

# Roman and medieval remains in Middleton-on-Sea, West Sussex

EXCAVATIONS AT NALGO LODGE, 2000

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*Rescue excavations by Archaeology South-East (University College London Field Archaeology Unit) revealed evidence of parts of a Romano-British and medieval ditched field system, medieval smithing slag and traces of a possible building made of flint with a tiled roof. Roman activity falls within a broad date range between the mid-1st and 4th centuries AD. Medieval pottery suggests a focus of activity in the late 13th–14th centuries, although some continuation into the early 15th century is also indicated. The presence of worked and burnt flint at the site, in addition to a solitary Middle to Late Bronze Age feature, suggests prehistoric activity in the vicinity. A single, poorly preserved Anglo-Saxon grave, carbon dated to cal. AD 680–890, with an east–west orientation, was also located.*

## INTRODUCTION

The excavated site (Fig. 1) is situated within the grounds of the former Nalgo Lodge, Shrubbs Drive, Middleton-on-Sea, West Sussex (NGR SU 97443 00352). Topographically the site lies on the West Sussex Coastal Plain, approximately 400 m from the coast at approximately 5.5 m OD. The site is bounded to the north, east and south by Elmer Road, Shrubbs Drive and Penn Close respectively and to the west by residential/commercial development. The underlying geology at the site is Brickearth.

Planning permission was granted to the Planning Bureau by Arun District Council (ref. M/50/99) for the erection of 83 sheltered apartments. An archaeological condition was imposed by the District Council as part of the planning consent. The condition imposed led to the Field Archaeology Unit, University College, London, being commissioned by the Planning Bureau to undertake a desk-based assessment (Sibun 1999) and evaluation (Griffin 2000a) which culminated in a Stage-2 archaeological excavation undertaken during June and July 2000 (Griffin 2000b).

## ARCHAEOLOGICAL BACKGROUND

The site lies in an area rich in prehistoric remains. However, whilst there is a growing body of evidence for prehistoric settlement and activity (particularly Later Bronze Age) on the Coastal Plain, there are

no known settlements in the immediate area. Two isolated finds of Bronze Age Pottery (including a bucket urn, Wedmore 1982) have, however, been found between 500 and 700 m west of the site.

A small number of isolated Romano-British coin and pottery finds have been made close to the site. A farmstead, with occupation spanning the 1st to the 4th centuries, was excavated in 1992 approximately 500 m north-west of the site at SU 9701 0061 (Barber 1994). Similar evidence for Romano-British exploitation of the fertile soils of the West Sussex Coastal Plain has been shown by recent work at Angmering (Griffin 2004) and Bognor Regis (Sibun 1998). A gazetteer of sites, which includes Alec Down's excavations at Bilsham Corner, Yapton, approximately 900 m north of Nalgo Lodge, may be found in SAC 117 (Pitts 1979).

Evidence for an Anglo-Saxon settlement at Middleton is somewhat elusive. A 14th-century copy of a grant of land in AD 953 alludes to an area of approximately 30 hides at Felhham [Felpham]. It has been suggested by Abbott (1995) that an interpretation of the boundary clauses indicates that the land granted may have adjoined Middleton and that one such common boundary is preserved as the present-day Middleton Road (B2132) and Elmer Road. Such principal boundaries (commonly Hundred boundaries) were preferred locations for the execution and burial of felons and others who were precluded from burial in consecrated ground in Late Anglo-Saxon England (Reynolds 1997, 37).

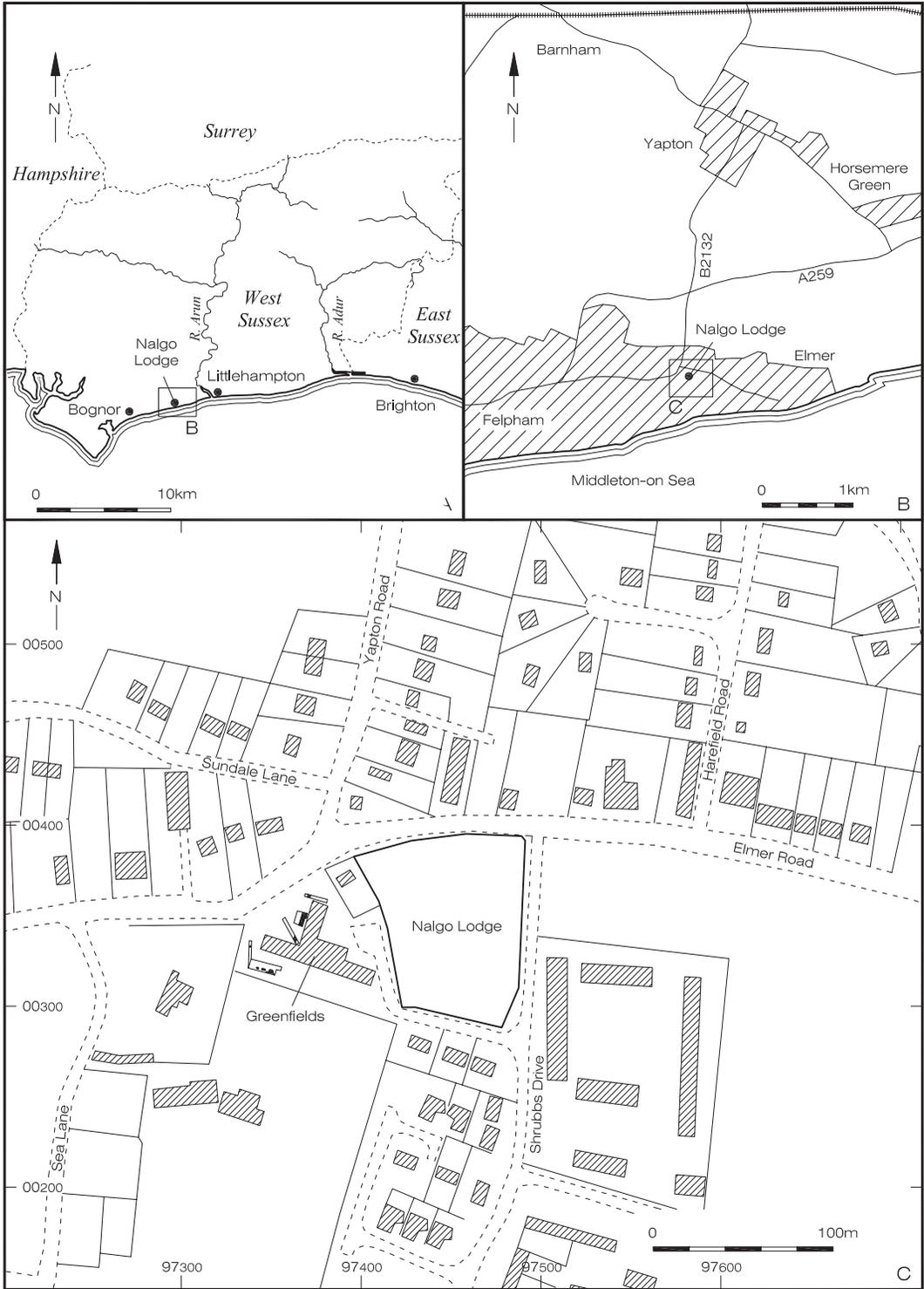


Fig. 1. Location of site.



Fig. 2. Trench location showing former and proposed buildings.

It is generally considered that much, if not the entire site of the medieval village of Middleton has been lost to coastal erosion. Records as early as AD 1340 state that encroachment since AD 1292 had resulted in a loss of 60 acres (Ballard 1910, 21). Middleton Church is marked on 18th-century maps (e.g. Yeakell & Gardner's 1778 2" survey), but not thereafter. During a storm in the winter of 1923–4 three wells (one containing late 15th- to early 16th-century pottery) were revealed on the scoured foreshore and were thought to relate to properties lost to the sea (along with the church) around 1830 (Page 1925).

At the time of the excavation, Thames Valley Archaeological Services were undertaking an evaluation (Saunders & Appleby 1999) and subsequent excavation (Saunders 2000; 2004) at a site immediately west of Nalگو Lodge (Fig. 1). Roman activity in the form of a linear feature and pit dated to the period AD 70–200, a small medieval gully and a number of undated features were located at this adjoining site.

## METHODOLOGY

The positioning of the excavation trenches was based on the findings of the evaluation and watching brief, but took into consideration likely areas of former and proposed disturbance (Fig. 2). Accordingly, the excavation trenches were located outside the footprint of the former Nalگو Lodge building and largely within areas that were to be affected by the new development. Trench sizes and positions were modified slightly (in some cases trenches were extended or adjacent trenches joined) from those originally planned, in order to avoid live services associated with an electricity substation and to answer specific questions as the excavation progressed. Topsoil and overburden to a depth of between c. 600–700 mm were removed by means of a mechanical excavator equipped with a 1.8-m-wide toothless bucket. All trenches were accurately surveyed into the National Grid by means of a total station and level readings were taken in relation to Ordnance Datum. For the purposes of this report, all evaluation contexts and trench numbers are prefixed with an 'E'.

