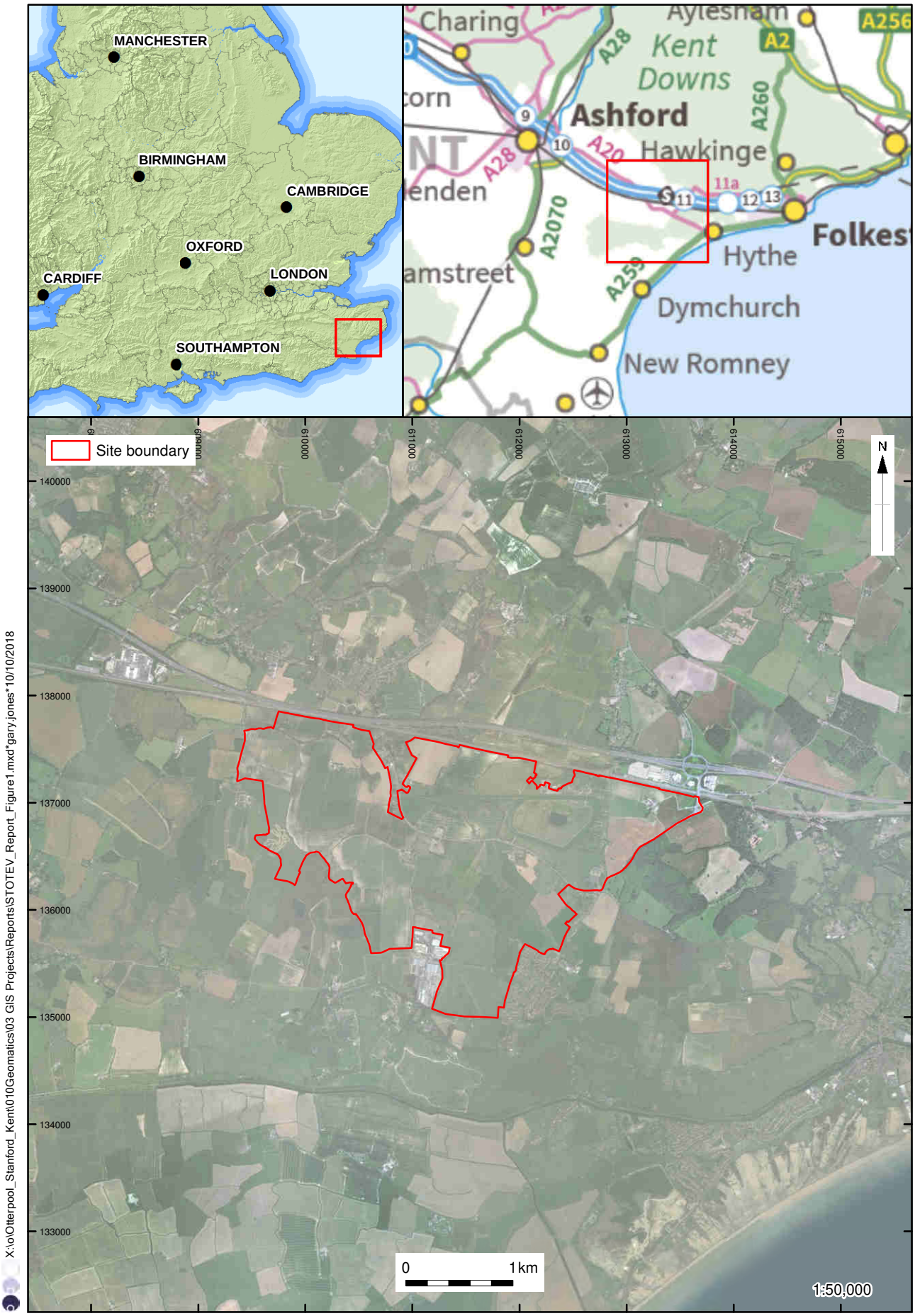

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Figure 1: Site location

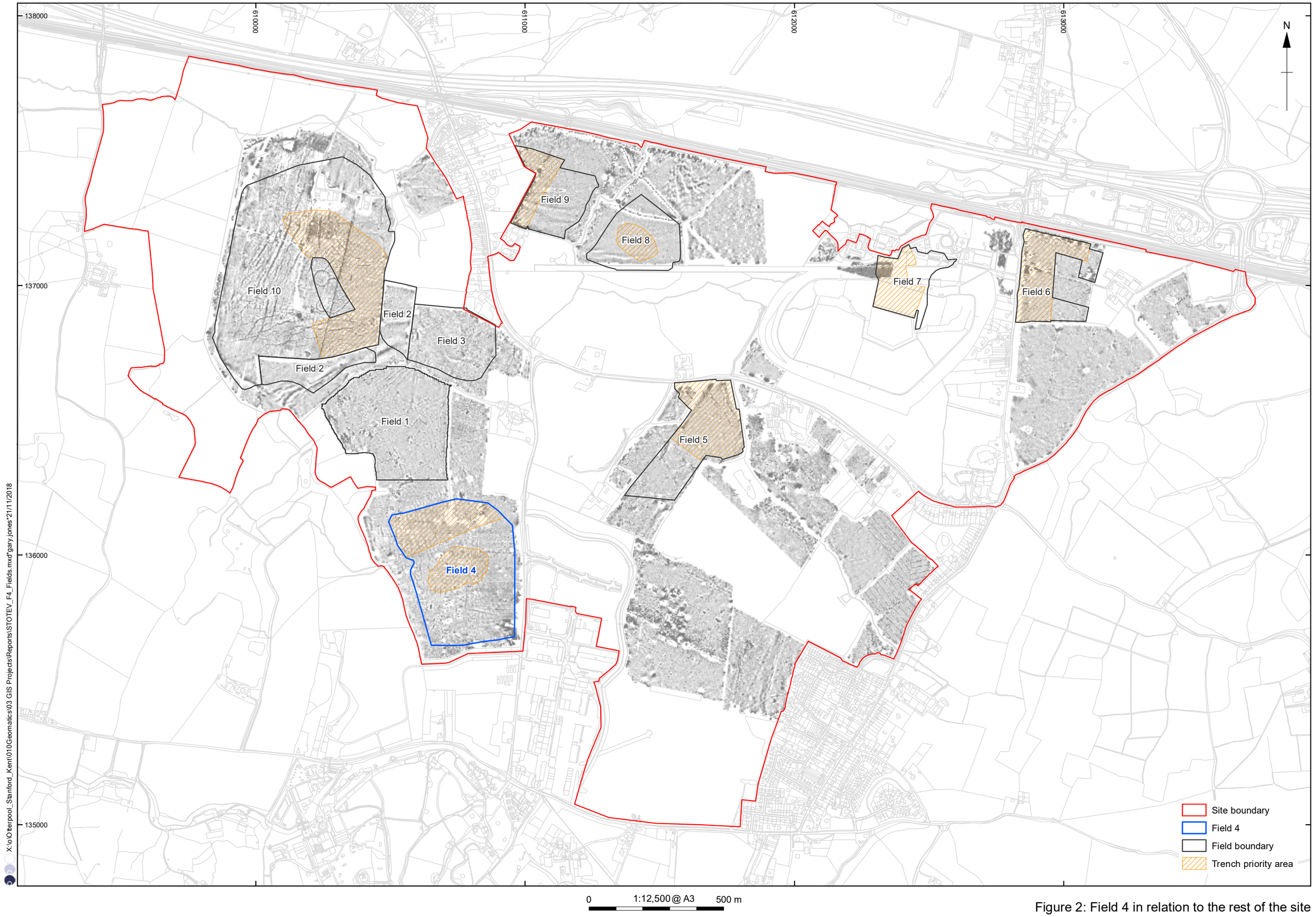

Figure 2: Field 4 in relation to the rest of the site

Figure 3: Overview of Field 4 trenches in relation to geophysical survey

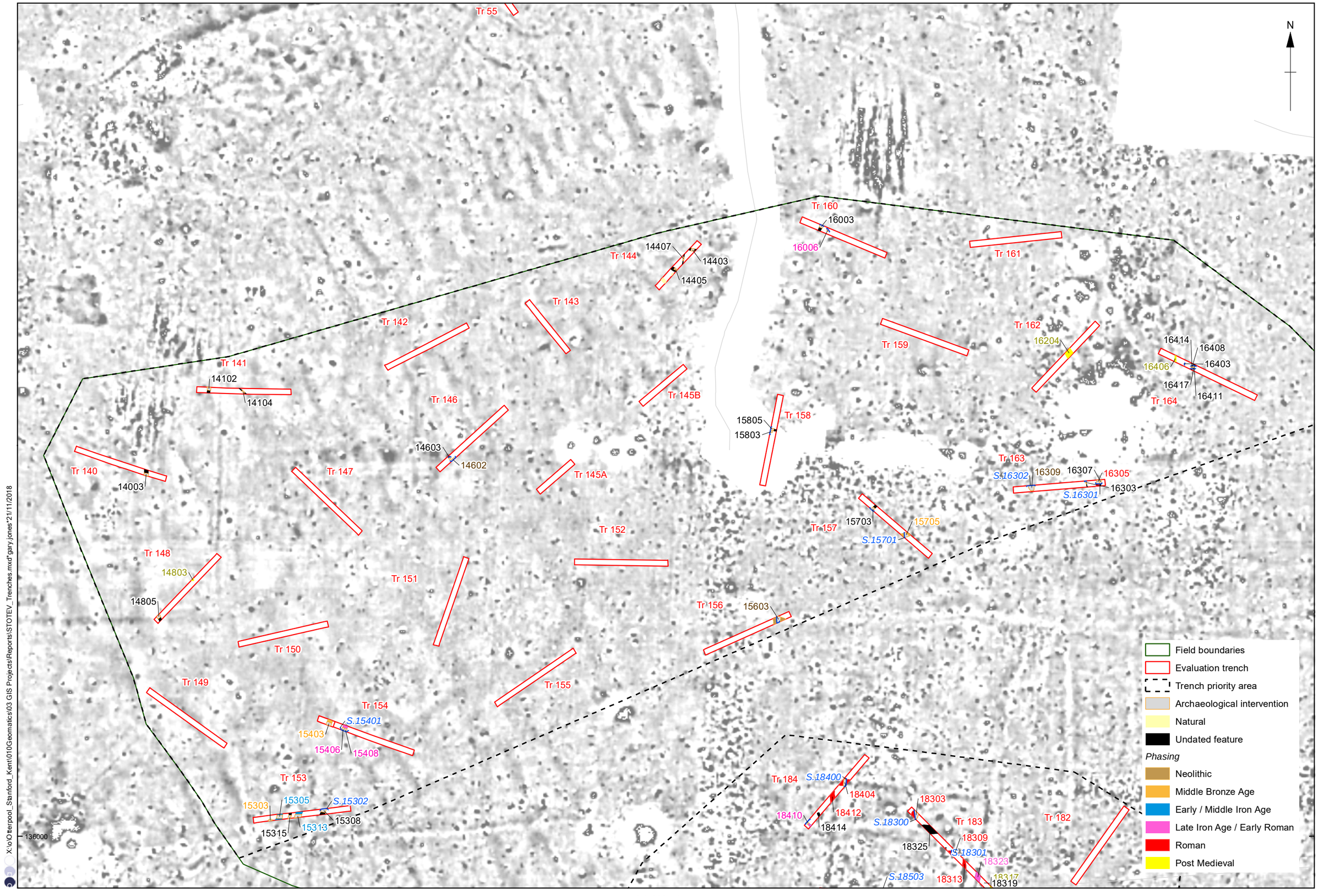

Figure 4: Trenches and features in the northern area of Field 4

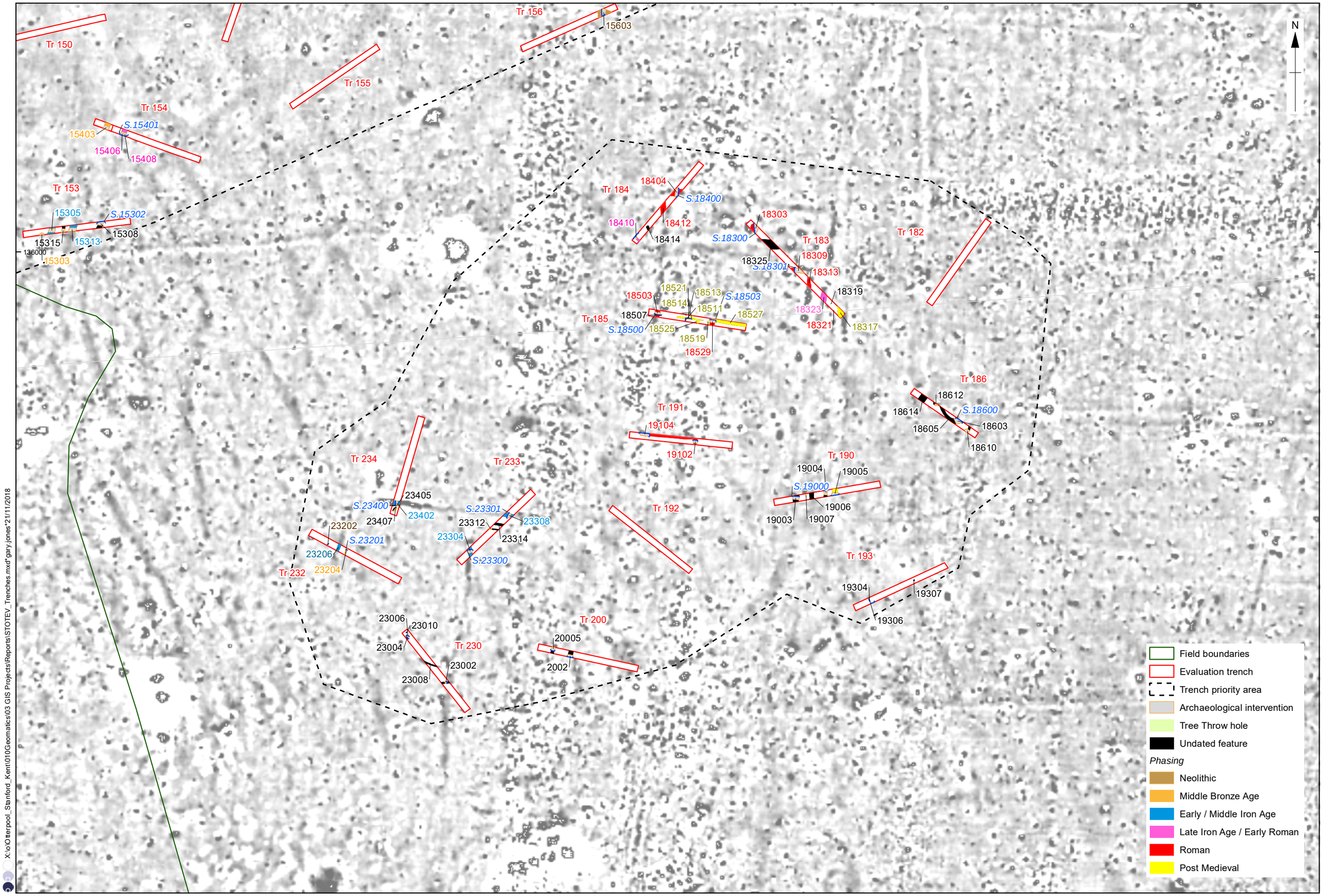

Figure 5: Trenches and features in the central area of Field 4

Evaluation trench
Archaeological intervention
Sections

Phasing

Neolithic
Early Bronze
Middle Bronze
Late Bronze
Late Bronze Age / Early Iron Age
Early / Middle Iron
Late Iron Age / Early
Roman
Late Roman
Early Medieval
Medieval
Post Medieval
Undated feature

0 1:200 @ A3 5 m

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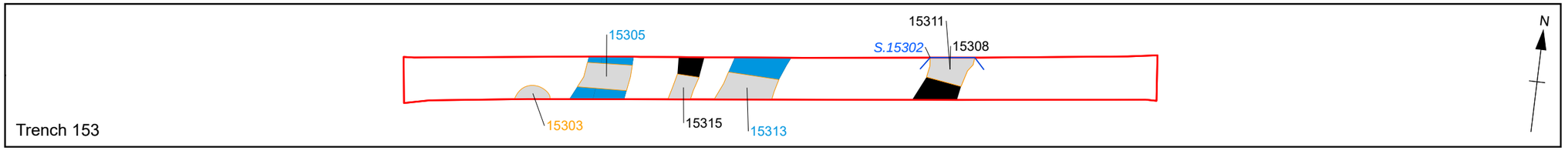
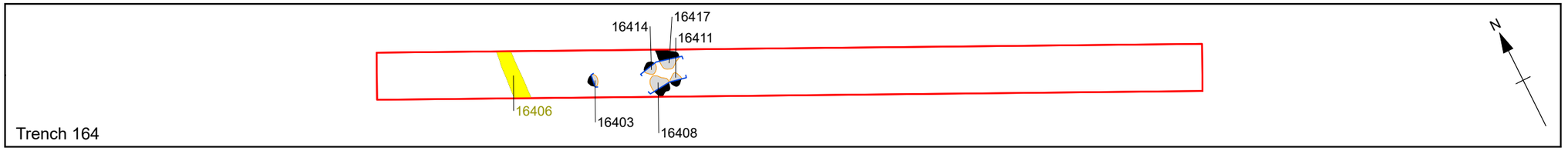
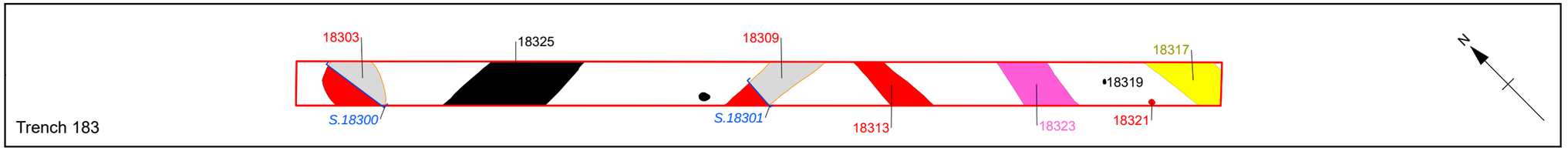
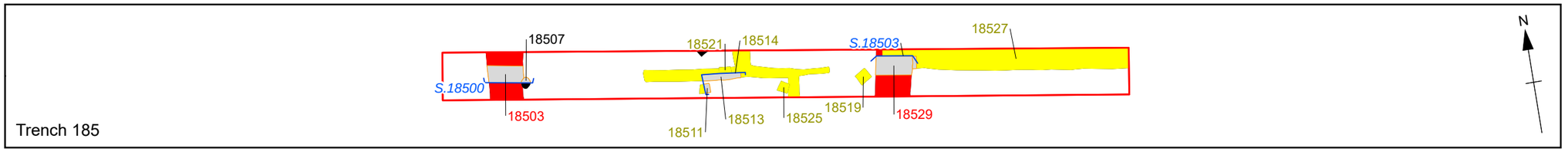
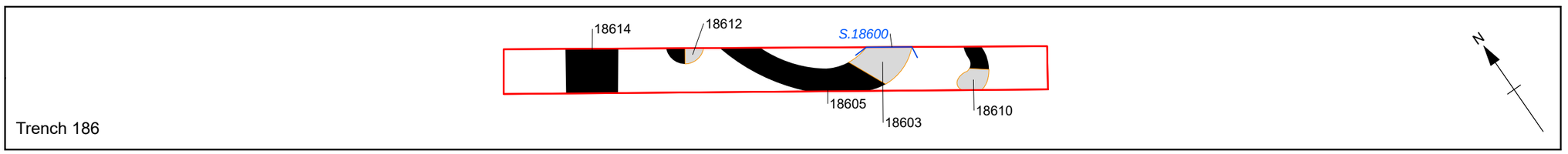
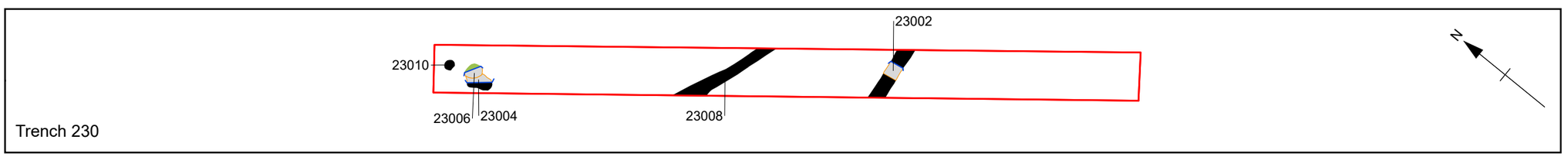












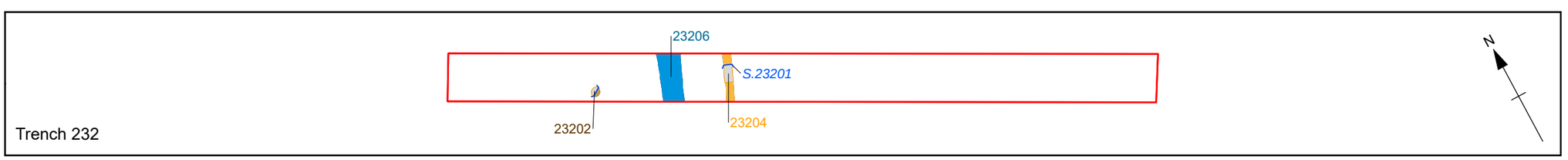
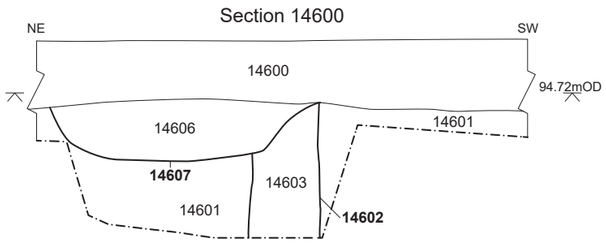
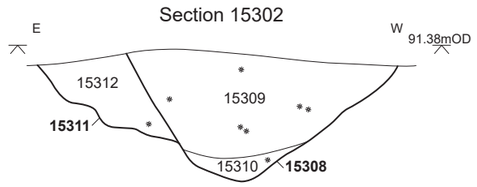
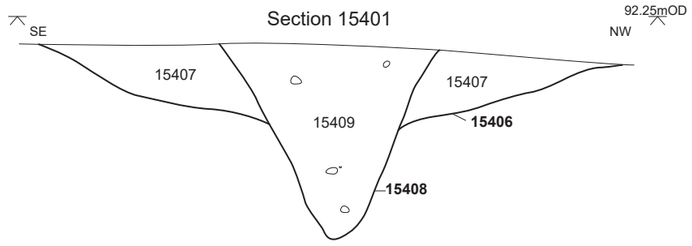
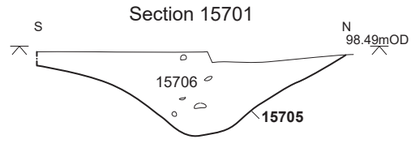


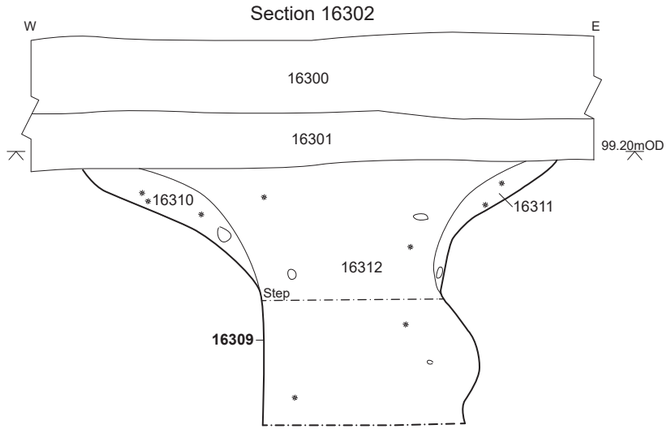
Figure 6: Detailed plans of trenches 153, 164, 183, 185, 186, 230 and 232 in Field 4

