Excavations at Montefiore New Halls of Residence, Swaythling, Southampton, 1992

by Andrew Crockett

Received 11/2/94

with contributions from D A Allen, Michael J Allen, R M J Cleal, R Gale, S Hamilton Dyer, P A Harding, P Hinton, K Knowles, L N Mepham, Elaine L Morris, D P S Peacock, R H Seager Smith and S F Wyles

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INTRODUCTION

Project background

The site was situated on the northern outskirts of the city of Southampton (Fig. 1), immediately to the north of the existing Montefiore Halls of Residence (SU 4390 1570) in Swaythling, Southampton (Fig. 2). The land is owned by the University of Southampton, who proposed to construct additional student accommodation to replace existing recreational facilities and car parking. In advance of this work, an archaeological evaluation of the area was commissioned and carried out in April 1992 by Thames Valley Archaeological Services (TVAS 1992, site code SOU486). The evaluation revealed evidence of prehistoric, Roman and medieval activity in the area. As a result of these findings, the University commissioned a full excavation of the proposed development area, to be carried out in accordance with project specifications prepared on their behalf by the Policy Unit of Southampton City Council City Heritage Section. The excavation was carried out by Wessex Archaeology over a five week period in August and September 1992 (Site code SOU503).

Topography and geology

The site was situated *c.* 0.5 km to the north of the confluence of the River Itchen and Monks Brook, at the south end of the east-facing valley side for Monks Brook (Fig. 2). Monks Brook originates in Ampfield Wood, *c.* 10km to the north, and feeds into the River Itchen in the vicinity of Woodmill. The excavation area was relatively level, at a height ranging between *c.* 8.5 and 9.5 m OD, on valley gravels overlying Eocene London Clay. In the northern half of the site the gravel was partly overlain by a deposit of material identified as alluvium (Ordnance Survey 1973), possibly a

'brickearth'. This was seen to fill natural hollows in the surface of the gravel, and sealing palaeo-channels cutting across the site (see below).

Archaeological background (Fig. 2)

Evidence for prehistoric activity in the immediate vicinity of Swaythling is relatively scarce, primarily indicated by findspots. The earliest recovered finds in the area are Upper Palaeolithic flint tools, predominantly found in the underlying gravel. Three axes were found in Hampton Park (two at SU 4320 1550 and one at SU 4300 1530), with a further four in Swaythling itself (SU 4400 1600). Possibly in association with the Swaythling axes, several fragments of Pleistocene mammoth tusk and teeth are also recorded from the same grid reference.

A Mesolithic trenchet adze was recovered from the area of Beverley Heights in Townhill Park (SU 4500 1525), and another from Bitterne Park (SU 4400 1400; Gardiner 1988, cat. no. 887). The only reference to Neolithic finds recovered in the area is a report from 1899 (Dale 1899) concerning axes, arrow-heads and scrapers, predominantly provenanced from Shirley, but also from Portswood, Shawford Down and Milford.

Several undiagnostic prehistoric flint flakes have been recovered in the past, including a possible palaeolithic flake near 'The Fleming Arms', Mansbridge Rd in Swaythling (SU 4403 1605), two flint flakes found in the vicinity of Burgess Road, Bassett (SU 4300 1550), and a flint knife from Eastleigh in North Stoneham (SU 4400 1700).

A Bronze Age hoard was found by a workman at Bitterne in the late 19th century AD (Darwin 1895). The hoard consisted of at least four palstaves and socketed axe heads, and a possible leaf-shaped sword. Unfortunately the sword did not survive for

very long once it had been disinterred, as '...it crumbled to pieces in his [the finders] hands...' (Darwin 1894, 54).

Whilst numerous excavations in the centre of Southampton have produced evidence for Iron Age activity (Smith and Cooper 1984, 46, fig. 6), no finds have been made in the vicinity of Swaythling. Major occupational remains such as Toothill Camp (SU 3815 1865) and Chilworth Ring (SU 4135 1700) are located to the north-west of the city. Excavations at Bitterne Manor to the south have not provided definite evidence for a pre-Roman Iron Age settlement. The defensive nature of the site, a narrow peninsula defended by a bank and ditch, is certainly characteristic of the Iron Age (Cotton and Gathercole 1958, 12), but as yet only isolated finds have been recovered.

Roman occupation in the area is concentrated in Bitterne Manor, formerly identified as *Clausentum* (Cotton and Gathercole 1958, 6), but now more usually referred to as Roman Bitterne (e.g. King 1989) The origins of the site have been identified as Flavian in date (Cotton and Gathercole 1958, 13), on the basis of the results from the 1951 excavations, but it is possible that a pre-Flavian settlement existed (Morton 1992, 24).. The original identification of Bitterne Manor as *Clausentum* was based on the entry for *Iter VII* in the *Antonine Itinerary*, covering the road from *Noviomagus* (Chichester) via *Clausentum* to *Venta Belgarum* (Winchester). The distances recorded are 20 miles from *Noviomagus* to *Clausentum* and a further 10 miles to *Venta Belgarum.* If *Clausentum* does refer to Bitterne Manor, then the recorded distances are at odds with the actual mileages, which are 27¼ and 9 miles respectively. It has been suggested that the compiler became confused between two separate routes (Margary 1955, 86). This is a fairly implausible argument and it is therefore likely that *Clausentum* is situated elsewhere, possibly in the region of Wickham based on the recorded distances.

To the north, in the vicinity of Swaythling, several Romano-British find spots are recorded in the Sites and Monuments Record. These include quantities of New Forest pottery recovered at Woodmill (SU 4375 1520); a silver coin of Trajanic date from the High Road, Swaythling (SU 4367 1568); building material from an old stream bed in Wessex Lane, Swaythling (SU 4396 1535); and a pair of pits in Eastleigh, North Stoneham (SU 4400 1730). A late 19th century reference to Roman remains near Swaythling, incorporating pottery, coins, a 'huge trench with at least 200 horses heads', and some carbonised grain could not be relocated with any degree of accuracy (Crawford 1942, 37). Romano-British structural remains have also been recorded in the past near Swaythling (SU 4478 1622), observed by Crawford, but not positively identified (*op. cit.*).

Of particular importance to the excavation is the route of the Roman road from *Venta Belgarum* to Roman Bitterne. The route of this road can be traced southwards from *Venta Belgarum* as far as Otterbourne Park Wood (Margary 1955, 83; route 42b), beyond which its line is unknown (Crawford 1947, 248). Three reasonable theories can be proposed for the missing length; that it continues the line of the last known section to a ferry point opposite Roman Bitterne on the west bank of the River Itchen (*op. cit.*); that it turns almost due south somewhere in the region of Eastleigh to ford the River Itchen upstream, connecting directly to Roman Bitterne without the need for a ferry connection; or that it splits and follows both courses. Of these theories, a ford over the River Itchen would seem to be the most plausible, for if Bitterne Manor is an outport for *Venta Belgarum*, the cantonal capital (Morton 1992, 24), then one would assume that there would be a direct road linkage.

Examinations carried out on the eastern approach road from *Noviomagus* to Roman Bitterne (Johnston and Reed 1968, 21) have revealed that the last section from Wickham to Bitterne was a relatively minor road (Margary 1955, 84-6; route 421), with the principle route (Margary 1955, 83-4; route 420) turning north-west towards

Venta Belgarum. This may possibly be seen as evidence to support the interpretation that Roman Bitterne existed primarily as an outport for *Venta Belgarum*, with the remainder of southern Britain better served by other south coast ports. If this is the case, one would expect the width of a road from Bitterne Manor to *Venta Belgarum* to be substantially more than the narrow 3.7 - 4 m wide *agger* identified to the east.

Evidence for Saxon or medieval activity in the area of Swaythling is generally restricted to charters and documents that mention either Swaythling, North Stoneham or South Stoneham. Swaythling, in the parish of North Stoneham, is mentioned in several charters, one of the earliest dating to AD 932 (B.692). This records the grant of 12 hides of land at *Stanham* (Stoneham) by King Aethelstan to the thegn Alfred, the survey for which starts *Ærest of Swaethelingforda* (First from Swaythling Ford).

The origins of the name Swaythling are debatable (Ekwall 1936, 435), although it appears to have been the original name for Monks Brook. Although possibly a family name, its apparent connection with the Old English word *Swaeth* or *Swæp*, meaning swathe or track (Ekwall 1936, 435) may indicate a reference to the route of the Roman road mentioned above. It should be noted, however, that the title *strete* is more usually associated with the route of a Roman road (Crawford 1947, 251). It has similarly been proposed that the name could be based on *swathul* meaning smoke or mist (Coates 1989, 160), Swaythling therefore being 'place of mist', or even that the name derives from *swethel* meaning wrappings or swaddling-bands, indicating a topographic feature of Monks Brook. Although its former course is unknown, the stream nowadays is not particularly winding, making such an interpretation unlikely (*op. cit.*).

The closest mid-Saxon settlement lay *c.* 4 km to the south at *Hamwic*, recognised as a major centre for trade and industry during the mid to late Saxon period. Excavations have indicated that the settlement, established by the early 8th century at the latest

(Morton 1992, 26) continued in existence until at least the middle of the 9th century AD (*op. cit.*, 71). The settlement was sited predominantly on brickearth, overlying gravel, in an area well suited for river traffic on the River Itchen, which formed its eastern boundary. If the siting of *Hamwic* was for defensive purposes then it would probably have been located on the higher ground to the south-west, subsequently occupied by the medieval walled town. Some evidence exists (SOU89 and SOU169; Morton 1992, 30-1) for a ditch system enclosing *Hamwic* on its western side. It is known that the settlement evolved around a regular street plan, with finds such as imported pottery and glassware indicating trade routes to the continent.

In addition, scant evidence has come to light for Saxon occupation at the site of Roman Bitterne Manor, including stray finds and a cemetery imprecisely dated to the 7th-12th centuries (Cotton and Gathercole 1958, 30).

It is recorded that Vikings raided *Hamwic* twice, in 840 and 842 AD, the second raid culminating in the destruction of the town (Addyman 1973, 219). However, recent analysis has proposed that only one raid occured, in AD 840, but was recorded in two separate texts (Morton 1992, 76). The *Anglo-Saxon Chronicle* records a fight at *Hamtun* in 840, when the Vikings were ultimately defeated by Ealdorman Wulfheard. This account is supported by the lack of any archaeological evidence for wide scale destruction or rapid depopulation of the town from excavations so far. The demise of *Hamwic* as a settlement centre and port is therefore attributed by Morton to the effect on trade that the 9th century Viking raids were having, making it impossible for the town as a trading centre to survive.

Limited excavation evidence has come to light for small scale occupation of *Hamwic* beyond the 9th century (Morton 1992, 72), but for the most part it seems that the settlement centre ultimately shifted to the south-west, establishing the site of what was to be the medieval walled town (Platt and Coleman-Smith 1975, 18).

Excavations within Southampton have indicated that 10th century settlement within and around the area of the medieval town is scattered and difficult to characterise. Three general centres of occupation have been proposed; a certain degree of residual, 'squatter' occupation probably continued at *Hamwic* (Morton 1992, 74); an enclosed settlement was established in the area of the later medieval town (Oxley in prep); and the Roman site at Bitterne Manor was re-fortified and used (Hill 1967). During the 11th and 12th centuries the dispersed settlement grew in intensity, with excavation evidence indicating intensive settlement in the parishes of St Michael, St John and Holy Rood to the south of All Saints (Platt and Coleman-Smith 1975, 18). The town walls were constructed in the early 13th century, possibly indicated by a documentary reference from 1202-4 to King John making a two-year grant of £100 to the men of Southampton '...to close their town' (*Pipe Roll 4 John, p.78*). This appears to have resulted in a slight contraction of the settlement limits, as those who could afford to do so moved within the enclosed area (Platt and Coleman-Smith 1975, 20). This contraction was only a temporary effect, and as the population increased, the settlement limits spread further from the town again. Medieval records, such as the *St Denys Cartulary* (Blake 1981), attest to suburban occupation along principal routes out of the walled town, much as are later shown in Speed's map (Speed 1909). Likewise, the so-called Elizabethan map of Southampton, which although not fully reliable as a documentary source (Welch 1964, 1), does appear to indicate extensive occupation along most of the major approaches to the walled town. This includes structures in the vicinity of Swaythling, labelled as South Stoneham.

Methodology

The evaluation initially consisted of four, fairly evenly-spaced, 3 x 3 m (9 m^2) trenches numbered 1 - 4. These were aligned south-west - north-east across the proposed development area, covering a distance of *c.* 120 m (Fig. 3). The trenches were excavated by machine to either the level at which archaeological features could

be defined, or if no features were identified, to the surface of undisturbed natural subsoil. The trenches were then cleaned and recorded by hand, with a representative sample of the archaeological features examined to assess the nature of the deposits in terms of function and date. As a result of findings from Trench 3, an additional fifth trench was excavated immediately to the east, which was 6.2 m long and 1.6 m wide. Whilst the evaluation was taking place, permeability tests were also being carried out by the consultant engineers, involving the machined excavation of a further seven trenches. The opportunity was therefore taken to examine these additional trenches for archaeological remains, and they are identified below as trenches 6 - 12.

The excavation commenced with the machined removal of the overlying topsoil under archaeological supervision, to the surface of the natural gravel and alluvium subsoil. At this level archaeological features could be identified, which were then cleaned and excavated in accordance with an agreed sampling procedure. The excavation was monitored by the City Heritage Policy Unit.

RESULTS

The Evaluation (Fig. 3)

The evaluation (site code SOU486) was carried out by Thames Valley Archaeological Services in April 1992 (TVAS 1992). Five trenches were examined by a combination of machine trenches and hand-excavation. Four of these (Tr. 1-4) were 3 x 3 m and aligned south-west - north-east across the development area, covering a distance of 120 m. Trench 5 was 6.2 x 1.6m and excavated immediately west of Tr. 3. In addition, seven further trenches (Tr. 6-12) were examined and recorded during permeability tests carried out by the consultant engineers.

Material recovered from the evaluation suggested three phases (2-4) of activity, prehistoric, Romano-British and post-Roman. In addition, a buried soil identified in Tr. 4 has been designated Phase 1, pleistocene.

Phase 1: Pleistocene

A layer of alluvium was identified as a buried soil in Tr. 4. This was cut by pits 6 and 7, and post-hole 8.

Phase 2: Prehistoric

A number of features were provisionally identified as prehistoric, including several pits or ditch terminals, post-holes and at least two ditches, all of which contained both worked and burnt flint. Feature 4 (Tr. 2) is recorded as '...a doubtful archaeological feature...which is either a shallow scoop or merely a natural subsoil hollow' (TVAS 1992, 2). This contained numerous sherds of Late Neolithic or Early Bronze Age pottery, some of it decorated with bird bone impressions. Pit 3 (Tr. 3) produced a few fragments of cremated human bone, with three pot sherds recovered adjacent to it identified as being possibly Iron Age. Pits 6 and 7 (Fig. 12), both in Tr. 4 produced between them 20 sherds of possible Iron Age pottery, together with a fragment of

Mayan Lava quern. A further fragment of Mayan Lava quern, together with a single sherd of possible Iron Age pottery was recovered from ditch 10 (Tr. 8).

Phase 3: Romano-British

Romano-British finds consisted of fragments of floor tile from ditch 10 (Tr. 8) and a single sherd of pottery from the topsoil in Tr. 4.

Phase 4: Post-Roman

The only post-Roman finds identified were fragments of possible post-medieval tile from pit/ditch 9 (Tr. 6).

The evaluation report identified substantial quantities of pottery as possible Iron Age material. Following comparison with the Southampton Fabric Series, these sherds have since been identified as late Saxon/early medieval.

The Excavation

The entire excavation area of 10,272 m^2 (Fig. 3) was machine stripped under constant archaeological supervision to the surface of the natural gravel and alluvium subsoil. The surface was then cleaned where necessary to reveal and clarify the position of archaeological and potentially archaeological features. All features thus identified were hand-excavated, with at least one section removed in each case. Further sections were then excavated from archaeological features to a minimum of 50% excavation for circular and subcircular features (pits, post-holes etc.), and 20% excavation for all linear features (ditches, gullies etc.). This sampling strategy was adjusted for very large features, with a 10% excavation of Phase 3 quarry 702 (5% by hand, 5% by machine), 10% excavation of Phase 2 ditch 704, 15% excavation of Phase 3 ditch 713 and 25% excavation of Phase 4.1 pit 620.

Feature 666 was identified as the north-east facing edge to the gravel terrace on which the excavation area is situated, overlooking the flood plain for Monks Brook. The 'buried soil' recorded in Tr. 4 of the evaluation was seen during the excavation to be alluvium overlying the gravel at the north end of the site, filling any natural hollows in the surface of the gravel (features 438 and 633). The date for the deposition of this alluvium is open to question, as a small piece of Romano-British brick was recovered from the base of the alluvium laid against gravel terrace 666. Further to the south the alluvial material was seen to seal Phase 2 pit 423 (layer 427, Fig. 5), and was cut by Phase 3 ditch 713. From this evidence the period of deposition would appear to occupy a time span between the later prehistoric and the Roman periods.

The largest recorded natural feature was 717, a former watercourse or palaeo-channel, aligned north - south across the western half of the site, and continuing beyond the limits of the excavation to the south. It was filled with a light brown compact sandy silt, was at least 1m deep and varied in width from 3 - 6 m. Several pieces of worked flint were recovered from the upper fills of this channel but its date is uncertain.

Phase 2: Prehistoric - post-2800 BC (Fig. 5)

This period is represented by a number of pits and, on stratigraphic grounds, possibly two ditches.

Pit 629 was a large pear-shaped feature *c.* 2.5 m long, 1 m wide and 0.75 m deep, to the east of palaeo-channel 717. It revealed evidence for at least one recut (pit 681), part of which was examined during the evaluation producing many sherds of prehistoric pottery. Excavation produced no further pottery but quantities of burnt flint. Of the pottery recovered from the evaluation, 19 sherds were subsequently identified as later Neolithic Peterborough Ware (*c.* 2800 - 2000 BC), probably all from the same vessel (Cleal, below).

Two further pits were recorded (423 and 430) *c.* 2.5 m apart, *c.* 0.8 - 1 m in diameter, and *c.* 0.4 m deep, filled with yellowish brown sandy loam with profuse quantities of gravel above dark greyish brown clayey loam primary fills. Both were cut by later features. Pit 423 had been sealed by 427, a layer of clayey loam initially identified as remnant topsoil, but subsequently seen to be alluvial material cut by Phase 4.3 ditch 711 (Fig. 6).

A sherd of late Neolithic Grooved Ware (Fig. 15, 4) was recovered from the secondary fill of pit 423, and two small fragments of grog-tempered pottery of probable Early Bronze Age date from the primary fill, together with worked and burnt flint. In addition, both the primary and secondary fills also produced sufficient carbonised material to provide the following calibrated radiocarbon dates. The primary fill was dated to 2612 - 2320 BC (BM-2874), whilst the secondary fill dated to 2707 - 2456 BC (BM-2875).

Pit 430 produced two conjoining base sherds, also in a sandy grog-tempered fabric of probable Early Bronze Age date, as well as four pieces of worked flint, including a scraper (Fig. 15, 2), all from its primary fill.

Stratigraphically, the earliest undated features were 706, a slightly curved length of ditch in the south-east corner of the site and 704, an east - west aligned ditch cutting across 706 and continuing beyond the limits of the excavation in both directions. Ditch 706 was *c.* 1 m wide and at least 0.4 m deep, and narrowed at its north-eastern end to become 414, a very shallow gully, considerably disturbed by later activity. Ditch 704 was *c.* 1.4 m wide and at least 0.4 m deep, its fill producing pieces of burnt flint. This ditch was cut by Romano-British ditches 710 and 713 (Phase 3, see below), and is therefore, together with the earlier ditch 706, interpreted as prehistoric.

Phase 3: Romano-British - AD 43 to AD 410 (Fig. 7)

This phase was represented by the construction of two substantial parallel ditches, possibly defining a road zone, in association with a possible enclosure to the west of these ditches, and a relatively shallow massive gravel pit in the south-east corner of the site.

Ditch 710 was aligned approximately south-west - north-east, and continued beyond the limits of the excavation in both directions. It was generally *c.* 1 m wide and 0.4 m deep, and punctuated immediately to the north of its intersection with Phase 2 ditch 704 by a 4 m wide opening. The ditch line was continued across this opening by 129, a shallow gully 0.5 m wide and 0.17 m deep, which had been cut by the terminals of ditch 710 at either end. This implied that gully 129 was either an earlier feature, or that ditch 710 to either side had been recut or cleaned at least once without the base of the gully being similarly treated. Dating evidence recovered from ditch 710 included undiagnostic Romano-British pottery from four separate excavated ditch segments.

As with 710, ditch 713 also continued beyond the limits of the excavation in both directions and was parallel to, and *c.* 20 m to the west of, ditch 710. The overall size of this feature varied either side of its intersection with ditch 288. To the north of 288 it exhibited a variable profile ranging from a flat bottomed feature *c.* 1.5 m wide and 0.4 m deep, to a 'V'-profiled feature *c.* 0.7 m wide and 0.4 m deep. To the south of 288 the ditch profile was generally 'V'-shaped, *c.* 2.5 m wide and 1 m deep, but included a narrowed section 1.2 m wide, 0.45 m deep and 9 m long immediately to the north of its intersection with Phase 2 ditch 704. This narrowed section appeared to be contemporary with the main body of the ditch. Undiagnostic Romano-British pottery was recovered from several of the segments excavated through ditch 713.

Ditch 288 was recorded as a short length of ditch, *c.* 2 m wide and 0.8 m deep, contemporary with, and forming an approximate right-angle with, ditch 713. This

ditch produced sherds of a Romano-British flagon, and had been considerably disturbed by the construction of the modern car park. The curved nature of the intersection between ditches 713 and 288 implies that they formed the north-east corner of an enclosure.

The narrowing of ditches 710 and 713 in relation to Phase 2 ditch 704 is an aspect which is presumably more than a coincidence. If a bank generated from the construction of ditch 704 had been placed to the south, and was still visible during the construction of ditches 713 and 710, the narrowed sections could indicate the position of openings adjacent to such a bank. If the bank associated with ditch 704 was to the north, it is possible that the narrowed sections correspond to a shallower cut into the subsurface natural gravel as the later ditches passed up and over such a bank.

The latter interpretation would appear reasonable for ditch 710, where gully 129 shares the same longitudinal line of symmetry, but not for ditch 713, where the narrowed section is offset against the line of the east side of the main ditch. It would therefore appear likely that the proposed hypothesis of a southern bank related to ditch 704 is more viable, and that these narrowed sections indicate entrances into the resulting parcels of land to the east and west (Fig. 6)

A possible interpretation for these parallel ditches is that they form delimiting boundaries for a road 'zone' (Margary 1955, 16). If this interpretation is correct, no trace of a road surface or related drainage ditches to either side survived. This may be an indication of the degree to which subsequent ploughing/landscaping has truncated features in the area, but it must be borne in mind that not all Romano-British roads or tracks have roadside drainage ditches. The interpretation as ditches delimiting a road zone is perhaps supported by the evidence for large-scale gravel extraction in the vicinity (pit 702; see below), which may have provided material for the road surface.

Gravel pit 702, in the south-east corner of the excavation, lay within the north-east facing angle formed by ditches 704 and 710. The pit was *c.* 12 m in diameter, with uneroded steep concave sides and a slightly conical base sloping gently to a depth of 1.3m at the centre. The fill consisted of an homogeneous deposit of almost sterile loamy sand and gravel, with slight evidence for silting apparent as a thin deposit of interleaved sand and sandy loam at the very base of the feature. Pottery recovered included a small sherd of probable later Bronze Age date, as well as one larger sherd of undiagnostic Romano-British ware, and numerous pieces of burnt flint. The interpretation of this feature as a gravel pit is based on its size and the almost complete absence of silting within its fill. Moreover, as the loose gravel edges would have eroded considerably if left open even briefly, it would appear that the pit was backfilled very shortly after gravel extraction. A possible source for this backfill could have been the section of bank associated with ditch 704 (Phase 2) that would have been removed from between ditches 710 and 713 during the road construction.

The phasing for this feature, however, is not as clear as its interpretation. The backfilled quarry was cut by ditch 707 and pit 651 (Phase 4.2) and ditches 703 and 708 (Phase 4.3), which does not conflict with a Romano-British interpretation. However, it also appears that the gravel pit was respected by (or even respected) ditches 701 and 705 (Phase 4.2). If these relationships are not coincidental, then it would imply that the backfilled gravel pit survived as a visible feature for over 600 years if its Phase 3 interpretation is correct. It is possible that the resulting settling of the quarry backfill produced a hollow in the ground surface, resulting in a waterlogged area during wet weather, no longer visible at the time of excavation.

To the south and east of this feature were six shallow post-holes, 527, 117, 115, 219, 217 and 223, forming a curved line following its south-east edge. The only artefact recovered from any of these post-holes was a small piece of undiagnostic fired clay

from post-hole 217 immediately to the south of pit 702. The shallow nature of these post-holes made it difficult to define any relationships with other features, it is possible that they collectively represent part of a fence line marking the edge of the gravel pit.

In summary, although this feature is most likely to have Romano-British origins, the apparent relationship implied by the routes of later medieval ditches cannot be ignored. It is therefore also possible that this pit may belong to the late Saxon or medieval phases, representing gravel extraction in association with the adjacent structures 712 and 722 (see below).

Phase 4: Late Saxon/medieval - c. AD 900 to 1400

The main concentration of features identified as belonging to this phase was in the eastern half of the site, to the north and south of the disturbance resulting from the modern car park access road. These features consisted primarily of pits to the north, and a complex series of intercutting ditches, pits and post-holes to the south. Connecting the two areas, ditches 705 and 652 (Phase 4.2) are interpreted as parts of the same feature.

The results from the southern and northern areas will be presented separately under each phase.

Phase 4.1: 10th to 11th century AD (Fig. 8)

This phase represents the earliest post-Roman activity in the area, and is marked by the construction of a post-supported timber-framed building, with associated external refuse pits, and a major north - south aligned ditch which follows the line of the present route of Wessex Lane. The pits to the north corresponding to this phase generally appear to form a north - south line, adjacent to the eastern limit of the main excavation area.

Southern Area

The stratigraphically earliest feature identified as originating in the post-Roman period was 113, a major ditch aligned approximately north - south in the south-east corner of the excavation area. This was only partially exposed, but was at least 1.8 m wide and 1m deep, with a rectangular profiled slot at the base, and had been subsequently cut by at least two other ditches. The ditch alignment was roughly parallel to the present route of Wessex Lane, which is *c.* 10 m to the east (Fig. 00).