## RESULTS (Figs 3 & 4)

### PREHISTORIC

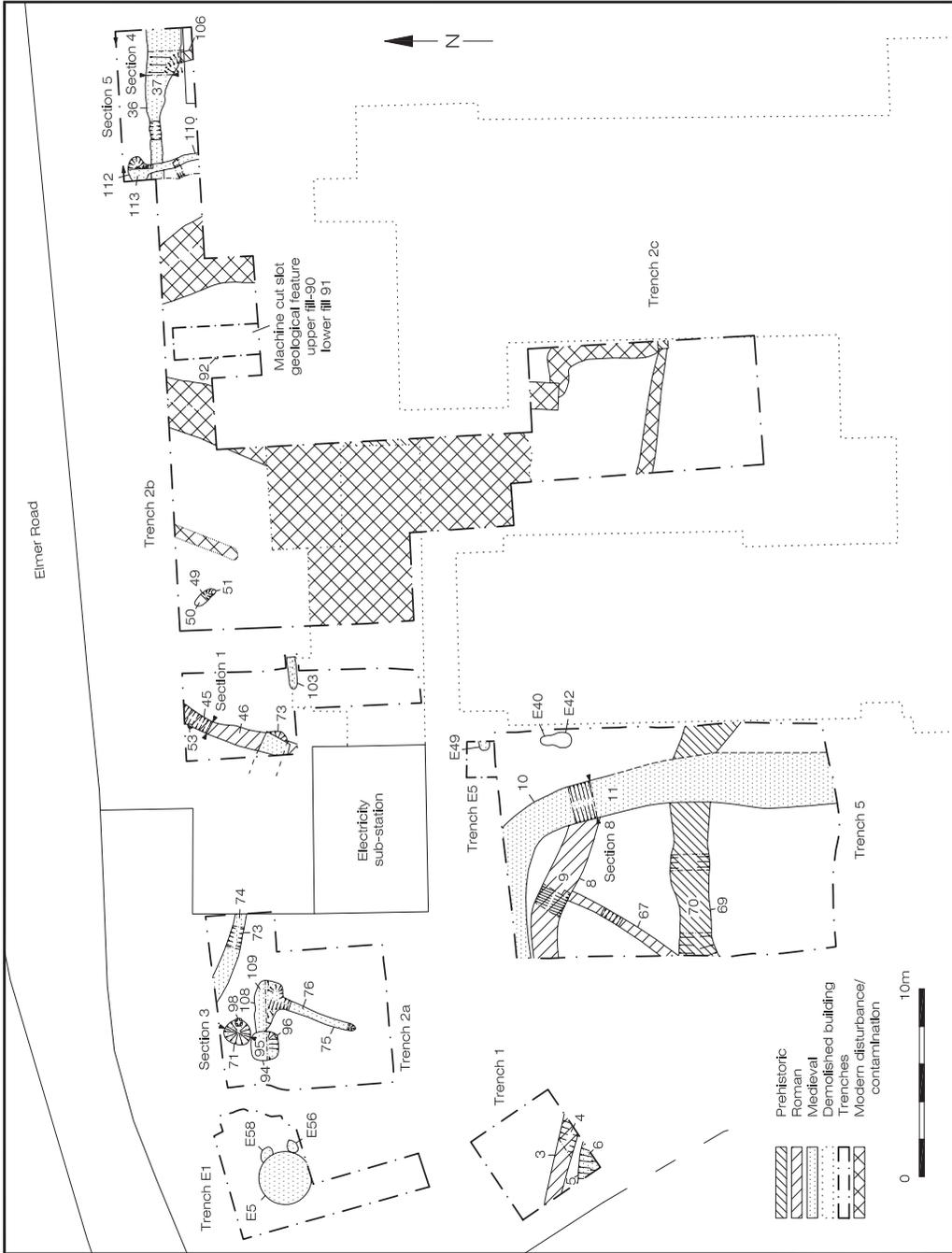
Two linear features, in addition to a small

assemblage of flint debitage, represent the total evidence of prehistoric activity at the site. A shallow gully aligned north–south (Context 106) in Trench 2b at the north-east corner of the site contained an unabraded body sherd of Middle or Late Bronze Age date (Fig. 3). The sides of the gully were angled to approximately 45° and the feature had a slightly curved base. It was truncated to the north by later activity (Context 36, *see below*), and continued southwards beyond the limit of the trench. A faint shallow linear feature aligned east-west and with vague edges (Fig. 3: Trench 5, Context 69 and E47) is more tenuously dated by a small quantity of burnt flint (and intrusive slag).

### ROMANO-BRITISH

Romano-British activity was dispersed across the site and was represented by six linear features. A ditch aligned approximately north-east/south-west (Context 45, Fig. 3 & Fig. 5, Section 1) was located at the north-west corner of Trench 2b. The fill (Context 46) contained a small assemblage of conjoining BB1 sherds dated to between the 3rd and 4th centuries. Three possibly early Romano-British pottery sherds were recovered from this feature where it was intersected by a medieval linear feature (Context 73). A small post-hole (Context 53) cut the north-western edge of this feature. A short length of ditch (Trench 1, Context 3) with regular c. 45° sides and a rounded base was also located. The fill (Context 4) contained two small abraded sherds of 2nd- to 3rd-century pottery and a small assemblage of burnt and worked flint.

Two further Roman features were located in Trench 5 (Fig. 3). A small ditch (Context 67) had approximately the same alignment as the ditch (Context 45) in Trench 2b, but was of different dimensions and had a moderately steep U-shaped profile. The fill of this feature (Context 68) contained a small assemblage of Rowlands Castle ware and abraded sherds in addition to a small fragment of briquetage. At the northern end of this feature a wider ditch (Context 8) ran approximately north-east/south-west, but their relationship could not be established. The fill of this feature (Context 9) contained four small and abraded Roman pottery sherds in addition to a small abraded sherd of Late Bronze Age/Early Iron Age pottery. Towards the south-east of the site a short length of ditch (Context 18) was found within Trench 4 (Fig. 4 & Fig. 5, Section 2). Dating of this feature is somewhat tenuous: it was based upon a single



small sherd of Roman pottery from Fill 19. Three small abraded sherds of Late Bronze Age/Early Iron Age pottery, an animal bone fragment, 27 worked flints and 1.8 kg of burnt flint were also recovered. A continuation of this feature was detected within Trench E7 (Fig. 4, Context E19, Fill E20) and a further small sherd (of South Gaulish Samian) was also recovered in addition to approximately 700 g of burnt flint.

#### ANGLO-SAXON

A single feature (Context 103, Trench 2b; see Figs 3 & 6) of Anglo-Saxon date was identified. This consisted of a shallow grave-cut aligned east/west and containing the poorly preserved and incomplete remains of one person buried with the head (not present) lying to the west. No artefacts were found within the grave fill and its fragmentary state may be the result of the construction and subsequent destruction of Nalgo Lodge. A radiocarbon date of cal. AD 680 to 890 at 68% probability (Beta Analytical ref. 152861; cal. AD 640 to 990 at 95% probability) was obtained from the surviving bone collagen. This date was obtained using the methods outlined in Stuiver and Plicht 1998; Stuiver *et. al.* 1998; and Talma and Vogel 1993.

#### MEDIEVAL

Three intercutting medieval pits were located during the evaluation within Trench E1 (Fig. 3, Contexts E5, E56 and E58). The latter two (smaller) pits were not excavated, but collections of pottery from the surface of their respective fills (Contexts E57 & E59) indicate a contemporaneous date of AD 1275–1375. A small slot was excavated at the western side of Pit E5 through upper fill E54 and lower fill E6 (a third fill, Context E54, was present below E6, but excavation ceased at this point). Contexts E6 and E54 both contained pottery of an identical date range to that of fills E57 and E59. Fills E6 and E54 both contained quantities of tile, slag, shell and iron. A change in the proposed development plan resulted in these features being preserved *in situ* and as a result they were not subjected to further investigation during the excavation. All these features were sealed beneath a layer of a mid-grey-brown silty-clay c. 230 mm thick (Context E4) which was present beneath the topsoil and recent plough-soil. A small amount of pottery collected from this layer was dated to AD 1275–1375. A partially exposed probable linear feature was located in Trench 1 (Fig. 3: Context 5,

Fill 6). A small pottery assemblage from this feature included an abraded residual Late Bronze Age/Early Iron Age sherd and a small 12th- to 13th-century rim sherd.

Four medieval features were located within Trench 2a (Fig. 3). A linear feature aligned c.north-west/south-east (Context 73) contained one small sherd of 13th- to 14th-century pottery within its fill (Context 74). The terminal end of this feature cut Ditch 45 in Trench 2b. Two pits (Fig. 3, Contexts 71 & 94) lay immediately adjacent to each other. The former was slightly oval and only 150 mm deep and contained two fills (upper Context 72, lower Context 79, Fig. 5, Section 3). The pottery from these respective contexts fell within date ranges of AD 1275–1375 and AD 1200–1300. A small quantity of slag and burnt clay was also collected from the latter context. Pit 94 was sub-rectangular in shape and flat-bottomed. Pottery from its fill (Context 95) suggests a date range of AD 1225–1350 for the infilling of this feature. A moderate amount of burnt clay and oyster was also collected from this context. Both these pits were cut by smaller features on their eastern sides. Pit 71 was cut by a nearly vertical-sided rectangular feature (Context 98) which contained no datable artefacts. Pit 94 was cut by a vertical-sided post-hole (Context 96) from which a single sherd of pottery (from fill 97) dated to AD 1250–1400 was collected. A narrow linear gully (Fig. 3, Context 75) ran in a south-westerly direction from a roughly oval-shaped pit (Context 108) which was cut by Pit 94 at its extreme western edge. It was not possible to establish the relationship between Contexts 75 and 108 owing to the similarity of their fills (Contexts 76 & 109 respectively), but the pottery from both features falls within a date range of AD 1250–1400. A small amount of bone, slag and burnt flint was also collected from Context 76, and a small amount of tile, shell, burnt flint, slag and copper alloy was also found within Context 109.

At the eastern end of Trench 2b two further medieval features were located (Fig. 3). The fill of a shallow, roughly circular scoop (Context 112) contained a single potsherd (Context 113) dated to AD 1200–1400 in addition to a small quantity of tile, bone and burnt clay. An undated, but stratigraphically later gully (Context 110) extended from the southern end of this feature. This gully cut across another gully aligned east–west (Context 36, Fig. 5, Section 4) which broadened to the east.

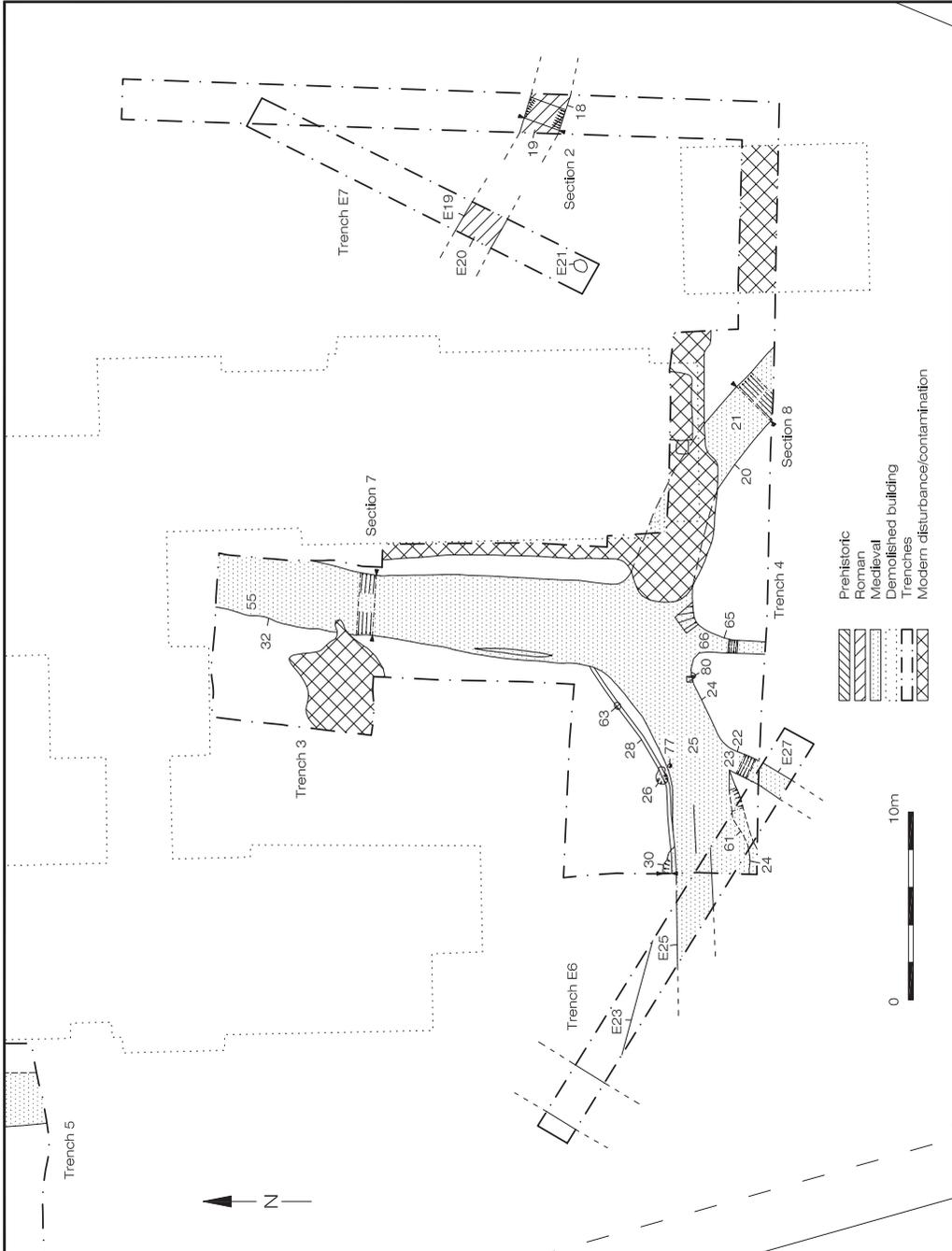


Fig. 4. Southern area showing contexts for evaluation and excavation.