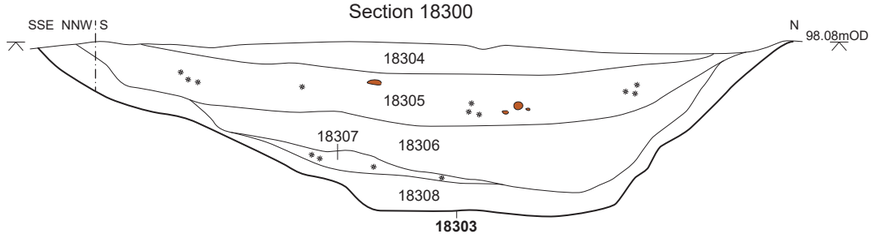


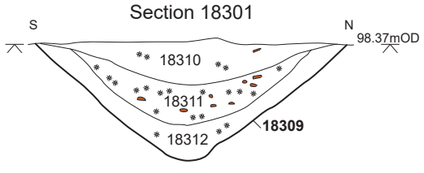


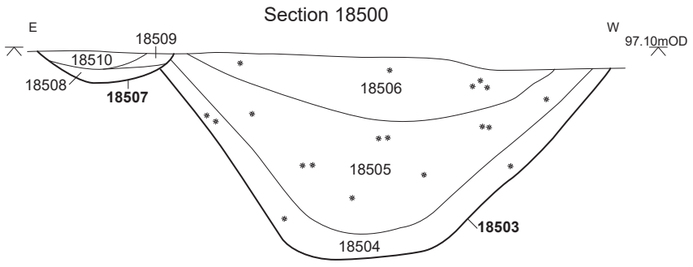


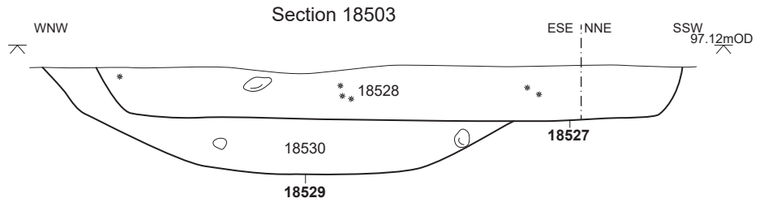


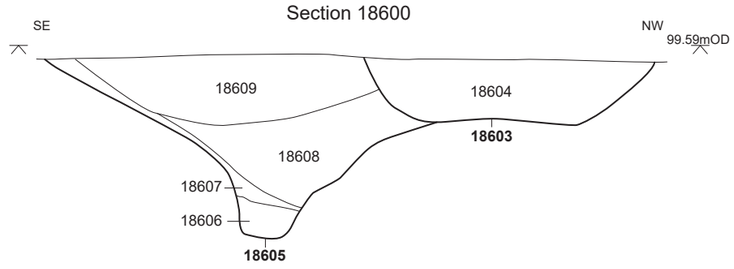


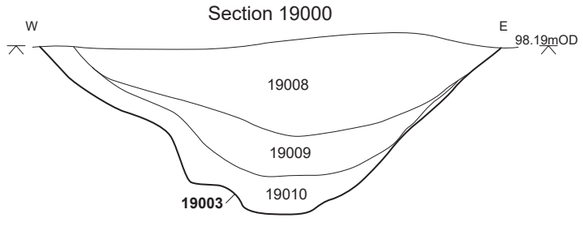


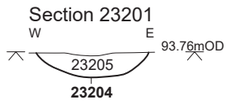


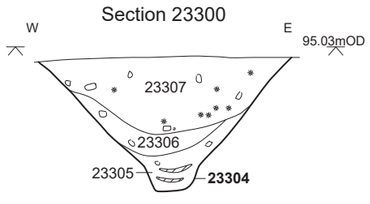


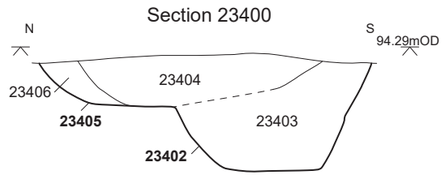












Charcoal
Stone
Pottery

0 1m

1:25

Figure 7: Sections of features from Field 4

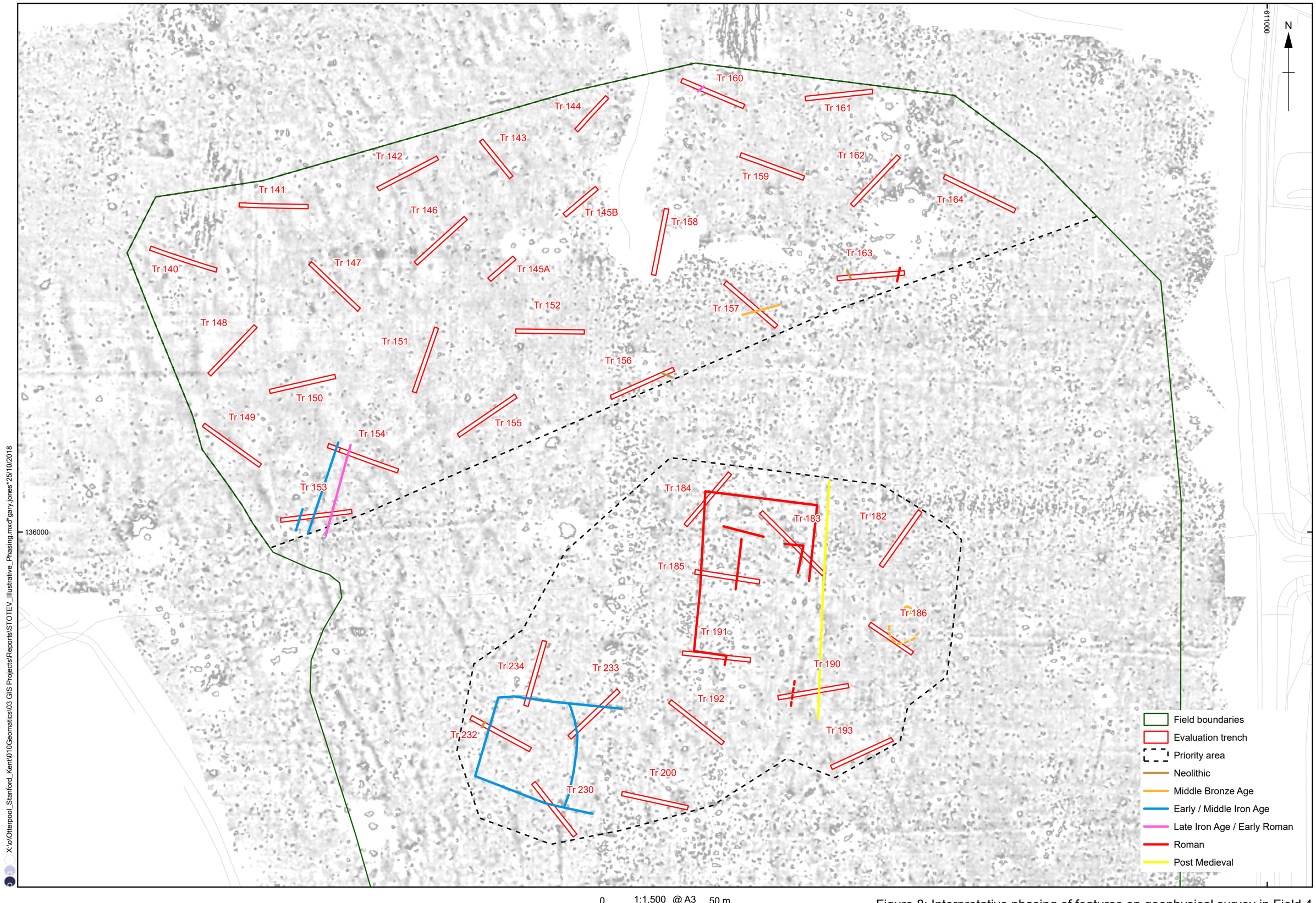


Figure 8: Interpretative phasing of features on geophysical survey in Field 4

Plate 1: Trench 140, looking west

Plate 2: Ditch 14403, looking west

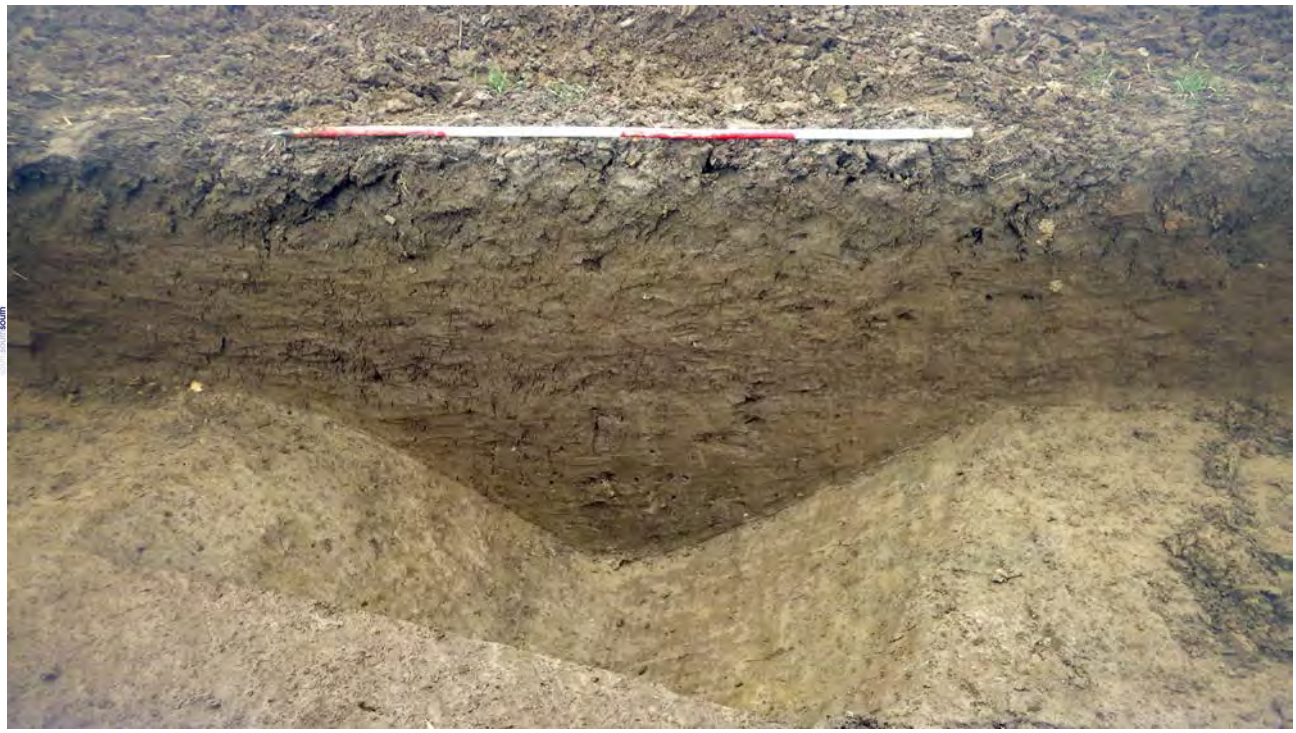


Plate 3: Ditch 15313, looking south-west

Plate 4: Elongated pit or ditch terminus 16309, looking north

Plate 5: Trench 183 after excavation, looking north-west

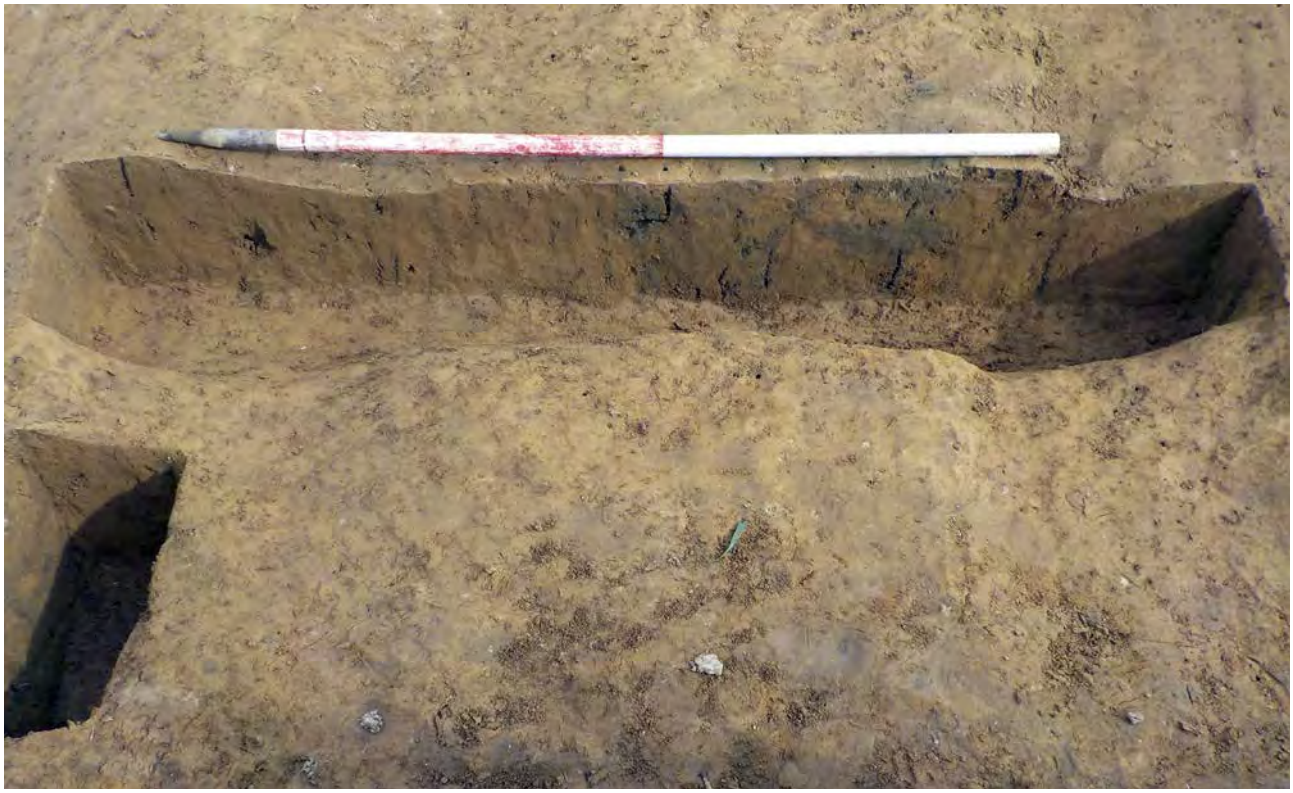


Plate 6: Posthole 18511 (left), and posthole 18514 cutting beamslot 18513, looking north

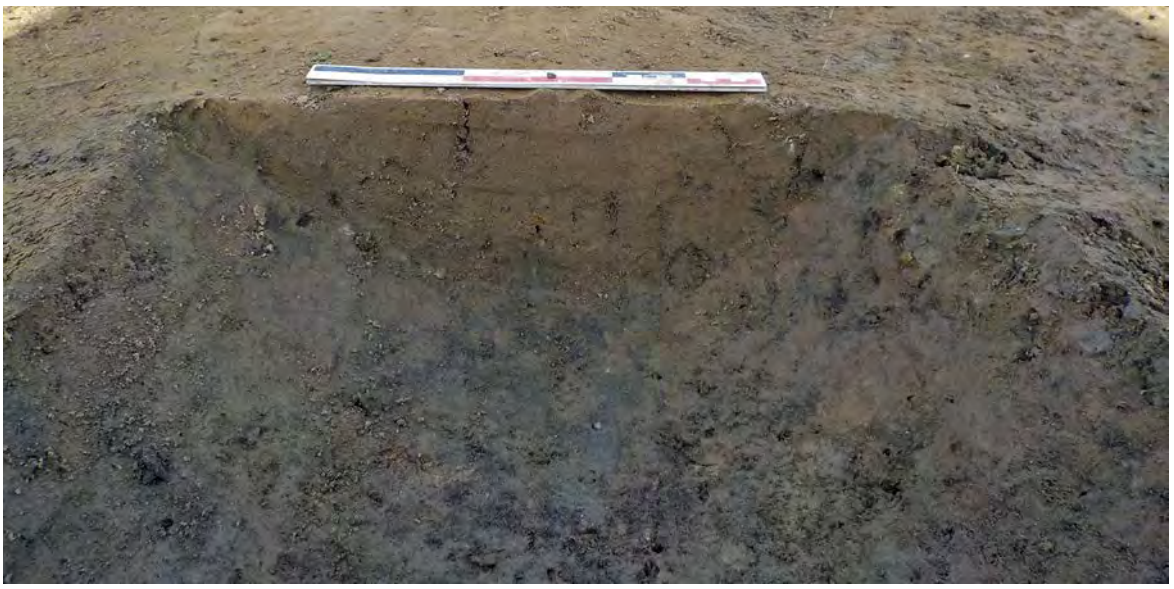


Plate 7: Ditch 23002, looking east

Plate 8: Ditch 23402 and recut 23405, looking west

Plate 9: Trench 183, Small Find 103 – blade of a polished axe

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Field 5, Otterpool Park, Sellindge, Kent

Archaeological Evaluation Report

November 2018

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Field 5, Otterpool Park, Sellindge, Kent

Archaeological Evaluation Report

Written by Alex Davies

With contributions from Edward Biddulph, Paul Booth, Lee Broderick, Lisa Brown, Sharon Cook, Geraldine Crann, John Cotter, Michael Donnelly, Julia Meen, Rebecca Nicholson, Cynthia Poole, Ian Scott and Ruth Shaffrey, and illustrations by Benjamin Brown, Gary Jones and Charles Rousseaux

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Summary

This report is concerned with Field 5 of the proposed Otterpool development area, comprising Trenches 241-264.

The remains of a mound represented by a layer surviving up to 0.55m high and overlying a buried soil was found in Trenches 262 and 263 on the south. The mound soil covered an area at least *c* 35m across. The buried soil beneath the mound contained sherds of Beaker pottery, providing a *terminus post quem* for the construction of the monument. Additionally, a significant assemblage of struck flint was found in the soils under the mound. Most of this was probably early Mesolithic, suggesting that the mound had preserved an area of Mesolithic activity on the buried soil pre-dating the mound. No ditch that could be associated with the mound was found, nor any evidence of human remains, but it seems likely that the mound represents a barrow.

A Roman villa was found in the northern part of the field, in Trenches 241-252, 257-259, and 264. This included the foundations and lowest courses of limestone walls, primarily found in the northern trenches, as well as associated stone spreads and ground surfaces in varying states of preservation. Two structural phases could be recognised on numerous buildings. The stone buildings included a hypocaust whose infilling included painted wall plaster. Other structures included a possible malting oven, a substantial boundary ditch and associated wall, and a large posthole possibly indicating a timber building. Other features include a probable road, linear ditches and pits. The predominant orientation of the ditches and buildings was NW-SE/NE-SW. The southern extent of the complex has been approximately defined, although the full extent of the villa has not been confirmed in the other directions.

The artefacts recovered span most of the Roman period. Some structural features and a large boundary ditch can be dated to the first century, and a small amount of possible Conquest-period pottery was discovered. However, the majority of the features date to the middle Roman period. Coins and pottery of the late Roman period were also found, but no late Roman structural features were uncovered in the evaluation.

The presence of stone column bases of imported limestone, strongly suggest the presence of a building of high status. Fragments of fired clay with vitrified green glaze were discovered across multiple contexts, and indicate a former glass furnace on the site, presumably for construction of window glass.

Waterlogged ditches containing preserved wooden objects and environmental material were also discovered, with the potential to produce not only rarely preserved artefacts but also valuable information about the contemporary environment. These factors indicate that the villa complex is of regional importance.

Acknowledgements

Oxford Archaeology would like to thank Arcadis, acting on behalf of Folkestone & Hythe District Council and Cozumel Estates, for commissioning this project. Thanks are also extended to Ben Found, Senior Archaeological Officer, and Lis Dyson, Heritage Conservation Manager, who monitored the work on behalf of Kent County Council, for their advice and guidance.

The project was managed for Oxford Archaeology by Tim Allen. The fieldwork was directed in the field by Mike Donnelly, who was supported by Tom Bruce, Tom Lawrence, Belle Nielson, Conan Parsons, Adam Rapiejko, Ben Slader, Caroline Souday and Andrew Smith. Site survey was carried out by Ben Slader, and digitizing and post-processing by Ben Brown. Thanks are also extended to the teams of OA staff that cleaned and packaged the finds under the supervision of Geraldine Crann and management of Leigh Allen, processed the environmental remains under the supervision of Sharon Cook and the management of Rebecca Nicholson, and prepared the archive under the supervision and management of Nicola Scott.

OA would also like to thank the KCC Finds Liaison Officer Jo Ahmet for putting them in touch with local detectorists Fred Cooper and Wendy Thompson, who located and assisted in the recovery of metal finds, aided by their companions. OA is also grateful to Timothy Palmer who carried out the petrographic analysis of the stone columns, and to Mark Taylor and David Hill for their advice upon the fired clay from glass-making.

1 INTRODUCTION

1.1 Scope of work

1.1.1 This report deals with the excavation of Field 5, part of the evaluation of ten fields or parts of fields within the Otterpool proposed development area (Figs 1 and 2). Due to the scale of the evaluation and of the results, a single report covering all ten fields was considered to be too large, so separate reports have been provided for each field or pair of fields. The background to the scheme is provided in the introduction to the report on Field 1 (OA 2018b), and will not be repeated here.

1.1.2 In accordance with the targeted evaluation strategy agreed between Arcadis (on behalf of Folkestone & Hythe District Council and Cozumel Estates) and Kent County Council, and detailed in the Written Scheme of Investigations (OA 2018a), only the northern part of this field was evaluated at this stage, and this was achieved using a 2.5% sample of trenches (Fig. 3).

1.1.3 The geophysical survey (SUMOgeophysics 2018) was tentatively interpreted as the site of a Roman villa. Following confirmation of the presence of Roman buildings by trenching, re-examination of the results of the geophysical survey identified a possible further area of potential coinciding with a topographic high point to the south, and following discussion between Arcadis and KCC, it was decided to extend the trenching area to include this.

1.1.4 All work was carried out in accordance with local and national planning policies, and in particular the Planning (Listed Buildings and Conservation Areas) Act 1990, which applies special protection to buildings and areas of special architectural or historic interest, the Ancient Monuments and Archaeological Areas Act 1979, and Section 12 of the National Planning Policy Framework (DCMS 2015), which relates to archaeology.

1.1.5 All work also followed the MoRPHE Project Manager's guide (Historic England 2015), and the Code of Conduct of the Chartered Institute for Archaeologists (CIfA), of which OA is a Registered Organisation. The archaeological works adhered to the Standards and guidance for archaeological evaluation, excavation and archiving (CIfA 2014a; CifA 2014b), and to the KCC requirements for trial trenching (KCC Manual of Specifications for Archaeological Work in Kent, Part B).

1.1.6 The work was monitored by the client's representative (the Arcadis monitoring archaeologist Kate Clover) and by both KCC Senior Archaeological Officer Ben Found and KCC Heritage Conservation Manager Lis Dyson.

1.2 Location, topography and geology

1.2.1 Field 5 lies immediately south of the A20 opposite three houses on the north side of the road, and some 500m east of the junction with the B2067 (Fig. 2). It consists of a large field and a smaller field west of the main field at the north end adjacent to the A20. It is bounded to the west, south and east by further fields (though most of the area to the west is an infilled former quarry). Only the northern part of these two fields was to be evaluated.

1.2.2 The ground here has a height of just under 100m aOD, and is highest towards the south end, dipping away to the south-east and, to a lesser degree, to the north-west and north-east. The sinuous eastern boundary of the field suggests that this follows the line of a watercourse.

1.2.3 Field 5 is situated mostly on the interbedded sandstone and limestone of the Hythe Formation, part of the Lower Greensand Group, overlain in its most easterly corner by Quaternary Head deposits, and by a band of alluvium along the eastern edge, following the line of the watercourse.

1.3 Archaeological and historical background

1.3.1 The background to the scheme has already been detailed in the Otterpool Park, Lympne, Kent: Archaeological Appraisal and Fieldwork Strategy, and in the Oxford Archaeology Written Scheme of Investigations (Arcadis 2017a; OA 2018a), so will not be repeated here. Detailed information relating to Field 5 is however considered below.

1.3.2 Historic maps show that this area has been undeveloped since the later 18th century. On the Ordnance Survey draft map of 1797 a boundary running north-east to south west from the A20 divides off a small trapezoidal field from the rest, and this field survives until after 1877, as it is still shown on the 1st edition OS map. By the time of the 2nd edition of 1892, however, this boundary has gone, and there is only one field.

1.3.3 On the 1797 map the central part of the field is wooded, with a narrow rectangle of woodland extending north-north-west up to the boundary of the smaller trapezoidal field (Arcadis 2017b, fig. 7). On the tithe map the wooded area is again evident, lying immediately west of the area to be evaluated, but east of this the woodland has been cleared, and the larger eastern field is divided in two by a north-east to south-west boundary. Within the more northerly field a narrow rectangular parcel marks the limit of the former north-north-west extension to the woodland.

1.3.4 By 1877 the outline of the wooded area to the west remains, although the area is not shown as wooded, but on the 2nd edition of 1892 the area is clearly still wooded, and is shown as such on the 1899, 1908, 1933 and 1943-6 OS editions as well. This woodland has now been cleared.

1.3.5 There are no internal boundaries within the area to be evaluated on the 1908, 1933 or 1943-6 OS editions, though the division separating off the north-west trapezoidal field is still evident on modern views, suggesting that it was still present in part throughout the 20th century.

1.3.6 The long narrow rectangle that was shown as wooded on the earliest historic maps, and as enclosed on the Tithe map, is evident as a sunken area on aerial photographs both in 1946 and 1964, and is also visible on the LiDAR survey of this field, and (faintly) on the geophysical survey plot (OA 2018a, figs 16-18).

1.3.7 Apart from the small trapezoidal field on the north-west, the area is entirely within Area of High Archaeological Potential G1 (OA 2018a, fig. 3), identified due to the discovery of a Neolithic axe and possible medieval remains near Upper Otterpool.

1.3.8 The geophysical survey (Fig. 3) recorded a variety of rectilinear anomalies on the south-west side of a linear boundary running from north-west to south-east within the north-east edge of the field. This appears to become a trackway, or a double boundary, south of the

main concentration of associated linear features, which are suggestive of a series of small plots or enclosures adjacent to the north-east side of a large rectilinear enclosure. This larger enclosure continues north-westwards into the smaller trapezoidal part of Field 5, returning north-eastwards within this small field, and the geophysical survey interpretation (SUMOgeophysics 2018) suggested that this might represent a Roman villa. Unfortunately, the north-east corner of the trapezoidal field was not surveyed due to the unevenness of the ground.

1.3.9 At both the north-west and south-east ends of the large enclosure there are at least one pair of returns some 20m apart, dividing off smaller sub-enclosures and strongly suggesting a symmetrical layout within the enclosure.

1.3.10 A boundary runs at right angles south-westwards from the south-west side of the large enclosure, which on this side appears to have several parallel ditches, possibly indicating a number of phases. These are marked as possibly archaeological to the north-west, but of uncertain function at the south-west corner.

1.3.11 Two bulbous discrete features are indicated by the survey within the large enclosure, both of uncertain character.

1.3.12 East of the main boundary is a short length of north-south straight linear feature, and just east of this a sinuous wider anomaly that may represent the former line of a stream course.

1.3.13 The greyscale plot (OA 2018a, fig.5) indicates a large number of discrete anomalies across the field, but other than the few mentioned above, none is considered to be of archaeological origin on the geophysical survey interpretation (OA 2018a, fig. 6).

2 EVALUATION AIMS AND METHODOLOGY

2.1 General Aims

2.1.1 The general aims of the evaluation trenching were:

2.1.2 To determine the presence or absence of archaeological remains, and where these exist, to establish the character and complexity of any remains by sample excavation;

2.1.3 To test the geophysical survey results;

2.1.4 To attempt to establish the date of the deposits encountered through artefact recovery;

2.1.5 To determine the degree of complexity of any surviving horizontal or vertical stratigraphy;

2.1.6 To determine the potential of the sites to provide palaeo-environmental or information by establishing the environmental significance of deposits through targeted environmental sampling, processing and assessment. Specific objectives relating to palaeo-environmental remains are outlined in the Otterpool Park Archaeological Appraisal and Fieldwork Strategy (Arcadis 2017a) and summarised in the WSI (OA 2018a);

2.1.7 To determine the potential of the site to provide economic evidence, and the forms in which such evidence may survive;

2.1.8 To assess the associations and implications of any remains encountered with reference to the historic landscape;

2.1.9 To place any archaeological discoveries into their local and, where appropriate, regional/national contexts, and to assess the implications of any such discoveries for our current understanding of settlement and landscape change in the area;

2.1.10 To generate an accessible and useable archive which will allow future research of the evidence to be undertaken;

2.1.11 To disseminate the results of the work in a format and manner proportionate to the significance of the findings.

2.2 Site-specific Aims

2.2.1 Following the identification of stone walls associated with Roman pottery and tile in Field 5, the evaluation aims were refined to establish the answers to key questions about this possible Roman villa, while doing as little damage as possible to the surviving remains. The specific aims included the following:

2.2.2 To establish the northern limit of the masonry structures within the evaluation area;

2.2.3 To establish whether complex stratigraphy and phasing was present;

2.2.4 To establish whether associated structures outside the main area indicated by the geophysical survey might exist further south, and particularly upon a slightly raised area within the formerly wooded area;

2.2.5 To clarify whether the formerly wooded area to the south of the targeted evaluation area, where slight banks were visible on the surface of the field, represented the remains of an earlier, possibly prehistoric enclosure.

2.3 Methodology

2.3.1 An area of just under 6ha was targeted within Field 5 for a 2.5% evaluation, which involved a total of 24 trenches, Trenches 241-264 (Fig. 3). These covered the northern ends of the main field, then under arable cultivation, and of the smaller trapezoidal field to the west, which was pasture.