To the west of this ditch was structure 712, a group of twelve post-holes covering an approximately rectangular area *c.* 13 m east - west by 7 - 8 m north - south. The majority of these post-holes appear to indicate the line of the north and east walls, with a single post-hole marking the opposing south-west corner. These post-holes did not have a direct stratigraphic relationship with any other feature, and the only datable evidence recovered was a single sherd of 10th to 11th century pottery. An undated shallow irregular pit at the perimeter of this rectangular structure may be contemporaneous.

Several other pits in the vicinity of structure 712 have been assigned to this phase on the basis of datable finds; including pits 3 and 236 to the south; pit 620 to the west; and pits 283 and 285 to the north of the structure. Pits 3 and 236 were both circular in plan, *c.* 2 m in diameter and 0.6m deep, with moderate sloping sides and slightly rounded bases. Pit 620 was *c.* 3.75 m in diameter and 1.4m deep, with convex sloping sides and a flat base. Pits 283 and 285 were both subrectangular in plan, *c.* 1.2 m long, 0.7 m wide and 0.6 m deep, with vertical sides and flat bases.

Northern Area (Fig. 9)

The principal group of features are pits 440, 449, 457, 469, 330 and 476, aligned approximately north - south across the entrance of the eastern extension to the

excavation area. All produced 10th to 11th century pottery from securely stratified primary and secondary fills.

Pit 440 was subrectangular in plan, *c.* 1.4 m long, 1 m wide and 1.2 m deep, with a slight 'bell'-shaped profile and a rounded base. Pit 449 was square, *c.* 1.1 m long and wide, and 1.2 m deep, with an irregularly tapering profile and a rounded base. Pit 469, subrectangular, *c.* 1.7 m long, 1.4 m wide and 1 m deep, had vertical sides and a slightly rounded base with a deeper central section. The north-east side of this pit had been cut by pit 457, which was 'pear'-shaped in plan, *c.* 1.7 m long, 1.2 m wide and 0.8 m deep, with steep sides. The base of this feature was very uneven, possibly as a result of cutting through the earlier pit fills on its south-west side. Pit 330 to the south was subcircular in plan, *c.* 0.9 m long, 0.8 m wide and 0.3 m deep, with steep sides and a flat base. The southernmost pit in this group was 476, subcircular, *c.* 1.3 m long, 0.9 m wide and 0.85 m deep, with slightly convex sides and a rounded base. Layers 480 and 481 within this pit form an almost vertical band of brown clayey loam soil around the upper edge of this feature. This appears to indicate that at some time after the deposition of primary fill 478 a lining, probably of timber, had been inserted into this feature which either rotted *in-situ* or was removed following the deposition of upper fill 477

From the results outlined above, it can be proposed that two episodes of activity within the 10th/11th century are represented by the two separate groups of features: that is pits 440, 449 and 469, post-dated by pits 457, 330 and 476. This interpretation is supported by the apparent shift in pit design from subrectangular to subcircular in plan, the stratigraphic relationship between pits 469 and 457, and the presence of a few sherds of later 11th to 13th century pottery in the upper fills of the subcircular pits 457, 330 and 476.

Three other pits within the northern group have been identified as belonging to this phase, incorporating pits 61 and 664 on the same alignment as the main group to the north, and pit 51 further to the west. Pit 61 was circular in plan, *c.* 1.5 m in diameter and 1.2 m deep, with near vertical sides and a slightly rounded base, *c.* 8m to the south of pit 476. Fragmented parts of a Mayen lava quern were recovered from secondary fill 65, recognised as a mid - late Saxon find from excavations in the area of Saxon Hamwic (Morton 1992, 90). Pit 664 was *c.* 11 m further to the south, and had been cut by both ditch 652 (Phase 4.2) and pit 657 (Phase 4.3). The surviving portion of this pit was rectangular in plan, *c.* 1 m long, 0.8 m wide and 0.8 m deep, with steep sides and a flat base. Pit 51 lay within a cluster of features to the west of the principle north - south line of pits. This circular pit was *c.* 1 m in diameter and 0.45 m deep, with steep sides and a slightly rounded base. This pit was provisionally identified during the evaluation as pit/ditch terminal 6 (Tr. 4), and re-excavated during the excavation to confirm its interpretation. No datable finds were recovered, but a re-examination of the pottery sherds from the primary fill during the evaluation identified them as 10th to 11th century.

Phase 4.2: 11th to 13th century AD (Fig. 10)

This phase sees a continuation in the settlement pattern, with the earlier post-hole structure replaced by a building supported on sill beams, and the excavation of additional external pits. The surrounding land appears to be subdivided, with field boundary ditches evident, including a major ditch aligned approximately north - south, to the east of the aforementioned building. Pit digging activity to the north appears to tail off during this period, with only two pits confirmed as dating to this phase.

Southern Area

The principal feature was ditch 705, orientated on a north-north-west - south-south-east line. This continued to the south beyond the limit of the excavation, whilst to

the north it is identified as ditch 652 beyond the car park disturbance (see below). The ditch had a 'V'-shaped profile and was generally 1.1 m wide and 0.4 m deep, though it widened to *c.* 2 m width and 0.6 m depth to the south of its intersection with ditch 701.

Contemporary with ditch 705 were features 701 and 707, both intersecting with the eastern side of ditch 705. Feature 701 was a shallow east - west aligned gully, *c.* 0.4 m wide and 0.15 m deep that followed the south edge of pit 702 (Phase 3, above). The gully was generally linear, with a slight curve to the north immediately before its intersection with ditch 705. No finds were recovered from this feature, it is assigned to this phase as it was cut by ditch 721 (Phase 4.3) and cut across ditch 113 (Phase 4.1).

Parallel to gully 701 was ditch 707, 9 m to its north and terminating *c.* 7 m from its intersection with ditch 705. This ditch was *c.* 0.65 m wide and 0.2 m deep, with a shallow rounded profile, the terminal being slightly bulbous in plan compared to the main body of the ditch.

To the west of ditch 705, evidence indicates the apparent replacement of structure 712, with structure 722, supported on sill beams. Four short linear features were identified, forming the west, north and east wall lines, and enclosing an overall area *c.* 12 m east - west by 6.5 m north - south. The north wall line consisted of two beam slots, covering a total distance of *c.* 9 m, and ranging between 0.27 m and 0.45 m wide and 0.10 m to 0.19 m deep, with steep-sided profiles. The west wall line consisted of a single slot, 4.5 m long, *c.* 0.4 m wide and 0.22m deep, again with a steep-sided profile and evidence for a terminal post at its north end. The east wall line appears to consist of gully 41, a shallow indistinct feature *c.* 7 m long, up to 0.70 m wide and 0.05 m deep with a shallow rounded profile. In addition, a 2 m length of north - south aligned beam slot was recorded running into the interior of the structure,

slightly to the west of centre of the contemporary north wall line. It may possibly indicate an internal division.

The only datable evidence recovered from this structure was a single sherd of 11th to 13th century pottery. Stratigraphically, this structure was cut by ditch 703 (Phase 4.3, below), and cut across ditch 710 (Phase 3, above).

The remaining features in the southern area assigned to this phase on the basis of pottery evidence were pits, incorporating 651 to the east of ditch 705, and 517 and 533 to the west. Pit 651 was circular in plan, *c.* 1.1 m in diameter and 1.3 m deep with vertical sides and a rounded base. Pit 517 was elongated in plan, *c.* 2.3 m long, 0.6 m wide, and 0.6 m deep, with moderate sloping sides and a slightly rounded base. Pit 533 was elongated in plan, *c.* 2.4 m long, 1.7 m wide, and 0.7 m deep, with moderate concave sides and a slightly rounded base.

Northern Area (Fig. 12)

Only two pits, 299 and 638, have been securely dated to this phase on the basis of pottery recovered, as well as ditch 652, which is interpreted as the northern continuation of ditch 705. Pit 299, immediately to the south of pit 61 (Phase 4.1, above), was a shallow rectangular feature *c.* 2.2 m long, 1 m wide and 0.25 m deep, with steep even sides and a flat base. Only one fill was recognised within the pit, producing substantial quantities of 11th to 13th century pottery. Pit 638 was within the cluster of features to the west of the main north - south line of pits. This feature was recorded as pit 7 (Tr. 4) during the evaluation. It was subrectangular in plan, *c.* 1.5 m long, 1.2 m wide and 0.9 m deep, with steep even sides and a fairly flat base. This pit is placed in this phase on the basis of large quantities of 11th to 13th century pottery recovered during the evaluation, the full excavation only producing pottery attributable to the 10th to 11th centuries (Phase 4.1).

Ditch 652 was aligned approximately south-west - north-east, and had cut the upper fill of pit 664 (Phase 4.1, above). It was *c.* 0.5 m wide and 0.1 m deep, with moderate sides and a flat base, and continued to the north-east beyond the limit of the excavation. To the south-west it appeared to turn to the south immediately before disappearing beneath the modern car park disturbance. This turn corresponded in alignment with the north end of ditch 705 *c.* 7 m to the south, and thus the two features are considered to be the same.

Phase 4.3: 12th to 14th century AD (Fig. 11)

This phase marks a break in the evidence for settlement continuity at the southern end of the excavation area, with the apparent abandonment of the domestic site, to be replaced by a series of enclosures, possibly indicating that the area was 'greenfield'. The main centre of domestic activity appears to be associated with the pit group to the north, with at least six pits dated to this phase, within the southern boundary of what appears to be a double-ditched enclosure.

Southern Area

Ditch 703 was an 'L'-shaped feature, consisting of a 29 m long approximately north - south aligned section, turning east at its southern end to continue for a further 16 m. The ditch had a 'V'-shaped profile, and was generally *c.* 1 m wide and 0.45 m deep, with rounded terminals. Stratigraphically, this ditch cut across numerous features, including structure 722 (Phase 4.2), ditch 710 and pit 702 (Phase 3) and layer 427, which sealed pit 423 (Phase 2), and was contemporary with ditch 225 (below).

Ditch 711 was a similar section of 'L'-shaped ditch, the main north - south aligned arm of which was situated 3 m to the west of ditch 703. The north - south aligned section was *c.* 16 m long, turning east at its southern end for a further 2 m. The ditch had a 'V'-shaped profile, and was generally 1 m wide and 0.45 m deep, with rounded terminals. The east terminal was situated *c.* 1 m from the west edge of ditch 703,

possibly indicating the location of an upcast bank associated with ditch 703. The only datable evidence recovered from this ditch was residual fragments of Romano-British brick or tile; it is therefore placed within this phase as a result of its apparent relationship with ditch 703 to the east. Stratigraphically, this ditch cut through the west side of pit 423 (Phase 2).

Ditch 714, to the north of ditches 703 and 711, was an east - west aligned feature, *c.* 9 m long, 0.7 m wide and 0.35 m deep, with a 'V'-shaped profile. The western terminal for this feature corresponded to the northern terminal for ditch 711, 2 m to the south. An eastern terminal could not be identified, as the ditch appeared to be contemporary with ditch 705 from the previous phase. A possible interpretation is that the eastern terminal for ditch 714 cut through the backfill of Phase 4.2 ditch 705, a relationship not identifiable during excavation. Alternatively, this may indicate that part of ditch 705 (Phase 4.2), to the south of its intersection with ditch 714, remained in use during this phase. It is therefore possible that the entire section of ditch 705, including ditch 707, from ditch 714 to ditch 703 could have remained in use into this phase.

Ditch 708, to the east of ditch 703, was a south-east - north-west aligned feature, *c.* 23 m long, 0.8 m wide and 0.2 m deep, with a shallow rounded profile. This originated on the east side of pit 702 (Phase 3), followed the north-east side of this pit and cut across ditch 710 (Phase 3) to continue to a terminal within 4m of the south edge of ditch 715 (below). Ditch 225 originated at a point *c.* 4.5 m from the south end of ditch 708, and cut across pit 702 (phase 3) in a south-south-westerly direction. As noted above, this feature was contemporary with ditch 703, with which it intersected, and cut across ditch 701 (Phase 4.2). It terminated immediately on the south side of the gravel quarry, *c.* 4.5 m after its intersection with ditch 703.

Ditch 721 was aligned approximately north - south, cutting across the south-east corner of the excavation and continuing beyond the excavation limits in both directions. This feature was *c.* 0.6 m wide and 0.35 m deep, with a steep 'U'-shaped profile. Stratigraphically, this ditch cut across both ditch 113 (Phase 4.1) and ditch 701 (Phase 4.2).

To the north of, and parallel to, ditch 714 was a pair of east - west aligned parallel ditches, *c.* 0.8 m apart. The southern ditch, 715, had a 'V'-shaped profile, and was *c.* 0.6 m wide and 0.25 m deep. Ditch 716 to the north was *c.* 0.7 m wide and 0.15 m deep, with a shallow rounded profile. Both ditches continued beyond the limit of the excavation to the east, whilst turning towards the north at their western ends just before the edge of the modern car park disturbance. At this western end a short length of ditch connected the two features. The gap between these two ditches increased to 2.5 m for the short length of north - south aligned section exposed.

To the west of ditch 711, pit 272 has been dated to this phase following the recovery of a comparatively large quantity of 12th to 14th century pottery, representing over 65% of the total amount of 12th to 14th century pottery found in the southern area. This circular feature was *c.* 0.4 m in diameter and 0.3 m deep, with steep sides and a slightly rounded base. Pit 412, to the south of ditch 703, has also been placed in this phase on stratigraphic grounds, as it cut through the backfill of ditch 705 (Phase 4.2).

Northern Area (Fig. 12)

Six pits can be subdivided into two groups of three, one forming part of the general north - south line of pits in the area, the other group to the west of this line. The north - south line of pits included 56, 290 and 657, whilst the western group included 43, 297 and 185.

Pit 56 was circular in plan, *c.* 1.5 m in diameter and 0.7 m deep, with steep sloping sides and a fairly flat base. Pottery recovered from this feature included Romano-British material, almost certainly originating from ditch 713 (Phase 3) through which this pit had been cut. Pit 290 to the south was subrectangular, *c.* 1.4 m long and 0.9 m wide, tapering slightly to 0.6 m wide at each end, and 0.45 m deep, with slightly concave sides and a rounded base. Pit 657 was rectangular in plan, *c.* 1.2 m long, 0.9 m wide and 0.9 m deep, with a flat base. The east, south and west sides of this pit were vertical, whilst the north side, which had cut pit 664 (Phase 4.1), sloped out at an angle of *c.* 30°. The upper fill of this pit produced a piece of intricately carved bone (Crockett, below).

Pit 43 was subrectangular in plan, *c.* 1.8 m long, 1.3 m wide and 0.9 m wide, with slightly convex sides and a rounded base. Whilst 12th to 14th century material was recovered from securely stratified fills, including the primary fill, a large quantity of 10th to 11th century pottery was recovered from its upper fill. This implies that the pit had been backfilled with rubbish originating in the earlier phase. Pit 297 to the south-east was *c.* 1 m in diameter and 0.5 m deep, with moderately sloping sides and a slightly rounded base. Pit 185 was subrectangular, *c.* 1.7 m long, 1.4 m wide and 1 m deep, with slightly concave sides and a fairly flat base.

To the north of these pits was ditch 723. This was 'V'-shaped in profile, *c.* 1.3 m wide and 0.5 m deep, and aligned roughly south-west - north-east. This feature continued beyond the limit of the excavation to the east, but could not be traced any further to the west. Although the only find recovered was a very small abraded sherd of possible 10th to 11th century pottery, it is possible that the western end of this ditch turns to the south to correspond to either ditch 715 or 716 (above), forming part of an enclosure associated with the northern pit group.

Phase 5: Post-medieval/modern (Fig. 13)

Other than the disturbance resulting from the construction of the former car park, features positively identified as either post-medieval or modern were recorded in the western side of the excavation. Many features examined in this area were seen on excavation to be alluvium-filled natural hollows and linear depressions, but two were provisionally identified as ditches. Ditch 172 was aligned approximately south-east - north-west, with ditch 668 cutting across its northern end, at a right-angle. The extremely vacuous nature of the fill of ditch 172, producing several pieces of post-medieval brick or tile and roofing slate, identified this feature as a modern service or land drain. As such this was not fully excavated. Ditch 668 produced no datable finds, but was recorded cutting across part of the modern disturbance associated with the car park to the north.

In addition, two discrete spreads of animal bones were recorded to the north of ditch 668, of which the larger, 622, contained predominantly calf bones. This has been provisionally interpreted as a relatively recent burial (ie. within the last 100 years), and the smaller spread, 623, has therefore been considered as contemporaneous.

Phase 6: Unphased (Fig. 13)

The following features recorded during the course of the evaluation and excavation contained neither datable artefacts, nor could be accurately phased on typological, spatial or stratigraphic grounds. Provisional phases are noted in parentheses where appropriate.

SOU486

Post-holes 2 and 3: A pair of shallow post-holes in Tr. 3 (see Fig. 2; accurate dimensions not recorded, section drawing implies that post-hole 3 is *c.* 0.35 m in diameter and 0.15 m deep) to the north-east of pit 620. These features were not re-located during the excavation. Post-hole 3 contained burnt human bone and charcoal (see McKinley, below).

Post-hole 8: A shallow elliptical post-hole, 0.18 m long, 0.1 m wide and 0.05 m deep in Tr. 4. This feature was not re-located during the excavation.

SOU503

Gully 119: A shallow gully *c.* 5 m long, 0.6 m wide and 0.1 m deep cutting across the intersection of ditches 704 and 710. (Post-Phase 3)

Post-hole 127: A shallow elliptical post-hole, *c.* 0.25 m long, 0.2 m wide and 0.2 m deep, with a stepped base. This cut the north edge of ditch 704 and was situated adjacent to the east end of gully 119. (Post-Phase 2)

Ditch 174: A shallow meandering linear feature, *c.* 0.7 m wide and 0.18 m deep, and aligned roughly north - south which cuts across ditch 704. (Post-Phase 2)

Hollow 179: A shallow scoop on the east edge of the excavation area, at least 1.5 m long, 1.4 m wide and 0.1 m deep. The base of this feature was lined with a layer of rounded pebbles, in the form of cobbling.

Post-hole 251: A shallow circular post-hole, *c.* 0.6 m in diameter and 0.05 m deep, to the north-east of ditch 709.

Layer 291: A 0.1 m diameter circular spread of charcoal, too shallow to interpret as a feature fill, to the east of pit 517.

Pit 307: A shallow circular pit, *c.* 1.6 m in diameter and 0.2 m deep, immediately to the east of ditch 705.

Pit 319: A subrectangular pit adjacent to the southern limit of the excavation, *c.* 1.5 m long, 1.2 m wide and 0.4 m deep, and with a loose backfill. (Phase 5?)

Pit 325: A small circular pit, *c.* 0.9 m in diameter and 0.25 m deep, to the west of palaeo-channel 717. This contained worked flint, burnt flint and charcoal.

Ditch 327: A north-north-west - south-south-east aligned feature on the west side of the excavation area, terminating to the north. The exposed length was *c.* 20 m long, 1 m wide and 0.3 m deep, and identified as ditch 5 during the evaluation.

Post-hole 504: A shallow circular feature, *c.* 0.4 m in diameter and 0.17 m deep, to the north of the timber structures 712/722.

Post-hole 506: A shallow circular feature, *c.* 0.4 m in diameter and 0.17 m deep, to the north-east of post-hole 504 and cut by later ditch 703. (Pre-Phase 4.3)

Pit 515: A subcircular feature, *c.* 1.4 m long, 1 m wide and 0.5 m deep, to the east of post-holes 504 and 505.

Pit 520: A shallow elongated feature to the west of pit 517, *c.* 0.7 m long, 0.3 m wide and 0.06 m deep, and containing profuse quantities of charcoal.

Pit 635: A slightly conical pit, 0.9 m in diameter and 0.3 m deep, with a circular flat base, *c.* 0.3 m in diameter. This was cut by later ditch 716. (Pre-Phase 4.3)

Ditch 709: A shallow ditch aligned south-west - north-east, to the north of ditch 241. This was *c.* 0.6 m wide and 0.2 m deep with a visible length of *c.* 6 m, cut at its north-eastern limit by ditch 708, and terminating at its south-western limit. The upper fill contained a piece of worked flint. (Pre-Phase 4.3)

Ditch 718: A north - south aligned ditch, 0.55 m wide and 0.19 m deep, which cuts across ditch 704, but could not be traced beyond palaeo-channel 717. (Post-Phase 2)

The Watching Brief

Continuous archaeological monitoring of any groundwork beyond the limit of the earlier excavation was maintained during construction of the new Montefiore Halls of Residence. This primarily concerned the excavation of utility (water, electricity etc.) pipe trenches connecting with existing services beneath Wessex Lane. In addition, the excavation of all foundation trenches within the area previously designated as modern car park disturbance was also monitored. This aimed to record any substantial archaeological features that may have survived beneath the aforementioned disturbance. As with the evaluation and excavation, the results are presented by phase.

Phase 1: Pleistocene (Fig. 4)

Palaeo-channel 801 was recorded within the area of the modern car park disturbance. The exposed section was at least 15 m long, *c.* 2.7 m wide and 1 m deep, with steep

convex sides and a broad concave base. This was aligned approximately north-west - south-east on the northern edge of the modern car park disturbance. There were no archaeological components within the four layers filling this feature. Although of differing alignments, it is possible that this feature and palaeo-channel 717 (Phase 1), recorded during the excavation, represent separate parts of the same feature.

Phase 3: Romano-British (Fig. 7)

Ditch 806, a south-west - north-east aligned feature, was recorded during the excavation of a pipe trench from Wessex Lane northwards towards the western limit of the excavation area. The ditch was *c.* 5 m wide and at least 0.8 m deep, although its full depth was not revealed, with moderate concave sides. Although no datable finds were recovered, it was positioned on exactly the same alignment as ditch 713 (Phase 3), recorded *c.* 90 m to the north-east during the excavation. On this basis it is probable that the two ditches are the same.

FINDS

The finds from the evaluation and excavation have been examined as a single collection. All of the material is presented by context and feature in Table 2 (Mf. 00-00).

Metalwork (Fig. 14)

by A Crockett

A total of 20 metal objects was recovered: one of copper alloy and 19 of iron. All of these items were x-radiographed, with a selection then sent for conservation. The conservation work was carried out by Anne Wright of the Conservation Consortium, Salisbury and South Wiltshire Museum Laboratory. Detailed descriptions and measurements of each object are available in archive; the objects are discussed here by broad functional classes.

Personal items (Fig. 14, 1 and 4)

These comprise a pair of copper alloy tweezers and an iron buckle recovered from phase 4 pits, both in the northern area. The tweezers (Fig. 14, 1) bear an incised marginal groove running parallel to each edge and over the loop. Many tweezers in this style have been found in both Romano-British (Crummy 1983, 58-62; Holbrook and Bidwell 1991, 244-5) and Saxon/medieval contexts (Crummy 1988, 26; Goodall 1990a, 431-2; Oakley 1979, 254-5), and although no examples of tweezers have been published from excavations within Southampton for either period, seven are known to exist from excavations within *Hamwic*. The closest parallel in terms of form and decoration was dated as Romano-British (Crummy 1983, 59, fig. 63, 1883), but the provenance of the Montefiore tweezers suggests it is probably a late Saxon/early medieval object.

The buckle (Fig. 14, 4) has a 'D'-shaped frame with a flattened dome section decorated with transverse incised lines, a rounded pin, and an attached buckle plate formed from a single sheet of metal, with a single rivet to attach the buckle to a leather strap end. A space was left between the end of the strap and the pin bar, in which survived a belt loop to retain the loose end of the strap once it had passed through the buckle. This is very unusual, but a similar item was recovered from excavations in Northampton (Goodall 1979, 273, fig. 121, 121) and was provisionally phased as late Saxon on the basis of its similarity in decoration style to a securely dated prick spur of late Saxon type. This item is not a standard belt fitting, and may be associated with riding equipment. In addition, a second fragment of buckle plate (Cat. no. 00; Mf. 00) was recovered from ditch 705 (Phase 4.2).

Tools (Fig. 14, 2, 3, 5 and 6)

Two knives were recovered. One is an angled-back knife (Fig. 14, 2) with a whittle tang central to the blade, recovered from a phase 4.3 pit in the northern area. No evidence for rivets could be discerned from the x-radiograph. This item is closely paralleled with knives from a variety of excavations including a late 12th century example from London (Cowgill *et al.* 1987, 80, fig. 54, 6), an 11th/12th century knife from Northampton (Goodall 1979, 268, fig. 118, 36), and an early 11th century example from Winchester (Goodall 1990b, item 2653, 841). The other knife (Fig. 14, 3) also had a whittle tang approximately central to this blade, recovered from a phase 4.2 ditch in the southern area. The concave curve of the cutting edge adjacent to the tang appears to indicate that this knife has been sharpened several times during use. A possible rivet hole is evident at the end of the tang closest to the blade. This knife is similar to a late 12th century example from London (Cowgill *et al.* 1987, 78, fig. 54, 3).

A key (Fig. 14, 5), found in pit 469 (phase 4.1), is of type IA (London Museum 1940, 134, fig. 42, IA), a pre-Conquest form, with an elongated bow and four decorative

grooves around the shaft. The bit is 'L'-shaped, and had two teeth which have since broken off. A silver-coloured, non-ferrous plating is evident within the decorative grooves, which may have originally covered the entire object. This item is closely paralleled with single examples found at both Northampton (Goodall 1979, 268, fig. 116, 9), where it was assigned a general date range from the 10th to 13th century, and Faccombe Netherton, Hampshire (Goodall 1990a, 415, fig. 9-7, 382), a residual find and dated by form to the 11th century at the latest.

A tapering object (Fig. 14, 6) from pit 297 (phase 4.3) has a rectangular cross-section, and is broken across both the eye and the point. This is similar to a mid Saxon loose ringed pin from North Elmham, Norfolk (Goodall 1980, 516, fig. 267, 118), and an unidentified implement from Southampton (Harvey *et al.* 1975, 279, fig. 251, 2009) dated as mid to late 13th century.

Transportation

Items associated with transport include three fragments of horseshoes, one from each of the phases 4.1 (Cat. no. 9), 4.2 (Cat. no. 10) and 4.3 (Cat. no. 8), and a single unused fiddle-key horseshoe nail (Cat. no.17) from a phase 4.3 pit. Fiddle-key horseshoe nails, although occasionally found in pre-Conquest contexts, are generally considered to be 11th to 14th century (Clark 1986, 2). The recovery of only one nail, either used or unused, is surprising.

