it is in the 3rd to 4th centuries. Whatever the case, stone exploitation during the 1st and 2nd centuries appears similar in that with the exception of Lower Greensand, brought specifically in as querns, all utilized stone was probably from the immediate vicinity of the site.

The 3rd- to 4th- century assemblage is considerably larger reflecting the main period of activity at the site. Some 43 contexts of this period containing stone were located. Locally available stone from around the site and beach was still being utilized and there is a great increase in the amount of glauconitic Lower Greensand, presumably

reflecting an increase in activity associated with arable agriculture. The presence of the Lower Greensand bedded sandstone and Upper Greensand blocks is interesting as these, probably representing stone roofing slates and quoins respectively, are likely to have been derived from a building of some substance. The most obvious source is the villa at Angmering, which toward the end of the Roman period may have offered another potential source of stone. Further reaching trade is suggested by the Hertfordshire Puddingstone and German lava, both of which were brought in as querns, as well as the presence of the granite. However, imported stone never makes up a large percentage of the assemblage, presumably as the local and regional stone catered for the site's needs.

The stone in the medieval and post-medieval contexts is present in small quantities and in the main is likely to be residual earlier material.

The Romano-British Assemblage: worked stone

Quernstones

A relatively large number of diagnostic quern fragments were located. With one exception from the evaluation, all are from the main Area C excavations. The querns from the whole site are summarised in Table 9 along with the prehistoric querns and are discussed below.

Period/Type	**Lower Greensand (glauconitic)** (no. frags/g)	**Other stone** (no. frags/g)	**Totals** (no. frags/g)
Prehistoric	2/108g rotary – intrusive Roman? 1/1,250g grain rubber/saddle quern (from 2 contexts)	-	**3/1,358g**
C1st	2/2030g rotary (inc. x1 upper stone) (from 2 contexts)	-	**2/2,030g**
C2nd	4/4,435g rotary (inc. x2 upper stones) (from 4 contexts)	-	**4/4,435g**
C3rd to C4th	132/46,638g rotary (inc. 7 upper stones, one re-used as a saddle quern, and 1 lower stone) (from 11 contexts) 8/8,100g millstone (from 1 context)	Hertfordshire Puddingstone 1/3,000g rotary (upper stone) (from 1 context) Tertiary sandstone 1/884g (from 1 context) German lava 9/8,100g millstone (lower stone?) (from 2 contexts)	**151/58,722g**
General Roman	5/4,624g rotary (inc. x2 upper stones, one with hopper, x1 lower stone) (from 3 contexts)	-	**5/4,624g**
Undated	1/616g rotary (upper stone) 1/9,000g millstone (?lower stone)	-	**2/9,616g**

Table 9: Summary of definite quern fragments

Earlier Roman quernstones have been shown to be generally thicker with a flat horizontal top and grinding faces of not more than 15 degrees (Curwen 1937). The current site has produced a small number of these from 1st- and 2nd- century contexts, though more early pieces are residual in later contexts. All are in glauconitic Lower Greensand. The best two examples are illustrated on Fig. 28. The first consists of an upper stone from 1st- to 2nd- century Pit 1009 (Fill 1010: No. 1). The second is part of a 350mm diameter lower stone, with the remains of a circular perforation through the full thickness, from 1st- century Ditch 988 (Fill 989: Fig. 28, No. 2)

The quernstones from the current site are dominated by the later Roman types, characterised by being thinner with sloped upper surfaces, usually with a protruding hopper, and shallower angled grinding faces of not more than 10 degrees (Curwen 1937 and 1941). These stones have numerous parallels in Sussex, such as those from the agricultural settlement at West Blatchington (Curwen 1950). The current assemblage includes only one example with protruding hopper (Ditch 608, Fill 609: Fig. 28, No. 3). Although from a Roman context which has not been closely dated, the presence of the hopper and remains of the rectangular/square eye is typical of later Roman Lower Greensand querns (Curwen 1950, 51, No. 4). The current site also produced a few examples of late Roman 'disc type' quernstones (Curwen 1937) where the grinding face does not exceed 2-3 degrees. The most complete example of this type is from the 4th- century corn dryer (Fill 1109: Fig. 28, No. 4). This example, which is from a lower stone, again in glauconitic Lower Greensand, has a circular central perforation which totally penetrates the stone.

One fragment of rotary quern of general early Roman type has been re-used as a small grain rubber/saddle quern. The piece is from an upper stone and shows a deep smooth trough worn into the original grinding face running obliquely across the original orientation of grind (Pit 858, fill 859, dated 2nd to 3rd century: Fig. 28, No.5). The reuse of broken fragments of rotary quern as saddle querns in the Roman period has been identified elsewhere on the West Sussex Coastal Plain at Rustington (Gilkes 2000) and in the Late Iron Age at Littlehampton (Gilkes 1993). Why this practise should continue so late is uncertain, however, the valuable grinding properties of fragments of a broken quern would provide a convenient and easily transportable lightweight 'kitchen tool' for small-scale grinding and food preparation.

Very few examples of quernstones in other rock types other than Lower Greensand were present (Table 9). These consist of a few pieces of German lava, possibly all from millstones (see below) and a possible fragment of hard Tertiary sandstone quern from Context 1096 (3rd- century gully 1095). One example of a rotary quern in Hertforshire Puddingstone was located (Ditch 944, Fill 970: Fig. 28, No. 6). The fragment from the current site is from a bun-shaped upper stone, with a side socket for the handle, and is typical of querns of this type. Other examples have been found at Richborough, Canterbury and Oldbury in Kent, as well as Hardham in West Sussex (Curwen 1941). Curwen has noted that all examples were of Roman date and that from Hardham was in a context dated 50-150AD. The current example, which has its closest parallel at St Albans (Curwen 1941, 21, No. 17), is from a context dated to the 3rd century. It is possible the quern was old at the time of discard, is residual, or the querns from this industry continued to be imported into Sussex into the 3rd century.

The current assemblage contains fragments from at least three probable millstones. All examples are very fragmentary, however, their massive size and thickness precludes their use as simple hand-turned rotary querns. One example of a lower stone in Lower Greensand is unfortunately unstratified in Area C. This piece, which weighs 9kg and measures in excess of 140mm thick, does not have any part of the exterior edge remaining, but has clear tooled radiating grooves on its grinding surface. A smaller piece, but again in Lower Greensand with heavy tooled lines on the grinding face, was recovered from Pit 1138 (Fill 1139: dated 3rd to 4th century). This piece, which could be either from the upper or lower stone, would have measured in excess

of 135mm thick (Fig. 28, No. 7). The final example is from the corn dryer (Fill 1109, dated 4th century) and consists of another piece of ?lower stone with no outside edges remaining but with a 'pecked' grinding face. This piece, which weighs 6kg, is in a dense dark grey German lava and shows the importation of good quality grinding stones was undertaken. It is likely these millstone fragments were taken for re-use from a local mill. Evidence for milling on a larger scale has been hinted at on the Coastal Plain by the location of rotary millstone fragments at sites such as Fishbourne (Cunliffe 1971), Wickbourne, near Littlehampton (Gilkes 1993) and Rustington (Gilkes 2000). The area was heavily utilised for arable agriculture during the period and is well catered for by watercourses which could provide driving power for mills. Despite this no Roman mills are known of at present though the site at Penfold Lane, Rustington may well have been related to one. The location and excavation of such sites on the Coastal Plain will be of critical importance in understanding how the agricultural economy functioned.

The 1st- and 2nd- century quernstones assemblage from the site is both too small and from too few contexts to undertake any meaningful analysis of spatial distribution. The assemblages of the 3rd and 4th centuries are larger and although generally the material is widely spread there are a few notable concentrations of quern fragments in certain features. One of the largest is in Pit 1048. Two fills, Contexts 1049 and 1057, produced 12 Lower Greensand rotary quern fragments weighing just over 7kg. To the north the corn dryer produced another large assemblage from two of its fills (Contexts 1109 and 1137): six Lower Greensand rotary quern fragments, weighing just over 2kg, and a lava millstone fragment weighing 6kg. The probable drainage sump associated with the corn dryer, Pit 1138 (Fill 1139), contained some 95 burnt and badly fragmented pieces of Lower Greensand rotary quern (18.53kg) as well as pieces from a Lower Greensand millstone (8.1kg). It is possible these had been dumped in the pit after use in the area in order to aid drainage. Whatever the case, there does appear to be a slight concentration of material directly south of the corn dryer, suggesting this area may have been the focus of grinding activity.

Other worked stone

With the exception of querns virtually no stone exhibiting signs of having been shaped or worked was located at the site. Three large pieces of Upper Greensand are roughly shaped to form building blocks (i.e. Evaluation Trench 22, Context 177, Area C, Pit 1052, fill 1053). All are from 3rd- to 4th- century contexts. It is probable these were originally quoins in a flint-walled building, perhaps originating from the nearby Angmering villa, though no such stone is mentioned in the excavation report (Scott 1938). The presence of white Italian limestone at the villa is interesting in that it shows the possible availability of 'exotic' stone types for re-use on peasant settlements in the area. However, at the villa this material was used for decorative work in the main and the small resultant pieces would be of little practical use to the local peasant population.

All of the bedded Lower Greensand is present as thin pieces ranging in thickness from 18 to 26mm. Although no fixing holes were observed in the current assemblage it is likely these are the remains of stone roofing slates, probably re-used from the nearby villa. Similar stone slates were used to a great degree in the later Roman period at Bignor villa (Barber in prep.) and it is interesting to note that in the present

assemblage 17 of the 28 pieces were found in 3rd- to 4th- century contexts (Table 1), while all but one were residual in post-Roman contexts. The only other worked stone consists of a fragment of square-sectioned whetstone in a hard variety of non-shelly ?Bognor Rock (4th- century corn dryer, fill 1109: Fig. 28, No. 8)

The Undated Assemblage

Although undated or unstratified it is likely that many of these contexts are of Roman date. However, due to the uncertainty of this the stone from them has not been studied in detail unless pieces of obvious Roman origin were present. As such a number of quern fragments have been identified which are undoubtedly of Roman origin.

Discussion

The prehistoric assemblage from the site is too small for reliable interpretation. However, an emphasis is on the exploitation of only resources available very local to the site. The presence of so many probable sling-shot is interesting in a period where pressure on land was on the increase. The single grain rubber in Lower Greensand shows that some milling was occurring but apparently was not widespread at the current site.

The Roman assemblage shows that there was a great increase in the exploitation of not only local, but regional stone resources. By far the majority of this material was from the Lower Greensand to the north of the chalklands. Most of this Lower Greensand was brought specifically to the site as rotary querns. Other material, such as the bedded Lower Greensand stone slates and Upper Greensand building blocks, are likely to have been scavanged from other sites that had used them for building materials. The large proportion of quern fragments is what one may expect from a settlement very much involved with the cultivation and processing of arable crops. This activity is represented by quernstones throughout the Roman period. In the later Roman period quernstones and millstones from Hertfordshire and the continent show an even wider catchment area for the site. The presence of the millstone fragments at the site is particularly interesting. It is unlikely these were originally used at the current site, judging by the topography and excavated remains. As such it is probable the fragments were brought to the site to act as stationary saddle querns from a nearby probable water-powered mill. Such a mill may well have been situated on the Black Ditch and served the Angmering villa estate.

The Glass by Luke Barber

Twelve pieces of glass, weighing *c.* 45g, were recovered from nine individually numbered contexts. With the exception of two modern pieces from Context 279 (Evaluation Trench 2), all are of Roman date. The earliest piece consists of a colourless bottle fragment from Context 1011 (Pit 1009). The remaining pieces are from contexts of 3rd- to 4th- century date. These consist of two colourless bottle fragments with the remainder coming from sturdy square or cylindrical bottles in blue green glass. These pieces include two ribbed handle fragments.

The Bone by Lucy Sibun

A total of 46 contexts produced 1,072 fragments of identifiable bone. This was identified to both taxa and the skeletal element represented when possible. However, in order to avoid the distortion caused by differing fragmentation rates between elements, the fragments were re-quantified. Where numerous cranial, rib or vertebral fragments of the same species occurred in a single context these were counted as only one. Conjoining fragments were also counted as one. As a result the total identifiable fragment count was reduced to 324.

The bone was in a varied state of preservation with some badly preserved and weathered material present. However, it was in general surprisingly good considering the acidic Brickearth of the site and demonstrates variable burial conditions in different contexts. Bone assemblages from this geology usually contain little more than tooth crowns.

Of the identifiable fragments 117 were recovered from undated or modern contexts (Contexts 279, 439, 769, 837, 966, 1147, 1222, 1317). Only three fragments were recovered from 1st-2nd century features (pit fills 1011, 1024), 40 from 2nd-3rd century pits (Contexts 859, 1217, 1226, 1252) and 164 from 3rd- to 4th- century ditch and pit fills (contexts 851, 970, 168/175, 933/1012 and 1069, 1070, 1255, 1139, 1053, 1275, 1277 respectively) pit/well (Contexts 1049, 1057) a post-hole (Context 927), layer (Context 956) and a corn dryer (Contexts 1156, 1064).

With such small numbers involved meaningful statistics are impossible. However, it is clear that of the main meat species (cattle, sheep and pig) cattle predominate. In the 2nd-3rd centuries cattle form 71.4% (15 fragments) sheep 23.8% (5 fragments) and pig 4.8% (1 fragment). In the 3rd to 4th century assemblage cattle form 83.2% (99 fragments) sheep 7.6% (9 fragments) and pig 9.2% (11 fragments). Other identifiable species present in small quantities in the 3rd to 4th century assemblage are horse (Contexts 1049, 1070; 11 fragments), dog (Context 1057; 1 fragment) small mammal (Context 1255; 2 fragments) bird (Context 1156; 35 fragments) and fish (Context 1255; 15 fragments). Dog was also present in the undated material.

There was very little evidence for butchery or bone modification noted. Only four fragments, three cattle ribs and one vertebra displayed shallow cuts. The 4th- century pit/well fill 1049 contained a single splinter of a cattle long bone shaft, which had a rounded and polished appearance at one end. This was however, broken. A total of 49 small fragments had been charred and this ranged from surface blackening to complete oxidisation. Third- to 4th- century pit fill 1053 is of note because it contained five cattle and horse skull exclusively. The bird remains, probably all from domestic fowl, were all charred and all recovered from the corn dryer (Context 1156).

Due to the small size of the assemblage it is not thought that meaningful results would come from studying skeletal representation of the main species. Therefore, minimum number of element calculations have not been undertaken. It appears that a large proportion of the assemblage consists of teeth but this is not surprising given the preservation conditions on site. The lack of sufficient aging, sexing or butchery data mean that it is difficult to draw conclusions from this small assemblage. The species

present and their relative quantities are typical of a Romano-British settlement but more detailed statistical analysis has not been possible.

The Cremated Bone by Jacqueline I. McKinley

Introduction

Cremated and burnt bone from 14 contexts was received for analysis, material having been recovered from all Areas of the site (A-D). Middle Bronze Age deposits from Area B included the remains of three urned burials and redeposited material from an associated ditch fill. A 2nd- century Romano-British grave was excavated in Area D. The nature of the single, undated deposit from Area A is inconclusive. Bone from six deposits in Area C proved to be animal, whilst the quantity of bone from two other contexts is so small (<0.5g) it cannot be conclusively identified as either animal or human.

Methods

Cremation-related contexts had been subject to whole-earth recovery in excavation (see above). The remains of one Middle Bronze Age burial (508) was excavated in three 0.03m deep spits. The Romano-British grave contained two vessels 611A and 611B, which both held cremated bone. Any sub-contexts created in excavation were maintained throughout analysis.

Osteological analysis followed the writer's standard procedure for the examination of cremated bone (McKinley 1994a, 5-21; 2000a). Age was assessed from the stage of skeletal and tooth development (Beek 1983; McMinn and Hutchings 1985), and the general degree of age-related changes to the bone (Buikstra and Ubelaker 1994). Sex was ascertained from the sexually dimorphic traits of the skeleton (*ibid.*).

Results

A summary of the results is presented in Table 10. Full details of identifications are held in the archive.

Condition and disturbance
The Bronze Age graves in Area B were very heavily disturbed, with a maximum surviving depth of 0.09m. A substantial proportion of the remains of these burials will, consequently, have been lost. The vessels in the Romano-British grave 610 in Area D were both damaged: vessel 611A appears to have been dislodged and cracked; vessel 611B was crushed and only survived in part.

The bone from all deposits other than 611A was slightly worn and chalky in appearance, which is indicative of burial in an acidic environment. Trabecular bone fragments were sparse or absent from individual assemblages; such skeletal elements (e.g. axial skeleton and articular surfaces) are the first to be lost in soil conditions adverse to bone survival (McKinley 1997a, 245; Nielsen-Marsh *et al* 2000). The extensive disturbance to many of the deposits will have further exposed the bone to conditions conducive to poor preservation.

Demographic data

The remains of five individuals are likely to be represented amongst the cremated bone (405, 300, 507, 508, 611A/B; Table 10), including a minimum of three adults, one probably female and one most likely male. Although the quantity of bone remaining in the Middle Bronze Age burial 507 was very small, contextually this probably represents the remains of an individual. There was no apparent duplication of skeletal elements between 611A and 611B in the Romano-British grave 610 and it is likely that the remains of a single individual was deposited in both vessels for burial. The undated deposit 405 may represent either the remains of an unurned burial with redeposited pyre debris or redeposited pyre debris related to a burial which has not been found (see below); whichever, since it represents a singleton from Area A the individual is unlikely to be represented elsewhere in the assemblage.

The surviving Middle Bronze Age deposits represent part of what may have been a slightly larger group of burials; a maximum of 12 'smears' of pottery were found within a 10 x 5m area to the south of Ditch 545, though some are likely to represent material spread from the truncated known burials. Such small grave groups are typical for the period, though poor bone survival precludes demographic comment. The Romano-British grave lies in the south-east corner of Area D and further burials of this date may lie to the south or east, but singletons are not uncommon in rural areas in this period.

context	phase	deposit type	weight	age/sex	pathology
Area A					
405	?	?rpd/ ? un.burial + rpd	80g	adult >18 yr. ?female	
Area B					
300	MBA	urned burial	29.5g	subadult/adult >13 yr.	
507	MBA	urned burial	0.1g	>infant	
508	MBA	urned burial	45.8g	adult >18 yr.	
561	MBA	ditch fill	3.6g	subadult/adult >13yr.	
Area D					
611	RB	urned burial	A) 87.6g B) 7.9g	A) adult *c.* 20-40 yr. ??male B) subadult/adult >13 yr.	exostoses – femur shaft

Table 10: The Cremated Bone - Summary of results
(KEY: rpd - redeposited pyre debris)

Pathology

There was little evidence for pathological lesions, with minor changes being observed in the adult remains from 611. Exostoses are bony growths which may develop at tendon and ligament insertions on the bone. It is not always possible to be conclusive with respect to the aetiology of particular lesions which may include age-related wear-and-tear, traumatic stress, or specific disorders (Rogers *et al* 1987).

Pyre technology and cremation ritual

The bone was predominantly white in colour, indicative of full oxidation (Holden *et al.* 1995a and b).

The Middle Bronze Age deposits were all too disturbed to pass any meaningful comment on the quantity of bone included in the burials, the bone fragment size or the

skeletal elements identified. A total of 95.5g of bone was recovered from the Romano-British burial 611, representing a maximum of *c.* 9.5% of the expected weight of bone from an adult cremation (McKinley 1993). The inclusion of only a proportion of the cremated bone in the burial is a recognised part of the rite, and a wide range of average weights have been recorded from contemporaneous cemeteries from as little as 179.1g (Low Borrowbridge, Cumbria; McKinley 1996) to 845.0g (East London cemeteries; McKinley 2000b). Although some trabecular bone may have been lost from burial 611 due to the acidic soil condition, the quantity of bone included places it at the very lowest end of the range for the period.

The maximum fragment sizes were all very low at 19mm (Bronze Age maximum burial 561), 29mm (Romano-British 611) and 33mm (unphased context 405). The majority of the bone from the Bronze Age deposits was recovered from the 5mm or 2mm fraction and from the Romano-British in the 10mm fraction (47%). There are a number of factors which may affect the size of cremated bone fragments (McKinley 1994b), in these cases the burial environment and extensive disturbance to the Bronze Age deposits will have substantially increased fragmentation of the bone, and there is no evidence to suggest any deliberate fragmentation prior to burial.

Trabecular bone was generally poorly represented and little or no axial skeletal elements were identified from any deposit. Elements of skull, upper and lower limb bones were identified within the largely intact Romano-British burial 611 and context 405. The latter also contained some tooth roots and the smaller bones of the hands and feet, none of which were represented in the Romano-British burials. This may reflect variations in the mode of recovery of the bone from the pyre site for burial with, for example hand collection of individual fragments from the pyre resulting in a bias towards mostly larger fragments in 611 and *en mass* recovery with subsequent sieving resulting in a range of fragment sizes in 405. Alternatively, the inclusion of the smaller bone fragments in 405 may reinforce its possible interpretation as redeposited pyre debris rather than a burial?

Formal 'burial' generally takes one of several forms; a contained deposit either in a ceramic vessel or an organic one, the physical remains of which are lost but leave the bone in a concentration; or a spread of material across the base of a grave cut. The act of 'burial' is separate from the backfilling of the grave which represents a subsequent act. A relatively small quantity of bone was recovered from 405, apparently spread throughout the fill which comprised large amounts of fuel ash (70-80%). The apparent characteristics of deposit suggest that it represents not a burial but a formal deposit of pyre debris (McKinley 1997b, 137-139).

Little or no fuel ash was recovered from any of the grave fills. The presence of small amounts of fuel ash and cremated bone (561) in the central excavated segment of Ditch 545 may have derived from a disturbed burial deposit or, more likely, represent redeposited pyre debris. Its presence suggests the pyre sites were also in the general vicinity.

The Shell by Luke Barber

The excavations produced only 665g of shell from seven different contexts. With the exception of three chips of mussel shell, all the material consists of oyster. Where datable the material is from 3rd- to 4th- century Roman deposits. The small assemblage size is likely to be the result of the acidic ground conditions at the site rather than a lack of shellfish in the occupants' diet.