2.3.2 Most of the trenches were 30m long and 2m wide, but Trench 249 was extended to 40m long. The 24 trenches include supplementary trenches 257 and 258, which were dug to establish the likely limits of a masonry building found in Trench 243, so were not dug to specified lengths. Trench 243 itself was extended on the north side to allow further investigation of what proved to be a hypocaust. Trench 257 was over 43m long, and 258 just under 10m long. Trench 246 was extended from 30 to 36m, and Trenches 262 and 263, which had located a mound, were extended by 16m and 15m respectively.

2.3.3 The trenches were targeted upon the identified geophysical anomalies, upon fainter linear features that could be of archaeological origin, and otherwise aimed to provide even coverage of the evaluated areas of the field.

2.3.4 A summary of OA's general approach to excavation and recording can be found in Appendix A of the WSI (OA 2018a).

2.3.5 The trenches were excavated using a mechanical excavator fitted with a toothless ditching bucket under the close supervision of an archaeologist down to the top of the first archaeological horizon, or failing that, to the surface of the underlying geology.

2.3.6 A metal detector was used to scan the spoil, and to highlight the locations of metal finds within the stripped trenches.

2.3.7 The revealed horizons/surfaces were inspected for archaeological features, photographed and planned.

2.3.8 Following stripping, hand-cleaning as necessary, photography and planning, all trenches were left open for at least 48 hours in order to allow exposed archaeological features to weather out.

2.3.9 Due to the presence of cobbled surfaces, stone walls and finds spreads, Trenches 242-244 and 258 were completely cleaned by hand to expose the features, as were most of Trenches 241, 257 and the north end of Trench 246.

2.3.10 As agreed with the KCC Senior Archaeological Officer Ben Found and the Arcadis consultant Kate Clover, only the outlines of the walls and stone surfaces were planned by hand. Detailed photographs were taken with a camera mounted on a polecam to allow photogrammetry to be used to provide an accurate and 3-D record of the exposed masonry.

2.3.11 Agisoft Photoscan was used to create a photogrammetric model from the photographs.

2.3.12 A representative sample of archaeological features was investigated by hand to characterise and (if possible) date them, and sections of all investigated archaeological features were drawn at an appropriate scale.

2.3.13 Following discussion and agreement with KCC Senior Archaeological Officer Ben Found, one or two very large features were only subjected to limited hand-excavation, following which further excavation was carried out by machine under close archaeological supervision. This was the case for the very broad linear feature 24712 in Trench 247.

2.3.14 In Trench 251, ditch 25110 was part-excavated by hand, but due to the depth of this feature, the trench was widened to allow access for further excavation by machine. Due to the high water table here, however, and the soft sandy nature of the natural clay, the excavated section collapsed before it could be recorded in detail. Further attempts to allow safe access resulted in further collapse, so this ditch was recorded using a measured sketch and photographs. A sample of the lowest fill was obtained by machine for environmental processing.

2.3.15 The mound in Trenches 262-263 was exposed following the removal of topsoil and subsoil. In both trenches, however, the eastern parts of the trenches (16m in Trench 262 and 6.5m in Trench 263) were heavily disturbed, the soils containing modern glass and other rubbish, so that the continuation of the mound was uncertain in plan. In Trench 263 this material appeared to be confined to the area east of a field boundary ditch, suggesting dumping adjacent to the former woodland area.

2.3.16 The disturbed area in the north-eastern part of Trench 262 was removed by machine under close archaeological supervision, and the sections were inspected for evidence of the mound or the underlying buried soils. The similarly disturbed area in Trench 263 was not removed or further investigated, as the section of Trench 262 had already established the limits of the mound and of the buried soils beneath in this direction.

2.3.17 Two sondages measuring 2.0 x 0.6m and 2.0 x 0.5m were dug by hand into the mound and the buried soils beneath in Trench 262. A further sondage was excavated across the junction of two mound soils in Trench 263 and a shorter but deeper sondage was dug through the mound and buried soils beneath (Fig. 8).

2.3.18 The character of the layer below the subsoil at the south-west end of Trench 262 was different from that further east, and the sondage through this did not identify any buried soils beneath it. The 7m at the south-west end of this trench was therefore excavated by machine under close archaeological supervision to confirm whether the buried soils were present.

2.3.19 Following the discovery of struck flints in the buried soils beneath the mound in Trench 262, it was decided to record the finds in these soils in more detail in Trench 263. The finds were therefore individually recorded in 3D (Fig. 8).

3 RESULTS

3.1 Introduction and presentation of results

3.1.1 The results of the evaluation are presented below, and include a stratigraphic description of the trenches that contained archaeological remains. The full details of all trenches with dimensions and depths of all deposits can be found in Appendix A. Finds data and spot dates are presented in Appendix B.

3.1.2 Context numbers reflect the trench numbers unless otherwise stated e.g. pit 24503 is a feature within Trench 245, while ditch 26304 is a feature within Trench 263.

3.2 General soils and ground conditions

3.2.1 Most of the trenches contained topsoil (ploughsoil) and a thin subsoil overlying either archaeological deposits or the natural geology.

3.2.2 The natural in most of the evaluated area was composed of a silty clay, but was sandier on the higher ground to the south, and was overlain by alluvial clays along the eastern edge of the site.

3.2.3 Ground conditions throughout the evaluation were generally good, although very wet conditions were encountered during the excavation of the mound in the southern area. Problems with the water table were also encountered in the easternmost trenches (245 and 251), leading to the collapse of sections before full recording could be completed.

3.2.4 Archaeological features, where present, were generally easy to identify against the underlying natural geology. In Trenches 262 and 263, however, distinguishing buried soils where not accompanied by occupation material proved very difficult, making the extent of the mound at the south-west end of the trench uncertain. The modern disturbance on the east also hampered establishing the exact limits of the mound and underlying buried soils in this direction.

3.3 General distribution of archaeological deposits

3.3.1 Field 5 comprised Trenches 241-264.

3.3.2 The distribution of archaeological remains in Field 5 is split between the northern area, which contains a Roman villa and related features, and a southern area, in which there are few features except for a Mesolithic activity area sealed by a Beaker/early Bronze Age mound, probably a barrow.

3.4 Northern area

3.4.1 The northern area comprised Trenches 241-252, 257-259 and 264 (Fig. 3). All the trenches contained archaeological remains.

3.4.2 Trenches are described from west to east, and then from north to south, rather than in ascending number order.

3.4.3 Each of the trenches containing masonry (Trenches 241-244, 246, 257 and 258) is illustrated in detail alongside the vertical photograph of the trench in Figures 6 and 7.

3.4.4 In the following description pottery described only as Roman cannot be more closely dated.

Trench 241 (Figs 6 and 9; Plates 1-3)

3.4.5 This trench was positioned over a series of linear geophysical anomalies running on a NE-SW alignment (Figs 4 and 5). Two of these in the north-western half of the trench did not appear as archaeological features, and features, which included two walls or foundations, were only present in the south-eastern half of the trench (Plate 1). A spring line ran through the north-western part of the trench, and this area flooded.

3.4.6 Sherds of late Iron Age/early Roman pottery were found in the topsoil (24100), as well as flint flakes, an iron nail and a coin (SF124) dating to the later third century. Middle Roman pottery was found in the subsoil (24101), as well as three small lead objects and a coin (SF125) dated to the mid-fourth century AD.

3.4.7 A layer of silty clay buried soil (24117) up to 0.20m thick was found across the whole of the trench over the natural. This may have been a layer of colluvium. Archaeological features had either been constructed on top of this layer, on were cut into it. Roman pottery, iron nails and animal bone were found within layer 24117.

3.4.8 A dump of fragments from a lava rotary quern (24111) was found between colluvium 24117 and the subsoil. A little Roman pottery was discovered amongst the fragments.

3.4.9 Two structural phases were recognised in Trench 241. The first was a limestone wall or foundation (24106=24118) aligned NE-SW, which was 0.69m wide (Plate 2). The south-western part (24106) consisted of large irregular and worn blocks up to 0.20-0.40m across; the north-eastern half (24118) was composed of smaller worn fragments 0.10m across, with larger blocks adjacent to 24106. This might indicate two phases of construction, but it may simply represent variations in a single foundation. A sondage excavated through layer 24117 on either side of 24106=24118 revealed that the stonework was constructed on the surface of the layer, and the rough construction suggests that it was either a foundation for a wall at a higher level or the base for a timber construction (Fig. 9 Section 24100).

3.4.10 To the south-east of wall 24106=24118, and respecting it, was a mixed layer of brown silty clay and mortar (24116), which was 0.11m thick. This may be the remains of a mortar floor surface, or alternatively a construction layer from the adjacent wall. It continued south-east beyond wall 24104, whose foundation trench cut it. Overlying 24116 south-east of later wall 24104 was layer 24107, a further layer of silty clay that was also 0.11m thick, and contained middle Roman pottery. This also appeared in places north-west of the later wall, but did not extend beyond wall 24106=24118.

3.4.11 Layer 24107 was cut by the construction cut (24109) for wall 24104 (Fig. 9 Section 24100). The limestone wall was composed of roughly hewn and faced outer stones and a rubble core bonded with light orange brown mortar (Plate 3). It was 0.67m wide and survived two courses (0.31m) high, and was constructed on an angular rubble foundation 0.20m deep (24108). The backfill of the construction cut (24110) produced early-middle Roman pottery.

3.4.12 An uneven cobbled limestone surface (24105) overlay layer 24107 to the south-east of wall 24104 (Plate 3). This surface did not have a direct relationship with the wall, but did

not extend north-west of it, so was probably associated with it. A 0.13m thick build-up of silty clay (24103) above layer 24105 abutted wall 24104.

3.4.13 Three successive layers were found in the south-eastern corner of the trench (Fig. 6). The earliest of these (24114) overlay layer 24103, but none of these surfaces reached the edge of wall 24104. Layer 24114 consisted of limestone fragments of similar size to those in 24105. This was overlain by layer 24113, a layer of gravel and mortar, which in turn was overlaid by a dump of tiles (24112). These upper three layers were not further investigated, but may represent a rough area of hardstanding that had been repaired on more than one occasion.

3.4.14 In summary, two phases of foundation or wall were discovered in Trench 241. Foundation 24106=24118 was associated with layers 24116 and 24107, at least one of which was a floor layer. These were cut by the construction of wall 24104, and layers 24105 and 24103 were associated with this later wall. Three later hard surfaces were then deposited. The first phase wall is not dated, the second phase wall was of early/middle Roman construction, and use continued in the middle Roman period.

Trench 242 (Figs 6 and 9)

3.4.15 Stone structures were exposed at the south-western end of the trench that appeared to represent the south-east end of a rectangular structure (24419), abutted by a wall (24205) that extended toward south-east.

3.4.16 Wall 24219 formed three sides of a rectangular building whose south-east end lay within the trench (Plate 5). The structure was 4.4m wide, and the walls or foundations were 0.7m wide within construction cut 24220, which was up to 0.35m deep (Plate 5). Up to three courses of stone were visible in the south-east side, and 24219 was composed of rough limestone blocks with little evidence of finishing, with the largest stones measuring 0.20m in length and 0.10m thick. Lower subsoil layer 24202 overlay the building and the interior. This was up to 0.30m thick and contained early Roman pottery, Roman tile, nails, animal bone, and fired clay with a vitrified green glazed surface, most likely from a glass furnace.

3.4.17 Layer 24204 was within the area that wall 24219 enclosed, and overlay foundation trench 24220 and appeared to abut the top layer of stones (Plate 6). This was a layer of clayey silt 0.21m thick that contained early Roman pottery and two further pieces of fired clay from a glass furnace. This layer was probably an internal make-up layer contemporary with the structure formed by wall 24219. A recent ditch cut through the south-east wall of 24219 and ran across the interior, truncating most of this layer.

3.4.18 Wall 24205 was aligned NE-SW and measured 0.6m wide and over 8.7m in length, ending against wall 24219 on the north-east but continuing beyond the end of the trench to the south-west. At the south-west end the wall was constructed of roughly hewn and faced outer stones and a rubble core, the larger blocks up to 0.40 x 0.25m. There was no obvious bonding, although a few of the larger stones had traces of mortar adhering. A small extension dug on the west side showed that only a single course of the wall survived, and sat upon a foundation 0.8m wide consisting of a single layer of unshaped limestone fragments within construction cut 24206 (Fig. 9 Section 24202). Further north the wall had not survived, only the foundation.

3.4.19 At one point the east side of the faced part of the wall was abutted by several smaller pieces of limestone, and overlain by a scatter of others. South-west of this was 24217, a single

course of close-set large limestones 1.1m long and 0.4m wide, roughly parallel to wall 24205. At the north end the stones petered out. This was believed to represent a narrow wall forming the other side of a drain alongside wall 24205, but may alternatively have been a limestone surface that originally abutted the wall but had been cut through when the wall was robbed.

3.4.20 To the east of the wall was layer 24203, a probable yard surface of clayey silt and gravel. This contained early Roman pottery, Roman tile, imbrex and tegula, as well as a bow brooch of 1st century AD date and an oyster shell.

3.4.21 To the north-east of structure 24207 was pit 24209 (Fig. 6 and Fig. 9 Section 24200). This was 0.8m wide and 0.27m deep and was fill by 24210, which contained iron nails, Roman pottery and large masonry fragments. Ovoid pit 24215 was 1.4m to the north-east of pit 24209, but was not excavated.

3.4.22 Two ditches on a NW-SE alignment were discovered in the north-eastern end of the trench. Adjacent to pit 24215 was ditch 24221, which was 1.37m wide. This was not excavated. Further north-east, ditch 24213 was 0.40m wide and 0.20m deep, and its sole fill (24213) produced Roman tile and imbrex (Fig. 9 Section 24203). The ditch was recut as ditch 24211. The recut was larger, being 0.80m wide and 0.40m deep, and its sole fill (24212) produced tile fragments and middle Roman pottery.

3.4.23 In summary, the structural elements in Trench 242 comprised long wall 24205 with yard surface 24203 and either another wall or a limestone surface (24217) to the east. This probably abutted a rectangular building 24219, on a NW-SE alignment, and this enclosed layer 24204. All the dateable artefacts recovered from the layers associated with these walls were dated to the 1st century, and the structures may therefore be dated tentatively to the early Roman period.

Trench 257 (Figs 7 and 10)

3.4.24 Trench 257 lay in the main field east of Trench 252, and was orientated NE-SW (Figs 4, 5 and 7). It was excavated to establish the limits of the masonry building found in Trench 243 to the south, but did not locate any further masonry, though pits and ditches were found.

3.4.25 The natural weathered limestone in this trench was overlain by a layer of yellowish-brown silty clay (25702) up to 0.48m thick containing infrequent small stones, charcoal and small scraps of ceramic building material. All of the archaeological features were cut into this deposit.

3.4.26 Eight ditches, a pit and two postholes were discovered in Trench 257. Three of the ditches (25710, 25726 and 25728) were orientated NW-SE. Ditch 25710 was 1.70m wide and 0.70m deep and was V-shaped with four fills (Fig. 10 Section 25702). The lowest fill contained early Roman pottery and Roman brick and tegulae fragments, whilst the other fills also contained Roman pottery and ceramic building material (CBM). Ditch 25703 was not visible continuing across the end of Trench 258 to the south-east, so probably ended at the edge of Trench 257.

3.4.27 Ditch 25726 was 2.50m wide, and ditch 25728 was 2.1m wide. Neither of these was excavated. An E-W soilmark visible between them may represent a ditch, but was not further investigated. This was cut by 25726, but the surface fill suggested that it was contemporary

with 25728. Ditch 25738 towards the north-east end of the trench was aligned NNW-SSE, and was only 0.3m wide. It was not excavated, although Roman pottery was found on its surface.

3.4.28 Ditches 25703, 25732 and 25736 were all aligned N-S. Ditch 25703 was 1.94m wide and 0.75m deep and had five fills (Fig. 10 Section 25701). Lower fill 25704 produced early/middle Roman pottery, blue bottle glass, animal bone and CBM, including a tegula with a cutaway suggesting a late Roman date. The other fills contained early Roman pottery and further CBM and glass, as well as nails and hobnails.

3.4.29 Ditch 25732 was 2.20m wide, and early/middle Roman pottery was found on the surface. A possible small pit (25734) was seen on the edge of the ditch. Ditch 25736 was 0.40m wide. None of 25732, 25734 and 25736 were excavated.

3.4.30 Ditch 25719 was in the eastern part of the trench. The western part of the ditch was curvilinear, with the eastern part aligned E-W and running beyond the limits of the trench. The ditch was 0.40m wide and 0.14m deep and contained Roman CBM, blue bottle glass and middle/late Roman pottery. It was cut by pit 25715 (Fig. 10 Section 25703). The pit was 1.30m in diameter and 0.84m deep and contained three fills. Finds included late Roman pottery, animal bone, and flue tiles.

3.4.31 Pit 25722 was 0.40m wide and was not excavated. Two postholes were also found in the trench (25730 and 25724). Neither was excavated.

3.4.32 A coin dated AD 275-285 was recovered from the subsoil, along with a nail. Further nail fragments and lead waste were discovered in the topsoil.

Trench 258 (Figs 7 and 11; Plate 7)

3.4.33 Trench 258 was a spur trench leading off Trench 257, and terminating 2m from Trench 243.

3.4.34 Overlying the weathered limestone natural in this trench was layer 25816, a yellowish-brown silty clay at least 0.2m thick containing occasional fragments of charcoal and scraps of ceramic building material. All of the archaeological features were lying on top of or were cut into this layer. This was probably the pre-existing soil formed over the limestone, equivalent to layer 25702 in Trench 257. Layer 24328 in Trench 243 adjacent was probably equivalent.

3.4.35 Two structural phases were recognised in Trench 258 (Figs 5 and 7; Plate 7). The first phase comprised a band of stones 25811 on a NE-SW alignment some 0.35m wide, and a larger wall foundation 25810 that ran NW-SE and was 0.55m wide. Both consisted of up to two courses of roughly hewn limestones up to 0.20m long and 0.10m thick, and 25811 was sloping down to the north-east (Fig. 11 Section 25800). Both were overlaid by a levelling deposit (25806) consisting of a dark greyish-brown sandy silt with many mortar and crushed CBM fragments. Middle/late Roman pottery was also discovered in this layer, as well as an oyster shell.

3.4.36 On top of layer 25806 part of structure 25804 was found (Fig. 7). This comprised wall foundation 25807, stone pad 25813 and wall foundation 25812. Foundation 25807 was aligned NW-SE, was at least 4m long and at least 0.50m wide. This was built from small undressed limestone surviving to three courses. On the north-east side of the foundation at the north-west end was a rectangular foundation 25813 aligned parallel to 25807, which measured 1.30m long and 1m wide. This was comprised of slightly larger undressed

limestones. The rectangular foundation had a well-defined edge where it met the wall foundation, perhaps indicating that 25807 was constructed first, though this relationship was not further investigated. This may have been the base of a free-standing structure, or alternatively a buttress added to wall 25807. It was not clear whether foundation 25807 continued beyond 25813 into the baulk, or ended adjacent to it.

3.4.37 At the south-east end of the trench, wall foundation 25812 was on a slightly different, WNW-ESE alignment to 25807. It is possible that the two walls were contiguous, but the stones at the south-east end of 25807 were patchy, and were removed as layer 25817, which was 0.16m thick and produced late Iron Age/Roman pottery. Foundation 25812 was composed of undressed limestones up to 0.20m in length and 0.15m thick, and two courses of stones survived in places. Unlike the other walls in Trench 258, lime mortar was not apparent within 25812.

3.4.38 Wall foundation 25808 was also part of the second structural phase, and overlay wall 25811 and posthole 25814 to its east. The posthole contained early/middle Roman pottery. Wall foundation 25808 was 0.25m wide and consisted of undressed limestones up to 0.15m in length, of which two courses survived in places.

3.4.39 Two layers of rubble (25805 and 25818) overlay the second structural phase. These may represent a phase of disuse and demolition. Layers 25805 and 25818 were both 0.20m thick, and overlay 25808 and 25812 respectively (Fig. 11 Section 25800). Early Roman pottery came from 25805 and middle Roman pottery from 25818, while both contained CBM and animal bone. Above these layers there was a lower layer of subsoil (25803), which was 0.10m thick and contained Roman pottery, CBM including a flue tile dated AD 160-260, vitrified clay with a green glazed surface from a glass furnace, nails and a medieval sherd of pottery dated *c* 1225-1400.

3.4.40 In summary, two structural phases were recognisable in Trench 258. The stonework of the earlier phase is not easy to interpret, but the second phase involves a wall foundation on a NW-SE alignment, possibly with a buttress at the north-west end. Neither of the phases is securely dated, with the best dating evidence comprising middle/late Roman pottery in the layer between the two structural phases (25806) and early/middle Roman pottery from posthole 25814, stratified beneath the second structural phase. This evidence suggests that the early phase is early/middle Roman, and the later phase middle/late Roman.

Trench 243 (Figs 7 and 9; Plates 8-11)

3.4.41 The western part of Trench 243 contained at least two phases of Roman building. The weathered limestone natural in this area was overlain by layer 24328, a layer of yellowish-brown sandy clay 0.24-0.30m thick, which produced Roman tile. This was followed by layer 24327, another sandy clay of similar thickness, and this in turn by layer 24326, a greyish-brown sandy clay only 0.14m thick that contained charcoal flecks, middle/late Roman pottery and a tegula fragment (Fig. 9 Section 24300). The surface of layer 24326 was the level from which the structures were constructed, either cutting into or resting upon this layer. Some of these layers presumably corresponded to the pre-existing soil found in adjacent Trenches 257 and 258 (25709 and 25816), but it was thought that one or more of the upper layers may have been redeposited, laid down to raise the level of the ground in preparation for the stone buildings.

3.4.42 A series of walls or wall foundations were found within Trench 243 on either a NW-SE or NE-SW alignment (Figs 5 and 7; Plate 8). Wall 24308 ran NW-SE and was traced for 5.5m, with three walls at right angles on the north-east side. The western two of these returns, walls 24343 and 24344, defined a hypocausted room; wall 24345 was only 1.2m beyond 24344, so may have defined a narrow corridor. Wall 24346 ran south-eastwards from wall 24345, disappearing into the southern baulk, and another wall running SW-NE crossed the trench further east, parallel to 24345 and just under 3m south-east of it. This was wall 24347, and it returned north-westwards within the trench (24348). The area bounded by walls 24345-8 was a square whose sides were just under 3m long.

3.4.43 All of these walls were 0.55-0.60m wide and were constructed of limestones bonded with a light grey and yellow sandy mortar, with larger roughly dressed blocks up to 0.5m long, 0.1m wide and 0.15m thick and a rubble core. Walls 24308, 24343 and 24344 all had better-dressed internal faces than those on the outer side, and used larger blocks on the internal face. There was no evidence from the exposed tops of these walls that any were of different phase to one another, and they may all have belonged to a single building.

3.4.44 Walls 24308, 24343 and 24344 were the only walls to be excavated to the bottom, and all were founded on the weathered natural limestone (Fig. 9 Sections 24300 and 24303; Plates 9 and 11). These walls survived 0.60m, 0.58m and 0.7m high, and surrounded a hypocausted room. An arch of limestone and tiles bonded with the same light greyish yellow mortar (24333) was found at the south-west end of wall 24343 (Fig. 9 Section 24303; Plate 9). The arch was 0.70m wide and framed an opening 0.27m wide and 0.35m high.

3.4.45 The floor of the hypocaust (24331) consisted of mortar like that used for the walls, but with the addition of crushed tile. A line of four square pilae (24332) remained *in situ* on the mortar floor, and were fairly evenly spaced across the width of the room parallel to wall 24308 (Fig. 7; Plate 9). The tiles had sides 0.20m in length, and were 0.03m thick. Only the bottom tile survived in three of the four pilae; the second tile of the fourth survived, but had been dislodged. A 0.03m thick burnt layer of dark clayey charcoal (24330) lay over the mortar floor around the pilae (Fig. 9 Section 24304). This contained Roman pottery including two unidentified rim sherds from similar wheel-turned vessels that appear to be from the narrow neck of flagon-like objects with a simple D-section beaded rim (diameter *c* 40mm). The layer also produced CBM including tegulae fragments dated AD 100-180, as well as mortar, plaster, possible hammerscale, and fish and small mammal bones. Above layer 24330 was a second, poorer quality mortar floor (24329). This was 0.02m thick.

3.4.46 Floor 24329 was overlain by a sequence of seven demolition layers that filled the hypocaust (24339, 24319, 24342, 24341, 24340, 24318 and 24317; Fig. 9 Section 24304). Layer 24319 was 0.42m thick, the others were between 0.10-0.16m thick. The second, six and seventh layers (24319, 24318 and 24317) produced artefactual material, including two small sherds of late Iron Age/early Roman pottery, a much larger quantity of middle Roman pottery, CBM including tegulae dating AD 160-260, mortar, plaster, fired clay from a glass furnace, an oyster shell, and animal bone. Fragments from two stone column bases were discovered within layer 24317, the uppermost demolition layer (Plate 10), both of oolithic limestone Marquise stone from Boulogne (France). The better-preserved column probably dates to the 2nd or 3rd century. This layer also produced window glass.

3.4.47 South-east of the hypocaust and wall 24344 the narrow corridor between this and wall 24345 contained a layer of soil (24306) that overlay the edges of the walls on either side. This was a late deposit, but was not removed.

3.4.48 The room surrounded by walls 24345-8 was filled by layer 24305 (Plate 8). This was composed of rough limestones within sandy clay interpreted as the foundation for a floor, and spreads of pink mortar may indicate the character of the destroyed floor. This layer was not further investigated. Both wall 24347 and 24346 were obscured by a large soilmark (24304) in the south-eastern part of the room. This was 1.5m in diameter and was probably a later pit, but was not excavated. South of walls 24345 and 24346 was layer 24338, a compact mix of limestones in silty clay, although very little of this was exposed within the trench. If wall 24308 continued south-eastwards, this may have been another room between it and wall 24346.

3.4.49 South-west of wall 24308, where layers 24328, 24327 and 24326 had been exposed, 24326 was overlain by a worn cobbled surface (24316) that abutted the wall. This was composed of limestone cobbles in a matrix of silty clay, and unlike the other limestone spreads, appeared to have had considerable use.

3.4.50 Cut into layer 24326 some 1.2m south of wall 24308, and running parallel to it, was linear feature 24321 (Fig. 9 Section 24300; Plate 11). This had a very steep north-east side and a flat base, and bottomed on layer 24322 at a depth of 0.64m. Layer 24322, of which only a small part was exposed within the excavated cut, consisted of fragments of limestone 0.05m thick, thought possibly to represent the very bottom of a wall, although it may instead have been the surface of the natural weathered limestone. The sole fill of 24321 was 24320, a dark clay containing much charcoal, limestone rubble and mortar, early/middle Roman pottery and much tile including a tegula fragment dated AD 100-180. The profile and fill of 24321 suggest that, whether 24322 represents the remains of a wall or not, this was probably a robber trench.

3.4.51 The relationship between this robber trench and layer 24316 was not recorded, but the robbing took place in the Roman period, as robber trench 24321 was overlain by surface 24307, composed of crushed pottery and CBM. Fired clay from a glass furnace was discovered in this layer, as was a large fragment of imported Marquise oolitic limestone, the same type as that from which one of the columns found in layer 24317 was made.

