

Syndale Park, Ospringe, Kent

Archaeological Evaluation and an Assessment of the Results





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AN ARCHAEOLOGICAL EVALUATION AND AN ASSESSMENT OF THE RESULTS

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Cover: Sherd of Samian pottery with lead repair

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Summary

Videotext Communications was commissioned by Channel 4 to carry out an archaeological evaluation as part of the Time Team television series in the grounds of Syndale Park, Ospringe Kent (centred on National Grid Reference TQ 994 610). The results of a watching brief during the construction of a gas pipeline in 1994 and evaluation trenches by Paul Wilkinson of the Kent Archaeological Field School suggested that the site contained the remains of a Roman Fort of Claudian date. As such it was likely to represent one of the earliest forts currently known from Britain. Confirmation of this would have considerable implications towards the debate concerning the location of the initial Roman invasion of Britain.

The archaeological evaluation comprised a geophysical survey and nine machine-dug trial trenches located across the site. The work was undertaken over three days in March 2003.

The results of the geophysical survey and the archaeological evaluation produced no evidence to substantiate the presence of a Roman fort. Archaeological activity dating from the Late Iron Age was found on the west slopes of the spur, which had continued throughout the Roman period. A metalled cobbled surface was located in the north of the site with related domestic refuse, which may have been linked to occupation adjacent to Watling Street. A series of linear boundary ditches across the crest of the spur, which extended to the east, suggest that the area was predominantly laid out as a field system.

There was a relatively low level of finds across the site. However a probable well on the east side of the spur, which included a number of high status objects, suggested that a building may have existed in that area.

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Acknowledgements

The evaluation was commissioned and funded by Videotext Communications. The collaborative role of P. Wilkinson of the Kent Archaeological Field School is acknowledged.

The Geophysical survey was undertaken by John Gater and Chris Gaffney, with staff from G.S.B. Prospection, and survey by Henry Chapman, University of Hull. Excavation strategy was conducted by Neil Holbrook (Cotswold Archaeology), site recording was coordinated by Phil Harding, assisted by Steve Thompson of Wessex Archaeology. The excavations were undertaken by the Time Team's retained excavators with help from members of Kent Archaeological Field School. Special thanks should also be given to members of Canterbury Archaeological Trust, who also assisted at short notice. The archive was collated and all post excavation analysis and assessment undertaken by Wessex Archaeology including management (Roland J C Smith), report (Phil Harding), finds (Lorraine Mepham) and illustrations (S E James). Specialist comment was provided by Lisa Brown (pottery), Stephanie Knight (animal bone), Chris Stevens (plant remains) and Nick Cooke (Roman coins).

The progress and successful completion of the work also benefited from discussion on site with specialists of Roman archaeology Guy de la Bedoyere, Malcolm Lyne (pottery), Paul Wilkinson and Tony Wilmott (English Heritage).

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1 BACKGROUND

1.1 Description of the site

- 1.1.1 The site is in Syndale Park Estate, close to the Syndale Park Motel at National Grid Reference TQ 994 610 (Figure 1). It consists of pasture used for sheep grazing, and was previously the grounds of Syndale House.
- 1.1.2 The site is on a spur of higher ground, rising from approximately 25m to 40m OD. The ground slopes steeply to the west with a shallower gradient to the north and east. A flatter plateau lies to the south at approximately 45m OD. The plateau and spur are capped with Head Gravel (BGS Sheet 273), which overlie a band of green-grey Thanet Sand with shell beds and sandy clay. A thin band of Lower Greensand and Wealden Clay outcrops on the west side.
- 1.1.3 Syndale is located to the west of Ospringe on the western edge of Faversham and immediately south of the modern A2 (Roman Watling Street). To the north-west, Oare Creek extends inland from the Swale estuary to within approximately 2km of Syndale.
- 1.1.4 It has been proposed (Wilkinson 1999) that the spur of higher ground, known as Judd's Hill, was the location of a Roman fort of the Claudian period. It is also believed that on the lower ground approximately 300m to the east was the centre of the Roman town of Durolevum (Kirk et al 1996; Wilkinson 1999).

1.2 Previous archaeological work

- 1.2.1 Syndale Park has long been associated with the belief that it marked the location of a Roman fort. Godfrey-Faussett (1871) claimed the existence of a Roman 'camp' that was 480ft from east to west and 400ft from north to south. He stated that the north-eastern corner and eastern ditch of the camp were still traceable, and the south-eastern corner was still extant, including a part of the bank (ibid). The area has also been the subject of numerous excavations and watching briefs, both on Judd's Hill itself and in the surrounding countryside. Drawings are retained at Faversham Museum of a watching brief undertaken during the installation of a gas main in 1994, although no location map or written records appear to survive.
- 1.2.2 More recently, Dr Paul Wilkinson and the Kent Archaeological Field School conducted an archaeological evaluation of the area in 1999. Six trenches were excavated in an attempt to evaluate the archaeological potential of the site, and to test the hypothesis that Judd's Hill was the site of a Roman fort. These excavations (Wilkinson 1999) revealed a V-shaped linear ditch on both the western and eastern sides of the putative fort. They were approximately 1.5m deep and 2m wide. At the

bottom of these ditches was a narrow square-cut channel, interpreted (ibid) as indicative of a defensive Punic ditch.

- 1.2.3 A small quantity of pottery from the primary silts comprised wheel-turned grey-black ware, coarse 'Belgic' grog-tempered ware; fired pottery of patchy brown, black and buff-brown fabric; fired rough blue-grey ware and other coarse fabrics, as well as a flake of a Dressel 20 amphora. The primary silting was overlain by rubbish including pottery of Late Iron Age to Pre-Flavian character (Lyne 2000). The tertiary fills contained sherds of similar date, although contaminated by sherds of 2nd century date (ibid).
- 1.2.4 The pottery assemblage suggested a very early Roman date for the construction of the site. According to Lyne: "The presence of the Late Iron Age fabrics and the fact that none of the datable forms have an inception date of later than AD 50 leaves little doubt that this assemblage accumulated between c. AD 43 and 50/60".
- 1.2.5 The evaluation established the alignment of the ditches on both the west and east side of the spur, but was unable to show that they formed part of a single continuous enclosure. On the western side the ditch ran parallel to an extant bank and, as on the east side, broadly perpendicular to the modern A2. It was suggested (ibid) that these two ditches represented the western and eastern sides of a characteristic trapezoidal Roman defensive enclosure. These observations concurred with the historical descriptions.
- 1.2.6 The extant bank on the crest of the spur on the western side is the most substantial of a series of apparent terraces on the western slope. A preliminary survey suggested these terraces may be of pre-Roman date, and that the extensive extant bank at the top of the slope may be a later refurbishment of an earlier feature (Ainsworth pers. comm.). Additionally the apparent line of Roman Watling Street, immediately south of the modern A2, appeared to cut this earthwork, supporting the theory that the bank was of earlier origin.
- 1.2.7 The results of a landscape survey (Wilkinson pers. comm.) and geophysical survey (Davies 1999) on the west side of the site suggested the presence of an entrance to the putative fort. Tentative interpretation of the geophysical results suggested the possibility of a timber gatehouse associated with this entrance.
- 1.2.8 The 1999 excavations also revealed evidence of later Roman occupation (Wilkinson 1999). In the centre of the putative fort, a set of post-holes containing pottery of Hadrianic date (Lyne 2000) was discovered. In addition, on the eastern edge of the putative fort, a trench designed to locate a northern continuation of the eastern enclosure ditch encountered a 2nd century building and rubbish dump (Wilkinson 1999) including 1st and 2nd century AD pottery.
- 1.2.9 Excavations have taken place elsewhere in the immediate area, including the likely site of the Roman town of Durolevum, to the east of Judd's Hill (TQ 998 610) and a section of Roman Watling Street (Wilkinson 2001). Several Roman buildings of 2nd and 3rd century date have been discovered, adjacent to the Roman road (ibid).

1.2.10 Directly associated with this settlement, an extensive Roman cemetery on the northern side of Watling Street was excavated in the 1920s (Whiting 1931). This contained evidence of 387 Roman burials dating from the 1st to 4th centuries, with both cremations and inhumations represented. More recently, seven cremations and four inhumations were found in the area aligned with a hollow way (Rady 2001), which apparently ran from Oare Creek in the north, directly to Judd's Hill. The depth of the hollow way (1.6m) suggested it was of some importance, and was in use for a long time, possibly spanning the entire duration of the putative Roman town of Durolevum. In addition to the suggestion that terracing on the western side of Judd's Hill is of Iron Age date, some Iron Age material has been discovered in the immediate locality. During the cutting of the gas pipe trench in 1994 a ditch containing characteristic Iron Age material was discovered in the north-west corner of the putative fort, running parallel to Roman Watling Street (Wilkinson pers. comm.).

2 METHODS

2.1 Introduction

2.1.1 A project design for the work was compiled and provided by Videotext Communications (Videotext Communications 2003). Full details of the circumstances and methods are contained in this document and are summarised here.

2.2 Aims and objectives

- 2.2.1 The project offered the opportunity to answer some significant outstanding questions surrounding the site at Syndale, especially relating to its Roman history and the possible presence of a Claudian era fort.
- 2.2.2 Very few sites from the conquest period, or which could be described as 'forts', have been excavated in South-East England and offered a rare insight into the nature of the earliest phase of Roman occupation of Britain. It was intended to confirm or reject the presence and extent of any military enclosure of conquest date by its methods of construction, internal structures and associated artefacts or to provide an alternative interpretation for activity on Judd's Hill. It was also intended to examine the duration, status, distribution and sequence of occupation at the site, especially in relation to Roman Watling Street, the density of archaeological remains and the degree of preservation.
- 2.2.3 The results would also provide an invaluable data set towards the wider interpretation of the environs around the Roman town of Durolevum, the Roman road and the possible Iron Age occupation of this area.

2.3 Fieldwork methodology

2.3.1 The fieldwork strategy was undertaken using a combination of an extensive magnetometer and resistivity geophysical survey across the site and a series of machine excavated trenches.

- 2.3.2 Nine machine-excavated trenches of varying lengths, but all 1.6m wide, were dug (Figure 1) after consultation with the on-site director, Neil Holbrook and associated specialists. The precise location of individual trenches was made across topographic features or geophysical anomalies to answer specific aims and objectives of the project design.
- 2.3.3 The trenches were excavated using a wheeled JCB mechanical digger and back hoe fitted with a toothless ditching bucket. A small tracked mini-digger was also used for the removal of topsoil. All machine work was undertaken with constant archaeological supervision and ceased at the identification of significant archaeological deposits, or where natural deposits were encountered first. When machine excavation had ceased all trenches were cleaned by hand and archaeological deposits were excavated. Where it could be shown that archaeological deposits were of recent date and filled with modern disturbance, limited machine excavation continued to *in situ* deposits or to the natural geology, whichever was encountered first. No trenches were excavated beyond a depth at which it was considered safe to enter, in accordance with accepted safety procedures.
- 2.3.4 A sufficient sample of all deposits was examined to allow the resolution of the principal questions outlined in the aims and objectives above. Other deposits were recorded and preserved *in situ* but not excavated.
- 2.3.5 All archaeological deposits were recorded using Wessex Archaeology's *pro forma* record sheets with a unique numbering system for individual contexts. Trenches were located using a Trimble Real Time Differential GPS survey system. All archaeological features and deposits were planned at 1:20 or 1:50 and sections drawn at 1:10 or 1:20, whichever was appropriate for the circumstances. All principal strata and features were related to Ordnance Survey datum and a photographic record of the investigations and individual features was maintained.
- 2.3.6 The work was carried out over 18th-20th March, 2003. All spoil was metal detected by Andrew Stephney and Steve Druggit, as recommended by Dr Paul Wilkinson of Kent Archaeological Field School.
- 2.3.7 At the completion of the work all trenches were reinstated using the excavated spoil from the trenches. All artefacts were transported to the offices of Wessex Archaeology where they were processed and assessed for this report.

3 RESULTS

3.1 Introduction

3.1.1 Details of individual excavated contexts and features, a full geophysical report (GSB 2003) and results of artefact and environmental sample analysis are retained in archive.

3.2 Geophysical survey

- 3.2.1 The gradiometer data from Area A (Figure 1) were dominated by magnetic disturbance presumed to be modern and which masked any potential archaeological anomalies. However, a possible former field boundary was visible within the data. Resistance data from this area were thought to reflect topographic and landscaping features.
- 3.2.2 Area B (Figure 1) was less disturbed magnetically and several responses were noted which could be of archaeological interest. Results from the resistance survey showed an area of high resistance to the west of the survey area. A subsequent excavation (trench 9) showed the anomaly to be due to natural gravel. Trends of both high and low resistance have been noted and could be archaeological, however such an interpretation is cautious.
- 3.2.3 While some of the magnetic results from Area B are consistent with settlement alongside Watling Street, no geophysical evidence was identified to indicate that the site at Syndale formed part of a Roman fort.

3.3 Archaeological evaluation

3.3.1 Archaeological features were overlain by mid grey-brown well-sorted silty clay topsoil, that averaged 0.35-0.40 m thick and represented a soil profile associated with well established unploughed pasture. Most features were filled with dark brown or grey-brown silts and silty clays derived from the parent Thanet Sand and 'brickearth'. In places the deposits were mottled with yellow or orange unaltered material, which was freshly eroded from the sides of features. Where domestic refuse was present in any quantity the accompanying matrix was more frequently dark-brown or black in colour and often contained charcoal.