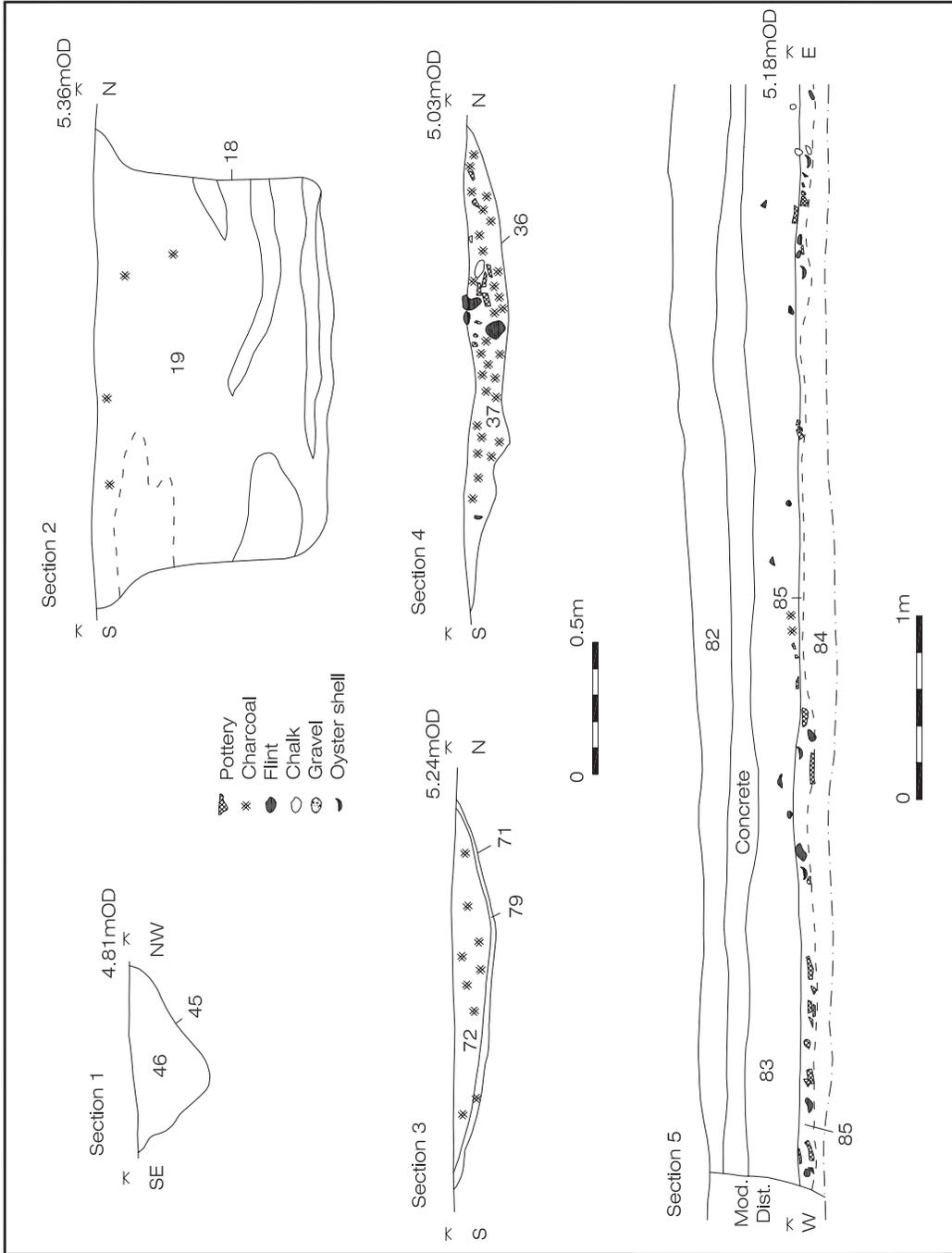


Fig. 5. Selected sections.

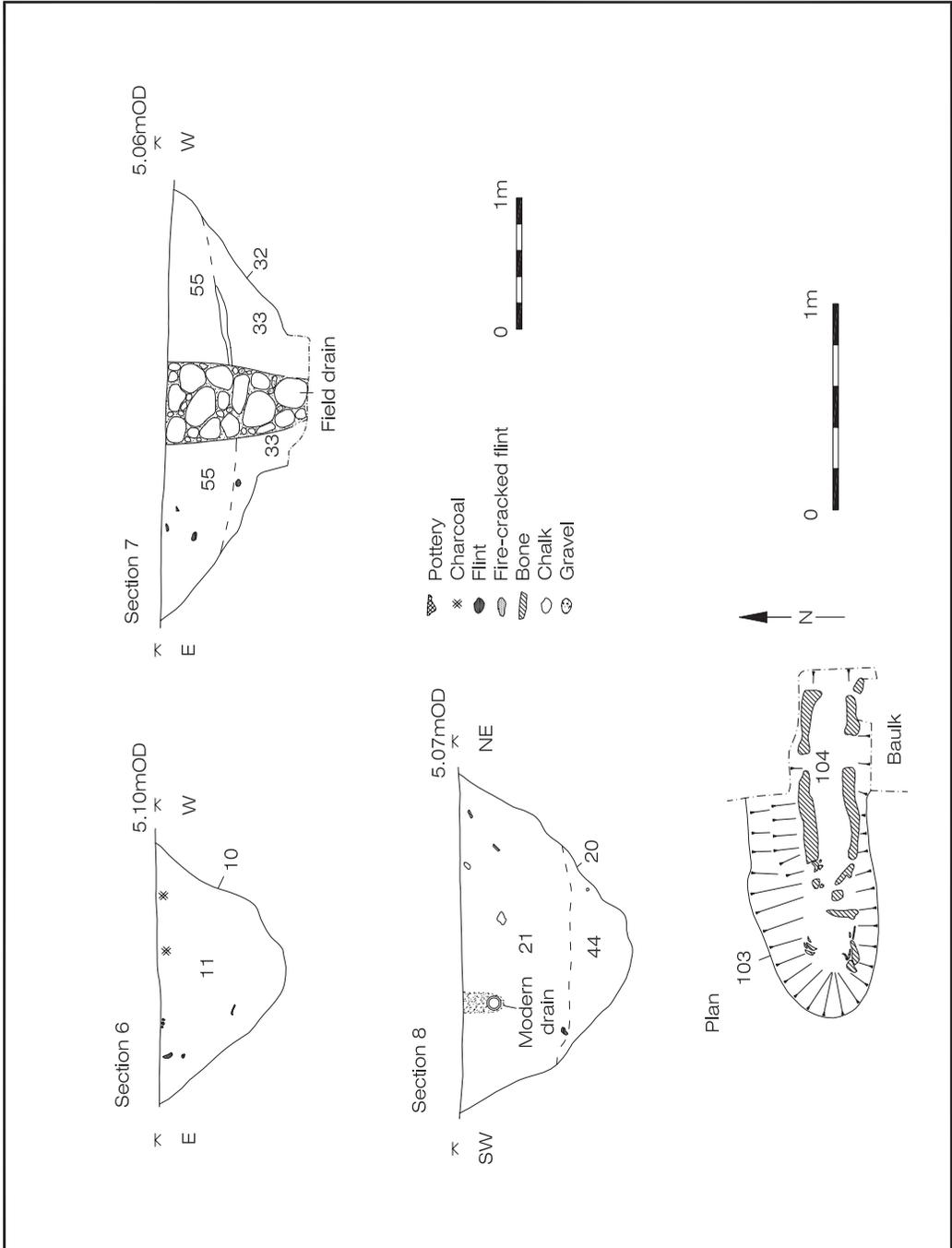


Fig. 6. Selected sections and grave plan.

The fill of this feature (Context 37) contained pottery dated to AD 1250–1425. This context also contained large quantities of tile, worked flint and foreign stone, moderate quantities of bone, shell, burnt flint, and copper alloy, and a few fragments of iron, slag and burnt clay. The eastern end of this feature truncated the northern extent of Context 106 (*see above*). Sealing these features at the easternmost stretch (c. 8 m) of this trench was a destruction layer (Context 85, Fig. 5, Section 5) which comprised mainly broken tile, foreign stone and flint. Pottery sherds dated AD 1350–1475, in addition to shell, copper alloy and iron, were also collected. This same deposit was also found to intrude slightly into the upper fill of Context 112.

A single fairly steep-sided ditch aligned east/west was found within Trench E4 (Fig. 2 only) (Context E17). A small assemblage of pottery dated to AD 1250–1375 was collected from the fill (Context E18).

At the northern end of Trench E5 an oval spread of tightly packed flints <80 mm thick (Fig. 3, Context E49) was located. A single sherd of pottery dated to AD 1200–1400 was recovered from below this feature. Within Trench 5 a large steep-sided, U-shaped ditch was located (Fig. 3 & Fig. 6, Section 6, Context 10). This feature curved from an approximate north/south alignment around to a westerly alignment at its northern end. An assemblage of pottery dated to AD 1200–1350 was recovered from its fill (Context 11).