Charred Plant Remains by Pat Hinton

Methods

Bucket flotation of bulk samples was carried out by the excavators with flot retained on a series of sieves, minimum 0.25mm.mesh and residue on 1.0mm. Flots from more than 300 contexts were assessed for their content of charred plant remains and potential value for illustrating agricultural activity and background vegetation. 33 samples were selected for full analysis because of obvious plant material or the significance of their context. Others with only very little charred material were briefly scanned. Charcoal was returned to the excavators for specialist study.

The selected samples were searched with stereo microscope at 7 - 40X magnification with higher magnification occasionally for surface details. Most samples were re-sieved to facilitate sorting. Very productive larger samples were sub-sampled and totals of the most numerous seeds estimated, with the remainder more briefly scanned for additional taxa.. All plants are represented by seeds unless otherwise stated, *seeds* being used loosely to include fruits, nutlets, caryopses etc.

Although different species of wheat may show certain characteristic features of the grain there can be considerable morphological overlap which, taken with varying degrees of distortion or damage due to charring and subsequent disturbance, means that exact identification is unreliable without additional diagnostic items of chaff. Therefore wheats are listed only as *Triticum* sp. but where preservation is good specific identifications are suggested. English names are used in the text with scientific names (following Stace 1997) given after each first mention.

Results

Evaluation

Seven contexts contained only a few cereal or chaff fragments and seeds, rarely more than three, but one sample (Context 65) produced a more significant quantity of seeds. This included at least 36 grains of wheat, probably mostly spelt (*Triticum spelta*), the identification supported by two securely identifiable glume bases. In addition were a probable oat grain (cf *Avena* sp), and a few weed seeds including brome grass (*Bromus* sp), dock (*Rumex* sp.) and small tares or vetches (*Vicia* cf *hirsuta* or *tetrasperma*). This ditch deposit and a scatter of seeds in the other samples are suggestive of cereal processing in the vicinity.

Mayflower Way Evaluation

One sample from Context 10 of a this evaluation contained charcoal and the equivalent of about six grains of wheat, probably spelt (*Triticum spelta*), with three glume bases, one of which is spelt and one partial seed of dock (Rumex sp.)

Excavation

Area A

Of 17 samples assessed only 9 included any charred plant remains other than charcoal. Two (both Context 415) each contained less than five wheat grains, identified as probably spelt by a characteristic grain in one sample and a glume base in the other. A few fragments of probable wheat and chaff were seen in a linear gully (Context 423) and four other samples included unidentifiable charred fragments. Several samples had greater amounts of charcoal, particularly a cremation deposit (Context 405), a very large sample which produced *c.* 1,575 ml. of flot. Searches of repeated sub-samples of this large amount failed to find any plant remains other than charred wood.

Area B

Nineteen samples from this area were assessed but most produced very small amounts of flot consisting mainly of charcoal. Only two from the curvilinear ditch (Context 545) contained a few cereal fragments, probably wheat.

Pots associated with cremations yielded a few charred items. Context 507 included in addition to a little charcoal only a few small shapeless pieces of glossy black vesiculated material that is not typical of charred cereals but likely to be of organic origin. Samples from three spits from Context 508 produced two poorly preserved grains, probably wheat, at 0-3cms, two probable wheat chaff fragments at 3-6cms. and two unidentifiable fragments at 6-9cm depth. In each were a few fragments of amorphous material similar to that in Context 507.

*** = estimated**

	Ditches and gullies						Post holes					Pits				
Context	909	980	933	849	1075	1317	943		1184	1245	1228	847	907	1139	1226	1275
Date	RB	MRB	LRB	LRB	MRB	RB	MRB	MRB	MRB	RB	LRB	RB?	LRB	LRB	MRB	LRB
Sample	4045	4060	4065	4098	4107	4202	4050	4093	4143	4153	4162	4003	4027	4138	4140	4192
Sample volume (litres)	7	2	14	14	7	15	14	12	7	7	2	14	28	40	7	15
Cultivated Plants																
Triticum sp. (undifferentiated wheat)	1	1	8	22	30	24	3	69	14	16	7	77	17	*20,000	23	175
Triticum cf *spelta* (spelt) - glume bases			4	4		5		5				2	3	*150		3
T.dicoccum/spelta (emmer or spelt) – glume bases			4	2	2	6	3	3	2	150	4	7	3	*50	2	6
Hordeum cf vulgare (hulled barley)				2				9				1	1	8		
Avena sp. (oats) – grains					1	1		12		2	3	5		18	1	
- awn fragments	2	2					2			85		1		2		
Cerealia indet. – grains & fragments (ml.)	<0.5	<0.5	<0.5	1.0	0.5	>2.0	0.5	>2.0	1.5	0.5	2.0	2.0	0.5	+++	2.0	2.5
Vicia faba *L.* ***(broad bean)***											1					
Linum usitatissimum *L.* ***(flax/linseed)***																1
Wild plants																
Papaver *cf* rhoeas *(field poppy)*																1
Chenopodium *sp. (goosefoot)*														1		1
Spergula arvensis *L. (corn spurrey)*						2								1		
Stellaria media/neglecta (common/greater										1						1
Fallopia convolvulus Á.Löve (black bindweed)									1				1			
Rumex ***sp. (dock)***		1	1	1	1	176			2		9	6	2	4		14
Polygonaceae indet.(knotweed family)				1		7			1			2				2
Brassica sp. (cabbage, turnip etc.)						2			1							
Raphanus raphanistrum *L.* ***(wild radish)***										1						
Crataegus monogyna Jacq. (hawthorn)																1
Trifolium sp.(clover)						37	3					9				3
Trifolium/Medicago sp .(clover or medick)							2									
Vicia hirsuta/tetrasperma (hairy or smooth tare)					2	21	1				1			2		12
Vicia cf *sativa* (common vetch)									1							1
Vicia/Lathyrus sp. (vetch or vetchling)					1	15			1		2	1	1			10
Apium graveolens L. (wild celery)											1					1
Galium aparine L. (cleavers)					1	1						2				1
Anthemia cotula L.(stinking mayweed)			4								1				2	1
Tripleurospermum maritimum/inodorum (scentless mayweed)	37		8					3		4		1	2	16	6	95
Asteraceae indet. (daisy family)	4					2	1		1							7
Schoenoplrctus lacustris (L.) Palla (common club-rush)												2				
Carex sp.(sedge)						3					2	4		1		2

cf *Poa annua* (annual grass)																
cf Festuca/Lolium ***(fescue or rye grass)***														1		
cf Alopecurus/Phleum type (foxtail /cat's-tail)			1			5										3
Bromus sp.(brome)				1		7	1	1		16	4	4	1	108	2	
Poaceae indet.	2		1			23						1	1			

Table 11: Seeds from Area C (pits, ditches and post-holes). Key: RB – general Romano-British, MRB – mid Romano-British, LRB – late Romano-British

*** = estimated**

	Main flue chamber							S and N flue chambers	Stoke hole	
Context	1062	1064				1109	1137	1156	1068	1067
Date	LRB	LRB	LRB	LRB	LRB	LRB	LRB	?LRB	?LRB	?LRB
Sample	4102	4094	4099	4108	4135	4126	4130	4134	4100	4136
Sample volume (litres)	7	14`	7	7	28	14	28	28	2	14
Cultivated Plants										
Triticum sp. (undifferentiated wheats, mainly cf *T.spelta* (spelt) - unsprouted grains	22	31	17	3	*5o	53	*120	*520	*150	25
" - shrunken grains	55	7		5 + frs	*340	3		*620	29	
" - grains with plumule	4				*60			*160	13	
" - grains with plumule depression only	12	5		2	*290			*150	53	
" - plumule bases and emerging radicles	11	1		1	*300			*470	5	
" - plumule fragments	c.30				*300			*120	2	
T.spelta (spelt) - glume bases	9		1		*100	5	1	*390	6	1
T.spelta/T.dicoccum (emmer or spelt) - glume bases					*90	3	2	*140	2	17
" - rachis frags								*30		5
Hordeum sp (hulled barley)		1					?1	4	1	
Avena sp. (oats) – grains	19	4	2		*15	?1	4	*470	32	16
- florets	1				*30	1		1	3	
- awn fragments	17				*90		1	3	25	36
Cereal fragments (ml.)	1.0		1.0	0.5	2.5	0.5	1.5	*20.0	0.5	>0.5
Pisum sativum L. (pea)										1
Linum usitatissimum L. (flax/linseed)		1					1			
Wild Plants										
Papaver sp.(poppy)	1	1			2			2	2	
Chenopodium album *L.* ***(fat hen)***		1				1		2	2	
Fallopia convolvulus Á. Löve (blaack bindwood)	1									
Rumex cf *crispus* (curled dock)	1					2		4		
Rumex sp.(dock)	1	1			10			25	4	4
Polygonaceae indet. (knotweed family)									4	1
Brassica sp. (cabbage, turnip etc.)					1				4	1
Prunus spinosa L.(sloe) - fruit stone							1			
Vicia hirsuta *(L.) Gray (hairy tare)*		1							3	
Vicia hirsuta/tetrasperma *(smooth or hairy tare)*	2		2		2	1		*60	2	5
Vicia cf *sativa* (common vetch)								*20	3	2
Vicia/Lathyrus sp. (vetch or vetchling)					3			*30		
Trifolium sp. (clover)								1		
Yrifolium/Medicago sp. (clover or medick)								5	5	
Aethusa cynapium L. (fool's parsley)								1	1	
Plantago lanceolata L. (ribwort plantain)										2

Galium aparine L. (cleavers)							1			2
Sambucus nigra L. (elder)		1								
Anthemis cotula L. (stinking mayweed)			1							2
Tripleurospermum maritimum/inodorum (scentless mayweed)	121				*400		3	*300	104	81
Asteraceae indet. (daisy family)	5				10			*500	8	10
Carex sp.(sedge)										1
cf *Poa annua* (annual grass)						1				3
cf Festuca/Lolium *(fescue or rye grass)*								20		
cf Alopecurus/Phleum type (foxtail or cat's tail)							5	15		
Bromus sp. *(brome)*	11+ frs			1		3	5	*200	11	6
Poaceae indet. (unidentified grass)	3			1	1		2	2	3	11

Table 12: Seeds from Area C (corn drier). All late Romano-British.

Area C

This area produced the most evidence of activity connected with cereals. Of roughly 200 contexts more than half included some evidence of charred cereals or other seeds. Selected for closer study were 26 Romano-British samples with greater numbers of plant remains and from a range of different contexts, of which the corn drying kiln is the most important.

Eleven samples from ditches, gullies and postholes included wheat grains, nine with glume bases indicating either emmer (*Triticum dicoccum*) or spelt and four with very characteristic spelt glume bases and fragments. Hulled barley (*Hordeum* cf *vulgar.*} appeared in only two samples, one ditch and one posthole; it was not possible to identify them as 2- or 6-row. Oat grains were found in two ditch and two post hole samples and awn fragments in three. One half seed (one cotyledon) of broad bean (*Vicia faba*) came from a posthole The ditch and gully samples may represent small dumps of material but often the chance presence of items from the general background of burned debris from various sources. (Table 11).

Deposition in pits, from which five samples were analysed, must have been deliberate and undoubtedly so in the case of the shallow pit (Context 1139) which held more than 28,000 grains. Sub-samples indicate that the majority of well-preserved grains have the more or less rounded back, straighter sides and blunter apex characteristic of spelt and several show impressions caused by the veins of the glumes. Glume bases, mostly with the rounded outline and strong venation of spelt were estimated to be about 150, but more such light items may not have survived burning Only very few shorter grains were suggestive of free-threshing wheat (*Triticum* cf *aestivum).* Barley and oats were only occasional finds. Weed seeds are few but brome, a common companion of spelt, was estimated at more than 100 seeds suggesting possible acceptance of its large seeds in a crop. The impression is of a deposit of spelt spikelets burned before or during the heating necessary for freeing the grains from the chaff. A smaller deposit in another pit (Context 1275) which included *c.* 175 wheat grains, fewer glume bases, but a greater number of wild plant seeds, not including brome, suggests waste disposal. This sample also included a seed of flax (*Linum usitatissimum*) and a fruit stone of hawthorn (*Crataegus monogyna*) presumably represents (Table 11).

The samples from the corn drying kiln vary in their composition. Six of eight samples from the flue chamber include among 'normal' wheat grains others which show signs of sprouting, and in some cases different stages of germination. Sometimes the sprout (plumule) is only just emerging, sometimes it has reached almost the length of the grain and rootlets (radicles) are developing. From other grains the plumule is lost but pressure of the glumes has caused a shallow groove along the dorsal surface. In freed grains the sprouts grow away from the grain at an angle. Other grains are shrunken or collapsed and illustrate later stages of the process. There are also many detached parts of plumules and radicles.

The greatest number of cereals came from the north and south extensions at the end of the flue chamber (Context 1156), admittedly one of the two largest bulk samples. This context included *c.* 1,450 wheat grains of which *c.* 930 had sprouted and 520 were

unsprouted. Chaff included rachis fragments and more than 500 glume bases, some as spikelet forks, of which three-quarters could be identified as spelt. A few more compact grains might have been free-threshing wheat but are still within the range of spelt. Approximately 470 oat grains is the largest accumulation of oats found from the whole site but only one floret base with the small straight disarticulation scar to indicate cultivated oats (*Avena sativa*). Barley appeared as only a very occasional exception among the hundreds of grains. Several hundred small wild plant seeds are mostly of typical arable weeds. A similarly sized sample (the largest of four from context 1064) contained *c.* 740 grains (690 sprouted and 50 unsprouted) and *c.* 190 glume bases. This context also produced oat lemma bases indicating both cultivated and wild oats (*Avena* cf *fatua*), and fragments of the twisted awns, although oat grains were few. Other flue chamber samples included lesser amounts of wheat, some oats and only a very occasional barley grain.

Two samples from the stoke hole produced contrasting results. One (Context 1047) contained about 25 wheat grains, slightly fewer glume bases and other chaff fragments of both wheat and oats. The grains were severely burned and somewhat distorted but none showed obvious signs of germination. The second sample from the stoke hole area (context 1068) is unusual in that the small amount of flot was made up of *c.* 150 unsprouted wheat grains, 95 at differing stages of germination and 32 oat grains with chaff suggesting cultivated species, but only a very few flecks of charcoal. This sample also produced one pea (*Pisum sativum*), the only evidence found from the site. The composition of the kiln samples is detailed in Table 12.

In smaller flots from other contexts from Area C wheat is the most frequently identified cereal, together with chaff and weed seeds in varying proportions but many contained only few cereal fragments.

Area D

Seven samples were selected for detailed analysis, all but one being of prehistoric, or probable prehistoric, date (Table 13). Spelt-like wheat occurred in each. However, two contexts (708 and 769) included a few slimmer grains with high ridged backs and more pointed apices which are comparable to emmer (*Triticum dicoccum*). Shorter, more compact forms found in Contexts 711 and 647 might be free-threshing wheat. Hulled barley occurred only in low numbers in 4 contexts and a single oat grain in context 711 is the only evidence of that cereal seen from Area D. In many cases, however, the cereals and weed seeds are in poor condition, and there are many fragments which can be identified only as cereal by their characteristic vesiculated appearance and occasional glimpses of over-all form.

The ditch and oval feature (Contexts 711 and 647) and the pit or well (Contexts 768 and 769) produced the greater numbers of seeds, with brome significantly more obvious in Contexts 768 and 769, and a fruit stone of sloe (*Prunus spinosa*) in the latter.

A circular feature (Context 708) included mainly wheat and a little barley but only one small weed seed. The two very small flots from stake holes (Contexts 703 and 707 contained merely smaller amounts of the cereals and a dock seed.

About 20 other samples with fewer seeds were scanned and yielded grains and fragments of wheat with chaff indicating spelt and weed seeds of species already noted in the selected samples. All are likely to be derived from the disposal of cereal processing or other waste.

	Ditch	Oval	Circular	Stake holes		?Well	
Context	711	647	708	703	707	768	769
Date	RB	?Prehist	LBA/EIA	?Prehist	?Prehist	MBA	
Sample	3013	3015	3017	3029	3031	3067	3074
Sample volume (litres)	15	7	14	1	1	7	14
Cultivated Plants							
Triticum sp (undifferentiated wheat) - grains	766	26	36	8	2	29	26
Triticum cf *spelta* (spelt) - glume bases	1						3
T. dicoccum/spelta - glume bases	1	6	1			31	27
Hordeum cf *vulgare* (hulled barley)		1	5	2	1		
Avena sp. (oats) – grains	1						
Cerealia indet. grains & frags. (ml.)	c.2.0	1.5	1.0	0.5	0.5	2.0	0.5
Wild plants							
Ranunulus acris/repens/bulbosus (buttercups)	1	1					
Chenopodium album L. (fat hen)		1					
Fallopia convolvulus *ÁLōve (black bindweed)*						2	2
Rumex acetosella *L. (sheep's sorrel)*	4	3					
Rumex sp.(dock)	18	7		1			
Polygonaceae indet. (knotweed family)						1	
Viola sp. (violet/pansy)	1						
Prunus spinosa *L.(sloe) – fruit stone*							1
Vicia hirsuta/tetrasperma *(hairy /smooth tare)*	2	2	1				
Vicia/Lathyrus sp.(vetch/vetchling)	1	1					
Trifolium sp.(clover)	1	2					
Solanum nigrum *L.(black nightshade)*	2						
Galium aparine *L. (cleavers)*						2	
Tripleurospermum inodorum (L.) Schulz-Bip	2						
Asteraceae indet. (daisy family)	1						1
Bromus sp. (brome)	2	1				51	26
Poaceae indet. (grass family)	1	1					1

Table 13: Seeds from Area D. Key: MBA – Middle Bronze Age, LBA/EIA – Late Bronze Age/Early Iron Age, ?Prehist – probably prehistoric

Discussion

There were few prehistoric samples and most, where discernible, produced only small numbers of fragments but the possible emmer in Context 769 (?Bronze Age) is of interest since in the Romano-British period most if not all the wheat is spelt. The Romano-British cereals, seeds and other fruits spread in many contexts over several areas of the site, together illustrate an agricultural regime apparently largely based on the cultivation and treatment of wheat although barley and oats and the few instances of pea, bean and flax hint at other crops.

Cultivation is most likely to have been on the good soils in the vicinity. The weeds are mostly common to any open disturbed soil but sheep's sorrel (*Rumex acetosella*) in Area D and corn spurrey (*Spergula arvensis*) in Area C suggest patches of lighter possibly stony soil. Stinking mayweed (*Anthemis cotula*), also from Area C, reflects heavier loam and common club-rush (*Schoenoplectus lacustris*) grows in shallow water. The charred remains in most cases are burned debris from various stages of

cereal treatment, either dumped or scattered from hearths, or added to kiln fuel. Prepared wheat may have been for local consumption or trade distribution, but sprouted grains in the kiln samples strongly suggests the use of spelt for brewing ale.

Germination of cereal grains will begin in appropriate degrees of moisture and warmth and might occur accidentally in damp storage conditions or in the ear before harvest in a poor season. Grains spoilt in this way would presumably have been disposed of as fodder or burned. Alternatively germination may be intentionally induced for malting, as the first stage of brewing. This entails steeping the grains and spreading them in warm conditions while the sprouts grow. When the sprouts reach a certain length (according to the type of ale required) the malted grain needs heat to halt the process before the starch of the endosperm is wholly converted into sugars to feed the growing seedlings. After this the sprouts and roots may be raked away and used for fodder (Stephens 1855) or otherwise disposed of.

Grains with sprouts or indentations caused by them found in five of the flue chamber samples could have become charred if heating to halt germination were too severe. More completely collapsed grains, found in six samples from the main chamber and one from close to the stokehole would appear to have passed the best stage but possibly were considered usable; otherwise charring may have occurred if they were added, with other cereal debris, to fuel.

Unsprouted grains found in varying proportions in all eight of the flue chamber samples, and chaff fragments in six, could be the result of accidental charring during either of two processes. First, if the kiln were used for drying newly harvested crops or second, for the parching of emmer or spelt spikelets to facilitate the release of the grains.

The contents of the stokehole samples are likely to be components of the fuel including discarded cereals, chaff and weeds from various procedures.

It is probable that the very mixed nature of the sample contents has resulted from many different operations and it seems likely that the kiln was used for more than one purpose. Cereals found in the flue chamber may have dropped from the platform on which they had been placed for heating or drying on many occasions before the final collapse and charred fuel fragments from the stoke pit could well have been wafted into the chamber by the warm air currents.

It has been suggested (Reynolds & Langley 1979) that drying of crops before storage would rarely have been necessary in southern England, but heating of wheats such as emmer and spelt prior to removal of glumes would seem an appropriate use of the kiln. An argument for its use in part of a malting process is that germinated grains were found only in kiln contexts. There is no sign of accidentally sprouted grains having been burned as rubbish from anywhere else on the site.

Sprouted grains have been found at other Romano-British sites in southern Britain. Very close to this site is Worthing Road, Littlehampton, where germinated spelt grains were recovered from kiln and pit samples and malting appeared likely (Lovell 2002). Further afield at Catsgore, Somerset (Hillman 1982) and at Caerleon (Helbaek 1964) malting was considered the most appropriate explanation of sprouted grains of

spelt. Evidence seems to be accumulating that wheaten ale was one important end-result of cereal agriculture.

The Charcoal by Rowena Gale

Introduction

Charcoal was present in a high percentage of the bulk soil samples collected from the four main areas of excavation (A, B, C and D) but often in quantities too small to yield significant data, e.g. the Bronze Age cremations in Area B, while some of the larger charcoal samples related to contexts of uncertain dating. Thus a comparatively small number of samples were suitable for inclusion in the current report. Ten samples were selected as follows:
Area A: 2 samples, ?prehistoric gully and a cremation
Area C: 5 samples, 3rd/ 4th century AD corn-dryer and pit
Area D: 3 samples, ?Bronze Age pit

The charcoal analysis was undertaken to obtain environmental and economic data.

Methodology

Bulk soil samples were processed by flotation and sieving using 1 mm and 0.25mm meshes. The resulting flots and residues were scanned under low magnification by Pat Hinton and the charcoal separated from plant macrofossils. Of the 57 samples containing charcoal, only 10 were considered appropriate for species identification (Table 14). Charcoal fragments measuring >2mm in radial cross-section were examined from each sample. Samples 5002 and 4138 were particularly large and were 50% subsampled for identification.