Miscellaneous

Other objects include one small piece of riveted iron plate (Cat. no. 18) and one wedge-shaped piece of unidentifiable iron (Cat. no. 19) from phase 4.1 contexts, four undiagnostic lengths of rod (Cat. nos. 12-15) from both 4.2 and 4.3 phases, a square headed stud or nail (Cat. no. 11) and a possible piece of a small strap-hinge (Cat. no. 20) from phase 4.3 contexts. The possible strap-hinge was a flat piece of slightly curved plate, with a possible longitudinal split at one end. Examples of this style

were found at Goltho, Northamptonshire (Goodall 1975, 86, fig. 40, 75) in an unstratified context, and Wareham, Dorset (Hinton and Hodges 1977, 74, fig. 20, 4) from a 12th or 13th century pit. A modern nail (Cat. no. 16) recovered *in situ* from a phase 4.2 pit in the northern area almost certainly originates from the evaluation, when the pit was half excavated.

List of Illustrated Metalwork (Fig. 14)

1. Tweezers, copper alloy; item 4004, context 441, pit 440, phase 4.1.
2. Knife, iron; item 4011, context 296, pit 297, phase 4.3.
3. Knife, iron; item 4013, context 637, pit 636, phase 4.2
4. Buckle, iron; item 4015, context 642, pit 657, phase 4.3
5. Key, iron; item 4007, context 464, pit 469, phase 4.1
6. Object, iron; item 4010, context 296, pit 297, phase 4.3

Glass

by D A Allen

Three fragments of glass (6 g) were recovered. Of these, one piece is thought to be a fragment of Romano-British vessel glass, recovered from layer 237 (phase 5). The other two are post-medieval, from pit 51 (phase 4.3) and modern tree disturbance 550 (phase 5).

Prehistoric pottery (Fig. 15, 3, 4)

by R M J Cleal

Fabric catalogue

Fl/Pet Hard fabric with a hackly fracture, containing moderate, angular, ill-sorted flint (10-15%, <10mm, most <3mm); sparse quartz sand (<5%, <0.5mm); and sparse dark grains which are likely to be iron oxides, or glauconite, or both (<3%, <0.5mm, most 0.25 -0.5mm). (19 sherds/55 g)

F2 Soft fabric, containing moderate angular, ill-sorted flint (10-15%, <5mm), and common, well-sorted sub-rounded quartz sand (20-25%, 0.5-1.0mm). Differs from F3 in that it appears well-oxidised (and is iron-rich). (1 sherd/2 g)

F3 Soft fabric, containing sparse to moderate, well-sorted angular flint (*c.* 10%, <3mm) and common to very common well-sorted sub-angular quartz sand (20-30%, <0.5mm). The sherds are covered with a post-depositional deposit (including ?iron pan), and the surfaces partially obscured). (2 sherds/31 g)

G1 Hard fabric with a hackly fracture, containing sparse to moderate, well-sorted, sub-angular grog (<10%, <4mm); sparse, well-sorted, angular flint (<5%, <2mm, most <1mm); sparse, well-sorted, quartz sand (<0.25mm); rare mica (less than 0.25mm), and rare black grains (<1mm) which may be iron oxides, or glauconite, or both. (4 sherds/41 g)

I1/GW Hard fabric with a hackly fracture, containing rare to sparse, ill-sorted, rounded iron oxides (large, soft reddish inclusions which react positively to a magnet) (<3%, <5mm, most <1mm); sparse well-sorted, rounded quartz sand (<0.5mm), and rare well-sorted sub-angular quartz grains (<1%, <1.5mm). It is likely that there is some grog in this fabric, but it is impossible to certainly distinguish it from the matrix at x 20 magnification. (1 sherd/15 g)

Twenty-seven sherds (144 g), recovered from six features, may be classified as prehistoric (Table 3; Mf. 00). Only five vessels are represented, two of which are middle to later Neolithic; the remainder probably date to the Bronze Age. In view of the limited nature of the collection, these vessels are discussed individually below.

Peterborough Ware

Nineteen sherds (55 g) appear to belong to a single Peterborough Ware vessel, of either the Mortlake or Ebbsfleet sub-style. The sherds are in a flint-tempered fabric

(F1/Pet). The decoration is worn, but appears to be of bird-bone impressions, with perhaps also some paired fingernail impressions (Fig. 15, 3). Part of a pronounced shoulder angle appears to be represented, but the vessel is not reconstructable.

Grooved Ware

A single sherd represents a Grooved Ware vessel decorated in typical Durrington Walls sub-style (Wainwright and Longworth 1971 240-242) in a slightly unusual fabric (I1/GW). The sherd carries two cordons, which are almost certainly vertical, and incised lines filling in the panels between (Fig. 15, 4).

Four grog-tempered sherds (fabric G1; two conjoining base-angles and two body sherds/fragments) may be early Bronze Age. Grog-tempered fabrics are common in this period, and the thickness of the basal sherds suggests that they could be derived from a large vessel such as a Collared Urn; alternatively, the sherds may belong to a coarse, thick-walled Beaker. A second vessel is probably represented by the thin-walled body sherds.

Three body sherds in fabrics containing flint (F2 and F3) are not diagnostic, but hard, flint-tempered fabrics are a feature of the later Bronze Age, and these sherds would not appear unusual in an assemblage of that date. A minimum of two vessels is represented.

Discussion

Peterborough Ware is an occasional find in isolated features, as well as occurring in association with monuments. It is particularly unfortunate in this case that charcoal from the context (excavated during the evaluation) was not retained for radiocarbon dating, as the currency of Peterborough Ware is not as yet firmly established. The Ebbsfleet Ware sub-style was certainly current towards the end of the earlier Neolithic, as it occurs in the lower and middle silts of causewayed enclosure ditches,

and the inception of Mortlake Ware may not be much later. The upper end of the time-range is even less well determined. There is very little of either ceramic style from Hampshire, in sharp contrast to the coastal area to the west, where there is a marked concentration of Neolithic material in the Bournemouth area (Gardiner 1987).

Grooved Ware also occurs as occasional finds in pits and other features. This ceramic style is also poorly represented in Hampshire (Wainwright and Longworth 1971, 276-277), in contrast, again, to the Bournemouth area.

Romano-British and post-Roman Pottery

by L N Mepham

The total amount recovered consists of 769 sherds (11,504 g). The pottery derives largely from excavated features and also from a small number of unstratified contexts. The intercutting of various features, and the excavation of multiple fills within a small number of features, have provided limited opportunities for the creation of a ceramic sequence; there is no well stratified stratigraphical sequence. The bulk of the assemblage is of late Saxon or medieval date (Tables 6-7; Mf. 00-00); there is also a small quantity of Romano-British (Tables 4-5; Mf. 00) and post-medieval material.

The pottery was recorded by fabric type for each context. Details of surface treatment, decoration, manufacture, residues, rim and base types were also recorded. Full details can be found in the archive. The pottery is discussed by chronological period below. Post-medieval pottery was excluded from this detailed analysis, and is treated only briefly here. Fabric totals and percentages by chronological period are given in Tables 4 and 6 (Mf. 00 and 00). In the fabric descriptions which follow, the following terms are used to indicate density of inclusions: rare (1-3%); sparse (3-10%); moderate (10-20%); common (20-30%).

Romano-British

Fabric catalogue

G100. Soft, fine fabric with a soapy feel: moderate grog/clay pellets <3mm; sparse iron oxides; rare mica. Handmade, unoxidised. (1 sherd/2 g--sieved sample only; Table 8, Mf. 00)

Q100. A general group which includes all sherds of coarse grey sandy wares. These almost certainly derive from more than one source. All wheelthrown. (36 sherds/885 g)

Q101. Moderately coarse oxidised sandy fabric, firing orange. Wheelthrown. (7 sherds/39 g)

Q102. Very fine, soft creamy-buff fabric with no visible inclusions. Wheelthrown. (14 sherds/10 g)

Q103. Moderately coarse oxidised sandy fabric: rare subangular flint <2mm; firing orange; traces of red colour coat on exterior surface. Wheelthrown. (19 sherds/496 g)

Q104. Moderately coarse oxidised sandy fabric, firing pale pink/buff. Wheelthrown. (2 sherds/25 g)

A total of 81 sherds (1631 g) was recovered, and eight fabric types identified. Three sherds are of well-known type: two of Black Burnished ware (BB1) from the Poole Harbour area, and one sherd from an amphora of Spanish Dressel 20. The six remaining fabric types are of unknown source.

Apart from fabric Q100, each fabric type is represented by sherds from a single vessel. Sherds in fabrics Q101, Q102 and Q104 are likely to derive from flagons; sherds in fabric Q103 form part of a large jar with multiple body cordons.

Very little of this material is closely datable within the Romano-British period. One cordoned jar in fabric Q100 can be dated to the late 1st/early 2nd century AD, but otherwise a broad date range of 2nd to 4th centuries is suggested.

Late Saxon/medieval (Fig. 16)

Fifteen fabric types were identified. These have been compared with the Southampton fabric series, and corresponding Southampton types are given in brackets, with the exception of fabrics known to be non-local. Full details of the

correlation between these fabric types and the Southampton series can be found in archive.

On the basis of parallels with fabrics and vessel forms found in other assemblages from Southampton, both from Saxon *Hamwic* and the medieval town, this late Saxon/medieval material has been subdivided into three groups. It should be stressed, however, that these groupings can be only partially confirmed from the stratigraphic evidence.

10th to 11th century

Fabric catalogue

F401. Soft, fine, slightly powdery clay matrix containing sparse to moderate, poorly-sorted, subrounded to subangular flint <3mm; rare quartz grains <0.5mm; rare mica. Irregularly fired: unoxidised with patchy oxidisation on surfaces. Handmade. (Southampton Fabric 1000: Early Medieval Flint-tempered Gritty Ware). (345 sherds/3933 g)

Q405. Hard, sandy fabric with a slightly soapy feel, containing sparse, poorly-sorted quartz grains <1mm. Oxidised, pale-firing, with unoxidised surfaces. Wheelthrown. (Southampton Fabric 917: Late Saxon Northern French Blackware). (4 sherds/53 g)

Q406. Soft, moderately fine sandy fabric, containing common, well-sorted quartz grains <0.25mm; rare subangular to subrounded flint <2mm; rare mica. Unoxidised; handmade. (Southampton Fabric 900: Flint-tempered Sandy Ware). (18 sherds/344 g)

The earliest element within the late Saxon/medieval assemblage would appear to consist of a relatively homogeneous collection of flint-gritted and sandy sherds (fabrics F401, Q406). Both fabrics contain flint inclusions, although the density and size of the inclusions vary considerably. In all cases the flint is of a similar character: it is generally patinated, and subrounded to subangular, suggesting a derivation from a gravel-like deposit.

At Montefiore, these fabrics are found in a restricted range of vessel forms: cooking pots and open bowls, both with simple everted rims, and generally relatively thick-walled (Fig. 16, 1-3). The cooking pots are frequently heavily sooted on the exterior, particularly on the upper part of the vessel and inside the rim. One complete profile has been reconstructed, from a rounded vessel with a rounded base. The bowls are also likely to be round-based. Decoration is completely absent. The patchy surface colouring of these vessels would suggest only very basic firing facilities, in a bonfire or perhaps a clamp kiln.

Such flint-gritted wares have been identified in middle Saxon deposits at Hamwic, where they appear in small quantities at the very end of the sequence, in the 9th century (Timby 1988, fabric group VI). Cooking pots and bowls with simple everted rims are present amongst the latter material (*ibid*, fig. 8), but the vessels from Montefiore, with generally larger rim diameters (140-180 mm), appear to have more affinities with the slightly later material (10th to 11th century) from Southampton (Platt and Coleman-Smith 1975, fig. 135-6).

To this earliest group may be added the hard sandy fabric Q405, which has been identified as an imported blackware from northern France. Such wares are found in middle Saxon *Hamwic* (Hodges 1981, class 14), and into the late Saxon period; associated material from Montefiore would suggest a date for these sherds no earlier than the 10th century. No diagnostic vessel forms are present.

<u>11th to 13th century</u>

Fabric catalogue

C401. A moderately coarse fabric with a slightly soapy feel, containing moderate crushed chalk <1.5mm; rare iron oxides. Unoxidised with oxidised margins; handmade. (Southampton Fabric 901: Early Medieval Chalk-Tempered). (4 sherds/9 g)

C402. A hard, moderately coarse fabric with common voids <3mm, resulting from the leaching out of calcareous inclusions; rare subangular flint <2mm; sparse quartz grains <2mm; rare mica and iron oxides. Oxidised with unoxidised core; handmade. (Southampton Fabric 903: Early Medieval Vesiculated) (5 sherds/44 g)

F400. Hard, coarse fabric with moderate, poorly sorted flint, subangular to subrounded, <3mm; sparse poorly sorted quartz grains <1mm. Generally unoxidised with oxidised interior surfaces. Handmade; frequently scratchmarked. (Southampton Fabric 1007: Scratchmarked Gritty Ware) (208 sherds/3359 g)

F402. Hard, moderately fine fabric containing rare to sparse flint, subrounded to subangular, <2mm; rare quartz grains <1mm; rare iron oxides and mica. Irregularly fired; unoxidised with patchy oxidisation of surfaces. Handmade; sometimes scratchmarked. (Southampton Fabric 1008: Scratchmarked Sandy Ware) (28 sherds/575 g)

F403. Hard, coarse fabric with 'pimply' surfaces; containing moderate, poorly sorted flint, subrounded to subangular, <1.5mm; sparse, poorly-sorted quartz grains <1mm; rare mica. Unoxidised; handmade. (1 sherd/27 g)

Q407. Hard, moderately coarse sandy fabric, containing common, well-sorted quartz grains <0.25mm; rare subangular flint <2mm; sparse carbonaceous material <4mm. Oxidised with unoxidised core; handmade. (Southampton Fabric 1008: Scratchmarked Sandy Ware). (12 sherds/203 g)

Q408. Moderately coarse sandy fabric containing common, poorly-sorted quartz grains <0.5mm; rare subangular flint <1mm; rare iron oxides <1mm. Unoxidised, some patchy oxidisation on exterior surfaces. Handmade. (Southampton Fabric 1014: Early Medieval Coarseware). (11 sherds/28 g)

Other flint-gritted fabrics (F400, F402, F403) and sandy fabrics (Q407, Q408) appear to be slightly later in date. To these may be added the calcareous fabrics C401 and C402, although there are no diagnostic vessel forms present in these fabrics. Flint inclusions in this group of fabrics are unpatinated, indicating a different derivation to the patinated inclusions in fabrics F401 and Q406. Handmade cooking pots are

represented, together with one pedestal lamp (Fig. 16, 11). The cooking pots have simple or slightly thickened everted rims, with baggy or slightly rounded bodies (Fig. 16, 4-8). Few base sherds were noted, perhaps suggesting that rounded bases continued in use, although one or two rounded base angles were identified. Again, cooking pots are frequently sooted on the exterior, but in contrast with the vessels described above, this sooting occurs generally on the lower part of the vessel. Some rims are decorated with a finger-impressed 'pie-crust' effect (Fig. 16, 9), and exterior surfaces, particularly on sherds of fabric F400, are frequently scratchmarked (Fig. 16, 7, 9). Rim diameters are again slightly larger than the previous examples (190-280 mm).

Similar handmade vessels in comparable fabrics are found in Southampton from the 11th to the 13th centuries (Platt and Coleman-Smith 1975; Brown 1986); the earlier gravel-tempered fabrics were superceded by the scratchmarked wares around the time of the Conquest. Fabric F403 has not so far been paralleled in Southampton, but comparable wares have been found in the Poole Harbour area, for example at Wimborne (Mepham 1992, fabric Q400); it may be a coarser precursor of the Dorset quartz-tempered wares represented by fabric Q402 (see below).

12th to 14th century

Fabric catalogue

C400. A moderately coarse fabric containing moderate crushed chalk <2mm; rare quartz grains <0.5mm. Unoxidised. Handmade, possibly with wheel-finished rims. (Southampton Fabric 1549: Coarseware with Chalk). (10 sherds/490 g)

Q400. A hard, moderately coarse fabric containing common, well-sorted quartz grains <0.5mm; rare iron oxides. Unoxidised; wheelthrown. (2 sherds/72 g)

Q401. A moderately coarse fabric, containing common, well-sorted quartz grains <0.5mm; sparse iron oxides. Oxidised: pale-firing (pink/buff); handmade. (5 sherds/90 g)

Q402. A hard, moderately coarse sandy fabric, containing common, fairly well-sorted quartz <1mm; sparse iron oxides. Oxidised with unoxidised exterior surfaces; handmade, with wheel-finished rims. (28 sherds/200 g)

Q404. Hard sandy fabric with a slightly soapy feel, containing moderate, fairly well-sorted quartz grains <0.5mm; sparse, poorly-sorted subangular flint <1mm; rare iron oxides. Oxidised with unoxidised surfaces; wheelthrown. (Southampton Fabric 1091: Early Medieval Coarseware). (2 sherds/44 g)

Wheelthrown calcareous and sandy wares (C400, Q400, Q404) and other fine sandy fabrics (Q401, Q402) are likely to overlap with the second group, falling towards the end of that sequence. The number of diagnostic sherds is smaller, but cooking pots are represented in fabrics C400 (Fig. 16, 10) and Q402. Handmade vessels in fabric Q402 have wheel-finished rims. None of these fabrics are scratchmarked, and there is no other decoration. There are no glazed sherds.

Wheelthrown cooking pots are considered to appear from the 13th century in Southampton (Brown 1986, 86), being generally less gritty than the earlier scratchmarked types. The sandy fabric Q404, and the chalk-tempered fabric C400 are recognised Southampton types, but the other fabrics within this group appear to come from further afield. Fabrics Q401 and Q402 can be paralleled in south-east Dorset, around the Poole Harbour area, for example from Wareham and Purbeck; a source for the coarser sandy wares comparable to fabric Q402 is suggested in the latter area (Hinton and Hodges 1977, fabric C; Lancley and Mepham 1990, fabric Q402). Fabric Q400 may derive from a similar source.

Post-Medieval/modern

A single sherd (18g) of a fine sandy fabric, from the rim of an internally-glazed bowl, was recovered from an unstratified context. This sherd is comparable to early products of the kilns of the Verwood area (Algar *et al.* 1979).

An almost complete stoneware bottle of late 19th-20th century type (8 sherds; 417g) was recovered from ditch 435; this is likely to be intrusive in this context.

Distribution on site

The lack of a well-stratified ceramic sequence on the site has already been mentioned. Features frequently contain a mixture of pottery from two or more of the late Saxon and medieval chronological groupings described above. It has been possible, however, to propose a sequence of activity on the site, based on the ceramic evidence. Features containing only 10th-11th century pottery consist almost entirely of pits, and are widely distributed across the eastern half of the site. Features containing 11th-13th century pottery include both pits and ditches, and cover approximately the same area as the earlier features. With very few exceptions, features containing 12th-14th century pottery have a restricted distribution at the northern end of the site, within a double-ditched enclosure, the main exception being ditch 708 in the south-east part of the site.

Discussion

The pottery from Montefiore provides a good opportunity for the comparison of an assemblage from the hinterland of Southampton with the better-known material from the Saxon and medieval settlements to the south. This is the first such assemblage to be excavated from the outskirts of the city. The quantity of late Saxon/medieval material from this site, however, is quite small compared to the previously excavated material and therefore caution must be taken when critically assessing these different collections.

The most immediately apparent difference is the poverty of the assemblage from Montefiore, in terms of imported vessels. With the exception of the four sherds of northern French blackware, possibly all from a single vessel, there are none of the

continental imports which are known from Saxon *Hamwic* and the medieval town of Southampton. The limited range of fabric types, and the manufacturing techniques employed, suggest that in the late Saxon and early medieval period at least, none of the pottery is likely to have been introduced from any great distance, and the community was instead exploiting a range of local resources. The presence of a single north French import in the small assemblage, however, indicates that the occupants of this hinterland settlement appear to have had access to the late Saxon urban market.

Whether the lack of medieval imports on this site can be explained in terms of status is uncertain; in Exeter in the 13th and 14th centuries, for example, imports are present even on 'poor' sites, and it is suggested that the lack of imports on rural sites may be a result of the lack of networks for redistributing these wares rather than their cost (Allan 1984, 13). In Southampton itself both Saxon and medieval imports are restricted in distribution, and may have been confined to use by foreign traders themselves, living within a trading enclave (Hodges 1981, 93); it may be no coincidence, then, that the late Saxon import found at Montefiore belongs to the only class found commonly outside *Hamwic* itself (*ibid*, 91).

The almost exclusive concentration on local sources of pottery continues into the early medieval period, but in the later part of the sequence there is some evidence for increasing use of non-local pottery, as represented by the south Dorset types.

List of Illustrated Vessels (Fig. 16)

1. Round-based cooking pot; fabric F401, handmade; sooting on exterior; context 45, pit 43, phase 4.3.
2. Bowl; fabric F401, handmade; context 436, ditch 437, phase 4.2.
3. Cooking pot; fabric F401, handmade; context 300, pit 299, phase 4.2.

4. Baggy cooking pot with rounded base angle; fabric F402, handmade; sooting on exterior and inside rim; joining sherds from contexts 57/296, pits 56/297; phase 4.3.

5. Cooking pot; fabric F400, handmade; context 300, pit 299, phase 4.2.

6. Cooking pot; fabric F400, handmade; context 300, pit 299, phase 4.2.

7. Cooking pot; fabric F400, handmade, shallow scratchmarking below neck; sooting on exterior; contexts 649/650, pit 651, phase 4.3.

8. Cooking pot; fabric F400, handmade; context 518/519, pit 517, phase 4.2.

9. Cooking pot; fabric Q407, handmade, finger-impressed decoration on rim and scratchmarking below neck; context 101, ditch 103, phase 4.3.

10. Cooking pot with sagging base; fabric C400, wheelthrown; sooting on exterior; context 45, pit 43, phase 4.3.

11. Pedestal lamp; fabric F400, handmade; sooting inside bowl; context 650, pit 651, phase 4.3.

Worked Bone (Fig. 17. 1)

by A Crockett

A worked bone object with carved decoration was recovered the upper fill of pit 657 (item 4014, phase 4.3). The object, carved from a sheep long bone, probably tibia, (Hamilton-Dyer pers. comm.) is incomplete with a pre-depositional break at the widest end, the recovered piece comprising two joining pieces, with a post-depositional break at the tapered end. It measures 71 mm in length, with an elliptical profile, tapering from a maximum cross-sectional width of 12 mm by 6.5 mm at its widest end to a rounded point. The elliptical nature of the cross-section is maintained to the point. Both faces of the object have been decorated using incised lines in a variety of patterns. This decoration can be divided into two distinct styles.

Style A: This is represented by fine incised curved lines in a 'Ringerike-Winchester' style, filling a panel 26.5mm long, situated 25mm from the point. The panel is defined using a pair of

parallel incised lines, of which the line furthest from the point can be observed around the full circumference of the object. The decoration within this panel consists of bold sets of parallel lines, generally 1mm apart, that are probably the component parts of an interlacing animal or plant pattern. The remainder of the space within this panel is filled with shallow hatched lines, that are gently curved across the width of the object, generally with the convex side of the curve towards the point. This decorative style is only present on one face, assumed to therefore be the front.

Style B: This style is represented by deep crude lines incised towards the widest end of the object, and present on the front and rear faces. On the front these lines are generally 2-3mm apart, and form a section of diagonal cross-hatching. Cutting across this cross-hatching are two roughly parallel lines scored across the width of the object, 10mm apart. It would appear that the intention was for the nearest of these lines to the point to indicate the limit of the cross-hatching, but it has been overcut by the cross-hatching at least twice. The rear face decoration consists of diagonal hatched lines, as opposed to cross-hatching, roughly parallel and 1-3mm apart. This section of hatching has been cut by three parallel lines, 6 and 2.5mm apart, across the width of the object, none of which follow the line of either of the lines on the front face. Both the front and rear face decoration in this style has been formed using several cuts for each line, with a limited degree of success in following the course of the previous cut.

The marked difference in quality between Style A and B leads to the supposition that they were not carried out by the same hand, and may not be contemporaneous. If so, Style A presumably represents the original decoration, as it is unlikely that the craftsman responsible for this delicate work would bother using a piece that was already marred by the crude decoration represented by Style B. It is even possible that the pre-depositional break noted at the widest end is a direct result of the Style B decoration work, as the edge of the break is suspiciously parallel to the incised lines cutting across the width on each face.

The use to which this item may have been put is unclear, though it would seem to be too thick for a pin. The object is perhaps most likely to either be a weaving tool, such as a pin-beater, or an implement handle, such as for a spoon. Although many parallels can be found with weaving tools for this form (Brown 1990), none are known to exist that are decorated using Style A. The interpretation as a spoon handle is supported by its similarity in shape and decoration to spoon 1 found at Westgate, Winchester. The Winchester spoon was unstratified, but has been confidently attributed to a pit containing 10th and 11th century material (Collis and Kjølby-Biddle 1979, 375). The later cross-hatching on the Montefiore 'spoon' also bears close similarity to decoration identified on object 1925, from High Street C, Southampton. This object was a similar shape to the Montefiore item, but could only be identified as a tapering rod, dated to the early 13th century (Platt and Coleman-Smith 1975, 270).

Ceramic Building Materials

by R H Seager Smith

A total of 73 pieces (8213 g) of ceramic building material was recovered (Tables 2 and 9; Mf. 00 - 00 and 00, full details in archive). The material is predominantly of Romano-British date although post-medieval roof-tile and brick fragments are also present. None of the ceramic building material recovered was assigned to the medieval period.

The fabrics of the ceramic building materials were analysed according to the standard Wessex Archaeology guidelines (Morris 1992) prefixed with CBM (Ceramic Building Material). Nine fabric types were identified, the number and weight of fragments being recorded by fabric for each context. Where identifiable, form was also recorded by fabric for each context. No complete bricks or tiles were found and the only complete lengths/widths occurred amongst the post-medieval bricks. Based on

the dimensions of Romano-British bricks and tiles suggested by Brodribb (1987), a thickness greater than 35mm was used to separate brick from tile fragments. Based on form types, six fabrics (CBM 1 - 6) are of Romano-British date, two of post-medieval date (CBM 7 and 8) while the date of the remaining fabric remains uncertain.