A large curving boundary/drainage ditch (Fig. 4, Contexts 32 and 61 (same as E25) and re-cut Context 24) dominated Trenches 3 and 4. The ditch measured over 21 m long, up to 4.5 m wide and up to 1.3 m deep in places. A chalk-filled French drain was found to run along the centre of the north-south section of this feature; it caused this feature to flood continually as water from the surrounding area was channelled through this conduit (Fig. 6, Section 7). A small quantity of 13th- to 14th-

century pottery was recovered from the residue of a soil sample from the lower fill (Context 33), none having been found at the time of excavation. A pit (Context 26, Fill 27) lay immediately to the north of this ditch on the inside corner and contained a small quantity of 14th-century pottery. This was cut by a field drain (Context 28, Fill 29) which contained residual 13th- to 14th-century pottery. At the extreme western end of Trench 4, lying north of Context 24 and cut by Context 28, was an irregularly shaped pit (Context 30, Fill 31) containing 13th- to 14th-century pottery. A short length of ditch (Context 65) was found to run southwards from the corner of Ditches 20, 24 and 32. Pottery recovered from its fill (Context 66) included abraded sherds of both Roman and medieval date (AD ?1200–1400).

#### POST-MEDIEVAL

A ditch aligned north-west/south-east (Context 20) measuring c. 1.2 m deep ran from the outside corner of the substantial ditch (Fig. 6, Section 8). The upper fill of this feature (Context 21) contained pottery falling within an AD 1450–1575 date range and the lower fill (Context 44) contained pottery dating to AD 1525–1675. This suggests that Ditches 32 and 24 may have remained in use slightly longer than the pottery from their fills suggests. A further linear feature (Context 22 and E27) ran from the southern edge of Ditch 24. This was a steep-sided, V-shaped ditch and its fill (Context 23) contained a small quantity of pottery dated to AD 1450–1550.

A small number of undated features were also found across the site. These include: a shallow lobate scoop (Trench 2b, Context 49) with a post-hole (Context 51) cut into its southern end; three possible post-holes within Trench 4 (Contexts 63, 77 and 80); and two linear gullies (Trench 5, Contexts 86 & 88). A presumed geological feature (Contexts 90 & 91) was located within Trench 2b and is thought to represent a palaeochannel.

## THE FINDS

### THE POTTERY by Luke Barber

#### Introduction

The evaluation and subsequent excavation at the site produced a small assemblage of pottery consisting of 527 sherds weighing just over 5.25 kg. This total, originating from 43 individually numbered contexts, is made up of 98 sherds from the evaluation, 394 sherds from the Stage-2 excavation and a further 35 small sherds from the environmental

samples. Most contexts only produced very small quantities of pottery, but some slightly larger groups were present. The largest single group from the site is from Context 37 (Ditch 36) which consists of some 89 sherds weighing a little over 1 kg. The site assemblage comes from both layers and closed contexts such as ditch and pit-fills.

The pottery is in variable condition. Generally sherd size is relatively small, although some contexts do contain larger pieces. Most pottery has suffered to some degree from the acidic soil conditions. As a result some sherds, particularly in

the softer, finer fabrics have lost their original surfaces and it is not always easy to be certain of the degree of residuality and reworking within certain groups. The pottery is from three main periods: late prehistoric (10 sherds), Roman (24 sherds) and late medieval (493 sherds). The majority of the material is from a relatively short period of activity in the last period.

### The prehistoric and Roman material

The 10 prehistoric sherds are, with one exception, all small, abraded and residual in either Roman or medieval contexts. The sherds, in a number of flint-tempered fabrics, appear to be of the Late Bronze Age/ Early Iron Age, though some could be Middle Bronze Age (S. Hamilton pers. comm.). The only exception to this is an unabraded bodysherd of probable Middle or Late Bronze Age date in Context 107 (Gully 106).

A slightly larger group of Romano-British pottery is also present. Most of these sherds are in local sand-tempered fabrics, though some Rowlands Castle products are present. Virtually all sherds show signs of heavy abrasion. Most are likely to have been deposited during manuring and incorporated into the ditches by associated cultivation and erosion. Few diagnostic sherds are present but it appears probable that the pottery spans at least the 2nd to 4th centuries. The only unabraded Roman pottery from the site consists of several conjoining sherds from a BB1 (or local imitation) bead-and-flanged bowl from Context 46 (Ditch 45). In addition to the pottery is a single piece of Roman flint-tempered briquetage from Context 68, perhaps indicating salt production in the vicinity.

### Medieval: methodology

Owing to the insignificant nature of the prehistoric and Roman assemblages, analysis has concentrated on the medieval material. The medieval pottery spans the mid-13th to early 15th centuries though most can be placed within the 14th century. The pottery was divided into fabric groups based on a visual examination of tempering, inclusions and manufacturing technique. The pottery from four of the largest context groups were then fully quantified by sherd count and weight for each fabric. This information was recorded on pottery summary sheets which are housed with the archive. A quantification based on EVEs was not undertaken owing to the small number of sherds involved. The remaining contexts were scanned in order to date them and to establish the presence of any fabrics/ forms not represented by the four largest assemblages. Full details are housed with the archive.

Although the assemblage is small, it was considered important to publish the pottery as this is only the second group of medieval ceramics excavated from Middleton-on-Sea and little is currently known of the pottery sources supplying this area during the later medieval period. The aims of the current report were, therefore, to establish the range of fabrics present on the site during its occupation and, as far as possible, to begin to refine the source and date of the fabrics.

### The fabric groups

#### *Fabric 1: Flint and fine sand*

Colour: cores generally orange with buff to dull orange surfaces. Some sherds are reduced to grey throughout. Tempering: moderate white (calcined) angular flint to 3 mm (occasionally to 7 mm) and sparse fine sand. Recognized

forms: storage jars/ cooking-pots, bowls. Decoration: thumb-applied strips on storage jars/ cooking-pots and thumbled rim on bowl (Fig. 7, No. 6, Context 95). No glaze. This fabric is relatively highly fired and vessels tend to be quite thin-walled (5–6 mm). Despite its somewhat archaic characteristics, this fabric consistently appears as unabraded sherds alongside late 13th- and 14th-century fine sand-tempered wares. As such, it can be concluded that the fabric is an unusually late flint-tempered ware used for coarseware vessels. The fabric compares closely with the coarseware fabric from the late 13th- to 14th-century Binsted kilns and has also been located in Arundel (Group 26: Barber forthcoming).

#### *Fabric 2: Coarse sand*

Colour: cores and surfaces generally buff to dull orange. Tempering: moderate to abundant clear sub-rounded quartz sand to 0.75 mm and sparse fine sand. Recognized forms: storage jars/ cooking-pots. Decoration: thumb-applied strips on storage jars/ cooking-pots. No glaze. This fabric is medium-fired and vessels tend to be quite thin-walled (4–7 mm). This is a rare fabric at the current site and could fit within a 13th- to 14th-century date bracket.

#### *Fabric 3a: Medium sand and 'grog/ iron oxide' inclusions 1*

Colour: cores range from mid-grey to dull orange with buff, dull orange or occasionally brown grey surfaces. Tempering: sparse to moderate medium (to 0.5 mm) and rare to sparse dull brown/ red grog/ iron oxide pellets to 1 mm. Recognized forms: cooking-pots. Decoration: none seen. This fabric is relatively low-fired. A mid-13th- to 14th-century date range is suggested for the fabric.

#### *Fabric 3b: Medium sand and 'grog/ iron oxide' inclusions 2*

A slightly coarser fabric than F3a, but undoubtedly related. Colours as F3a. Tempering: as F3a but somewhat coarser and higher-fired. The grog/ iron oxide inclusions are noticeably harder and range to a larger size (2 mm). Recognized forms: cooking-pots. Decoration: none seen. A mid-13th- to 14th-century date range is suggested for the fabric.

#### *Fabric 3c: Medium sand*

This fabric group contains a mix of loosely related, medium sand-tempered wares from undoubtedly more than one source. Colours range from dark grey to dull orange throughout, though reduced colours are more common. Tempering: moderate to abundant medium sand. Recognized forms consist mainly of cooking-pots, but also jugs. A bowl with a pouring spout is also present (Fig. 7, No. 7, Context 95). Decoration: generally cooking-pots only have unintentional splashes of glaze, though the bowl has internal dull green glaze on its base and part-way up its internal walls. Jugs usually have a thin dull green external glaze. Some incised decoration is present: the bowl has incised wavy line decoration on its rim. A 13th- to 14th-century date range is suggested for the fabric. Similar wares were located at Arundel (Group 25: Barber forthcoming).

#### *Fabric 4: Medium sand (high-fired)*

Only one vessel in this fabric appears in the current assemblage: a bottle from Evaluation Trench 1, Context 6. Colour: core and surfaces: mid- to bright orange. Tempering: sparse to moderate fine to medium sand. Decoration: none seen. This fabric is relatively high-fired and the vessel appears

to represent the start of the tradition of higher-fired vessels which appear from the mid-14th century.

*Fabric 5: Fine sand with rare flint inclusions*

This fabric is undoubtedly related to, and from the same source as, Fabrics 6a and 6b (see below). Colour: cores range from light grey to buff with pinkish or buff surfaces. Tempering: sparse to moderate fine sand (to 0.2 mm) and rare off-white irregular flint inclusions to 3 mm. Recognized forms: cooking-pots. Decoration: green glaze on interior bases. A late 13th- to 14th-century date range is suggested for the fabric. Probably a Binsted fineware variant.

*Fabric 6a: Fine sand: Buff wares*

This is one of the most common fabrics at the site and is almost certainly from the Binsted kilns. It is closely related to Fabric 6b. Colour: cores range from light grey to buff with buff, pinkish or pale orange surfaces. Tempering: moderate fine sand. Recognized forms: cooking-pots and dishes but predominantly jugs. Decoration: cooking-pots have occasional splashes of unintentional green glaze externally but are normally intentionally glazed on their internal bases with a dull green glaze. Jugs are frequently decorated with incised (horizontal, vertical, oblique or wavy) line decoration under an external glaze. The glaze ranges from pale to dark green, though is sometimes mottled. Jugs appear always to have rod handles and thumb bases, typical of the 14th century. This fabric is relatively high-fired, some sherds in this group, however, have a thinner glaze and are fired at a higher temperature suggesting a chronological progression throughout the 14th century. Sherd thickness ranges between 3 and 5 mm. The fabric was also located at Arundel (Group 23: Barber forthcoming). A 14th-century date is suggested for the fabric.

*Fabric 6b: Fine/Medium sand: Buff wares*

This fabric group is closely related to Fabric 6a and is also likely to be from the Binsted kilns. Colours are as Fabric 6a (though some light grey surfaces are present). Tempering: moderate fine to medium sand (a coarser and more mixed fabric than Fabric 6a usually with thicker vessel walls: 5–8 mm). Recognized forms: cooking-pots (Fig. 7, No. 1. Context 95/76) and bowls (Fig. 8, No. 2. Context 95/76), but predominantly jugs (Fig. 7, Nos 3–5. Context 95/76). Decoration: as Fabric 6a, however, though glaze is common, incised line decoration is much rarer. One jug has an applied clay pellet in the form of a rye seed under the glaze. Jugs appear always to have rod handles (Fig. 7, No. 8. Context 95). This fabric may either be a contemporary of 6a or an overlapping but slightly later development from it marking the beginning of the decline of the highly decorated wares of the high medieval period.