The condition of the charcoal varied from firm and well preserved to poor and friable. Intact radial segments of roundwood were relatively infrequent. Standard methods were used to prepare the samples for examination (Gale and Cutler 2000). The anatomical structures were examined using incident light on a Nikon Labophot-2 microscope at magnifications up to x400. The taxa identified were matched to prepared reference slides of modern wood. When possible, the maturity of the wood was assessed (i.e. heartwood/ sapwood) and stem diameters were recorded.

Sample	Context	Date and context description	Acer	Corylus	Fraxinus	Ilex	Pomoideae	Prunus	Quercus	Ulex/ Cytisus
Area A										
5001	431	?Prehistoric. Lower fill of linear gully 414	-	*cf.*3	-	-	-	2	4r	10
5002	405	?date. Cremation	1	1	-	-	4r	-	92h (?s)	-
Area C										
4126	1109	3rd/4th century AD. Fill of flue chamber 1063	-	1	1	-	1	-	22h,u	-
4130	1137	3rd/4th century AD. Fill of main chamber of corn-dryer	-	2	-	-	-	-	89h,u, 8s	-
4135	1064	3rd/4th century AD. Fill of 1063	-	8	-	-	-	-	3u	-
4136	1067	3rd/4th century AD. Fill of stoke hole of corn-dryer	-	25r	-	-	-	1r	-	-
4138	1139	*c.*270-350 AD. Shallow oval pit 1138	1	10	15	-	-	-	20s, 78r	-
Area D										
3035	615	Mid Bronze Age. Fill of pit 614	-	1	-	1	-	1	6r	1
3067	768	Mid Bronze Age. Fill of pit 614	-	1	-	-	3	5	37r/s	3
3074	769	Mid Bronze Age. Fill of pit 614	-	1	-	-	-	-	18r	-

Table 14: Charcoal from Bronze Age and Romano-British contexts
Key. h = heartwood; r = roundwood (diameter <20mm); s = sapwood (diameter unknown); u = unknown maturity (oak only)
The number of fragments identified is indicated.

Results

The taxa identified are presented in Table 14 and discussed below.

Classification follows that of *Flora Europaea* (Tutin, Heywood *et al* 1964-80). Group names are given when anatomical differences between related genera are too slight to allow secure identification to genus level. These include members of the Pomoideae (*Crataegus, Malus, Pyrus* and *Sorbus*) and Leguminosae (*Ulex* and *Cytisus*). Where a genus is represented by a single species in the British flora this is named as the most likely origin of the wood, given the provenance and period, but it should be noted that it is rarely possible to name individual species from wood features, and exotic species of trees and shrubs were introduced to Britain from an early period (Godwin 1956; Mitchell 1974). The anatomical structure of the charcoal was consistent with the following taxa or groups of taxa:

Aceraceae. *Acer campestre* L., field maple
Aquifoliaceae. *Ilex aquifolium* L., holly
Corylaceae. *Corylus avellana* L., hazel
Fagaceae. *Quercus* sp., oak
Oleaceae. *Fraxinus excelsior* L., ash
Leguminosae. *Cytisus scoparius* (L.) Link, broom or *Ulex* sp., gorse
Rosaceae. Subfamilies:
Pomoideae, which includes *Crataegus* sp., hawthorn; *Malus* sp., apple; *Pyrus* sp., pear; *Sorbus* spp., rowan, service tree and whitebeam. These taxa are anatomically similar; one or more taxa may be represented in the charcoal.
Prunoideae, which includes *P. avium* (L.) L., cherry; *P. padus* L., bird cherry, and *P. spinosa* L., blackthorn. In this instance the broad heterocellular rays suggest *P. spinosa* as the more likely.

Area A

A spot date from pottery suggested a prehistoric origin for the linear gully 414. Charcoal <5001> from the fill of the gully included oak (*Quercus* sp.), blackthorn (*Prunus spinosa*), gorse (*Ulex* sp.) and/ or broom (*Cytisus* sp.) and probably hazel (*Corylus avellana*). Some of the oak was twiggy (diameter 2mm).

An exceptionally large volume of charcoal (1500ml) was recovered from 'cremation/pyre deposit' 405. The date of this feature is uncertain, though probably Bronze Age, but in view of the quantity of material available for examination, it was thought worthwhile for inclusion in the current study. A 50% sub-sample was examined and consisted mostly of oak (*Quercus* sp.) heartwood but also included maple (*Acer campestre*), hazel (*Corylus avellana*) and the hawthorn/ *Sorbus* group (Pomoideae).

Area C

The Romano-British corn-dryer 1063 was dated to the 3rd/ 4th centuries AD Charcoal and charred grain were recovered from several contexts within the feature. Charcoal was fairly abundant in Contexts 1109 (the flue chamber), 1137 (the main chamber) and 1067 (the stoke hole). Fragments from the main chamber were relatively large (e.g. 35mm in radial axis and 25mm in length) and consisted mainly of oak heartwood from large wood, i.e. cordwood/ wide poles. Hazel (*Corylus avellana*), ash (*Fraxinus excelsior*) and the hawthorn/ *Sorbus* group (Pomoideae) were also identified (Table 14). Interestingly, oak was not recorded from 1067 (the fill of the stoke hole) - the charcoal here consisted mainly of hazel roundwood but also included blackthorn (*Prunus spinosa*). Perhaps this deposit related only to a batch of fuel made up of narrower roundwood or brushwood from shrubby species.

A shallow pit 1138 was sited in close proximity to, and to the south of, the corn-dryer. Charred grain was extremely abundant in the fill of the pit whereas charcoal was relatively sparse and consisted of thin slivers, mostly too small for identification. The origin of the charcoal is unknown but given its proximity to the corn-dryer and the large deposits of charred grain, its use as a dump for waste from the corn-dryer seems a strong possibility. The charcoal consisted mainly of oak (*Quercus* sp.) roundwood but also ash (*Fraxinus excelsior*), hazel (*Corylus avellana*) and maple (*Acer campestre*), and, by implication, may represent fuel debris from the corn-dryer.

Area D

Charcoal was examined from a Middle Bronze Age pit 614, from Contexts 615, 768 and 769. Oak (*Quercus* sp.) and hazel (*Corylus avellana*) were common to all three samples whereas other taxa including holly (*Ilex aquifolium*), blackthorn (*Prunus spinosa*), the hawthorn/ *Sorbus* group (Pomoideae) and gorse (*Ulex* sp.) and/ or broom (*Cytisus* sp.) were more sporadic (Table 14).

Discussion

Environmental samples were collected from a wide range of features throughout the site, many of which included charcoal. The potential of samples for analysis from dated features, however, was often diminished because of the paucity of included charcoal, and, conversely, some of the larger samples related to features of uncertain date. Consequently, only ten samples were selected for full analysis.

These samples included fuel residues from Area C, from a Romano-British (3rd/ 4th century) corn-dryer 1063 and an associated pit 1138, into which waste materials from the corn-dryer appear to have been dumped. Evidence from fuel debris within the corn-dryer indicated that it was fired predominantly with oak (*Quercus* sp.), mainly heartwood from largewood, i.e. cordwood, wide poles or trunkwood (although, in contrast, oak from Pit 1138 was made up of roundwood). Hazel (*Corylus avellana*), probably mostly smallwood, occurred in five contexts in the corn-dryer, while other species including maple (*Acer campestre*), ash (*Fraxinus excelsior*), the hawthorn/ *Sorbus* group (Pomoideae) and blackthorn (*Prunus spinosa*) were more randomly distributed (Table 14). Oak was not recorded, however, from the fill of the stokehole 1067, which consisted of shrubby species, mostly hazel – perhaps implicating the use

of faggots or brushwood. It is probable that the corn dryer was also fuelled with other types of combustible material, e.g. cereal chaff.

Charcoal was also examined from a few contexts of uncertain, but probably prehistoric, date. For example, from the lower fill of Gully 414 in Area A. The origin of this charcoal is unknown but it possibly represents fuel debris. Oak (*Quercus* sp.), blackthorn (*Prunus spinosa*), gorse (*Ulex* sp.) or broom (*Cytisus* sp.) and, possibly, hazel (*Corylus avellana*) were named. The fill of a Middle Bronze Age Pit 614 in Area D seems likely to contain domestic fuel debris; oak provided the main bulk of the firewood, combined with hazel (*Corylus avellana*), holly (*Ilex aquifolium*), the hawthorn/ *Sorbus* group (Pomoideae), blackthorn (*Prunus spinosa*) and gorse (*Ulex* sp.) and/ or broom (*Cytisus* sp.).

From Area A, a cremation/pyre deposit (405) yielded a huge quantity of charcoal probably from a prehistoric cremation pyre. The pyre was constructed predominantly with large billets or poles of oak (*Quercus* sp.), which included a high proportion of heartwood. Smaller woody components of the pyre (infill or ?kindling) or, perhaps, artefactual elements, consisted of hazel (*Corylus avellana*), maple (*Acer campestre*) and the hawthorn/ *Sorbus* group (Pomoideae).

Environmental evidence and woodland resources

The site is situated on the coastal plain, sheltered from the north by the chalkland ridge of the South Downs. Arable farming was evidently well established by the Roman period and it is probable that contemporary woodland was reduced to areas unsuited to the plough, e.g. the scarps and combes of the chalk downland, although small pockets may have survived or have been retained locally to supply essential resources to the settlement. The remains of metal-working slag and a forge bottom attest to on-site industry. The extent of this industry is unknown; it may have been practised on a domestic scale, although other parts of the region clearly supported large-scale industrial projects, e.g. potteries and metal-working at Littlehampton (see below). The charcoal from Roundstone Lane was too fragmented to present evidence of managed woodland, but it could be argued that coppicing would have been necessary to sustain ongoing pressure for woodland resources (fuel, wood and timber) in what may have been a comparatively densely occupied and, presumably, competitive area.

Oak almost certainly formed the dominant woodland in the region and the charcoal analysis demonstrates the availability of wide poles and, possibly, billets of wood from fairly mature trees. Oak woodland would also have included hazel, ash, maple and holly. Scrub or marginal woodland probably supported hazel, holly, blackthorn, the hawthorn group and gorse/ broom. Shrubby species would also have grown in hedgerows.

Comparable sites in the region

Evidence from other sites in the vicinity of Roundhouse Lane endorses the importance of this part of the coastal plain for settlement from the Bronze Age period and

possibly earlier. Charcoal deposits from a number of other local sites indicated similar woodland environments to that at Roundstone Lane.

An isolated Bronze Age cremation deposit at Westhampnett, Chichester, illustrated the exclusive and probably symbolic use of oak (*Quercus* sp.) pyre fuel in a high status cremation a young female and baby (Gale, unpub). This evidence stands in contrast the much wider range of taxa used as pyre fuel at Bronze Age cremations and associated pits with placed deposits that were later recorded nearby at Claypit Lane, Westhampnett. Various species were included in the pyre debris: oak (*Quercus* sp.), field maple (*Acer campestre*), alder (*Alnus glutinosa*), hazel (*Corylus avellana*), ash (*Fraxinus excelsior*), the hawthorn/ *Sorbus* group (Pomoideae), blackthorn (*Prunus spinosa*) and dogwood (*Cornus*) or *Viburnum* sp. (Gale, unpub).

An extensive Iron Age cemetery was also excavated at Westhampnett, where a large number of pyre sites and cremation burials were identified. The pyres were constructed mainly from substantial poles/ trunks of oak (*Quercus* sp.), but sometimes included cherry (*Prunus avium*) and willow (*Salix* sp.) or poplar (*Populus* sp.), and other species such as maple (*Acer campestre*), hazel (*Corylus avellana*), birch (*Betula* sp.), ash (*Fraxinus excelsior*), dogwood (*Cornus*), heather or ling (*Erica* or *Calluna*), the hawthorn/ *Sorbus* group (Pomoideae) and yew (*Taxus* sp.) (Gale 1997). Artefactual remains may account for the presence of some species. There was some evidence to suggest the use of coppiced wood.

Roman pottery kilns based at Worthing Road, Littlehampton, were operative during the 1st and 2nd centuries AD, and may have formed part of a larger craft complex working in the lower Arun Valley (Wessex Arch. 1998), which also included iron-working. Fuel residues included oak (*Quercus* sp.), ash (*Fraxinus excelsior*), maple (*Acer campestre*), the hawthorn/ *Sorbus* group (Pomoideae), blackthorn (*Prunus spinosa*) and elder (*Sambucus* sp.) (Gale, forthcoming)

Conclusion

Environmental data obtained from this analysis suggests that oak (*Quercus* sp.) formed the major woodland component. Other woodland taxa identified included maple (*Acer campestre*), ash (*Fraxinus excelsior*), hazel (*Corylus avellana*) and holly (*Ilex aquifolium*). Shrubby taxa such as blackthorn (*Prunus spinosa*), the hawthorn/ *Sorbus* group (Pomoideae) and gorse (*Ulex* sp.) or broom (*Cytisus* sp.) would have colonised scrubland or marginal woodland.

Oak provided the bulk of fuel requirements for industrial and domestic use, and for cremation. There was also evidence to implicate probably domestic level iron-working at the site though the epicentre of this activity was not within the excavation area. Recent work at another local site, Worthing Lane, Littlehampton, highlighted long-term industrial activities, in particular, pottery-making and iron-working. The charcoal at Roundstone Lane was too fragmented to assess the use of coppiced wood but it is suggested that, by the Roman period, some form of woodland management would probably have been necessary to sustain the demands of this apparently well-populated area.

DISCUSSION

Introduction

The dispersed nature of the four main excavation areas and evaluation trenches hamper the interpretation of the Roundstone Lane development site as a whole. However, the recent archaeological work at this site has highlighted that evidence for three main periods of occupation/utilization of this land survives (Middle and Late Bronze Age and Romano-British), and this fits in well with the burgeoning corpus relating to other archaeological work undertaken in the immediate and wider area on the West Sussex Coastal Plain. Activity relating to land use in earlier, intervening and later periods is far less apparent and is only reflected in residual finds or a low density of features.

Mesolithic and Neolithic

Employees of the former Freshacres Nursery at the centre of the development site had collected Neolithic flintwork over a period of *c.* 30 years. Neolithic and Mesolithic flint scatters have also been located further afield during the construction of the Rustington Bypass and associated commercial units and to the south of the Angmering Decoy Ponds.

Only one feature (Pit 1207) contained an assemblage of worked flint that may date to the Mesolithic/Early Neolithic period, although a number of residual worked flints of these periods were found elsewhere. These were dispersed across the site and formed no obvious concentrations, but indicate that hunter-gatherer groups either exploited or passed through the area. The small number of sites on the Coastal Plain (for gazetteer see Pitts 1981) tend to be Later Mesolithic and occur in close proximity to the coast or rivers and streams, where probable seasonal exploitation of the available resources took place. No Neolithic features were located, although residual flintwork across the site from this period indicates that hunting of animals and processing of meat was taking place. As mentioned above (Butler, *The Flint*) non-hunting activities are represented by the presence of a flaked axe and polished chisel.

Middle Bronze Age

Indirect evidence of a Middle Bronze Age settlement was found at the site in the form of a small cremation cemetery (Area B) and a number of discrete pits, hearth, gully and well (Area D) and associated artefacts. Worked flint is widespread across the site, both in contemporary features, but also as residual finds in later features and deposits. This illustrates further that activity in this area was present, on the increase, and of a more permanent nature. Evidence of domestic structures was unfortunately lacking, and may either have not survived later agricultural practices or was located away from the main excavation areas. Recent work by Oxford Archaeology on the A280 Angmering By-pass located a mid-late Bronze Age enclosed settlement approximately 800m north-east of the site and this may be broadly contemporary. Hearth 666 and Well 614 in addition to further more enigmatic features suggest some

form of domestic activity, although this does not appear to be particularly concentrated. The well is currently the only Middle Bronze Age example that has been located on the Coastal Plain, although Late Bronze examples have been located at Selsey (Seager-Thomas 2001a). Unfortunately the lack of dating evidence, or even excavation, of the lowest fill/s of Roundstone Lane Well mean that it remains unknown over which period this feature was in use. It would appear though that it was deliberately backfilled (some might say ritually) based on the quantities of 'sling shot', burnt flint, bone and charcoal within its upper fills. It is possible that some form of revetting was in place against the sides of the well, as this would explain the charcoal patches noted during excavation had become trapped behind.

The cremation cemetery found in Area B only consisted of a small number of known vessels (three), although it is quite feasible that urns, and indeed pyre bases, buried at a shallower depth simply would not have survived later agricultural practices. Another unknown is whether any visible monuments or markers were present though Ditch 545 to the north may have acted as a boundary to the funerary area on this side. No associated post-holes were found and ploughing would have removed any trace of mounds, and possibly any associated ring gullies. The length of time this cemetery was in use also cannot be established further than the chronological period into which it falls. Whether this was a small 'family group' of relatively short duration or represents a designated burial ground serving a nearby settlement that may have endured over a longer period cannot be ascertained.

These vessels were clustered around the eastern terminal of Ditch 545, which also contained MBA pottery. The apparently unused and well made flint tool (more diagnostic of the Early Bronze Age) found within this terminal may suggest an earlier date than that of the cremation vessels.

A number of MBA urned cremation cemeteries or individual interments have been discovered in recent years on the West Sussex Coastal Plain. Topsoil stripping prior to aggregate extraction at the extensive Carillion Quarries at Drayton Lane, Oving has revealed a number of internments in groups (Priestley-Bell 2001). Three urns were found at St Thomas a'Becket Church, Pagham (Kirk 1996). A single urned cremation was located within a small pit on the route of the Rustington By-pass (Rudling and Gilkes 2000, 17) and a MBA urn was also located on the route of the Angmering By-pass, although the lack of associated burnt bone may exclude this find from being a funerary deposit.

It is becoming apparent that due to an increase in the amount of archaeological investigations on the Costal Plain in the last decade or so, primarily driven by PPG16, our view has significantly changed regarding the understanding of MBA settlement within this area. Settlement and land use during this period is clearly much greater and denser than had previously been thought. A likely reason for the apparent density of such activity is the fertility of the soil and its suitability for sustaining an economy based on farming.

Late Bronze Age/Early Iron Age

The features of this period are widely distributed across the area with no real coherent pattern or concentration. It is quite possible therefore that the excavated areas lay on the periphery of the main area of settlement. It is possible this focus lay *c.* 800m to the north-east of the site, where more substantial remains of this period were located during Oxford Archaeology's work on the by-pass.

Gully 414 (Area A) was found to be in-filled with considerable dumps of burnt flint. This material was present across the whole site and found in features of all dates and is thought to be the waste product of cooking activities. The quantity of such material within this gully might suggest that this activity was taking place nearby, or may indicate the presence of a 'burnt mount' in the immediate area. Such burnt flint concentrations are not common on the Coastal Plain, but are increasing in number as fieldwork (generally fieldwalking) identifies potential sites such as at Bilsham, Ferring and Sompting (Dunkin 2000: 63, 69 and 75).

Ditch 504 (Area B), which for its large size yielded very little in the way of datable pottery, appears to date to this period. This major undertaking in terms of effort and manpower snakes distinctly around the earlier cremations and Ditch 545, suggesting perhaps that it was avoiding visible monuments in the landscape that still held meaning to the people constructing it. It is likely also that an up-cast bank was present on the southern side of this ditch judging by the asymmetrical infilling, and room just exists between the ditch and the cremations for this. Whether this served a defensive purpose (no evidence of a palisade was located), defined a special area, or was a land division was not established. Its full extent also is not known, although a similar sized feature crossed Evaluation Trench 5 some 80m to the north-west. Unfortunately, petrochemical contamination in this area prevented any further excavation and no surface artefacts were available for collection.

Gullies 541, 543 and 552, and Post-hole 558 (Area B) are all likely to be broadly contemporary with each other and based on three sherds from Gully 541 (Fill 542), only one of which was diagnostic, these may tentatively be dated to this period. Their purpose is unclear, but they may have served as minor boundaries, possibly helping to demark, in conjunction with Ditch 504, the internments of their ancestors. Gullies 541 and 543 may define a former trackway.

The large pit (Context 656, Area D) may have served a storage function, possibly a sump for the collection of water for livestock, but appears to have ended its life a rubbish pit. To the east, Pit 678 may have served as a rudimentary oven/hearth, with the associated stakeholes acting as a frame from which food, etc. could be suspended over the fire. These features illustrate that LBA/EIA activity was still present at the site, but as with the MBA, no evidence of structures relating to habitation were located. Recent excavations at Ford Aerodrome (Place 1999) located extensive Late Bronze Age ditched fields and droveways and further activity of this period has been located at Yapton (Rudling 1987). These sites indicate that during this period the

Coastal Plain is likely to have been an important region for both agriculture and settlement.

Late Iron Age

This period is only represented by one probable feature at the site: Ditch 976 (Area C), although Ditch 672 (Area D) may also have been of this date. It would appear that by this time, settlement had shifted even further away from the current excavation areas. The lack of pottery of this period generally suggests either agriculture had stopped at the site or, more probably, did not involve manuring with domestic refuse. As such it is quite probable the area at this time was utilised for pastoralism, perhaps interspersed with short periods of cultivation. Elsewhere on the Coastal Plain, there is good evidence for settlement, cultivation and funerary activity in this period (Bedwin and Holgate 1985, Fitzpatrick 1997).

Romano-British

The best evidence of occupation, and indeed the formal division of the landscape, comes from this period. Although some of the field system and trackway ditches may have originated in the earlier periods this is uncertain due to the Roman activity. Definite domestic occupation was occurring at the Roundstone Lane site for the first time. The Roman activity was concentrated primarily within Area C, although some evidence of outlying features, mainly probably field ditches, is present within Area A (Ditch 408) and Area D (e.g. Ditches 64, 604, 608 and Urned Cremation 610). Although Ditch 408 dates to the late 1st century, the focus of such early Romano-British activity is concentrated within a defined area towards the south-eastern corner of Area C (e.g. Ditches 846, 988, 1042, Pit 1009, 1029 and probably 1031, and the post pit structure to the east of Pit 1048).

It is unfortunate that the excavation area did not extended to the south of this discrete area as it is likely to have revealed the core of this 1st- century occupation area. Assemblages of tile found within these early pits and ditches suggest that a structure incorporating tile within its walls, or associated hearths was probably located close by and formed the main house of this early, probably low-status agricultural, settlement. Ditch 1042 may have served as a northern boundary, perhaps of an enclosure, that must have turned southwards or terminated at some point between the edge of the excavation and the post pit structure.