Romano-British

Fabric catalogue

CBM 1: Hard, very poorly-wedged fabric with a characteristic stripey appearance; matrix contains sparse - moderate quartz sand (<0.5mm) and a range of much larger added tempers including red iron oxides, clay pellets/grog and crushed flint, up to 4mm across; generally oxidised; *tegula* and brick fragments.

CBM 2: Soft, dense fabric containing common quartz sand (<0.5mm), rare amounts of red and black iron oxides, soft white, non-calcareous particles (both <1mm) and very occassional crushed flint fragments (<5mm); well prepared; oxidised; *tegula*, *imbrex*, box flue and brick fragments.

CBM 3: Hard, buff, fine-grained, slightly sandy calcareous fabric; sparse quartz (<0.5mm) tending to occur in linear bands, moderate limestone fragments (<1mm) and rare iron oxides (<0.5mm); oxidised; *tegula*.

CBM 4: Hard, pale pinkish-beige fabric with sparse amounts of quartz and rare iron oxides (both <0.5mm) and rare grog/clay pellets up to 4mm across; all inclusions more dense on one surface; oxidised; brick.

CBM 5: Hard, slightly sandy fabric with rare - sparse elongated voids (<10mm), many preserving imprints of the original vegetable tempering material; matrix contains rare - sparse quartz (<0.5mm) and red and black iron oxides (<2mm); predominantly oxidised; brick.

CBM 6: Hard, lumpy frabric containing sparse - moderate grog/clay pellets up to 16mm across, sparse iron oxides (0.5 - 5mm) and sparse quartz (0.5mm); surfaces generally oxidised but some examples have a non-oxidised core; brick.

Romano-British brick and tile fragments account for 73% of the total number of pieces recovered (Table 9; Mf. 00), although none of these were recovered from features belong to Phase 3, and no significant spatial distribution by phase or by fabric type could be observed. Two *imbrices*, one box-flue tile fragment, 15 *tegulae* fragments and pieces from at least seven bricks were recognised, while the remaining fragments were assigned a Romano-British date on the basis of fabric similarities. Fabrics CBM 1 and 2 dominate the assemblage but in general the range of fabrics present compares well with those recovered from the Hawkeswood Road, Bitterne, Hants (SOU414) and Bitterne Manor School (SOU456) sites and from the Brooks in Winchester.

Both *imbrex* fragments occur in fabric CBM 2, the box flue tile fragment, which has diagonally combed keying on one surface, is also of this fabric, whilst the *tegulae* fragments were mostly in fabric CBM 1, although five pieces were of fabric CBM 2 and one in fabric CBM 3.

Unfortunately all the brick fragments were too fragmentary to assign to a particular type of Roman brick (Brodribb, 1987, 34-43). However, one brick fragment found during the evaluation has an incomplete 'signature' in the form of two converging sets of two parallel, finger-made grooves on one surface. Brodribb notes that signatures are uncommon on Roman bricks and most likely to occur on the larger *sesquipedalis* and *bipedalis* (1987, 102). These forms have an average thickness of 52mm and 60mm respectively (Brodribb 1987, 41 - 42) and the Montefiore example, at 56mm thick, is well within that range.

Post-medieval/modern

In total 18 pieces (2076g) of post-medieval brick and tile were recovered and assigned to one of two fabric types (Table 9; Mf. 00). The hard sandy fabric (CBM 7) was used for roof-tiles. No evidence for peg-holes or glaze was preserved on any

of the surviving fragments. The grog/clay pellet tempered fabric (CBM 8) appears to have been used exclusively for the manufacture of bricks.

Uncertain

Two pieces of an undiagnostic fabric (CBM 9) were recovered, both from phase 4.1. One small, formless fragment was found in pit 236 in association with 10th - 11th century AD pottery and the second piece, a small, flat fragment 19 mm thick, was found in layer 670. Although slightly thinner than average, this fragment may be part of a *tegula*, suggesting a possible Romano-British date for this fabric.

Burnt Clay

by R H Seager Smith

One hundred and thirty-four fragments (1467 g) were recovered, all but one from excavated features. The fabrics were analysed according to the standard Wessex Archaeology guidelines (Morris 1992) prefixed by BC (Burnt Clay). Six fabric types were identified and the number and weight of fragments recorded by fabric type for each context. Full details are contained in the archive and a summary of this information is presented in Table 10 (Mf. 00). The assemblage was also examined for diagnostic pieces indicative of function. Five pieces were identified and these are briefly described below.

Fabric catalogue

BC 1: Soft and predominantly oxidised fabric although some examples have a non-oxidised core; contains moderate amounts of quartz sand (<1mm) and sparse red and black iron oxides (<0.5mm); very poorly wedged.

BC 2: Soft, very fine-grained fabric containing moderate amounts of quartz sand and rare - sparse mica and red and black iron oxides (all <0.25mm); predominantly oxidised; poorly wedged.

BC 3: Soft, moderately fine-grained fabric containing moderate amounts of quartz sand (<0.5mm), rare red iron oxides (<0.5mm) and occassional large pieces of crushed angular flint and gravel pebbles (up to 5mm); predominantly oxidised.

BC 4: Very fine-grained, dense sandy matrix with rare larger pieces of quartz (0.5mm), iron oxides (<0.5mm), crushed angular flint pieces (<3mm) and elongated voids (<5mm) many preserving the imprints of vegetable material; unoxidised.

BC 5: Very soft friable fabric with many irregularily-shaped voids indicative of poor clay preparation; contains moderate amounts of quartz (<0.5mm) and rare iron oxides (<0.5mm), grog/clay pellets (<3mm) or crushed flint (<2mm) may also be present; oxidised.

BC 6: Fine-grained fabric with common quartz sand (<0.25mm), sparse clay pellet/grog (<2mm) rare red and black iron oxides (<0.5mm) and very occassional flint pieces; oxidised. Possibly a post-medieval brick fragment similar to CBM 8.

The majority of pieces recovered were small featureless lumps (mean size 11 g), occasionally with one roughly smoothed, flattish surface preserved. Five fragments each with a single incomplete wattle impression, were the only diagnostic pieces present. These were found in pit 13 of phase 4.1, pit F7 and ditch sections 437 and 636 of phase 4.2 and in phase 4.3 in pit 43.

No significant spatial distribution by phase or by fabric type was noted amongst this material, 66% of the pieces were found in pits, 22% in ditches and the remainder in miscellaneous feature types.

Stone

by D P S Peacock and K Knowles

Stone from the excavation was examined visually and compared with the reference collection housed in the Department of Archaeology, University of Southampton. The quantified results are appended in Table 11 (Mf. 00-00) and the sources for the stone types are presented in Table 12 (Mf. 00).

A major noteworthy feature is the presence of Mayen lava, characteristic of many Saxon sites in Southern England, in particular *Hamwic* (Holdsworth 1980), and probably the main material used for querns during this period. Fragments of Mayen lava were found in various features (Table 11; Mf. 00-00), but only one fragment displayed evidence of form indicative of a quern (sample 2055, context 65, pit 61, phase 4.1).

Two pieces of stone were used as whetstones. One broken example from an unstratified context (item 5013), is made from a fine micaceous Sandstone and has a square cross-section, and the other is made from a fine Sandstone (item 5003, phase 5 layer).

Apart from Mayen lava, the recovery of stone, either as a natural resource or as utilised finds, is uncommon in *Hamwic* and generally occurs as beach pebbles. It does not become important until the post-Saxon period (Platt and Coleman-Smith 1975), but unfortunately the latter only record finished artefacts. Direct comparison is thus very difficult.

Worked Flint (Fig. 15, 1, 2)

by P A Harding

A total of 100 pieces of worked flint was collected. Most of the material occurs in features which post-date the prehistoric, only 28 pieces being present in Phases 1 and 2. There is a clear distinction between material from these phases, particularly Phase 2 which is in mint condition, and that from later features, which consistently shows edge damage. The single exception lies in an undamaged flake from ditch 428 (phase 4.3); however, this ditch cuts directly through the Phase 2 pit 430.

The raw material in phase 2 pits 4 (SOU486), 423 and 430 comprises gravel nodules. This flint is generally of good quality although many rejected pieces may be unaccounted for. No cores were recovered; however, it seems likely from the surviving cortex that most of the nodules were small and that cores were not flaked to exhaustion. The quantities of flint recovered make it impossible to observe any technological variations which may have been present. Most flakes were removed by hard hammer percussion and very little attention appears to have been paid to platform preparation beyond occasional flaking to trim the core edge. Similar observations have been made on the flint from the palaeo-channel 717.

Two retouched pieces were recovered, comprising a possible chisel arrowhead from the phase 1 palaeo-channel (Fig. 15. 1) and an end scraper made on a flake from the phase 2 pit 430 (Fig. 15. 2). The chisel arrowhead is broken, possibly in manufacture and consists of a thin blank with marginal retouch to thin the butt. The end scraper is well made and has semi-abrupt, regular, direct retouch at the distal end to create a convex scraping edge.

Pits 4 (SOU486), 423 and 430 are dated by pottery to around the 3rd millenium BC. The flint neither confirms nor contradicts this date. The largest accumulation of flint was recovered from the palaeo-channel 717. This material was found in the upper spits at the edge of the feature and has probably migrated down through the palaeo-channel fills from above. Technologically there appears to be no distinct difference between the material from the phase 1 palaeo-channel and the phase 2 pits, a fact substantiated by the possible chisel arrowhead. The likelihood is that this flint represents additional activity of 3rd millenium BC date preserved in the upper silts of a palaeo-channel.

Burnt Flint

by A Crockett

A total of 6953 g (271 pieces) of burnt flint was recovered. No pieces exhibited signs of working prior to burning. Although burnt flint was recovered from every phase represented, the majority of these pieces were attributable to contexts assigned to phases 1, 2 and 3. Although the presence of burnt flint is generally accepted as an indication of prehistoric activity, in this instance it can not be confirmed whether it is solely a product of the prehistoric phase or not. The quantities found in some of the medieval features would suggest not.

To examine the distribution of the burnt flint across the excavation area, the quantification by weight, together with site grid co-ordinates, were converted into a database file. This file was then transferred into a commercially available Surface Trend Analysis package. The distribution was examined using Inverse Distance^2, with a search pattern incorporating the 10 nearest points within a radius of 100 m. The image generated (Fig. 18) represents a 3-d net diagram based on this search pattern, viewed from the south-east, at an elevation of 40° from horizontal. The most significant results from this presentation are the massive peak which represents the prehistoric pit 629/681 and the secondary peak from the possible Romano-British quarry 702. The remaining spread appears to represent a low-level scatter across all features of all phases.

Human Bone

by J I McKinley

Ten fragments of cremated human bone (5.5 g) in association with a small quantity (0.9 g) of charcoal were recovered from post-hole 3 in evaluation trench 3 (Fig. 2; phase 6, unphased). Two fragments of bone were identifiable (2.4 g), one a skull vault fragment (25 mm), the other a fragment of posterior femur shaft. Other fragments were of unidentifiable long bone shaft (maximum 30 mm). The bone was that of an adult.

The bone was well cremated and in fairly good condition, i.e. not very worn. It could represent either the remains of a disturbed cremation burial, or material from a disturbed pyre site. Although as yet undated, it would not be unreasonable to suggest a Romano-British date for such activity, particularly given the evidence for Romano-British occupation in the immediate area

ENVIRONMENTAL EVIDENCE

Animal Bones

by S Hamilton-Dyer

A total of 731 bone pieces and nine burnt bones was recovered during excavation from 57 contexts in 47 features (full details in archive). This figure has been adjusted to take account of recent breaks; the adjusted figure is 293 bones and bone fragments. A high proportion of these have been identified to taxa with under 50% identified to group only (22 sheep/pig size, 97 cattle/horse, 14 unidentified mammal).

Romano-British contexts (Phase 3) produced two fragments only, identified as a small artiodactyl fragment and a large ungulate tooth fragment, whilst post-medieval contexts (Phase 5) contained 60 fragments, consisting almost entirely of a whole calf burial and a partial domestic fowl skeleton. Of the remaining assemblage, apart from one context dated only as medieval (phase 4) containing a single large ungulate fragment, all other contexts have been examined according to their sub-groups within the late Saxon/medieval phase. The species distribution of bone from these phase groups is listed in Table 13 (Mf. 00).

Late Saxon/medieval

Overall the majority of identified fragments from sub-groups 4.1, 4.2 and 4.3 are of cattle (59/25.7%). Many of the large ungulate class (LAR) are probably also cattle. Pig bones are frequent (30/13%), sheep/goat bones are less common (14/6.1%), horse is present in six separate contexts (6/2.6%) including the jaw of a male animal from ditch 281. Dog is also present, not only in skeletal material (a skull fragment) but also as a taphonomic agent as eighteen bones show signs of canid gnawing. Wild mammals are represented by a roe tibia, a red deer antler fragment and two metapodia, all from separate contexts. Bird bones were restricted to four domestic

fowl bones from pits 476 (Figs 7 and 11) and 638 (Figs 8 and 12) and three greylag/domestic goose bones also from pit 638.

As might be expected the few available measurements compare closely with those from excavations in the centre of Southampton (Bourdillon 1980). Three cattle metapodia were sufficiently complete to estimate withers heights of 1.041 m, 1.115 m and 1.123 m using the factors of Fock (von den Driesch and Boessneck 1974). There was also a complete horse radius from ditch 435 with a lateral length measured at 305 mm this gives an estimated withers height of 1.324 m (13 hands) using Kiesewalter's factors (von den Driesch and Boessneck 1974).

Two of the bones were abnormal, one was a cattle lower 3rd molar without the customary third cusp. The other was the jaw of a female pig with well worn teeth. This jaw showed some evidence of periodontal disease associated with a broken 1st molar.

Sieved material

In addition to the hand collected bones some faunal material was extracted from 1 mm residues of sieved samples. Most of the 13 samples with animal bone contained small fragments only of the domestic mammals. These merit little further examination, except to note that many have been gnawed, particularly those in the two samples from pit 476 (phase 4.1; Fig. 7 and 11) which contain most of the material. The samples from pit 476 also contain very small fragments with an appearance consistent with human or carnivore digestion, and others which are burnt.

Fish bones were also present in these two samples and in four others, all from phase 4.1 contexts. Sample 2055 from pit 61 contained two eel vertebrae, a flatfish vertebrae and several from very small fish, probably gut contents of larger fish. Sample 2052 from pit 457 also contained bones of very small fish, whereas sample

2050 from pit 457/469 contained a single herring vertebrae. Sample 2049 from pit 469 contained single vertebrae each of eel and flatfish and several bones of gobies. There was also a shrew humerus in this sample. The bulk of the fish remains were recovered from samples 2053 and 2054 from pit 476. Eel, herring and flatfish vertebrae and other bones were again present. Two of the herring vertebrae had been crushed, this has been interpreted as typical of the damage caused by eating (Jones 1984). Two other fish species were present, these were some teeth of a male thornback ray and the inferior pharyngials of two very small chub. Remains of other animals included mole and blackbird sized bird. The complete lack of fish remains from hand collected material once again illustrates the value of a sieving programme for fish recovery.

Discussion

There are several points of interest in the late Saxon/medieval assemblage, small though it is. Only one piece of worked bone was found, a decorated bone point (Fig. 16) carved from a sheep long bone, probably tibia. Excepting the single fragment of red deer antler in ditch 435 (phase 4.2), no offcuts were recovered. Apart from the deer remains, no wild animals were found, not even mallard despite the proximity of the Monks Brook, a tributary of the Itchen on the edge of the excavated site (Fig. 1). Birds in general are infrequent, even fowl bones only numbered four, though five greylag/domestic goose were present; two fowl and all goose bones were from the same context. Although never a major contribution to the diet, medieval sites in Wessex usually contain more frequent examples of bird bones, particularly of fowl but also of duck, goose and wild birds (cf. Coy 1987; 1989). Bones from young animals were also absent although the good preservation of most bones indicated that some remains should have survived if originally present. A rural site concentrating on animal husbandry might be expected to produce bones associated with this activity, such as those from old or sick animals and neonatal mortalities.

Horse remains account for up to 5% (phase 4.2) of the identified mammal bones, in contrast with the Saxon material at Melbourne Street where they constitute a mere 0.1% (Bourdillon and Coy 1980). Often horse bones are found in association as part or complete skeletons; here all the finds are of single bones in different contexts including pits as well as ditches. The presence of humerus and pelvis does not suggest skinning waste where there might be a possibility of foot bones.

The relative frequency of sheep and pig bone is also interesting; with pig bones more common than sheep, this is the reverse of the situation at Melbourne Street. Comparison between the three Saxon/medieval sub-phases (4.1, 4.2, 4.3) reveals a concentration of broken and butchered limb fragments (probably cattle) in the earliest phase (4.1). Although this may be a true temporal difference, this phase consists solely of pits, whereas the later phases also contain bone from ditches. As with all the above points this difference should be treated with caution in view of the small sample size.

This may also apply to the lack of remains of large fish. Bones of sea fish together with those of eel (which can be caught in local streams as well as from salt water) are consistently present in Southampton deposits; indeed herring and eel are almost ubiquitous. Large fish, particularly cod and other Gadidae, are present in increasing numbers throughout the medieval period in the medieval town but here there are none (Coy and Hamilton-Dyer 1987). Apart from the herring, which may well have been brought into Southampton pickled as a trade item (Coy forthcoming), the other sea fish (flatfish and thornback ray) and eels would have been readily available locally and may have been fished by the the inhabitants of the site or purchased at market. The Gobiidae, small sea fish of only a few centimetres long, were probably gut contents of other fish. Perhaps this is the explanation for the presence of the fresh water chub, as gut contents of an eel. Chub is not regarded as a food fish being of insipid taste and full of small bones, these here would also have been very small.

The number of bone fragments from features, particularly from pits, is much lower than from other excavations, including Southampton town sites. Although features may have been truncated, they were still about one metre across and at least one metre deep. Less than twenty fragments, often only one or two, were recovered from each feature where one would expect several hundred. As the preservation of the recovered bones is not poor, the reason for the paucity of bones may indicate a different type of useage of pits here, different activities occurring at the Montefiore location than in medieval Southampton, or some other aspect of site formation processes.

Although large amounts of material have been examined from the main late Saxon and medieval settlements in Southampton, nothing has been analysed from its periphery. This assemblage from the rural margin contains some unexpected features and, though very small, thus provides valuable data for future comparisons.

Charcoal

by R Gale

Charcoal fragments from 15 samples were prepared, examined and identified using the standard methods as described by Gale (1991). The samples included charcoal from the palaeo-channel, Neolithic pits and Late Saxon to medieval contexts. The results are shown in Table 15 (Mf. 00).

Phase 1: Pleistocene

A sample of charcoal fragments (sample 2020) was retrieved from the infill of the natural palaeo-channel 717 (Fig. 3). Oak, a woodland tree, and *Prunus* (most probably blackthorn, a shrubby species of marginal woodland and open areas) were identified. The narrow range of species identified is undoubtedly a reflection of the minimal quantity of charcoal available for examination. Assessment of the local

woody vegetation is, therefore, correspondingly limited to the indication of the presence of oak wood at this time.

Phase 2: Prehistoric

Charcoal samples (2006, 2007, 2009) retrieved from the fill of pits 423 and 430 (Figs 4-5) included a wider range of species than those retrieved from the palaeo-channel (Phase 1). Woodland trees including oak and ash were identified, the oak fragments included both sapwood and heartwood. The sapwood may have originated from stems but probably not from very young ones (i.e. less than 5 years old). Other species included hazel, which frequently grows as understorey, particularly in oak woods, but becomes more shrubby in open areas; *Prunus*, most probably blackthorn; poplar or willow (the close proximity of the river suggests the latter); and a member or members of the Pomoideae group (the most geographically plausible being hawthorn, apple, whitebeam, wild service tree). The presence of these species suggests that mixed oak/ash woodlands were growing in the neighbourhood, with smaller, perhaps shrubbier species, such as hawthorn and blackthorn at the margins; willow (or poplar) may have been associated with the river.

The charcoal samples were all associated with worked flint and fragments of more than one pottery vessel, and it can be assumed therefore that these probably represented debris from some form of domestic waste. Fragments of oak and Pomoideae were more abundant than those of the other species identified, but with such a small number of samples, this may not be significant. Oak wood would have provided a fuel of high thermal capacity. Ash wood also makes an excellent fuel and compares favourably with oak. The mixture of species present, including some fairly shrubby and probably rather insubstantial material (although light-weight to carry), suggests that the wood may have been collected randomly from the neighbourhood.

Carbonised material from samples 2006 (secondary fill 425, pit 423) and 2007 (primary fill 426, pit 423) were submitted to the British Museum for radiocarbon dating. The results are presented in Table 00; in summary, charred hazelnuts from primary fill 426 (BM-2874) produced a date range of 2612 - 2320 BC, whilst charcoal (predominantly Pomoideae and *Quercus*) from secondary fill 425 (BM-2875) produced a date range of 2707 - 2456 BC.

Phase 4.1 - 4.3: Late Saxon/medieval

A rather similar pattern of arboreal vegetation appears to have been present in the late Saxon/early medieval periods (samples 2045, 2053, 2054, 2049, 2005, context 45), although the presence of birch and maple (almost certainly field maple) suggests that the character of the oak woodlands may have changed. Fewer species were identified from the later medieval phases (samples 2025, 2024, contexts 2880, 609, 48). Oak was consistently present in the samples from the Saxon and medieval periods whereas other species fluctuated. However, since relatively little charcoal was excavated, this may indicate a degree of selection rather than availability of wood.

Plant Remains

by M P Hinton

Plant macrofossils extracted by standard Wessex Archaeology methods were sorted by stereo microscope at x7 - x40 magnification. Surface details of some were studied at higher magnifications with a metallurgical attachment and vertical illumination.

The cereals are in very poor condition, and in most cases identification is made only to generic level, but some smaller seeds are better preserved. Almost all samples include a small amount (never more than 1 or 2 ml) of fragments which resemble badly eroded parts of fiercely burned cereals, but some may derive from other plant parts.

Except that the cereals are given first, the order and nomenclature of taxa listed in Tables 16-17 (Mf. 00-00) is in accordance with Stace (1991). All are represented by seeds unless otherwise stated. The number of the mineralised Chenopodiaceae seeds was estimated from a sub-sample of about a quarter of the total sample.

Phase 1: Pleistocene

The two samples from the infilling of palaeo-channel 717 provide little information. The one fragment of hazelnut shell *(Corylus avellana)* presumably represents a locally available food resource. The other charred fragments, are less easily explained. At first study they suggest badly eroded burned cereals and one item in particular (from Sample 2014) has some resemblance to a severely distorted cereal grain, with a suggestion of a linear hilum: it is so damaged however that it might be interpreted as part of a culm or tuber. Some fragments seem almost vitrified, others are very shiny and dark and in two of these it is possible to see impressions left by the burning out of stems or straw. These have the appearance of being parts of a fused mass. Such material might result from the burning of starchy substances, of cereal, root and tuber origin. Similar fragments occur in late Saxon/early medieval samples and indeed the very close similarity of these to the two fragments found in the palaeo-channel suggests that the latter might be intrusions from the later period.

Phase 2: Prehistoric

Fragments resembling charred cereals are present in all four samples from two pits (423 and 430; Figs. 4 and 5) but are accompanied, in both samples from pit 423, by undoubted cereal grains. Sample 2007 includes one which conforms in its short, squat outline, rounded dorsal surface and steeply set embryo to a compact form of bread wheat *(Triticum aestivum* s.l.), and others may be of the same species but are too degraded to identify certainly. Another grain, listed as *Triticum/Secale*, is more doubtful. Its blunt truncated apex and very sloping scutellum, set very slightly askew, suggests rye, *(Secale cereale)*, but the upper half of the dorsal surface is very

smoothly rounded and the basal end is damaged. It differs from the other severely eroded grains in that a large part of the epidermis remains. It is perhaps more likely to be a badly distorted wheat grain, but the possibility of rye in the late Neolithic cannot be discounted. There is pollen evidence for rye in Britain in the early Bronze Age (Chambers and Jones 1984).

In addition, the same sample included one oat grain *(Avena* sp.*).* From the grain alone the species cannot be determined but by its small size (4.3 x 1.5 x 1.4mm), almost straight sides, and greater breadth slightly above the centre, it falls within the *Avena strigosa* (bristle oats) group identified in early Iron Age deposits by Helbaek (1944). The L:B Index of 2.86 and L:T of 3.07 however conform more to his *A. sativa* (cultivated oat) group. Both are cultivars but in this context the one grain would seem likely to have occurred as a weed of the wheat.

The one seed of vetch or tare, plants of arable or grassland, represents the only wild species, with the exception of hazel. Nut shell fragments are present in all four of the Neolithic samples and although in each case only representing a few nuts they illustrate the continuing importance of collected wild plant foods.

Phase 4.1: 10th to 11th century

For this period wheat and oats are the only cereals certainly identified, but there is the possibility of rye. Better-preserved wheat grains in two samples have been identified as bread wheat *(Triticum aestivum* s.l.*)* but the remainder are too damaged. There is one fragment of rachis consisting of part of a node and the lower 1.8 mm of the ascending internode which appears to have straight sides. No striations can be seen which would indicate *T. aestivum* s.s., but unfortunately the node is fractured where any thickening under the scars of the glume bases, indicative of a tetraploid hard wheat, might be sought. Oats occur in four of the five samples and in similar numbers to wheat, making their status as weed or cultivar uncertain.

The other charred seeds from this phase represent weeds of arable or disturbed land. Corn spurrey (*Spergula arvensis*) and chess (*Bromus* sp.) are field weeds, corn spurrey being particularly indicative of light freely drained sandy soil, while stinking mayweed (*Anthemis cotula*) and corn marigold (*Chrysanthemem segetum*) are characteristic of heavier clay soils. Glaucous sedge *(Carex flacca)* tolerates a wide range of conditions including wet or dry grassland, base-rich clay and lighter sandy areas.