*Fabric 6c: Medium/ Coarse sand: Buff wares*

This fabric group may also be related to Fabrics 6a and b, but is certainly similar in many respects to Fabric 6d (see below). Colours consist of light grey to buff cores and surfaces. Tempering: moderate to abundant medium to coarse sand with rare dull red grog/ iron oxide inclusions and white clay patches to 3 mm. Usually low to medium fired. Recognized forms: cooking-pots and large storage jars. Decoration: Storage jars have horizontal applied and thumb bases. Cooking-pots have green glaze on their internal bases. This fabric may represent a coarseware version of 6b.

*Fabric 6d: Sparse Medium sand: Buff wares*

This fabric group is closely related to Fabrics 6a–c but is separated out owing to the apparent sparse nature of its tempering. Colours consist of light grey to buff cores with buff to cream coloured surfaces. Tempering: sparse medium sand with rare white clay patches to 3 mm and dull red grog/ iron oxide inclusions to 2 mm (as 6c). Recognized forms: cooking-pots only. Decoration: Internal glaze on bases. This fabric may represent the transition to 'un-tempered' wares of the 15th century. A date range of mid-14th to early 15th century is suggested.

*Fabric 6e: Fine sand: Red wares*

Colours: Light grey cores with dull orange surfaces. Tempering: moderate to abundant fine (to medium) sand (a coarser fabric than F6a). Recognized forms: Jugs. Decoration: Patchy, thin external dull green glazes, occasionally over white painted decoration (i.e. in Context 95). This fabric marks the mid-/late 14th-century beginning of the white-painted decoration more common in the 15th century in West Sussex. Probably related to Fabric 8.

*Fabric 7: Fine black sand*

This fabric group is represented by only one vessel on the site (sherds of which were found in Evaluation Context 6 and Excavation Context 57). Colour is light grey throughout, but with dull orange outer surface under the glaze. Tempering: moderate fine black sand. Recognized forms: Jugs. Decoration: External olive/ brown glaze.

*Fabric 8: Fine sand with very rare flint: Red wares*

This fabric is virtually identical to F6e except that it contains very rare inclusions of white angular flint and grog/ iron oxide to 2 mm. Recognized forms: Jugs with thumb bases. Decoration: as Fabric 6e. A 14th-century fabric.

*Fabric 9: High-fired very fine sand*

This fabric group is the latest true medieval fabric group at the site and marks the beginning of the transition to the later, post-medieval fabrics. Colours: Light grey cores with buff to light brown grey surfaces. Tempering: sparse very fine sand, with rare iron oxide inclusions to 2 mm, giving a smooth surface texture. Recognized forms: storage jars/ pitchers?. Decoration: none seen, though the external surfaces of these high-fired vessels show extensive knife trimming and there is the occasional spot of unintentional glaze. A late 14th-, but more probably 15th-century date can be ascribed to this fabric.

## The pottery groups

Unfortunately, the site did not produce any large groups of pottery. Most assemblages, including those extending into the 15th century were too small for any meaningful quantification. Only four contexts provided slightly larger groups and these are discussed below. They have been used to begin to refine the chronology of the fabrics in this area, however, although provisional observations can be made, these should be viewed with caution until larger sealed groups are excavated from the area.

*Stage 1 evaluation: Pit E5, Fill E6*

The small assemblage from this pit fill is dominated by Fabric 6a (see Table 1). A similar pattern is evident in the small group of 15 sherds from the upper fill (Context E54).

Table 1. Pottery from Pit E5, Fill E6.

Fabric	No. sherds	No. sherds %	Weight (g)	Weight %
1	1	1.5	8	1.3
2	1	1.5	20	3.2
3a	12	18.5	88	13.9
4	5	7.7	68	10.7
5	2	3.1	64	10.1
6a	43	66.2	376	59.3
7	1	1.5	10	1.6
<b>Total</b>	<b>65</b>	<b>100</b>	<b>634</b>	<b>100.1</b>

Of the 43 sherds in Fabric 6a, 30 sherds are from jugs (226 g) and 12 (122 g) are from cooking-pots (a further sherd (28 g) is from a dish). The predominance of jugs (at least five vessels are represented) over cooking-pots is unusual and suggests either a higher-status site, or more probably in this instance, a selective disposal reflecting functional zones at the site. With the presence of large quantities of iron slag in the same fill, it is tempting to suggest that much of this material was broken and discarded from a smithy — an environment where the consumption of liquids (in jugs) rather than food is likely to have been more common. Although the presence of several sherds from a ceramic bottle in Fabric 4 tend to support such a theory, larger assemblages from this and from other 14th-century sites would be needed to compare/contrast the data. Of all the Fabric 6a sherds taken together, 33 out of 43 are glazed (including internal glazing of cooking-pot bases). This, together with the total dominance of thumbled jug bases, suggests a deposition date of between 1275/1300 and 1375.

*Excavation: Cut 36, Fill 37*

The ratios of different fabrics within this group are misleading due to the presence of a large number of sherds from a storage jar with applied thumbled strips in Fabric 6c (Table 2). Despite this, the group is of interest in that it appears to follow on from that of Context 6 of the evaluation (see above).

Table 2. Pottery from Cut 36, Fill 37.

Fabric	No. sherds	No. sherds %	Weight (g)	Weight %
Prehistoric	1	1.1	24	2.6
F3a	1	1.1	16	1.4
F3c	10	11.2	106	9.5
F6a	5	5.6	108	9.7
F6b	8	9.0	136	12.2
F6c	49	55.1	372	33.4
F6d	12	13.5	182	16.3
F9	3	3.4	170	15.3
<b>Total</b>	<b>89</b>	<b>100</b>	<b>1114</b>	<b>100.4</b>

Although Fabric 6a is still represented, the presence of Fabric 9 sherds, unabraded and of a size which cannot be intrusive, suggests a date range between 1350/75 and 1425 for this context's deposition. If this is the case, then the presence of fabrics 6b-d here, and not in Context 6, would suggest them

to be a chronological development of Fabric 6a.

It is interesting to note that of the sherds diagnostic of vessel form, and excluding those associated with the storage jar, 19 are from cooking-pots while 9 are from jugs. This is closer to a more 'normal' ratio and does tend to confirm the suggestions made regarding Context 6 above.

*Excavation: Cuts 94/75 (Fills 95 & 76)*

The small assemblage recovered from the intersection of these two features (Table 3) contains a range of material from earlier Fabric 1 sherds through Fabric 6a to the slightly later Fabric 6b-c sherds.

Table 3. Pottery from intersection of Cuts 94 and 75.

Fabric	No. sherds	No. sherds %	Weight (g)	Weight %
Prehistoric	1	1.7	2	0.4
Roman	1	1.7	6	1.1
F1	13	21.7	96	17.9
F3a	6	10.0	78	14.6
F3c	8	13.3	38	7.1
F5	1	1.7	6	1.1
F6a	9	15.0	102	19.0
F6b	20	33.3	206	38.4
F6c	1	1.7	2	0.4
<b>Total</b>	<b>60</b>	<b>100.1</b>	<b>536</b>	<b>100</b>

Owing to the potential mixing within this group, little can be said regarding its precise date: it could span 1275–1350 with a little intrusive material, or 1325–1375 with a little residual material. It is interesting to note that of the sherds identifiable to vessel form, 28 are from cooking-pots while 14 are from jugs. Illustrated vessels consist of: Fig. 7, No. 1: cooking-pot with external sooting; No. 2: bowl, Nos 3-5: green glazed jugs (all Fabric 6b).

*Cut 94, Fill 95 (only)*

The small group from this context offers some explanation as to where the later 14th-century material noted above in Cuts 94/ 75 combined originated (Table 4).

Table 4. Pottery from Pit 94, Fill 95.

Fabric	No. sherds	No. sherds %	Weight (g)	Weight %
F1	7	20.0	62	12.9
F3a	5	14.3	54	11.2
F3c	6	17.1	118	24.5
F6a	3	8.6	12	2.3
F6b	10	28.6	146	30.1
F6e	4	11.4	90	18.7
<b>Total</b>	<b>35</b>	<b>100</b>	<b>482</b>	<b>99.7</b>

This assemblage, which could fall anywhere between 1275 and 1375, is interesting in that of the sherds recognisable to vessel type, nine are from cooking-pots, 11 from jugs and two from bowls. However, 11 undiagnostic and unglazed bodysherds

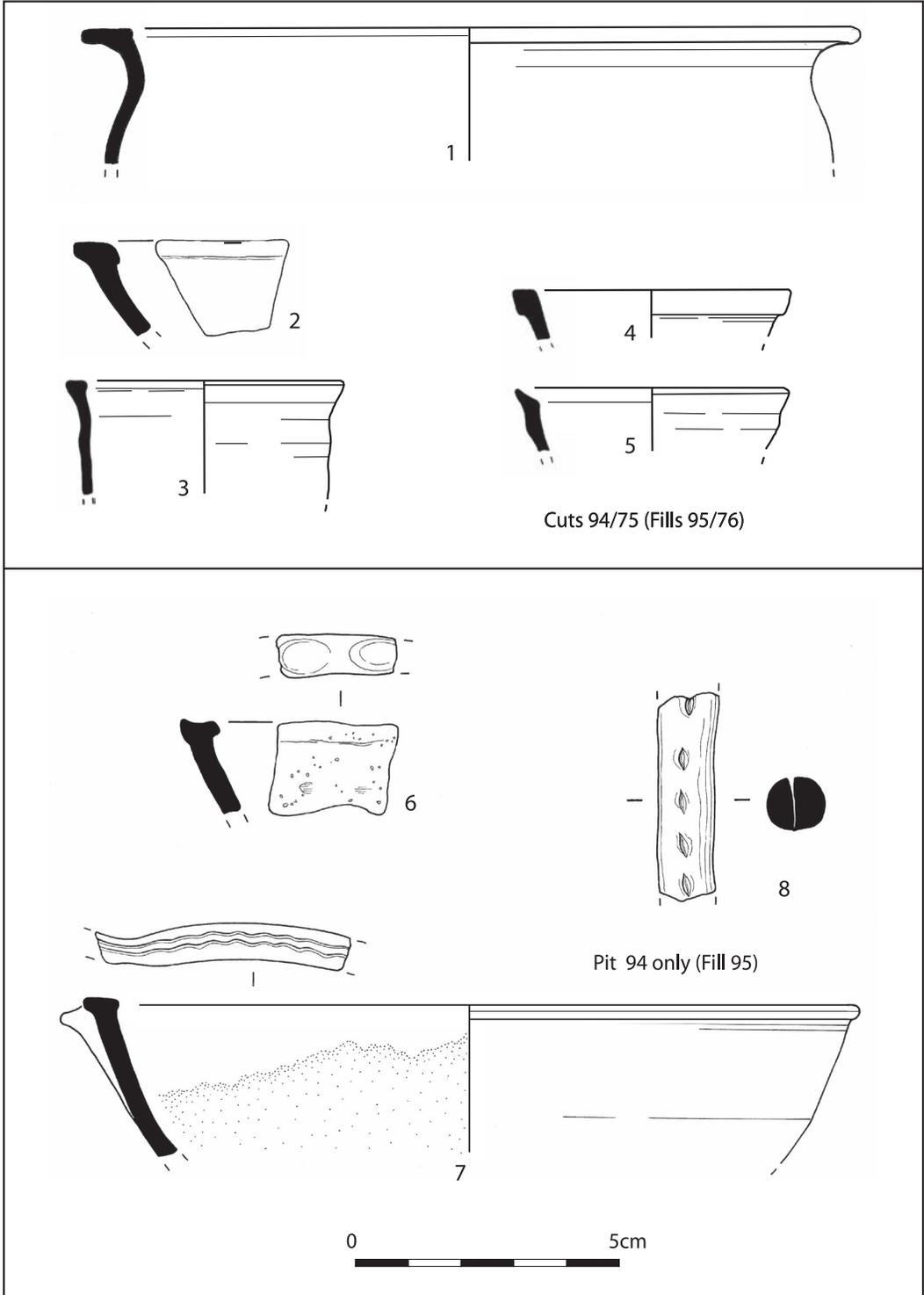


Fig. 7. Pottery.