3.4 Trench 1

- 3.4.1 This trench (Figure 2), which measured 43 metres long, was aligned NW-SE on the west side of the site. It descended from 42.0 m OD on the crest of the spur to 37.2 m OD and was designed to section and date the bank, which it was thought may have been of Iron Age date, that ran along the crest of the spur perpendicular to Watling Street. The trench extended down slope to investigate the nature of the terracing on the west side of the site and to intersect with and extend the known alignment of the 'Claudian' ditch discovered in the 1999 evaluation.
- 3.4.2 The bank (102) comprised a lynchet type deposit, 0.60 m thick, of grey brown silty clay with large numbers of small and sub rectangular or rounded flint nodules and fragments of brick and medieval roof tile. It seems most likely that the feature, which accentuates the natural skyline along the edge of the spur relates to landscaping associated with the construction of Syndale Park.
- 3.4.3 There was no buried soil beneath the bank, which sealed a ditch (106), 3.70 m wide and 1.20 m deep, with shallow-moderately sloping sides that tapered to a narrow flat base 0.15 m across. It followed the edge of the spur and was filled with a series of

- naturally accumulated grey brown to yellow brown stone free silts and silty clays (107, 122, 113, 117, 118) containing pottery, which dated from the Late Iron Age to the 2nd century AD.
- 3.4.4 The bank deposit also sealed a shallow undated post-hole (108), which measured 0.4 m in diameter and 0.05 deep. It lay 7.5 m east of the crest of the spur, within the 'interior' of the spur, but was of insufficient depth to have held a large, load-bearing structural post.
- 3.4.5 The side of the spur, which revealed natural deposits of 'brickearth' below the turf, fell away sharply to the west of the ditch to the terrace feature below. The true extent of this terrace is unknown, however the geophysical survey traced its probable edge from the excavation and suggested that it might be a discrete feature 60 m long and at least 20 m wide. This suggests that it may be a quarry type feature for the extraction of 'brickearth', rather than an agricultural terrace, running the length of the spur. The base of the terrace was reached approximately 1.20 m below the modern ground surface. It sloped away gently to the west and was filled with a series of dark to mid grey-brown silty clay colluvial deposits (111, 115, 126), which dated from the Late Iron Age to the 1st and 3rd century AD. A thin layer of dark brown clay silt with chalk fragments (104) immediately below the topsoil provided evidence of medieval or post medieval marling to reduce soil acidity levels and demonstrated ploughing on the side of the spur. The back edge of the terrace curved round to the west and formed a steep break of slope, 1.30 m deep, that descended into a shallow curving ditch-type feature (114). This measured 0.60 m wide at the base and was dug 0.20 m into the natural 'brickearth' below the base of the terrace. The excavated evidence is unclear whether this ditch is a curving continuation of the 'Claudian' ditch located in the Kent Archaeological Field School evaluation trench 1 of 1999 and relocated in Time Team trench 4 or is a drainage gully exclusively related to the terrace feature. The primary fills of both the 'Claudian' ditch and ditch 114, which produced no pottery, are composed of sand that may have been water lain, suggesting that they may be drainage ditches. However the base of the 'Claudian' ditch lies approximately 2.5 m lower than the base of ditch 114, a gradient of 1 in 15. A layer of dark yellow redeposited 'brickearth' (120) seen in the recorded north section of trench 1 also suggested that ditch 114 may have been cut or recut through the edge of the terrace, although there was no clear visible edge through the fill of the terrace. The stratigraphic sequence was also not repeated in the opposing south trench section to confirm this.
- 3.4.6 The terrace feature overlay a second terrace or broad ditch (125), which was filled with pale grey-yellow silty clay (124) and which contained Late Iron Age/Early Roman pottery of pre-Conquest/Conquest date. The upper fill of this feature was sampled by hand in a slot 0.5 m wide and 0.30 m deep against the north section, at which point it was considered unsafe to continue excavation. A single auger hole through the lower fills established that archaeological deposits continued for at least 0.90 m without reaching natural deposits. An auger transect was unable to achieve consistent penetration and failed to establish a complete profile and depth of the feature.
- 3.4.7 An area approximately 8 m by 8 m was subsequently stripped to the south of feature 114 to examine whether there was any trace of the 'Claudian' ditch beyond the terrace

or any other evidence to prove or disprove the evidence for the Roman fort. The stripped area exposed the continued curving edge of the terrace but no other archaeological features.

3.5 Trench 2

- 3.5.1 This trench was aligned SE-NW across the north-west corner of the site (Figure 3) and was also positioned to examine the corner of the putative fort. It measured 21 m long and was aligned across the bank at the edge of the spur at 39.4 m OD beyond which the land fell away steeply into a deep hollow at 33.3 m OD.
- 3.5.2 The excavation confirmed that the bank (202) was approximately 0.80 m thick and of post medieval construction. It also showed that beyond the edge of the bank the side of the spur had undergone extensive post medieval quarrying and had been backfilled with layers of redeposited 'brickearth'. The bank overlay a layer, approximately 0.40 m thick, of dark brown to black humic silty loam (209), with 4th century AD coins and Roman pottery. However post medieval finds were also present in the upper parts of this layer and an adjacent band of loose gravel (203), which may be related to the landscaping of the park or to bioturbation. A series of well-preserved stratified Roman deposits were preserved below these deposits including layers (213, 211) of dark brown/black humic silty loam, 0.24 m and 0.20 m thick, that dipped away to the south east. They were of similar composition and date to 209 and contained pottery, animal bone and oyster shell and probably represent a dump or midden of domestic refuse.
- 3.5.3 The 4th century AD midden deposits overlay a compact, worn cobbled surface (212) approximately 4.4m wide but only 0.06 m thick. It is probably related to one exposed in a trench, 16 m to the east, that formed part of the Kent Archaeological Field School 1999 evaluation. Finds from the surface, which may mark the line of a minor road or track, included a coin, a hob nail and other metal fragments.
- 3.5.4 The cobbled surface overlay the north-east edge of a large ditch (215) that was filled with yellow grey silty loam (214), which contained fragments of 3rd century AD pottery. It was not possible to establish the full profile and construction date of this ditch or to speculate whether it may be related to ditch 106 that ran along the edge of the spur in trench 1.

3.6 Trench 3

3.6.1 This trench measured 5.6 m NW-SE (Figure 3) and was excavated to intersect with the proposed alignment of the 'Claudian' ditch located in the 1999 evaluation. The trench revealed a natural soil profile of well-sorted topsoil overlying a silty clay subsoil. The trench was subsequently extended to the SE by 7 m to confirm the absence of the ditch. The extension exposed an oval linear feature (305) that extended 2.20 m NE from the south baulk. The feature, which may represent an elongated pit or terminus of a shallow ditch, was 0.90 m wide and 0.35 m deep with rounded sides and base. It was filled with dark grey-brown/black silty clay with oyster shell and contained pottery of the 2nd century AD or later date. Part of an additional feature, which was filled with similar material, was visible in the south east corner of the extension, but was not excavated.

3.7 Trench 4

- 3.7.1 This trench measured 6.5 m long (Figure 4) to relocate the 'Claudian' ditch discovered in Trench 1 of the Kent Archaeological Field School 1999 evaluation and re-expose the section. It confirmed that the ditch (414) was filled with laminated, horizontally bedded lenses and bands of sand and clay (408), which appeared to be water lain in character. There were no finds. The profile (414) was also similar to that recorded in the original evaluation, 1.10 m wide at the top and 0.70 m deep, with moderately sloping sides that tapered to a narrow rounded base. There was however no 'ankle breaker' at the base. The upper part of the ditch was truncated by pit 415, so that there was nothing to indicate from what height the ditch had been cut.
- 3.7.2 The pit had an irregular base and may have formed part of a pit complex. It contained a deposit of charcoal-rich (405) material at the base that was overlain by a tip of fired clay fragments (404) towards the west edge that thinned to the east. This material may represent the remains of a kiln or oven, with its ashy residue, that was demolished and discarded. These refuse/demolition deposits were overlain on the east side by a layer of dark grey brown silt and silty clay (411) that was mottled yellow with redeposited 'brickearth'. This may indicate a phase of deliberate backfill. This material contained associated pottery of the Early Roman period. The upper fills (403, 412, 413) are likely to represent phases of natural silting, probably from the higher slopes, into the top of the pit, with subsequent bioturbation.

3.8 Trench 5

- 3.8.1 This trench (Figure 4) was aligned E-W across the east side of the spur to intersect the projected line of the east ditch of the putative fort, 30 m S of the ditch section recorded in the 1999 evaluation. The trench measured 55 m long and descended from 41 m OD in the W to 37.5 m OD in the E.
- 3.8.2 The excavation revealed a linear ditch (503), 0.77 m wide and 0.37 m deep, with sloping sides and a narrow tapered base that was aligned N-S in the east of the trench. It was filled with mid brown gravely silty clay (502). A second ditch (505) of similar dimensions and fill (507), but with a narrow flat base, was located approximately 20 m west of and perpendicular to the first ditch. It is likely that these ditches form part of the general field layout present on the crest of the spur.
- 3.8.3 A cluster of features was present at the west end of the trench, which was widened to establish the full extent of these features. Limited excavation indicated the presence of a ditch (516), approximately 0.30 m deep, with shallow sloping sides and a rounded base that was filled with mid grey gravely silty clay. The feature was apparently aligned NW-SE although the south edge had been cut away by the construction of a larger, parallel ditch (512). This ditch, which was not sectioned, measured 3 m across and contained very dark grey-black silty clay with very little gravel.
- 3.8.4 The ditches were cut, on the north side, by a large oval feature (514) 2.8 m E-W and 3.7 m N-S, which was probably a Roman well. The section indicated that there were large quantities of gravel in the dark grey/black silty matrix (513) of a central shaft (513), 0.80 m across, which was probably once timber or wattle lined. The backfill

around the shaft (517, 518) was less stoney, but did include clearly defined tip-lines of gravel dipping in towards the central fill. The feature was partially excavated by machine to 2.5 m deep, after which excavation ceased. Large quantities of Roman refuse, including pottery of both early and late date, fragments of a repaired Samian bowl, a bronze ring and a bone pin were recovered.

3.9 Trenches 6, 7 and 8

- 3.9.1 These three trenches (Figure 1) were excavated to evaluate the broad archaeological potential of any deposits on top of the spur especially with regard to activity within the interior of the putative fort. The trenches measured 20 m long and were laid out at 90° to one another to maximise the chance of intersecting any linear features. The results indicated that truncated archaeological features were cut into the natural gravel and 'brickearth' immediately beneath the plough soil. Features were sampled in trench 6 but those in trenches 7 and 8 were plotted and recorded but not excavated. Details are available in archive.
- 3.9.2 Trench 6 was excavated from NE-SW in the central area of the spur and was located to coincide with a geophysical anomaly. The trench revealed a surface of yellow mottled silty clay 'brickearth' (603) into which a sequence of features had been cut near the east section. However this material also overlay an archaeological deposit (609), which filled a small pit or post hole (608) near the section. At least some of the 'brickearth' is therefore likely to have been redeposited. It was not possible, in the time and area of the trench available, to resolve the extent of the redeposited material or to fully define feature 608.
- 3.9.3 Part of a shallow gully (607), cut into the 'brickearth' (603), extended approximately 0.60 m into the trench from the east baulk. It was 0.15 m deep and was filled with mid brown silty clay (606) and contained 3rd century AD pottery and bone. This feature was cut by a gully (605) with a similar fill (604), which was aligned E-W across the trench and 0.65 m wide and 0.15 m deep.
- 3.9.4 The line of a land drain or water pipe (610) was recorded towards the north end of the trench. There was nothing to indicate the source of the geophysical anomaly.
- 3.9.5 Trench 7 was located approximately 20 m N of trench 6 and was aligned NW-SE. Two probable post-holes (703, 705), approximately 0.35 m in diameter and 1 m apart, were present near the central part of the trench. They were aligned NE to SW and ran parallel to a linear gully (707), 0.60 m across, which lay 5.5 m to the West of the post-holes. There is nothing to suggest that these features indicate wall lines but are more likely to represent field boundaries and fence lines on the spur.
- 3.9.6 Trench 8 was excavated approximately 20 m S of trench 6 and was aligned NW-SE. It revealed that the underlying deposits sloped down from 43.4 m OD to 42.5 m OD towards the edge of the spur. Natural deposits were exposed in the base of the trench at the east end, however the west end of the trench contained the fill of a large feature (805). The edge of this feature was aligned approximately SE-NW and enclosed a series of layers (808, 807, 803/6, 804) composed of grey-brown to yellow-brown clay silt. The feature was cleaned, which produced a small assemblage of later prehistoric, Late Iron Age and Early Roman pottery, and recorded but not excavated.

- 3.9.7 The feature at the end of the trench was cut by a linear ditch, approximately 0.60 m wide, which was also aligned SE-NW and filled with dark grey brown silty clay.
- 3.9.8 It is possible that the large feature at the west end of the trench is of a similar date and function to the feature underlying the terrace/quarry at the west end of trench 1, or to the terrace/quarry itself. The edges of these features were only seen in a limited extent, however neither is aligned parallel to the line of the spur, which suggests that they may represent discrete quarry features. The earliest features in both trench 1 and 8 were filled and cut by later Roman features. The shallow linear ditch in trench 8, although undated is of a similar size and alignment to the gullies exposed in trenches 6 and 7 and probably formed part of a network of field boundaries.