Sample 2054, in addition to the charred seeds, yielded seeds preserved by mineralisation. The greatest number is of goosefoot and orache *(Chenopodiaceae* sp.*)* but nettles *(Urtica dioica)* and red bartsia *(Odontites verna)* were also preserved in this way. Most of these mineralised seeds are opaque and pale buff in colour while others are somewhat more translucent and light honey-coloured. The Chenopodiaceae seeds are represented only by their embryos, measuring less than 1 mm to *c.* 1.5 mm, and as only very faint traces of surface markings can be discerned on a few, and many are very thin and wasted, no closer identification has been attempted. Calcium phosphate mineralisation often occurs in proximity to bone or faecal material and in this context the presence of fish bones, and two mineralised pupae suggest that the pit contents originated in a midden. The large numbers of Chenopodiaceae seeds is interesting but may not be particularly significant. Fat hen *(Chenopodium album)* leaves and seeds are known to be of use as foodstuff, but goosefoot, particularly the smaller-seeded red goosefoot *(C. rubrum)*, will grow readily in the rich organic material of a midden. One fat hen plant may produce as many as 3,000 seeds, and the small seeded Chenopodium species even greater numbers (Salisbury 1961, 162). Nettles and red bartsia will grow in damp nutrient-rich soils in disturbed or cultivated land.

Phase 4.3: 12th to 14th century

Oat and wheat are the only securely identified cereals. Oats occur in both samples but only three (from Sample 2046) were fit to measure and average 4.4 x 1.8 x 1.4 mm; L:B 2.4, L:T 3.1. As before the dimensions accord with Helbaek's *A. strigosa* group, and the indices with his *A. sativa* group.

The other seeds included chess (*Bromus* sp.), a field weed of light, freely drained soil and Orache (*Atriplex* sp.) and curled dock (*Rumex crispus*) which are characteristic of heavier soils. Wild radish (*Raphanus raphanistrum*) indicates a damp nutrient-rich non-calcareous soil.

Discussion

The same cultivated plants are recorded at this site in both the late Saxon/early medieval and the medieval periods. The wild plants of the earlier phase are mostly typical of arable or otherwise disturbed ground and may have originated in heavy clay or in lighter, usually non-calcareous soils. For the later medieval phase there is less evidence but again it indicates cultivation of both lighter, freely drained and heavier damp, acid soils.

The small numbers and uncertain identifications prevent conjecture of the circumstances of the burning of the seeds before they became incorporated in the pit and ditch fills. The fact, however, that almost all samples consist mainly of crop plants and field weeds, and are therefore connected with the production of food, does suggest that the surroundings were rural rather than a close adjunct of the nearby towns of Saxon *Hamwic* and medieval Southampton.

Marine Molluscs

by S F Wyles

The remains of only five oyster shells were recovered during the excavation and sampling of late Saxon/early medieval (phase 4.1) features. All of the shells were

poorly preserved, very badly worn and incomplete indicating that they were casually discarded and eroded before being incorporated into the pits. The low numbers, whilst indicating that oysters were not a significant dietary component at Montefiore, are of particular interest when compared to recent research (Winder 1993) indicating relatively high abundances of oysters and other shellfish in urban late Saxon Southampton.

DISCUSSION

by A Crockett, Michael J Allen and Elaine L Morris

Phase 1: Pleistocene

Although certainly Pleistocene in origin, the date by which the palaeo-channels had silted to the point that they no longer functioned as watercourses remains enigmatic. Stratigraphically, the larger infilled channel was cut by an undated ditch, in turn cut by a Romano-British ditch containing 2nd century AD pottery. Finds recovered from its upper fill included worked flint, charcoal and carbonised starch material, and a hazelnut shell fragment.

Although flints were recovered from the upper fills, Harding states (above) that they may have been intrusive finds, probably as a result of earthworm action, and therefore not related to the palaeo-channel when it existed as a watercourse. The palaeo-environmental evidence (hazelnuts, charcoal and starchy material) does not provide a strong chronological indicator either, as all were also present in late Neolithic/early Bronze Age, late Saxon and medieval contexts. Perhaps the most significant result for phasing purposes was the restricted range of species identified from the charcoal which might represent a natural, unmanaged environment (i.e. Mesolithic) or be the result of the small quantity of charcoal recovered.

The smaller palaeo-channel did not produce any finds or palaeo-environmental data, perhaps not surprisingly as its upper fills had almost certainly been removed by the construction of the modern car park. However, this section of palaeo-channel had been sealed by alluvium covering the northern half of the excavation area, itself provisionally dated to the late prehistoric/early Roman period.

Phase 2: Prehistoric

Other than isolated Palaeolithic finds, very little evidence exists for prehistoric activity in the Southampton region. Evidence of late Neolithic/early Bronze Age settlement features is everywhere sparse, and very rare on the southern coastal plains. When viewed in this context, the importance of the discovery of a number of securely dated later Neolithic/early Bronze Age pits at Montefiore can be fully appreciated.

The finds recovered from the pits are most likely to be indicative of subsistence activity. This includes the comparatively large quantities of burnt flint recovered from pit 629/681, and charcoal identified as possibly originating from a small scale domestic fire. The small numbers of Peterborough Ware and Grooved Ware sherds in pits 681 and 423 respectively do not suggest anything more than the discard of domestic waste.

The local environment during the late Neolithic/early Bronze Age seems to have contained one of mixed oak/ash woodland, but with more open scrubby areas, probably near a stream, of hazel, blackthorn, poplar/willow and Pomoideae. Some areas were certainly cleared for farming, presumably locally, as evidence for cultivated ground is indicated by weed seeds (vetch or tare) and cereals of bread wheat and possibly rye. The possible presence of cultivated rye is particularly interesting. Pollen evidence for rye has been recovered from early Bronze Age contexts elsewhere (Chambers and Jones 1984); at Wytch Farm, Dorset it has been suggested that the rye pollen indicates a cultivated crop during the Bronze Age (Allen and Scaife 1991) because of the acid and relatively poor soils in that area, on which it would difficult to grow barley, but of which rye is relatively tolerant. Such soils are similar to those presently occurring at Swaythling.

Apart from cultivated crops, wild plant resources continued to be collected, such as hazelnuts and oats. However, the presence of hazelnuts in contexts ranging from

Neolithic to medieval perhaps reflects their availability in the immediate vicinity, rather than any specific collection.

Although undated, it would not be unreasonable to suggest a late Bronze Age or Iron Age date for the substantial east - west aligned ditch cut by later Romano-British features. Without further evidence concerning prehistoric settlement patterns for this area, it is impossible to place such features into a regional framework.

The alluvium sealing the gravel in the northern half of the excavation area is essentially undatable though demonstrably later than the late Neolithic/early Bronze Age pit 423, and earlier than Romano-British ditch 713. In addition, a small fragment of undiagnostic Romano-British brick or tile was recovered from the edge of the gravel terrace 666, at the base of the alluvium. The increased sediment input causing this silting could have been the result of human activity (vegetation clearance, settlement, farming etc.) upstream. Although the most obvious time for the inception of such activity would be the late Neolithic and early Bronze Age, the stratigraphic relationships and finds recovered indicate a late prehistoric/early Roman date for soil development at Montefiore.

Phase 3: Romano-British

The Romano-British phase was principally represented by evidence apparently indicative of a road, with an associated enclosure to the north-west. It is suggested that the road itself had been completely removed by later activity, as had any shallow drainage ditches that may have existed to either side. What remained appeared to be the ditches defining the road zone, which have elsewhere been identified as generally 18.9 m (62 ft) apart for a secondary road (Margary 1955, 16); the ditches at Montefiore range between 18 - 19.5 m (59-64 ft) apart.

The gravel pit to the east of these ditches, although not confidently dated to this phase, can best be seen as a quarry for a road surface. The size of the pit could, on a simple volumetric scale, have provided sufficient gravel to cover a cambered road surface 6m wide and up to 0.3m deep for a distance of at least 100m. It would therefore be expected that similar gravel pits should be a feature along the entire length of the road where it passed directly over gravel, possibly evidenced by the reference to a 'huge trench', as recorded in the late 19th century (Crawford 1942, 37), somewhere in Swaythling.

Although it is tempting to suggest that the evidence for a road indicates part of the missing road link between the Roman settlement at Bitterne Manor and *Venta Belgarum*, it is impossible to prove without the discovery of further sections to the north and south to fill in the remaining gaps. If these ditches do prove to be part of such a road, it could support the theory of a ferry crossing from Bitterne Manor across the River Itchen during this period.

Structural evidence was also recovered in the form of a large quantity of Romano-British brick and tile, recovered predominantly in late Saxon and medieval features. The possible presence of a Romano-British enclosure to the north-west of the ditches may represent a source for this material, with the brick and tile fragments deposited as residual finds from the general area. The possibility that they represent late Saxon and medieval re-use of Romano-British building materials cannot be completely ruled out, however.

Phase 4.1 - 4.3: Late Saxon and Medieval

At least three phases were recognisable from the stratigraphic relationships recorded, a picture that was reflected in the pottery analysis which provided broad date ranges for these phases. These were dated to the 10th-11th centuries, the 11th-13th centuries and the 12th-14th centuries. This degree of overlap, coupled with the

continual presence of residual and intrusive finds, has ensured that the phasing for this site has been very reliant on observable stratigraphic relationships.

Phase 4.1: 10th-11th century

The newly established settlement apparently consisted of a single post-supported timber-framed building with a number of associated rubbish pits. This building was located partially over the probable earlier Roman road, and it is therefore possible that the road was re-aligned to pass to the east of the settlement, following the route of what is now Wessex Lane (Fig. 2). To the north of this structure was a concentration of pits, possibly in a separate enclosure which may have been associated with an undiscovered second building. Animal bone evidence for this phase indicates a marked concentration of broken and butchered cattle bones.

Phase 4.2: 11th-13th century

The second phase of settlement saw the replacement of the post-supported building with one resting on sill beams, coupled with the division of the immediate landscape into rudimentary enclosures using ditches. By contrast however, pit-digging activity in the northern area effectively ceased, with only two of the pits tentatively assigned to this phase.

Phase 4.3: 12th-14th century

The final phase for this settlement saw the occupation zone to the south apparently replaced with a series of ditched enclosures. This was coupled with the construction of a possible double-ditched enclosure to the north, and an increase in pit-digging activity in the resulting area. No structural evidence was recovered for this phase, and it must therefore be assumed that any buildings associated with this activity are elsewhere, possibly to the east and fronting onto Wessex Lane.

General

The evidence recovered from Montefiore for the late Saxon/early medieval periods indicates a small rural settlement or farmstead, generally cultivating wheat and oats, and rearing predominantly cattle, together with pig and occasional sheep. The settlement appears to have been established at about the same time as the dispersal of the Saxon population from *Hamwic*, *c.* 4 km to the south, in the late 9th and early 10th centuries. Pottery recovered indicates a small overlap between the later wares from *Hamwic* and the earliest material at Montefiore.

Several aspects from the excavation indicate that this community, although rural, was not isolated from the markets of medieval Southampton. The quantity of Mayen lava quern fragments, although possibly items brought with the initial settlers from *Hamwic*, strongly suggests access to these markets, as do the items of metalwork.

The range of artefacts is generally poor in comparison with those recovered from *Hamwic* and medieval Southampton. Pottery indicates a fairly restricted range of cooking pots and bowls, with only one import in the entire assemblage. Metal objects are uncommon, with a pair of copper alloy tweezers, an early form of key and a buckle possibly associated with riding equipment representing the finest items recovered. Similarly, only a single piece of worked bone was recovered, together with a few examples of worked stone, predominantly whetstones, and the Mayen lava quern fragments mentioned above.

The local environment appears to have included some mixed woodland, represented by oak, ash, birch and maple, amongst others. Farming was practised on the damp acid clay soils and lighter sandy soils. Local riverine environments, such as Monks Brook, offered moister/danker vegetation in contrast to the local woodlands and open drier farmed areas.

Animal husbandry was practised, and the expected range of common species such as cattle, sheep, pig and fowl were present. Pigs may have been kept as breeding stock, as indicated by the presence of a mature female pig with well worn teeth. The presence of mixed woodland in the vicinity may explain the apparent dichotomy between the relative proportions of pig and sheep bones from Montefiore and similarly dated excavations within Southampton. This would suggest local exploitation of the woodland environment to rear greater quantities of pig, an environment not generally available to the inhabitants of *Hamwic* and medieval Southampton. Horse bones, recovered from only six contexts, represent up to 5% of the total bone assemblage. Although this figure is far greater than the 0.1% recovered from Saxon contexts at Melbourne Street (Bourdillon and Coy 1980), only a small number of bones were recovered. In addition, a few examples of roe and red deer and goose bones were recovered. Although the geese may have been domestic, it is probable that the remainder indicate the limited use of wild animals to supplement the diet of the community.

The animal bone assemblage as a whole is considerably smaller than that from similarly dated excavations within *Hamwic* and medieval Southampton. Preservation was not the reason for these low numbers, and thus an alternative explanation must be sought. Although on face value this paucity could be seen as an indication of a relatively impoverished community, it should be considered that the 'settlement' is represented by only a single structure, replaced once and abandoned by the final phase. It is therefore possible that the main settlement centre is some distance from the excavation area, and that, accordingly, less domestic refuse became deposited in the area of the excavation.

Cereal cultivation included wheat and rye, and although oats were recovered they may have been collected as weeds rather than cultivated. Wheat and oats probably grew locally on the damp acid and lighter sandy soils and farming may have included

the cultivation of fat hen. Calcium phospate mineralisation of some seeds (Chenopodium in particular) in the refuse pits to the north may indicate that they originated from a midden deposit.

The fish remains indicate that fresh and saltwater species including eels, flatfish, thornback ray and herring were eaten. Whilst the eels could be caught locally in streams such as Monks Brook, and the thornback ray off the Solent coast, the remainder were presumably purchased. In particular, herring, which was often pickled, almost certainly indicates the purchase of fish, presumably from a market in medieval Southampton. Although oysters were recovered, as with the animal bone assemblage, very few examples were present.

In summary, the evidence from Montefiore appears to indicate part of a small rural settlement spanning at least 500 years, predominantly reliant on wheat and cattle as the principle food resources. Although late Saxon/early medieval Montefiore was not a wealthy community, the inhabitants clearly had at least limited access to the medieval markets of Southampton. The means by which the few non-local items recovered may have been purchased may have been through the sale or barter of excess produce such as wheat. The size of the settlement to which the structural evidence at Montefiore belongs is unknown. As such, it is difficult to accurately place these results into a regional or national framework. It would be hoped that further work within Swaythling would help to identify the size and extent of the community as a whole.

Whether the settlement was abandoned or simply moved/contracted beyond the limits of the excavation area by the end of the 14th century is unclear. This is a period of contraction and abandonment for settlements throughout Britain (Dyer 1989, 45-6; Clarke 1984, 19), for which many reasons have been proposed. It has been recognised that the 14th and 15th centuries were characterised by cool and moist

summers (Davison 1988, 104). These conditions on so called 'marginal lands' would possibly tip the balance between success and failure for a community barely keeping above subsistence level in ideal growing conditions (Clarke 1984, 20). The clay soils at Montefiore may not necessarily have been marginal, the early establishment of the settlement in the late Saxon period would suggest not. However, the wetter conditions may still have resulted in poor drainage and puddled ground, making it difficult to break up the soil by plough during the autumn in preparation for the winter frosts. The almost complete absence of late medieval or early post-medieval finds apparently indicate abandonment rather than contraction of the settlement in the immediate vicinity. If occupation and/or farming had continued in the area then one would normally expect some finds resulting from 'night-soil' manuring.

ACKNOWLEDGMENTS

Wessex Archaeology would like to acknowledge the assistance of The University of Southampton Estates and Buildings Department, and in particular Mr A Davies. In addition, the cooperation shown by the construction team of W F Johnson and Partners Ltd, Robert Jackson Associates and Gifford and Partners Ltd was greatly appreciated. The fieldwork and post-excavation analysis were monitored by Mr K White and Mr A Morton of Southampton City Heritage Policy Unit, their knowedge and experience concerning the archaeology of Southampton proving invaluable.

The fieldwork managed by Ian Barnes and directed in the field by Duncan Coe, assisted by Andrew Crockett. The watching brief was undertaken by Andrew Crockett and Hugh Beamish. Post-excavation analysis was managed by Elaine L Morris. The illustrations are by Julian Cross and the report was edited by Julie Gardiner.

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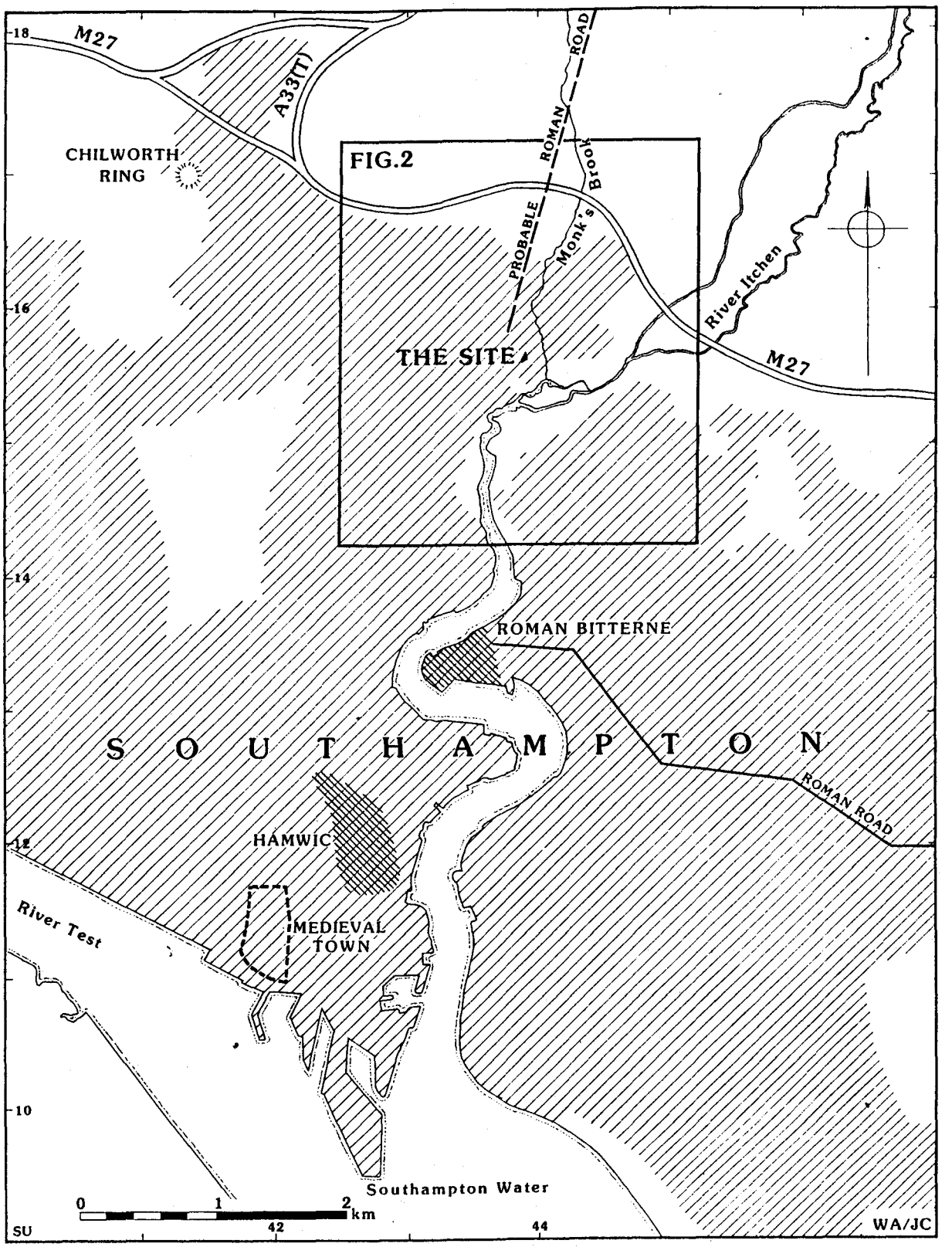
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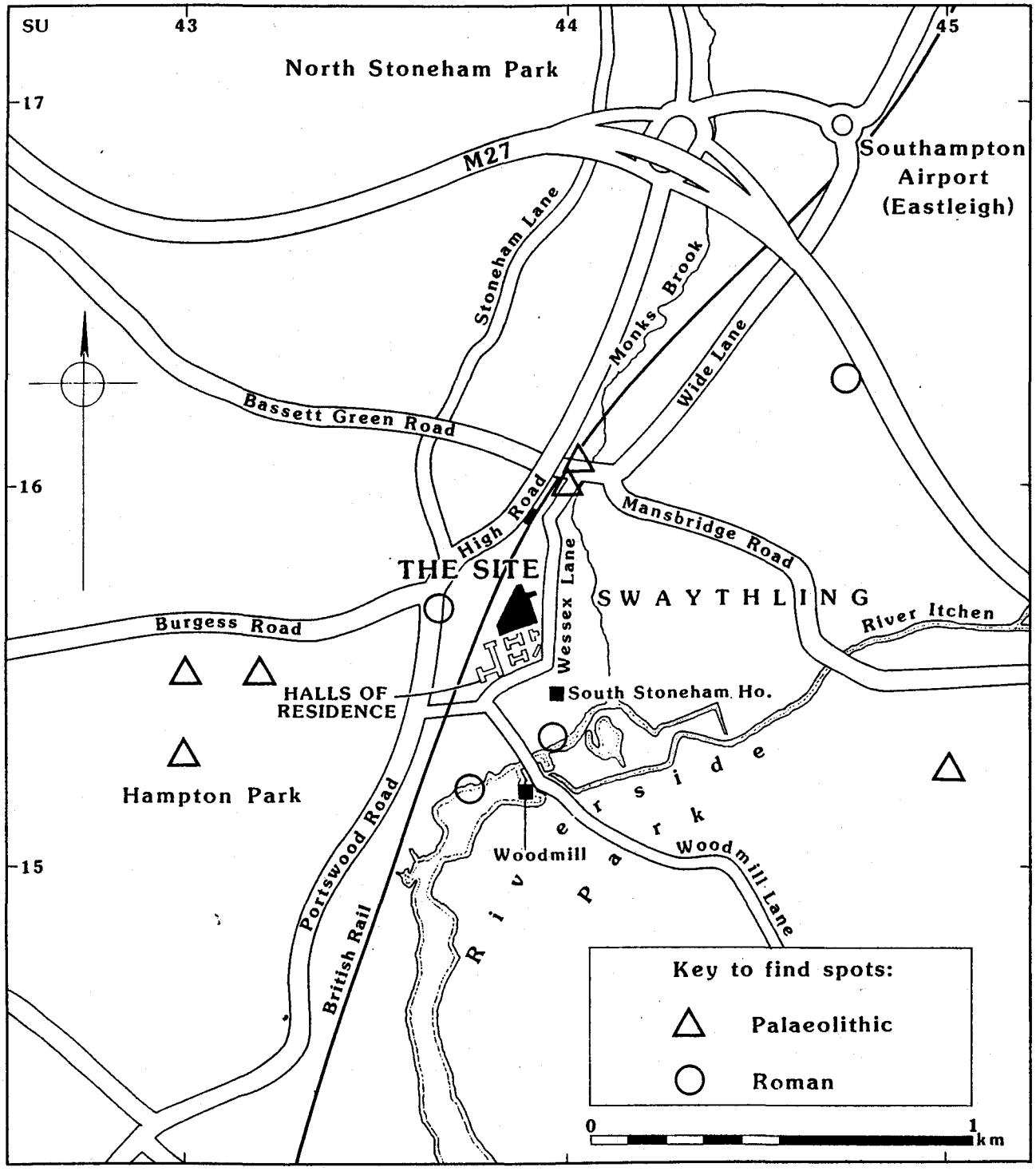
Fig 1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Airport
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Stoneham Lane
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Wide Lane
Bassett Green Road
16
High Road
Mansbridge Road
THE SITE
SWAYTHLING
Wessex Lane
Burgess Road
River Itchen
HALLS OF
RESIDENCE
South Stoneham Ho.
Hampton Park
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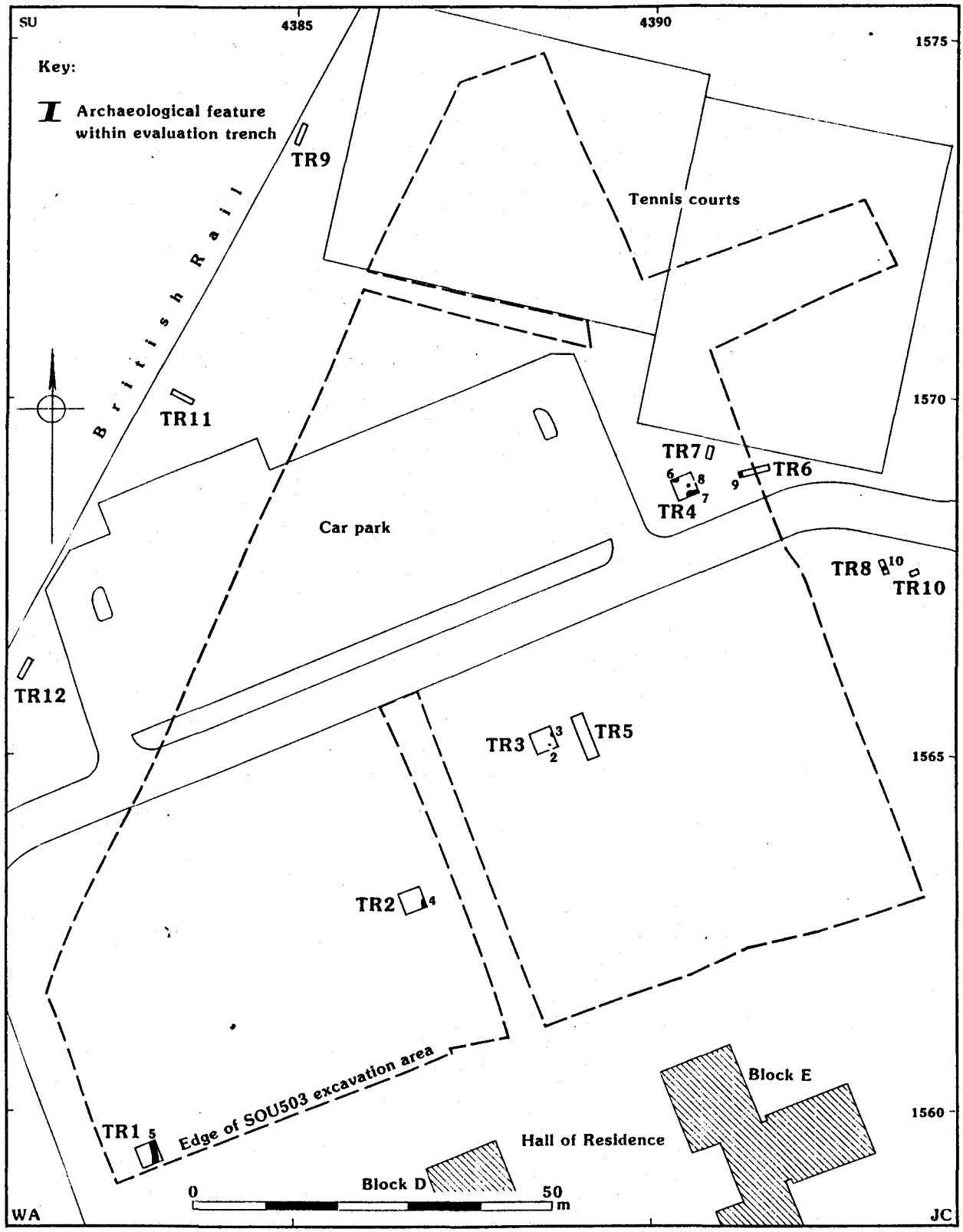