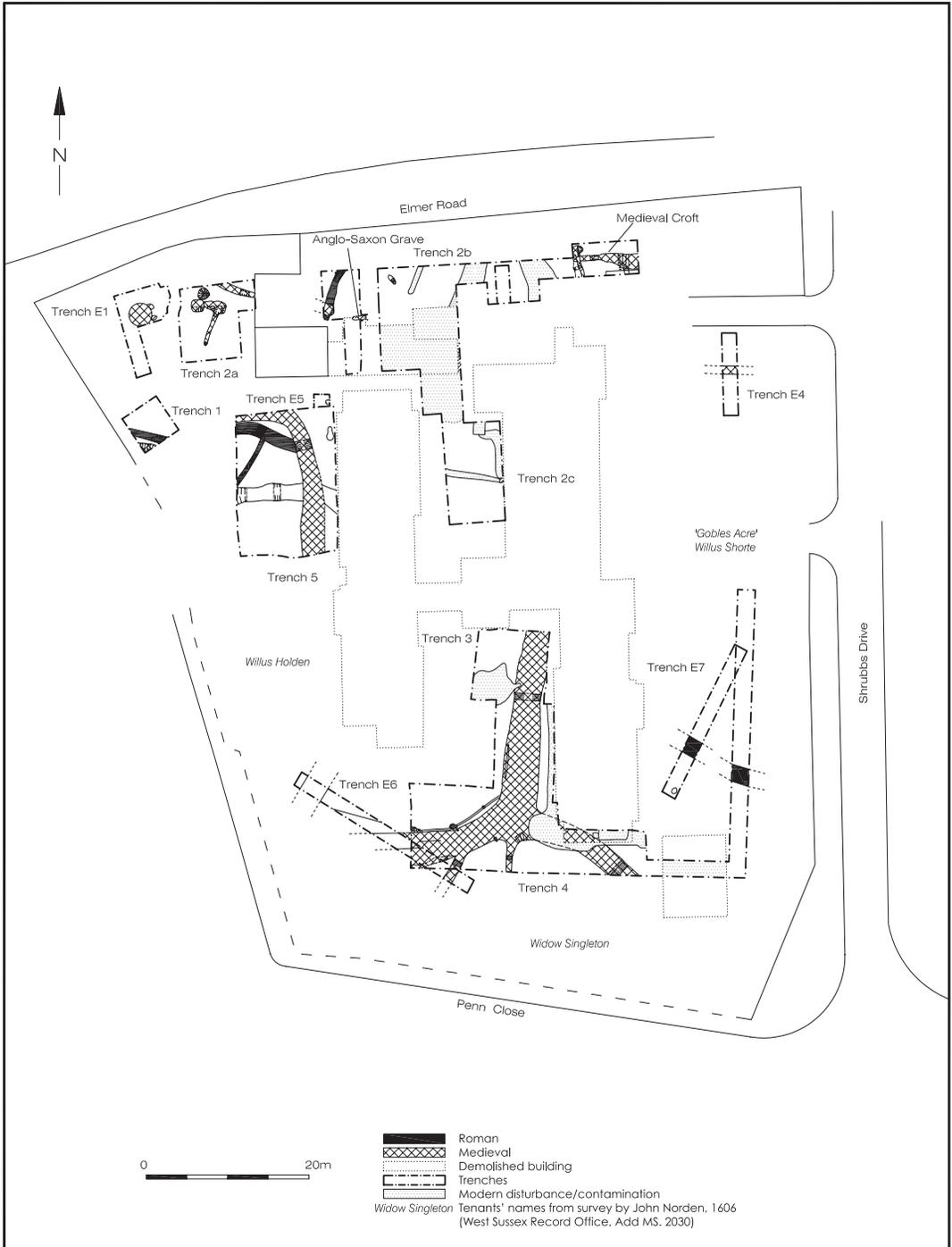


Fig. 8. Phased overview of Romano-British and medieval field system.

are likely to be from cooking-pots rather than jugs. Illustrated vessels consist of: Fig. 7, No. 6: bowl with thumbled rim (Fabric 1); No. 7: bowl with internal green glaze, incised decoration on rim and pouring spout (Fabric 3c); No. 8: green glazed rod handle with knife-point stabbing (Fabric 6b).

### Discussion

The earliest activity at the site, as represented by the ceramics, would appear to belong to the Late Bronze Age/ Early Iron Age. The exact nature of the activity is difficult to determine with certainty, however, the presence of 10 sherds may suggest that a settlement site lies in the vicinity though apparently not on the Nalگو Lodge site itself. It is probable that at this time fields demarcated by drainage ditches were beginning to be established for the first time and that the pottery relates to an associated agricultural settlement. It is probable that this initial field system formed the basis of subsequent ones including the probable Roman field system detected at the site. The Roman pottery from the current site is predominantly represented by small abraded sherds and as such, it is likely to have derived from the manuring of arable fields. The quantity of Roman pottery present again suggests the current site is not immediately adjacent to a settlement.

The medieval pottery at the site could span the mid-13th to early 15th centuries. However, where diagnostic sherds, or more correctly groups of sherds, are present, they indicate a 14th- rather than 13th-century date. The dominance of thumbled jug bases, internally glazed cooking-pot bases and generally of products of the Binsted kilns would tend to confirm this. The date range for the main activity at the site can safely be put within a late 13th- to 14th-century date bracket: the quantity of pottery indicates a settlement/ industrial site immediately adjacent to the excavations, probably to the north, fronting Elmer road. This activity appears to have continued into the early 15th century but apparently not for long. It is possible it was mainly concerned with the dismantling / robbing of the site. The few later sherds are likely simply to reflect the return to manuring/arable cultivation in the 16th century.

The medieval pottery assemblage is dominated by sandy wares of differing, but usually fine, grades (typical of the 'West Sussex Ware' tradition). The similarity of these fabrics is such that they are often difficult to divide into fabric groups, as there tends to be merging between groups. This is not surprising considering that many of the fabric groups represent probable chronological developments at the same kiln site. However, the similarity of these sandy wares also makes provenancing the sherds difficult without time-consuming and costly textural analysis. Despite this, many of the fabrics at the present site (see above) can be attributed with a fair degree of certainty to the Binsted kilns (Barton 1979; Streeten 1980), which would have been well positioned, close to the Arun, to supply this area of the coastal plain. However, a closer, as yet undiscovered, pottery source cannot be ruled out. It is interesting to note that the group of medieval pottery excavated from the lower portion of a well on the foreshore at Middleton in 1923-4 contains vessels typical of those excavated at Nalگو Lodge (Barton 1979, 116). Most notable is the jug with thumbled base, rod handle and incised line decoration under green glaze (Barton 1979, 117, No. 1) which is noted as the standard Binsted type. Barton also points out the importance of the foreshore group in showing

the overlap of the jugs of 'West Sussex Ware' type with those decorated with slip under glaze. This is again evident at the current site where a couple of slip under glaze jug bodysherds (Context 75, Fabric 6e) were found alongside Binsted type products (Fabric 6a/b).

The 'status' of the site is difficult to comment on for a number of reasons. Firstly, in the 14th century the general standard of wares in West Sussex was good and there appears to have been no great range in quality. Glazed vessels, both jugs and cooking-pots, were far more common across the social spectrum. Secondly, there is the problem of functional variation of rubbish disposal at the present site, which is hinted at by the great variation in the ratio of jugs to cooking-pots within different contexts. With no other similarly quantified assemblages from definite high- and low-status sites, there are currently no statistical criteria for designating a site or assemblage in this part of Sussex. The total absence of imported pottery from the site may be an indicator of lower status, or simply that the quality of the local wares was such that expensive imported pottery was not in particular demand at Middleton.

### THE METALLURGICAL REMAINS by Luke Barber (see ADS supplement for full report)

The excavations produced 146 pieces of slag, weighing 4782 g, from 14 individually numbered contexts. All the material is from medieval deposits, the majority of which are of the later 13th to 14th centuries. Where discernible, all pieces consist of iron-smithing waste with variable proportions of iron remaining. A number of fragments of hearth lining are present with heavy slag build-up on them. The material has been fully listed for the archive and samples have been retained for long-term curation.

The largest single assemblage of slag is from evaluation Trench E1, Pit E5 (Fills E54 and E6). The lower fill (E6) contained only small quantities (6 pieces weighing 72 g), however, the upper fill (E54) contained 98 pieces weighing 2355 g. Although not a large quantity of slag, it is of sufficient size, particularly when the other slag from around the site is added, to suggest that smithing was being undertaken at more than a purely domestic level and that the site itself may have, at least in part, functioned as a smithy for the local area.

The distribution of the slag at the site has a marked concentration toward the north-west corner, in the vicinity of evaluation Trench E1, excavation Trench 2a and the northern part of excavation Trench 5. These areas account for 77% of the slag assemblage by weight. There are only small scatters to the south of excavation Trench 5 and, with the exception of a single piece from Trench 2b, Context 37, no slag was found to the east of Ditch 32 (Trench 3). This distribution strongly suggests metalworking activity was located at the extreme north-western edge of the site, probably just outside the investigated area, and thus adjacent to the junction of Elmer and Yapton roads. Such a location would be fitting for a roadside smithy.

### THE CERAMIC BUILDING MATERIAL by Luke Barber (see ADS supplement for full report)

The evaluation and subsequent excavation at the site produced 472 fragments of tile, weighing in excess of 15.1 kg, from 16 individual contexts. No brick was recovered.

All the material is of medieval date and consists virtually exclusively of roof tile (where apparent all are from peg tiles) although a few floor-tile fragments are also present. The analysis of selected context groups clearly showed the transition from sand- and flint-tempered fabrics (13th to early 14th century) to sand only tempered fabrics (mid-14th to mid-15th century).