3.4.52 Surface 24307 was cut by 24325, a shallow cut containing foundation 24323, which consisted of a single course of limestone blocks up to 0.20m long and 0.10m wide (Fig. 9 Section 24300). This foundation measured 0.92m by 0.55m wide, and was in line with wall 24344 north of 24308. Around the stones, cut 24325 was filled with packing 24324, which did not contain any finds.

3.4.53 Three ditches (24335, 24337, 24311) were exposed to the east of the stone building. Ditch 24335 ran NE-SW and was 1.30m wide, and early Roman pottery was found on the surface. Ditch 24337 ran WNW-ESE, terminating just before reaching 24335, and was 0.33m wide and 0.16m deep, but did not contain any finds. Ditch 24311 was oriented NW-SE and was 1.92m wide and 0.54m deep, with a V-profile and a single fill (243112) that produced late Iron Age/Roman pottery and tile. This was the same feature as ditch 24416 in Trench 244 to the south-east, where it was dated to the early/middle Roman period.

3.4.54 A possible road surface (24315) consisting of a compact surface of limestones bedded in clay, was discovered 1.35m to the north-east of ditch 23411, and following the same alignment. This had an irregular linear cut (24313) in its surface, 0.14m wide, also on a NW-SE alignment, and this may have been a wheel rut. Two sherds of medieval pottery as well as probable Roman nail fragments were found on the surface of the rut.

3.4.55 Midway between ditches 24335 and 24311, pit 24304 was partly exposed on the north side of the trench. It was 1.50m in diameter, and fill 24303 was limestone rubble in a matrix of silty clay, but it was not excavated.

3.4.56 Iron objects and CBM were found in the topsoil and subsoil. The topsoil also produced tegulae fragments dated AD 160-260.

3.4.57 In summary, two phases of stone structure including a hypocaust were found in Trench 243. Only two small sherds of material dating to the 1st century came from contexts associated with the stone structures, and these were from layer 24317, the infilling of the hypocaust. The only other early Roman pottery was from ditch 24335. No artefactual material dating after *c* AD 250 was found in Trench 243, other than the medieval sherds found over the road at the east end. The vast majority of the pottery and CBM was dated to the later 2nd century or first half of the 3rd century AD, and both phases of activity probably belong during the middle Roman period. The wall plaster recovered from the trench is likely to derive from a bath-house.

Trench 244 (Figs 7 and 9; Plates 12-14)

3.4.58 This trench was aligned N-S and lay south-east of Trench 243 (Figs. 5 and 7). Ditch 24416 ran across the northern part of the trench on a NW-SE alignment, and was 1.40m wide. Limited trowelling of the top fill (24415) recovered early/middle Roman pottery and CBM. The ditch was the same as 24311 to the north-west. As in Trench 243, a possible road surface (24403) was found on the north-east side of the ditch. This consisted of a compacted limestone surface set in clay, and was at least 7m long and 2m wide. A possible wheel rut on the same NW-SE alignment was cut through 24403.

3.4.59 To the south of these features, ditch 24418 was on a NNW-SSE orientation. This ditch was 1.20m wide and 0.32m deep with two fills (Fig. 9 Section 24402), and middle Roman pottery and a nail came from the upper fill (24417). Gully 24420 cut the ditch. This was running on an E-W alignment and was 0.40m wide and 0.15m deep. The main fill of the gully (24419) contained late Iron Age/Roman pottery and Roman tile, while the basal fill (24437) contained some very degraded waterlogged plant material, but no finds.

3.4.60 Two probable walls (24404, 24406) were discovered in the central part of the trench (Plate 12). Wall foundation 24404 was aligned NW-SE, and was 0.80m wide and composed of worn limestone blocks up to 0.32m long and 0.15m thick (Plate 13). The larger stones were edge-set, and their external face had been roughly hewn flat, with smaller stones in the middle. The wall was bonded with clay.

3.4.61 Wall foundation 24406 was discovered on a similar alignment 2.30m to the south of 24404 (Plate 12). This was composed of slightly smaller worn limestones, again bonded with clay, but the edges and alignment were less clear. Towards either end of the exposed length the stonework projected further to the north-east, and these projections were interpreted as

contemporary post pads 24407 and 24414, although they might simply indicate that the wall was curving, or only survived in part.

3.4.62 The area between walls 24404 and 24406 contained silty clay layer 24439. This layer included dumps of burnt material with late Iron Age/Roman pottery and some fired clay possibly indicating burning *in situ*. A similar layer (24440) composed of silty sandy clay with frequent CBM and charcoal partly overlay wall 24406 and extended further south, but was not excavated.

3.4.63 Layer 24439 was cut by drain 24405, which ran on a NE-SW orientation and also passed through wall 24404 (Plate 13). Where the drain passed through the wall, it was made of pairs of complete imbrices. South-west of the wall the line of the drain was marked by intermittent small limestones; the drain was not visible north-east of the wall, and may simply have ended here.

3.4.64 Rectangular slot 24434 was situated 2m south of wall 24406. This was 0.45m wide and Roman pottery was found on the surface. It was not excavated.

3.4.65 A sondage south of these features exposed sub-rectangular cut 24433 (Fig. 9 Section 24401). This was at least 0.75 x 0.6m and 0.12m deep, and contained limestone cobbles in a sandy clay matrix (24432). It was recorded as overlain by three successive layers (24431, 24430 and 24429). The middle layer, 24430, was a dark greyish-brown silty clay 0.20m thick, and contained late Iron Age/Roman pottery, Roman CBM and fired clay from a glass furnace. The layer was sandwiched between two layers of possibly redeposited natural (24431 and 24429) that were each up to *c* 0.11m thick. North of the sondage, layer 24430 showed through 24429 in places, giving the impression of further features (numbered as 24422 and 24426). Posthole 24424 was cut through these layers, and was sub-rectangular, measuring 0.7 x 0.35m wide and 0.46m deep. It occupied a central position within earlier feature 24433. Middle/late Roman pottery, tile and animal bone came from its fill (24423).

3.4.66 In the southern part of the trench a large spread of limestones was found (24411=24413). The cobbles covered an area 1.50-2.10m wide. This was cut by ditch 24410 running NW-SE (Fig. 7 and Fig. 9 Section 2400; Plate 14). The ditch was 1.63m wide and 0.62m deep and had three fills. The second fill (24427) produced early/middle Roman pottery, CBM and nails. The main and upper fill of the ditch (24409) produced middle Roman pottery, Roman CBM, mortar, fired cay, nails and an iron strip.

3.4.67 At the southern end of the trench beyond 24411=24413, a layer of silty clay similar to the natural (24412) was found. This contained occasional fragments of pottery, CBM and charcoal, so was interpreted as redeposited natural. The relationship between this and stone spread 24413 was uncertain.

3.4.68 The archaeological features were overlain by layer 24408, which was 0.12m thick. Early/middle Roman pottery was found in this layer, as well as CBM including tegulae fragments dated AD 100-180, a fired clay slab, nails and iron fragments, and slag. The topsoil contained a hobnail, linchpin and nails, whereas the subsoil (24401) produced early/middle Roman pottery, nails, a Roman copper alloy nail cleaner, and a medieval or early post-medieval buckle. Three coins (SFs 128, 127 and 129) were also found in the subsoil over possible road 24415 at the north end of the trench, dating to the late 3rd, early 4th and mid-4th century AD respectively.

3.4.69 Some of the archaeological features can be identified on the geophysical survey. Ditch 24410 is particularly clear, and can be seen to turn to the south-west 3.5m to the south of the trench, and apparently turning to the north-west 9m to the north-east of the trench, running broadly in line with the gap between walls 24404 and 24406.

3.4.70 In summary, a possible road surface in the northern part of the trench was bounded on the south side by a middle Roman boundary ditch. Two walls on the same alignment were found, and a substantial area covered by limestone, whose relatively straight edges could suggest that they constituted some form of stone platform for a building, though this remains speculative. Posthole 24424, which lay just beyond the stone spread, was very substantial, and may belong to a timber building either adjacent to, or enclosing it.

3.4.71 Dating evidence from useful contexts is very slim. However, no material dated to the 1st century, and the only sherds that date to the first half of the 2nd century were within the roadway ditch (24416) and not associated with the structures. Only the coins indicate activity after AD 250, suggesting that elsewhere the activity in Trench 244 dates between the second half of the 1st and first half of the 3rd century BC.

Trench 245 (Figs 4, 5 and 9)

3.4.72 Trench 245 was located on the eastern side of the field, and reached groundwater at a shallow depth (Figs 4 and 5). Pit 24503 was found in the western part of Trench 245. This was 1.10m wide and 0.15m deep (Fig. 9 Section 24500). Its sole fill (24504) produced early Roman pottery, Roman tile and animal bone. Pit 24505 was immediately adjacent to the east, although there was no relationship between the features. Pit 24505 was 1m across and only 0.11m deep, and produced Roman pottery.

3.4.73 Ditch 24509 was 3.56m wide and 0.80m deep and ran N-S (Fig. 9 Section 24500). The ditch contained four fills, and most of the fills were waterlogged. Basal fill 24513 produced middle/late Roman pottery, Roman brick, an oyster shell and animal bone. The second fill (24512) produced middle Roman pottery, CBM, an iron bar, an oyster shell and animal bone, as well as a wooden 'plug'. Late Roman pottery, a later 3rd-century coin (SF135), CBM, a rotary quern fragment, nails and animal bone were found in middle fill 24511, and middle Roman pottery, CBM, further nails and an iron strip, as well as animal bone, was found in upper fill 24510. This ditch can be seen on the geophysical survey continuing on a slightly curved alignment for 120m to the south, and for 10m to the north.

3.4.74 The ditch was cut by pit 24507, which was 0.54m wide and 0.23m deep. Within the pit, CBM, an iron fragment, and animal bone were found, alongside middle Roman pottery that must have been residual as the middle fill of earlier ditch 24509 contained late Roman pottery.

3.4.75 Pit 24515 was found in the centre of the trench. This was 0.40m wide, and Roman pottery, CBM, fired clay from a wattle structure, animal bone and a Colchester brooch were found on the surface.

3.4.76 The features were overlain by a probable occupation layer (24517) that underlay the subsoil. This was a silty clay that varied in colour from brownish-grey on the west to dark blueish-grey on the east. The western part of the layer was removed by machine under close archaeological supervision, and here it was 0.12m thick. Middle Roman pottery, imbrex fragments and an iron nail were found within the layer. Due to the high water table, the layer

was not removed at the eastern end of the trench. Here it overlay a wide anomaly on the geophysical survey that continued northwards to the north-east corner of the field, and southwards for at least 140m.

Trench 246 (Figs 6 and 10; Plate 15)

3.4.77 Trench 246 lay on the west edge of the larger field, south of Trench 242, and was orientated N-S (Figs 4, 5 and 6). A large enclosure ditch (24603) was found in the northern part of the trench (Fig. 10 Section 24601; Plate 15). This was 4.32m wide and was at least 1.16m deep although the base was not reached. The ditch was aligned NW-SE. A middle fill (24607) produced early Roman pottery, alongside tile and a nail. Middle/upper fill 24605 also produced early Roman pottery, as well as CBM dating to the 2nd century and some possible dating to the 1st century, as well as structural fired clay and a nail. The next fill (24606) produced middle Roman pottery, CBM, fired clay and iron fragments, and the upper fill (24604) produced early/middle Roman pottery, middle Roman tegulae fragments, a coin (SF146) dated AD 350-364, structural fired clay and a nail. The ditch therefore appears to have been constructed in the 1st century, and remained at least as a depression throughout much of the Roman period.

3.4.78 On the north side of the ditch the natural silty clay (24602) was at a lower level than on the south, and was overlain by layer 24618, a brownish grey clay containing both sand and silt. The change in level may simply have been due to the natural slope, but was thought to represent deliberate terracing (24617). Layer 24618 was tentatively interpreted as redeposited material dug out of the ditch to form a bank, against which the upper ditch fills accumulated (Fig. 10 Section 24601).

3.4.79 Layer 24618 was cut by 24615, the construction cut for wall 24614, which was aligned NW-SE parallel to ditch 24604. The exposed length of wall was 2.2m, and it was 0.90m wide and survived 0.34m high (Fig. 10 Section 24602). The wall was composed of rough limestones up to 0.18m long and 0.11m thick. It was presumably created to enhance the boundary provided by the bank and ditch.

3.4.80 Another ditch (24612) was discovered at the southern end of the trench. This was 3.75m wide and was left unexcavated. This was the same as ditch 25903 to the south-west, where it was dated to the early/middle Roman period.

3.4.81 Small pit 24610 was seen in the centre of the trench. This was 0.65m wide and was not excavated.

3.4.82 Ditches 24612 and 24603 can both be clearly seen on the geophysical survey. These appear to cross or meet 16m to the north-east of the trench. Ditch 24612 can be followed to the south-west for some 60m, and ditch 24603 for a similar distance to the north-west.

Trench 247 (Figs 4 and 5; Plates 16 and 17)

3.4.83 Trench 247 lay east of Trench 246 (Figs 4 and 5), and was positioned to explore a rectangular feature 60-70m long and over 10m wide shown on historic maps and visible as a sunken area on mid-20th century aerial photographs and recent LiDAR survey (OA 2018a, figures 16-17). The feature (24712) had steep sides and a flat bottom, and was 1.20m deep and 11m wide (Plate 16). There were three sterile fills, the lowest (24724) bluish-grey in colour

suggesting waterlogging, with occasional charcoal flecks. Its date and function were not established.

3.4.84 Ditch 24706 was found in the north-eastern part of Trench 247. This was 1.05m wide and 0.35m deep, and was orientated NW-SE. Its upper fill (24705) contained Roman pottery and mortar. This was cut by modern drain 24708. The drain was placed in the centre of the ditch, suggesting that this remained as a depression until recent times.

3.4.85 Oval pit 24704, which lay south-west of ditch 24706, was 0.90m in diameter and 0.42m deep. Its sole fill (24703) contained Roman imbrex fragments, mortar and limestones (Plate 17), including at least one fragment of Marquise limestone. This is burnt and apparently unworked, but presumably came from an architectural feature. Both of the column fragments in Trench 243 were of the same limestone.

3.4.86 Two square pits (24714 and 24716) were found towards the centre of the trench. These were not excavated.

3.4.87 A curvilinear gully (24720) was found in the south-western part of the trench, running broadly NE-SW, and was 0.45m wide. Ditch 24718 lay adjacent, was 1.70m wide and ran N-S. Neither of these was excavated. Ditch 24718 corresponded to the position of a linear geophysical anomaly.

Trench 248 (Figs 8 and 10; Plate 18)

3.4.88 Trench 248 lay east of Trench 247 (Fig. 3). Eight ditches were found in Trench 248, three of which were cut by modern land drains. Ditches 24803, 24823, 24825, 24829 and 24831 were aligned NE-SW, ditches 24806 and 24812 were aligned NW-SE, and ditch 24809 was aligned E-W. As agreed with the KCC Senior Archaeological Officer, only four of these ditches (24831, 24803, 24806, 24809) were excavated. Ditches 24823, 24825, and 24829 were respectively 1.34m, 6m and 1m wide, but were not excavated. Land drain 24827 was seen to cut the middle of ditch 24825 on the same alignment.

3.4.89 Ditch 24831, at the south-east end of the trench, was 1.8m wide and over 0.75m deep (Fig. 10 Section 24803). A slot was dug into the north-western side, but was not bottomed, and none of the three fills that were excavated produced finds.

3.4.90 Ditch 24803 lay further north-west. It was 1.2m wide and 0.47m deep and its upper fill (24804) contained Roman CBM and a fresh sherd of medieval pottery weighing 56g. This was cut by ditch 24806, which was 1.14m wide and 0.46m deep, and had two fills that did not produce any finds. Land drain 24815 cut though 24806 on the same alignment.

3.4.91 Towards the north-west end of the trench, ditch 24809 ran on an E-W alignment, and was 0.92m wide and 0.26m deep. It had two fills, which were largely truncated by a land drain (24817) that ran on the same alignment, and did not produce any finds. One of the drainpipe sections was retained and dated *c* 1850-1925. The reuse of a number of ditches in the placement of land drains suggests that these remained as depressions until recent times.

3.4.92 North of ditch 24809 were postholes 24819 and 24821, but neither was excavated. South of 24809 two further postholes may be represented by two semicircular soilmarks cut by the north-west edge of ditch 24823. Neither the ditch nor these possible postholes were excavated.

3.4.93 At the very north-west end of the trench was the terminus of ditch 24812, which was 0.54m wide and 0.48m deep. It had two fills, neither of which contained finds.

3.4.94 A layer of limestones (24835), possibly indicating either the remains of a wall or a spread, was found in section in the north-western part of the trench. This was comprised of roughly hewn blocks 0.10-0.14m long, and no mortar was seen (Plate 18).

Trench 249 (Figs 3 and 10)

3.4.95 Trench 249 lay south of Trench 248, and was positioned to cross several geophysical linear anomalies aligned NW-SE (Fig. 3). Six ditches were recorded in Trench 249. Four of these were aligned NW-SE: 24903, 24913, 24915 and 24917. Ditch 24903 at the north-east end was excavated. This was 1.93m wide, with one steep and one sloping side, and was 0.52m deep. There were three fills, none of which contained finds. Ditches 24913, 24915 and 24917 were respectively 0.96m, 1.20 and 1.12m wide. No finds were visible on the surface of their fills.

3.4.96 Ditches 24907 and 24911 were aligned E-W. Ditch 24911, which lay just south of ditch 24903, was 0.49m wide, but was not excavated, and no finds came from its surface. There was no relationship between 24903 and 24911 within the trench.

3.4.97 Ditch 24907 at the south-west end of the trench was excavated, and this measured 0.89m wide and 0.66m deep with a V-profile (Fig. 10 Section 24901). There were three fills, producing middle Roman pottery, Roman CBM and an iron bar.

Trench 250 (Figs 8 and 10; Plate 19 and 20)

3.4.98 Trench 250 lay east of Trenches 248 and 249, and was orientated NNW-SSE (Fig. 3). Eight ditches were found in Trench 250.

3.4.99 At the north-west end ditch 25023 was aligned E-W. Only the edge of this ditch lay within the trench, and it was not excavated, although Roman pottery, CBM and a nail was found on the surface.

3.4.100 Ditches 25021 and 25025 lay just south of 25023, running on parallel NE-SW alignments. These were 0.60m and 0.80m wide, and were not excavated. Ditch 25021 corresponded to a ditch indicated by the geophysical survey.

3.4.101 In the middle of the trench was layer 25018, which was 8.5m wide and 0.05m thick. It may represent subsoil collected in a hollow, but was less clayey, so may instead represent a patch of buried soil. There were no finds from this layer, which was removed by machine under close archaeological supervision to reveal ditches 25013 and 25016, both on a NE-SW alignment. Ditch 25016 was 0.4m across, and was not excavated. Ditch 25013 was 1.44m wide and 0.8m deep, with a V-profile and two fills. The upper fill (25015) produced quantities of tegulae and imbrices including examples dated AD 160-260, and one with an imprint of a child's foot.

3.4.102 Ditch 25019 lay south-east of this, and was 0.75m wide, but was not excavated, and there were no finds from the surface of its fill. Within the trench it appeared to be running east-west, but it corresponded to the position of a linear on the geophysical survey that was aligned NE-SW.

3.4.103 At the south end Trench 250 had targeted a large sub-rectangular anomaly. This corresponded with a soilmark 4.75m wide crossing the trench, and this proved to consist of several elements (Fig. 10 Sections 25000 and 25001; Plate 19).

3.4.104 The earliest elements were at the south end, where the truncated remains of a post- or stakehole (25027) and the cut for an oven or similar structure were found (25010; Plate 19). Feature 25010 was 1.32m wide and 0.27m deep, and the initial fill (25012) consisted of dark greyish-brown clayey silt with very frequent charcoal and ash. This was overlain by a tile 0.28m square and 0.03m thick, upon which a stack of four pilae tiles had been constructed (25036). The height of the base tile and the stack was 0.16m (Plates 19 and 20). The stack had been damaged, only half surviving. Around the stack the feature had been filled in with layer 25011, in which fragments of tile were frequent. North-east of the excavated slot, a reddened area was visible in the surface of 25011, and this may represent the remains of a second pila (Plates 19 and 20). Roman pottery, tile and fired clay with wattle impressions and fired clay characteristic of oven superstructure were associated with this structure. Charred plant remains from layer 25012 produced abundant grain, some of which was sprouted.

3.4.105 Ditch 25003 overlay posthole 25027 and had removed the northern part of oven 25010. This ditch and a parallel ditch 25007 ran NE-SW adjacent to one another but did not intercut. Ditch 25007 was 0.74m wide and 0.19m deep, ditch 25003 was 2.36m wide and 0.35m deep. The fills of ditch 25003 produced Roman CBM, pieces of fired clay with wattle impressions and fragments from a fired clay oven, as well as nails and a key. Fragments of fired clay with wattle impressions came from the fills of ditch 25007.

3.4.106 At this end of the trench, layer 25029 overlay the archaeological features below the subsoil. This was 0.2m thick, and was probably colluvium.

3.4.107 The exact identification of the possible oven structure in Trench 250 remains unresolved due to the limited extent of the feature that was exposed. The presence of two possible stacks of pilae suggests the presence of a suspended floor, and the original structure might have had others, now completely removed by the later ditch 25003. The discovery of fired clay with wattle impressions within the fill of the feature also supports the existence of a suspended floor, and this might indicate that structure 25036 was a type of crop drying oven (Cynthia Poole pers. comm.). Furthermore, the CPR recovered was rich in grain and included a number that were sprouted, and appeared comparable to the assemblage at Nonnington, Kent (Sharon Cook pers. comm.), where it was interpreted as evidence for malting (Helm and Carruthers 2011). In common with structure 25036, at Nonnington the sprouted grain was associated with quantities of daub. This suggests that structure 25036 may have been used in malting.

Trench 251 (Figs 3 and 10; Plate 21)

3.4.108 Trench 251 lay east of Trench 250, and was orientated east-west (Fig. 3). Ditch 25103 was found in the western half of the trench running on a NE-SW alignment, and was 1.11m wide and 0.32m deep (Fig. 10 Section 25100). It contained two fills; the upper fill (25105) contained early/middle Roman pottery, CBM and a nail. The ditch was cut by pit 25114 (Fig. 10 Section 25101). This was 1.18m wide and 0.30m deep, and its upper fill (25116) produced indeterminate fired clay. The pit also cut pit 25106, which was 1.40m wide and 0.44m deep and had three fills. The middle fill (25117) contained early/middle Roman pottery.

3.4.109 Ditch 25108 lay east of the pits, ran on a NW-SE alignment and was 1.25m wide. This was not excavated, although a silver coin (SF 115) in fresh condition dated AD 251-253 was discovered on the surface.

3.4.110 Ditch 25110 was orientated approximately N-S, was 4.10m wide and at least 1.70m deep (Plate 21). Three fills were recorded (25120, 25119 and 25111), but the ditch section collapsed during excavation and a more complex sequence of fills might be present towards the base. The lowest two fills exposed were waterlogged, the earlier of these (25120) producing half of a black-burnished vessel dated AD 250-410. In the second fill (25119), wooden fragments up to 0.08m wide and 0.45m long were observed but left *in situ*. The upper fill (25119) produced early/middle Roman pottery, Roman CBM, nails, and lead caulking and waste. This feature was just west of a wide linear geophysical feature that extended down much of the eastern side of the field, but it is unclear whether this or feature 25112 just east of it corresponded to the geophysical anomaly.

3.4.111 A layer of bluish-grey and dark grey silty clay (25113) was exposed at the very east end of the trench, lying within cut 25112. This was not excavated, although Bronze Age pottery, Roman tegulae fragments and a nail were found on the surface. Its composition was similar to that of layer 24517 at the east end of Trench 245, and was clearly affected by waterlogging. Its position suggests that it may correspond to a wide geophysical anomaly running close to the east edge of the field, which was thought might represent a palaeochannel, or alternatively a canalized channel.

Trench 252 (Figs 3 and 10)

3.4.112 Trench 252 lay south of Trench 251 and contained a single ditch (Fig. 3). Ditch 25203 was aligned NE-SW, was 1.77m wide and 0.65m deep with a stepped profile and three fills (Fig. 10 Section 25200). The ditch fills produced Roman pottery, CBM and fired clay. This could be faintly seen on the geophysical survey to the north-east.

Trench 264 (Fig. 3)

3.4.113 Trench 264 lay west of Trench 249, and was dug to confirm the apparent lack of ditches suggested by the geophysical survey. Only a single feature, pit 26402, was partially exposed in Trench 264. This was 0.42m in diameter and was not excavated, although Roman tile was found on the surface.

Trench 259 (Figs 3 and 11)

3.4.114 Trench 259 lay on the western edge of Field 5 and south-west of Trench 246 (Fig. 3). Ditch 25903, aligned NE-SW, was exposed at the north end the trench, and was 3m wide and around 0.8m deep (Fig. 11 Section 25901). Due to the high water table and wet conditions it was not certain that the excavated profile is quite correct, but was certainly close to the bottom of the ditch. Three fills were exposed, the waterlogged nature of the lowest fill (25906) being clear from the bluish-grey colour of the clayey silt, and organic inclusions were present in both this and the middle fill (25905). Fill 25906 contained early/middle Roman pottery and Roman CBM; the middle and upper fills produced Roman pottery and CBM. The ditch could be seen on the geophysical survey extending to the north-east, and was also uncovered as ditch 24612 in Trench 246.

3.5 Southern area

3.5.1 The southern area comprised Trenches 253-256, and 260-263 (Fig. 3). Trenches 253-256 did not contain archaeological features, although Roman tile was found in Trench 256 as well as a hobnail, nails and iron wire. Worked flint was found in all of these trenches, and lead waste was also recovered from the subsoil of Trench 254. Trenches 253-256 will not be discussed further.

3.5.2 Trenches 260-263 were laid out to investigate a slight earthwork corresponding to the boundary of a wooded area recorded on historic maps, which it was thought might be prehistoric in origin, and to examine a slightly raised area evident on the LiDAR survey, close to which the geophysical survey had indicated significant disturbance.

Trench 260 (Fig. 3)

3.5.3 Trench 260 was located to cross the western side of the earthwork boundary. A single ditch (26003) aligned NNE-SSW was discovered, corresponding to the area of disturbance marking the boundary in the geophysical survey. The ditch was 0.72m wide and 0.34m deep with a V-profile and a single fill, which was sterile.

3.5.4 A single sherd of pottery dating to the late Iron Age or early Roman period was found in the subsoil.

Trench 261 (Figs 3 and 11)

3.5.5 This trench was located to cross the northern boundary of the wooded area. A single ditch (26103) running NW-SE was discovered in the corresponding position in Trench 261. This was 4.60m wide and 0.80m deep, with a sloping south side and a very gently sloping north side (Fig. 11 Section 26100). The first fill (26104) was a stony deposit spread along the north side, and was probably deliberately dumped. The succeeding fills (26105 and 26106) were much less stony, and the only find was a flint flake from the base of fill 26106.