Fig.2: Evaluation trench location plan, showing all features discovered

Fig 3

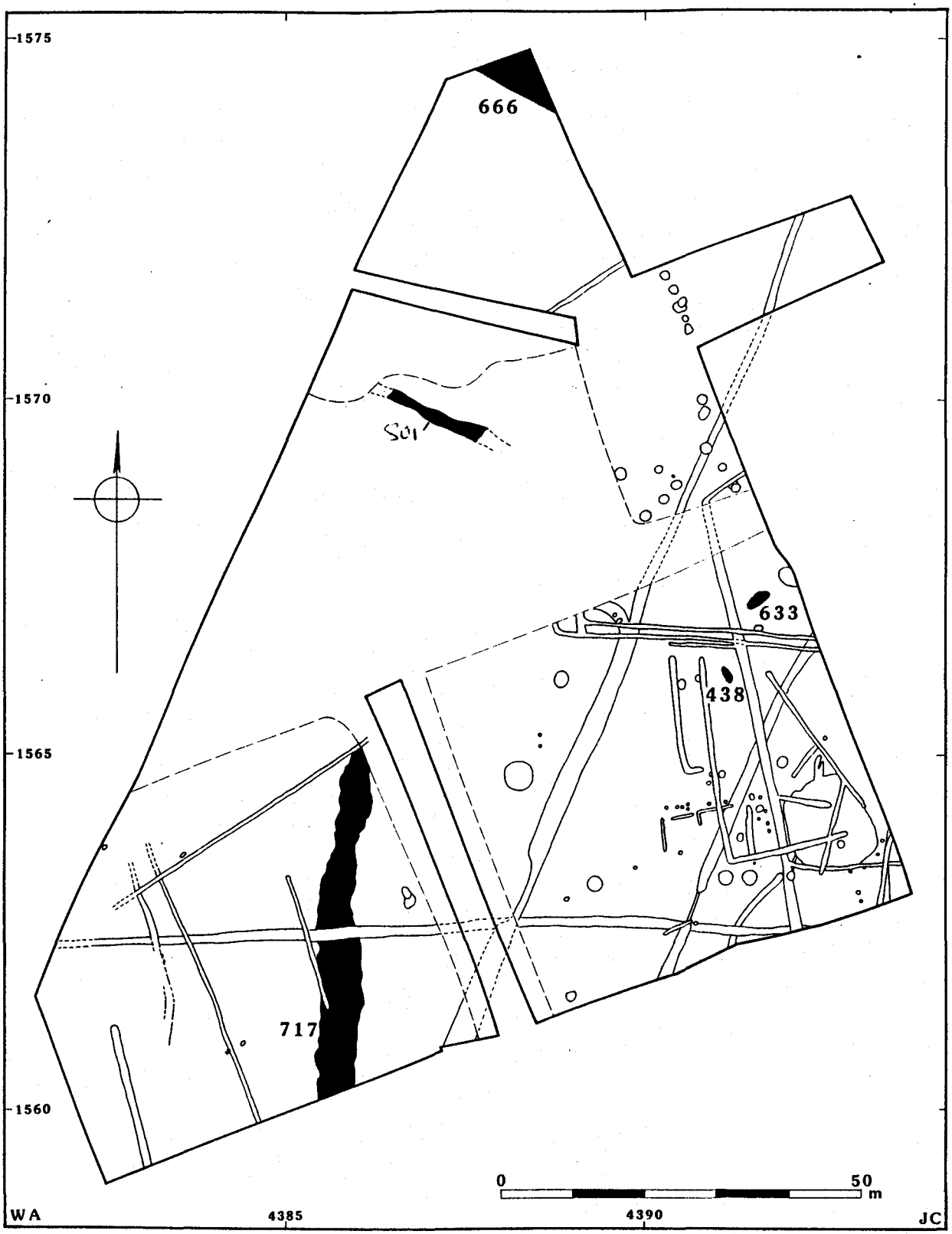


Fig.4: Phase 1 - Natural feature location plan

Fig 4

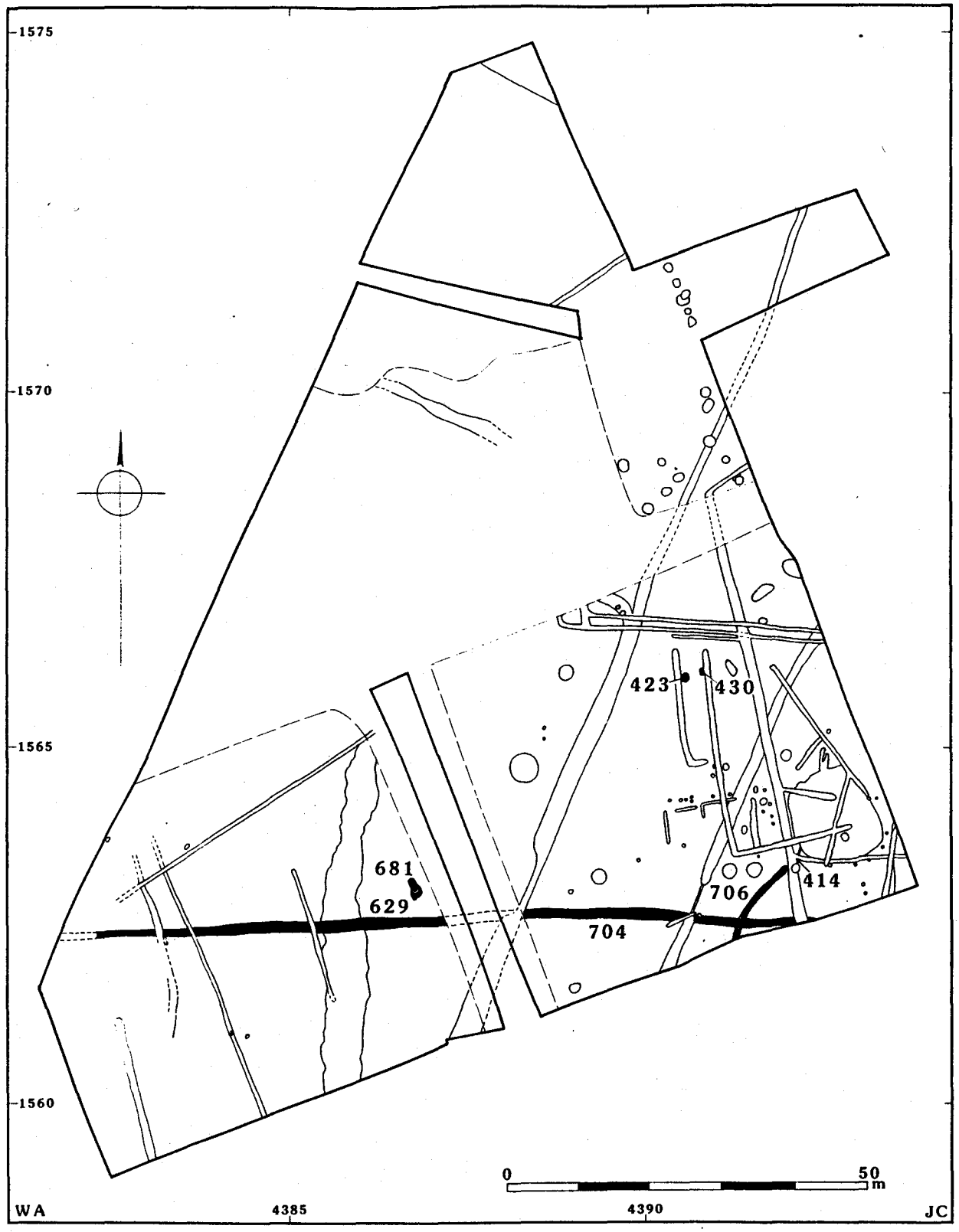
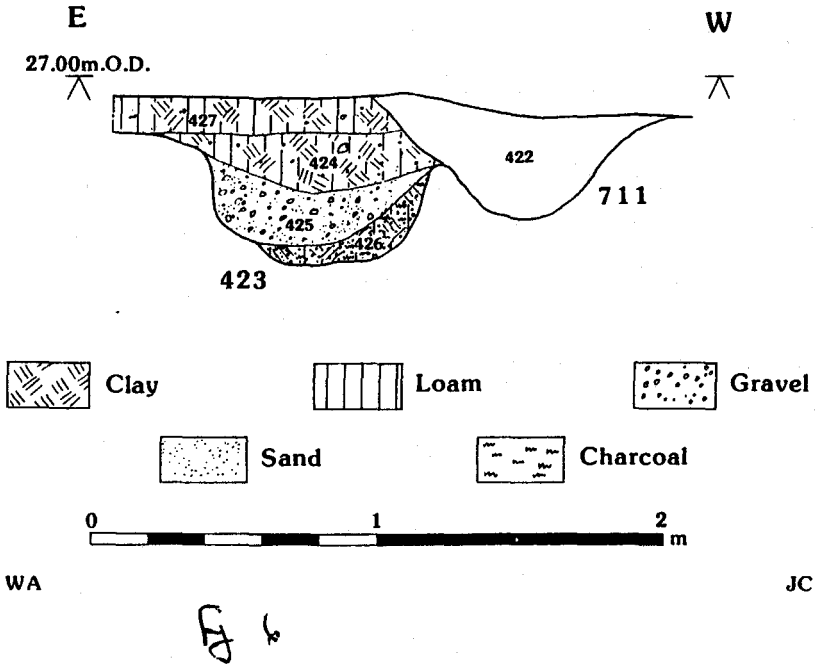