**WORKED FLINT** by Chris Butler  
(see ADS supplement for full report)

A total of 176 pieces of flint was recovered during the excavation. The assemblage can be divided into two components: firstly, the residual prehistoric flintwork which makes up some 45% of the assemblage, and secondly, a group of cruder material which may be related to building construction in the medieval period. Pieces recovered from Context 85 may indicate the presence of a knapped flint wall of late 13th- to 15th-century date in close proximity. The background to medieval flint walling is fully reviewed in the ADS supplement.

**GEOLOGICAL MATERIAL** by Luke Barber  
(see ADS supplement for full report)

The excavations produced 82 pieces of 'foreign' stone, weighing over 4.3 kg from six different contexts. The material has been fully quantified by stone type and context on geological record sheets which are housed with the archive. The only worked stone, a fragment of the upper stone of a rotary quern in Lodsworth-type Lower Greensand, came from a Roman context (Ditch 18, Fill 19).

**BONE** by Lucy Sibun

#### Human skeletal remains

Skeletal remains of a single inhumation were recovered during the excavations. The individual is represented by only a few poorly preserved fragments of the bone from the post-cranial skeleton. A full skeletal inventory has been completed and this is housed in the archive.

Unfortunately, owing to the poor preservation of the remains and incompleteness of the skeleton, it was not possible to determine the gender of the individual. However, it is possible to estimate that the individual represented was a young adult at the time of death.

Owing to the lack of dating evidence associated with the unexpected burial, the remains were sent for radiocarbon dating (Beta Analytical ref. 152861). The results provide a date for the remains of AD 680 to 890 (68% probability).

**Animal bone** (see ADS supplement for full report)

The excavations produced a small animal bone assemblage, only 73 fragments in total weighing 1192 g. This material has been fully quantified, identified and listed for the archive.

**SHELL** by David Dunkin

(see ADS supplement for full report)

The evaluation and excavation produced 16 contexts that contained marine molluscs, notably pits E5, E56 and 94, gully 36 and layer 85. The entire assemblage consisted of just one species *Ostrea edulis* (common oyster). The assemblage was represented by 141 complete valves and weighed in total 5133 g. All are of medieval date.

**PLANT REMAINS** by Pat Hinton

#### Methods

Samples of soil were processed by the excavators by flotation, with the 'flots' being retained on 0.25-mm-mesh. Following assessment of the dried flots by the writer, seven were selected for closer study. These were re-sieved to facilitate sorting by stereo microscope at 7–40X magnification, according to particle size. Higher magnification (160–200X) was used for surface details of sedge nutlets.

From the larger samples the numbers of cereal grains were estimated from counted sub-samples, but the entire sample was scanned to detect rarer items such as beans, peas, cereal chaff and wild plant seeds. The probable number of whole grains represented by the small cereal fragments was also estimated.

**Results** (Table 10)

The only really informative assemblage came from the lower fill of Pit E5 (Fill E6). The major cultivated cereal is a free-threshing bread wheat (*Triticum* cf. *aestivum* sl.) There is a small proportion of chaff, poorly preserved, so that only fragments of the toughest part of the rachis (spike) were found; there is therefore nothing to indicate any other wheat species. Hulled barley (*Hordeum vulgare*) forms a much smaller part of the recognisable grains. There are, in addition, many unidentifiable cereal fragments which may well reflect the same proportions. Only a very few oats (*Avena* sp.) are present and in the absence of essential parts of chaff, it is not possible to determine whether they were cultivated or part of the weed flora.

Pulses are a very minor component of the sample. Field beans (*Vicia faba*) are represented by only four fragments of cotyledons (seed leaves) of characteristic shape, but their size suggests they equal four beans. Peas (*Pisum sativum*) appear in this sample as one whole seed and a few probable fragments. Other similar more or less spherical seeds are present and those with a diameter of c. 4 mm or more may be peas or vetches, seeds not uncommonly found together. In this sample there is the equivalent of nine whole seeds and several cotyledon fragments but, as neither the outer seed coat nor the hilum (point of attachment to the pod), have survived, close identification is not possible. Common vetch (*Vicia sativa*) has been sown, probably for animal fodder, since at least the 13th century.

Wild plant seeds in this large sample include some which were common arable weeds and others more typical of damp or muddy conditions.

The sample from the upper fill of this pit (Fill E54) contained only a few grains of bread wheat, some unidentifiable cereal fragments and one vetch seed.

Other contexts from both excavation stages tend only to reflect on a much smaller scale the results of the first large sample. Wheat is the major cereal with barley occurring in lesser amounts. Oats occur not at all. Fragments equivalent to two peas were found in Sample 1027, Context 37 (Cut 36). Small vetch seeds and fragments of c. 2–3 mm diameter, which occurred in several samples, are likely to be weed species. Sample 1027 is the only sample to produce more than a very few wild plant seeds including, as Context E6, seeds of spike rushes and sedges.

There are several possible interpretations of the large deposit in Context E6. The relatively small number of weed seeds compared with grains may indicate that the

Table 10. Charred plant remains.

		EVALUATION			EXCAVATION			
Context		E6	E54	E18	6	36	37	109
Sample no.					1025	1013	1027	1029
Sample vol. (litres)		16	24	16	25	37.5	37.5	18.75
<b>Cultivated plants</b>								
<i>Triticum</i> cf <i>aestivum</i> s.l. - grains	bread wheat	c. 1500	11	4	7	15	6	9
<i>Triticum</i> sp. - grains	undifferentiated wheat	c. 500						
<i>Triticum</i> sp. – rachis node fragments	" wheat chaff	15				4	4	
<i>Hordeum vulgare</i> L. - grains	hulled barley	c. 110		1	1	7	4 + frags.	
<i>Hordeum</i> cf <i>vulgare</i> – rachis frags.	barley chaff	3				6	1	
<i>Avena</i> sp.- grains	oats	7						
Cerealia indet.	indeterminate grains & frags.	= c. 50	7 + frags.	frags.	5 + frags.	3 + frags.	frags.	5 + frags.
<i>Vicia faba</i> L.	field or broad bean	4						
<i>Pisum sativum</i> L.	pea	1 + frags.					2	
<b>Arable weeds</b>								
<i>Chenopodium album</i> L.	fat hen	2						
<i>Chenopodium</i> sp.	goosefoot	1						2
<i>Atriplex prostrata/patula</i>	spear-leaved or common orache	2						
<i>Stellaria media/neglecta</i>	common or greater stitchwort					1		
<i>Persicaria lapathifolia</i> (L.) Gray	pale persicaria						1	
<i>Polygonum</i> cf. <i>aviculare</i>	knotgrass	1					1	
<i>Rumex</i> cf. <i>obtusifolius</i>	broad-leaved dock	3				1	2	
<i>Rumex</i> sp.	dock	4				1	1	
<i>Vicia</i> cf <i>sativa</i>	common vetch	9 + frags.				2		1
<i>Vicia hirsuta/tetrasperma</i>	hairy or smooth tare	4	1	1		2		
<i>Vicia/Lathyrus</i>	vetch/vetchling				1 + frags.	2		
<i>Anthemis cotula</i> L.	stinking mayweed	1					2	
Asteraceae indet.	daisy family	2					1	
<i>Lolium</i> cf. <i>perenne</i>	rye grass						1	
<i>Bromus hordaceous/</i> <i>secalinus</i>	oft or rye brome	2						
Poaceae indet.	indeterminate small grasses	4					1	
<b>Plants of damp ground</b>								
<i>Pedicularis</i> cf. <i>sylvatica</i>	lousewort	2						
<i>Eleocharis palustris/</i> <i>uniglumis</i>	common or slender spike rush	4					9	
<i>Carex pallescens</i> L.	pale sedge	1					1	
<i>Carex</i> spp.	indeterminate sedges	3					1	

Table 11. Charcoal: list of species identifications for all samples submitted for analysis.

Context	37	37	37	27	Pit E5	Pit E5	72	79	
Sample	1013	1027	-	1032	Upper fill E6	Lower fill E54	1014	1030	
Fraction	4 mm	4 mm	H-picked	4 mm	4 mm	4 mm	4 mm	4 mm	
Subsampled (Y/N)	Y	N	N	5 Y	N	N	N	Y	
<i>Quercus</i> sp./spp. (oak)	48	47		50	12	11	33	50	251
<i>Corylus avellana</i> (hazel)	5	5							10
<i>Betula pubescens</i> (birch)	4								4
<i>Fagus sylvatica</i> (beech)	12	6	13		9	2			42
<i>Prunus</i> (avium type) (cherry)		3			1	1			5
<i>Prunus</i> (spinosa type) (blackthorn)		1							1
Maloideae indet. (hawthorn/apple/pear)		1			7	1			9
<i>Fraxinus</i> sp./spp. (ash)	19	9			2	1			31
<i>Salix</i> sp./spp. (willow)	3	2			11				16
<i>Alnus</i> sp./spp. (alder)		1							1
Indet.	9	2			9	75			95
<b>Total</b>	<b>100</b>	<b>77</b>	<b>13</b>	<b>50</b>	<b>51</b>	<b>91</b>	<b>33</b>	<b>50</b>	<b>465</b>

assemblage represents the burned remains of prepared grains or, as suggested by the badly burned chaff fragments, smaller seeds were destroyed and the whole was at an earlier stage of processing. Alternatively, the deposit may represent the disposal of burned material from more than one source and it is possible that the damp ground plants were not closely associated with the crops.

The conditions of the fields where the crops were grown are illustrated here only to a minor extent by the small number of weed seeds. Some e.g. fat hen (*Chenopodium album*), stitchworts (*Stellaria* spp.), docks (*Rumex* spp.), small vetches (cf. *Vicia hirsuta* or *V. tetrasperma*) may occur in any open, disturbed soils, but stinking mayweed (*Anthemis cotula*) is particularly characteristic of heavy clay. Pale sedge (*Carex pallescens*) also occurs typically on clay. Other indications of poorly-drained areas are two other sedges, not specifically identified: spike rush (*Eleocharis (palustris/uniglumis)*) and lousewort (*Pedicularis* cf. *sylvatica*).

Wheat, barley, peas, beans and vetches were the basic crops of medieval agriculture, with wheat the commonest cereal in southern Britain. Legumes are usually found in lower numbers and problems of identification mean they are less frequently specifically recorded.

**THE CHARCOAL** by Eleni Asouti (see ADS supplement for full report)

Eight charcoal samples were selected for analysis. All were of later 13th- to 14th-century date and related to a possible smithy and demolished building material. The assemblage is summarized in Table 11.

The picture emerging from the charcoal data suggests that a wide variety of tree species were used as fuel for the putative smithy. Dominant in the samples associated with 'slag' (as indeed in most samples) is oak, something expected, given the high density and excellent fuel qualities of oak wood.