3.10 Trench 9

3.10.1 This trench was located across a linear geophysical anomaly of high resistance on the east side of the spur. It was 21 m long and aligned E-W. The excavation revealed a sequence of topsoil and subsoil overlying a broad band of compacted natural gravel, which accounted for the geophysical results.

4 FINDS

4.1 Introduction

- 4.1.1 Finds were recovered from eight of the nine trenches excavated (Trenches 1 to 8); the assemblage also includes a small quantity of material from completely unstratified contexts. The assemblage comprises mainly bulk finds, with a smaller proportion of individually recorded Objects ('small finds'), mainly metalwork. All finds have been cleaned (with the exception of the metalwork) and have been quantified by material type within each context. There is also a register of individual Objects. Quantified data form the primary finds archive for the site, and these data are summarised by trench in Table 1.
- 4.1.2 Subsequent to quantification, all finds have been at least visually scanned in order to gain an overall idea of the range of types present, their condition, and their potential date range. Pottery and ceramic building material have been subjected to more formal scanning, including quantification by ware group/type (details below). Spot dates have been recorded for selected material types as appropriate. All finds data are currently held on an Excel spreadsheet.
- 4.1.3 This section presents an overview of the finds assemblage, on which is based an assessment of the potential of this assemblage to contribute to an understanding of the site in its local and regional context. The assemblage is largely of Romano-British date (late 1st to 4th century AD), with small quantities of prehistoric and post-Roman material).

Table 1: Finds totals by material type (number / weight in grammes)

CBM = ceramic building material

| Material Type | U/S | Tr 1 | Tr 2 | Tr 3 | Tr 4 | Tr 5 | Tr 6 | Tr 7 | Tr 8 | TOTAL |
|-------------------|--------|----------|----------|--------|--------|----------|--------|------|--------|----------|
| Pottery | 35/328 | 319/2127 | 123/1284 | 44/754 | 31/223 | 221/2517 | 35/921 | 2/5 | 22/133 | 832/8292 |
| Later Prehistoric | - | 6/28 | 1/3 | 3/65 | - | 1/3 | - | - | 7/26 | 19/127 |
| Romano-British | 35/328 | 310/2091 | 121/1280 | 41/689 | 31/223 | 220/2514 | 35/921 | 2/5 | 15/107 | 809/8156 |
| Medieval | - | 1/2 | 1/1 | - | - | - | - | - | - | 2/3 |
| Post-Medieval | - | 2/6 | - | - | - | - | - | - | - | 2/6 |
| CBM | - | 22/1183 | 25/932 | 3/358 | 2/186 | 21/2751 | - | 2/19 | - | 75/5429 |
| Romano-British | - | 7/325 | 18/651 | 3/358 | 2/186 | 18/2687 | - | 1/12 | - | 49/4219 |
| Med/Post-med | - | 15/858 | 7/281 | - | - | 3/64 | - | 1/7 | - | 26/1210 |
| Fired Clay | - | 3/27 | 3/31 | - | 10/531 | 16/141 | - | - | 1/4 | 33/734 |
| Clay Pipe | - | - | 3/13 | - | - | - | - | - | - | 3/13 |
| Worked Flint | - | 5/80 | | - | - | - | - | - | - | 5/80 |
| Burnt Flint | - | 3/48 | 1/8 | - | - | 1/9 | - | - | 5/135 | 10/200 |
| Glass | - | 2/335 | 9/17 | - | - | 1/1 | - | - | - | 12/353 |
| Stone | - | - | | 1/606 | - | 10/139 | - | - | - | 11/745 |
| Slag | - | 6/144 | 18/302 | - | - | - | 1/87 | - | - | 25/533 |
| Worked Bone | - | | | - | - | 1 | - | - | - | 1 |
| Animal Bone | - | 41/282 | 49/1271 | 7/164 | 1/18 | 197/3127 | 19/352 | - | - | 314/5214 |
| Shell | - | - | 2/13 | 2/36 | - | - | - | - | - | 4/49 |
| Metalwork | 1 | 27 | 45 | 10 | - | 64 | - | - | - | 147 |
| Coins | - | 4 | 20 | 8 | - | 18 | - | - | - | 50 |
| Cu alloy | - | 7 | 1 | 1 | - | 8 | - | - | - | 17 |
| Lead | 1 | 3 | 4 | - | - | 5 | - | - | - | 13 |
| Iron | - | 13 | 20 | 1 | - | 33 | - | - | - | 67 |

4.2 Pottery

- 4.2.1 Pottery and coins provide the primary dating evidence for the site. The overwhelming majority of the pottery assemblage consists of Late Iron Age/Romano-British material, but there are also very small quantities of later prehistoric, medieval and post-medieval sherds. The whole assemblage has been quantified, within each context, by broad ware group or known type (eg. coarse greywares, samian). The presence of identifiable vessel forms and other diagnostic features has been recorded, along with spot dates. Summary totals by ware group are presented in Table 2. An archive report is presented as Appendix 1.
- 4.2.2 Later prehistoric sherds occur exclusively as redeposited material in later contexts. Most of these sherds are in coarse, flint-tempered fabrics, with one glauconitic sandy sherd. The likely date range of this small group lies in the early part of the 1st millennium BC (Late Bronze Age to Early Iron Age).
- 4.2.3 The Late Iron Age/Romano-British assemblage is dominated by coarsewares. Native Late Iron Age ceramic traditions are represented by a high proportion of coarse, grog-tempered wares (33% of the total assemblage by weight), and a single sherd in a shelly fabric. Both types span the conquest period, but occur here exclusively with 'Romanised' wares of the later 1st century and beyond; vessel forms are predominantly bead rim jars. This group, however, also includes some late Roman grog-tempered wares at least one typically late vessel form (dropped flange bowl) is present.

Table 2: Pottery breakdown by ware type (number of sherds / weight in grammes)

| Ware group | U/S | Tr 1 | Tr 2 | Tr 3 | Tr 4 | Tr 5 | Tr 6 | Tr 7 | Tr 8 | TOTAL |
|---------------------|--------|----------|----------|--------|--------|----------|---------|------|--------|----------|
| LATER PREHISTO | ORIC | | | | | | | | | |
| Glauconitic sandy | | | | 1/13 | | | | | | 1/13 |
| Flint-tempered | | 9/61 | 1/3 | 2/51 | | 1/3 | | | 8/29 | 21/147 |
| LATE IRON AGE/I | ROMAN | O-BRITIS | SH | | • | | | | | |
| Samian | | 18/94 | 5/36 | 1/3 | | 5/80 | 2/33 | 1/3 | | 32/249 |
| Amphora | 1/6 | 3/104 | 3/99 | | | | 24/776 | | | 31/995 |
| Greyware | 10/34 | 118/477 | 53/448 | 15/171 | 30/214 | 137/1060 | 6/116 | 1/2 | 6/31 | 376/2555 |
| Orange-firing ware | 7/41 | 58/331 | 9/41 | | 1/9 | 9/43 | 3/29 | | | 87/494 |
| Grog-temp (general) | 17/246 | 108/1068 | 29/473 | 17/301 | | 36/492 | 1/55 | | 8/66 | 204/2433 |
| Patchgrove ware | 2/66 | 8/80 | | 1/66 | | | 1/56 | | | 12/268 |
| Coarse shelly | | 1/2 | | | | | | | | 1/2 |
| White-firing ware | | 1/2 | | | | 2/28 | 1/6 | | 1/10 | 5/46 |
| BB1 | | 1/8 | | 8/213 | | 3/11 | | | | 12/232 |
| BB2 | | | 1 / 2 | | | 4/43 | | | | 5/45 |
| Nene Valley fine | | | 6/69 | | | | | | | 6/69 |
| Oxon colour fine | | | 15/112 | | | 19/413 | | | | 34/525 |
| New Forest fine | | | | | | 3/18 | | | | 3/18 |
| Misc. mortaria | | | | | | 2/286 | | | | 2/286 |
| POST-ROMAN | | • | | | • | | | | | |
| Medieval sandy | | 1/2 | | | | | | | | 1/2 |
| 'Tudor Green' | | | 1/1 | | | | | | | 1/1 |
| Post-med. redware | | 2/6 | | | | | | | | 2/6 |
| TOTAL | 37/393 | 328/2235 | 123/1284 | 45/818 | 31/223 | 221/2477 | 38/1071 | 2/5 | 23/136 | |

- 4.2.4 The 'Romanised' coarsewares consist of sandy wares greywares, oxidised wares and whitewares. These certainly represent the products of several different sources, including the Upchurch marshes and the Canterbury area; Black Burnished ware (BB1) is also present in small quantities. Vessel forms are mainly jars, with a few dishes and one flagon handle. Alongside the coarsewares is a small range of finewares, including some imports (Southern and Central Gaulish samian; Dressel 20 amphora), and some British finewares (Oxfordshire and Nene Valley colour coated wares; mortaria from Oxfordshire and other as yet unknown sources).
- 4.2.5 The emphasis throughout appears to be on the early Roman period (late 1st/2nd century AD), with few identifiable late Roman types (eg. dropped flange bowls; British finewares). Late Roman groups were observed in Trench 2 (possible midden deposits 211 and 213) and Trench 5 (fill of well 514).
- 4.2.6 The remaining four sherds are post-Roman in date: one medieval sandy coarseware, one late medieval 'Tudor Green', and two post-medieval coarse redwares.

4.3 Ceramic building material

4.3.1 This category includes fragments of brick, tile and field drain. Approximately two-thirds of the fragments are of Romano-British date, and include identifiable *imbrex* and *tegula* roof tiles, although most fragments are too small and/or abraded to assign to specific type. The remaining fragments, comprising brick, roof tile and field drain, are of medieval or post-medieval date.

4.4 Fired clay

4.4.1 The fired clay comprises small, abraded fragments, some with irregular surfaces; these are likely to be of structural origin, and of Romano-British date on the basis of associated finds.

4.5 Stone

4.5.1 Stone recovered comprises one architectural limestone moulding (unstratified in Trench 3), nine small, abraded fragments of a lava quern stone and a fragment of a sandstone ?floor tile (all from well 514).

4.6 Coins

4.6.1 Fifty coins were recovered, one post-medieval (unstratified) and the rest Roman. The condition of these coins varies considerably from relatively well preserved to very abraded and illegible; approximately half came from topsoil or unstratified contexts. Most of the issues are of the 3rd or 4th century AD, although a small number of earlier issues were noted, including one of Claudius from ditch 106 (four others came from Trench 5). A detailed report on the coins is presented in Appendix 2.

4.7 Metalwork

- 4.7.1 Other metalwork includes objects of copper alloy, lead and iron. Of the 17 copper alloy objects, ten are post-medieval or undated (sheet/plate fragments, fitting, buttons, etc). The remaining seven are certainly or probably Romano-British, and comprise a small strip, probably an armlet fragment (unstratified in Trench 2), a stud and two shanks (all from Trench 1), a possible awl (Trench 3), a toilet instrument (ditch 106), and a finger ring (well 514).
- 4.7.2 Of the 13 lead objects, all but one are undated (waste/offcut fragments) or post-medieval (shot). Only one object, a probable pot mend from well 514, is certainly of Romano-British date.
- 4.7.3 Nearly all of the ironwork consists of nails and nail fragments (58). None of these are typologically datable, but several derived from stratified Romano-British contexts. Three hobnails, one from Trench 1 and two from Trench 5, are more certainly Romano-British, while the remaining six objects are post-medieval or undated.

4.8 Shell

4.8.1 The small quantity of shell consists entirely of oyster, and includes both left and right valves, ie both preparation and consumption waste.

4.9 Other finds

4.9.1 Other finds recovered, all in small quantities, comprise ironworking slag (uncertain date), vessel glass (one modern bottle and one small Romano-British fragment from ditch **106**), window glass (post-medieval), clay pipe stem fragments (post-medieval), a

worked bone pin (Romano-British, from well **514**), worked flint flakes (uncertain prehistoric date) and burnt, unworked flint (unknown date).

4.10 Animal bone

- 4.10.1 The bone was recovered from contexts dated from the Late Iron Age to the fourth century AD, and some had been redeposited in the post-medieval period during landscaping. Unfortunately the relatively small number of bones that was recovered does not allow for detailed division of the material into phases or feature types, which consisted of pits, ditches, middens, a well-like feature and a colluvial deposit.
- 4.10.2 Bones were recorded to species and element and were sided where possible. Bones were recorded as large, medium or small mammal when bone element but not species could be positively identified. Conjoining bone fragments were counted as one bone in order to minimise distortion caused by recent fragmentation. Taphonomic information such as the condition of the bone and presence of gnawing was also recorded. Bone condition was assessed and a number was assigned accordingly: 1 for poor (bone surface obscured or eroded), 2 for fair (some attrition or root etching evident) and 3 for good condition (a smooth bone surface with little attrition).
- 4.10.3 The percentage survival of each fragment (i.e. how much of the original element was present) was recorded, from which an average percentage survival for the whole site could be derived. An arbitrary figure of 5% was given for each unidentified fragment. Ageing information from bone fusion and mandibular tooth wear was analysed to assess husbandry, and consumption patterns were investigated using butchery marks and burning.
- 4.10.4 *Taphonomy*. 202 fragments of animal bone were recorded from this site. 11% were recorded as being in poor condition, 86% in fair condition and 3% in good condition. Those in good condition originated from feature 214, a 3rd century AD ditch deposit, while those in poor condition were located in the redeposited material from landscaping, a late Iron Age to 2nd century AD ditch and from the well feature (context 511).
- 4.10.5 32 (16%) fragments showed evidence of gnawing, of which the majority (N=29) was canine rather than rodent. Unsurprisingly, 13 of 26 (50%) bone fragments in the midden had been gnawed. In contrast, only 10 of the 125 bones (8%) from the well had been gnawed.
- 4.10.6 The fragments of bone were on average 28% complete. This figure is higher in the midden (36%) and lower in the well (26%). It was still lower in the ditches, at 23%, suggesting that ditch deposits contained bone that had been subject to trampling and disturbance.
- 4.10.7 A relatively high proportion of bones (N=114; 56%) could be identified. The highest percentage of identified bones was in the midden (62%), with only 42% of bone in the well identified. This is probably due to the greater fragmentation in the well creating more small bone splinters.