This ditch apparently silted up by *c.* AD 60, during which time a number of broken vessels were cast into it. The absence of any tile fragments within the fills of this ditch (Fills 1043 and 1044) suggest that the putative structure was still probably standing. A parallel ditch was subsequently dug to the north (Ditch 988), possibly to increase the size of the putative enclosure, with the new area being used for cess/rubbish pits. This new ditch also silted up (again incorporating unabraded sherds), but the amount of charcoal and tile late on in its infilling may indicate that the structure may have gone out of use, possibly as late as *c.* AD 100. The three pits in this area were probably contemporary with Ditch 988 and certainly were used as cesspits, although whether this was their original function is not clear. Again, good quantities of tile and

charcoal, predominantly within the upper fills of Pit 1009 (Fill 1010, 1011 and 1024) all indicate the demise of the structure.

This area of the site subsequently went out of use and all trace of the pits and ditches was concealed beneath an occupation horizon (Context 1041) that contained pottery indicating that rubbish was still being incorporated as late as *c.* AD 150.

The timber-framed building (marked by the large post-holes 1181 etc) almost certainly continued south beyond the limits of the excavation and as such its full length is uncertain. The pottery evidence suggests a construction date of between *c.* AD 70-120, but how long lived it was is more difficult to ascertain. No tiles were found in association with this structure, so it is unlikely to be the putative structure mentioned above although it may have been contemporary with it and if roofed, was likely to have been thatched. The function of this building, whether domestic or agricultural, is uncertain.

Gully 1193 (and re-cut 1199) surrounding this structure could only be dated imprecisely to the early Romano-British period, and unfortunately no stratigraphic relationships exist that indicated whether the structure or enclosure came first though looking at their positioning it is probable both were in existence together. Gullies 1093 and 1107 to the west of Pit 1048 in conjunction with Gully 1193 appear to form a rudimentary enclosure and entrance. The truncated remains of features 846 and 854 to the east also appear to have been excavated early within this period.

The extent of the trackways and ditch system surrounding the early occupation of this farmstead is uncertain. Virtually all of the ditches contained much later Roman finds assemblages, and where early ones were located they are small and likely to be residual. The reason for this is almost certainly due to the maintenance of the ditches, by desilting, in the later Roman period removing the earlier fills with the associated refuse. As such it is quite probable that many of the ditches dated to the later Roman period were in fact in use during the 1st century AD, if not earlier.

The main trackway, or perhaps more correctly droveway, appears to have been that marked by Ditches 944 and 932. Remains of a metalled surface survived in a hollow and presumably the remainder of any surface had been lost to ploughing. Although it is impossible to be certain this track may be the earliest as it has a similar orientation to the Late Iron Age ditch (976) to the east but is at an angle to most of the presumably field ditches either side. If this was a well established early route, perhaps for driving livestock across the coastal plain, then the smaller trackway, marked by Ditches 810 and 812, may have been added later. This secondary trackway's general west-north-west to east-south-east alignment heads towards the Angmering Roman Villa (out of use by *c.* AD 160) and may have been established in the 1st century during the formal creation of the Roman field system. It is interesting to note that most of the field boundaries aligned with this, rather than the main, track.

Within the period AD 150-270 further ditches appear to have been excavated although there is little uniformity in their orientation. These, no doubt demarked areas of the site, but do not appear to actually enclose anything although Ditch 1095 in

conjunction with Gully 1193 does restrict access from the north to Pit/well 1048. Additionally, the double row of post-holes that were undated in this area possibly formed a structure that may have been related to the use of the pit/well.

A row of roughly square cut post-holes may represent a fairly substantial fence line and is broadly contemporary with Ditch 864 and oven 884 to the west. Ditch 850, possibly originally draining into Pit/well 1048 was present at this time and lower fills within the pit also date to this period. It has been suggested that this pit may be of natural origin, being caused by dissolution of the underlying chalk strata. The sub-surface collapse can cause circular sink holes to appear at ground level which tend to have a wide opening that narrows with depth (David Bone *pers. comm.*). Recent examples of such phenomena are known on the West Sussex Coastal Plain such as at Slindon, Fontwell and Chichester (McDowell 1986). It is not inconceivable that such an occurrence happened at the site and it was subsequently utilised by the inhabitants with the surrounding gullies positioned around it for reasons of safety. It is possible that this large hole provided a handy receptacle for water (hence Ditch 850 draining into it) and there is a possibility the feature was indeed the remains of a badly slumped well. Although the edge of cut would appear to be very close to the timber building this would only be the construction trench, which would be backfilled after construction of the shaft lining. Although a central shaft was located no lining was noted, suggesting if this was a well at any time it was robbed out and the resultant hole used for rubbish disposal. The presence of a number of cow and horse skulls packed tightly into a shallow pit on the eastern edge of Pit/well 1048, together with a large number of flint nodules may represent ritualistic offerings to the gods for good luck on completion of the well (such deposits are known at certain villa buildings each associated with a new built part of the building. D. Rudling *pers. comm.*) abandonment of the site. Equally they may represent offerings to appease the gods and avoid any further subsidence.

Further ditches were added throughout the period AD 270-400+, presumably marking out further divisions/sub-divisions within the fields surrounding the settlement. Many of the probably earlier ditches were also cleaned out though some were allowed to silt up and go out of use.

The north-south aligned arrangement of post-holes running south of Ditch 944, in the absence of any other post-holes, probably formed a boundary. The small patch of flint cobbles lying within a depression (Context 1015) was cut by post-hole 926 and may have served as an entrance that was later blocked.

The corn dryer and associated drainage gully appear to have been in use up until the late 4th century, and possibly as early as AD 270. The corn dryer itself would have been regularly cleaned out and only contained later pottery. Use was made of tiles in its construction, including box flue tiles helping to form the two western flues. This structure may have served a dual purpose: both drying grain for storage, but also malting grain for making ale. The high number of sprouted grains within the main flue chamber provides good evidence for this latter use. This structure may have ended up as a rudimentary oven as remains of burnt animal bones were found within it. A number of probable ovens (i.e. Contexts 884, 906, 1045 and 169) in a rough line

to the east of the corn dryer may have served as bread ovens. The many finds of broken quern stone fragments indicate that flour was being produced at the site and a further fragment was found in the garden of 4 Mill Road Avenue *c.* 500m to the north-west (SMR No. 2247). Domestic settlement during this late period is again likely to have been focused just to the south of Area C, however, activity, apparently associated with agricultural work and refuse disposal, extended further to the north than before.

Throughout the entire Romano-British occupation of the site, evidence for domestic structures is lacking. Three linear gullies (Contexts 1236, 1238 and 1240) at the north central area of Area C were originally thought to relate to a timber beam-slot building. It seems more probable that these were simply gullies that may have formed a small enclosure. These features were cut by a large area of intercutting pits (Contexts 1278, etc.) that appear to be evidence of very late activity relating to the extraction of some raw material, possibly the Brickearth or underlying gravels for an unknown purpose. A similar, albeit smaller, feature (Context 1290) to the north-east may relate to similar activity. Considering the position of these two areas of 'diggings' in relation to the secondary trackway, marked by Ditches 810 and 812, it is probable that the pits were dug after this track had fallen out of use.

The evidence for Romano-British activity at the site fits in well with other known findspots and sites in the area. The activity here may well have formed part of a wider picture of outlying 'peasant' farmsteads that fell under the control of local villas. Whether an as yet unlocated villa that continued in use after the known one lies close by is not known. The possible site of a bathhouse approximately 800m north-west of the development site at TQ 066046 was suggested in the middle of the last century (SMR 2265) and this may form part of a second villa complex. A further bathhouse (out of use by about the end of the 3rd century) is located on the western slopes of Highdown Hill, approximately 1.5km east of the development site and is thought to relate to a villa that is located further west (Burstow and Wilson 1939). The area covered by such activity is likely to have been considerable as numerous finds of coins, pottery, tiles, quernstones, cremations and features such as pits and ditches have been found within a wide area around the site. It seems probable that the farmstead located within the development site formed part of a network of such sites that were governed by one or more of the villas that are known or postulated.

Anglo-Saxon

A 10m length of east/west aligned ditch (Context 700) terminating within Area D was the only feature that falls within this period and is probably early Anglo Saxon in date though the pottery could be intrusive/residual. In the absence of any further features of this date and the fact that the full extent of this feature was not exposed, little more can be said regarding its function. Although the Coastal Plain is rich in Anglo-Saxon place names and churches, and was heavily populated at the time of Domesday (Bell 1978, 50), evidence of early Anglo-Saxon settlement within the immediate area is rather scant. Recent rescue excavations by the Oxford Archaeological Unit along the route of the Angmering By-pass *c.* 0.5km east of the development site did however revealed evidence of Anglon- Saxon settlement. Two previous finds of metalwork in

this area may suggest the presence of pagan inhumations, or could be accidental losses. It has been suggested that some of the excavated structures found in association with the pagan Anglo-Saxon cemetery on Highdown Hill, *c.* 2km east of the development site, may be evidence of a contemporary settlement (Bell 1978, 46-7).

Medieval

No evidence of medieval settlement within the development site was located. Abraded pottery sherds were found within the topsoil and ploughsoil and these are taken as indicators of manuring of the land which was no doubt under agriculture during this period.

Post-medieval

Little evidence for post-medieval activity at the site was located, with the exception of a small number of artefacts located within the topsoil and ploughsoil. These presumably mark the continuing use of manuring on the land from the preceding period. The only feature dated to this period is Ditch 406 in Area A (also located in Evaluation Trench 2, Context 278) which is clearly depicted on the Tithe map of 1838-9 though it was gone by 1879. Study of the early 19th- century cartographic sources shows the site to be entirely under cultivation (much as allotments) with the only buildings lying outside of the northern site boundary.

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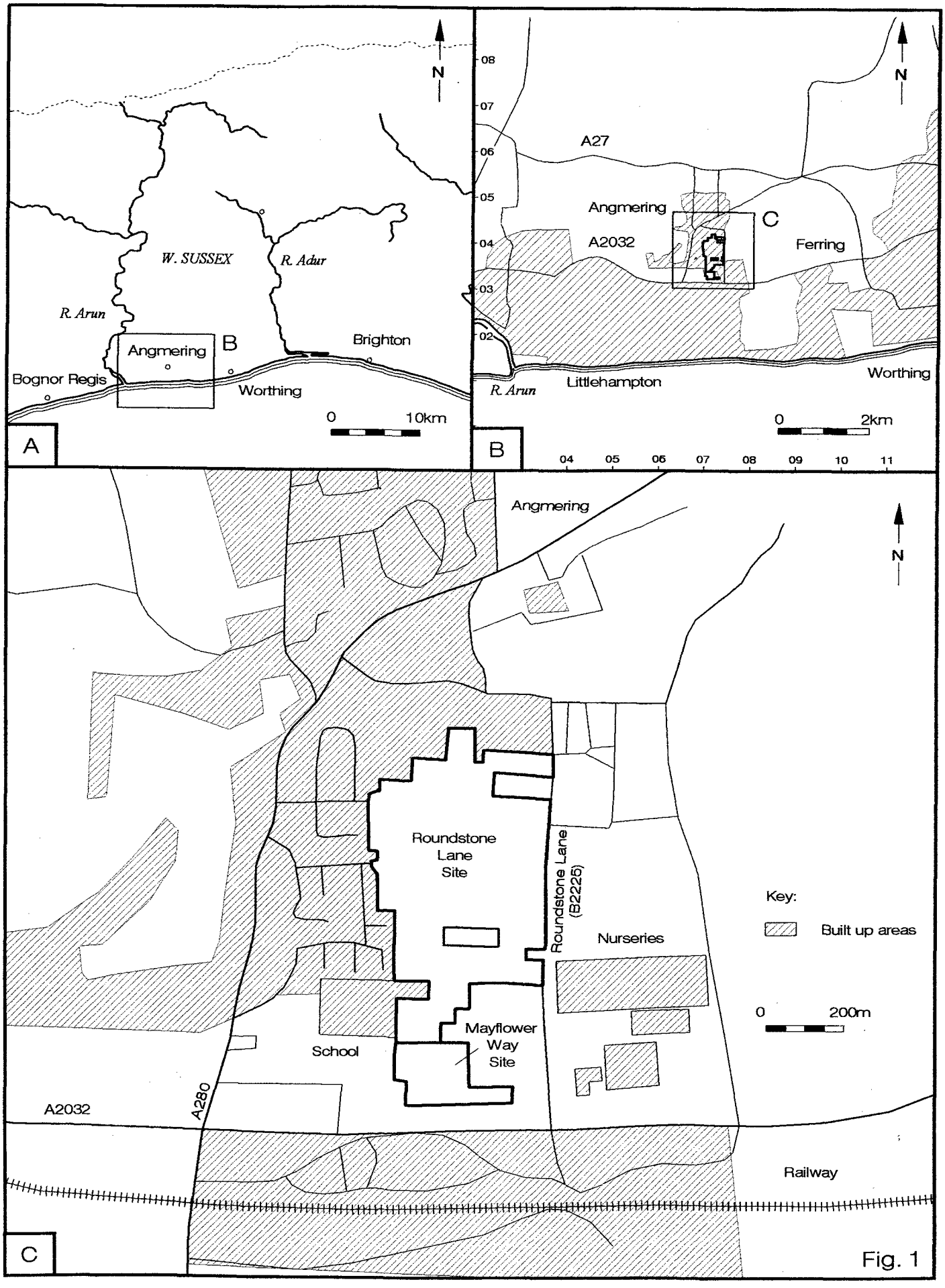
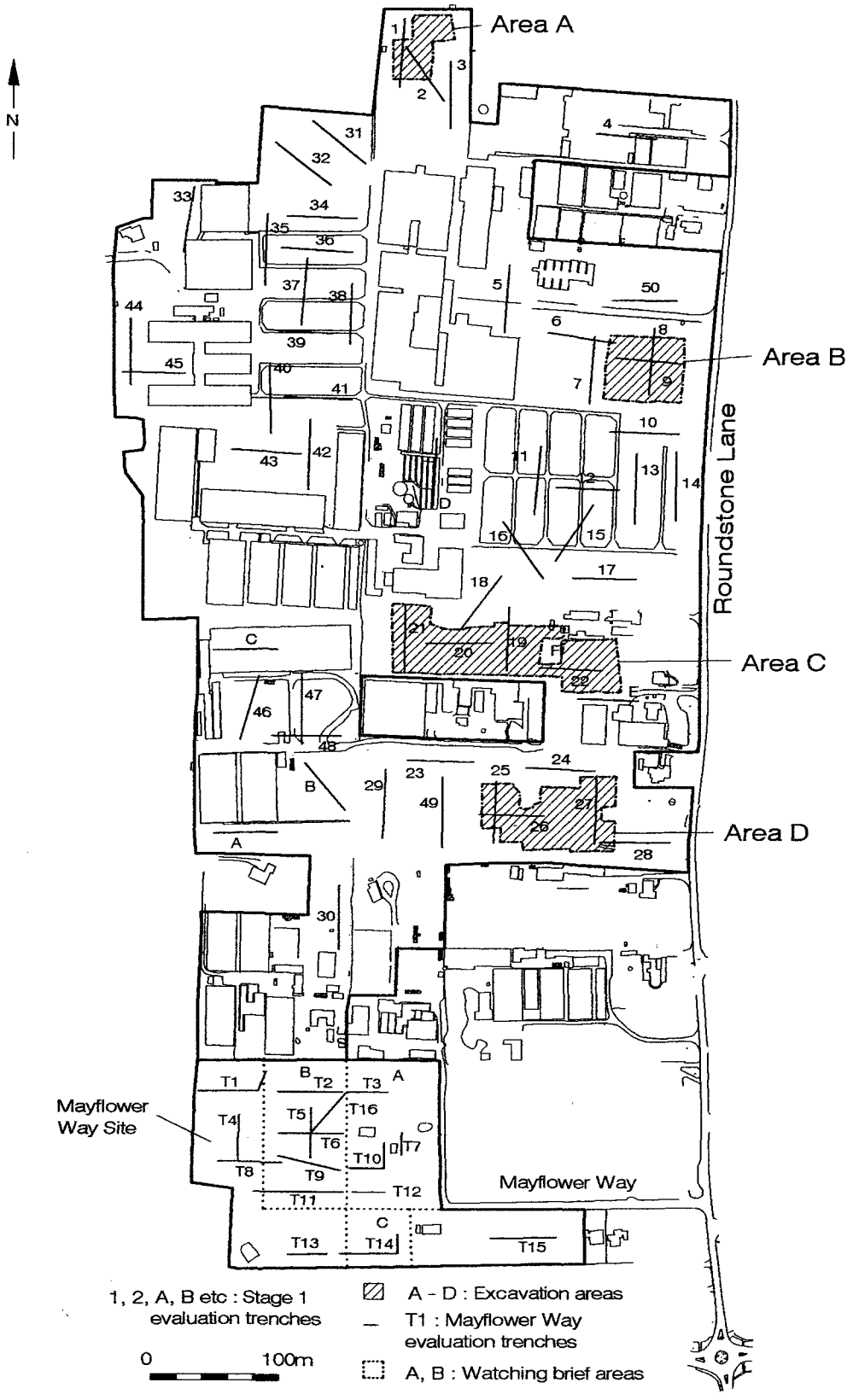
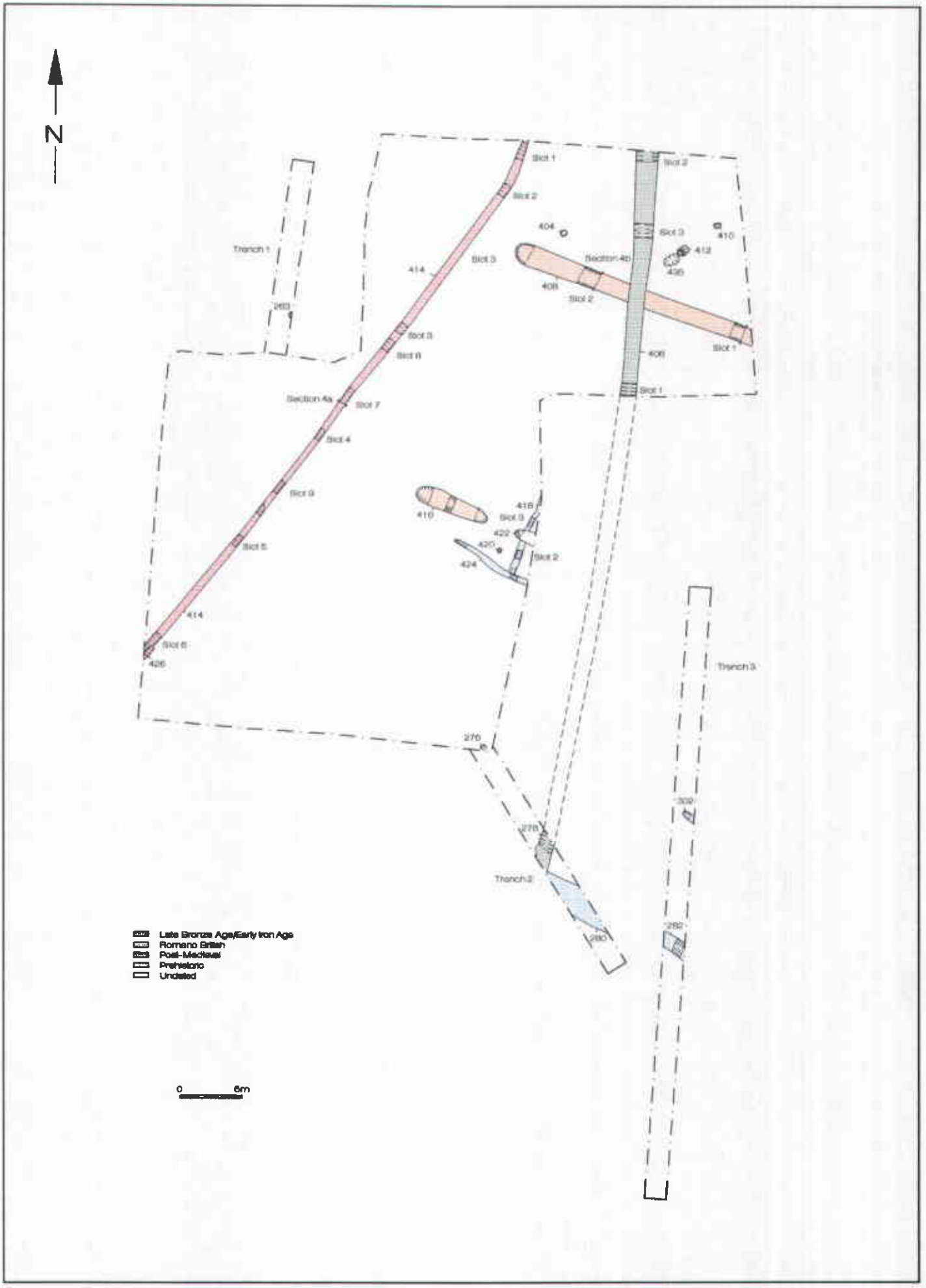

A
N
W. SUSSEX
R. Adur
R. Arun
Angmering
B
Brighton
Bognor Regis
Worthing
0 10km
B
N
08
07
06
05
04
03
02
A27
Angmering
A2032
C
Ferring
Littlehampton
Worthing
R. Arun
0 2km
04 05 06 07 08 09 10 11
C
N
Angmering
Roundstone Lane Site
Roundstone Lane (B2225)
Nurseries
Key:
Built up areas
0 200m
Mayflower Way Site
School
A280
A2032
Railway