Trench 262 (Figs 3, 8 and 11; Plate 22)

3.5.6 Trench 262 was laid out to cross the eastern side of the boundary around the formerly wooded area, the largest area of geophysical disturbance, and the slightly raised area. Below topsoil and ploughsoil along most of the length of the trench layer 26203 was discovered. This was up to 0.56m thick in the western part of the trench, reducing to only 0.10m in the centre of the trench (Plate 22; Fig. 11 Sections 26200 and 26201). A single small sherd of grog-tempered pottery dating to the Neolithic or early Bronze Age was discovered within this layer and the flint assemblage included pieces of Neolithic/early Bronze Age character. This soil was interpreted as a mound.

3.5.7 Two hand-excavated sondages 2m long and 0.5-0.6m wide were dug through the mound. In the central part of the trench two layers of buried soil (26204 and 26205) were discovered beneath mound 26203 (Fig. 11 Section 26201; Plate 22). No finds were recovered from these layers, but monolith samples were taken to characterise the soils and look for pollen. In the south-western sondage there were no buried soils present below layer 26203, which directly overlay the natural (Fig. 11 Section 26200). Following the excavation of the south-western sondage, layer 26203 was removed by machine at the south-west end of the trench to confirm that the buried soils did not extend this far. No further evidence of the buried soils was seen.

3.5.8 To the north-east, modern disturbance had disturbed the top of the mound, mixing in recent rubbish, so this was removed by machine under close archaeological supervision to look for features or soils sealed beneath it. The approximate limit of the mound in this direction is indicated on Figure 3.

3.5.9 Layer 26203 is interpreted as the mound of a barrow, sealing an earlier sequence of buried soils. Equivalent layers were discovered in Trench 263.

Trench 263 (Figs 3, 8 and 11; Plate 23)

3.5.10 Trench 263 was located across the west side of the slightly raised area, and to investigate the interior of the possible enclosure. A layer of soil (26311=26309) up to 0.32m thick was found beneath the subsoil in the centre of Trench 263, and represents a continuation of the mound seen in Trench 262 (Plate 23; Fig. 11 Section 26301).

3.5.11 A sondage 2m long and 0.6m wide was excavated across the junction of the two mound soils, and a shorter but deeper sondage through the mound and buried soils beneath (Fig. 8). The mound and buried soil were also investigated adjacent to a ditch towards the east end.

3.5.12 Four tiny sherds of early prehistoric pottery were discovered in the layer, alongside 15 flints of early prehistoric date, and very small amount of intrusive Roman pottery. Beneath 26311=26309 buried soil 26303 was discovered, and this was up to 0.18m thick and 5.75m in width. Buried soil 26303 produced a large assemblage of flint that included Mesolithic and Neolithic/early Bronze Age pieces. The finds from this layer were recorded three dimensionally (Fig. 8). Beaker sherds were also found. Beneath this, another layer of buried soil 0.10m thick (26310) was discovered. This contained grog-tempered body sherds with twisted cord impressions possibly from a coarse Beaker, as well as a flint flake and chips.

3.5.13 In the eastern part of the trench, and extending from just east of ditch 26304 south-westwards, another layer of buried soil (26308) was found over the natural. This was 0.05m thick, and probably represents the same soil as 26303, although 26308 was much lighter in colour and only produced a single flint flake and a core dateable to the late Neolithic/early Bronze Age.

3.5.14 This layer was sealed by layer 26306, which was up to 0.21m thick, and is probably the same as layer 26311=26309, although modern disturbance in the eastern part of the trench made this observation uncertain, and modern wood and glass were found on the surface of the layer. The disturbed part of the mound in Trench 263 was not removed or further investigated in Trench 263, as the section of Trench 262 had already established the limits of the mound and buried soils beneath in this direction.

3.5.15 Ditch 26304 cut layer 26306. This was 1.68m wide and 0.47m deep with a single fill that produced struck flint (Fig. 11 Section 26300). It was overlain by layer 26307, a 0.09m thick sterile layer that also sealed 23606. Layer 26306The ditch was not seen on the geophysical survey, although it was in an area of geophysical disturbance. However, the ditch corresponds to a boundary shown on the tithe map between a field and area of woodland, and despite the early finds from it, it is probably post-medieval in date.

3.5.16 It is likely that this sequence of buried soils represents a barrow mound (26311=26309 and 26306) overlying two layers of earlier buried soils (26303=26308 and 26310). The mound

was also found in Trench 262 (26203), as were two earlier buried soils (26204 and 26205). No ditch was found associated with the barrow.

3.5.17 A significant assemblage of probable early Mesolithic flint was found under the barrow, as well as within the mound. The material from beneath the mound implies the presence of a sizable *in situ* assemblage that may have derived from one or more camp sites. Probable Beaker sherds were also found under the barrow providing a *terminus post quem* for the construction of the monument, with this probably built within a landscape that had been heavily utilised in the Mesolithic and preserving earlier artefactual spreads.

3.6 Finds summary

3.6.1 Field 5 produced a significant assemblage of 297 pieces of struck flint. Over two-thirds of this was from Trenches 262 and 263, where a probable barrow was discovered. The assemblage included a significant early prehistoric component including early Mesolithic material. Some of the material is late Neolithic/early Bronze Age in date, and associated with the barrow and possible pre-barrow activity.

3.6.2 The prehistoric pottery comprised 30 sherds weighing 99g. Most of this was associated with the probable barrow in Trenches 262 and 263, and included beaker sherds.

3.6.3 A total of 1212 sherds of late Iron Age/Roman pottery, weighing 14153g, were recovered. No groups were certainly dated to the late Iron Age, although sherds in a pre-Flavian 'Belgic' fabric were identified that may date before the conquest. Early Roman material accounted for 17% of the assemblage by sherd count or 12% by EVE. A larger quantity of middle Roman pottery was found, accounted for 26% of the assemblage by sherd count or 41% by EVE. Late Roman pottery accounted for 15% on the entire assemblage by sherd count or 21% by EVE, although no context group was dated exclusively to the fourth century. The Roman pottery includes imported vessels that are indicative of moderate to high-status.

3.6.4 Just four sherds of medieval pottery were found, all dating between the 10th-15th century. No post-medieval pottery was recovered.

3.6.5 Fragments of two Roman rotary querns were discovered, one a probably hand-operated quern, the other a millstone. Two columns were found, both of limestone from Boulogne. Other stone was discovered that had the same French provenance. Column bases are extremely rare from rural sites in Roman Britain and are indicative of a very high status building nearby.

3.6.6 A large quantity of ceramic building material, amounting to 1617 fragments weighing 73kg was recovered. The assemblage consists almost entirely of Roman tile, which included roof tile, floor tiles and hypocaust flue tiles.

3.6.7 A modest assemblage of wall plaster (26 fragments, 2456g) and mortar (402 fragments, 4965g) was recovered, mainly from the infill of a robbed hypocaust in Trench 243. A very limited range of colours was represented on the plaster, and no complex designs. The mortar and wall plaster are all likely to derive from a bath-house.

3.6.8 A large quantity of fired clay was recovered, amounting to 729 fragments (14378g) from 30 contexts. All of the material is Roman and includes flat slabs from a wattle structure possibly associated with a malting oven and pieces with a heavily vitrified surface coated in a thick opaque pale green glassy veneer that almost certainly come from a glass furnace.

3.6.9 Ten coins were discovered, all of later 3rd or 4th century date. These included a rare radiate of Trebonianus Gallus (AD 251-3) in good condition.

3.6.10 The metalwork assemblage comprises 244 objects (404 frags). The largest single class of finds is nails which number 140 (200 frags). The objects of certain Roman date include two brooches, a nail cleaner, four hobnails and a linchpin.

3.6.11 The small glass assemblage included sherds from square blue Roman bottles and a piece of Roman window glass.

3.6.12 Fifteen soil samples for environmental remains or flint debitage were taken. This includes samples from the late Neolithic/early Bronze Age barrow mound and buried soils beneath it, one of which was very rich in charcoal, as well as Roman samples including one from the oven-type feature in Trench 250. The latter produced a large amount of charred cereal grains, some of which were sprouted, suggesting the feature was used for malting. Eight waterlogged samples were recovered, all from Roman contexts. Although no pollen assessment was undertaken, the survival of waterlogged plant remains indicates that pollen will also be preserved.

3.6.13 A total of 248 animal bone specimens were recovered. This included examples showing a quick method of butchery. A large proportion of the specimens were from cattle. The presence of cat is also worth noting.

3.6.14 A very small assemblage of oyster shells was recovered. Fish bones were also found.

3.6.15 Wood was recovered from three waterlogged contexts. This included a worked wooden ‘plug’, dating to the middle/late Roman period.

4 DISCUSSION

4.1 Reliability of field investigation

4.1.1 Conditions were generally good and features could be easily recognised against the natural. However, poor weather was encountered during the excavation of Trench 262 and 263, containing the barrow.

4.2 Evaluation objectives and results

Aims 2.1.1 and 2.1.3

4.2.1 The evaluation was successful in identifying areas of archaeological activity, as well as characterising and dating many of the remains. The complexity of the site and the very large numbers of features exposed, of which only a sample were excavated, means that a full understanding of the phasing and development of the villa site has not been achieved at this stage. A drone survey was carried out subsequently by AerialCam towards the end of the very hot summer to look for parchmarks, but did not reveal anything new. A GPR survey has also been carried out by Magnitude following the trenching in an attempt to reveal the full extents of the revealed features, particularly the walls, but the results have not yet been finalised.

Aim 2.1.2

4.2.2 Many of the features indicated as ditches on the geophysical survey were located by the evaluation, as were several discrete features. There were, however, also a significant number of features exposed that had not been indicated by the geophysical survey interpretation or the greyscale plot.

Aim 2.1.4 and 2.2.3

4.2.3 Areas of vertical stratigraphy were identified on the site, both in the form of the probable barrow mound and underlying buried soils, and as sequences of surfaces within the Roman villa area, together with structural evidence of buildings of more than one phase. Both stone structures and ditches could be traced between trenches, but where multiple walls were exposed, as in Trench 243, it was not felt appropriate in evaluation to investigate all of the relationships between them, so projection of walls to make rooms and complete buildings is not based on proven contemporaneity. Robber trenches also show the likely existence of multiple phases of construction.

Aim 2.1.5

4.2.4 Environmental evidence was plentiful and varied. Animal bones were fairly well-preserved, and present in sufficient numbers to allow butchery and other types of information to be obtained. Despite mineral encrustation and damage from burning, bulk soil samples included some with plentiful charred plant remains indicating crop processing and possibly malting, and charcoal was also plentiful in some samples. The presence of charred plant remains and charcoal in the early prehistoric buried soil allows the possibility of reconstruction of the contemporary environment, and the presence of cereal grains was of note. Waterlogged plant remains were also present, as were insect remains, and pollen preservation is also likely, indicating very good potential for reconstruction of the local environment in the Roman period.

Aim 2.1.6

4.2.5 The late Iron Age and Roman finds included continental imports in the form of imported pottery, stone columns and millstone, and pottery and stone objects from other parts of Roman Britain. The range of finds suggests that the site was high status, as does the presence of a hypocaust, painted wall plaster, stone column fragments and glass slag. It seems clear that there was a glass furnace in operation on the site, presumably constructed to provide window glass for the villa buildings, though only slag from this was recovered by the evaluation. Economic evidence is also present in the oven-type structure found in Trench 250, possibly related to malting on the site.

Aim. 2.1.7

4.2.6 A very long and wide rectangular feature marked on historic maps and as a cropmark on aerial photographs, and still evident on the LiDAR survey of Field 5, was identified and its profile established by evaluation, but no finds were recovered from the intervention excavated across it.

Aim 2.1.8

4.2.7 The Mesolithic flint cluster found below the mound in Field 5 is the first substantial site of this date found within the Otterpool landscape, and if early Mesolithic, would be one of only a handful of such sites in East Kent. Although the Otterpool landscape contains a number of groups of ring ditches surviving from early prehistoric barrows, there are far fewer monuments with surviving mounds. The identification of a hitherto unknown early prehistoric mound within Field 5 is there an important addition to the local landscape, particularly as it overlies a buried soil containing charcoal and charred plant remains that may indicate the character of the landscape prior to its construction. The Roman villa is one of several now known in the area, and overlaps in date with the late Roman Saxon Shore fort at Lympne just 2km to the south-east. It is a regionally important discovery, particularly as the evaluation also showed the survival of waterlogged wooden objects and environmental remains, offering categories of artefact and environmental information that are not always present on villa sites.

Aim 2.2.2

4.2.8 Trenches 257 and 258 were excavated specifically to establish the limits of the building found in Trench 243 to the north, and were successful in doing so. It was noted that the north end of Trench 257 encountered groundwater at very shallow depth, and it was thought unlikely that further Roman buildings would have existed north or north-east of this. Trenching was not, however, extended further to the west or north-west of Trenches 241 and 242, so the extent of the villa in this direction remains uncertain.

Aim 2.2.4

4.2.9 Trenches 262 and 263 were dug specifically to test this, and found an early prehistoric mound, but no evidence was found of additional Roman activity or structures in this area.

Aim 2.2.5

4.2.10 The trenches laid out across the possible bank and ditch of the enclosed former woodland indicated that the ditch was of recent date, and not of a character or scale to

suggest the presence of an earlier enclosure in this location. The slight bank was an artefact of the presence of former woodland and ploughing around it.

4.3 Interpretation (Fig. 12)

Mesolithic

4.3.1 The barrow discovered in Trenches 262 and 263 had buried two layers of soil. Within these soils, and redeposited in later contexts in other trenches, a sizable assemblage of Mesolithic flint was discovered. The one microlith found was of a type dated to the transition from the early to later phases of the Mesolithic period. The barrow appears to have preserved a disturbed scatter of early date, and this Mesolithic activity is likely to be present over a reasonably large area.

Neolithic/early Bronze Age

4.3.2 The mound of a barrow probably dating to the late Neolithic/early Bronze Age (Beaker period) was found overlying earlier soils in Trenches 262 and 263. The mound extended over an area more than 35m across (Fig. 12). No accompanying ditch was seen either during excavation or on the geophysical survey, although an area of geophysical disturbance in the north-eastern area of the barrow obscured the survey here. No human remains were discovered in the trenches.

Early Roman

4.3.3 No certain late Iron Age material culture was discovered, although a sherd of imported Terra Nigra and sherds in a 'Belgic' fabric indicate a very early Roman presence, if not an element of pre-conquest activity. A possible later 1st century phase of villa was found in Trench 242 on the north-western part of the area, and comprised walls that enclosed two adjacent areas with one possible internal floor. The earlier of two phases of parallel wall in adjacent Trench 241 was undated, the construction of the later phase contained early/middle Roman pottery, so the earlier phase may also belong to this early Roman phase. The structures in Trenches 242 and 241 were aligned NE-SW/NW-SE, and this orientation is followed by all the later structural elements and is the prevailing organisation visible on the geophysical survey.

4.3.4 The other major early Roman feature was a substantial boundary ditch found in Trench 246, and seen on the geophysical survey to run for at least 80m. This boundary appears to have remained in use throughout much of the Roman period.

4.3.5 More minor early Roman features include ditches to the north-east, in Trenches 257 and 243, and pits further to the east in Trench 245, demonstrating that 1st and early 2nd century activity was spread over an area in excess of one hectare.

Middle Roman

4.3.6 The majority of the Roman features uncovered date between the early/mid-2nd century and the mid-3rd centuries AD. The later phase wall in Trench 241 continued in use in the middle Roman period, and middle Roman activity can be demonstrated in the most north-easterly trench, 245, as well as to the south in Trenches 249, 250 and probably 251. This covers some 2.25 hectares, and is the minimum extent of the middle Roman villa complex. The southern extent of the villa has been approximately defined by the evaluation, as no features

of Roman date were found to the south of Trench 253, and no geophysical anomalies that appear to be related to the complex are visible within this area. Substantial ditches 24603 and 24612=25903 might represent the south-western limits of the villa (Fig. 12), although no trenches were positioned to the west of these ditches to confirm this supposition. The geophysical evidence does not clearly demonstrate the presence or absence of activity in this western area. To the north-west (beyond Trenches 241 and 242) the limits are unknown. No structures were found in low-lying Trenches 245 or 251, which only contained ditches and pits, and it may be that the tributary of the River East Stour running along the east side of Field 5 formed the boundary of the villa, though this is not certain. The northern extent was also not defined, although recent geophysical survey by Magnitude (Magnitude 2018) did not find anything substantial in the field across the A20 to the north.

4.3.7 More than one structural phase dating to the middle Roman period was recorded in Trench 243. Multiple phases were also seen in Trench 258 and 244, although it was not clear if these all belonged to the middle Roman period. These buildings included internal and external floor/yard surfaces of varying preservation. There was a hypocaust in Trench 243, which was robbed, and the backfill included both painted plaster probably from a bath-house and two stone column bases. Although not in their original positions, these architectural elements are very rare and are indicative of a building of very high status.

4.3.8 The masonry buildings that were evaluated have been extensively robbed, with the best-preserved wall standing to only three courses above contemporary ground level, and the majority only represented by foundation deposits, and in at least one case, completely robbed out. It is also possible that some of the exposed foundations were in fact footings for timber, rather than masonry, buildings.

4.3.9 Although an isolated example, a very substantial posthole was found in Trench 244, and is of the type often associated with large timber buildings in villas. It is therefore possible that a building of this type existed in this part of the site.

4.3.10 Fired clay with a vitrified, glazed surface was found in Trenches 242-244 and 247-248. Although these fragments are redeposited, they indicate that there was a glass furnace within the complex. The majority of the pieces were recovered from contexts associated with the abandonment of the investigated villa buildings, although layer 24204 within structure 24219 was tentatively dated to the first century AD, and surface 24307 to the middle Roman period, both also produced fragments from a furnace, possibly suggesting that a furnace was present in both of these periods.

4.3.11 Part of an oven-type feature was discovered in Trench 250. The use of tile pilae in such a structure is unusual, but suggests a suspended floor. The structure also contained fired clay with wattle impressions and a large amount of grain, some of which was sprouted. Together, these suggest that the oven may have been used in the malting process.

4.3.12 A road surface with an adjacent ditch was found in Trenches 243-4. This was aligned NW-SE, and may well have continued south-eastwards for 120m, although it was not visible in Trench 252. This was broadly parallel to the course of the stream bounding the east side of Field 5, and may either have led to a crossing point, or have continued south-eastwards alongside the stream towards Lympne, as further geophysical anomalies are visible continuing beyond Trench 252.

4.3.13 One very wide linear feature was visible running down the east side of Field 5, and substantial ditches west of that. Evaluation has shown that the ditches to the west are of Roman date, and are filled with sequences of waterlogged deposits that contain waterlogged plant remains, insect remains and probably pollen. Wood and wooden objects are also preserved, examples of which have been recovered. Evaluation also showed that a layer of Roman occupation material overlies the larger feature to the east. There is therefore ample potential for reconstruction of the local environment, as well as for the recovery of further wooden objects. The ditches may simply be for drainage, but the straight alignment of the wider eastern anomaly may indicate deliberate channelling of water from the adjacent stream, and, together with the recovery of fragments of a millstone, may indicate that there was once a mill associated with the site.

4.3.14 Feature 24711, the very long rectangular feature visible on historic maps, on aerial photographs, on LiDAR and (faintly) on the geophysical magnetometer survey, and which was not date by the evaluation, deserves consideration as a possible Roman feature due to its NW-SE orientation parallel to many of the Roman villa ditches and at least one building. This feature appears to have been rectangular, around 60m long and 11-12m wide, and was 1.2m deep with steep sides and a flattish base at the point where it was sectioned. Its presence on the 1797 OS map as a wooded area suggests that it was infilled at least a century earlier than this, but otherwise there is no other guide to its date. Its regularity perhaps argues against it having been a quarry, and if it was a quarry, this was presumably for clay, not limestone, which was not reached in the excavated slot. Shallow linear quarries are, however, known in Kent in connection with brickmaking, and there was previously a track linking Westenhanger to the Ashford Road (now the A20) just opposite Field 5, to which clay for early bricks might have been taken.

4.3.15 The absence of Roman finds might argue against a Roman date, but unless deliberately infilled during the Roman occupation, there is no reason why it need have accumulated many Roman finds, as it lay upslope of the main focus of Roman activity. Once partly silted and overgrown with trees, it is possible that it could have survived undisturbed as a hollow for a very long period.

4.3.16 There are Roman ponds of similar size known, for instance at Shakenoak in Oxfordshire, where a pond 65m long and over 25m wide was dated to the mid-2nd to mid-3rd centuries AD (Brodribb *et al.* 1978, 15-20). This and another, smaller pond at Shakenoak had stone walls and floors of rammed pebbles (at least in part), unlike feature 24711, but one wall of the largest pond at Shakenoak had been robbed, and the same may have happened at Field 5, where the percentage of the pond examined was very small. Some of the Roman ponds at Shakenoak were fed by a stream. The geophysical survey greyscale plot appears to show one known Roman ditch at Field 5 coming from further upslope and turning 90° onto the alignment of the pond just north-west of its end, and another known Roman ditch is on the same NW-SE alignment as the pond, and may join this. Towards the SE end of the pond several ditches run NE downslope from it, and one or more of these could have been an outlet. These ditches may have been connected to the pond, perhaps providing a source of flowing water, or alternatively may all have been cut by it. The matter is likely only to be resolved by further, and more extensive, excavation.

Late Roman

4.3.17 No pottery was discovered that certainly dated to the 4th century, although 4th-century coins were found in topsoil, subsoil and an upper ditch fill. Two pits and three ditches from Trenches 257, 245 and 251 have been dated to the second half of the 3rd century. Some 15-21% of the pottery dated to the late Roman period, and this material was from quite large deposits in a limited number of contexts. No buildings of late Roman date were found, although it is possible that these exist within the villa complex, but were not sampled by the evaluation trenches.

Medieval

4.3.18 A small quantity of medieval pottery was recovered from the site. Some of this came from ruts on the probable stone road in Trenches 243 and 244, and may indicate that this remained visible, and so continued to be used long after the villa itself had fallen into disuse. A fairly large medieval sherd came from ditches 24803 in Trench 248, and this was cut by ditch 24806, perhaps indicating a phase of medieval activity not otherwise recognised in the evaluation. As only a proportion of the many ditches exposed were excavated, this is certainly possible, although it is also perhaps more likely that the sherd was intrusive, related to the land drain that ran along 24806.

4.4 Significance

Mesolithic

4.4.1 The Mesolithic flint assemblage recovered from adjacent Trenches 262 and 263 indicates the likelihood of a substantial activity area preserved beneath the barrow mound. Although exposed between the Mesolithic and Beaker periods, it is likely that the material is very little disturbed, and as such, is a rare survival in Kent and the south-east of England. There are very few findspots of early Mesolithic date in East Kent (Garwood 2011, fig. 3.3), so if genuinely of earlier Mesolithic date, this would be of regional significance, and even if it proved to be of later Mesolithic date, would still be of similar significance due to its state of preservation and the presence of environmental material.

Late Neolithic/early Bronze Age

4.4.2 A large mound of Beaker or early Bronze Age date was found over Trenches 262 and 263. Although there are a number of ring ditches remaining from early prehistoric barrows in the Otterpool area, very few of these have surviving mounds, and this is also true of barrows across Kent in general. If genuinely without a surrounding ditch, this is also an unusual type of barrow for Kent and the south-east of England, though more commonly found further west. The barrow should therefore be considered to be of regional significance.

Roman

4.4.3 The Roman villa within Field 5 was previously unrecognised. A fair number of villas are already known in Kent (Millett 2007, Fig. 5.9), but the majority are in north Kent, and only a few are known as far south as Lympne, although another villa has recently discovered no more than 5km distant (Found pers. Comm.) This makes the villa in Field 5 a significant addition, and suggests a group clustered in the vicinity of Lympne.

4.4.4 Many of the villas in Kent (like that in Field 5) have only been partly investigated, and some a long time ago, so that the information retrieved was partial or poorly-dated, and

comparisons of significance are therefore difficult. There are, however, certain aspects of the villa at Field 5 that heighten the significance of this example.

4.4.5 The earliest masonry building found, that in Trenches 242 (and possibly 241) appears on current evidence to be of later 1st century date. If so, it belongs to a much smaller group of early villas in the south-east of England with such early origins. Millett claims only eleven in Kent (Millett 2007, 152), most of which are in west Kent. Like the villa in Field 5, some of the other early sites in Kent such as Thurnham were also located close to the coast. An imported sherd of *terra rubra* and other continental pottery also support the view of a site of moderate or high status at this date.

4.4.6 The discovery of two middle Roman stone column bases, both of stone imported from Boulogne, is particularly noteworthy. Columns are relatively rare in Roman villas, and ones built of imported stone even more so. The columns here were also towards the upper end of the size range for those on villa sites, suggesting that they adorned a building of some size and high status. While they were found in the backfill of a hypocaust on the site, and could possibly have been brought in from elsewhere as rubble, other fragments of stone from Boulogne were found across the site, strengthening the likelihood that they were erected and used on this site.

4.4.7 The presence of slag from a glass furnace is also of note, although it is probable that this material indicates that, as might be expected, such furnaces were built solely for the construction of villa buildings, and fell into disuse or were dismantled thereafter. The presence of an oven, possibly relating to the malting process, is also significant, as few structures definitely associated with malting have been identified in Roman Britain. Waterlogged Roman features have already produced preserved wood and wooden objects.

4.4.8 There is also significant potential for reconstruction of the contemporary environment from waterlogged plant and insect remains, and from pollen. Overall, the villa in Field 5 is of regional significance.