4.10.8 *Species represented*. The species list consists mainly of domestic animals, with one deer and one human also present.

Table 3: Species represented (NISP) and percentages

| | Bos (cattle) | Cervus (deer) | Equus (horse) | Homo sapiens (human) | Large Mammal | Ovicaprid (sheep/goat) | Sus (pig) |
|------------|--------------|------------------|---------------|-------------------------|-----------------|------------------------|-----------|
| NISP | 51 | 1 | 1 | 1 | 44 | 11 | 4 |
| Percentage | 45 | 1 | 1 | 1 | 39 | 10 | 4 |

4.10.9 Cattle bones were the most commonly represented, at 45% of the assemblage (table 3). However, the bones recorded as large mammal are probably also cattle, considering the very small number of identified horse bone. This would put the percentage of cattle bone at 84%, a similar proportion to that obtained when using a basic Restricted Fragment Count (in this case, using proximal and distal epiphyses, counted separately), here called RFC and shown in Table 4.

Table 4: Species represented (RFC) and percentages

| | Bos | Equus | Ovicaprid | Sus (pig) |
|------------|----------|---------|--------------|-----------|
| | (cattle) | (horse) | (sheep/goat) | |
| RFC | 19 | 1 | 3 | 1 |
| Percentage | 79 | 4 | 17 | 4 |

- 4.10.10 No positive goat identifications were made, and the proportion of sheep/goats is fairly low at 10% NISP or 17% RFC. However, MNI counts suggest that two cattle and two sheep were represented. Horse and pig were both present but are represented by only one individual of each species. The deer was represented only by a small piece of antler from a young individual, which could have been collected and does not necessarily suggest that deer were used as a food resource.
- 4.10.11 The predominance of cattle in NISP counts is in keeping with the pattern noted at a large number of other sites in the Roman period (King 1978).
- 4.10.12 The single human bone, a right humerus from a large male (Jackie McKinley, pers. comm.), was found in pit 609. It had been broken in both in antiquity and more recently, probably during excavation. The presence of a break made in antiquity suggests that this bone was from a disturbed burial, possibly disarticulated. Since the features from this trench were only partially excavated, any further remains of this person that had been interred at the same time probably remain in the pit.
- 4.10.13 *Animal Husbandry*. Relatively little can be said about the age structure of the domestic animal population due to the small number of bones that can be aged. One unfused distal pig humerus suggested an animal under one year of age (Silver 1969), and a fused distal horse tibia was from an individual over 2 years at death. Neither of these results are surprising, as pigs do not provide many useful secondary products and are more likely to be kept primarily for meat, whilst horses are valuable sources of transport and traction. An unfused sheep/goat scapula suggested that this animal was under eight months when killed, perhaps an unwanted male or a lamb culled in order

to increase the excess milk yield of the mother. However, a sheep/goat mandible with an erupting permanent third molar suggested another animal of over 18 months, using Silver's modern figures, or over 3 years of age using 18th century figures. This older animal could be a breeding ewe or one kept mainly for wool.

4.10.14 Of the cattle bones, an unfused calcaneum suggests that one individual was under three years of age at death, while the rest of the ageing evidence suggests at least one more individual that survived past the age of 42 months. A relatively old cattle population is also suggested by the pathologies: four cattle bone articular surfaces show evidence of heavy use or old age in the form of extra bone growth or an eburnated surface. These cattle were probably kept primarily for use as traction, rather than meat.

Table 5: Bone element (NISP) by species

| Element | Bos (cattle) | Large | Ovicaprid | Sus (pig) |
|----------------|--------------|--------|--------------|-----------|
| | | Mammal | (sheep/goat) | |
| Horncore | 2 | | 1 | |
| Maxilla | 1 | | 1 | |
| Mandible | 5 | | 1 | |
| Tooth | 6 | | 4 | 1 |
| Axis | 2 | | | |
| Vertebra | | 22 | | |
| Rib | 3 | 18 | | |
| Scapula | 6 | 1 | 2 | |
| Humerus | 2 | | | 2 |
| Radius | 3 | | | |
| Carpal | | 1 | | |
| Metacarpal | 4 | | | |
| Pelvis | 1 | 2 | | |
| Femur | 2 | | | |
| Tibia | | | | 1 |
| Astragalus | 2 | | | |
| Calcaneum | 2 | | | |
| Metatarsal | 7 | | 2 | |
| First phalange | 2 | | | |
| Third phalange | 1 | | | |

- 4.10.15 The wide range of bone elements that were present for each species (Table 5) suggests that animals were being processed on site, rather than implying any trade of parts on or off site. Bones from all areas of the carcass, from meat-bearing and 'waste' bones, were also found mixed together in individual features, such as the well and the midden, and no spatial segregation of butchery and consumption practices are in evidence. This suggests a relatively small scale, self-sufficient community.
- 4.10.16 Some bones could be measured, following von den Driesch (1976), and are presented in Table 6, although as there are so few no attempt has been made to cross-reference them with those from other sites.

Table 6: Metrical data

| Species | Bone | Measurement | Value (mm) |
|--------------|-------------------|-------------|------------|
| Sus (pig) | Lower third molar | GL | 31.6 |
| Bos (cattle) | Metacarpal | Bd | 44.1 |
| Bos (cattle) | Metatarsal | Вр | 42.4 |
| Bos (cattle) | Metatarsal | Bp | 43.2 |
| Bos (cattle) | First phalange | Вр | 29.3 |

- 4.10.17 Consumption practice. Butchery marks were noted on 38 bones, 19% of the total. 31% of bones in the midden and 19% of bones in the well had been butchered. The difference is not due to a greater proportion of the bones of larger species (which require more butchery) being located in the midden, since large mammal bones were equally distributed in the different features (42% and 49% respectively in the midden and well). The difference is instead more likely to reflect depositional practice. The greater degree of fragmentation in the well, together with the lesser incidence of butchery marks on the bone, suggests that the well deposit may have contained redeposited material. As detailed above, the bone in the well was in slightly worse condition to that in the midden, which supports this interpretation, and abrasion of the bone surface during redeposition can obscure butchery marks on the bone surface.
- 4.10.18 However, helical fractures, symptomatic of breakage of the bone while fresh (Outram 2001), often for marrow extraction, were found on 15% of bones from the midden compared to 8% of those in the well. This again indicates that bone in the midden had been more intensively butchered than that in the well, and perhaps that the midden contained more waste deposited directly following butchery than the well did. The higher incidence of gnawing on the midden material suggests that it had been deposited with some meat still adhering in an open area, although this is not testable statistically due to the small numbers of bone from the midden.
- 4.10.19 Marrow extraction appears to have been routinely carried out. All helical fractures were found on cattle or pig bone, which is to be expected as these animals provide the most marrow.
- 4.10.20 Butchery practice was based on chopping (97% of all butchery marks were chops), in common with what is known of butchery at other Roman sites (see Dobney *et al.* (1996), Grant (1975; 1987) and Maltby (1979) for example). Chops through the bone to remove the feet and head, to disarticulate bones from each other at the pelvic-femoral joint, to portion the ribcage, vertebral column and long bones, and to split bones for marrow, were all in evidence. Scapulae with slices taken off the spine and blade suggest meat removal from the bone was also effected using a cleaver. In at least two cases the horncore was removed by chopping into the skull, presumably to isolate the horn so the casing could be processed.
- 4.10.21 Rapid butchery processes with little regard for the physiology of the animal appear to have been followed, often leaving bone and/or bone splinters in the meat. Further processing exploited horn casings and marrow.
- 4.10.22 Only two bones showed evidence of burning, and both were from cattle lower forelimbs, found in ditch deposits in trenches 1 and 2. Neither showed patterns of

burning indicative of roasting (i.e. burning on the parts of the bone exposed during butchery). The majority of bones (99%) were not burned, suggesting that meat was boiled or removed from the bone before cooking. It is possible that the burnt bones were simply burned accidentally or as fuel prior to disposal in the ditch.

5 ENVIRONMENTAL SAMPLES

5.1 Charred macro remains

- 5.1.1 Three samples from the following Roman features were looked at: gulley 605, (context 604), gulley 607 (context 606) and pit 608 (context 609). The samples were floated on site then the residues again in the lab using a 500 micron mesh to collect the flot. They were then scanned using a low-powered binocular and the main species recorded.
- 5.1.2 The samples from 604 and 609 contained quite large amounts of grains of hulled barley (*Hordeum vulgare sensu lato*), and hulled wheats in similar though perhaps slightly less quantities. The samples also contained quite high numbers of glume bases by which we may conclude that the main hulled wheat present was spelt (*Triticum spelta*). Glume bases appeared to be slightly less common than hulled wheat grains, although full quantification would be needed to establish this conclusively. Only a single rachis fragment of barley was present. The sample from 606 contained only a single grain of barley and one of hulled wheat along with a straw culm node.
- 5.1.3 Seeds of weeds that would have grown within the fields and were brought back with the harvested crop were less frequent than cereal grains. They were predominately of larger seeded species such as black bindweed (*Fallopia convolvulus*), vetches/tares or wild peas (*Vicia/Lathyrus* sp.) and also dock (*Rumex* sp.). Other species included, black medick (*Medicago luplina*), wild radish or runch (*Raphanus raphanistrum*) and fat-hen and many seeded goosefoot (*Chenopodium album* and *C. polyspermum* respectively). The sample from 606 contained relatively few seeds of wild species, although it contained many seeds of goosefoot (*Chenopodium* sp.). Most of these appeared to be modern although a few were charred.
- 5.1.4 More interestingly were the remains of pulses within the samples. From 609 were several charred remains or probable pea (*Pisium sativum*) and from 604 at least one and possible several more cotyledons of lentil (*Lens culinaris*).
- 5.1.5 Spelt wheat and barley are the commonest cereals present within assemblages from Roman sites in southern England. The final stage of processing for spelt as it is taken from storage involves the removal of the glumes that tightly enclose the grains in the spikelet. These are removed by parching the spikelets, then pounding them to release the glumes from the grains. The unwanted glumes are then removed by sieving and winnowing. Lastly those weed seeds that are the same size as the grain are removed by hand. The waste from this dehusking activity is often thrown onto the fire. This waste is therefore often richer in glume bases than grain. Although glume bases appeared less common than hulled wheat grains in the samples examined they are often destroyed more readily than grain. The samples could therefore still represent the

- waste from this final processing, especially since large weed seeds were relatively common in the samples.
- 5.1.6 The weed seeds are not particularly indicative of any particular soil conditions or cultivation practices. It is possible that some of the weeds may be associated with pulse crops rather than cereal crops. The proportion of goosefoots (*Chenopodium* spp.) to vetches, tares etc. (*Vicia/Lathyrus* spp.) has been taken as indicative of soil fertility and/or sowing times. Future work in the region then has the potential to examine such issues.
- 5.1.7 Peas are relatively well known from Roman sites. Lentils however are less well known and not thought to be cultivated in Britain until the Saxon period. A number of sites have still produced finds of lentil, though these tend to be either forts, such as the Roman fort at Bearsden, Scotland (Dickson and Dickson forthcoming) or imperial warehouses (Straker 1983). Possible lentils were also found within samples from Roman Southwark (Hinton 1988) and the finds at the site at Sydenham begin to suggest that it may have been cultivated in and around London during the Roman period. Perhaps this was to supply the more Romanised elements of Roman London with a more Romanised diet.

6 DISCUSSION

- 6.1 The evaluation at Syndale Park set out to test the hypothesis for the presence of an early Roman fort of Conquest date. The results of the geophysical survey and archaeological evaluation have failed to produce any positive evidence to substantiate the claim for this hypothesis.
- 6.2 There is a moderate level of archaeological activity on the spur, pointing to sustained activity in the area commencing in the Late Iron Age when the west slopes of the spur were cultivated or exploited for brickearth. There is also the possibility that a ditch was dug along the slope of the spur, although its (defensive) function is questionable.
- 6.3 The pottery suggests that the immediate area was occupied throughout the Late Iron Age and Roman periods, however most of the pottery assemblages are relatively small and often contain sherds that were derived from earlier deposits.
- 6.4 It seems likely that the spur formed part of a field system throughout the Roman period. The evaluation produced no evidence to locate the possible site of an associated farm or of any other buildings. The greatest densities of archaeological material, which may indicate the most likely locations of settlement, were found in a probable well in the SE of the evaluation area and in a dump of Roman refuse adjacent to Watling Street. The quality of the associated finds from the well hints that there may be a high status residence in that area.
- 6.5 The accumulation of refuse adjacent to Watling Street suggests that some form of ribbon development had been established close to the road, leading from Duolevum by the 4th century AD.

6.6 The results of the evaluation have helped to fill a gap in the archaeological knowledge/data for the immediate environs of Durolevum.