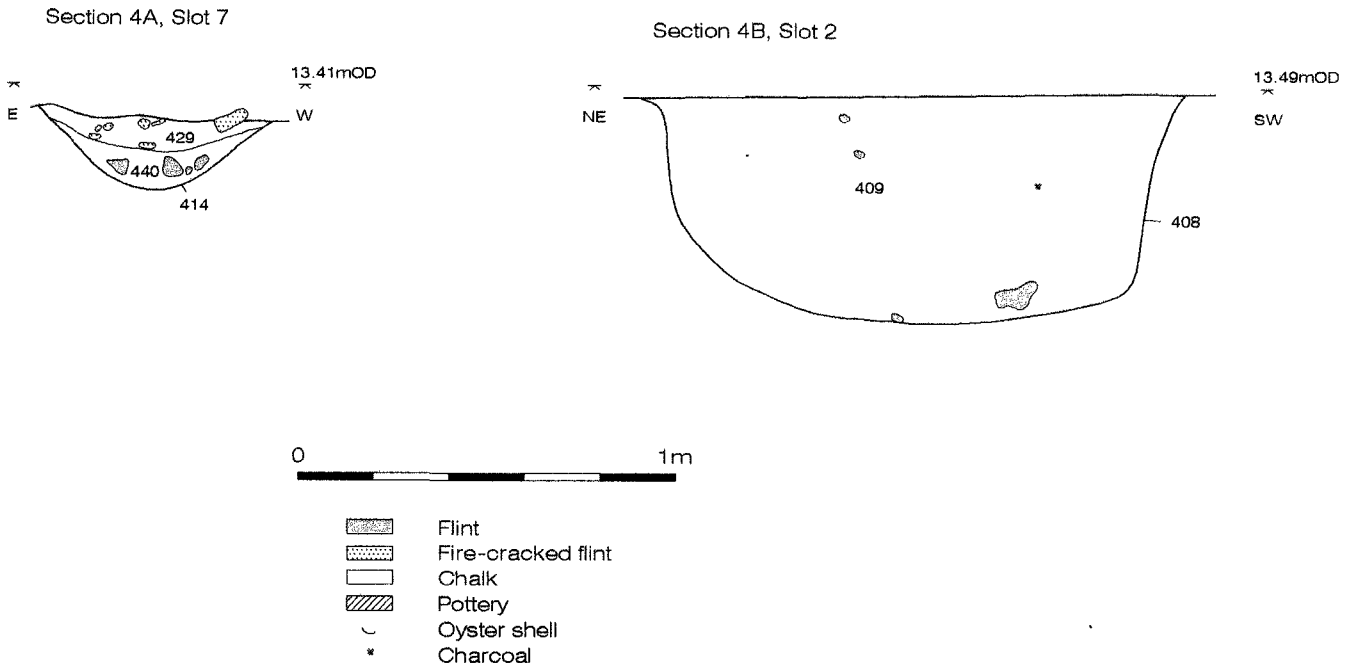
Fig. 1



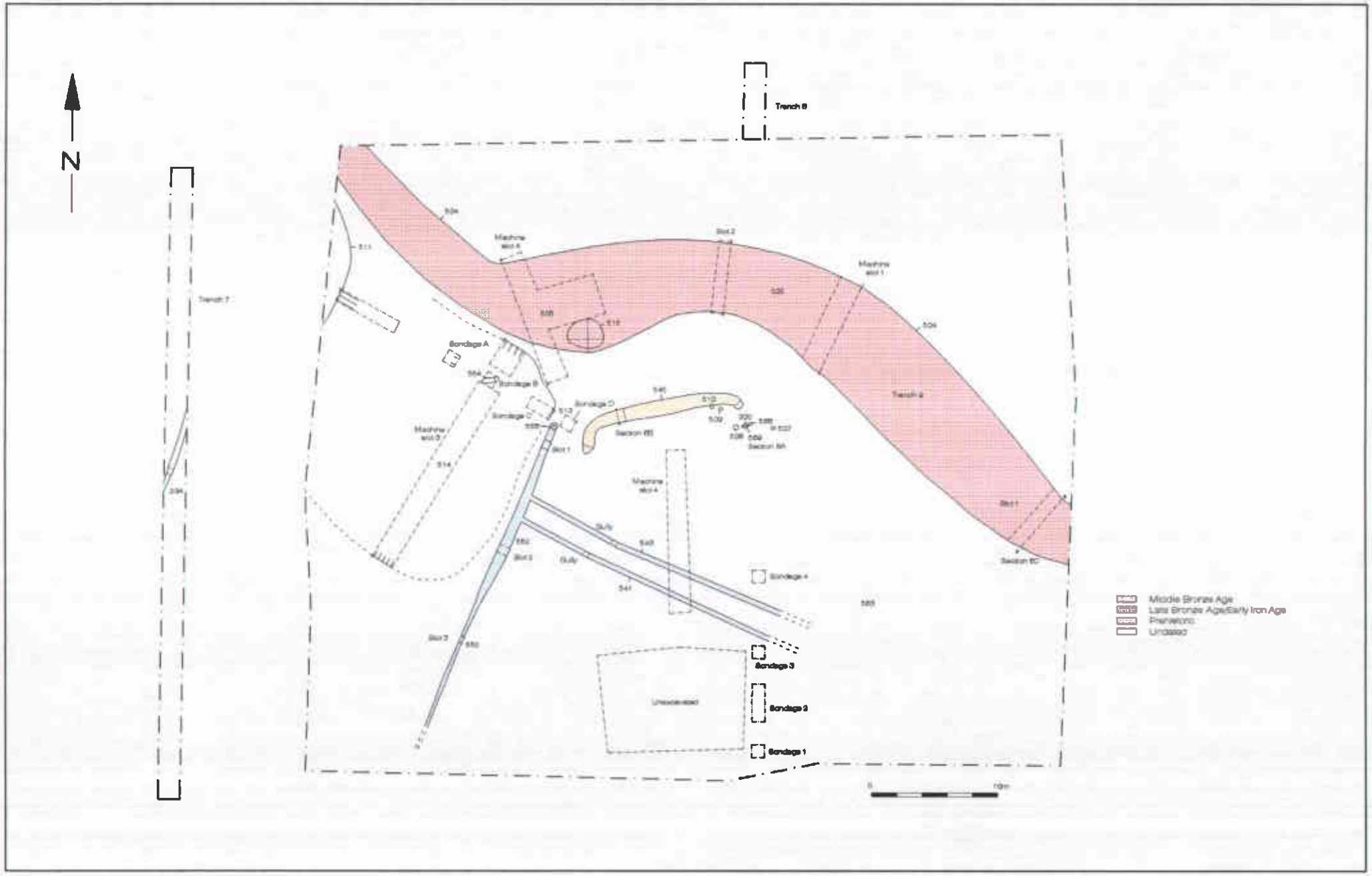
© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 2
Ref: 1333	Sept 2003	Plan of Site Showing Evaluation Trenches, Excavation Areas and Watching Brief Locations	



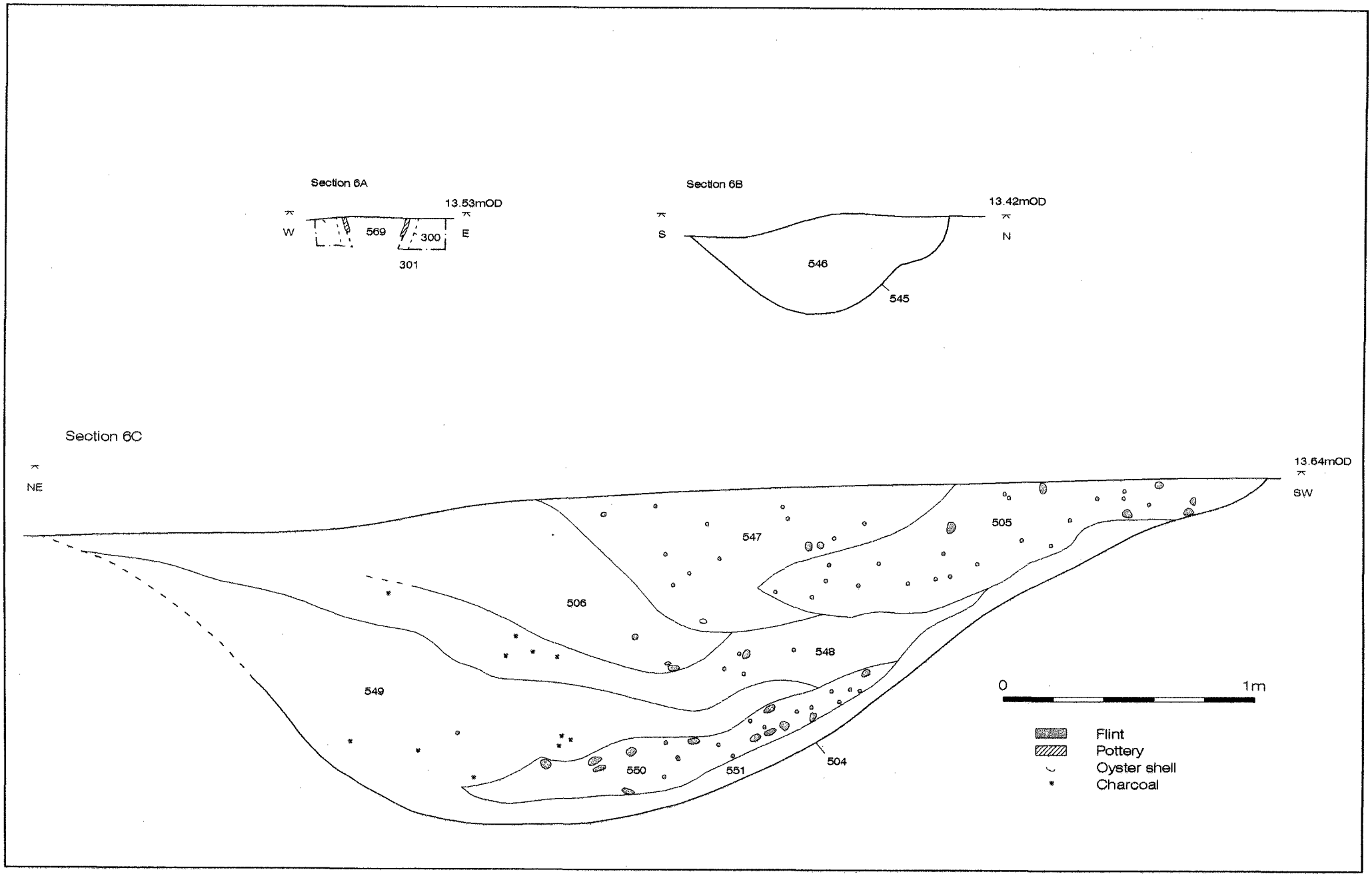
© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 3
Ref: 1333	Sept 2003	Plan of Area A	



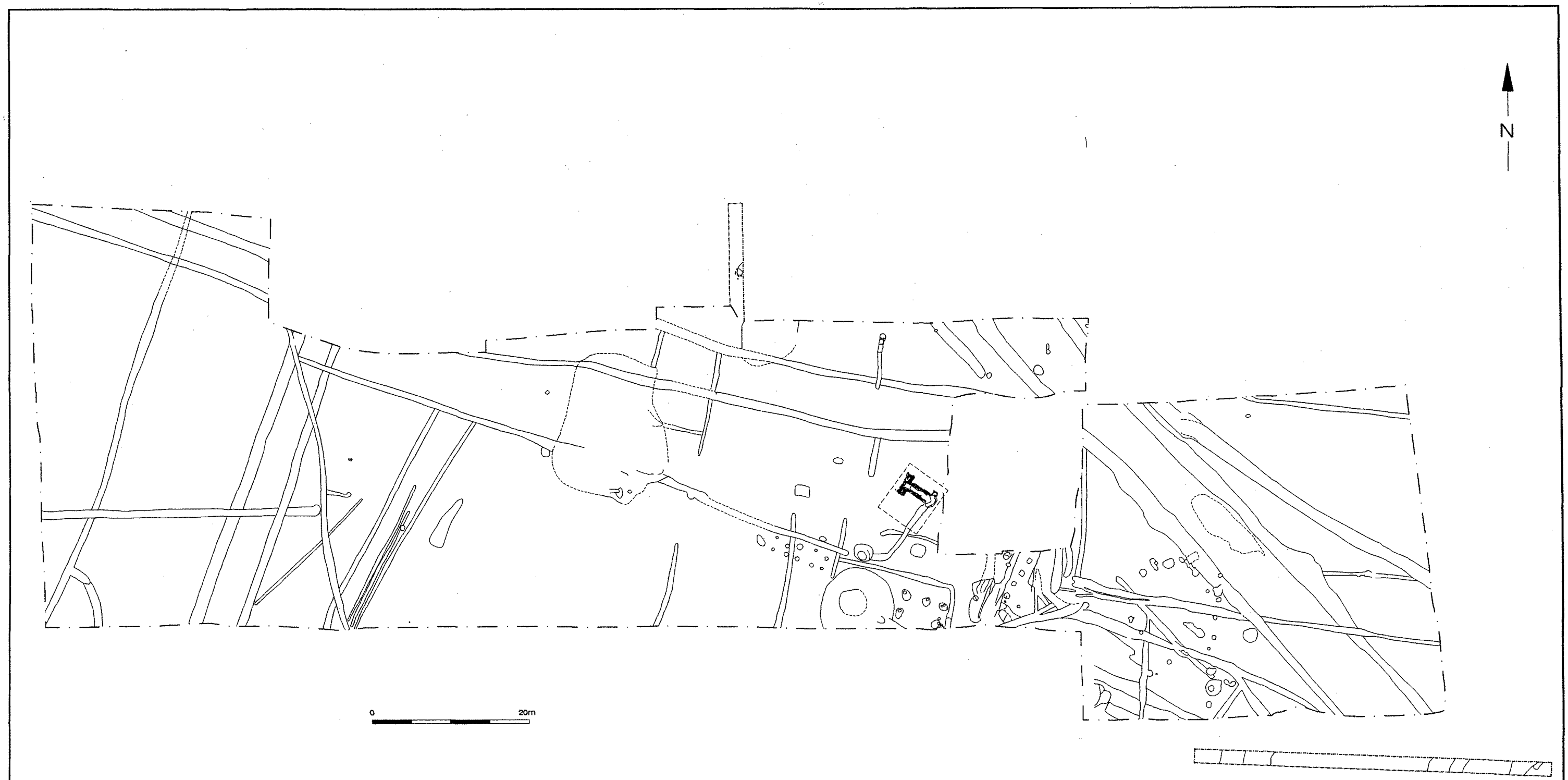
© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 4
Ref: 1333	Sept 2003	Selected sections Area A	



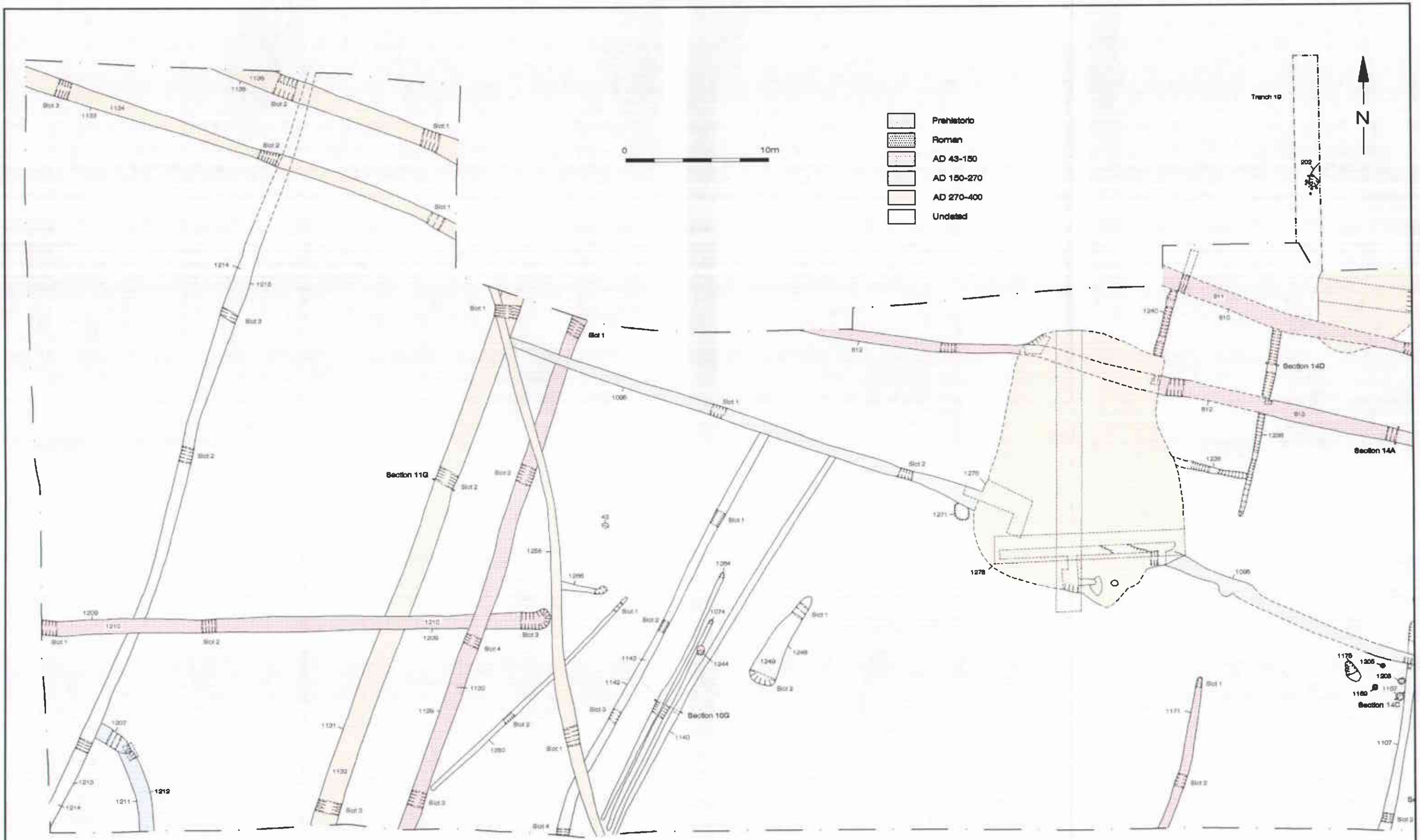
© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 5
Ref 1333	Sept 2003	Plan of Area B	



© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 6
Ref: 1333	Sept 2003	Selected sections Area B	



© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 7
Ref: 1333	Sept 2003	Plan of Area C: Overall	



© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 8
Ref: 1333	Sept 2003	Phased Plan of Area C (west)	

© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 9
Ref: 1333	Sept 2003	Phased Plan of Area C (east)	

Prehistoric
Roman
AD 43-150
AD 150-270
AD 270-400
Undated

0 10m

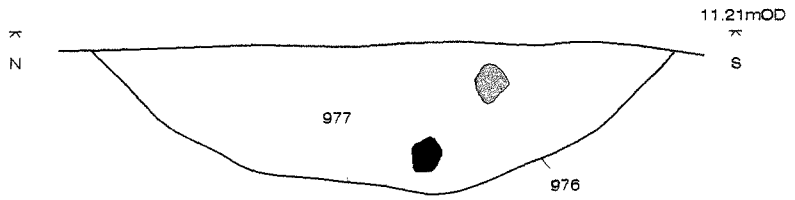
N

See Fig 12

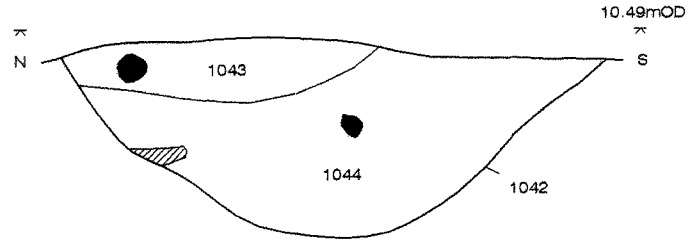
Section 10E
Section 12D
Section 10F
Section 10D
Section 13A
Section 13B
Section 11B
Section 11A
Section 11D
Section 11C
Section 11E
Section 11F
Section 11I
Section 11J
Section 14B
Section 10A
Section 11H
Section 11L
Section 11K
Section 10C
Section 10B

Trench E

Section 10A



Section 10B



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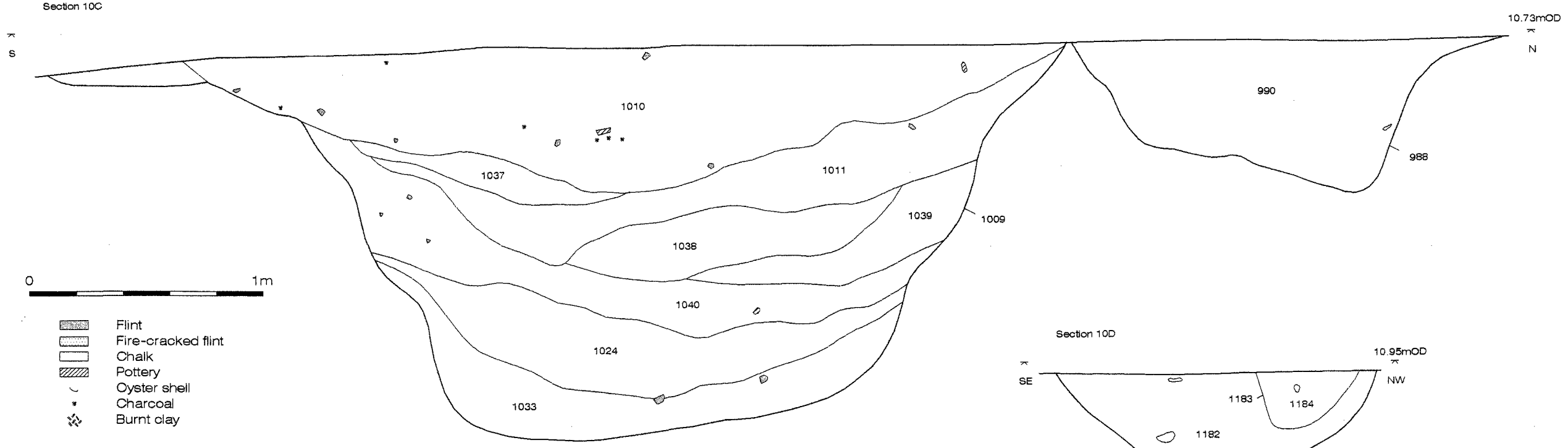
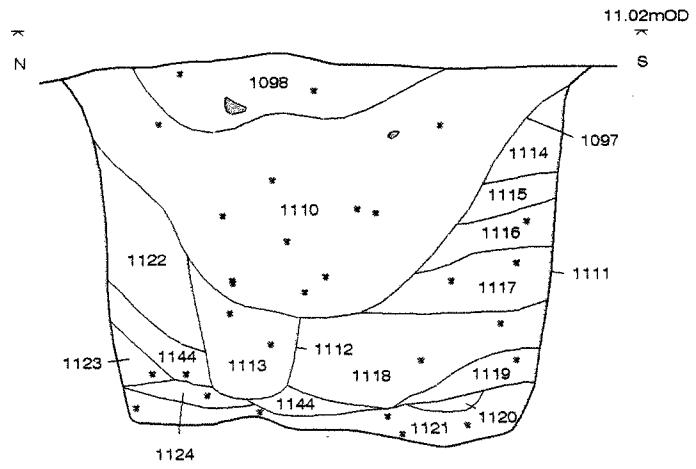