Medieval

4.4.9 Only a very small quantity of medieval material was recovered from Field 5, and the significance is negligible.

APPENDIX A TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench 241						
General description					**Orientation**	NW-SE
Trench contained walls and a series of surfaces associated with the Roman phase of the site. Consists of topsoil, subsoil and a colluvium layer overlying the natural geology of clayey silt.					**Length (m)**	30
					Width (m)	1.8
					Avg. depth (m)	0.61
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
24100	Layer			Topsoil. Dark grey clayey silt.	Flint flakes; LIA/ER pottery; Iron nail; Coin, later 3C	-
24101	Layer	-		Subsoil. Brown grey clayey silt.	MR pottery; Lead weight, offcut and pointed object; Coins, later 3C-mid 4C	-
24102	Layer			Natural. Orange brown clayey silt.	-	-
24103	Layer	1.8	0.13	Layer built up against wall 24104. Dark yellow brown silty clay.	-	MR
24104	Wall	0.67	0.31	Limestone wall on NE-SW alignment. Composed of roughly hewn and faced outer stones and a rubble core. Light orange brown clayey sand mortar with white flecks. Sits on rubble foundation 24108 and within construction cut 24109.	-	MR
24105	Surface	1.8	-	Cobbled limestone surface/hardstanding.	-	MR
24106	Wall	0.69	0.2	Limestone rubble wall foundation or possible terrace.	-	MR
24107	Layer	1.8	0.11	Layer underlying cobbled surface 24105. Orange brown silty clay. Occasional gravel.	MR pottery	MR
24108	Wall	0.94	0.2	Rubble foundation for wall 24104, lies within construction cut 24109. Roman in date.	-	MR
24109	Cut	1.04	0.29	Construction cut for wall 24104 and foundation	-	MR

				24108. Linear running NE-SW. Steep, almost vertical sides, likely flat base.		
24110	Fill of 24109	1.04	0.29	Backfill of construction cut 24109. Yellow brown silty clay.	E/MR pottery	MR
24111	Deposit	0.1	0.06	Dump deposit of light blue grey lava quern fragments	R pottery; Rotary quern	R
24112	Layer	0.83	-	Dump of roman roof tiles, possibly formed a rough floor surface or hard standing. The last of three consecutive surfaces, therefore may be repairs/maintenance. Grey brown silty clay. Frequent roof tiles. Unexcavated.	-	MR?
24113	Layer	1.8	-	Layer of gravel and mortar. Possibly formed a surface or hardstanding. Grey brown silty clay. Frequent rounded gravel and mortar; occasional charcoal flecks. Unexcavated.	-	MR?
24114	Surface	0.51	-	Cobbled limestone rubble floor surface or hardstanding.	-	MR?
24115	VOID			VOID		
24116	Layer	0.3	0.11	Potential floor surface. Heavily disturbed by bioturbation. Light white grey mortar and grey brown silty clay.	-	MR
24117	Layer	1.8	0.2	Colluvium layer. Grey brown silty clay. Occasional gravel; moderate charcoal flecks.	R pottery; Iron nails; Bone	-
24118	Wall	0.69	0.1	Limestone rubble. Possible wall foundation for a robbed wall.	-	MR

Trench 242

General description					**Orientation**	NE-SW
Trench contained a walled structure, two ditches and a pit. Consists of topsoil and an upper and lower subsoil overlying natural geology of clayey silt.					**Length (m)**	30.1
					Width (m)	1.8
					Avg. depth (m)	0.45
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
24200	Layer	-	0.16	Topsoil. Dark grey clayey silt.	R pottery	-

24201	Layer	-	0.26	Subsoil. Brown grey clayey silt. Moderate stones and flint.	Iron nails, lead offcut	
24202	Layer	1.8	0.3	Subsoil overlying structure 24207. Grey brown with grey lenses, clayey silt. Moderate organic flecks, flint and pottery fragments.	ER pottery; R tile; FC furnace; Iron nails; Modern metal; Bone	-
24203	Surface	0.48	-	Yard surface. Clayey silt and gravel. Moderate stones.	ER pottery; R tile, imbrex and tegula; Cu alloy brooch; Oyster shell	ER
24204	Surface	1.10	0.21	Interior surface of structure 24219. Grey brown with grey lenses, clayey silt. Moderate organic flecks, small stones and pottery fragments.	ER pottery; FC furnace	ER
24205	Wall	0.4	-	Limestone wall on a NE-SW alignment. No obvious bonding, some trace of 'cement' daub on the larger stones. Possibly butts or is the same event as wall 24219.	Iron nails	ER
24206	Cut	0.60	0.25	Foundation cut of wall 24205. Linear on NE-SW alignment. Steep, almost vertical sides.	-	ER
24207	Structure	-	-	Series of walls forming a coherent building structure. Consists of: 24202, 24203, 24204, 24205, 24206, 24217, 24218, 24219, 24220.	-	ER
24208	Layer	-	-	Natural. Orange brown clayey silt. Moderate stones.	-	-
24209	Cut	0.8	0.27	Pit or possible robber trench terminus. Elongated oval running NW-SE. Shallow with a concave base.	-	R
24210	Fill of 24209	0.8	0.27	Only fill of pit 24209. Dark grey with dark brown lenses, clayey silt. Occasional organic flecks	Iron nails; R pottery	R

				and large masonry fragments.		
24211	Cut	0.8	0.4	Re cut of ditch 24213. Linear running NW-SE. Steep sides, concave base.	-	MR
24212	Fill of 24211	0.8	0.4	Only fill of ditch 24211. Likely backfilling. Very dark grey clayey silt. Frequent charcoal/ organics, flint, small stones and masonry.	MR pottery; R tile	MR
24213	Cut	0.4	0.2	Linear ditch on NW-SE alignment. Same as 25710?	-	E-MR
24214	Fill of 24213	0.4	0.2	Only fill of ditch 24213. Grey brown with dark grey lenses, clayey silt.	R tile and imbrex	E-MR
24215	Cut	0.3	-	Semi-ovate feature. Unexcavated.	-	
24216	Fill of 24215	0.3	-	Fill of feature 24215. Dark grey clayey silt. Unexcavated.	-	
24217	Drain	0.41	0.11	Small limestone structure running NE-SW, parallel to wall 24205. Possible drain.	-	ER
24218	Cut	0.41	0.11	Shallow foundation cut of drain 24217. Linear running NE-SW.	-	ER
24219	Wall	0.7	0.2	Square limestone walled structure running NW-SE and NE-SW. No obvious bond. 1-3 courses remaining, possibly robbed.	-	ER
24220	Cut	0.41	0.37	Shallow foundation cut for square walled structure 24219.	-	ER
24221	Cut	1.37	-	Linear cut on NW/SE alignment.	-	
24222	Fill of 24221	1.37	-	Fill of 24221. Grey clayey silt. Occasional organics and stones.	-	

Trench 243		
General description	**Orientation**	NE-SW
Trench contained a roman villa structure and two ditches. Consists of topsoil and subsoil overlying a mixed natural geology of clayey silt and sand.	**Length (m)**	31
	Width (m)	1.8
	Avg. depth (m)	0.3

Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
24300	Layer	-	0.12	Topsoil. Dark grey brown silty clay. Moderate small stones and rooting.	Iron nails and hinge; R brick, tile and MR tegula	-
24301	Layer	-	0.18	Subsoil. Light brownish grey clayey silt. Moderate small stones.	Iron nail, spike and lead waste	-
24302	Layer	-	-	Natural. Grey brown clayey silt with orange yellow sandy lenses.	-	-
24303	Fill of 24304	1.5	-	Fill of possible robber pit 24304. Grey brown sandy clay. Frequent limestone rubble. Unexcavated.	-	
24304	Cut	1.5	-	Possible robber cut or pit. Unexcavated.	-	
24305	Surface	3.4	-	Possible foundation or hardstanding for a floor surface within villa structure 24310. Consists of limestone within grey brown sandy clay. Patches of floor plaster survive as light reddish pink mortar spreads. Unexcavated	-	MR
24306	Surface	1	-	Demolition layer. Grey brown sandy clay. Occasional CBM and charcoal flecks and small limestone fragments. Unexcavated.	-	MR
24307	Surface	1.8	0.02	Yard surface. Replaces cobbled surface 24316. Cut by 24325 suggesting the villa structure was still being used and modified when this surface was laid. Composed of grey brown silty clay within a crushed pot and tile matrix. Occasional charcoal flecks and pea gravel.	R pottery; R tile, flue, imbrex and indet. CBM; FC furnace; Column; Sample 104	MR
24308	Wall	0.6	0.65	Limestone walls running on NE-SW and NW-SE alignments. Composed of interior side of large faced stones, an uneven core	-	MR

				and external face of roughly hewn stone. Bound with a light grey yellow sandy mortar.		
24309	Cut	0.6	0.69	Construction cut of wall 24308. Linear running N-S and E-W. Vertical sides, flat base.	-	MR
24310	Structure	-	-	Villa structure. Consists of walls 24308, hypocaust arch 24333, hypocaust 24332, buttress 24323 and floor surfaces 24331, 24329, 24305 and exterior yard surfaces 24307 and 24316.		MR
24311	Cut	1.92	0.54	Linear ditch on SSE-NNW alignment. Possibly a boundary or trackway ditch relating to roman villa 24310. Same as 24416.	-	MR
24312	Fill of 24311	1.92	0.54	Secondary fill of ditch 24312. Dark grey brown silty clay. Occasional limestone fragments.	LIA/R pottery R tile	MR
24313	Cut	0.14	-	Irregular linear cut, possible wheel rut, within road surface 24315. Runs roughly parallel with roadside ditch 24311. Unexcavated.	-	R
24314	Fill of 24313	0.14	-	Fill of possible wheel rut 24313. Dark grey brown silty clay.	Flint scraper; Med pottery *c*1350-1500; Iron nails	R
24315	Layer	1.20	-	Possible road surface composed of limestone within dark grey brown silty clay. Truncated by wheel rut 24313.	-	R
24316	Layer	1	0.03	Worn cobbled surface abutting wall 24308. Likely an exterior yard surface. Composed of limestone cobbles within dark grey brown silty clay. Occasional charcoal and CBM flecks.	-	MR

24317	Layer	0.8	0.16	Demolition layer filled with roof tile and wall masonry. Contained two column bases. Dark grey brown sandy silty clay.	LIA/ER pottery; R brick, tile, MR tegula and indet. CBM; Stone columns; R window glass	
24318	Layer	-	0.12	Demolition layer. Likely accumulated over time from the naturally decaying building. Grey brown silty clay. Frequent mortar and charcoal flecks.	MR pottery; R brick, tile, flue imbrex, tegula and indet. CBM; Mortar; Plaster; FC furnace; Oyster shell; Fish bone; Bone; Sample 105	
24319	Layer	-	0.42	Demolition layer. Grey brown silty clay. Frequent CBM, plaster and mortar fragments, occasional charcoal flecks.	MR pottery; R brick, tile, flue, imbrex and tegula Mortar; Plaster; Bone	
24320	Fill of 24321	-	0.64	Fill of robber cut 24321. Dark grey brown silty clay. Frequent charcoal, CBM, masonry and mortar.	E/MR pottery; R brick, flue, imbrex and MR tegula	
24321	Cut	-	0.64	Linear robber cut. Steep sides, flat base. Likely dug in the roman period as part of the villa structure remodel.	-	
24322	Structure	0.2	0.05	Bottom course of a robbed-out wall. Composed of roughly hewn limestone bound with grey brown sandy clay.	-	MR
24323	Structure	0.52	0.7	Buttress foundation. Composed of random coursed limestone bound with grey brown silty sand.	-	MR
24324	Fill of 24325	0.6	0.05	Foundation packing around buttress 24323, within construction cut 24325. Grey brown silty clay. Moderate mortar and limestone fragments.	-	MR

24325	Cut	0.6	0.05	Linear construction cut for buttress foundation 24323. Moderately sloping sides, flat base. Truncates roman yard surface 24307.	-	MR
24326	Layer	-	0.14	Surface. Grey brown sandy clay. Occasional charcoal and CBM fragments. Overlain by subsequent yard surfaces 24316 and 24307.	Flint cores and flakes; M/LR pottery; Tegula	MR
24327	Layer	-	0.24	Reclamation deposit to build land up above the water table, on which to build villa structure 24310. Dark yellow brown sandy clay. Occasional charcoal and CBM flecks.		MR
24328	Layer	-	0.24	Reclamation deposit. Yellow brown sandy clay. Occasional charcoal flecks.	R tile	MR
24329	Layer	1.3	0.02	Light yellow grey silty mortar flooring covering hypocaust 24332.	-	MR
24330	Layer	-	0.03	Burnt layer covering hypocaust, floor 24331 and under arch 24333. Related to the heating of water for the hypocaust. Dark brown grey clayey charcoal. Occasional mortar.	R pottery; MR tegula; R indet. CBM; Mortar; Plaster; Slag/cinder and possible hammerscale; Fish bones; Bone; Sample 108	MR
24331	Layer	2.48	-	Light brown yellow mortar floor onto which the hypocaust 24332 were set. Occasional crushed tile. Unexcavated.	-	MR
24332	Structure	0.2		Hypocaust tiles, running NW-SE, placed between arch 24333 and wall 24308.	-	MR
24333	Structure	0.7	0.56	Hypocaust arch composed of limestone	-	MR

				and tile bound with light grey yellow mortar.		
24334	Fill of 24335	0.72	-	Tertiary fill of ditch 24335. Grey brown sandy clay.	ER pottery	ER
24335	Cut	1.3	-	Linear ditch. Uneven sides, base not reached as not fully excavated. Possible boundary ditch.	-	ER
24336	Fill of 24337	0.33	0.16	Fill of gully 24337. Grey brown sandy clay.	-	
24337	Cut	0.33	0.16	Linear gully on a WNW-ESE alignment. Moderately steep sides, concave base.	-	
24338	Layer	-	-	Demolition layer within structure 24310. Limestone within grey brown silty clay. Unexcavated.	-	
24339	Layer	-	0.19	Demolition layer. First phase of demolition representing the collapse of wall plaster. Brown yellow silty mortar.	-	
24340	Layer	-	0.1	Demolition layer. Grey brown silty clay. Frequent mortar flecks.	-	
24341	Layer	-	0.15	Demolition layer. Grey brown silty clay. Frequent mortar, charcoal flecks and tile.	-	
24342	Layer	-	0.1	Silty deposit. Dark grey brown silty clay. Occasional charcoal flecks.	-	

Trench 244						
General description					**Orientation**	NW-SE
Trench contained a roman villa structure, three ditches, two pits and a number of postholes and pads. Consists of topsoil and subsoil overlying natural geology of clayey silt.					**Length (m)**	30
					Width (m)	1.8
					Avg. depth (m)	0.55
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
24400	Layer	-	-	Topsoil. Brownish grey sandy silt.	Flint flakes; Iron hobnail, linchpin and nails	-
24401	Layer	-	-	Subsoil. Greyish brown clayey silt.	E/MR pottery; Iron hobnail, nails, nail cleaner,	-

					fragments; Copper alloy nail cleaner and Med or early post-med buckle	
24402	Layer	-	-	Natural. Brownish orange clayey silt brick earth.	-	
24403	Layer	7	-	Possible yard or road surface. White yellow limestone upper surface within very dark yellow clay.	-	R
24404	Wall	0.8	0.2	Wall on a NW/SE alignment. Composed of unfinished or roughly hewn limestone bound with sandy clay mortar.	-	MR?
24405	Drain	1.65	0.45	Drain built into wall 24404 and continuing beyond running on a NE/SW alignment. Composed of imbrex tiles and stones.	R imbrex	MR?
24406	Wall	0.7	0.15	Probable wall remnants, possibly robbed of facing stones. Runs of a NW-SE alignment. Composed of limestone rubble and rough unfinished boulders.	-	MR?
24407	Postpad	0.22	-	Limestone post pad. Not fully exposed.	-	MR?
24408	Layer	-	0.12	Subsoil interface between the actual subsoil 24401 and the features below. Brown silty sandy clay.	Flint awl and flake; E/MR pottery; R tile, imbrex and MR tegula; FC furniture; Iron nails, strips and fragments; Slag	-
24409	Fill of 24410	1.4	0.35	Main fill of ditch 24410. Likely intentional backfill. Very dark greyish black sandy silty clay.	Flint flakes; MR pottery; R brick, tile, flue, imbrex, tegula, ridge and indet. CBM; Mortar; FC indet.; Iron nails and strip; Sample: 107	M/LR?

24410	Cut	1.63	0.62	Linear ditch on a NE/SW alignment. Steep sided, slightly concave base.	-	M/LR?
24411	Deposit	3	0.22	Foundation deposit. Composed of limestone cobbles and pebbles within yellow brown sandy clay. Occasional charcoal flecks.	-	MR?
24412	Deposit	3	0.35	Redeposited natural. Yellow brown silty sandy clay. Occasional fragments of fired clay, CBM, pot and charcoal flecks. Unexcavated.	-	MR?
24413	Deposit	1.20	0.26	Deposit. Yellow brown sandy clay. Moderate stones.	-	MR?
24414	Postpad	0.48	0.1	Limestone post pad.	-	MR?
24415	Fill of 24416	1.4	0.1	Fill of linear 24416. Dark yellow brown sandy silty clay. Abundant charcoal flecks, moderate pebbles, occasional charcoal chunks and cobbles. Not fully excavated.	E/MR pottery; R brick, tile and flue	E/MR
24416	Cut	1.4	0.1	Linear running NW-SE. Not fully excavated. Same as 24311	-	E/MR
24417	Fill of 24418	1.2	0.24	Main fill of ditch 24418. Possibly represents gradual infilling. Dark yellow brown silty sandy clay.	MR pottery; Indet. R CBM; Iron nail	MR
24418	Cut	1.2	0.32	Linear ditch on NW-SE alignment. Gently sloping sides that then sharpen, broad and flat base.	-	MR
24419	Fill of 24420	0.4	0.14	Main fill of ditch 24420. Dark yellow brown silty sandy clay. Frequent CBM and tile, occasional pot charcoal flecks and pebbles.	LIA/R pottery; R tile and flue	M/LR?
24420	Cut	0.4	0.15	Shallow ditch cut on a E-W alignment. Steep sides and concave base, V shaped profile.	-	M/LR?
24421	-	-	-	-	-	
24422	-	-	-	-	-	

24423	Fill of 24424	0.35	0.46	Fill of post pipe 24424. Very organic, possible deliberate backfill after the removal of the post. Very dark grey brown sandy silty clay. Moderate pot and CBM, frequent charcoal flecks, occasional pebbles and cobbles.	M/LR pottery; R tile; Bone	M/LR?
24424	Cut	0.35	0.46	Oval posthole Vertical sides, flat base.	-	M/LR?
24425	Fill of 24426	0.45	-	Fill of possible feature 24424. Dark yellow brown sandy silty clay. Frequent charcoal flecks, moderate pebbles, occasional CBM.	-	MR?
24426	Cut	0.45	-	Possible sub rectangular cut feature, or possibly just a gap within layer 24429 exposing the underlying layer 24430.	-	MR?
24427	Fill of 24410	1.35	0.12	Secondary fill of ditch 24410. Grey brown sandy silty clay. Occasional pot, CBM, charcoal flecks, pebbles and cobbles.	E/MR pottery; R indet. CBM; Iron nails	M/LR?
24428	Fill of 24410	0.7	0.05	Primary fill of ditch 24410. Dark brown yellow silty sand.	-	M/LR?
24429	Layer	1.8	0.1	Compact light to mid yellow brown sandy clay surface. Perhaps composed of redeposited natural.	R ridge	MR?
24430	Layer	0.24	0.20	Organic make up layer. Dark grey brown silty sandy clay. Occasional pot, CBM, charcoal flecks, pebbles, occasional stones.	LIA/R pottery; R tile and imbrex; FC furnace	MR?
24431	Layer	0.85	0.12	Layer of redeposited natural. Yellow brown silty sandy clay. Occasional pot, CBM, charcoal and pebbles.	LIA/R pottery; R tile	MR?
24432	Fill of 24433	0.5	0.12	Fill of shallow cut 24433. Composed of limestone cobbles within dark grey brown sandy clay. Possibly also formed a surface.	-	MR?

24433	Cut	0.5	0.12	Sub-rectangular shallow stone filled cut. Vertical sides, flat base.	-	MR?
24434	Cut	0.45	-	Rectangular linear slot or possible square ended ditch running NE-SW. Unexcavated.	-	MR?
24435	Fill of 24434	0.45	-	Fill of rectangular cut 24434. Dark yellow brown silty sandy clay. Occasional limestone cobbles, CBM, pot, charcoal flecks and flint. Unexcavated.	Flint flake; R pottery	MR?
24436	Fill of 24410	1.3	0.22	Fill of ditch 24410. Likely slumped 24408 filling hollow after underlying backfill 24409 settled. Dark brown sandy silty clay. Occasional pebbles and charcoal flecks.	-	M/LR?
24437	Fill of 24420	0.2	0.05	Base fill of ditch 24420. Degraded and waterlogged redeposited natural. Mixed red brown - dark yellow brown sandy silty clay. Occasional small pebbles and charcoal flecks.	-	M/LR?
24438	Fill of 24418	0.5	0.12	Fill of ditch 24418. Likely natural infilling or possibly overcut natural. Mixed red brown - dark brown - dark yellow brown sandy silty clay. Occasional small pebble, very occasional charcoal flecks.	-	MR
24439	Layer	2.3	-	Mixed rich organic dumps and burnt deposits. Possible internal yard or barn surface. Mixed yellow brown - dark yellow brown - dark grey brown sandy silty clay. Frequent charcoal flecks and chunks, moderate cobbles and pebbles, occasional pot, CBM and fired clay.	Flint waste; LIA/R pottery; FC indet.	MR?
24440	Layer	1.5	-	Layer of very dark grey brown - yellow brown silty sandy clay. Frequent CBM	-	MR?

				and charcoal chunks, occasional fired clay and charcoal flecking. Unexcavated.		

Trench 245						
General description					**Orientation**	E-W
Trench contained an enclosure ditch and four pits. Consists of topsoil, subsoil and an occupation layer/horizon overlying natural geology of silty clay .					**Length (m)**	30.2
					Width (m)	1.8
					Avg. depth (m)	0.41
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
24500	Layer	-	0.10	Topsoil. Brown grey clayey silty sand.	R brick	
24501	Layer	-	0.15	Subsoil. Brown grey - light brown yellow sandy clayey silt.	Flint flake; Med pottery *c* 900-1250; R tile and imbrex; Iron nails	
24502	Layer	-	-	Natural. Light yellow orange - white yellow silty clay.	-	
24503	Cut	1.1	0.15	Ovate large and shallow pit. Gently sloping sides, Flat base.	-	
24504	Fill of 24503	1.1	0.15	Only fill of pit 24503. Light brown grey - grey sandy silty clay. Very occasional small stones and charcoal flecks.	Flint flake; ER pottery; R tile; Bone	
24505	Cut	0.30	0.11	Ovate shallow pit cut. Gently sloping sides, concave base.	-	
24506	Fill of 24505	0.30	0.11	Fill of pit 24505. Light yellow grey - brown sandy silty clay. Very occasional small stones and charcoal flecks.	R pottery	
24507	Cut	0.52	0.27	Ovate pit. Gently sloping sides to W, vertical to E, concave base.	-	
24508	Fill of 24507	0.52	0.23	Top fill of pit 24507. Light brown grey - grey orange sandy clayey silt. Occasional charcoal flecks and stones.	MR pottery; R tile/brick; Iron fragment; Bone	
24509	Cut	3.56	0.8	Linear enclosure ditch on a N-S alignment. Irregular, steep - gently sloping sides, concave, v shaped base.		M/LR

24510	Fill of 24509	2.9	0.28	Top fill of enclosure ditch 24509. Partially waterlogged. Brown grey with orange lenses sandy clayey silt. Occasional charcoal flecks and small stones.	Flint flake; MR pottery; R tile, imbrex, brick and flue; Iron nails and strip; Bone; Samples: 112, 115	M/LR
24511	Fill of 24509	2.8	0.2	Mid fill of enclosure ditch 24509. Brown grey - dark brown grey organic silty clay. Occasional charcoal flecks and small stones.	Flint flake and scraper; LR pottery; R imbrex and brick; Rotary quern; Iron nails; Bone; Coin, 3C Samples 111, 114	M/LR
24512	Fill of 24509	1.8	0.28	Second basal fill of enclosure ditch 24509. Dark brown grey with yellow white lenses silty organic clay. Occasional charcoal flecks and stones.	Flint piercer; MR pottery; R brick, flue and tile; Iron bar; Oyster shell; Bone; Wooden 'plug'; Samples 109, 110, 113	M/LR
24513	Fill of 24509	3.2	0.08	Base fill of enclosure ditch 24509. Light - mid grey yellow silty clay. Occasional stones.	M/LR pottery; R brick; Oyster shell; Bone	M/LR
24514	Fill of 24507	0.5	0.08	Base fill of pit 24507. Light grey yellow with brown grey lenses silty clay.	-	
24515	Cut	0.4	-	Ovate probable pit. Unexcavated.	-	
24516	Fill of 24515	0.4	-	Top fill of probable pit 24515. Brown grey - dark blue grey sandy clayey silt. Occasional small stones and charcoal flecks. Unexcavated.	R pottery; R indet. CBM; FC wattle str; Copper alloy brooch; Bone	ER
24517	Layer	18.5	0.12	Occupation layer underlying the subsoil 24501. Brown grey - dark blue grey sandy silty clay.	MR pottery; R imbrex; Iron nail	

Trench 246		
General description	**Orientation**	N-S

Trench contained two ditches, one of which is a large enclosure ditch and bank, a stone wall structure and a pit. Consists of topsoil and subsoil overlying natural geology of silty clay.					**Length (m)**	36.7
					Width (m)	1.8
					Avg. depth (m)	0.47
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
24600	Layer	-	0.25	Topsoil. Brown grey - dark brown grey silty clayey sand.	Flint blade, piercer and flake; Iron fragment	
24601	Layer	-	0.16	Subsoil. Brown grey - light brown grey with yellow lenses sandy clayey silt.	Flint flake; E/MR pottery; R brick, tile and indet. CBM; Iron nails	
24602	Layer	-	-	Natural. Light - mid yellow brown silty clay	-	
24603	Cut	4.32	1.16	Linear enclosure ditch on a NW-SE alignment. Relatively steeply sloping sides, base not reached. Not fully excavated.	-	
24604	Fill of 24603	3.5	0.15	Top fill of enclosure ditch 24603. Brown grey - dark grey silty clayey sand. Occasional small stones and charcoal flecking.	E/MR pottery; MR brick, imbrex, tegula, flue and tile; FC structural; Iron nail; Coin, AD 350-364?	
24605	Fill of 24603	3.96	0.17	Fill of enclosure ditch 24603. Brown yellow - yellow grey silty clayey sand. Occasional stones and charcoal flecks.	ER pottery; E/MR tegula, flue, tile and indet. CBM; FC structural and indet.; Iron nail	
24606	Fill of 24603	1.04	0.24	Fill of enclosure ditch 24603. Likely backfilling dump. Brown grey with yellow lenses - dark grey silty clayey sand. Occasional small stones and charcoal flecks.	MR pottery; R tegula and tile; FC indet.; Iron fragments	
24607	Fill of 24603	4.32	0.52	Fill of enclosure ditch 24603. Formed by erosion. Brown grey with orange lenses, sandy clayey silt. Occasional small stones and charcoal flecks.	Flint knife and flake; ER pottery; R tile; FC indet.; Iron nail	

24608	Fill of 24603	2.29	0.54	Fill of enclosure ditch 24603. Formed by erosion. Brown grey with orange lenses, sandy clayey silt. Occasional small stones and charcoal flecks.	E/MR pottery	
24609	Fill of 24603	0.5	0.09	Basal fill of enclosure ditch 24603. Redeposited natural. Yellow orange - light brown yellow silty clay. Occasional small stone and charcoal flecks.	-	
24610	Cut	0.65	-	Oval pit. Unexcavated.	-	
24611	Fill of 24610	0.65	-	Fill of pit 24610. Light grey yellow - light brown yellow clayey sandy silt. Unexcavated.	Flint flake; E/MR pottery;	
24612	Cut	3.75	-	Linear ditch cut on a NE-SW alignment. Unexcavated. Same as 25903?	-	
24613	Fill of 24612	3.75	-	Fill of ditch 24612. Brown grey with orange lenses, silty clay. Unexcavated.	Flint flake; M/LR pottery; R tile, imbrex and indet. CBM; FC oven?	
24614	Wall	0.9	0.34	Structural remnants of a wall, or wall foundation, on a NW-SE alignment. Composed of unfinished limestone within clayey soil.	-	
24615	Cut	0.9	0.32	Linear construction cut of wall 24614. Vertical sides, likely flat base.	-	
24616	Fill of 24615	-	0.32	Fill of construction cut 24615. Dark brown grey clayey silt. Moderate large stones, occasional small stones.	-	
24617	Cut	0.4	0.29	Possible terracing for the formation of a bank running parallel to enclosure ditch 24603. Sides are diffuse and eroded, flat base.	-	
24618	Fill of 24617	-	0.29	Fill of 24617. Likely upcast from the digging of enclosure ditch 24603 to construct a bank running parallel. Heavily eroded.	-	

				Brown grey - light brown grey with orange lenses, sandy clayey silt.		