Fig.5: Phase 2 - Prehistoric feature location plan

Fig 5

Pit 423, Ditch 421



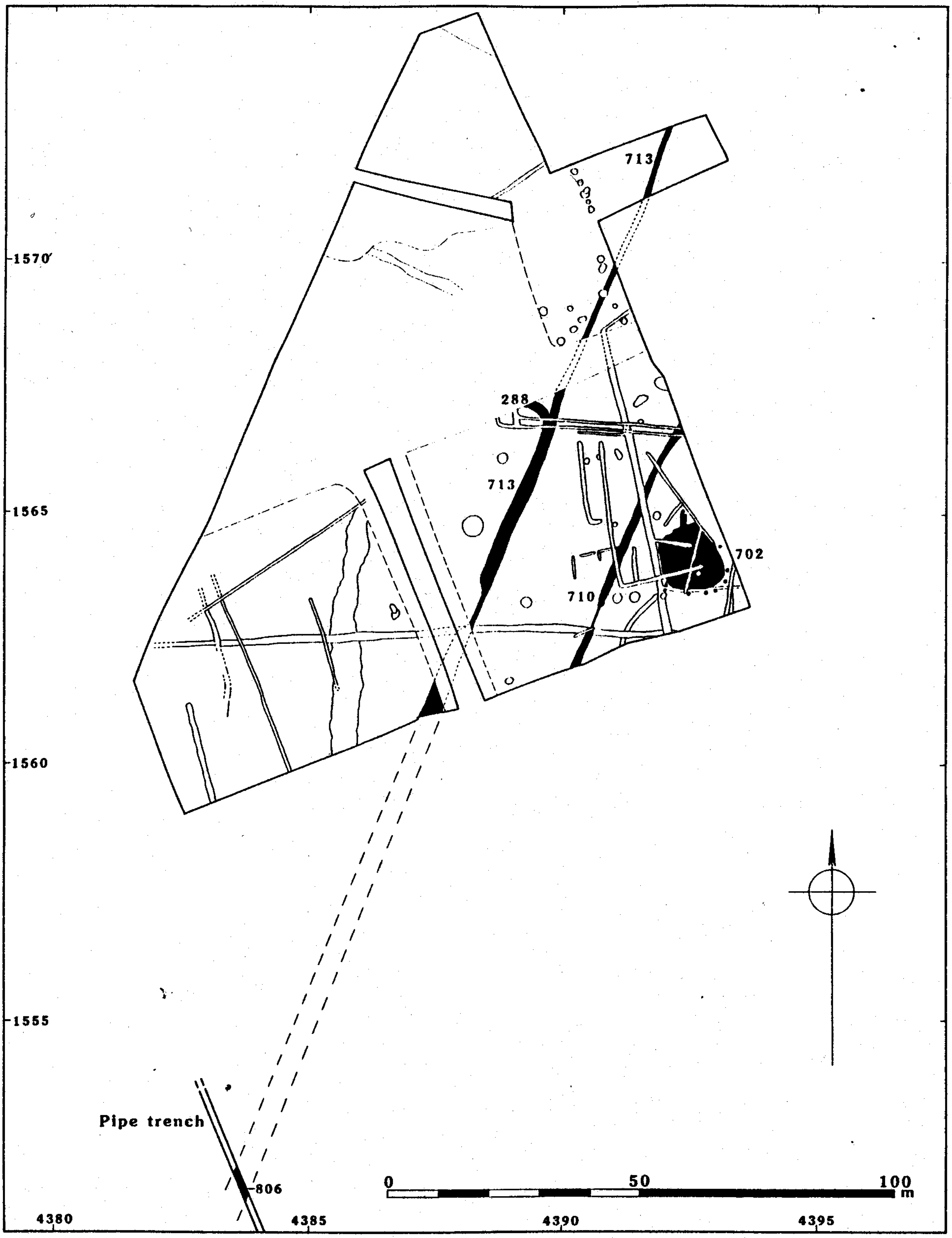


fig 7

Roman Burial

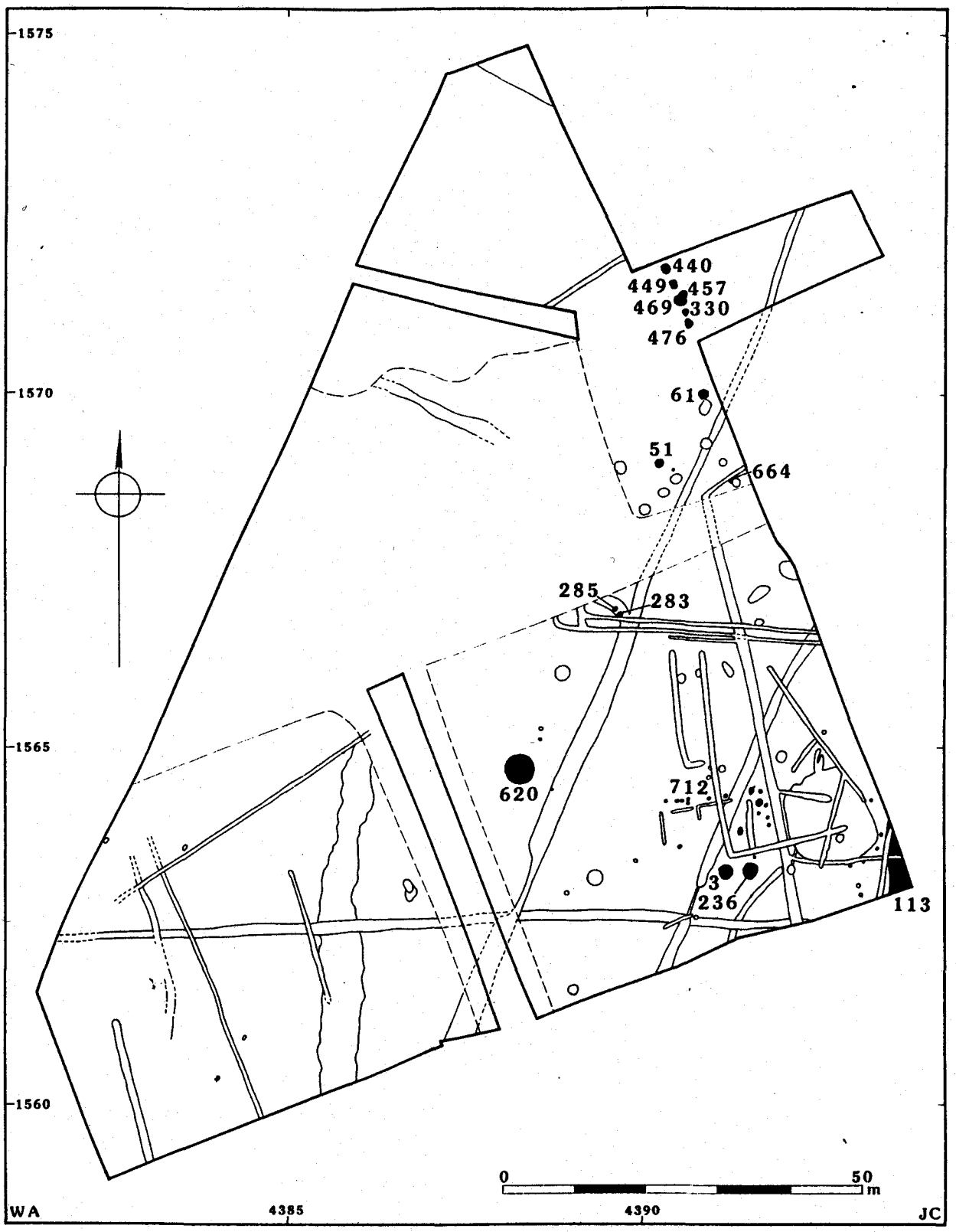


Fig 8

10K - 11K C

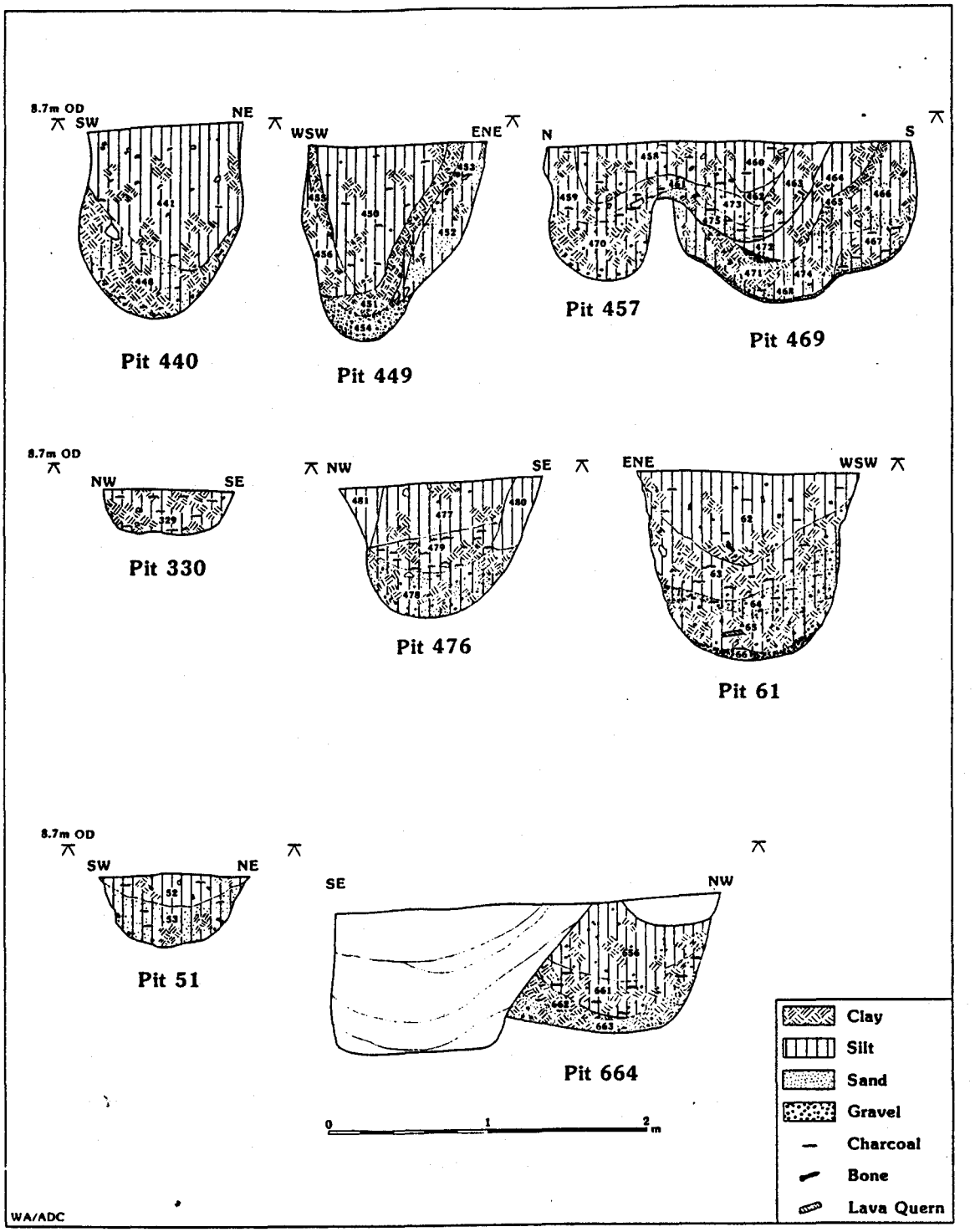


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Fig 9

Fig 10

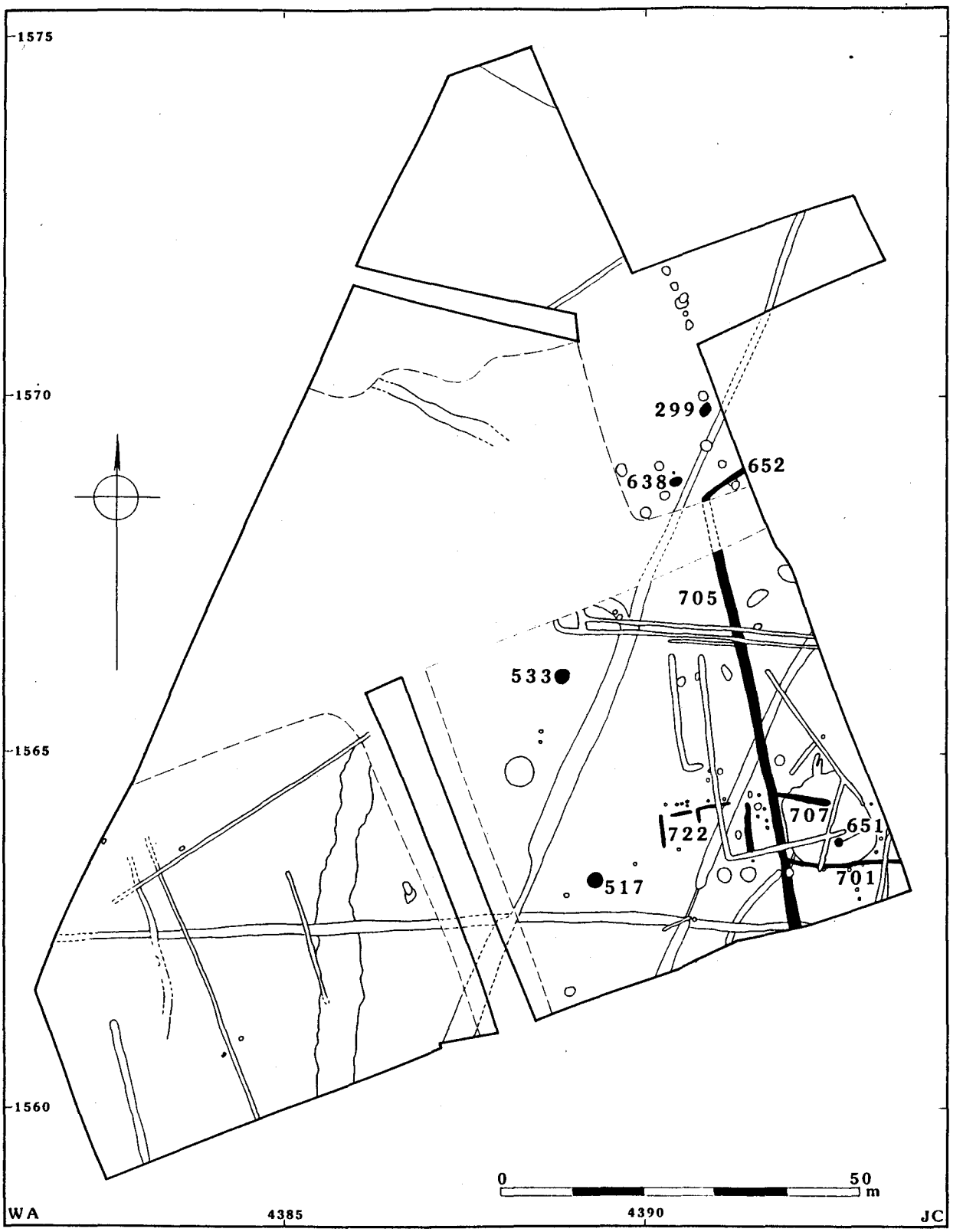


Fig.9: Phase 4.2 - Early medieval (11th/13th century) feature location plan

Fig 10

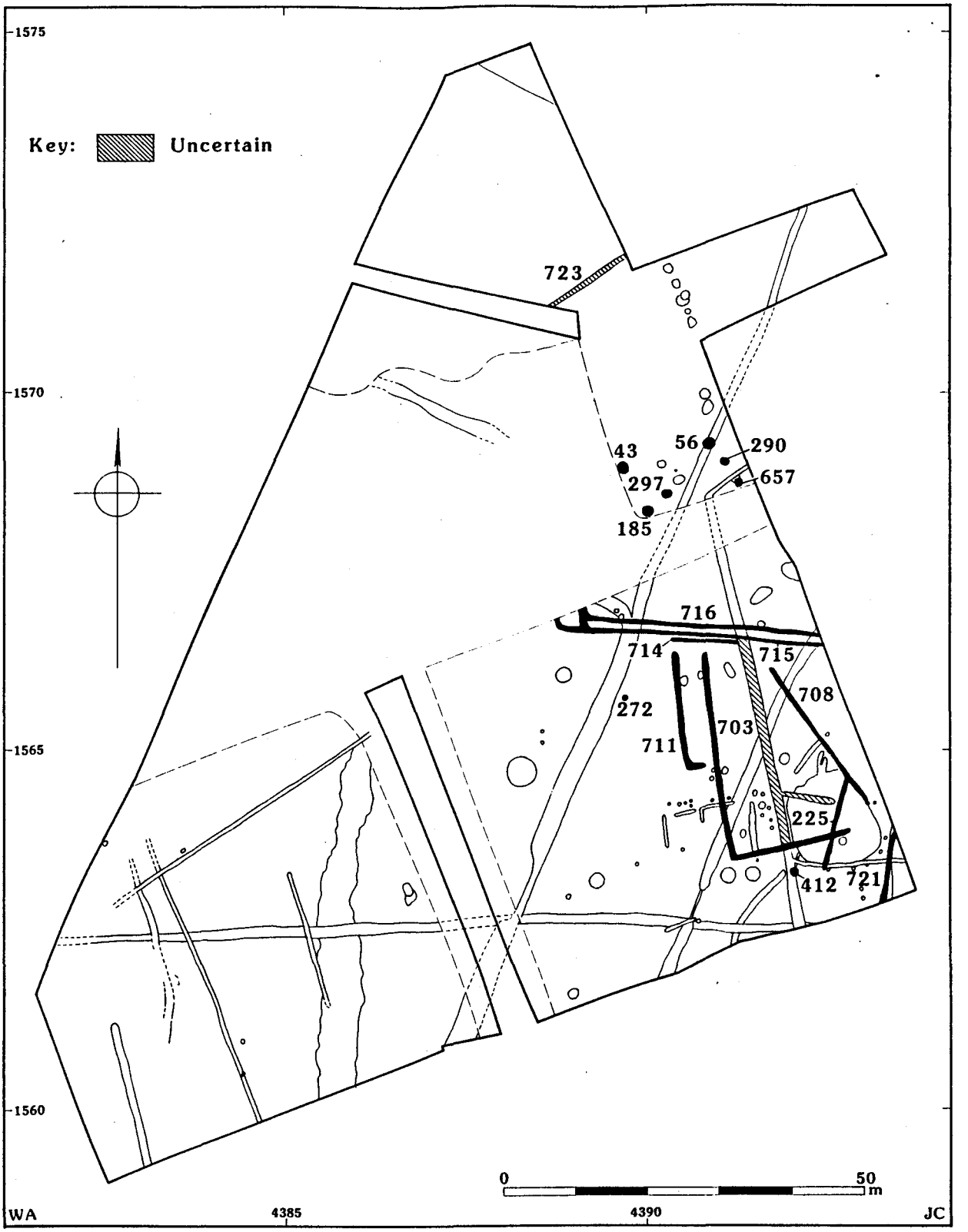
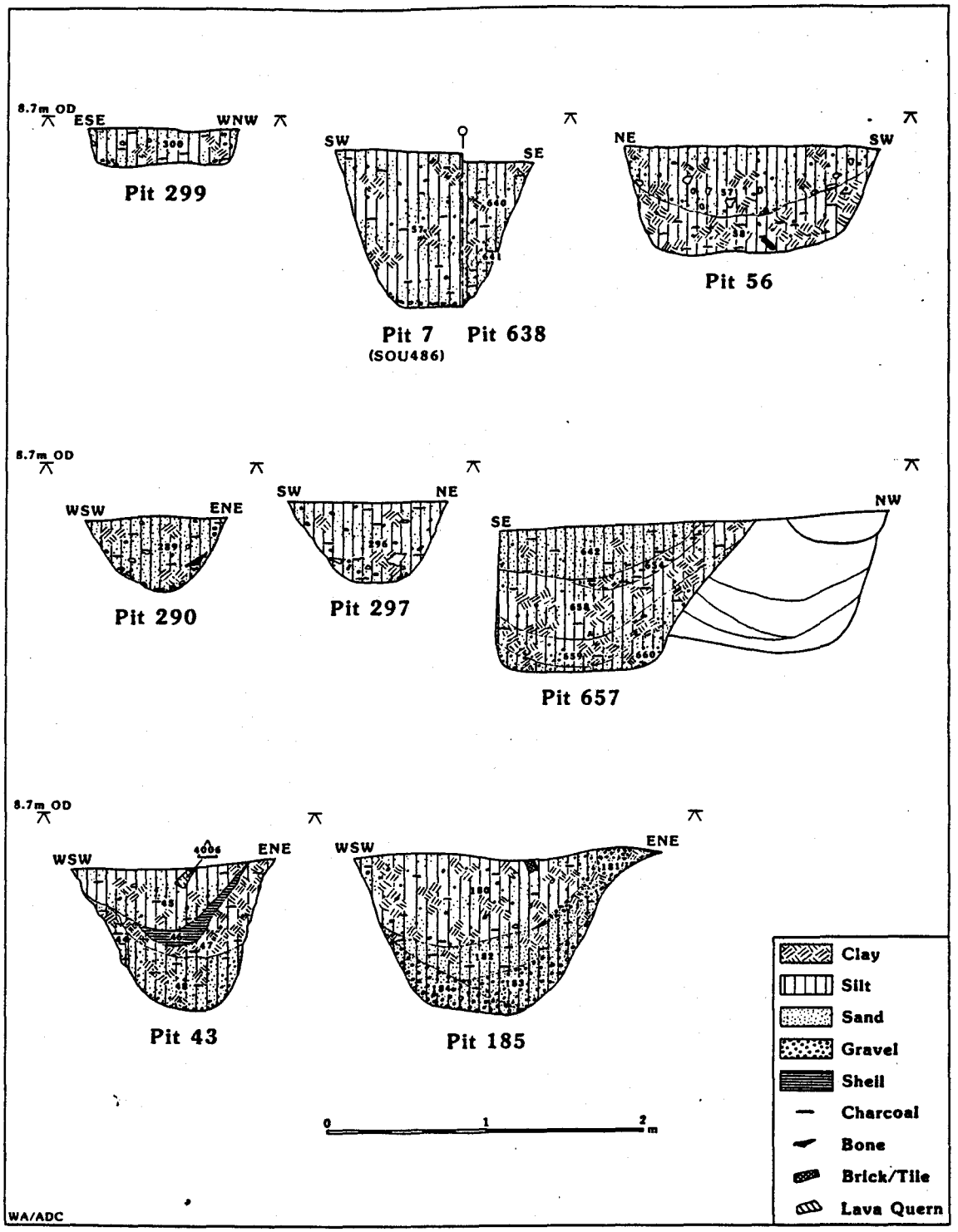


Fig.8: Phase 4.3 - Medieval (12th/14th century) feature location plan

Fig 11



(13)

Fig 12

Fig 10 XX

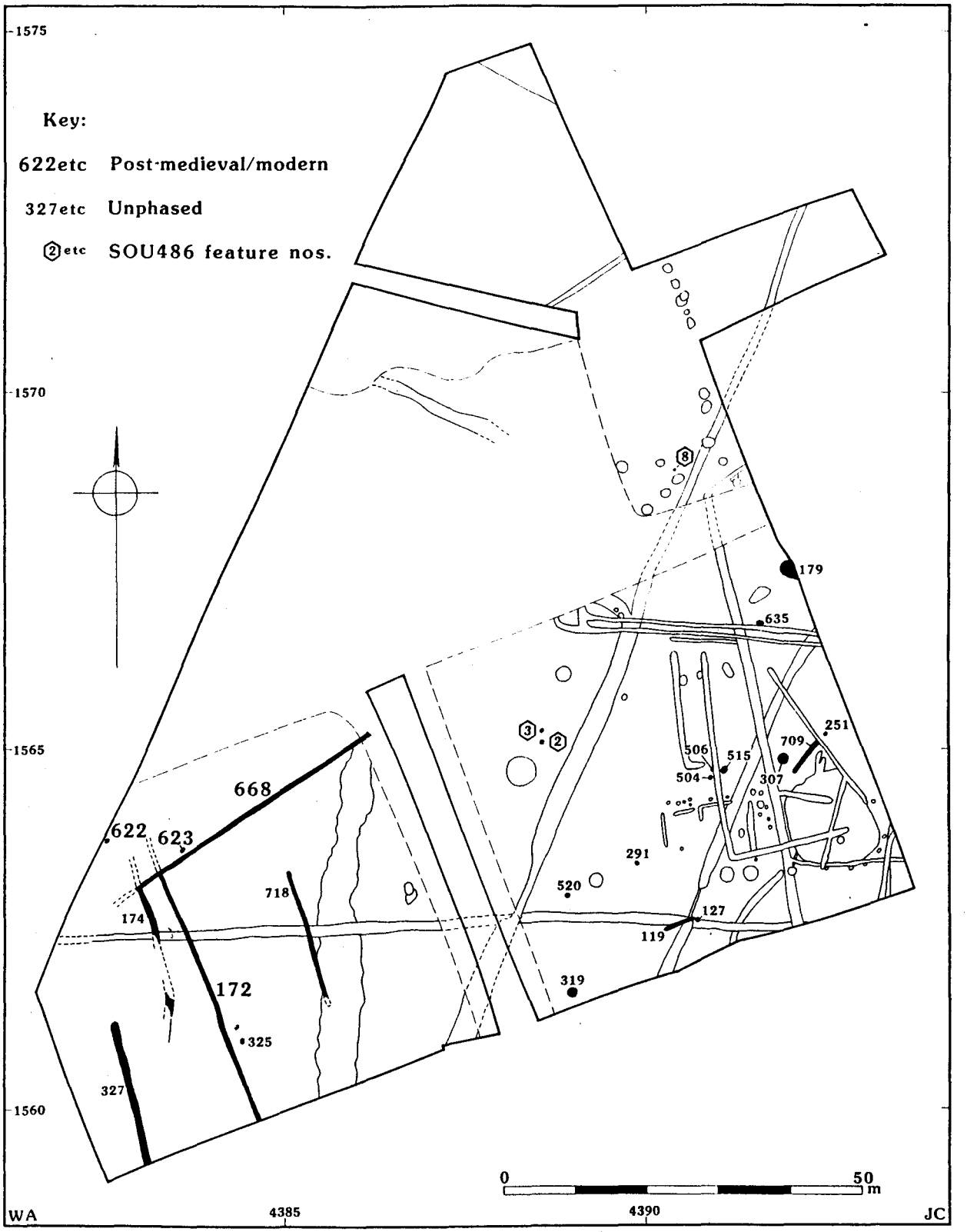


Fig.11: Phases 5/6 - Post-medieval/modern and unphased feature location plan

Fig 13

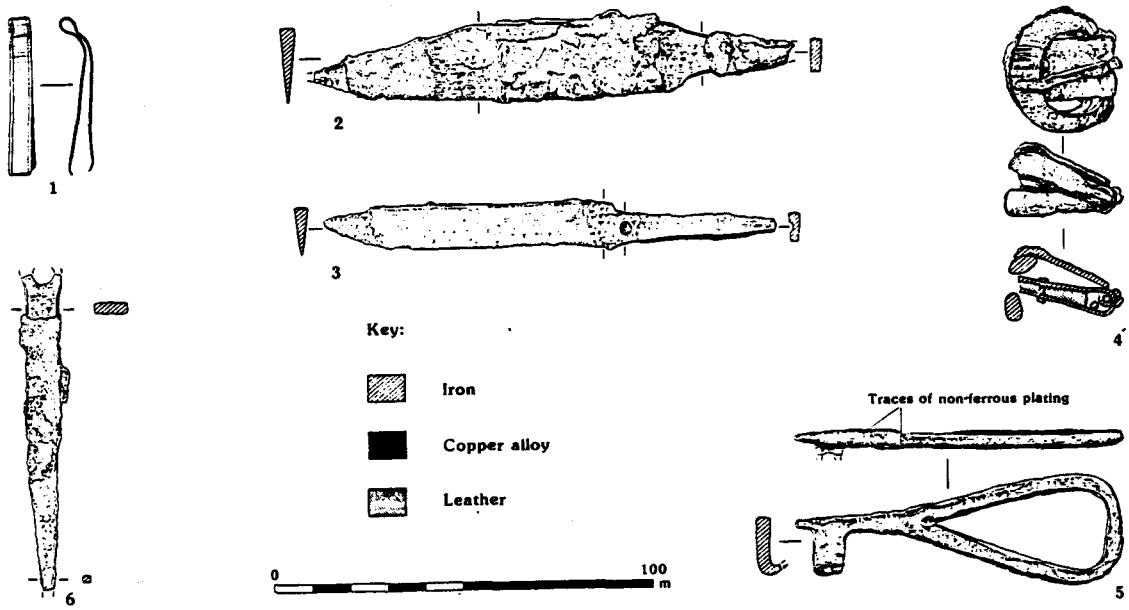


Fig.12: Copper alloy and iron objects

Fig 14

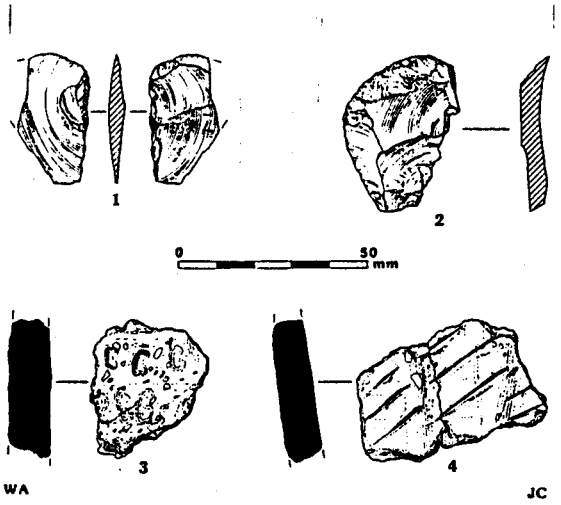


fig 15

(15)

Fig ~~14~~ 15 / ~~14~~

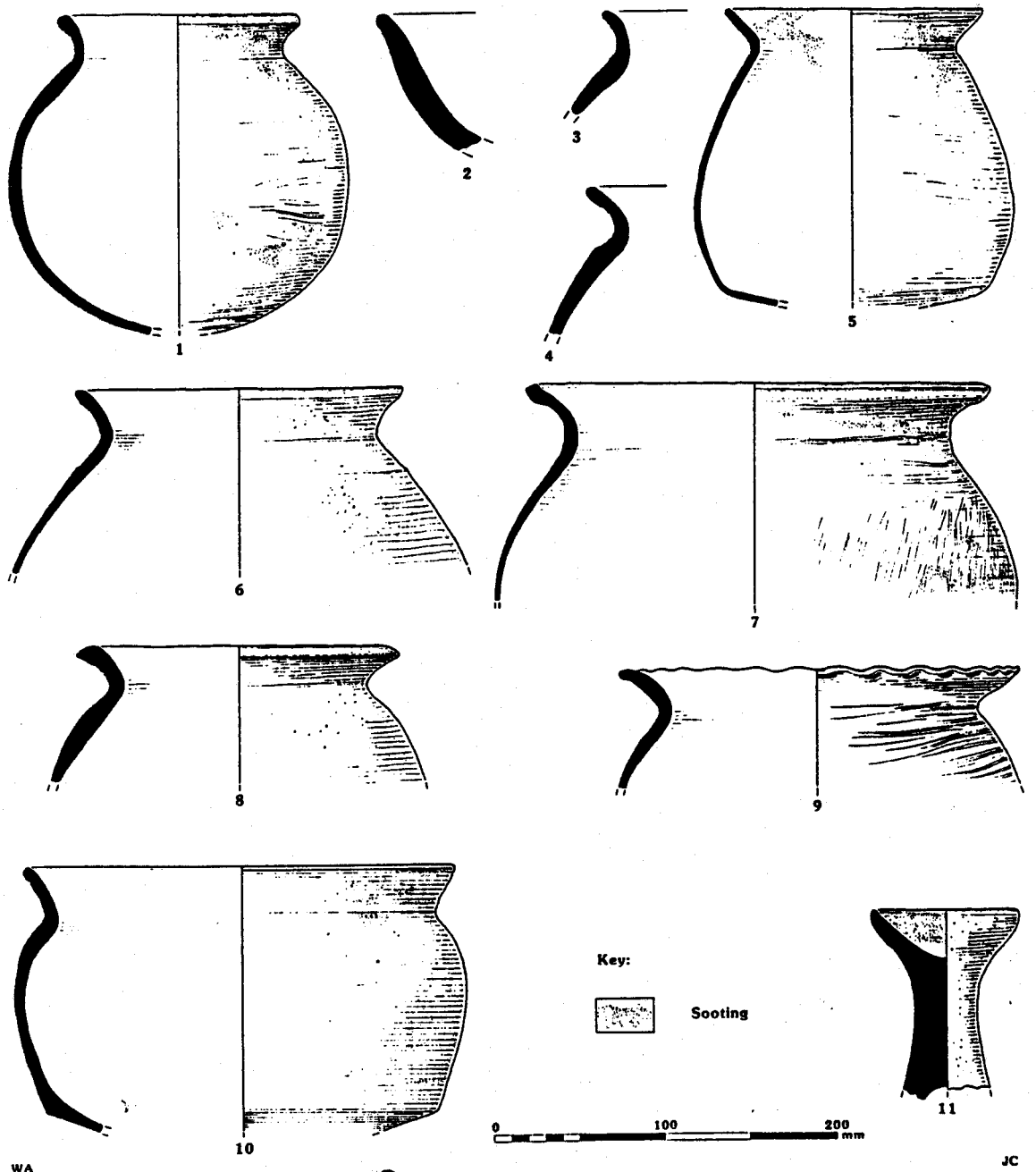


Fig 16

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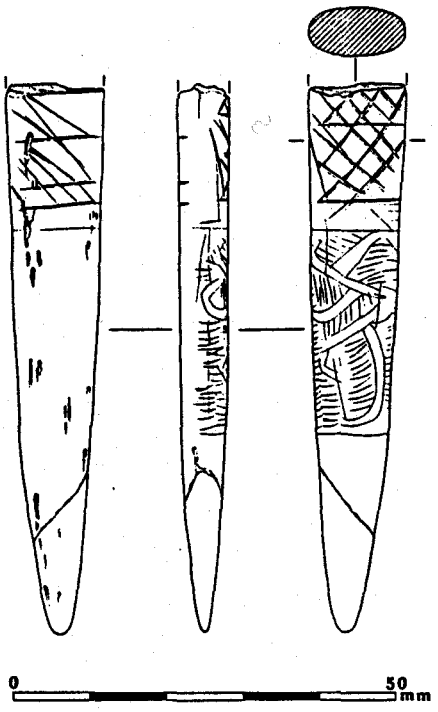

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Fig 17

(17)

Fig ~~13~~ 14 ~~15~~ 16

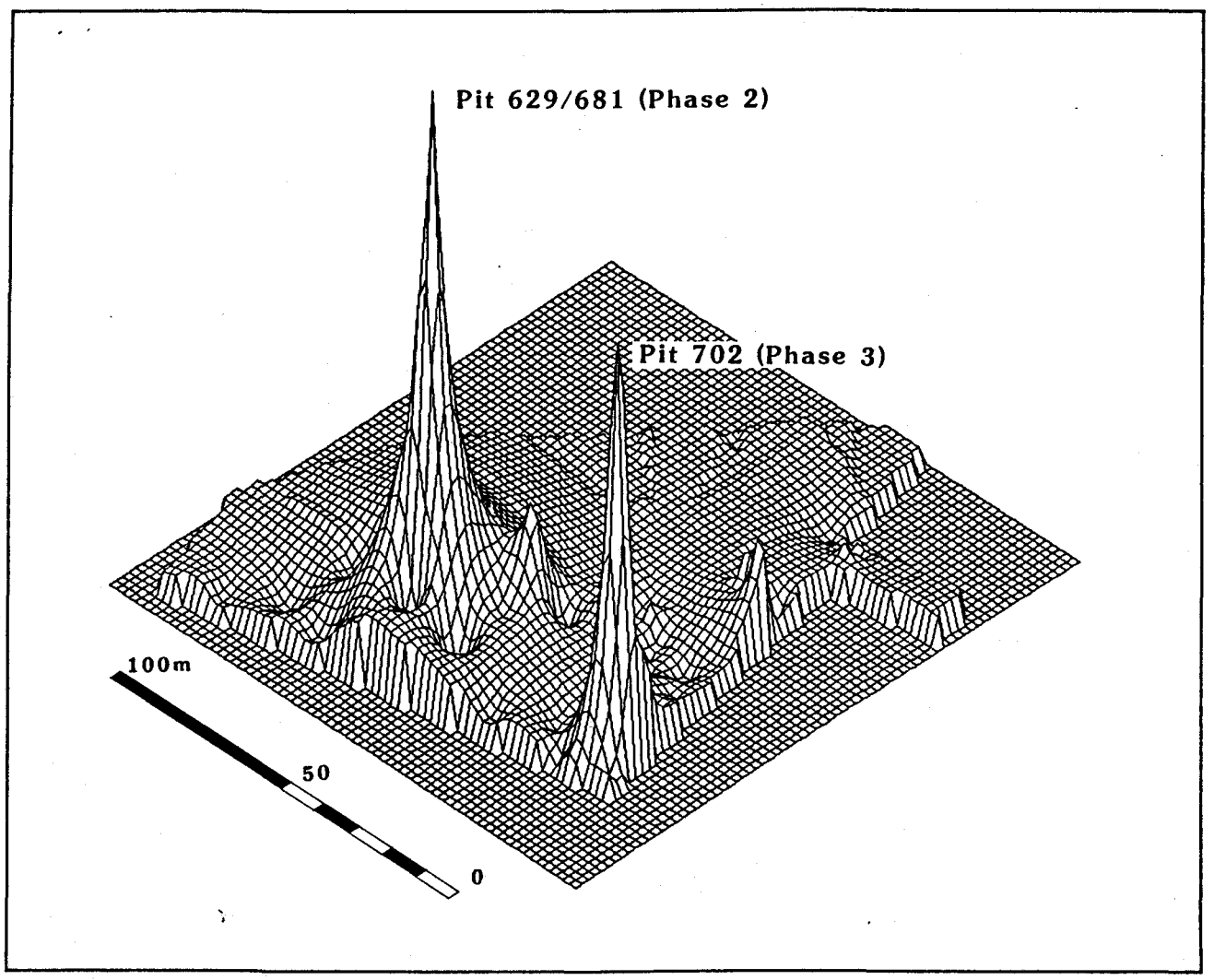

Fig 18

List of Tables

Table 1: Pottery quantification by area for Phases 4.1-4.3

	Northern Area			Southern Area			Unstratified			
	No.	Wt. (g)	MSW	No.	Wt. (g)	MSW	No.	Wt. (g)	MSW	Total
Phase 4.1										
No.	221 60 % 64 %			132 36 % 58 %			13 4 % 12 %			366
Wt. (g)		2833 64 % 55 %			1340 30% 45 %			249 6% 17 %		4422
MSW			12.82			10.15			19.15	12.08
Phase 4.2										
No.	107 40 % 31 %			72 27 % 32 %			88 33 % 82 %			267
Wt. (g)		1671 39 % 32 %			1449 34 % 49 %			1171 27 % 80 %		4291
MSW			15.62			20.13			13.31	16.07
Phase 4.3										
No.	16 35 % 5 %			23 50 % 10 %			7 15 % 6 %			46
Wt. (g)		651 73 % 13 %			191 21 % 6 %			52 6 % 3 %		894
MSW			40.69			8.30			7.43	19.43
	344	5155	14.99	227	2980	13.13	108	1472	13.22	679/ 9607/ 14.15

Table 2: Quantification of all finds by material type for each context by feature and phase (number/weight in grammes)

SOU486

Feature	Context	Ph	Bone	BFlint	CBM	FClay	Flint	Glass	Pottery	Stone	Metal
-	u/s Tr 2	5		1/3			2/98				
-	u/s Tr 3	5					5/86		4/21		
-	u/s Tr 4	5					5/164		1/2		
-	u/s Tr 5	5		3/64			5/27		2/6		
-	u/s Tr 6	5		2/21			2/82		1/23		
PH3	51	6	10/5				1/4				
P4	52	2		27/1081			2/9		19/53		
D5	54	6		2/97			1/4				
P6	55	4.1				2/8					
	56			1/45		2/14			3/5		
P7	57	4.2	18/30	10/258	1/17	1/23	2/60		24/172	9/88	
P9	59	4.3			1/3		1/12		1/1		
D10	60	4.1		1/4	3/1820		2/61		1/8	15/2074	
SOU486 Total			**28/35**	**47/1573**	**5/1840**	**5/45**	**28/607**		**56/291**	**24/2162**	

SOU503

Feature	Context	Ph	Bone	BFlint	CBM	FClay	Flint	Glass	Pottery	Stone	Metal
-	237	5	2/8	37/790	3/293	1/6	5/21	1/2	41/304	2/79	
-	270	5	1/10			2/7			5/120	1/309	
-	622	5	119/242								
-	623	5	7/3								
-	670	4.1			3/31						
-	678	4.1			2/29						
-	682	1					1/84				
D1 [721]	2	4.3	1/3	2/37	1/173	1/2	1/90		2/11	1/271	
P3	4	4.1	43/143		1/42	9/27			7/36	1/109	1
D10 [703]	11	4.3		4/55		3/73	1/5			1/3	
P13	12	4.1		2/70		4/38			2/14		
PH18 [722]	19	4.2							2/49		
PH20 [722]	21	4.2							1/1	1/101	
PH22 [722]	23	4.2		1/9					4/20		
PC30 [717]	31	1		1/7			6/17				
	32			1/18			4/7				
PC33 [717]	34	1					2/40				
	37			1/23							
P43 [719]	44	4.3							5/118		
	45		6/128			7/114			55/1877	3/3227	
	47		1/13			2/11				1/175	
	48		3/56						2/9		
P51 [719]	53	4.3						1/2			