Section 10D

Section 10E



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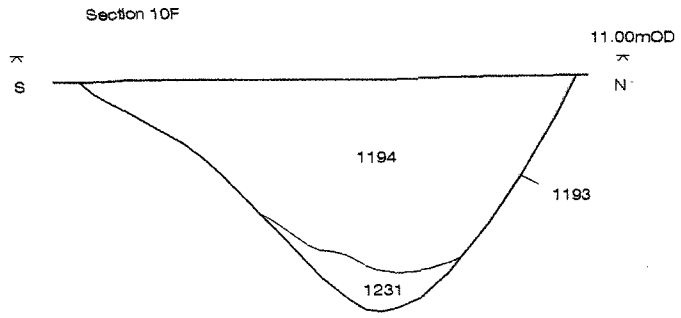

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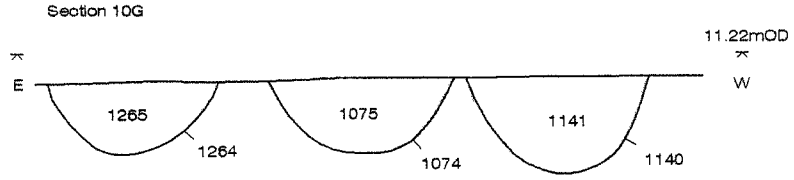
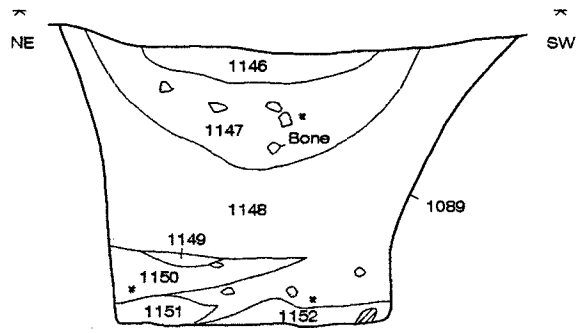


© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 10
Ref: 1333	Sept 2003	Selected Sections Area C	

Section 11A



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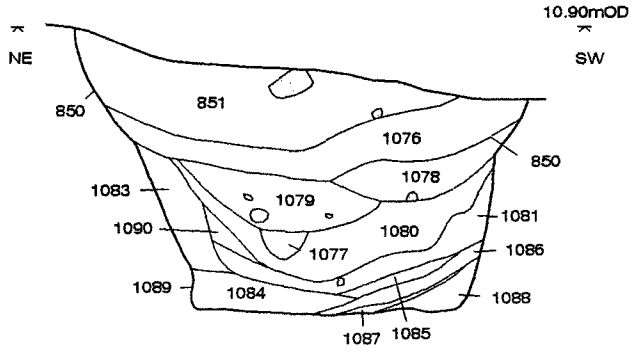

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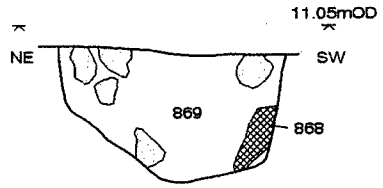

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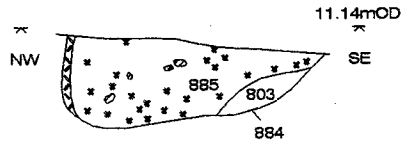

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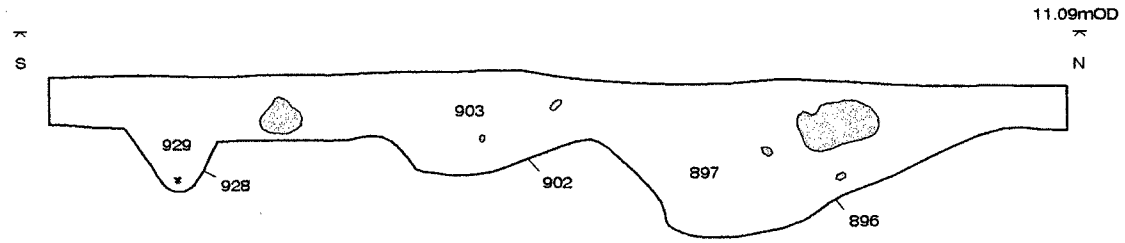

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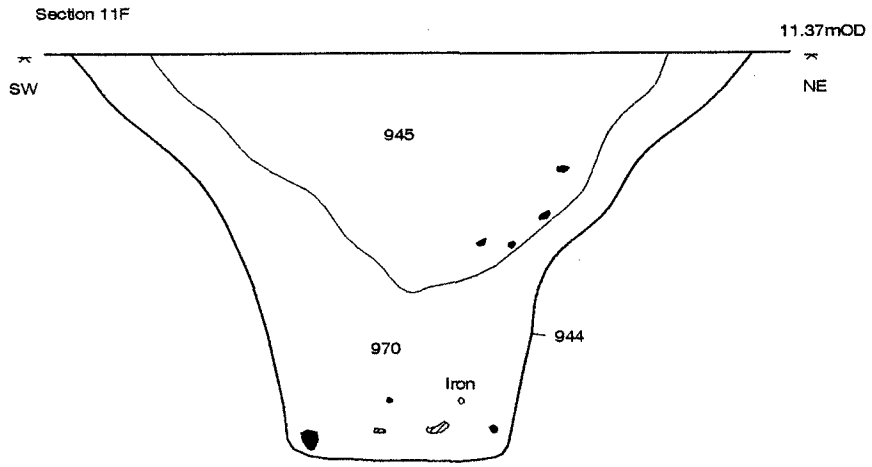

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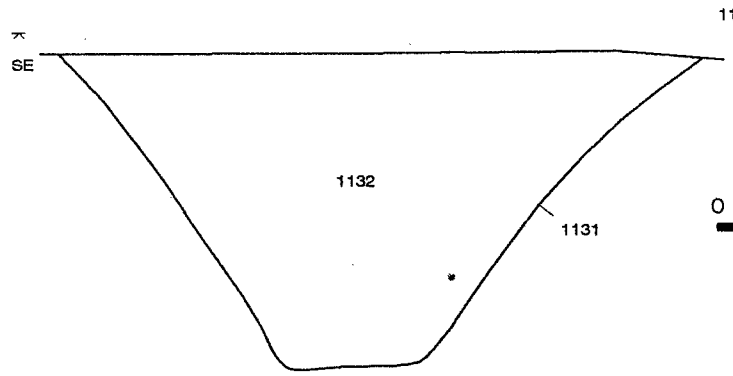

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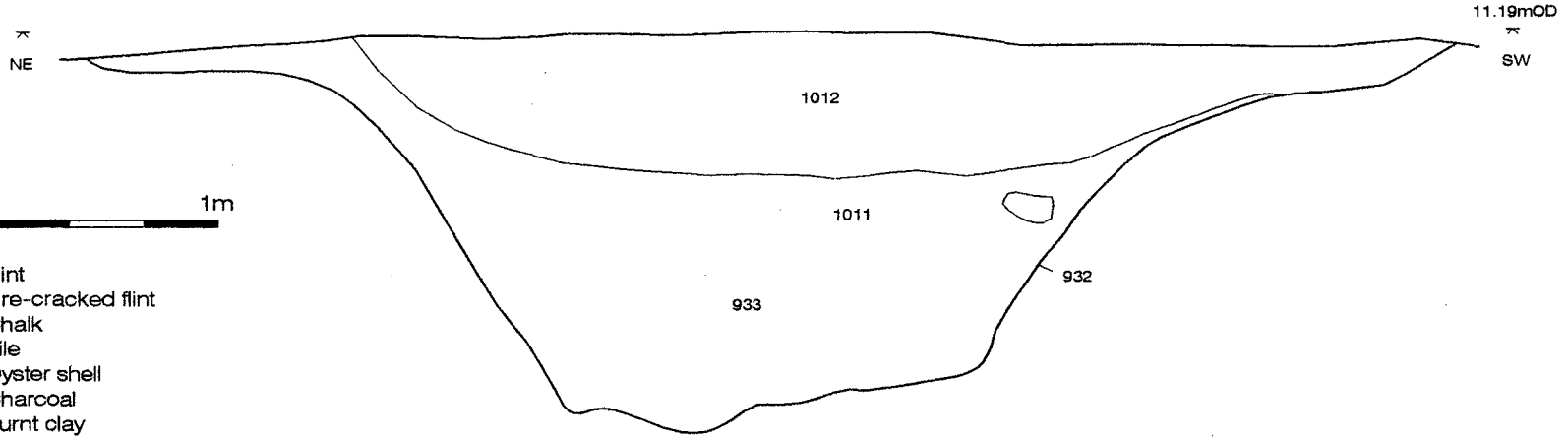
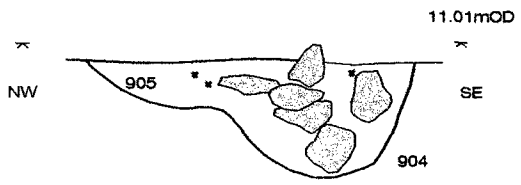
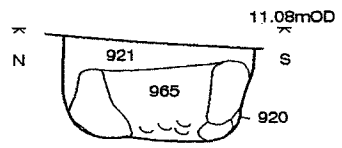


Section 11I



Section 11J

Section 11K



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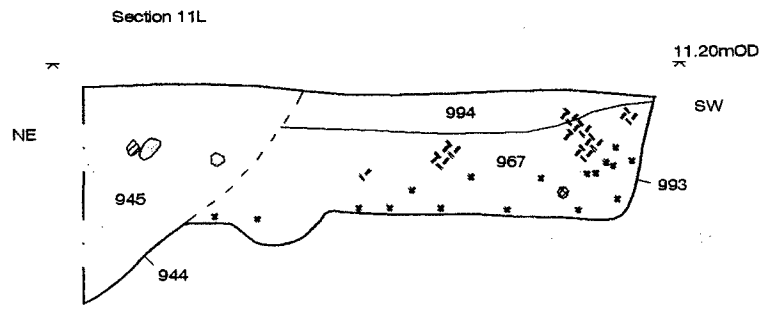

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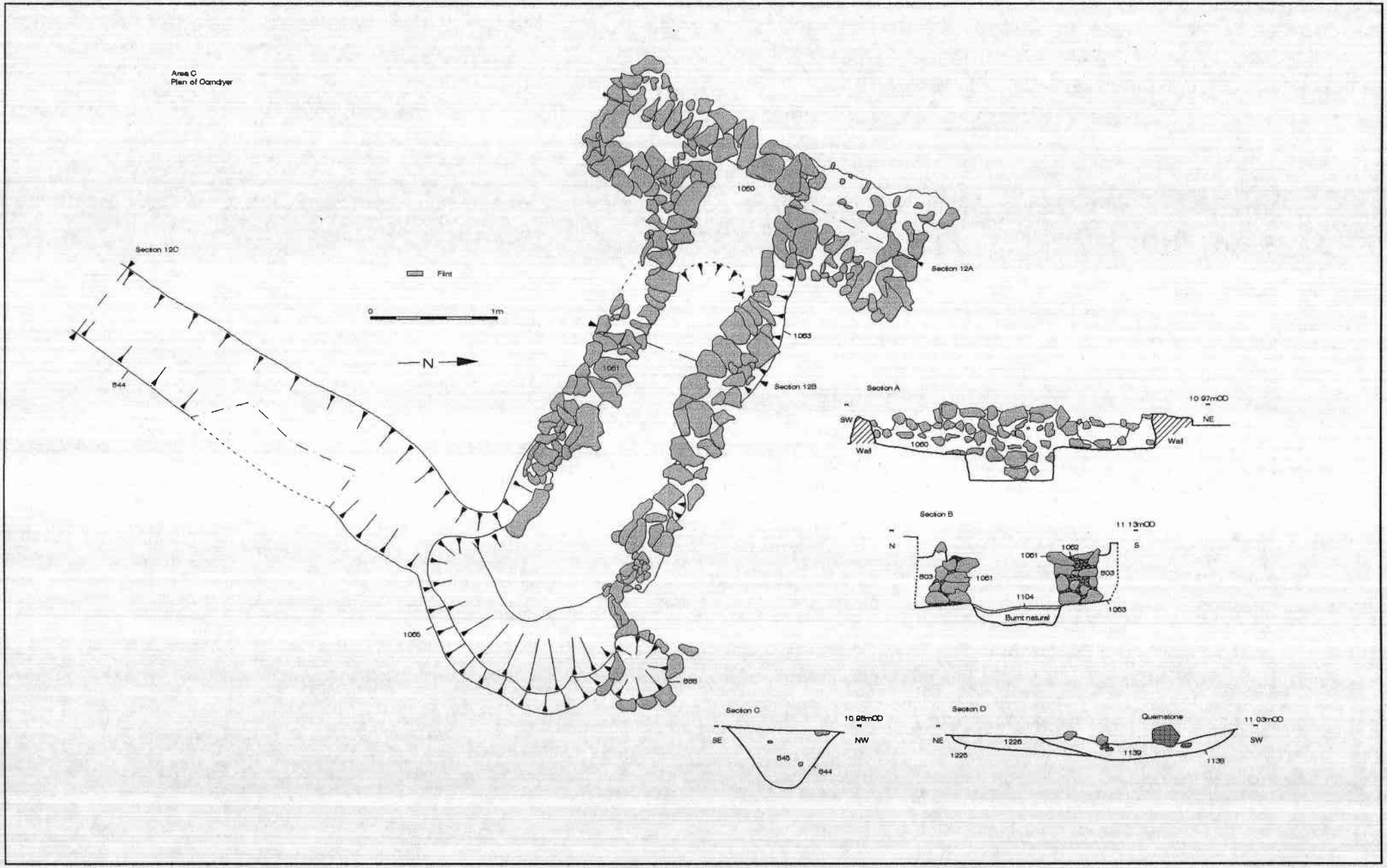
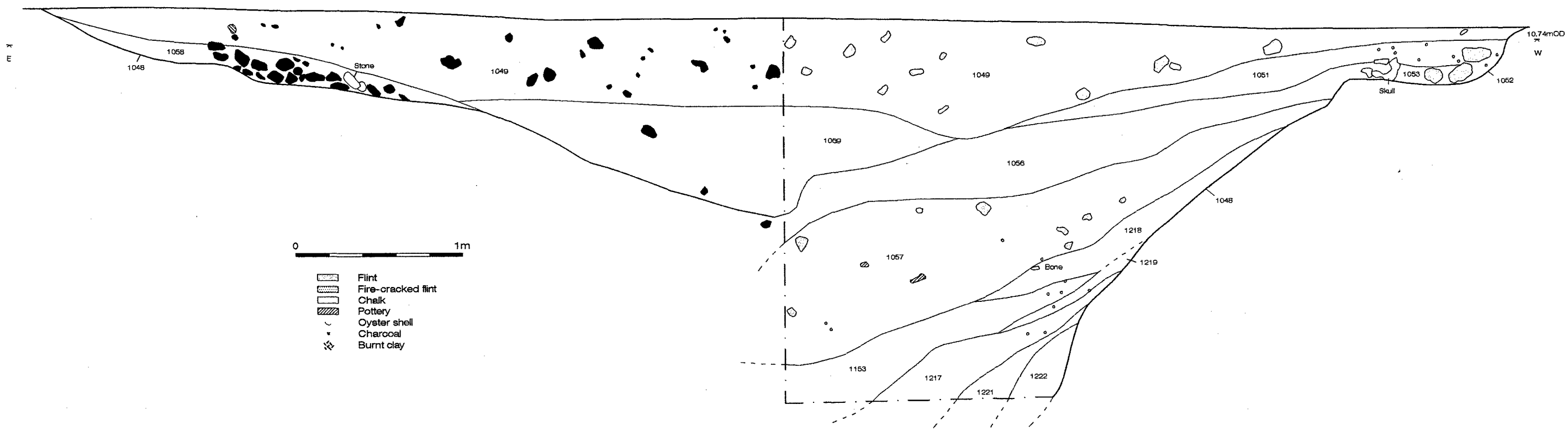
Ref: 1333	Sept 2003	Selected Sections Area C	

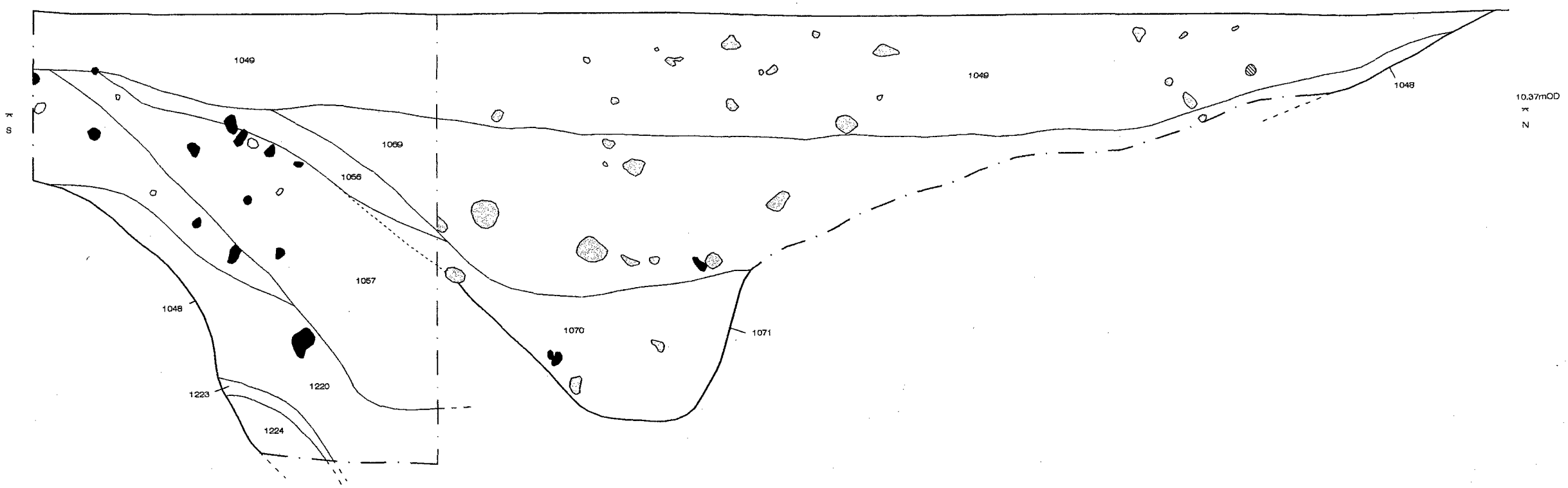


© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 12
Ref: 1333	Sept 2003	Plan, Sections and Elevation of Corn Dryer and associated features	