Trench 247						
General description					**Orientation**	NE-SW
Trench contained two ditches, four pits, a large rectangular feature, a gully and a drain. Consists of topsoil and subsoil overlying natural geology of greensand.					**Length (m)**	30
					Width (m)	1.9
					Avg. depth (m)	0.8
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
24700	Layer	-	0.55	Topsoil. Dark brown clayey silt.	Flint blade and flakes; Copper alloy sheet; Iron button	
24701	Layer	-	0.25	Subsoil. Dark brown yellow clayey silt.	Flint scraper; Iron horseshoe and fragments	
24702	Layer	-	-	Natural. Greensand.	-	
24703	Fill of 24704	0.9	0.42	Fill of pit 24704. Dark yellow brown - dark grey brown silty sandy clay. Frequent cobbles and pebbles and charcoal flecks.	R imbrex; Mortar; Unworked imported stone	M/LR
24704	Cut	0.9	0.42	Oval pit cut. Vertical sides, shallow concave base.	-	M/LR
24705	Fill of 24706	1.05	0.35	Upper fill of ditch 24706. Gradual infilling. Dark yellow brown sandy silty clay. Moderate pebbles, occasional charcoal flecks and pebbles.	R pottery; Mortar	Roman
24706	Cut	1.05	0.45	Linear ditch on a E-W alignment. Regular moderately sloping sides, flat base.	-	Roman
24707	Fill of 24706	0.55	0.12	Primary fill of ditch 24706. Grey brown silty sandy clay. Occasional pebbles.	-	
24708	Cut	0.15	1.8	Drain. Vertical sides, rounded base.	-	Modern
24709	Drain	-	-	Ceramic drain	-	Modern
24710	Fill of 24708	0.15	1.8	Backfill in drain 24708. Yellow brown silty sandy clay. Occasional pebbles.	-	Modern
24711	Fill of 24712	6	0.65	Fill of feature 24712. Loose mixed fill of silty sandy clay	-	

				with gravel lenses. Occasional pebbles, cobbles and CBM.		
24712	Cut	11	1.2	Long rectangular sunken feature running N-S. Sharp, steep sides, flat base.	-	
24713	Fill of 24714	0.5	-	Fill of pit 24714. Unexcavated	-	
24714	Cut	0.5	-	Square pit. Unexcavated	-	
24715	Fill of 24716	0.5	-	Fill of pit 24716. Light yellow grey sandy clay. Occasional pebbles. Unexcavated.	-	
24716	Cut	0.5	-	Square pit. Unexcavated.	-	
24717	Fill of 24718	1.7	-	Fill of ditch 24718. Mottled grey brown - dark yellow brown coarse sandy clay. Occasional pebbles, cobbles and charcoal flecks. Unexcavated.	-	
24718	Cut	1.7	-	Linear ditch on a N-S alignment. Unexcavated.	-	
24719	Fill of 24720	0.45	-	Fill of gully 24720. Dark - mid yellow brown silty sandy clay. Occasional pebbles and cobbles. Unexcavated.	-	
24720	Cut	0.45	-	Gully. Unexcavated.	-	
24721	Fill of 24722	0.3	-	Fill of pit 24722. Pale - mid green grey silty sandy clay. Unexcavated.	-	
24722	Cut	0.3	-	Pit. Unexcavated.	-	
24723	Fill of 24712	4.5	0.8	Fill of feature 24712. Light red grey coarse sandy clay. Pebble and cobble inclusions.	-	
24724	Fill of 24712	4.8	1	Fill of feature 24712. Dark blue grey silty clay. Occasional pebbles, cobbles and charcoal flecks.	-	
24725	Layer	-	-	Upper greensand.	-	
24726	Layer	-	-	Lower greensand. Very pale blue green sand.	-	

Trench 248		
General description	**Orientation**	NW-SE
Trench contained eight ditches, most on a roughly NE-SW alignment, (several with ceramic drains cut into them), two post	**Length (m)**	30
	Width (m)	1.8

holes and a potential wall. Consists of topsoil overlying natural geology of silty clay and greensand.					**Avg. depth (m)**	0.45
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
24800	Layer	-	0.25	Topsoil. Dark brown clayey silt. Occasional stones.	Iron wire and nails	
24801	Layer	-	0.2	Subsoil. Dark brown yellow clayey silt. Occasional stone.	Iron nails	
24802	Layer	-	-	Natural. Light brown yellow silty clay overlying greensand. Occasional flint and pebbles.	-	
24803	Cut	1.2	0.47	Linear ditch on a NW-SE alignment. Steep, even sides, flattish base.	-	Medieval
24804	Fill of 24803	1.2	0.25	Top fill of ditch 24803. Likely natural silting. Brown grey sandy silt. Occasional small stones.	Med pottery *c*1225-1400; R indet. CBM	Medieval
24805	Fill of 24803	0.5	0.25	Base fill of ditch 24803. Likely primary fill. Brown grey with yellow mottling, sandy silt. Occasional small pebbles.	-	Medieval
24806	Cut	1.14	0.46	Linear ditch on a SW-NE alignment. Steep, even sides, flattish base.	-	
24807	Fill of 24806	1.14	0.26	Top fill of ditch 24806. Likely natural silting. Brown grey sandy silt. Occasional small pebbles.	-	
24808	Fill of 24806	0.45	0.23	Base fill of ditch 24806. Brown grey with dark brown mottling, sandy silt. Occasional small pebbles.	-	
24809	Cut	0.92	0.26	Linear ditch on a rough E-W alignment. Regular gently sloping sides, concave base.	-	
24810	Fill of 24809	0.92	0.16	Top fill of ditch 24809. Likely natural silting. Brown grey sandy silt.	-	
24811	Fill of 24809	0.71	0.17	Base fill of ditch 24809. Mix of primary and secondary deposits. Brown grey with dark brown mottling, sandy silt.	-	

24812	Cut	0.54	0.48	Linear ditch terminus. Steep, even sides, concave base.	-	
24813	Fill of 24812	1.08	0.27	Top fill of ditch terminus 24812. Likely natural silting. Grey brown with red brown mottling, sandy silt. Occasional small stones.	-	
24814	Fill of 24812	0.34	00.19	Base fill of ditch terminus 24812. Mix of primary and secondary deposits. Grey brown silty sand. Occasional small pebbles.	-	
24815	Cut	0.39	0.23	Land drain.	-	Modern
24816	Fill of 24815		0.23	Fill of land drain 24815. Brown grey silty sand. Occasional pebbles.	Field drain *c*1850-1925	Modern
24817	Cut	0.41	0.18	Land drain.	-	Modern
24818	Fill of 24817		0.18	Fill of land drain 24817. Brown grey sandy silt.	Field drain *c*1850-1925	Modern
24819	Cut	0.58	-	Possible oval post hole. Unexcavated.	-	
24820	Fill of 24819	0.58	-	Fill of possible post hole 24819. Brown grey sandy silt. Occasional small flint pebbles. Unexcavated.	-	
24821	Cut	0.54	-	Possible oval post hole. Unexcavated.	-	
24822	Fill of 24821	0.54	-	Fill of possible post hole 24821. Brown grey sandy silt. Occasional small flint pebbles. Unexcavated.	-	
24823	Cut	1.34	-	Linear feature, possible ditch on a SW-NE alignment. Unexcavated.	-	
24824	Fill of 24823	1.34	-	Fill of possible ditch 24823. Dark grey brown sandy silt. Occasional small flint pebbles. Unexcavated.	-	
24825	Cut	6	-	Large linear ditch running on a SW-NE alignment. Unexcavated.	-	
24826	Fill of 24825	6	-	Fill of ditch 24825. Brown grey sandy silt. Occasional small flint pebbles. Unexcavated.	-	
24827	Cut	0.3		Land drain.	-	
24828	Fill of 24827			Fill of land drain 24827. Light grey brown sandy silt. Occasional flint.	-	

24829	Cut	1	-	Linear feature, possible ditch on a NE-SW alignment. Unexcavated.	-	
24830	Fill of 24829	1	-	Fill of possible ditch 24829. Brown grey sandy silt. Occasional small pebbles. Unexcavated.	-	
24831	Cut	1.8	0.75	Large linear ditch. Steep, even sides. Not fully excavated.	-	
24832	Fill of 24831	1.8	0.34	Top fill of ditch 24831. Likely natural silting. Dark grey brown sandy silt. Occasional small flint pebbles.	-	
24833	Fill of 24831	1.8	0.43	Fill of ditch 24831. Mix of primary and secondary fills. Dark grey green sandy silt. Occasional small flint pebbles.	-	
24834	Fill of 24831	1.8	0.21	Bottom most excavated fill of ditch 24831. Likely naturally accumulating. Dark brown grey sandy silt. Occasional small flint pebbles.	-	
24835	Wall	0.39	0.14	Remnants of a wall or post pad. Composed of roughly hewn limestone.	-	

Trench 249						
General description					**Orientation**	NE-SW
Trench contained six ditches. Consists of topsoil and subsoil overlying natural geology of clayey silt.					**Length (m)**	38
					Width (m)	1.8
					Avg. depth (m)	0.48
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
24900	Layer	-	0.32	Topsoil. Grey brown silty clay. Occasional flint.	Iron nails, horsehoes	
24901	Layer	-	0.22	Subsoil. Light brown clayey silt. Occasional flint.	Flint flakes; MR pottery; Iron nail	
24902	Layer	-	-	Natural. Yellow brown with light yellow mottling clayey silt.	-	
24903	Cut	1.93	0.52	Linear ditch on a NW-SE alignment. Possible boundary ditch. Steep sides, NE side steeper, concave base.	-	

24904	Fill of 24903	1.78	0.15	Top fill of ditch 24903. Likely natural silting. Dark brown grey sandy silt. Occasional small stones.	Flint flake	
24905	Fill of 24903	1.9	0.43	Fill of ditch 24903. Likely natural silting. Grey with red mottling, sandy silt. Occasional small stones.	-	
24906	Fill of 24903	1.27	0.22	Base fill of ditch 24903. Likely primary fill. Brown yellow clayey silt. Occasional small flint.	-	
24907	Cut	0.89	0.66	Linear ditch on a E-W alignment. Possible boundary ditch. Steep regular sides, concave base.	-	MR
24908	Fill of 24907	0.89	0.41	Top fill of ditch 24907. Grey with light brown mottling, sandy clay. Occasional small flint pebbles.	Flint blade; R pottery; R tile and flue; FC indet.; Iron bar	MR
24909	Fill of 24907	0.45	0.21	Middle fill of ditch 24907. Grey clayey silt. Occasional small flint pebbles.	Flint flakes; MR pottery;	MR
24910	Fill of 24907	0.24	0.16	Base fill of ditch 24907. Mix of primary and secondary fills. Grey clayey silt.	-	MR
24911	Cut	0.49	-	Linear ditch on a E-W alignment. Unexcavated.	-	
24912	Fill of 24911	0.49	-	Top fill of ditch 24911. Grey clayey silt. Occasional small flint. Unexcavated	-	
24913	Cut	0.96	-	Linear ditch on a NW-SE alignment. Unexcavated.	-	
24914	Fill of 24913	0.96	-	Top fill of ditch 24913. Brown grey sandy clay. Occasional small flint pebbles. Unexcavated.	-	
24915	Cut	1.2	-	Linear feature, possible ditch, on a NW-SE alignment. Ephemeral edges. Unexcavated.	-	
24916	Fill of 24915	1.2	-	Top fill of ditch 24915. Brown clayey silt. Occasional flint pebbles. Unexcavated.	-	
24917	Cut	1.12	-	Linear ditch on a NW-SE alignment. Unexcavated.	-	

24918	Fill of 24917	1.12	-	Top fill of ditch 24917. Grey brown clayey silt. Occasional small flint pebbles. Unexcavated.	-	

Trench 250						
General description					**Orientation**	NW-SE
Trench contained a possible tile kiln. It is represented by the remnants of the structure and a construction cut. It also contained a series of ditches. Consists of topsoil and subsoil overlying natural geology of silty clay.					**Length (m)**	30
					Width (m)	1.8
					Avg. depth (m)	0.5
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
25000	Layer	-	0.23	Topsoil. Brown clayey silt. Occasional stones.	Iron nail, rod and poker	
25001	Layer	-	0.21	Subsoil. Brown grey clayey silt. Occasional stones.	Iron nails	
25002	Layer	-	-	Natural. Brown grey silty clay. Occasional flint.	-	
25003	Cut	2.36	0.35	Linear ditch on a NE-SW alignment. Truncates away the remnants of oven 25010. Steep, regular sides, flattish base.	-	R
25004	Fill of 25003	1.18	0.16	Fill of ditch 25003. Possible dumping of demolition waste. Brown grey clayey silt. Occasional small stones, charcoal flecks and CBM.	R tile; FC wattle str. and oven; Sample 116	R
25005	Fill of 25003	1.45	0.21	Fill of ditch 25003. Dump deposit. Dark grey brown clayey silt. Occasional small flints, charcoal flecks and CBM.	R tegula; FC wattle str. and oven	R
25006	Fill of 25003	0.88	0.23	Fill of ditch 25003. Mix of demolition and primary deposits. Dark grey brown clayey silt. Occasional small flint pebbles, charcoal flecks and CBM.	Iron nails, key	R
25007	Cut	0.74	0.19	Small linear ditch or gully on a NE-SW alignment. Regular gently sloping sides, shallow concave base.	-	
25008	Fill of 25007	0.74	0.12	Top fill of ditch or gully 25007. Brown grey clayey silt. Occasional flint	FC wattle str.; Sample 117	

				pebbles, charcoal and CBM.		
25009	Fill of 25007	0.63	0.15	Base fill of ditch or gully 25007. Possibly washed in. Brown grey clayey silt. Occasional small flint pebbles, charcoal flecks and CBM.	-	
25010	Cut	1.32	0.27	Possible ovate oven construction cut. Truncated by ditch 25003. Steep, regular sides, concave base.	-	
25011	Fill of 25010	1.27	0.18	Fill of possible construction cut 25010. Brown clayey silt. Moderate CBM, occasional charcoal flecks.	R pottery; FC wattle str. and indet.; Sample 118	R
25012	Fill of 25010	1.42	0.26	Base fill of possible construction cut 25010. Possible rake out material. Dark grey brown clayey silt. Moderate charcoal.	-	R
25013	Cut	1.44	0.8	Linear ditch on a NE-SW alignment. Irregular steep sides, irregular concave base.	-	MR
25014	Fill of 25013	0.6	0.18	Primary fill of ditch 25013. Grey green with orange mottling, silty clay sand. Occasional charcoal flecks.	-	MR
25015	Fill of 25013	1.44	0.56	Tertiary fill of ditch 25013. Dump of CBM. Dark brown grey silty clay. Occasional charcoal and limestone, frequent CBM.	MR tegula and imbrex	MR
25016	Cut	0.40	-	Cut of NE-SW running ditch. Unexcavated.	-	
25017	Fill of 25016	0.40	-	Fill of ditch 25016. Grey brown silty clay.	-	
25018	Layer	8.0	0.05	Old soil horizon. Brown grey loam.	-	
25019	Cut	0.70	-	Cut of NE-SW running linear ditch. Unexcavated.	-	
25020	Fill of 25020	0.70	-	Fill of ditch 25020. Dark grey brown sandy clay. Unexcavated.	-	
25021	Cut	0.80	-	Cut of NE-SW running linear ditch. unexcavated	-	

25022	Fill of 25021	0.80	-	Fill of ditch 25021. Dark brown grey sandy clay.	-	
25023	Cut	-	-	Cut of E-W running linear. Unexcavated.	-	R
25024	Fill of 25023	-	-	Fill of ditch 25023. Dark brown grey sandy clay. Unexcavated.	R pottery; R indet. CBM; Iron nail	R
25025	Cut	0.60	-	Cut of N-S running ditch. Unexcavated.	-	
25026	Fill of 25025	0.60	-	Fill of ditch 25025. Dark brown grey sandy clay. Unexcavated.	-	
25027	Cut	0.21	0.23	Cut of post hole. Concave base steep sides.	-	R
25028	Fill of 25027	0.21	0.23	Fill of post hole 25027. Brown grey clay silt.	-	R
25029	Layer	3.50	0.21	Colluvium. Brown clay silt.	-	
25030	Fill of 25003	2.12	0.09	Middle fill of ditch 25003. Dark grey brown clay silt.	-	R
25031	Fill of 25003	1.06	0.29	Middle fill of ditch 25003. Grey brown clay silt.	-	R
25032	Fill of 25003	0.84	0.17	Middle fill of ditch 25003. Brown clay silt.	-	R
25033	Fill of 25003	0.78	0.25	Middle fill of ditch 25003. Dark brown clay silt.	-	R
25034	Fill of 25003	1.71	0.11	Lower fill of ditch 25003. Brown clay silt.	-	R
25035	Fill of 25010	1.14	0.07	Fill of oven cut 25010. Dark grey clay silt. Burnt CBM and charcoal.	-	R
25036	Structure	0.28	0.16	Support for oven structure.	-	R
25037	Fill of 25010	0.80	0.11	Fill of construction cut 25010. Dark grey brown sand.	-	R

Trench 251

General description	**Orientation**	NW-SE
Trench contains three ditches, a paleochannel and two pits. Consists of topsoil and subsoil overlying natural geology of silty clay.	**Length (m)**	30
	Width (m)	1.8
	Avg. depth (m)	0.45

Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
25100	Layer	-	0.16	Topsoil. Mid brown grey loam.	Flint core; Iron nail and block	-
25101	Layer	-	0.16	Subsoil. Light brown grey loam.	Flint burin and flake; R tile;	-

					Iron nails; Coin, later 3C	
25102	Layer	-	-	Natural. Light grey yellow silty clay.	-	-
25103	Cut	1.11	0.32	Cut of NE-SW running ditch. Concave base and moderately steep sides.		E/MR
25104	Fill of 25103	0.98	0.08	Lower fill of ditch 25103. Light grey yellow silty clay.		E/MR
25105	Fill of 25103	1.11	0.24	Upper fill of ditch 25103. Brown grey clay silt.	Flint blade; E/MR pottery; R indet. CBM; Iron nail	E/MR
25106	Cut	1.40	0.44	Cut of pit. Concave base and moderately steep sides.		E/MR
25107	Fill of 25106	1.45	0.06	Top fill of pit 25106. Brown grey clay silt.	R pottery; FC indet.	E/MR
25108	Cut	1.25	-	Cut of NE-SW running ditch. Unexcavated.		LR
25109	Fill of 25108	1.25	-	Fill of ditch 25108. Blueish grey sandy clay.	FC indet.; Bone; Coin (AD 251-253)	LR
25110	Cut	4.10	1.70	A N-S running ditch. Steep sides and concave base.		LR
25111	Fill of 25110	4.10	0.80	Top fill of ditch 25110. Brown grey sandy clay.	Flint flakes; E/MR pottery; R tile, flue and imbrex; FC indet.; Iron nails, lead caulking and waste	LR
25112	Cut	-	-	Cut of paleochannel. Unexcavated.		
25113	Fill of 25112	-	-	Fill of paleochannel 25112. Blue grey silty clay.	BA pottery; R tegula; Iron nail	
25114	Cut	1.18	0.30	Cut of pit. Concave base and moderately steep sides.		
25115	Fill of 25114	1.14	0.07	Lower fill of pit 25114. Light grey yellow silty clay.		
25116	Fill of 25114	1.18	0.24	Upper fill of pit 25114. Brown grey clay silt.	FC indet.	
25117	Fill of 25106	1.10	0.20	Middle fill of pit 25106. Brown grey clay silt. moderate charcoal.	E/MR pottery; Sample 106	E/MR

25118	Fill of 25106	1.30	0.20	Lower fill of pit 25106. Light grey yellow silty clay,		E/MR
25119	Fill of 25110	2.20	0.30	Fill of ditch 25110. Light blue grey.	Wood	LR
25120	Fill of 25110	1.20	0.60	Fill of ditch 25110. Dark brown silty clay.	LR pottery; Sample 119	LR

Trench 252						
General description					**Orientation**	E-W
Trench contains a ditch. Consists of topsoil and subsoil overlying natural geology of clay silt.					**Length (m)**	30
					Width (m)	1.80
					Avg. depth (m)	0.42
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
25200	Layer	-	0.24	Topsoil. Dark brown loam.	-	-
25201	Layer	-	0.16	Subsoil. Brown grey loam.		
25202	Layer	-	-	Natural. Light yellow brown clay silt.		
25203	Cut	1.77	0.65	Cut of NE-SW running ditch. U-shaped base and stepped sides.		R
25204	Fill of 25203	1.60	0.50	Upper fill of ditch 25203. Brown grey loam.	R pottery; R brick and tegula; FC indet.	R
25205	Fill of 25203	1.35	0.30	Middle fill of ditch 25203. Brown grey clay silt..	LIA/R pottery; FC indet.	R
25206	Fill of 25203	0.10	0.16	Lower fill of ditch 25203. Light grey yellow silty clay.	LIA/R pottery	R

Trench 253						
General description					**Orientation**	ENE-WSW
Trench devoid of archaeology. Consists of topsoil and subsoil overlying natural geology of clay silt.					**Length (m)**	30
					Width (m)	1.8
					Avg. depth (m)	0.50
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
25300	Layer	-	0.25	Topsoil. Brown grey loam.	Flint blade and flake	-
25301	Layer	-	0.24	Subsoil. Light brown grey loam.	-	-
25302	Layer	-	-	Natural. Brownish greenish grey clay silt.	-	

Trench 254		
General description	**Orientation**	ENE-WSW
	Length (m)	30

Trench devoid of archaeology. Consists of topsoil and subsoil overlying natural sandy clay geology on top of limestone.					Width (m)	1.8
					Avg. depth (m)	0.34
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
25400	Layer	-	0.24	Topsoil. Very dark yellow brown loam.	-	-
25401	Layer	-	0.12	Subsoil. Dark yellow brown loam.	Flint awl, blade and flake; Lead waste	-
25402	Layer	-	-	Natural. Brickearth. Mid yellow brown sandy clay.	-	-
25403	Layer	-	-	Natural. Fragmented limestone surface.	-	-

Trench 255						
General description					**Orientation**	NW-SE
Trench devoid of archaeology. Consists of topsoil and subsoil overlying natural geology of sandy clay.					**Length (m)**	30
					Width (m)	1.8
					Avg. depth (m)	0.38
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
25500	Layer	-	0.24	Topsoil. Very dark yellow brown loam.	Flint flake	-
25501	Layer	-	0.12	Subsoil. Dark yellow brown loam.	Flint bladelet	-
25502	Layer	-	-	Natural. Brickearth. Mid yellow brown sandy clay.	-	-

Trench 256						
General description					**Orientation**	E-W
Trench devoid of archaeology. Consists of topsoil and subsoil overlying natural geology of sandy clay on top of a clay with flints deposit.					**Length (m)**	30
					Width (m)	1.8
					Avg. depth (m)	0.30
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
25600	Layer	-	0.12	Topsoil. Very dark yellow brown loam.	Flint flakes; Iron hobnail, nails and wire	-
25601	Layer	-	0.18	Subsoil. Dark yellow brown loam.	R tile; Iron wire	-
25602	Layer	-	-	Natural. Brickearth. Mid yellow brown sandy clay.	-	
25603	Layer	-	-	Natural. Clay with flints Cobbles in a clay matrix.	-	

Trench 257		
General description	**Orientation**	NE-SW
	Length (m)	44
	Width (m)	2

Trench contains eight ditches, two postholes and three pits. Consists of topsoil and subsoil overlying natural geology of silty clay and weathered limestone.					**Avg. depth (m)**	0.37
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
25700	Layer	-	0.25	Topsoil. Brown loam	Iron nails, lead waste	-
25701	Layer	-	0.12	Subsoil. Brown grey clay silt.	Iron nail; Coin, AD 275-285	-
25702	Layer	-	-	Natural. Light yellow brown silty clay with weathered limestone	-	-
25703	Cut	1.94	0.75	Cut of N-S running ditch. Steep sides and concave base.	-	LR
25704	Fill of 25703	1.35	0.32	Lower fill of 25703. Grey brown silty clay.	E/MR pottery; R brick, tile, imbrex, indet. CBM and LR tegula; R bottle glass; Bone	LR
25705	Fill of 25703	0.50	0.15	Middle fill of 25703. Dark grey silty clay, frequent charcoal.	ER pottery; R brick, tile and imbrex; Iron hobnail, nails, fragment Bone; Sample 120	LR
25706	Fill of 25703	1.90	0.15	Top fill of 25703. Brown grey sandy silt. moderate charcoal flecks.	Flint piercer; ER pottery; R tile, imbrex, tegula and indet. CBM; Iron nails, lead offcut; R bottle glass; Bone	LR
25707	Fill of 25703	0.30	0.25	Lower fill of ditch 25703. Yellow brown silty clay.	-	
25708	Fill of 25703	0.42	0.15	Middle fill of 25703. Brown grey silty clay.	-	
25709	Layer	-	0.30	Reclamation layer. Yellow brown silty clay.	-	
25710	Cut	1.70	0.70	Cut of NW-SE running ditch. V-shaped base and steep sides. Same as 24213?	-	ER
25711	Fill of 25710	1.70	0.16	Lower fill of ditch 25710. Light grey brown silty clay.	ER pottery;	ER

					R brick and tegula; Bone	
25712	Fill of 25710	1.25	0.32	Middle fill of ditch 25710. Brown grey clay silt. moderate charcoal.	R pottery; Bone	ER
25713	Fill of 25710	0.56	0.28	Middle fill of ditch 25710. Grey brown sandy silt.	Flint blade and flake; ER pottery; R tile and tegula	ER
25714	Fill of 25710	0.96	0.16	Upper fill of ditch 25710. Yellow brown sandy silt. frequent sub angular stones.	R brick	ER
25715	Cut	1.30	0.84	Cut of pit. Steep sides and concave base.	-	LR
25716	Fill of 25715	1.30	0.50	Lower fill of pit 25715. Light grey silty clay.	FC indet.; Bone	LR
25717	Fill of 25715	1.30	0.26	Middle fill of pit 25715. Brown grey clay silt. moderate charcoal	Bone	LR
25718	Fill of 25715	0.74	0.28	Upper fill of pit 25715. Dark grey sandy silt. frequent charcoal flecks.	LR pottery; R tile and flue; Bone	LR
25719	Cut	0.40	0.14	Cut of curvilinear gully. Shallow sides. Concave base.	-	M/LR
25720	Fill of 25719	0.40	0.12	Upper fill of gully 25719. Mid grey brown sandy silt.	M/LR pottery; R indet. CBM; Iron nail; R bottle glass	M/LR
25721	Fill of 25719	0.40	0.04	Lower fill of gully 25719. Orange brown sandy silt.	-	M/LR
25722	Cut	0.40	-	Cut of pit. Unexcavated.	-	
25723	Fill of 25722	0.40	-	Fill of pit 25722. Light yellow loam. Unexcavated.	-	
25724	Cut	0.55	-	Cut of posthole. Unexcavated.	-	
25725	Fill of 25724	0.55	-	Fill of posthole. Dark yellow blue sandy clay. Unexcavated.	-	
25726	Cut	2.5	-	NW-SE running ditch. Unexcavated.	-	
25727	Fill of 25726	-	-	Fill of ditch 25726. Dark yellow blue sandy clay. Unexcavated.	R pottery; R tegula	
25728	Cut	2.5	-	Cut of L-shaped ditch. Unexcavated.	-	