7 RECOMMENDATIONS FOR FURTHER WORK

- 7.1 Further detailed analysis of all the results of this archaeological project are not considered to be appropriate in view of the limited stratification, the disparate character and dispersed nature of deposits, and the limited size and potential of the finds and environmental data. Some limited further work is proposed and is set out below.
- 7.2 A basic archive level of finds recording has already been achieved, and proposed further work focuses on enhancing that archive in order to meet minimum recording standards for the Romano-British pottery (cf SGRP 1994). This will involve the refinement of the breakdown by pottery ware group/type where possible. A short archive report outlining the range of types present, their date ranges and potential sources, as well as comment on specific context groups, with selective supporting illustrations, might also be considered appropriate, the results of which will be integrated into this existing report for the site (Appendix 1). The assemblage does not, however, warrant full publication. Identification of the Roman coins is also recommended (Appendix 2), following any necessary conservation treatment.
- 7.3 Other proposed work concerns the requirements for long-term curation of the finds archive. Most of the artefacts are in a stable condition and have been packaged in accordance with national guidelines on the preservation of artefactual archives for long-term curation (eg. UKIC 1983). The metalwork, however, is inherently unstable and this has certain implications for long-term curation. All of the metalwork, with the exception of the lead objects, has been X-radiographed, as a basic record and will inform any selection for further conservation treatment. This treatment, involving partial or total cleaning by a skilled conservator, is recommended, at least for the majority of the coins, and other copper alloy and iron objects of definite Romano-British date.
- 7.4 While the environmental samples are of some particular interest, the general lack of other contextual evidence from the site, however, means that there is no need at present to take the analysis any further than as set out in this report. Rather the identification should be noted for further work that may be conducted within the area.
- 7.5 This report will be amended to include the results of the further work proposed above. It will be deposited with the Kent Sites and Monuments Record so as to be available to future researchers. A summary report will be distilled from this report and published as a note in *Archaeologia Cantiana*.

8 THE ARCHIVE

8.1 The archive, which includes all artefacts, written, drawn and photographic records relating directly to the investigations undertaken, is currently held at the offices of Wessex Archaeology under the site code SYN 03 and Wessex Archaeology project code 52568. It is intended that, in accordance with the wishes of the landowner, the excavated material and records will eventually be deposited and curated at Maison Dieu Museum in Ospringe.

The paper archive is contained in a lever arch ring binder file. It includes:

Project Design

Finalised Assessment Report

The geophysics report includes a record of all data, plots of the results, interpretation with detailed comments and conclusions.

The excavation archive includes:

- 9 A4 context index sheets
- 117 A4 context record sheets
 - 8 A4 graphics register sheets
 - 7 A1 drawing sheets
 - 7 A3 drawing sheets
- 12 A4 drawing sheets
- 6 A4 Photographic register sheets
- 6 A4 Object Register sheets
- 4 A4 Sheets of results, showing levels data
- 5 A4 Sheets of GPS data showing trench location, geophysics grid and TBMs

The photographic archive includes:

86 colour transparency slides

Monochrome photographs

There is also:

A 5 page report and tabulated data of the contents of the sieved soil samples (Rubicon Environmental Processing)

3 pages A4 pot scan results 4 pages A4 Finds by Context 1 page A4 CBM scan 2 pages A4 Object Register

1 page A4 all finds by total 2 pages A4 Pot Scan Totals by type

9 REFERENCES

- Champion, T, 1976 The Earlier Iron Age in the Region of the Lower Thames:

 Insular and External Factors, unpublished D. Phil. Thesis, Institute of Archaeology,
 Oxford
- Dickson C A and Dickson J H, forthcoming, 'The plant remains' in Breeze D J (ed.) Excavations of the Roman fort at Bearsden, Scotland. Soc. Antiq. Scotland. Scotland, Central
- Dobney, K M, Jaques, S D, and Irving, B G, (n.d.) [1996] Of Butchers and Breeds. Report on vertebrate remains from various sites in the City of Lincoln, Lincoln Archaeological Studies 5. Lincoln: City of Lincoln Archaeology Unit.
- Grant, A, 1975 'The animal bones'. in Cunliffe, B, *Excavations at Portchester Castle; Vol. 1, Roman.* London: The Society of Antiquaries of London: 378-408.
- Grant, A, 1987 'Some observations on butchery in England from the Iron Age to the Medieval period'. *Anthropozoologia* 1: 53-58.
- Hinton, P, 1988 'Environmental evidence from Southwark and Lambeth' 443-77 in Tyers I, (ed.) Excavations in Southwark (1973-6) and Lambeth (1973-79). London and Middlesex Archaeol. Soc. and Surrey Archaeol. Soc. Joint Publication 3. [Borough High St (64-70)] England, Greater London CHK REF.
- King, A, 1978 'A comparative survey of bone assemblages from Roman sites in Britain'. *Institute of Archaeology Bulletin* 15: 207-32.
- Maltby, J M, 1979 Faunal Studies on Urban Sites the Animal Bones from Exeter. Sheffield: Department of Archaeology and Prehistory.
- Monaghan, J, 1987 Upchurch and Thameside Roman Pottery: A ceramic typology for northern Kent, first to third centuries A.D., BAR British Series 173
- Outram, A, 2001 'A new approach to identifying bone marrow and grease exploitation: why the indeterminate fragments should not be ignored'. *Journal of Archaeological Science* 28: 401-410.
- Pollard, R J, 1988 The Roman Pottery of Kent, Kent Archaeological Society.
- SGRP 1994, *Guidelines for the Archiving of Roman Pottery*, Study Group for Roman Pottery Guidelines Advisory Document 1
- Silver, I, 1969 'The ageing of domestic animals'. in D. Brothwell & E. Higgs (eds.), *Science in Archaeology*. London: Thames and Hudson: 293-302.

- Straker, V, 1983 'First and second century carbonised cereal grain from Roman London' 323-329 in van Zeist, W, and Casparie, W A, (eds) Plants and Ancient Man: Studies in palaeoethnobotany. [The Forum] *Rotterdam: A A Balkema*. England, Greater London
- UKIC 1983, Packaging and storage of freshly excavated artefacts from archaeological sites, United Kingdom Institute for Conservation, Conservation Guidelines No. 2
- von den Driesch, A, 1976 A Guide to the Measurement of Animal Bone from Archaeological Sites as Developed by the Institut fur Palaeoanatomie, Domestikationsforschung und Geschichte der Tiermedizin of the University of Munich. Cambridge, Massachusetts: Peabody Museum of Archaeology and Ethnology Harvard University, Peabody Museum Bulletin 1.
- Wilkinson, P, 1999 'A Roman fort near Faversham, Kent' Practical Archaeology Issue No. 1 Autumn 1999, 8-9
- Wilkinson, P, 2001 'Roman Watling Street found in a field in Kent' Practical Archaeology Issue No. 3, 4-5

APPENDIX 1: Archive Pottery Report by Lisa Brown

Summary of the assemblage

A total of 832 sherds weighing 8101 grammes was recovered from Trenches 1-8. The condition of the assemblage is generally poor to moderate, many sherds in a very fragmentary and abraded state. Some contexts, however, including 511, produced sherds in a larger, fresher condition.

The majority of the assemblage dates to the Late Iron Age and Romano-British period but a small group of 22 sherds may belong to an earlier Iron Age phase. These include a single glauconitic sandy sherd and 21 hand made flint-tempered sherds. Fragments of the coarser variety (F1) occurred as redeposited material in later contexts but were largely concentrated within Trench 1 and may indicate the presence of an early settlement in the vicinity. Seven sherds in the finer variety, fabric F2, may, however, date to a later period as the use of the fabric persists into the Late Iron Age and early Romano-British periods in east Kent and used in the manufacture of 'Belgic' and 'Gallo-Belgic' forms (Pollard 1988).

A significant proportion of the assemblage can be placed in the Late Iron Age/Romano-British period, straddling the Conquest. The period is dominated by coarsewares, especially grog-tempered wares (G100), which represent over a quarter of the assemblage by weight. Forms include storage jars, bead-rim and necked jars along with copies of Belgic style corrugated jars. A similar range of vessels was manufactured in a variety of coarse sandy greywares (Q100) and fine greywares (Q101) along with cordoned jars, lids and beakers, including a late first century BC carinated beaker copying a Gaulish 'eggshell' terra nigra form (Cam 120) from midden deposit 213. A single unstratified sherd of shell-tempered pottery resembles Cooling wares which appear to span the Conquest period. Although a large proportion of these coarsewares represent the Late Iron Age native stylistic traditions, they generally occur in association with first century Romanised wares and may belong exclusively to the post-Conquest period.

Certain types can be placed with some confidence in the post-Conquest period. The site produced 12 sherds of Patch Grove ware for which, despite its traditional Late Iron Age style range, no firm evidence of a pre-Conquest origin has been established (Champion 1976). The small size of the Syndale Park collection of Patch Grove ware is not surprising as it is more commonly found in west Kent. The fine orange and white-firing wares, which includes flagon fragments and rouletted beakers, may also belong to this first century AD phase and beyond, along with fineware imports of southern, eastern and central Gaulish samian. Twenty-eight sherds of southern Spanish Baetican (E258), a single sherd of Gaulish amphorae (E259) were also present. These were imported into Britain from the mid-first century AD to the third century AD. The handle of a north African amphora (E260) of a type imported from the mid-second century was recovered from the fill of gully 607.

Six small fragments of Black Burnished Ware 2 (E184) were identified. Production of these wares is thought to have begun during the reign of Hadrian but the precise location of production centres is a matter of controversy (Monaghan 1987). BB2, in common with Patch Grove ware, is far more commonly found in west Kent. A number of the coarse greywares are also of second century and later date. Although the fabric group was not subdivided, some sherds were observed to resemble products of the Alice Holt and Upchurch kilns.

The later Roman period is less well represented, but a range of British finewares accompanied by distinctively late greyware jars, dropped flange bowls and a small group of Dorset black-burnished wares indicate some level of activity during the third and fourth centuries. The fineware assemblage includes 31 sherds of Oxfordshire red-slipped ware and smaller quantities of Nene Valley and New Forest colour-coated ware. Although Nene Valley wares were in production from the second century they were found in association with third/fourth century wares at Syndale Park. Much of the later assemblage was recovered from possible midden deposits 211 and 213 in Trench 2 and from the fill of well 514 in Trench 5.

Description of Fabric

Prehistoric fabrics:

- F1 Coarse flint-tempered ware. Relatively hard fabric containing sparse quartz sand and moderate to common crushed calcined flint fragments up to 3mm.
- F2 Finely sanded relatively hard fabric containing sparse calcined flint fragments mostly < 2mm across. Possibly early Romano-British date.
- Q1 Glauconitic sandy ware containing common medium grade quartz sand and glauconite pellets. Relatively soft, friable. Grey core, dark brownish-grey surfaces.

Romano-British fabrics:

- G100 Grog-tempered wares. The group includes a range of grog-tempered wares. The majority are non-sandy grey or brown firing wares with a soapy texture, containing a sparse to moderate quantity of crushed grey or brown grog pieces < 2mm. A smaller quantity of sherds are lightly sanded orange-firing wares with orange grog pieces up to 4mm.
- Q100 Coarse grey ware. This group includes a range of coarse grey-firing wares of Romano-British type. Sources are likely to include Alice Holt and Upchurch production sites.
- Q101 Fine grey wares. Smooth, finely sanded grey-firing wares, some containing sparse fine mica. A variety of production sites, including Upchurch, are likely to be represented.
- Q102 Coarse orange-firing ware. General category including a range of orange-firing wares but all incorporating coarse to medium grade quartz sand.
- Q103 Fine orange-firing ware. Finely sanded, smooth fabric with few or no other visible inclusions. Used in the manufacture of thin-walled vessels.
- Q104 Fine white-firing ware. Finely sanded, smooth fabric with few or no other visible inclusions.
- S100 Shell-tempered ware. Single sherd, majority of shell fragments leached.

Established wares:

- E101 BB1 (south-east Dorset)
- E161 New Forest Red
- E170 Oxfordshire red-slipped ware
- E172 Oxfordshire parchment ware
- E176 Nene Valley colour-coat
- E183 Patchgrove grog-tempered ware
- E184 BB2 (Thames Estuary?)

- E200 mortarium (unspecified type)
- E207 mortaria Verulamium region
- E209 Oxfordshire white ware
- E211 Oxfordshire red/brown colour-coat mortaria
- E250 amphora (unspecified type)
- E258 amphora Southern Spanish (Baetican)
- E259 amphora Gaulish (Pelichet 47)
- E260 amphora North African
- E300 samian (unspecified source)
- E301 samian South Gaulish (unspecified source)
- E304 samian Central Gaulish (unspecified source)
- E308 samian East Gaulish (unspecified source)
- E454 'Tudor Green ware'
- E600 post-medieval red ware (unspecified)

Vessel Forms

General

P plain body sherdD decorated body sherdA angled body sherd

Samian

| Dr 8/31 | samian form 18/31 |
|----------|-------------------|
| Dr 29 | samian form 29 |
| Dr 30 | samian form 30 |
| Dr 35/36 | samian form 35/36 |
| Dr 37 | samian form 37 |

Oxfordshire wares

- C51 Flanged bowl copying samian form 38. AD 240-400.
- C55 Hemispherical bowl with bead-rim, perhaps copying samian form 37. AD 240-400
- C78 Necked bowl without-turned rim and full, curved body. Stamped rosette decoration. AD 340-400+).
- C94 Straight-sided dish ('dog-dish'). AD 300-400+.
- C100 Mortarium withupright rim and angular flange. AD 300-400+.
- P24 Parchment ware. Wall-sided moulded at rim. Normally painted at rim. AD 40-400.