D54	55	4.1		5/35			1/5		1/1	1/309	
P56 [719]	57	4.3	30/268	2/21		9/63	2/49		82/1779	6/775	1
	58										1
D59	60	3	1/1			1/53	2/8		3/9		
P61 [719]	62	4.1	13/108				1/26		7/90		
	63						1/6		3/48		
D103 [721]	101	4.3		2/30	1/79				6/153	8/192	
	102				1/7					1/486	
D113	108	4.1			1/80	2/1			1/10		
D132	130	3							13/10		
D137 [710]	134	3		2/62					2/27		
PC154 [717]	144	1					1/7				
D157 [718]	155	5	15/34								
D159 [704]	158	2		1/10							
D169	168	5					1/8				
D172	170	5			4/101					2/12	
P185 [719]	180	4.3			1/80				7/78		
PH202	201	4.1		1/12		6/12			1/2		
D209 [705]	206	4.2	6/35								
	208			1/24							
PH217	216	3				1/6					
D221 [701]	220	4.2				4/1					
D231 [720]	230	4.2								5/743	
P236	234	4.1	7/42		1/14	14/52	1/13		1/1	7/207	
	235		8/62	3/44	1/40		1/26		1/8		
D239 [708]	238	4.3	1/1						3/15		1
D241	240	6					3/19				
D243 [708]	242	4.3		4/71			1/13		6/39		1
D246 [709]	245	6					1/4				
D253 [715]	252	4.3	3/1	2/37	1/3		1/2		1/5		
D256 [716]	255	4.3							3/2		
D259 [715]	257	4.3	11/64	4/31	1/33				2/18	1/4	
D261 [716]	260	4.3				1/13			1/4		
D263 [722]	262	4.2			2/214						
D265 [713]	264	3					2/9			1/1460	

	266			6/142			1/9		1/20		
	267			2/32					9/171		
P272	271	4.3	1/6			1/3	1/4		18/144		
N278	277	1							1/4		
D281 [714]	280	4.2	8/193						1/17		
P283	282	4.1	20/79						2/10	1/725	
	292								3/14		
P285	284	4.1	15/130	1/29		3/19			5/88	3/202	
	293		10/204						3/27	4/30	
D288 [713]	286	3	1/1	4/158			4/31		7/39		
P290 [719]	289	4.3	27/194		3/404	6/114			12/67		1
D295 [713]	294	3					1/4				
P297 [719]	296	4.3	41/251		1/384	15/86			6/208	2/111	1
P299 [719]	300	4.2	1/1						51/888		
D301 [707]	302	4.2		1/24					3/91	3/34	
D303 [705]	304	4.2	3/21						3/13		
D309 [713]	308	3		8/152			3/29				
	310						2/39				
D317 [704]	316	2		2/51							
D320 [713]	321	3		1/5			1/8		19/502		
P325	326	6		1/31			1/3				
P330 [719]	329	4.1	16/32			1/1			5/41		
D333 [711]	334	4.3	1/6	1/26	1/238						
D401 [703]	402	4.3							6/27		
P412	413	4.3							3/20		
D418 [703]	419	4.3	1/1				1/19		3/7	2/23	
D421 [711]	422	4.3			1/35						
P423	424	2		2/26			1/4				
	425								2/15		
	426			2/35			3/16				
D428 [703]	429	4.3					2/19		1/5		
P430	432	2		1/32			5/35		1/13		
D435 [705]	433	4.2	43/429			7/60			19/592	3/209	
	434		27/322			4/137	1/7		3/56		1
D437 [705]	436	4.2	30/385	2/14	2/94	5/128			18/276	4/675	2

P440 [719]	441	4.1	11/71	3/60		1/4			2/15		1 Cu
	448		31/292	1/25					2/8	4/747	
D445 [715]	444	4.3	1/5	1/14						1/6	
D447 [714]	446	4.2							6/42		
P449 [719]	450	4.1	7/86	1/9						1/24	
P457 [719]	458	4.1			1/97				3/14		
	459		5/13	2/116	1/107		1/10		9/58		
	460					4/60			8/39		
	462			1/27		4/11			4/31		
	463				1/48	1/24					
P469 [719]	464	4.1									1
	466		1/2				2/14		2/23	1/6485	
	467								1/24		
	468		4/64						1/12		
P476 [719]	477	4.1	14/69		3/219	3/56			3/15	3/881	1
	478								2/17		
	479		23/252						19/122		
D501 [703]	502	4.3				2/2					
D510 [710]	511	3							1/18		
	513								1/1		
P517	518	4.2	1/5						12/301		
	519		7/50		11/427				1/10	2/193	
D522 [708]	523	4.3					1/6				
Q526 [702]	524	3		26/607					2/12		
	525			1/42							
D529 [722]	530	4.2							1/5		
	531									4/1232	
P533	534	4.2	1/8	3/145		1/74			2/32	10/183	
N550	549	5		1/49	5/325			1/2			
D602 [708]	601	4.3					1/3				
D606 [710]	603	3		2/55			1/1		1/6		
	604			2/6			2/14				
D608 [710]	607	3							18/621		
D610 [705]	609	4.2	55/355	2/106	1/83				20/246	1/37	1
P620	614	4.1	2/2	10/230		1/4	1/3		5/27		
	617		6/32	5/177					3/14		1
P629	630	2		2/68							
N633	631	1		1/57	1/599		3/34			1/2962	

D636 [707]	637	4.2	6/86	1/17		1/25			7/80	4/802	1
P638 [719]	640	4.2							1/13		
	641								1/8	1/14	1
Q647 [702]	644	3							1/7		
P651	648	4.2	1/11						1/31	5/95	
	649								19/373		
	650								7/362		
D652 [705]	653	4.2	2/6		1/38	3/31	3/6		9/33		
P657 [719]	642	4.3	9/41*	9/487	1/212	1/11			2/39	1/66	1
	658		3/17	2/82					2/15		
P664 [719]	656	4.1	9/131	1/46					13/81		
N666	665	1			1/9						
D667 [713]	668	3					2/30		1/3		
	672			5/124			1/17		1/3		
P681	624	2		32/688							
	Unstrat	6							61/1060	1/43	1
SOU503 Total			**750/ 5010**	**224/ 5380**	**74/8250**	**136/ 1384**	**109/ 1329**	**3/6**	**786/ 12325**	**129/ 26433**	**20**
GRAND TOTAL			**778/ 5045**	**271/ 6953**	**79/ 10090**	**141/ 1429**	**137/ 1936**	**3/6**	**842/ 12616**	**153/ 28595**	**20**

Phase codes (Ph):

1	Pleistocene
2	Prehistoric
3	Roman
4.1	10th/ 11th century AD
4.2	11th/ 13th century AD
4.3	12th/ 14th century AD
5	Post-medieval/ modern
6	Unphased

Feature codes:

P	Pit
D	Ditch/Gully
PH	Post-hole
Q	Quarry
PC	Palaeo-channel
N	Natural

All metal objects are Iron apart from Cu = copper alloy/ * includes worked bone object/ numbers in square brackets are group numbers assigned to features.

Table 3: Quantification of prehistoric pottery by fabric for each feature (number/weight in grammes)

SOU486

Feature	Context	F1/Pet	I1/GW	F2	F3	G1
4	52	19/55	-	-	-	-

SOU503

Feature	Context	F1/Pet	I1/GW	F2	F3	G1
43	44	-	-	-	1/9	-
423	425	-	1/15	-	-	-
423	426	-	-	-	-	2/2
430	431	-	-	-	-	1/25
430	432	-	-	-	-	1/14
469	467	-	-	-	1/22	-
526	524	-	-	1/2	-	-
	Totals	**19/55**	**1/15**	**1/2**	**2/31**	**4/41**

Table 4: Quantification of Roman pottery by fabric or ware group

Fabric	Number	Weight (g)	% of total by number	% of total by weight
Amphora	1	167	1.2	10.2
BB1	2	9	2.5	0.5
Q100	36	885	44.4	54.3
Q101	7	39	8.6	2.4
Q102	14	10	17.3	0.6
Q103	19	496	23.4	30.4
Q104	2	25	2.5	1.5
Total	**81**	**1631**	**99.9**	**99.9**

Table 5: Quantification of Roman pottery by fabric and feature (number/weight in grammes)

Feature	Context	Amph	BB1	Q100	Q101	Q102	Q103	Q104
56	57	1/167		1/4				
59	60		2/9					
132	130					14/10		
137	134							2/25
265	266			1/20				
	267			9/168				
288	286				7/39			
320	321						19/496	
510	511			1/18				
526	524			1/11				
608	607			19/617				
610	609			1/24				
667	668			1/3				
	672			1/3				
-	237			1/17				
	TOTAL	**1/167**	**2/9**	**36/885**	**7/39**	**14/10**	**19/496**	**2/25**

Table 6: Quantification of late Saxon/medieval pottery by fabric

Fabric	Number	Weight (g)	% of total
C400	10	490	5.2
C401	4	9	0.1
C402	5	44	0.5
F400	208	3359	26.2
F401	342	3849	50.0
F402	28	575	6.1
F403	1	27	0.3
Q400	2	72	0.8
Q401	5	90	0.9
Q402	28	200	2.1
Q404	2	44	0.5
Q405	4	53	0.6
Q406	18	344	3.6
Q407	12	203	2.1
Q408	11	82	0.8
Total	**680**	**9441**	

Table 7: Quantification of late Saxon/medieval pottery by fabric and feature (number/weight in grammes; shading denotes a pit in the northern group)

SOU486

		Phase 4.1			Phase 4.2							Phase 4.3					
Feature	Context	F401	Q405	Q406	C401	C402	F400	F402	F403	Q407	Q408	C400	Q400	Q401	Q402	Q404	Total
Tr 3	U/S	2/13					2/8										4/21
Tr 4	U/S	1/4															2/6
Tr 5	U/S																2/6
Tr 6	U/S	1/23															1/23
6	56	3/9															3/9
7	57	17/111		2/29		2/6	2/7	3/29									24/176
9	59	1/1															1/1
10	60			1/8													1/8
SOU486	Subtotal	25/161		3/37		2/6	4/15	3/39						1/2			38/250

SOU503

		Phase 4.1			Phase 4.2							Phase 4.3					
Feature	Context	F401	Q405	Q406	C401	C402	F400	F402	F403	Q407	Q408	C400	Q400	Q401	Q402	Q404	Total
1	2	1/2									1/8						2/10
3	4	7/35															7/35
13	12	2/13															2/13
18	19									2/47							2/47
22	23						4/19										4/19
43	44	3/35											2/72				5/107
	45	55/1405										3/445					58/1850
	48	1/5										1/4					2/9
54	55	1/1															1/1
56	57	37/286	2/15	2/175			30/293	8/276			1/6			2/37			82/1088
59	60	1/2															1/2
61	62	6/89									1/4						7/93
	63	1/9	2/38														3/47
103	101						1/2			5/146							6/148
113	108	1/11															1/11
185	180	3/18		3/45								1/13					7/76
236	234	1/1															1/1
	235	1/7															1/7
239	238	2/10													1/8		3/18
243	242	3/20													3/23		6/43
253	252	1/6															1/6
256	255	3/2															3/2
259	257			1/12											1/6		2/18
261	260														1/4		1/4
272	271	1/24					5/9								15/107		21/140
278	277											1/4					1/4
281	280	1/17															1/17
283	282	2/10															2/10
	292	3/14															3/14

285	284	5/86															5/86
	293	3/27															3/27
290	289	10/51										1/5		1/12			11/56
297	296	3/41						2/159				1/5					6/205
299	300						54/879										54/879
301	302						2/91				1/5						3/96
303	304						3/13										3/13
330	329	4/35										1/6					5/41
401	402	5/22									1/5						6/27
412	413	3/21															3/21
418	419	1/1					2/6										3/7
428	429	1/4															1/4
435	433	10/129												1/39			11/168
	434	3/57															3/57
437	436	18/270															18/270
440	441			2/14													2/14
	448	2/9															2/9
447	446	6/41															6/41
457	458	3/15															3/15
	459	9/56															9/56
	460	6/28				1/6											7/34
	462	3/25		1/6													4/31
469	466	2/23															2/23
	468	1/12															1/12
476	477	2/5										1/8					3/13
	478	2/17															2/17
	479	16/78		3/42													19/120
517	518	7/98					5/200										12/298
	519						1/11										1/11
529	530						1/6										1/6
533	534						2/32										2/32
606	603									1/5							1/5
610	609	14/167		3/13			1/13		1/27								19/220
620	614	5/25															5/25
	617	3/12															3/12
636	637	5/48				1/18					1/18						7/84
638	640	1/14															1/14
	641	1/9															1/9
647	644						1/7										1/7
651	648						1/31										1/31
	649						15/314	5/36			1/17						21/367
	650						5/348	2/12									7/360
652	653	8/32			1/3												9/35
657	642	1/4														1/35	2/39
	658	1/7														1/9	2/16
664	656	10/72			3/6												13/78
-	237	3/23				1/14	23/189	1/2		4/5	3/14				4/18		39/265
-	270	2/96					1/15								2/8		5/119
-	U/S	4/90					47/866	7/61			1/5				1/26		56/959
SOU503	**Subtotal**	**320/3772**	**4/53**	**15/307**	**4/9**	**3/38**	**204/ 3344**	**25/546**	**1/7**	**12/203**	**11/82**	**10/490**	**2/72**	**4/88**	**28/200**	**2/44**	**642/9191**

GRAND TOTAL	**345/3933**	**4/53**	**18/344**	**4/9**	**5/44**	**208/ 3359**	**28/575**	**1/27**	**12/203**	**11/82**	**10/490**	**2/72**	**5/90**	**28/200**	**2/44**	**680/ 9441**

Table 8: Quantification of pottery recovered from all soil samples (number/weight in grammes)

Sample	Context	Feature	Phase	Fabric	Amount	Comment
2039	450	449	4.1	Q101	1/4	beaded rim
				F401	4/5	body sherds
2040	452	"	"	F401	1/4	body sherd
2055	65	61	"	F401	2/9	1 rim-type, sooted; 1 body sherd
2056	643	647	3	F401	2/1	body sherds
2058	645	647	3	G100	1/2	body sherd

Table 9: Quantification of ceramic building material by fabric (number/weight in grammes)

Fabric codes		CBM1	CBM2	CBM3	CBM4	CBM5	CBM6	CBM7	CBM8	CBM9
Phase	**Feature**	**No/Wt**	**No/Wt**	**No/Wt**	**No/Wt**	**No/Wt**	**No/Wt**	**No/Wt**	**No/Wt**	**No/Wt**
1	666								1/9	
4.1	1	1/173								
	3		1/42							
	113		1/80							
	236	1/14								1/40
	457	2/145		1/107						
	476	1/80	2/121							
	670								2/19	1/12
	678		1/21							
	F10 SOU486						3/1813			
4.2	263	1/148						1/66		
	437	2/94								
	517		3/31		8/396					
	610		1/83							
	652	1/38								
4.3	113		3/86							
	185		1/51					1/11	9/1890	
	253		1/3							
	259	1/33								
	290	2/303	1/100							
	297						1/384			
	333						1/238			
	421		1/35							
	657				1/212					
	F7 SOU486				1/17					
	F9 SOU486	1/3								
5	172	2/40	2/61							
	550		1/232					3/68	1/13	
U/S	237		1/170			2/123				
	633						1/599			
Total		**15/ 1071**	**20/ 1116**	**1/107**	**2/229**	**10/528**	**6/3034**	**5/145**	**13/193 1**	**2/52**

Table 10: Quantification of burnt clay material by fabric (number/weight in grammes)

Fabric codes		BC 1	BC 2	BC 3	BC 4	BC 5	BC 6
Phase	**Feature**	**No/Wt**	**No/Wt**	**No/Wt**	**No/Wt**	**No/Wt**	**No/Wt**
3	59	1/53					
	217			1/6			
4.1	1	1/2					
	3			9/27			
	13		2/5	2/33			
	113			2/1			
	284			3/119			
	411		1/4				
	457			5/35		4/60	
	476			3/56			
	620		1/4				
	F6 SOU486	2/14			2/7		
4.2	202	6/12					
	221			4/1			
	236			14/52			
	435			6/45		5/152	
	533			1/74			
	437			4/109	1/19		
	636			1/25			
	652	1/7		1/3			1/22
	F7 SOU486				1/23		
4.3	10			2/72	1/1		
	43				3/36	6/89	
	56	4/51		5/12			
	261			1/13			
	272			1/3			
	290	1/3	1/9		4/98		
	297	7/22		3/34	5/28		
	501	1/1		1/1			
	657					1/11	
5	270			1/7			
U/S	237			1/6			
	Total	**24/165**	**5/22**	**71/734**	**17/212**	**16/312**	**1/22**

Table 11: Quantification of non-local stone by feature

Phase	Feature	Context	Quantity	Description
1	633	631	1	Sandy Limestone
3	713	264	1	Binstead Limestone
	647	644	1	Wealdon Sandstone (from sample 2057)
4.1	3	4	1	Binstead Limestone
	61	65	1 bag	Mayen Lava (from sample 2055)
	236	234	8	Mayen Lava
	283	282	1	Chalk
	285	284	1	Slate
			1	Burnt Oolitic Limestone
		293	3	Mayen Lava
			1	Kimmeridge Shale (dry)
	440	441	1	Quarr Featherbed (limestone)
		448	3	Quarr Featherbed (limestone)
			1	Binstead Limestone
	449	450	1	Sandy Limestone
	469	466	1	Binstead Limestone
	476	477	2	Sandy Limestone
			1	Oolitic Limestone
4.2	517	519	2	Chalk
	533	534	10	Mayen Lava
			1	Binstead Limestone
			1	Sandy Limestone
	638	641	1	Modern Road Metal
	651	648	5	Quarr Featherbed (limestone - finer facies)
	705	433	2	Mayen Lava
		436	1	Mayen Lava
			1	Sandy Limestone
			1	Binstead Limestone (finer facies)
			1	Burnt Granite
			1	Malmstone
		609	1	Mayen Lava
	707	302	3	Mayen Lava
		637	5	Quarr Featherbed (limestone)
	720	230	5	Binstead Limestone (Sample no. 3001)
	722	21	1	Quarr Featherbed (limestone)
		531	1	Malmstone
			1	Mayen Lava
4.3	43	45	2	Quarr Featherbed (limestone)
			1	Quarr Featherbed (limestone, Obj. no. 4006)
		47	1	Sandy Limestone
	54	55	1	Sandy Limestone
	56	57	3	Mayen Lava
			3	Binstead Limestone
			1	Sandy Limestone
	297	296	1	Mayen Lava
			1	Quarr Featherbed (limestone)
	657	642	1	Quarr Featherbed (limestone)
	703	11	1	Binstead Limestone
		419	2	Quarr Featherbed (limestone)
	715	257	1	Mayen Lava
	721	2	1	Sandy Limestone

		101	1	Quarr Featherbed (limestone)
		102	1	Iron-rich Sandstone (Item 5001)
5	-	layer 270	1	Fine-grained Sandstone (Item 5003)
6	-	u/s	1	Fine micaceous Sandstone (Item 5013)

Table 12: Provenance of non-local stone

Stone	Provenance
Mayen lava	Eifel Hills, Germany (Tertiary)
Quarr Featherbed	Bembridge formation (similar to examples from Quarr Beach, Quarr, Isle of Wight)
Binstead limestone	Bembridge formation (similar to examples from Wootton Creek, Ryde, Isle of Wight)
Kimmeridge shale	Clavel Point, Isle of Purbeck, Dorset (Jurassic)
Devonian slate	Not Welsh - probably from SW England or Brittany
Fine-grained sandstone	Source unknown
Granite (burnt)	Difficult to identify due to burning, but nearest source may be the Channel Islands or SW England
Pennant sandstone	Similar to examples from Clevedon, Avon
Iron-rich sandstone	Source unknown (Tertiary)
Malmstone	Similar to examples from Selbourne, Hampshire (Upper Greensand, Cretaceous Period)
Oolitic limestone	Possibly from the Isle of Purbeck, Dorset (Jurassic)
Wealdon sandstone	Source unknown
Chalk	Source unknown
Tufa	Source unknown

Table 13: Quantification of animal bone by species from phase 4 features

Phase	No.	Type	Hor	Cow	S/G	Pig	Red	Roe	Lar	Sar	Mam	Dog	Fow/ Goo	Total
4.1	3	pit		2	3	1			13					19
	61	pit	1			2	1		3					7
	236	pit		3					2					5
	283	pit		2					3					5
	285	pit	1	5										6
	330	pit							9					9
	440	pit	1	5	1	2			2					11
	449	pit		1					4					5
	457	pit							2					2
	469	pit				3			2					5
	476	pit		3	3	2			7	1			2	18
	620	pit		1					3					4
	664	pit		2	2	1								5
		Total	**3**	**24**	**9**	**11**	**1**	**0**	**50**	**1**	**0**	**0**	**2**	**101**
		%age	**3**	**23.8**	**8.9**	**10.9**	**1**	**0**	**49.5**	**1**	**0**	**0**	**2**	
4.2	57	pit		1						2	1		5	9
	209	ditch		1										1
	281	ditch	1	1										2
	299	pit								1				1
	303	ditch		1										1
	435	ditch	1	9			1		3			1		15
	437	ditch	1	2	1	6			5	1				16
	517	pit		2										2
	533	pit							1					1
	610	ditch		7		1			3					11
	636	ditch		2		1			1					4
	652	ditch							1					1
		Total	**3**	**26**	**1**	**8**	**1**	**0**	**14**	**4**	**1**	**1**	**5**	**64**
		%age	**4.7**	**40.6**	**1.6**	**12.5**	**1.6**	**0**	**21.9**	**6.3**	**1.6**	**1.6**	**7.8**	
4.3	43	pit		3		1			4	1				9
	56	pit		4	2	2	1		12	5	1			27
	239	ditch								1				1
	253	ditch									1			1
	259	ditch							1					1
	272	p/h				1								1
	290	pit		1	1	2								4
	297	pit		1		2		1	4	1				9
	333	ditch			1									1
	418	ditch									1			1
	445	ditch							1					1
	651	pit							1					1
	657	pit				3			2	3				8
		Total	**0**	**9**	**4**	**11**	**1**	**1**	**25**	**11**	**3**	**0**	**0**	**65**
		&age	**0**	**13.8**	**6.2**	**16.9**	**1.5**	**1.5**	**38.5**	**16.9**	**4.6**	**0**	**0**	
	Grand Total		**6**	**59**	**14**	**30**	**3**	**1**	**89**	**16**	**3**	**1**	**7**	**230**
	Overall %age		**2.6**	**25.7**	**6.1**	**13.0**	**1.3**	**0.4**	**38.7**	**7.0**	**6.1**	**0.4**	**3.0**	

SPECIES LIST AND ABBREVIATIONS USED IN TEXT AND TABLES

HOR domestic horse

COW	domestic cattle
S/G	domestic sheep (or identified to "ovicaprid")
PIG	domestic pig
RED	red deer, *Cervus elaphus*
ROE	roe, *Capreolus capreolus*
LAR	large ungulate (probably mostly COW but may also include HOR and RED)
SAR	small artiodactyl (probably mostly S/G but may also include some PIG and ROE)
DOG	domestic dog
MAM	unidentified bone, probably SAR and/or LAR
FOW	domestic fowl
GOO	domesticoose/greylag *Anser anser*

Table 15: Calibrated radiocarbon date ranges from pit 423 (phase 2)

	BM-2874: 3960 ± 50 BP	**BM-2875: 4040 ± 70 BP**
Context	Primary fill 426	Secondary fill 425
Sample number	2007	2006
Method A (1σ)	2569 - 2459 BC	2858 - 2481 BC
Method A (2σ)	2590 - 2340 BC	2876 - 2460 BC
Method B (1σ)	2522 - 2455 BC (56% of distribution)	2624 - 2480 BC (70% of distribution)
Method B (2σ)	2612 - 2320 BC (100% of distribution)	2707 - 2456 BC (73% of distribution)
References	Pearson and Stuiver	Pearson *et al*

Calibrated calendar ranges provided using University of Washington Quaternary Isotope Laboratory Radiocarbon Calibration Program, CALIB*, revision 2.0 (1987)

* © Microsoft Corporation, 1985

Table 16: Quantification of seeds from prehistoric contexts

Period			Pleistocene		Late Neolithic/ early Bronze Age			
Phase			1		2			
Feature			717		423		430	
Context		Habitat	34	36	426	425	432	431
Sample		preference	2014	2020	2007	2006	2010	2009
Sample volume (litres)			15	10	10	10	10	15
Avena sp.	oats				1			
Triticum /Secale sp.	wheat or rye				1			
Triticum aestivum s.l.	bread wheat				1			
cf Triticum sp.	indeterminate wheat				2	1		
Indeterminate cereals			?1		3+	+	1+	2+
Corylus avellana L.	hazel	HSW						
	nut shell fragments		1		65	17	55	10
Vicia/Lathyrus sp.	vetch or tare				1			
unidentified	seed					1		
	starchy material		+	+				

Table 17: Quantification of seeds from late Saxon/medieval contexts

Period			Late Saxon/early medieval					Medieval	
Phase			4.1	4.1	4.1	4.1	4.1	4.3	4.3
Context		Habitat	479	478	468	448	441	44	45
Sample		preference	2053	2054	2049	2025	2024	2045	2046
Sample volume (litres)			10	10	10	10	10	10	10
Avena sp.	oats			2(2)	2(1)	(1)	(1)	1	5
Triticum/Secale sp.	wheat or rye				1		(1)		
Triticum aestivum s.l.	bread wheat		4	(2)		(1)			
cf T. aestivum s.l.	rachis fragment		1						
Triticum sp.	indeterminant wheat		2	4		2		1	1
Indeterminant cereals			+	3+	+	1+	2+	1+	2+
Urtica dioica L.	stinging nettle	AD		2^{M}					
Corylus avellana L.	hazel nut shell frags	HSW	4	2		2			
Atriplex sp.	orache	AD							1
Chenopodiaceae sp./spp.	orache/goosefoot			500^{M*}					
Spergula arvensis L.	corn spurrey	AD				2			
Rumex cf crispus L.	curled dock	ADG						1	1
*Raphanus raphanistrum*L.	wild radish pod fragment	AD						1	
Vicia cf tetrasperma (L.) Schreber	smooth tare	ADG		1	2				
Vicia/ Lathryus sp.	vetch or tare			1					1
Odontites verna (Bellardi) Dumort	red bartsia	AD		1^{M}					
Anthemis cotula L.	stinking mayweed	AD		1					
Chrysanthemum segetum L.	corn marigold	AD			1(1)				
Carex flacca Schreber	glaucous sedge	DGMa					1		
Bromus sp.	rye brome/ chess	AG					2	1	
Poaceae spp.	smallrass seeds					1			2
	swollen culm fragment		1						
Unidentified	seeds		1	1^{M}					1
	starchy material		++	++	+			++	++

Key:

() = identification uncertain; * = estimated; M = mineralised; + = less than ten fragments; ++ = 10-50 fragments; A = arable; D = disturbed, open ground; G = grassland; H = hedgerows; S = scrub; Ma = marsh or wet places; W = woodland.