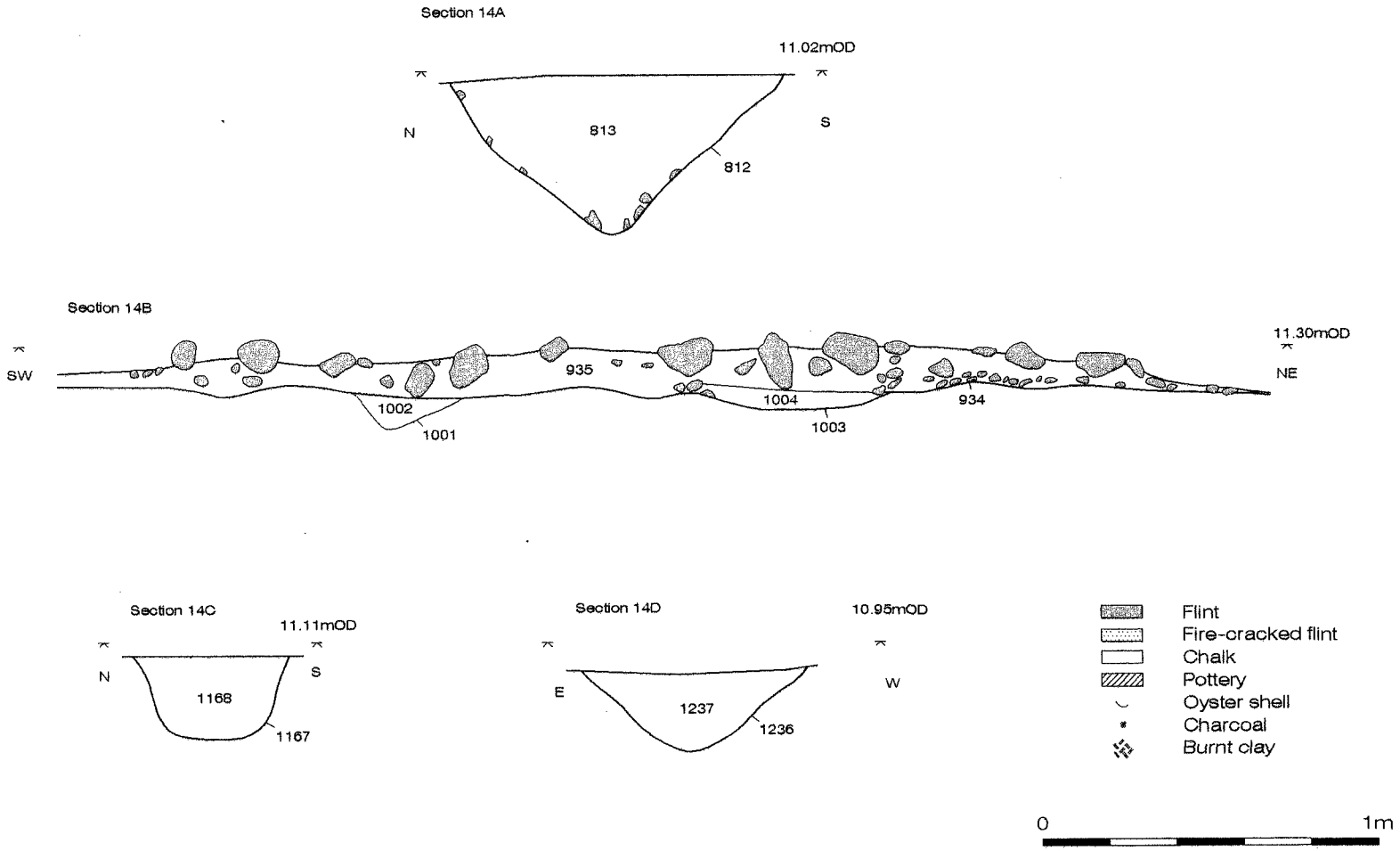
Section 13A



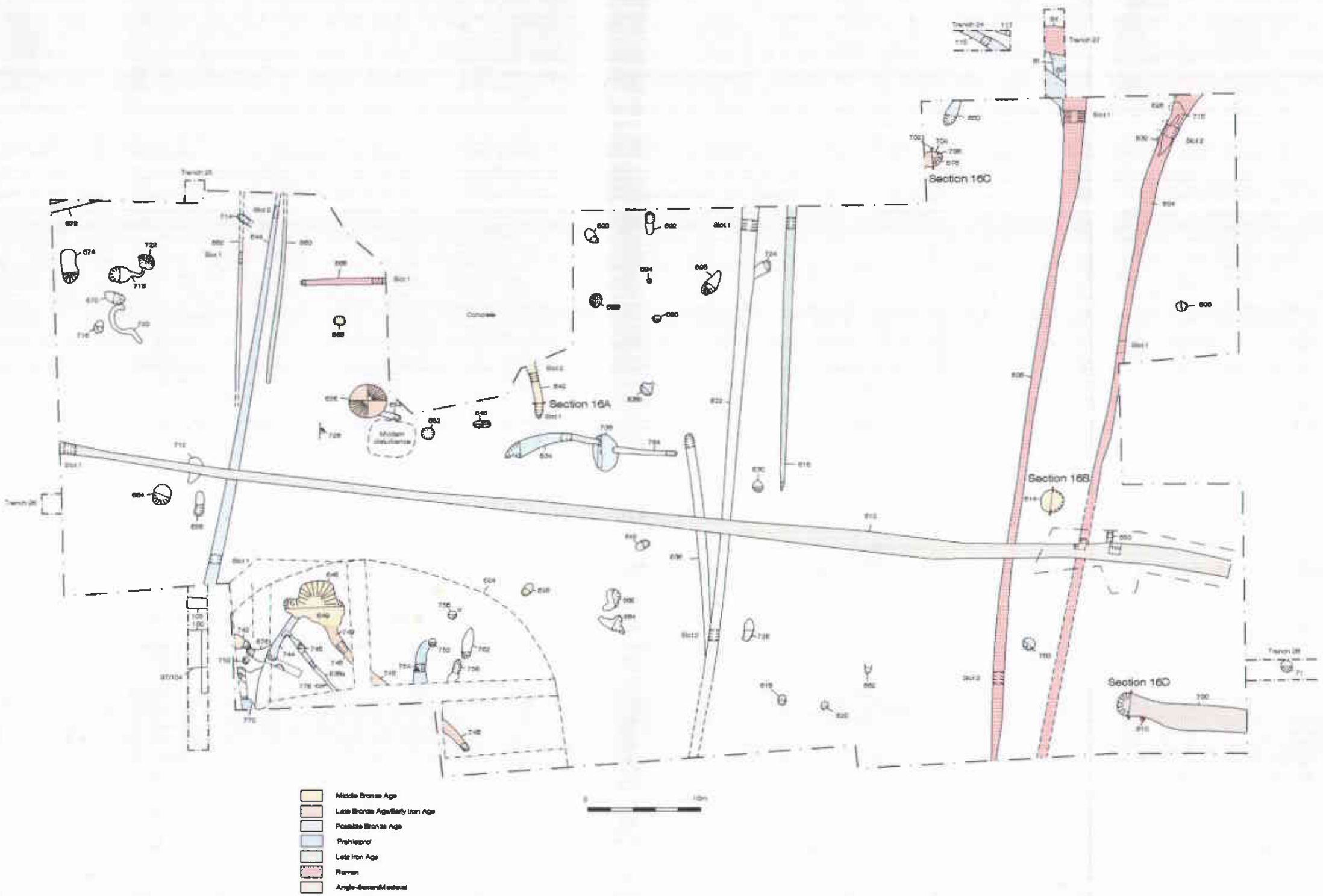
Section 13B



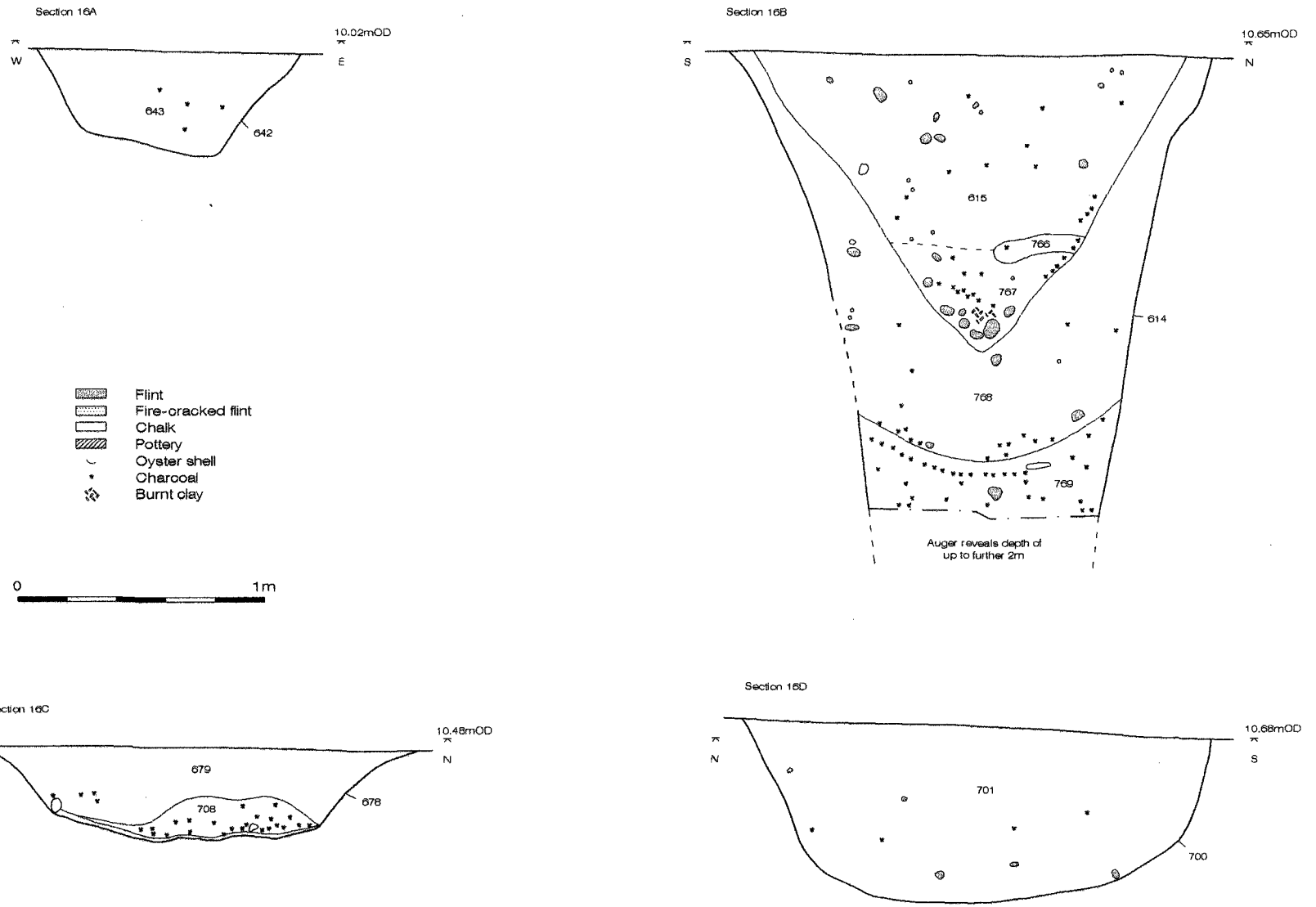
© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 13
Ref: 1333	Sept 2003	Sections of Pit 1048	



© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 14
Ref: 1333	Sept 2003	Selected Sections Area C	



© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 15
Ref: 1333	Sept 2003	Plan of Area D	



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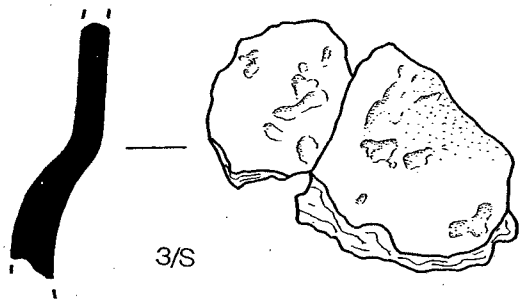
Ref: 1333	Sept 2003	Selected Sections Area D	

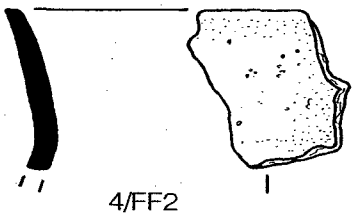
1/F2

Ditch 280/ 281

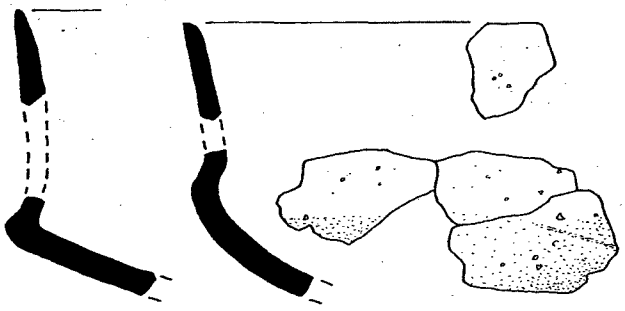


3/S

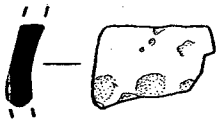
Ditch 414 261/ 262



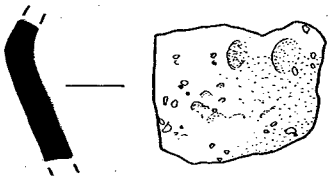
4/FF2



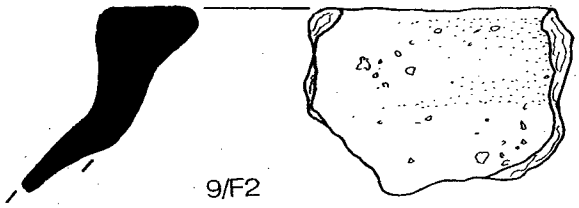
6/FF3 5/FF3



7/S

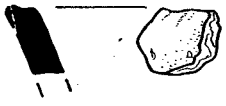


8/FS



9/F2

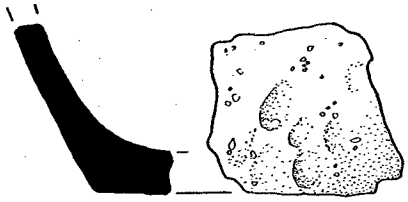
Ditch 414/ 415



18/F2

Ditch 504/ 505

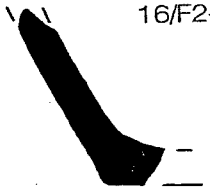
0 5cm



14/F2

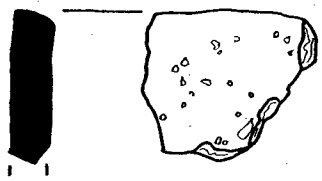
13/F2

16/F2-F1



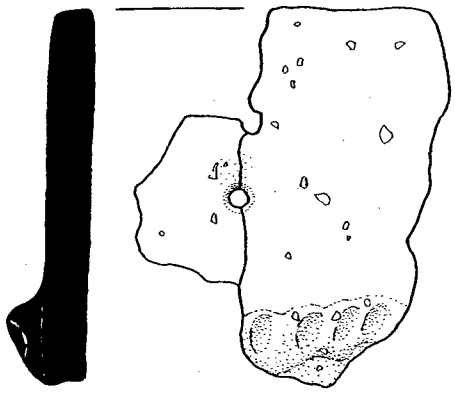
Gully 426/ 427

© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 17
Ref: 1333	Sept 2003	Prehistoric Pottery	

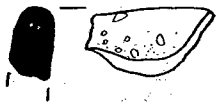


20/CF2

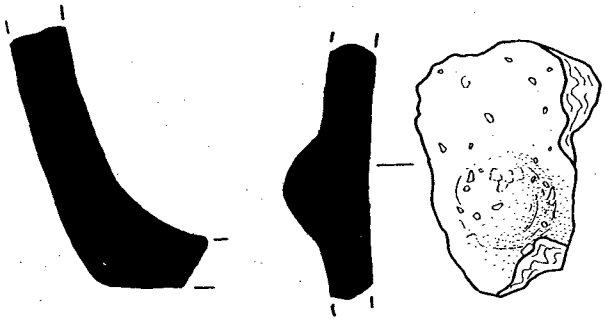
Cremation 507



21/CF2



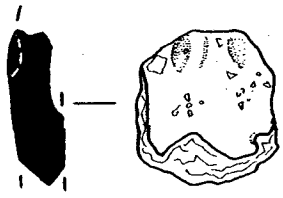
26/CF4



25/CF3

27/CF4

Ditch 545/ 560



22/CF2

Cremation 508

29/CF4

28/F4

Ditch 545/ 561

0 5cm

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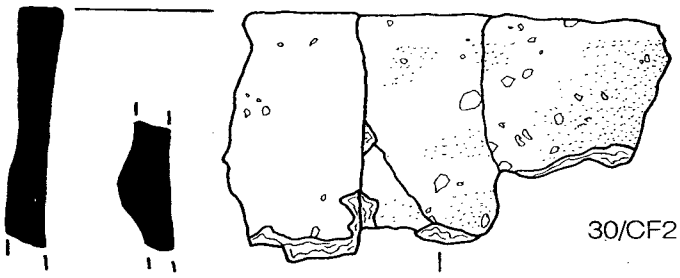
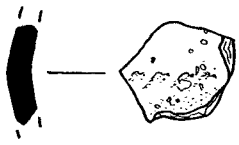
Ref: 1333	Sept 2003	Prehistoric Pottery	



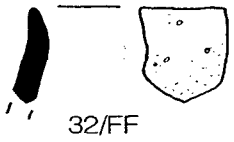
30/CF2

Cremation 300/569

31/F2



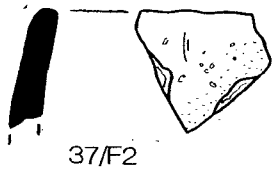
Context 995/ 996



32/FF

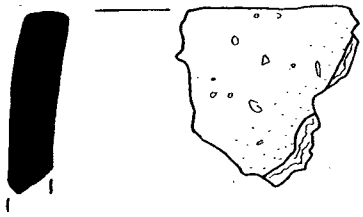
Pit 614/ 767

36/FF3



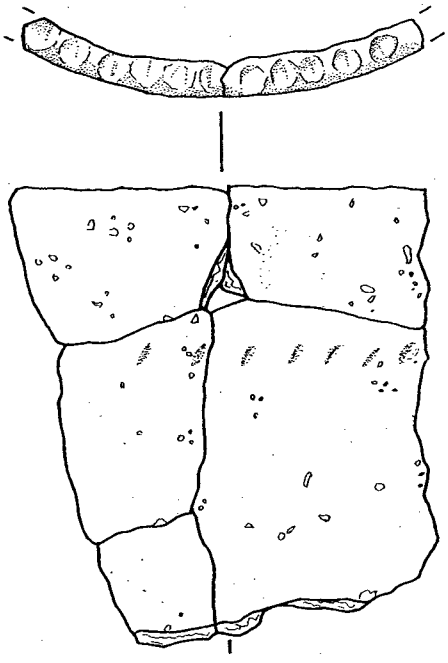
37/F2

Ditch 642/ 643



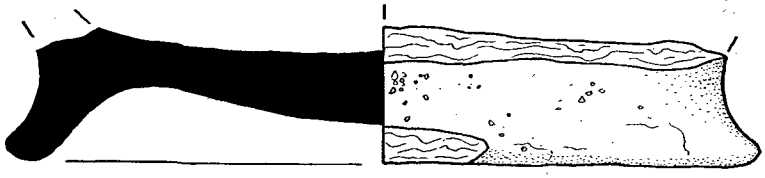
44/CF4

Pit 666/ 740



38/F4

0 5cm



42/F2

41/FF3

Pit 656/ 657

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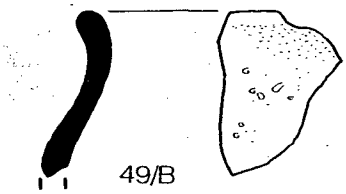
Ref: 1333	Sept 2003	Prehistoric Pottery	