Site-specific type series

- R101 Flat flanged bowl or dish
- R102 Simple everted rim, generally assigned to jar forms.
- R103 Bead rim jar / bowl
- R104 Jar with elongated bead-rim
- R105 Jar with everted, rolled rim
- R106 Simple plain rim generally assigned to straight-sided dish form ('dog dish')
- R107 Bowl or jar with simple flaring rim
- R108 Mortarium / bowl with complex flange/rim.
- R109 Flanged bowl or dish

- R110 Expanded (bulbed) generally belonging to beaker forms
- R111 Jar with everted, hooked rim
- R112 Unidentified vessel with 'pie-crust' rim

Bases

B101 plain, flat base

B102 footring base

Decorative Motifs

corrugated CG CO combed CR cordon Dec samian FU furrowed impressed IM MO moulded PA painted pinched PΙ RLrilled RO rouletted

slipped

Surface Treatment

BU burnished GL glazed SL slipped

SL

TABLE 1: FABRIC AND VESSEL TOTALS

| Fabric code | Fabric | No | Wt (gm) | Vessel Type | Vess |
|---------------|--|-----|---------|----------------------|------|
| F1 | Coarse, dense flint temper | 14 | 105 | Bead-rim jar | 1 |
| F2 | Fine, sparse flint temper | 7 | 42 | Bead-rim jar | 1 |
| TOTALS | Time, sparse mine temper | 21 | 147 | Dead Tilli jai | 2 |
| TOTALS | | 21 | 17/ | | 2 |
| G100 | Grog temper – general category | 168 | 1896 | Bead-rim jar | 6 |
| | | | | Necked jar | 2 |
| | | | | Corrugated jar | 2 |
| | | | | Storage jar | 2 |
| | | | | Jar unspecified | 7 |
| | | | | Flanged bowl | 1 |
| | | | | Straight-sided dish | 2 |
| TOTALS | | 168 | 1896 | | 22 |
| 0100 | Commence | 250 | 2124 | Des Laine in | 12 |
| Q100 | Coarse greyware | 258 | 2134 | Bead-rim jar | 2 |
| | | | | Necked jar | 1 |
| | | | | Cordoned jar | 1 |
| | | | | Jar unspecified | 20 |
| | | | | Flat-rim bowl | 3 |
| | | | | Flanged bowl | 1 |
| | | | | Straight-sided dish | 4 |
| | | | | Lid | 1 |
| | | | | Beaker | 1 |
| Q101 | Fine greyware | 134 | 606 | Cordoned jar | 1 |
| | | | | Jar unspecified | 2 |
| | | | | Beaker | 4 |
| | | | | Carinated beaker | 2 |
| TOTALS | Greywares | 393 | 2740 | | 43 |
| Q102 | Coarse orange-firing ware | 59 | 369 | Jar unspecified | 4 |
| Q102 | Coarse orange-ming ware | 39 | 309 | Necked bowl/jar | 1 |
| | | | | 3 | |
| | | | | Flanged bowl | 1 |
| | | | | Flagon/jug | 3 |
| 0102 | T' C' | 20 | 102 | Misc (pie-crust rim) | 1 |
| Q103 | Fine orange-firing ware | 39 | 192 | Hemispherical bowl | 1 |
| TOTAL | | 0.0 | 7.61 | Flagon | 3 |
| TOTALS | Orange-firing wares | 98 | 561 | | 14 |
| Q104 | Fine white-firing ware | 4 | 20 | | |
| TOTALS | White-firing ware | 4 | 20 | | |
| 0.1 | | 1 | 12 | | |
| Q1 | Glauconitic sandy ware (prehistoric) | 1 | 13 | | 1 |
| TOTALS | | 1 | 13 | | 1 |
| S100 | Shell-tempered ware | 1 | 7 | | |
| TOTALS | Shell-tempered ware | 1 | 7 | | |
| | • | | | | |
| E101 | Black burnished ware 1 (SE Dorset) | 12 | 232 | Cooking pot | 1 |
| 0.10: | | | 1 | Straight-sided dish | 1 |
| Q184 | Black burnished ware 2 (Thames Estuary?) | 6 | 47 | Jar | 1 |
| TOTALS | Black burnished ware | 18 | 279 | 1 | 3 |

| E161 | New Forest red –slipped ware | 3 | 18 | Beaker | 2 |
|--------|-----------------------------------|-----|----------|---------------------|-----|
| E170 | Oxfordshire red-slipped ware | 31 | 440 | Flanged bowl | 5 |
| | | | | Necked bowl | 2 |
| | | | | Hemispherical bowl | 1 |
| E172 | Oxfordshire Parchment ware | 2 | 10 | Reeded-rim bowl | 1 |
| E176 | Nene Valley colour-coated ware | 6 | 50 | Straight-sided dish | 1 |
| | | | | Beaker | 1 |
| TOTALS | Colour-coated / slipped / painted | 42 | 518 | | 13 |
| | | | | | |
| E183 | Patchgrove ware (grog-tempered) | 12 | 268 | Storage jars | 3 |
| TOTALS | Patchgrove ware | 12 | 268 | | 3 |
| 77.00 | | | <u> </u> | | |
| E200 | Mortaria unspecified | 1 | 7 | | 1 |
| E207? | Verulamium mortaria | 1 | 279 | | 1 |
| E209 | Oxfordshire white ware mortarium | 2 | 106 | | 1 |
| E211 | Oxfordshire red-slipped mortarium | 1 | 9 | | 1 |
| TOTALS | Mortaria | 5 | 401 | | 4 |
| E250 | Amphora unspecified | 1 | 11 | | 1 |
| E258 | Southern Spanish amphora | 28 | 829 | | 5 |
| E259 | Gaulish amphora (Pelichet 47) | 1 | 39 | | 1 |
| E260 | North African amphora | 1 | 116 | | 1 |
| TOTALS | Amphorae | 31 | 995 | | 8 |
| | | | | | |
| E300 | Samian unspecified | 1 | 1 | | 1 |
| E301 | South Gaulish samian | 18 | 74 | Drag 18/31 | 1 |
| | | | | Drag 29 | 1 |
| | | | | Drag 35/36 | 1 |
| E304 | Central Gaulish samian | 9 | 118 | Drag 30 | 2 |
| | | | | Drag 36 | 1 |
| E308 | East Gaulish samiam | 4 | 56 | Drag 37 | 1 |
| TOTALS | Samian | 32 | 249 | | 8 |
| E454 | Tudor Green ware | 1 | 1 | | 1 |
| E600 | Post-medieval red ware | 2 | 6 | | 2 |
| TOTALS | Post-Roman wares | 3 | 7 | | 3 |
| TOTALD | A COL ALVIEWE ITWICE | 3 | | | |
| TOTAL | | 832 | 8101 | | 121 |

APPENDIX 2: The Coins by Nicholas Cooke

A total of 50 coins recovered during the Time Team excavations at Syndale Park was examined. Two of the fifty are post-medieval in date, whilst the remaining forty-eight are Roman.

Roman

The forty-eight Roman coins recovered are all copper alloy or base silver coins of the first to fourth centuries AD. These were recovered from four of the nine trenches excavated. No coins were recovered from trenches 4, 6, 7, 8 or 9. The recovery of these coins and other metal objects was enhanced by the use of metal detectors to scan excavated spoil.

The Roman coins recovered predominantly date from the late third and fourth centuries, with only four dated to the first and second centuries AD. Two of these could be dated closely – an as of Claudius (AD 41 - 54) and a sestertius of Hadrian (AD 117 - 138). The former was recovered from one of the fills (layer 107) of ditch 106 in trench 1, and may point to an early date for this feature. The sestertius of Hadrian was recovered from layer 501, the topsoil of trench 5. The two remaining coins of the first and second centuries AD were both too badly corroded to be identified closely, as was another coin, dated to the first to third century AD. All of these were dated on the basis of their size alone. It is possible that these may be identifiable once they have been X-rayed.

The remaining 42 Roman coins date to the late third and fourth centuries AD. Of these, eleven were too badly worn or corroded to be closely dateable. These have been dated on the basis of their size and shape. Nine of the remaining Roman coins were Barbarous Radiates (poor contemporary copies of official coinage), dating to between AD 270 and AD 290. The remainder date to the fourth century, and include coins of both the House of Constantine and the House of Valentinian. The latest coins from the site are the nine Valentinian coins dating to AD 364 - 78. This need not however, mark the end of Roman activity on the site, as coins later than this are relatively rare, and might not be represented in a small assemblage such as this. Clearly however, they do point to continued activity into the late fourth century AD.

Twenty of the late Roman coins were recovered from trench 2, either unstratified or from stratified deposits. The majority of those recovered from stratified deposits came from the cobbled layer (212) and the midden layers which sealed it (layers 203, 209, 211 and 213). The dates of these coins indicate that the cobbled surface was in use into the Valentinian period, and that the sealing deposits, which also contain Valentinian coins, must date to the last third of the fourth century or later.

Eight fourth century coins were recovered from trench 3, whilst 18 coins were recovered from trench 5, including all nine of the Barbarous Radiates. This may point to the area of trench 5 being a centre of activity in the late third century.

As an assemblage, the Roman coins recovered from the site at Syndale Park are characteristic of a typical assemblage from a Roman settlement in use into the late fourth century. The number of coins recovered is too small to be subject to any detailed statistical analysis. The small group of early coins recovered are interesting, but in no way unusual. The degree of wear on some of these coins may point to them having been in circulation for some period of time. In general the coins are in fair condition, although some show signs of heavy corrosion, notably many of those

recovered unstratified or from the topsoil. The later coins fit the expected pattern, with more coins dated between 330 and 348 than in the period of 296 – 330, with fewer coins between 348 and 264 and a peak of coins dated to between AD 364 and 378. As mentioned above, the absence of coins dated to after AD 378 need not indicate that activity on the site had ceased. Where the mint marks on the late coins could be distinguished, the expected pattern emerges, with the mints of Lyon, Trier and (to a lesser extent) Arles dominating the supply.

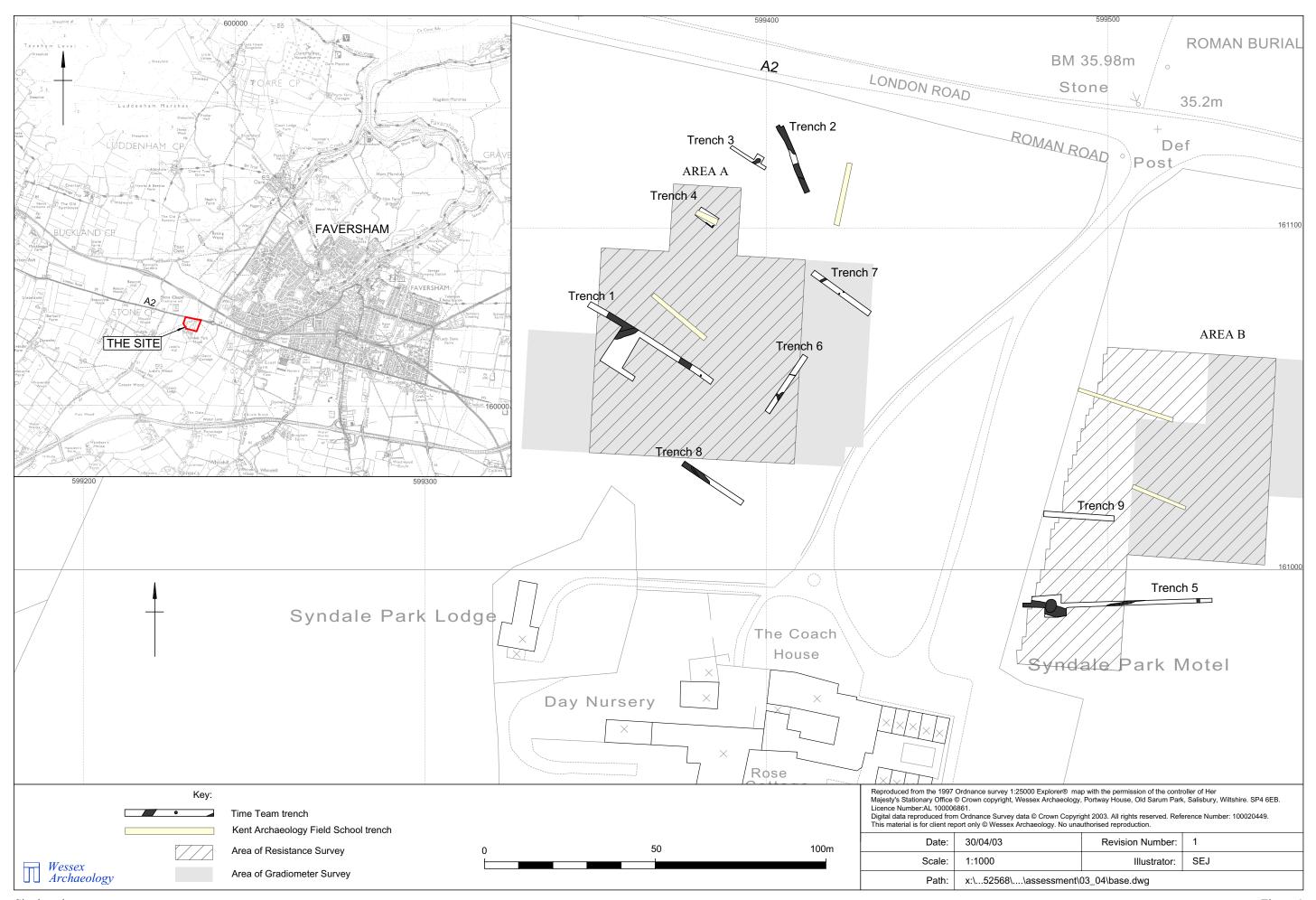
Post-Medieval

Two post-medieval coins were recovered during the excavations - a farthing of George IV dating to between 1826 and 1828 recovered from layer 101 (the topsoil in trench 1) and a half penny of Queen Victoria dated to 1868, recovered unstratified in trench 1. These may represent the use of the area as a landscaped park in the post-medieval period.