The assemblages deemed possibly to represent 'building' debris are very diverse (with the exception of the hand-picked material that contained exclusively beech). The wide array of taxa recovered gives some indication of the materials likely to represent construction elements. Oak is again dominant; taxa such as hazel, willow, ash and birch (the latter two less so, birch in particular) are further well-known for their use in medieval wattle hurdles and thatching broaches (Rackham 1982). However, one cannot exclude the possibility that the charcoal remains represent fuel refuse and may thus be unrelated to the building/roofing material that has been retrieved from the same deposits.

## DISCUSSION

Owing to the restricted nature of the excavations, only limited interpretation can be drawn about the occupation at the site and much of this relies heavily on the artefacts and ecofacts recovered. At a general level, the excavations revealed evidence

of prehistoric activity, a possible Romano-British field system that was subsequently overlain by medieval and post-medieval field systems (Fig. 8) and evidence of both industrial and domestic medieval activity fronting Elmer Road.

The two prehistoric features identified (Trench 2b, Context 106 and Trench 5, Context 69/E47),

in addition to the presence of residual burnt and worked flint (the majority of which is probably of Bronze-Age date) within the backfill of many of the features, indicates that activity from this period is present in the vicinity of the site. The nearest excavated sites to Nalگو Lodge suggestive of prehistoric occupation are located at the old Ford Airfield (Place 1999), south of Horsemere Green Lane, Climping (Stevens 2001), or perhaps at Yapton (Rudling 1987).

Romano-British activity at the site was represented by a series of linear ditches (Contexts 3, 8, 18/E19, 45 & 67) that shared a similar coaxial alignment. The full extent of these features could not be established owing to site limitations. All of these features produced only small quantities of pottery making a tighter chronological sequence somewhat unreliable. The small assemblage spanned the 2nd to the 4th centuries AD and overlaps with the date range of pottery collected from the adjacent Greenfields site, which spanned the period AD 70–200 (Saunders 2000). It is possible that the features found at these sites represent a developing field system or sequence of enclosures that was in use for much of the Romano-British period. A partially excavated farmstead approximately 0.5km north-west of the site at Moraunt Drive, (SU 9701 0061) revealed evidence to suggest that the main occupation spanned the 1st and 2nd centuries AD, with less intensive activity into the 4th century (Barber 1994, 99). In the absence of evidence from a closer Romano-British farmstead, it could be suggested that both the Nalگو Lodge and Greenfield sites formed outlying fields associated with the Moraunt Drive agricultural settlement.

The Anglo-Saxon grave is rather enigmatic as there appears to be no evidence of an established cemetery. However, as a moderately sized area of the site to the south and east of this feature either was not excavated or had been substantially disturbed and it should not be ruled out that this grave lies on the periphery of a small burial ground. There is no strong evidence to suggest that this individual was an executed criminal as the grave orientation conforms to Christian practice, which was not in general applied to the burial of wrongdoers at this time (Reynolds 1999, 108). However, the grave's location on a putative charter/hundred boundary (a favoured location for the burial of execution victims at this time) means that this option cannot

be entirely ruled out. Unfortunately, the study of any pathology was not possible owing to the poor state of preservation of the bone. This factor, in addition to truncation of the remains by later activity at the site, are more likely reasons why no head was present, although decapitation must still remain a possibility. No evidence of settlement for this period has been found at the site, although if the medieval settlement of Middleton developed from Anglo-Saxon origins, then it may have been located to the south and now lost to coastal erosion. Middleton Green at this time may have been only marginal to this suggested Late Saxon settlement focus, but may have become more important into the later medieval period as coastal erosion advanced northwards.

Medieval industrial and domestic activity was focused at the northern end of the site, whilst field boundary/drainage ditches were primarily located over the central and southern areas. It is not unlikely that the large quantities of flint and peg-tile debris within demolition layer 85 (Trench 2b) relate to a building that once fronted the southern side of Elmer Road and went out of use by the mid-15th century. Ditch 36 may have served as the southern croft boundary to this structure and was certainly open at the time the building was destroyed, as it contained material largely derived from demolition debris, with a sherd of the same vessel as was found in Context 85. Fragments of lava quern probably indicate a domestic rather than an industrial function for the building.

Higher proportions of oyster shell were found within features that were in close proximity to this suggested domestic focus, adjacent to modern day Elmer Road. The bone assemblage, being small and generally poorly preserved, provides only limited information, but plant remains show that a range of crops were being utilised on the site, in particular wheat.

Pits E5, E56 and E58 were broadly contemporary (Pit E57 containing a sherd from the same vessel as found in Pit E6), as pottery finds suggest a date range of between AD 1275–1375. The large proportion of iron-smithing slag within these features and generally within the north-west of the site may indicate the presence of a small-scale smithy which may have been focused at the junction of Elmer Road and Yapton Road and therefore just beyond the boundary of the site.

The medieval features found within Trench 2a are of a contemporary date and may have functioned as further rubbish pits and boundary/drainage ditches relating to this activity, although very little slag was recovered from them. Evidence of *in-situ* burning within Pit 71 suggests that this may have functioned as a hearth.

The large medieval ditches (Contexts 10, 32, 61 and re-cut 24, and Ditch 65) within the central and southern areas of the site are likely to represent the division of land, most likely for small-scale agricultural purposes and likely also to have served a drainage function. Dating evidence suggests this took place between AD 1200 and 1350, although cleaning of the ditches may have removed earlier deposits. The early evidence of coastal erosion in the area may also have led to occasional flooding of low-lying areas close to the sea. The substantial ditches identified during the excavation could have been dug in response to this threat and would certainly have provided an adequate means of drainage. It is interesting to note that a number of plant species were identified that are more typical of damp condition (e.g. sedges, spike rush and lousewort).

The substantial chalk drain (still functioning) that cut through the fills of Ditch 32 (Contexts 33 & 55) suggests that this feature may have survived until more recent times as a slight depression which retained water and therefore required additional drainage. Ditch 10 turned a right angle to the west at its northern end and may be the same as Ditch 5 within Trench 1. Ditches 20 and 22 seem to be slightly later additions to this field system and contained pottery dating to 1450–1575 and 1450–1550 respectively. Alternatively, the slightly later pottery in these ditches may indicate that the other ditches remained open a little later than their pottery suggests. John Norden's 1606 map of the

manor of Middleton allows the early-17th-century landholders to be identified, as ditches 32, 24 and 20 appear to have continued in use until at least this date (Fig. 8).

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#### ADS Supplement

Information within appendix on ADS website can be found at <http://ads.ahds.ac.uk/catalogue/library>. Follow the link to *Sussex Archaeological Collections* and select Volume 143:

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#### REFERENCES

**Abbott, W.**, 1995. Early Middleton, in G. Male & W. Abbott (eds), *The Incoming Tide - Studies in the History of Middleton on Sea, West Sussex*. Felpham and Middleton Local History Workshop.

**Ballard, A.**, 1910. The Sussex Coastline, *Sussex Archaeological Collections* (hereafter SAC) **53**, 5–25.

**Barber, L.**, 1994. The excavation of a Romano-British site at Moraunt Drive, Middleton-on-Sea, West Sussex, 1992, SAC **132**, 87–100.

— — forthcoming. The Pottery, in D. Rudling in prep. Excavations in Tarrant Street 1983, Arundel, West Sussex.

**Barton, K.**, 1979. *Sussex Medieval Pottery*. Chichester: Phillimore.

**Griffin, N. S.**, 2000a. An Archaeological Evaluation at Nalگو Lodge, Shrubbs Drive, Middleton-on-Sea, West Sussex. Unpublished ASE Client Report No. 1218.

— — 2000b. An Archaeological Excavation at the Site of Nalگو Lodge, Shrubbs Drive, Middleton-on-Sea, West Sussex: Post-Excavation Assessment. Unpublished ASE Client Report No. 1233.

— — 2004. Archaeological Excavations at Roundstone Lane, Angmering, West Sussex. Unpublished ASE Client Report No. 1333.

**Page, W.**, 1925. Reports of Local Secretaries: Bognor, *SAC* **66**, 237–8.

**Pitts, M. W.** 1979. A Gazetteer of Roman sites and finds on the West Sussex Coastal Plain, *SAC* **117**, 63–83.

**Place, C.**, 1999. Bronze and Iron Age ford, *Sussex Past and Present* **89**, 9.

**Rackham, O.**, 1982. The growing and transport of timber and underwood, in S. McGrail (ed.) *Woodworking Techniques before A.D. 1500*. British Archaeological Reports (International Series) **129**, pp. 199–218.

**Reynolds, A.**, 1997. The definition and ideology of Anglo-Saxon execution sites and cemeteries, in G. De Boe & F. Verhaeghe (eds), *Death and Burial in Medieval Europe*. Papers of 'Medieval Europe Brugge 1997' Conference Volume **2**. — — 1999. *Later Anglo-Saxon England Life and Landscape*. Stroud: Tempus.

**Rudling, D.**, 1987. The Excavation of a Late Bronze Age site at Yapton, West Sussex, 1984, *SAC* **125**, 51–67.

**Saunders, M. J.**, 2000. 'Greenfields', Middleton-on-Sea, West Sussex - An Archaeological Excavation. Unpublished Thames Valley Archaeological Services Client Report.

— — 2004. A Roman field boundary at 'Greenfields', Middleton-on-Sea, West Sussex, *SAC* **142**, 135–9.

**Saunders, M. J. & Appleby, R.**, 1999. Greenfields, Middleton-on-Sea, West Sussex - An Archaeological Desk-based Assessment and Evaluation. Unpublished Thames Valley Archaeological Services Client Report.

**Sibun, L.**, 1998. A Report on the Archaeological Excavations at Bognor Regis Community College, Westloats Lane, Bognor Regis, West Sussex.. Unpublished ASE Client Report No. 921.

— — 1999. An Archaeological Desk-based Assessment of Nalgo Lodge, Shrubbs Drive/Elmer Road, Middleton-on-Sea, West Sussex. Unpublished ASE Client Report No. 1141.

**Stevens, S.**, 2001. Excavations to the South of Horsemere Green Lane, Climping, West Sussex. Unpublished ASE Client Report No. 1244.

**Streeten, A.**, 1980. Potters, Kilns and Markets in Medieval Sussex: A Preliminary Study, *SAC* **118**, 105–118.

**Stuiver, M. & van der Plicht, H.**, 1998. Editorial Comment, *Radiocarbon* **40** (3), xii–xiii.

**Stuiver, M., Reimer, P., Bard, E., Beck, J., Burr, G., Hughen, K., Kromer, B., McCormac, F., van der Plicht, J. & Spurk, M.**, 1998. INTCAL98 radiocarbon age calibration, 24,000–0 cal BP, *Radiocarbon* **40**(3), 1041–83.

**Talma, A. S. & Vogel, J. C.**, 1993. A simplified approach to calibrating C14 dates, *Radiocarbon* **35**(2), 317–22.

**Wedmore, B.**, 1982. A Bronze Age bucket urn from Middleton-on-Sea (SU 9699 0047), *SAC* **120**, 209.