46/CF4

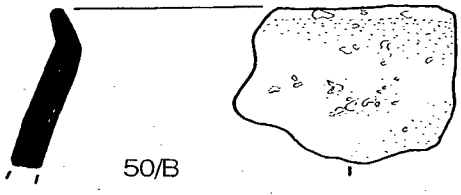
Ditch 742/ 743

48/F2

Ditch 408/ 409



49/B



50/B

Gully 976/ 977

0 5cm

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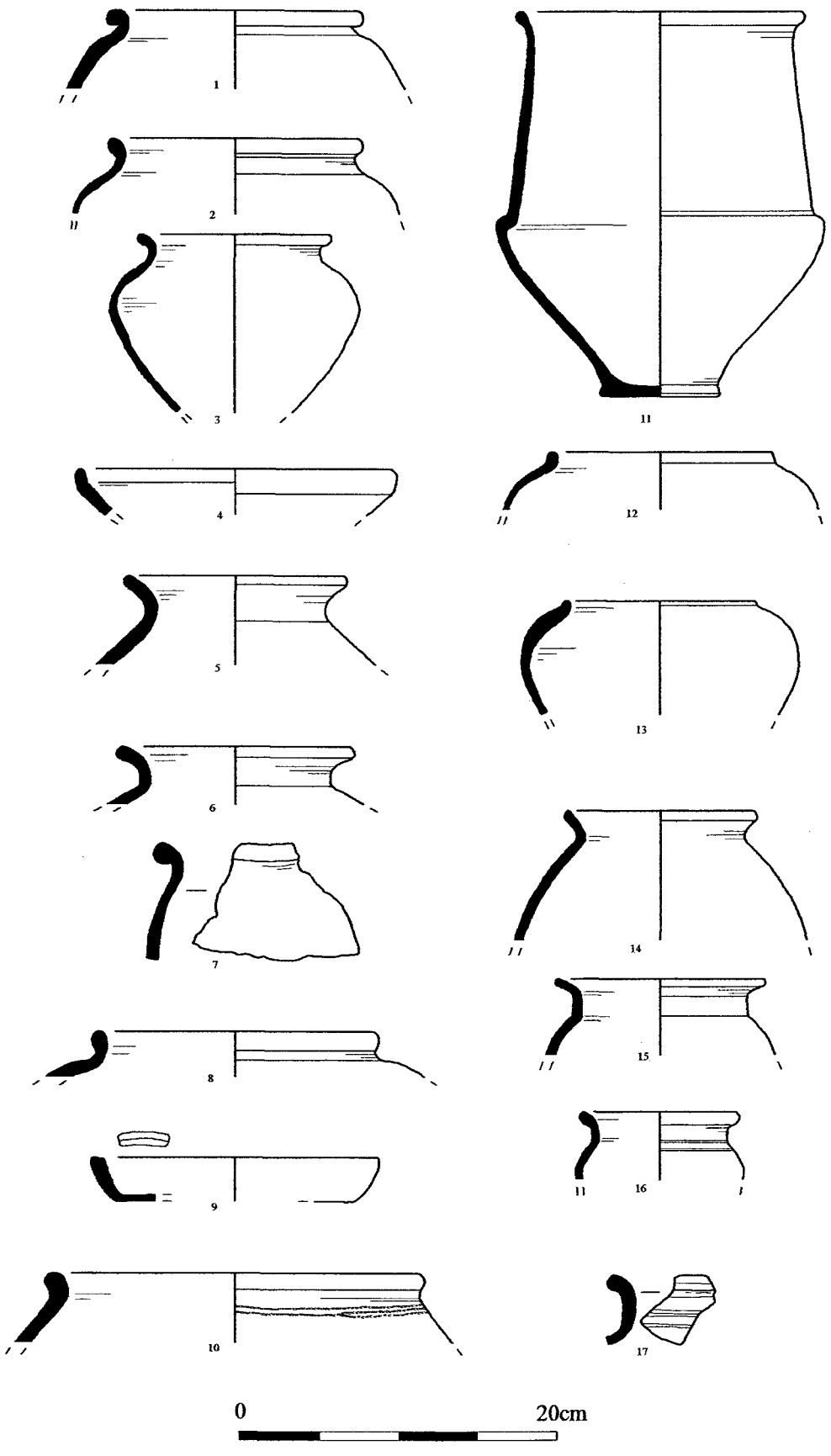
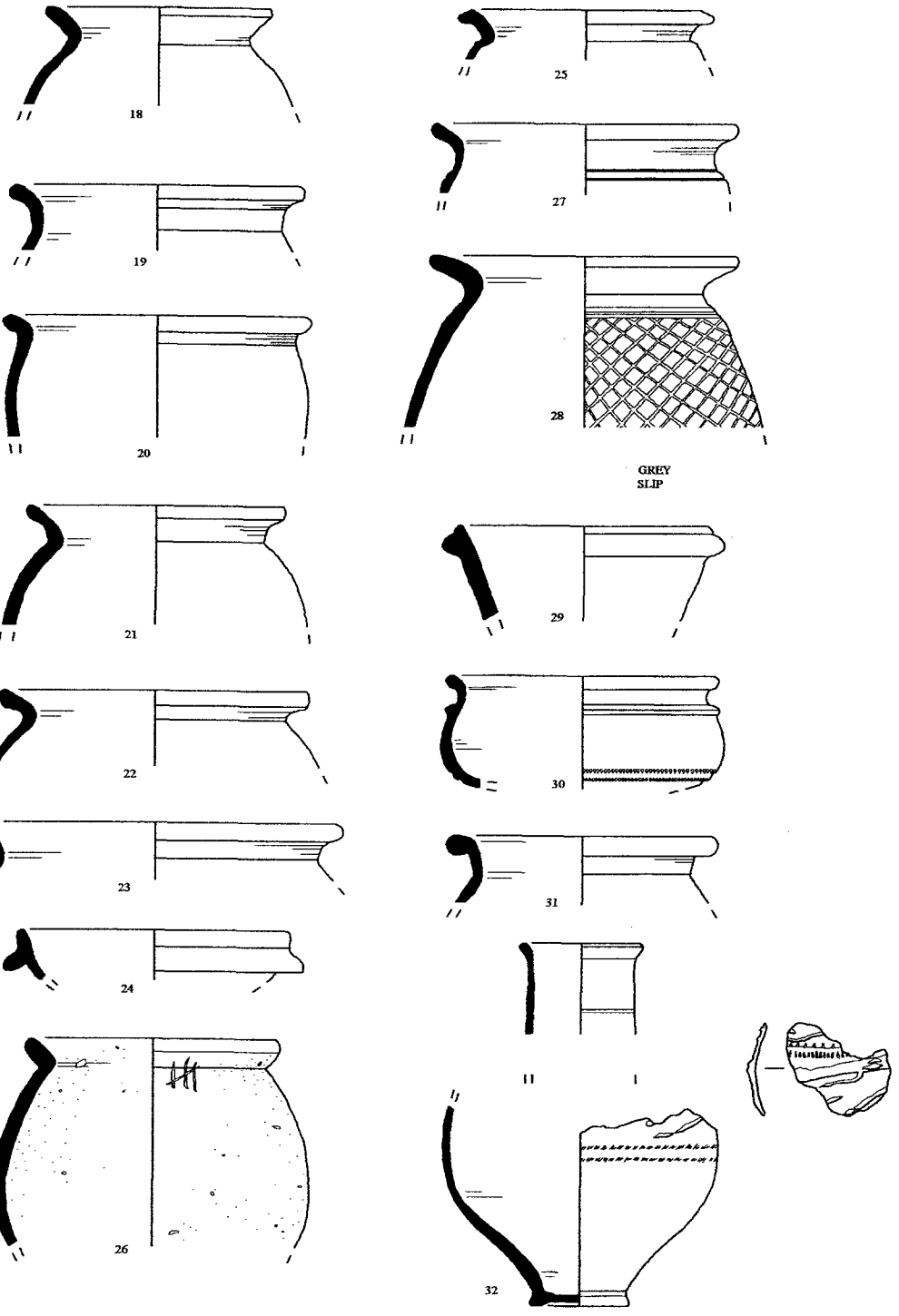
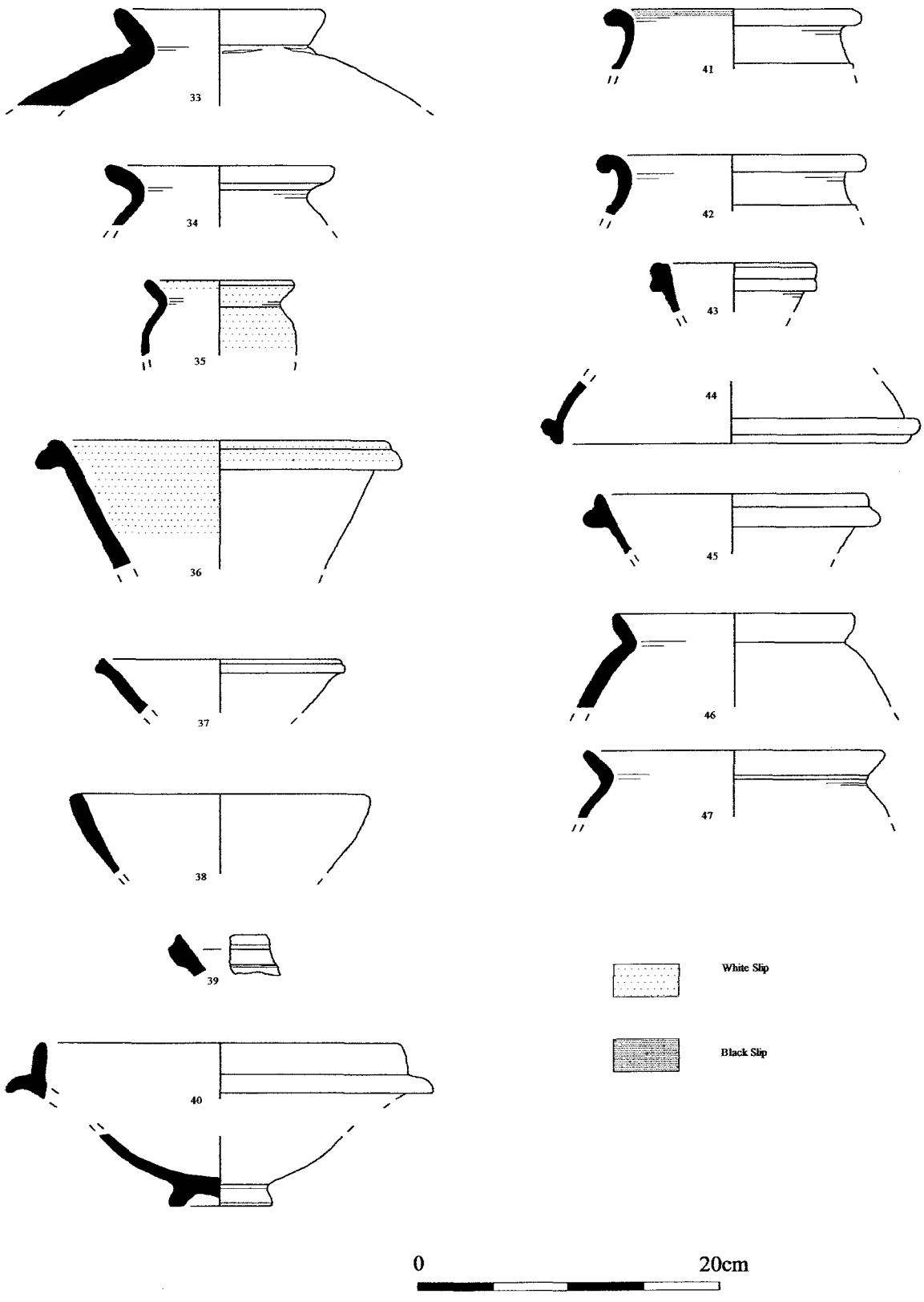
Ref: 1333	Sept 2003	Prehistoric Pottery	



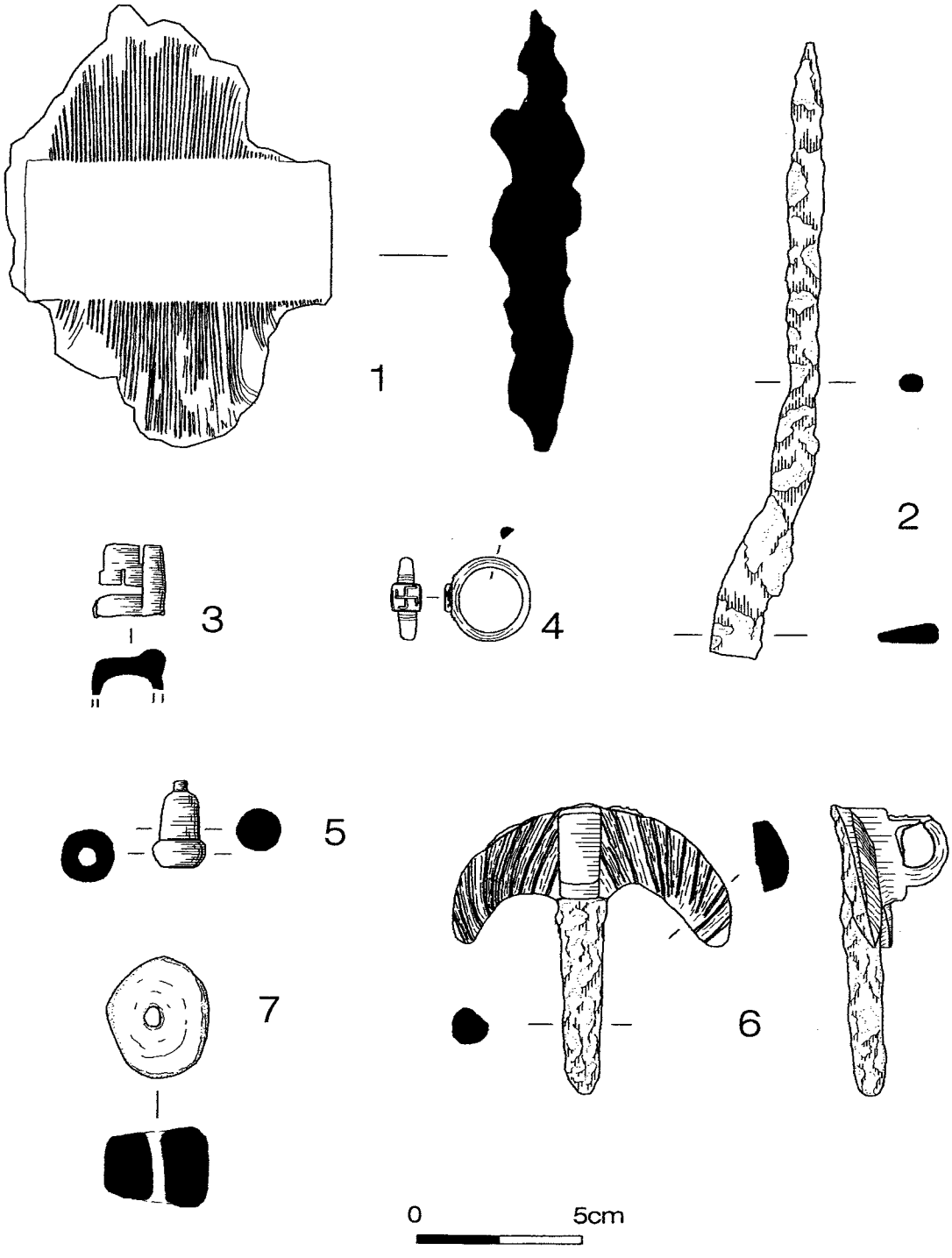
© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 21
Ref: 1333	Sept 2003	Roman Pottery	



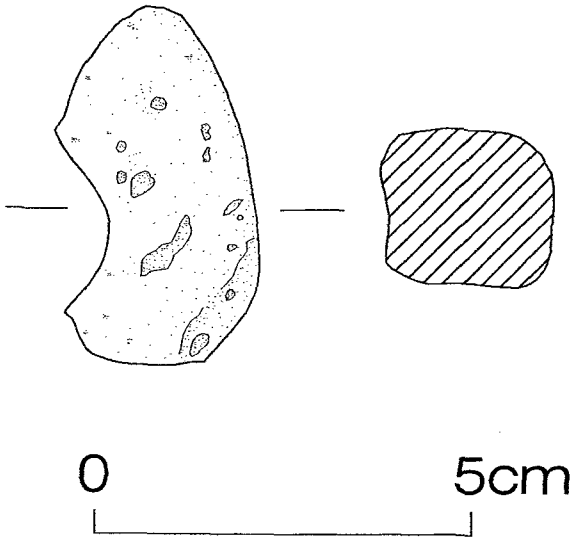
© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 22
Ref: 1333	Sept 2003	Roman Pottery	



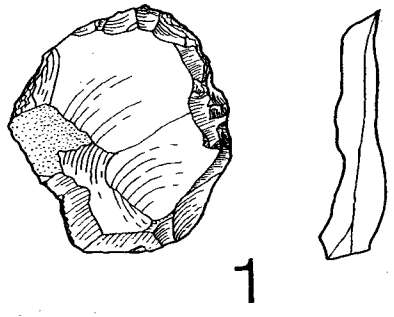
© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 23
Ref: 1333	Sept 2003	Roman Pottery	



© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 24
Ref: 1333	Sept 2003	Metalwork	

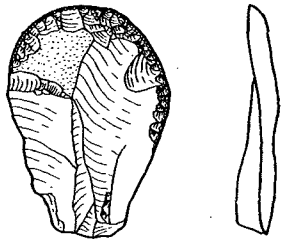


© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 25
Ref: 1333	Sept 2003	Burnt clay	



1

2



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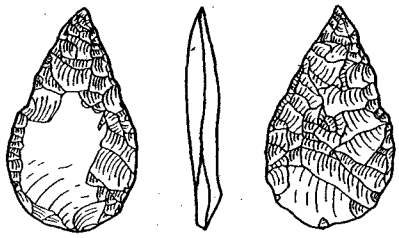
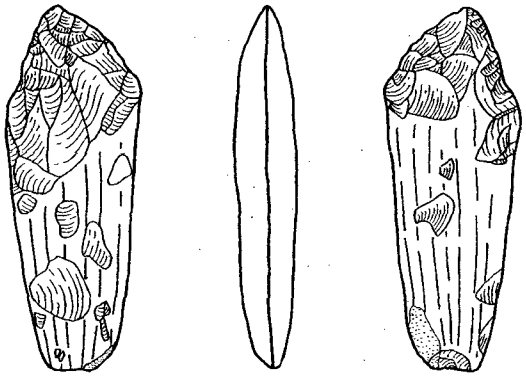
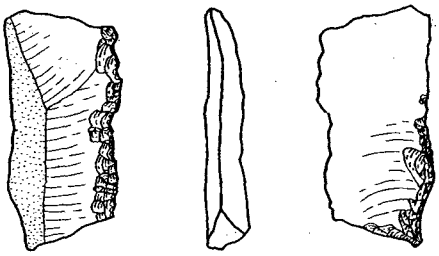


4

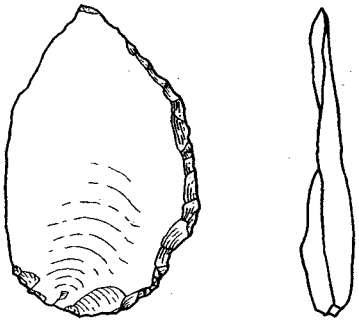
0 3cm



5



6



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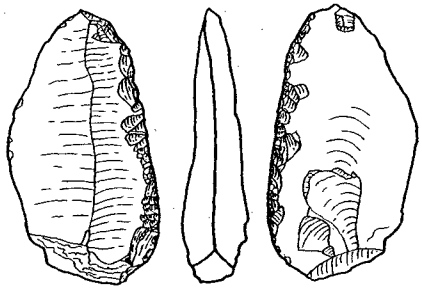

8

0 5cm

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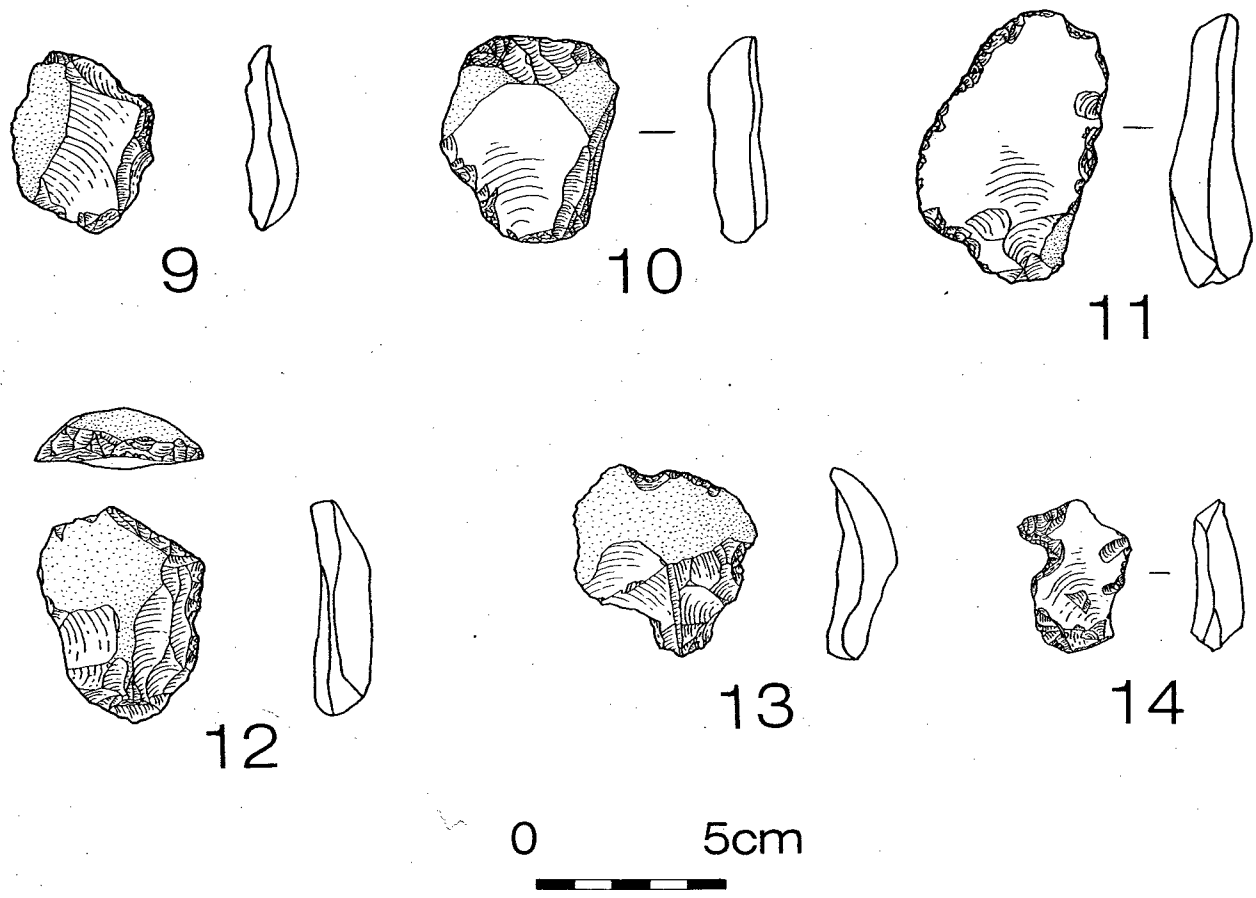
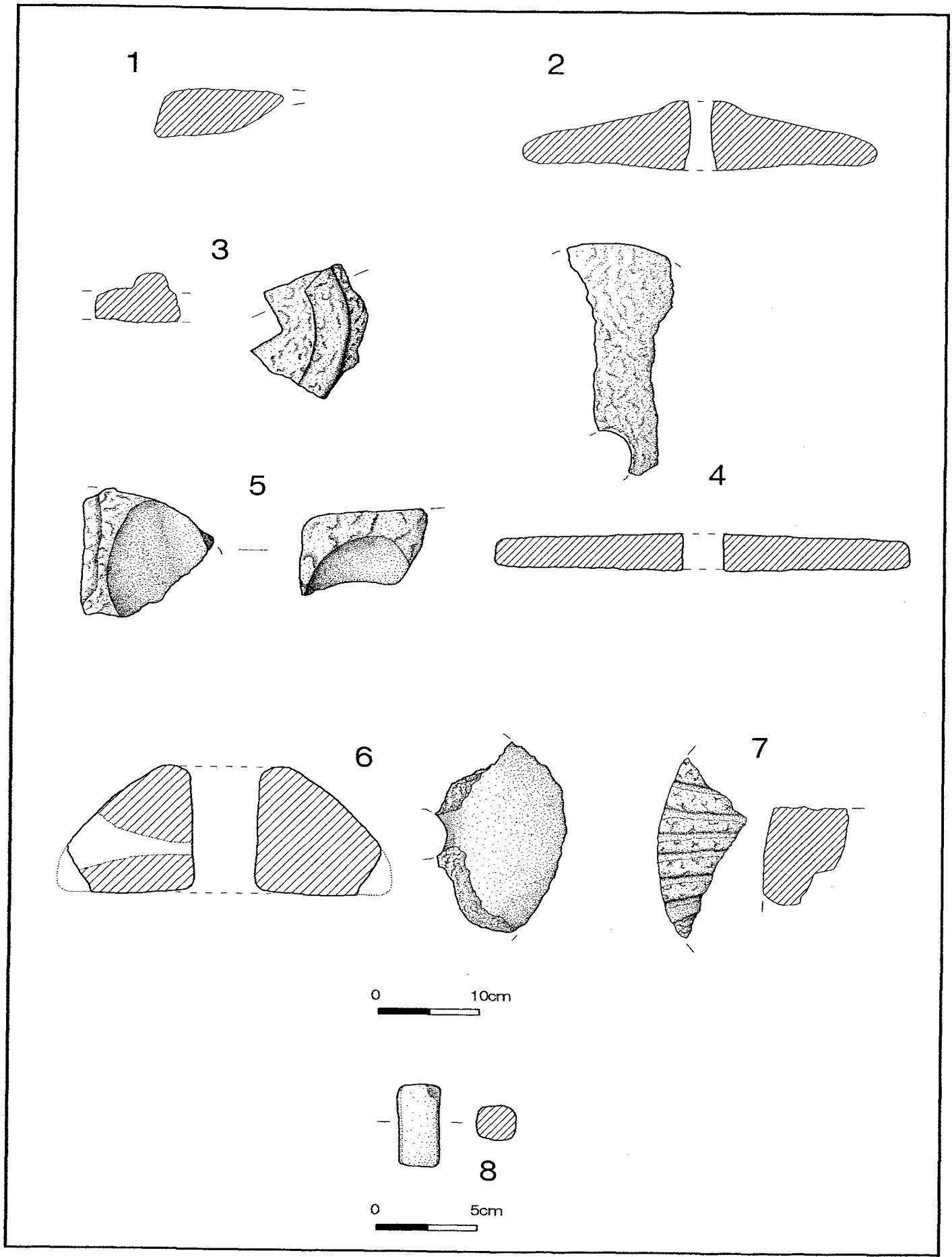
Ref: 1333	Sept 2003	Flintwork	



© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 27
Ref: 1333	Sept 2003	Flintwork	



© ARCHAEOLOGY SOUTH EAST		Roundstone Lane, Angmering	Fig. 28
Ref: 1333	Sept 2003	Geological Material	

Plate 1: Romano-British Corndryer (Context 1063)

Plate 2: Romano-British Trackway (Context 934)

Plate 3: Middle Bronze Age Well (Context 614)

Plate 4: Romano-British Urned Cremation (Context 610)