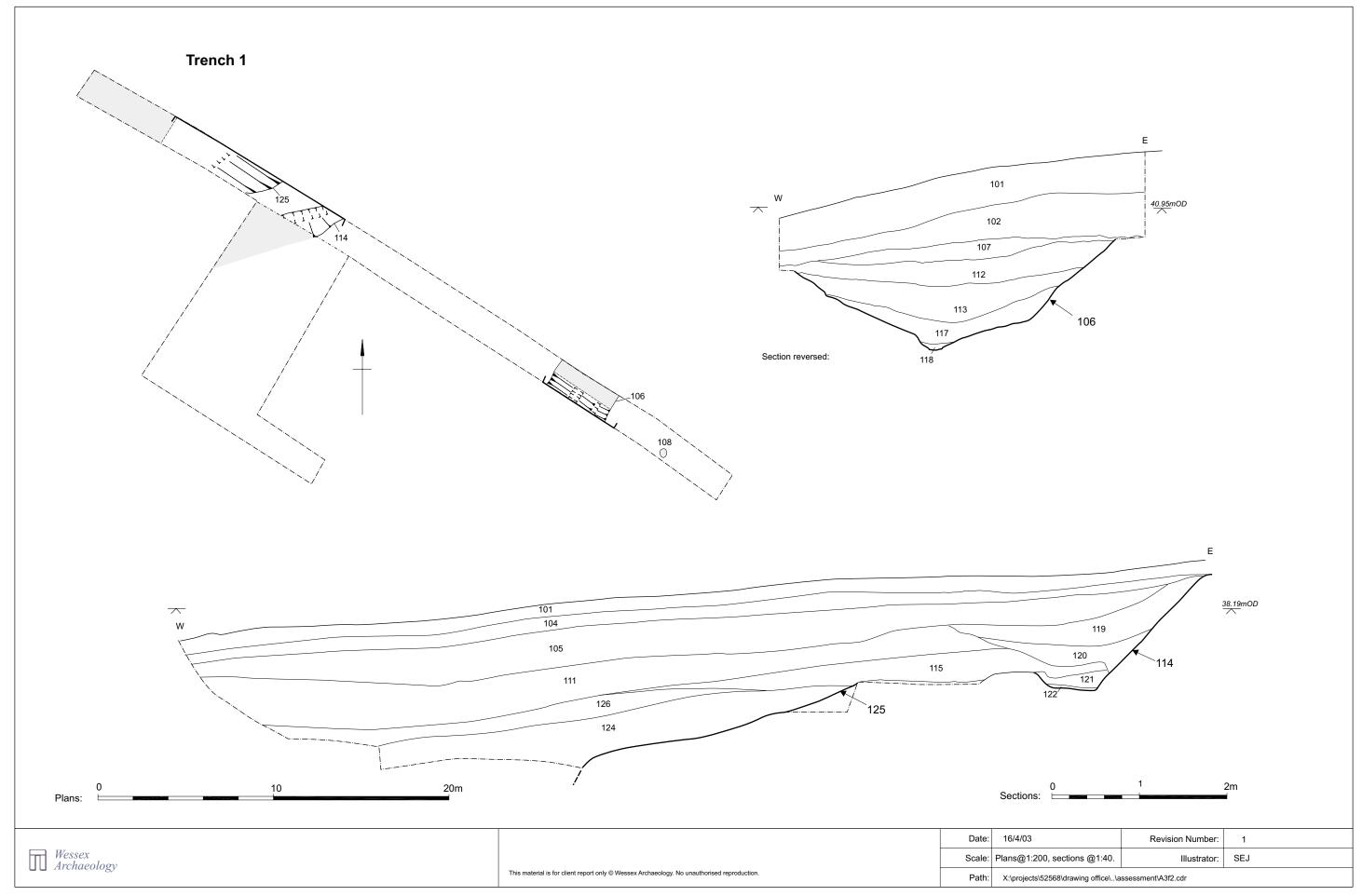
| Obj No | Context | Material Type | Obverse | Reverse | Obverse inscription | Reverse inscription | Emperor | Date | Denomination | Mint Mark | Mint | Diameter | Comments |
|-----------|-----------------|------------------|--------------------------------|--|--------------------------|--------------------------|--|-------------|--------------------------|---------------|-----------|----------|---|
| 1 | 212 | cu alloy | Bust r. pearl diadem? | Victory walking I with wreath (Securitas Reipublicae type) | DNVAL- | | Valens / Valentinian | AD 364 - 78 | follis | Illegible | Uncertain | 17mm | |
| 2 | 203 | cu alloy | Bust r. pearl diadem | wreath (Securitas Reipublicae type) | DNVALEN- | SECVRITAS REIPVBLICAE | Valens / Valentinian | AD 364 - 78 | follis | Illegible | Uncertain | 18mm | Irregular die |
| 3 | 203 | cu alloy | Bust r. pearl diadem | Victory walking I with wreath (Securitas Reipublicae type) | DNVALEN SP- | SECVRITAS REIPVBLICAE | Valens | AD 364 - 78 | follis | OF I/T R/LVGP | Lyons | 17mm | Irregular die |
| 4 | 203 | cu alloy | Helmeted bust l, spear to r | Victory on prow | CONSTAN TINOPOLIS | None | Emperor of the House of Constantine | AD 330 - 45 | follis | TPL*- | Lyons? | 16mm | Probably a copy |
| 5 | 202 | cu alloy | Illegible | Illegible | Illegible | Illegible | Unknown C4 emperor | C4 AD | follis | Illegible | Uncertain | 13mm | V. badly corroded. Dated to C4 on size alone. |
| 7 | 213 | cu alloy | Bust r. pearl diadem | Emperor r, dragging captive (Gloria Romanorum type) | -VS- | -NORVM | Emperor of the House of Valentinian | AD 364 - 78 | follis | O F II/-G-D | Uncertain | 18mm | Oval flan. Obverse very worn. |
| 8 | 212 | cu alloy | Bust r. laureate | 2 soldiers, 2 standards (Gloria Exercitus type) | FLIVLCONSTAN TINVSAVG | GLOR IAEXERC ITVS | Constantine II | AD 330 - 45 | follis | PLG | Lyons | 14mm | Small size, stylied engraving and oval flan indicate a copy |
| 9 | Tr 2 unstrat | cu alloy | Bust r. pearl diadem | Victory walking I with wreath (Securitas Reipublicae type) | -ANVSPFAVG | - REIPVBLIC- | Valentinian | AD 364 - 78 | follis | Illegible | Uncertain | 17mm | Corroded |
| 10 | Tr 2 unstrat | cu alloy | Illegible | Illegible | Illegible | Illegible | Unknown C3 - 4 emperor | C3 - 4 AD | Follis / antoninianus | Illegible | Uncertain | 13mm | V. badly corroded and encrusted. Dated to C3 - 4 on size alone. |
| 11 | Tr 2 unstrat | cu alloy | Bust r. pearl diadem | Victory walking I with wreath (Securitas Reipublicae type) | Illegible | Illegible | Emperor of the House of Valentinian | AD 364 - 78 | follis | Illegible | Uncertain | 16mm | Badly corroded |
| 12 | Tr 2 unstrat | cu alloy | Helmeted bust 1 | Victory on prow | Illegible | Illegible | Emperor of the House of Constantine | AD 330 - 45 | follis | Illegible | Uncertain | 12mm | Size suggests a copy |
| 15 | 302 | cu alloy | Bust r. laureate | Sol standing l | CONSTANTINVS AVG | SOLIIN VICTO | Constantine I | AD 310 - 17 | follis | PTR | Trier | 19mm | In very good condition. Some cleaning required. |
| 16 | 302 | cu alloy | Helmeted bust 1 | Wolf and twins | VRBS - | None | Emperor of the House of Constantine | AD 330 - 5 | follis | TRP* | Trier | 21mm | In good condition |
| 17 | 302 | cu alloy | Bust r | Camp gate | Illegible | Illegible | Emperor of the House of Constantine | AD 313 - 30 | follis | Illegible | Uncertain | 16mm | Badly corroded |
| 18 | 302 | cu alloy | Bust r. pearl diadem | Victory walking I with wreath (securitas Reipublicae type) | -NVALEN S- | - REIPVBLICAE | Valens | AD 364 - 78 | follis | Illegible | Uncertain | 17mm | In fair condition. SI irregular flan |
| 19 | 302 | cu alloy | Bust r | Fallen horseman | Illegible | FEL - | Emperor of the House of Constantine | AD 350 - 60 | follis | Illegible | Uncertain | 12mm | A classic fallen horseman copy. Too small and too stylised to be genuine. |
| 21 | Tr 3 unstrat | cu alloy | Bust r. laureate | 2 soldiers, 2 standards (Gloria Exercitus type) | CONSTANTINVS - | GLOR- | Constantine I / II | AD 330 - 5 | follis | *PLG | Lyons | 16mm | Needs cleaning. Minor corrosion on reverse. Otherwise very nice. |
| 22 | Tr 3 unstrat | cu alloy | Illegible | Illegible | Illegible | Illegible | Unknown C4 emperor | C4 AD | follis | Illegible | Uncertain | 14mm | V. badly corroded. Dated to C4 on size alone. |
| 23 | 107 | cu alloy | Bust 1 | Illegible | CLAUDIVSCAES - | Illegible | Claudius I | AD 41 - 54 | As | None | Rome | 26mm | Reverse corroded and obscured by dirt |
| 24 | 303 | cu alloy | Bust 1 | Standing fig 1. | Illegible | Illegible | Unknown C1 - 2 emperor | C1 - 2 | As? | None | ?Rome | 24mm | Badly corroded and worn - needs X- raying |
| 26 | 209 | cu alloy | Illegible | Illegible | Illegible | Illegible | Unknown C4 emperor | C4 AD | follis | Illegible | Uncertain | 14mm | V. badly corroded. Dated to C4 on size alone. |
| 28 | Tr 2 unstrat | cu alloy | Illegible | Illegible | Illegible | Illegible | Unknown C3 - 4 emperor | C3 - 4 AD | Follis / antoninianus | Illegible | Uncertain | 16mm | V. badly corroded and encrusted. Dated to C3 - 4 on size alone. |
| 29 | Tr 2 | cu alloy | Illegible | Illegible | Illegible | Illegible | Unknown C4 | C4 AD | follis | Illegible | Uncertain | 13mm | V. badly corroded. Dated to C4 on size |

| | unstrat | | | | | | emperor | | | | | | alone. |
|----|-----------------|----------|------------------------------------|---|-----------------------|------------------------------|---|--------------|--------------------------|-------------------------------|-----------|------|--|
| 31 | 207 | cu alloy | Bust r. pearl diadem | Victory walking I with wreath | DNVALEN S- | SECVRITAS REIPVBLICAE | Valens | AD 364 - 78 | follis | Illegible | Uncertain | 18mm | SI worn and corroded |
| 39 | 101 | cu alloy | Illegible | Britannia seated l | Illegible | BRITTANNIAE REX FID: DEF: | George IV | AD 1826 - 8 | farthing | Illegible | Uncertain | 21mm | Corroded obverse |
| 40 | 511 | cu alloy | Bust r. pearl diadem with rosettes | 2 soldiers, 2 standards (Gloria Exercitus type) | CO- | G- | Emperor of the House of Constantine | AD 330 - 5 | follis | TR.S | Trier | 17mm | corroded on both sides |
| 41 | 511 | cu alloy | Illegible | Illegible | Illegible | Illegible | Unknown C1 - 3 emperor | C1 - 3 AD | Uncertain | Illegible | Uncertain | 27mm | V. badly corroded. Dated to C1 - 3 on size and thickness alone. X ray may help tie down emperor |
| 43 | 511 | cu alloy | Radiate bust r | Illegible | Illegible | Illegible | Barbarous Radiate | AD 270 - 90 | antoninianus | Illegible | Uncertain | 17mm | Worn and corroded. Almost illegible. Barbarous Radiate copy |
| 44 | 513 | cu alloy | Radiate bust r | Fig standing I (Providentia?) | IMPTATRIC- | -TIAAVGN | Barbarous copy of coin of Tetricus I | AD 270 - 90 | antoninianus | Illegible | Uncertain | 19mm | Very oval flan, stylised engraving. Clearly a copy |
| 45 | 513 | cu alloy | Bust l, laureate. | Illegible | Illegible | Illegible | Emperor of the House of Constantine | AD 300 - 360 | follis | Illegible | Uncertain | 18mm | X Ray may hel clarify detail on reverse. Prob worth conservation |
| 50 | 501 | cu alloy | Radiate bust r | Illegible | Illegible | Illegible | Barbarous Radiate | AD 270 - 90 | antoninianus | Illegible | Uncertain | 15mm | Worn and corroded. Almost illegible. Barbarous Radiate copy |
| 56 | 501 | cu alloy | Radiate bust r | Fig standing l | IMPTETRICVS- | -V- | Barbarous copy of coin of Tetricus I | AD 270 - 90 | antoninianus | Illegible | Uncertain | 21mm | Oval flan, stlysed engraving on reverse, but good on obverse. Neither obverse or reverse struck centrally on flan. A Barbarous copy |
| 57 | 501 | cu alloy | Radiate bust r | Illegible | Illegible | Illegible | Barbarous Radiate | AD 270 - 90 | antoninianus | Illegible | Uncertain | 12mm | Worn and corroded. Almost illegible. Barbarous Radiate copy. Very irregular thin flan |
| 58 | 501 | cu alloy | Illegible | Emperor r, dragging captive (Gloria Romanorum type) | Illegible | Illegible | Emperor of the House of Valentinian | AD 364 - 78 | follis | Illegible | Uncertain | 18mm | Very badly corroded. Only just identifiable |
| 59 | 501 | cu alloy | Radiate bust r | Fig standing 1 | -TETRICVSAVG | Illegible | Barbarous copy of coin of Tetricus I | AD 270 - 90 | antoninianus | Illegible | Uncertain | 18mm | Oval flan, stlised engraving on reverse. Flaky corrosion . A Barbarous copy |
| 65 | 501 | cu alloy | Radiate bust r, bearded | Fortuna standing l, w cornucopia and hand on tiller | -IANVS AVG- COSIII | FORTUN A- | Hadrian | AD 117 - 138 | sestertius | S C either side of Fortuna | Rome | 32mm | in quite good condition. Conservation recommended. |
| 66 | 501 | cu alloy | Illegible | Illegible | Illegible | Illegible | Unknown C3 - 4 emperor | C3 - 4 AD | Follis / antoninianus | Illegible | Uncertain | 20mm | V. badly corroded and encrusted. Dated to C3 - 4 on size alone. |
| 68 | 501 | cu alloy | Radiate bust r | Illegible | Illegible | Illegible | Barbarous Radiate | AD 270 - 90 | antoninianus | Illegible | Uncertain | 16mm | Radiate spikes only just visiobe. Very badly worn and corroded. |
| 69 | 501 | cu alloy | Illegible | Illegible | Illegible | Illegible | Unknown C3 - 4 emperor | C3 - 4 AD | Follis / antoninianus | Illegible | Uncertain | 17mm | V. badly corroded and encrusted. Dated to C3 - 4 on size alone. |
| 71 | 501 | cu alloy | Illegible | Illegible | Illegible | Illegible | Unknown C1 - 2 emperor | C1 - 2 | sestertius? | None | ?Rome | 31mm | Badly corroded and worn - needs X-raying. Dated on basis of its size alone. |
| 72 | 501 | cu alloy | Bust r. laureate | 2 soldiers, 2 standards (Gloria Exercitus type) | CONSTANPF- | GLOR IAEXERC ITVS | Emperor of the House of Constantine | AD 330 - 5 | follis | Wreath / SCONST | Arles | 16mm | Small flan, but coin in good condition |
| 73 | 501 | cu alloy | Radiate bust r | Illegible | -VS- | Illegible | Barbarous Radiate | AD 270 - 90 | antoninianus | Illegible | Uncertain | 18mm | Oval corroded flan. |
| 74 | 501 | cu alloy | Radiate bust r | Fig standing l | Illegible | Illegible | Barbarous Radiate | AD 270 - 90 | antoninianus | Illegible | Uncertain | 18mm | Oval corroded flan. |
| 78 | Tr 2 unstrat | cu alloy | - | Camp gate | Illegible | Illegible | Emperor of the House of Constantine | AD 313 - 30 | follis | Illegible | Uncertain | 12mm | Badly corroded |
| 79 | Tr 2 unstrat | cu alloy | Illegible | Illegible | Illegible | Illegible | Unknown C3 - 4 emperor | C3 - 4 AD | Follis / antoninianus | Illegible | Uncertain | 17mm | Very irregular shaped flan. V. badly corroded and encrusted. Dated to C3 - 4 on size alone. |
| 80 | Tr 2 unstrat | cu alloy | Bust r | Fallen horseman | Illegible | Illegible | Emperor of the House of Constantine | AD 350 - 60 | follis | Illegible | Uncertain | 11mm | A fallen horseman copy. Obverse badly corroded, but fallen horseman recognisable on reverse. |
| 81 | Tr 2 | cu alloy | Bust r | 2 soldiers, 1 standard | Illegible | Illegible | Emperor of the | AD 335 - 45 | follis | Illegible | Uncertain | 12mm | Copy of Glorai Exercitus 2 soldiers 1 |

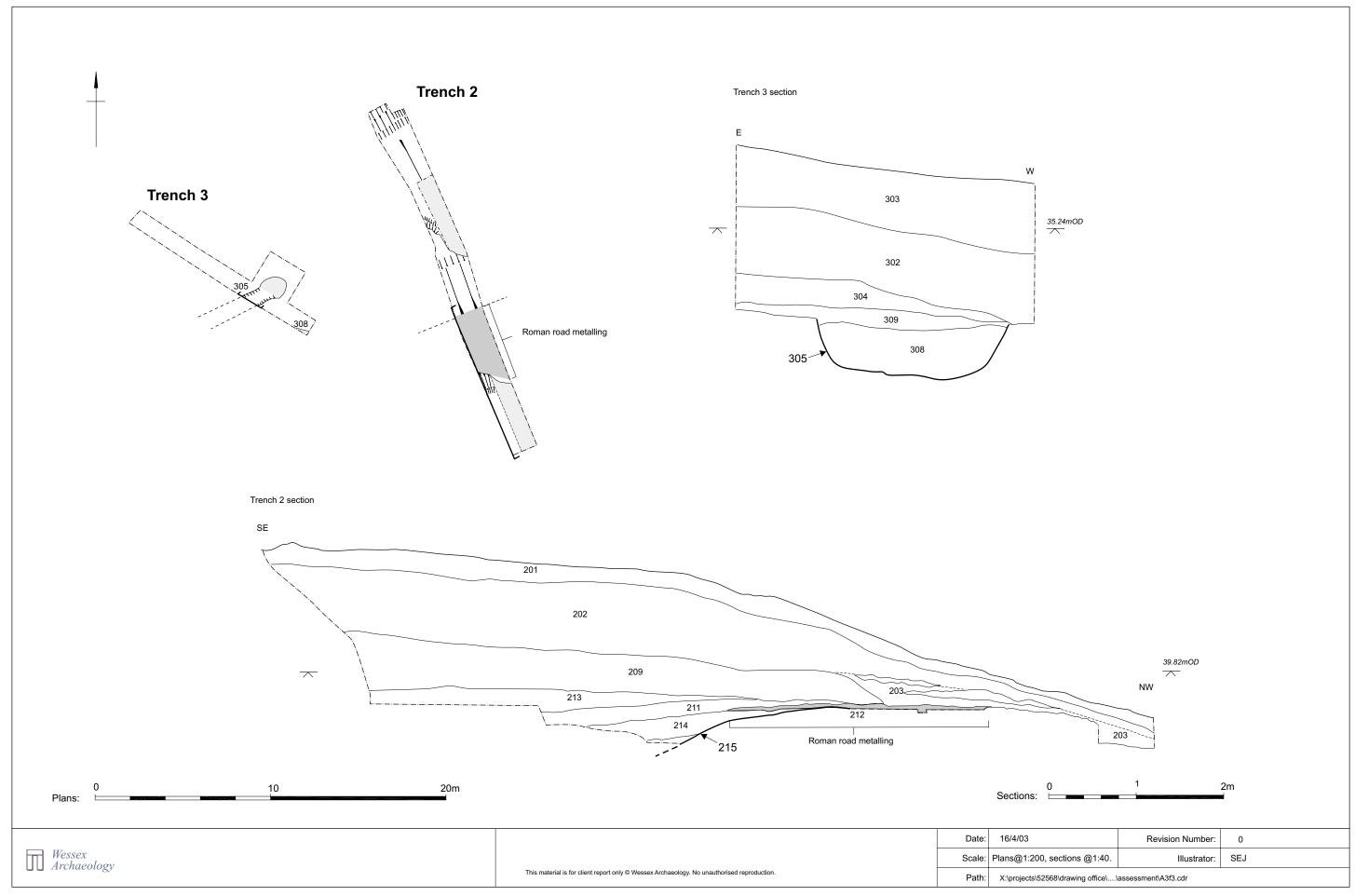
| | unstrat | | | (Gloria Exercitus type) | | | House of Constantine | | | | | | standard. Reverse only just visible. |
|----|-----------------|----------|---------------|-------------------------|-------------|-----------|---------------------------|-----------|--------------------------|-----------|-----------|------|---|
| 83 | Tr 2 unstrat | cu alloy | Illegible | Illegible | Illegible | Illegible | Unknown C3 - 4 emperor | C3 - 4 AD | Follis / antoninianus | Illegible | Uncertain | 23mm | Irregular shaped flan. V. badly corroded and encrusted. Dated to C3 - 4 on size |
| | unstrut | | | | | | emperor | | | | | | alone. |
| 94 | | cu alloy | Female bust 1 | Britannia seated r | - T:REG:D:F | | Queen Victoria | AD 1868 | Half penny | None | Uncertain | 26mm | Half penny of Queen Victoria, in fair |
| | unstrat | | | | | 1868 | | | | | | | condition |
| 95 | Tr 1 | cu alloy | Illegible | Illegible | Illegible | Illegible | Unknown C3 - 4 | C3 - 4 AD | Follis / | Illegible | Uncertain | 16mm | Irregular shaped flan. V. badly corroded |
| | unstrat | | | | | | emperor | | antoninianus | | | | and encrusted. Dated to C3 - 4 on size |
| | | | | | | | | | | | | | alone. |



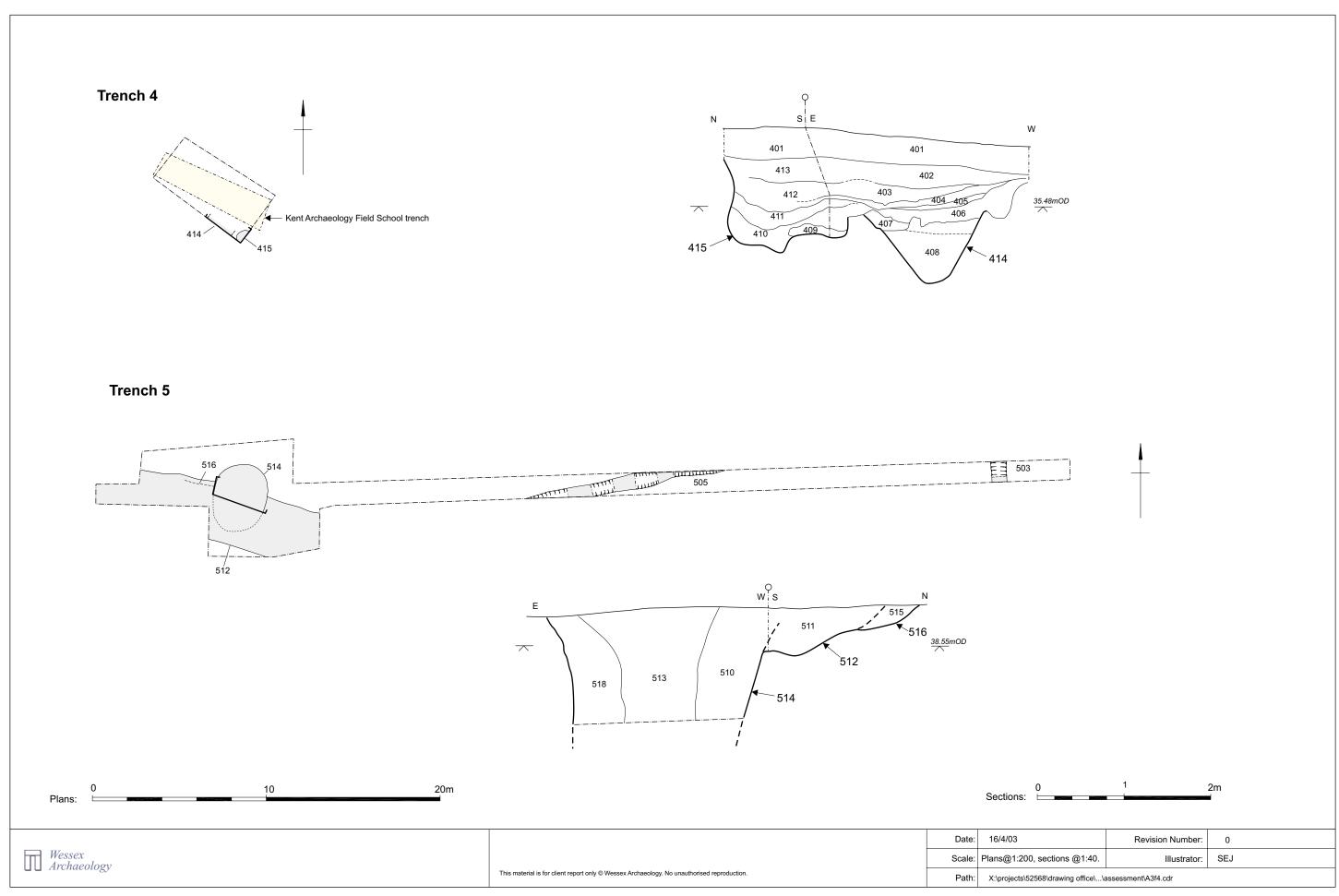
Site location maps



Trench 1: Plan and sections.



Trenches 2 and 3: Plans and sections.



Trenches 4 & 5: Plans and sections.