25729	Fill of 25728	-	-	Fill of ditch 25728. Brown grey loam. Unexcavated.	MR pottery	
25730	Cut	-	-	Cut of posthole. Unexcavated.	-	
25731	Fill of 25728	-	-	Fill of posthole 25728. Light brown grey loam. Unexcavated.	-	
25732	Cut	2.2	-	Cut of N-S running ditch. Unexcavated.	-	
25733	Fill of 25732	-	-	Fill of ditch 25732. Dark brown grey sandy clay. Unexcavated.	E/MR pottery; R tile	
25734	Cut	-	-	Possible pit. Unexcavated.	-	
25735	Fill of 25734	-	-	Fill of pit 25734. Dark brown grey silty clay. Unexcavated.	-	
25736	Cut	0.40	-	Cut of N-S running ditch. Unexcavated.	-	
25737	Fill of 25737	0.40	-	Fill of ditch 25737. Dark brown grey loam. Unexcavated.	Flint scraper	
25738	Cut	0.30	-	Cut of NW-SE running ditch. Unexcavated.	-	
25739	Fill of 25738	0.30	-	Fill of ditch 25739. Dark brown grey loam.	R pottery	

Trench 258

General description					**Orientation**	NW-SE
Trench contained walls and post pads of the villa complex. Consists of topsoil and subsoil overlying natural geology of silty clay with weathered limestone.					**Length (m)**	10
					Width (m)	1.8
					Avg. depth (m)	0.70
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
25800	Layer	-	0.20	Topsoil. Grey brown sandy silt.	Iron nails, lead waste, copper alloy button	-
25801	Layer	-	0.10	Subsoil. Brown grey sandy silt.	Iron nail, lead waste, copper alloy button	-
25802	Layer	-	-	Natural. Yellow brown silty clay with weathered limestone.		-
25803	Layer	-	0.10	Abandonment layer. Dark brown grey sandy silt. frequent sub rounded stones.	Flint scraper and flakes; Med pottery; R brick, tile, imbrex, indet. CBM and MR flue;	-

					FC furnace; Iron nails Slag; Bone	
25804	Structure	4.0	-	Group number for the second phase of building in this trench. Consists of walls 25807, 25808, 25812, 25813.		M/LR
25805	Layer	1.30	0.20	Rubble layer. Overlies villa structure. Mid brown grey clay silt. frequent sub rounded stones.	ER pottery; R tegula, brick and tile; Bone	-
25806	Layer	2.20	0.10	Levelling deposit. Mid grey brown sandy silt with mortar patches.	M/LR pottery; R imbrex and tile; Oyster shell	M/LR
25807	Structure	>0.5	-	NW-SE running wall. Made of limestone blocks. Three courses.		M/LR
25808	Structure	0.70	-	E-W running wall. Made of limestone blocks.		M/LR
25809	Structure	-	-	Group number for the first phase of walls. Consist of two walls 25810 and 25811.		E/MR
25810	Structure	0.55	-	NW-SE running wall. Two courses of roughly hewn limestone.		E/MR
25811	Structure	0.35	-	NE-SW running wall. Two courses of roughly hewn limestone.		E/MR
25812	Structure	0.70	-	ESE-NWN running wall. Two courses of roughly hewn limestone.		M/LR
25813	Structure	1.30	-	Stone post pad associated with villa construction.		M/LR
25814	Cut	0.25	0.14	Cut of posthole under wall 25808. Steep sides, concave base.		E/MR
25815	Fill of 25815	0.25	0.14	Fill of posthole 25815. Brown grey clay silt.	E/MR pottery	E/MR
25816	Layer	-	0.20	Reclamation deposit. To build up the land. Yellow brown silty clay.		-
25817	Layer	1.40	0.16	Rubble layer. Grey brown sandy silt with frequent limestone blocks.	LIA/R pottery	-
25818	Layer	3.10	0.20	Rubble layer. Grey brown sandy silt with frequent limestone blocks.	MR pottery; R tegula, imbrex, brick and tile;	-

					Bone	
25819	Cut	0.35	0.2	Wall cut for wall 25808. Unknown sides, flat base.		M/LR

Trench 259						
General description					**Orientation**	N-S
Trench contains one NE-SW running ditch. Consists of topsoil and subsoil overlying natural geology of clay silt.					**Length (m)**	30
					Width (m)	1.8
					Avg. depth (m)	0.30
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
25900	Layer	-	0.16	Topsoil. Grey brown loam.		
25901	Layer	-	0.15	Subsoil. Dark grey brown clay silt.	Flint bladelet and flakes	
25902	Layer	-	-	Natural. Yellow orange clay silt.		
25903	Cut	3.10	2.45	Cut of NE-SW running ditch. Concave base, stepped sides. Same as 24612?		E/MR
25904	Fill of 25903	0.32	0.32	Upper fill of ditch 25903. Dark grey clay silt. frequent charcoal.	R pottery; R tegula and tile; FC indet.; Sample 122	E/MR
25905	Fill of 25903	2.70	0.40	Middle fill of ditch 25903. Grey brown clay silt.	R pottery; R tile	E/MR
25906	Fill of 25903	2.50	0.27	Lower fill of ditch 25903. Blue grey clay silt. moderate charcoal.	E/MR pottery; R tegula and tile	E/MR

Trench 260						
General description					**Orientation**	NW-SE
Trench contains a NW-SE running ditch. Consists of topsoil and subsoil overlying natural sandy clay geology on top of sandy clay with flints.					**Length (m)**	30
					Width (m)	1.8
					Avg. depth (m)	0.38
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
26000	Layer	-	0.14	Topsoil. Dark brown grey silty clay.	Flint flakes	-
26001	Layer	-	0.24	Subsoil. Grey brown silty clay.	LIA/R pottery	
26002	Layer	-	-	Natural. Light brown grey sandy clay with angular flint.	Flint blade and flakes	
26003	Cut	0.72	0.34	Cut of NW-SE ditch. Concave base and moderate steep sides.	-	-
26004	Fill of 26003	0.72	0.34	Fill of ditch 26003. Dark grey brown silty clay.	-	-

26005	Layer	-	-	Natural, brickearth, Brown yellow silty sandy clay.	Flint flake	

Trench 261						
General description					**Orientation**	N-S
Trench contains a ditch. Consists of topsoil and subsoil overlying natural geology of clay silt.					**Length (m)**	30
					Width (m)	1.8
					Avg. depth (m)	0.50
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
26100	Layer	-	0.10	Topsoil. Brown clay silt.	Flint flakes	-
26101	Layer	-	0.30	Subsoil. Brown clay silt.	-	-
26102	Layer	-	-	Natural. Brownish yellow clay silt.	-	-
26103	Cut	4.60	0.80	Cut of ESE-WNW running ditch. Moderately steep sides and concave base.	-	-
26104	Fill of 26103	2.30	0.28	Fill of ditch 26103. Grey brown stoney deposit in clay silt matrix		
26105	Fill of 26103	4.60	0.80	Fill of ditch 26103. Dark grey brown silty clay.		
26106	Fill of 26103	3.60	0.24	Fill of ditch 26103. Brown orange clay silt.	Flint flake	

Trench 262						
General description					**Orientation**	NE-SW
Trench contains barrow mound soils and buried soil horizons. Consists of topsoil and subsoil overlying natural geology of sandy clay.					**Length (m)**	50
					Width (m)	1.8
					Avg. depth (m)	0.50
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
26200	Layer	-	0.20	Topsoil. Dark grey brown silty clay.	-	-
26201	Layer	-	0.10	Subsoil. Mid grey brown silty clay.	-	-
26202	Layer	-	-	Natural. Sandy clay.	Flint bladelet and flake	
26203	Layer	-	0.56	Barrow mound. Dark brown grey with patches of light grey white silty sand.	Flint bladelet, cores, knife, scrapers, flakes and waste; Intrusive LIA/R pottery; Monolith 121	
26204	Layer	-	0.14	Buried soil below mound. Light brown grey silty clay.	Monolith 121	
26205	Layer	-	0.19	Buried soil below 26204. Brown grey with dark	Monolith 121	-

				brown lenses of silty clay with sand.		

Trench 263						
General description					**Orientation**	E-W
Trench contained a ditch as well as a barrow mound soil that overlies a buried soil and podsol. Consists of topsoil and subsoil overlying natural geology of silty clay.					**Length (m)**	50
					Width (m)	1.8
					Avg. depth (m)	0.70
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
26300	Layer	-	0.02	Topsoil. Brown grey loam	Flint burin, denticulate, blades and flakes; Modern glass	-
26301	Layer	-	0.18	Subsoil. Grey brown loam.	Flint scraper and flakes	-
26302	Layer	-	-	Natural. Brown yellow silty clay.	-	-
26303	Layer	5.74	0.18	Buried soil below mound. Dark black grey silty clay, frequent charcoal. Same as 26308?	Flint blades, knifes, cores, saw, peiercer, denticulate, flakes and waste; L Neo/EBA pottery; FC indet.; Samples 124, 125, 127, and 132	
26304	Cut	1.68	0.47	N-S running ditch. Base not reached, moderately steep sides. Cuts 26306 and 26308.		
26305	Fill of 26304	1.68	0.47	Fill of ditch 26304. Brown grey silty clay.	Flint bladelet, blade, flakes and waste	
26306	Layer	-	0.21	Light grey yellow silty clay. Cut by 26304. Same as 26311 and 26309?	Wood; Modern glass (Surface)	
26307	Layer	1.66	0.09	Mid brown grey silty clay.	-	
26308	Layer	0.70	0.05	Buried soil? Grey brown silty clay. Cut by 26304. Same as 26303?	Flint core and flake	
26309	Layer	-	0.32	Barrow mound soil. Orange brown sandy clay. Same as 26311 and 26306.	Flint blades, mincroburin, bladelets, microlith and flakes; Neo-BA pottery; Intrusive R pottery;	-

					Bone; Samples 123, 128	
26310	Layer	-	0.10	Podsol. Overlain by buried soil 26303. Light yellow grey silty clay.	Flint flake; Neo-EBA pottery Sample 126 133 and 127	
26311	Layer	-	-	Same as 26309 and 26306.	-	

Trench 264						
General description					**Orientation**	NW-SE
Trench contained a pit. Consists of topsoil and subsoil overlying natural geology of clay sand.					**Length (m)**	30
					Width (m)	1.8
					Avg. depth (m)	0.40
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
26400	Layer	-	0.30	Topsoil. Grey brown silty clay.	-	-
26401	Layer	-	-	Natural. Yellow brown clay sand flint matrix.	-	-
26402	Cut	0.42	-	Cut of pit. Unexcavated.	-	-
26403	Fill of 26402	0.42	-	Fill of pit 26402. Dark brown grey clay silt.	R tile	-

APPENDIX B FINDS REPORTS

B.1 Flint

By Michael Donnelly

Introduction

B.1.1 Field 4 of this large evaluation scheme brought to light a significant assemblage of 265 pieces of struck flint, five pieces of burnt unworked flint weighing 298g and one natural fragment. The assemblage was split between topsoil/subsoil material and flints from ditches, pits and other features. The assemblage was extremely tool heavy (19.22%) surpassing even the high figures for Field 1 (14.95%) and included artefacts whose form suggested a date range spanning the early Neolithic through to the early Bronze Age. Blades were actually quite rare here suggesting that the majority of the assemblage post-dates the early Neolithic. Flakes that typified later prehistoric industries were also present. The field included several good assemblages from features including some that were very probably contemporary with those features, while the tool assemblage was strongly focused on scrapers and piercer-type artefacts suggesting that hide working may well have been very important here.

CATEGORY TYPE	Topsoil/subsoil	Features	Barrow & buried soil	Total
Flake	37	30	71	138
Blade	7	3	13	23
Bladelet	2		9	11
Blade index	19.57% (9/46)	9.09% (3/33)	22.83% (22/93)	19.77% (34/172)
Irregular waste		2	7	9
Chip		1		1
Microburin			1	1
Sieved chip		1	50	51
Core rejuvenation flake	1	1		2
Crested piece	1	3	2	6
Core opposed platform blades	1		1	2
Core other blades			2	2
Core single platform flakes			1	1
Core keeled flakes		1		1
Core levallois flakes			2	2
Core on a flake	1	1	2	4
Core fragment		1		1
Scraper end	1	2	3	6
Scraper side		1		1
Scraper sides and end	1	1	3	5
Scraper other			1	1
Microlith			1	1
Knife backed		1	1	2
Knife other			1	1
Awl	1	1		2
Piercer	1	2	2	5
Denticulate	1		1	2
Saw			1	1
Notch	1			1
Burin	2			2
End truncation	2		1	3
Flake retouched	3			3
Blade retouched	1		2	3
Other retouch	2		1	3
Total	66	52	179	297

Burnt un-worked	0	21 / 90g	16 / 11g	37 / 101g
No. burnt (%)	9 / 66 (13.64%)	5 / 52 (9.62%)	12 / 179 (6.70%)	26 / 297 (8.75%)
No. broken (%) (not including waste)	24 / 66 (36.36%)	24 / 51 (47.06%)	47 / 129 (36.43%)	95 / 246 (38.62%)
No. retouched (%) (not including waste)	16 / 66 (24.24%)	8 / 51 (15.69%)	18 / 129 (13.95%)	42 / 246 (17.07%)

Table B.1.1: The flint assemblage from Otterpool Field 5

Provenance (Table B.1.2)

B.1.2 As mentioned above, a very considerable proportion (71.38%) of this assemblage came from just two linked trenches at the southern limit of this area. Much of this assemblage belonged in either the pre-barrow soil horizons (36.70%) or from the mound itself (23.57%). Topsoil, subsoil and some flints from brickearth deposits accounted for another 22.22% of the assemblage and the remaining 17.51% was found as residual flintwork in features scattered across the evaluation area. These flints from features were mostly recovered from ditches (38/52, 73.08%) but there was also 11 pieces (21.15%) from layers associated with the villa in the northern portion of the evaluation and from a very limited number of other features (e.g. pits 3/52, 5.77%).

CATEGORY TYPE	Total	Percentage
Ditches	38	12.79
Villa layers	11	3.70
Pits	2	0.67
Misc features	1	0.34
Topsoil/Subsoil/Natural	66	22.22
Barrow mound	70	23.57
Pre-barrow soils	109	36.70
Total	297	[100]

Table B.1.2: The flint assemblage by context type

Raw material and condition (Table B.1.3)

B.1.3 As with all the Otterpool assemblages, flint was the only material utilised for knapping. The flint came from various sources including chalk and glacial/riverine gravels. The majority of the assemblage appeared to have been recovered from on or close to the chalk with either typical chalk cortex (52/133), often heavily weathered (27/133) or with the very thin abraded cortex typical of north downs flint (16/133). Bullhead Beds flint (16) (Bromehead and Dewey 1915) was also present and has often been a significant component of Neolithic and later assemblages at Otterpool and elsewhere in Kent. The remaining pieces with cortex displayed a wide range of conditions including rolled (8), indeterminate (8) and thermal (6).

B.1.4 The assemblage was actually one of the freshest so far recovered from Otterpool and includes the very fresh material associated with the barrow activity in Trenches 262 and 263. Here, 56.41% of the flints were described as fresh and 94.02% of the material was either fresh or had light edge damage, 5.13% had moderate levels and just 0.85% displayed high levels of damage. Beyond this one component, however, the assemblage was actually marginally the least fresh identified (21.36%) by a small amount over Fields 1 and 4. Flints from features were in slightly better condition (fresh 19.56%, light 54.35%, moderate 21.74% and heavy 4.35%) than those from topsoil/subsoil horizons (fresh 22.81%, light 50.88%, moderate 17.54% and

heavy 8.77%), although the latter actually had more fresh pieces largely related to the recovery of material from subsoil and brickearth horizons in the vicinity of the barrow. It is obvious that the assemblage from the barrow and underlying soils is in very good condition and it implies that the barrow was constructed over unmodified and undisturbed land surface containing flints dating back to the early Mesolithic. The residual material from features and topsoil/subsoil horizons very probably relates to this same broad phase of activity and may well represent the disturbed remains of task sites and casual losses carried out along the banks of this river system, overlooked by the ridge on which the barrow sat.

Total assemblage	Total	%	Cortication	Total	%
Fresh	88	40.0%	None	29	13.18%
Light	98	44.55%	Light	157	71.37%
Moderate	26	11.82%	Moderate	22	10.0%
Heavy	7	3.18%	Heavy	5	2.27%
Rolled	1	0.45%	Very heavy	7	3.18%
	220			**220**	
Topsoil/subsoil	Total	%	Cortication	Total	%
Fresh	13	22.81%	None	4	7.02%
Light	29	50.88%	Light	37	64.91%
Moderate	10	17.54%	Moderate	10	17.54%
Heavy	4	7.02%	Heavy	4	7.02%
Rolled	1	1.75%	Very heavy	2	3.51%
	57			**57**	
Features	Total	%	Cortication	Total	%
Fresh	9	19.56%	None	5	10.87%
Light	25	54.35%	Light	34	73.92%
Moderate	10	21.74%	Moderate	6	13.04%
Heavy	2	4.35%	Heavy		
Rolled			Very heavy	1	2.17%
	46			**46**	
Barrow & buried soils	Total	%	Cortication	Total	%
Fresh	66	56.41%	None	20	17.09%
Light	44	37.61%	Light	86	73.51%
Moderate	6	5.13%	Moderate	6	5.13%
Heavy	1	0.85%	Heavy	1	0.85%
Rolled			Very heavy	4	3.42%
	117			**117**	

Table B.1.3: Flint by condition and cortication

The assemblage (Table B.1.4)

B.1.5 The assemblage was sizeable for an evaluation and included a very large group of material associated with a barrow and buried soil. Beyond this, there were no significant groups from other features and the majority of the flint work here was residual in later features, mostly of Romano-British date.

B.1.6 The pattern of flint-related activity was clearly focused on the southern uphill portion of the evaluation area. While the barrow will have sealed and thus preserved a buried soil containing numerous pieces of flint, there was still more topsoil and subsoil material in this uphill portion of site than in the northern portion down closer to the stream. This indicates that there was very probably a much larger area of early prehistoric activity than that preserved under the barrow. However, this activity was very probably made up of numerous small scale scatters situated at a favoured location, in this case a ridge that provided a very good vantage point overlooking a river channel and possibly a wetland area.

B.1.7 The assemblage had a moderate blade index of 19.77% suggestive of earlier Neolithic assemblages. However, numerous Mesolithic sites are known from this region that contain low-levels of blade forms and it is certainly possible that much of this assemblage is Mesolithic in date. However, some of the assemblage is clearly of more recent in date and would be directly associated with early Bronze Age activity before, during and after the mound had been constructed.

B.1.8 In terms of cores and related debitage, the evaluation yielded 21 pieces or 8.54% of the non-chip assemblage. This figure is the highest figure at Otterpool by some margin with the largely early Neolithic Field 1 coming second at 6.41%. It clearly indicates that knapping of cores down from nodules or at least preformed cores occurred here. The assemblage consisted of 13 cores and eight pieces of core dressing (six crested pieces and two core rejuvenation flakes). Nine of the cores were geared towards flake production while four were blade/let cores. Two of these were classic opposed platform blade cores that are very probably Mesolithic in date while the remaining two are more complex, cubic examples and are probably likely to date to the early Neolithic period. The 13 flake cores consisted of four on large flakes, one single platform, one keeled, two levallois cores and one core fragment. The single platform core has negative scars that were very close to bladelet dimensions and is also probably Mesolithic while both of the levallois cores and the keeled examples are probably late Neolithic to early Bronze Age in date. The significant levels of crested pieces here highlight the likelihood that early prehistoric knapping was prominent, especially in and around the barrow where four of the six examples were recovered (one in ditch 26305 and another as a topsoil find in Trench 260).

B.1.9 Tools were extremely numerous at 17.07% but this figure drops markedly to 13.95% from the barrow and buried soil areas where preservation has retained a more complete assemblage. It should be mentioned that five of the 16 topsoil/subsoil tools came from the barrow area and could arguably be included in the barrow assemblage which would result in the is figure increasing to 15.54% (23/148) and the topsoil/subsoil figure dropping slightly to 23.40% (11/47). However, this figure is still very high, but excavations at that area were conducted under very poor flint-recovery conditions and it is likely that this has resulted in tools being overrepresented. Four bulk samples taken from the mound and underlying layers that were not scanned for flints during excavation, yielded an assemblage of 83 pieces, 50 of which were fine knapping chips. Only one of the remaining 33 flints was a tool, giving a more typical figure for tool percentage in an assemblage of 3.03%. This item was the sole microlith recovered so far from Otterpool and highlights the importance of sampling in order to determine the age of any flint assemblage. Topsoil/subsoil layers had by far the most tools at 24.24% while features generated a figure of 15.69%.

B.1.10 Very high tool percentages have been a feature of all the Otterpool assemblages (16.50%). In contrast, the highest figure obtained from any excavation area at the relatively close Bexhill to Hasting Link Road project was 6.45% (OA forthcoming), the highest from any of the *in situ* scatters was 14.12% with a norm of around 6%. East Kent Access Road had figures of around 5.8% while a recent evaluation on the M2 gave a figure of 8.82%. The A2 and A21 excavations had 7.17% and 4.95% respectively. Clearly the Otterpool figures are unusual and indicate an area that had very strong connections with the use of tools rather than the industrial processes that produced them. What is perhaps more important is that this heightened use of flint occurs over time, Field 5 probably largely belonged in the early Mesolithic and early Bronze Age (17.07%), while Field 1 was mostly early Neolithic in date (14.95%). Fields 2 and 3 belonged to a range of periods from the Mesolithic through to the early Bronze Age (12.84%), while Field 4 belonged to the late Neolithic to later Bronze Age (19.22%). This consistent use of flint over time may well indicate that a very rich, diverse prehistoric landscape was present here and that the potential for encountering archaeological remains of regional or national importance is great should further work be carried out.

B.1.11 Although there were 42 tools identified, three were combination tools giving a total of 45 forms in the assemblage. The combination tools all included piercers, two combined with end scrapers and the third was paired with an awl. This gave a total figure of 15 scrapers, eight end, one side, five side-and-end and one other form (a concave end scraper). The scrapers were almost all formed on flake blanks but many of these were quite regular, long examples. The most notable scraper was a poorly retouched end of blade scraper formed on a long crested blade with faceted platform. This piece came from the pre-barrow soil 26303 and is almost certainly early Mesolithic in date. Several of the scrapers, especially the more complex side-and-end scrapers are likely to be Neolithic or early Bronze Age in date and a number of these were found under the barrow (2) or in the mound (1).

B.1.12 The second most numerous tool form was the awl (3) or piercer (8) making a total of 11 tool edges on 10 pieces (there is one combination awl/piercer) that are related to the formation or widening of holes in material such as hides. These tended to be more dispersed across site but three were still recovered from below the mound. These tools are common throughout prehistory and there is nothing in the blank form to suggest that many are early, all are formed on flakes, however, at least one is very early in form and was recovered from villa trench 244, abandonment layer 24408.

B.1.13 Further evidence of animal processing may be indicated by the recovery of a saw (inner blade), two denticulates and three knives. Of these, five were found in or around the barrow with just one of the backed knives being found elsewhere in ditch fill 24603.

B.1.14 The key tool recovered from Field 5 was the microlith recovered from sample <128> taken from barrow mound 26309. It yielded a bi-truncated rhombic microlith that is usually dated to the end of the early Mesolithic (Conneller *et al*. 2016). This layer also yielded a probable miss hit microburin as well as an end truncation and retouched blade. All of these would be easily accommodated by an early Mesolithic date. However, it is possible that a late Mesolithic date would also suffice but it should be said that the early material from this area all tended to be formed on high quality chalk flint and late Mesolithic industries very often use less high quality material. Therefore, it would appear likely that much of the early tools, cores and debitage recovered here should date to the early Mesolithic.

B.1.15 Early tool forms included the three end truncations usually associated with arrow shaft production and straightening as well as other wood working tasks. Three retouched blades/lets were also recovered as were two burins on flakes, one dihedral and another multiple angle burin. These early forms were actually found dispersed across the evaluation area but four of the eight forms were still recovered from the barrow area including one of the burins found as a topsoil find from Trench 263

B.1.16 Finely serrated pieces/microdenticulates were absent from here. These very often form a major component of early Neolithic assemblages and their absence here is another indicator that this assemblage may well be largely Mesolithic in date.

B.1.17 Overall, the tools indicate a large early Mesolithic assemblage, mostly recovered from the barrow area on the ridge but also present in the valley bottom indicating the complexity of these early taskscapes. There was also a potentially significant later Neolithic to early Bronze Age component that was more dispersed but included several tools from under and in the barrow. This would clearly indicate some form of pre-barrow activity that was broadly contemporary with its construction showing that the mound was not created atop virgin land.

CATEGORY TYPE	Buried soil	Barrow mound
Blade index	29.27%	25.00%
Retouch	15.58%	11.54%
Core/core debitage	9.09%	5.77%
Breakage	31.17%	44.23%
Burning	6.49%	13.46%

Table B.2.4

Key contexts

B.1.18 There were few key contexts in Field 5. The vast majority of the flintwork came from the southern edge of the evaluation area (225) and from a very limited number of features. A large area in the central and eastern part of the evaluation contained very few flints (25), while the northern and northwestern edge of the scheme did contain more flintwork (47) but this was very probably a factor of the intense workload in these trenches including the hand cleaning and hand removal of overburden from Roman structural remains.

B.1.19 The barrow mound and buried soil horizons associated with it yielded 179 flints, 18 from Trench 262 and 161 from Trench 263. However, Trench 263 was extensively sampled and the hand-recovered figures show more similarity with 16 and 24 mound flints from 262 and 263 respectively. The respective numbers from the buried soil were 2 and 54 flints, but far more of the buried soil was exposed in Trench 263, and here, the soil was clearly darker, more charcoal-rich and contained obvious artefactual material. This may imply that the flint scatter covered by the mound was quite discrete, although it was clearly multi-period in date given the tool forms and associated pottery.

B.1.20 Unsurprisingly, when the mound and underlying layers are examined separately (Table B.1.4) it is clear that the material from the barrow has fewer blades, tools and cores, is more broken and more burnt and less fresh than that from the buried soils. The comparative figures are: mound - fresh 46.67%, light 48.89%, moderate 2.22% and heavy 2.22%; buried soils - fresh 62.50%, light 30.56% and moderate 6.94%). This clearly shows a degree of mixing and disturbance associated with the mound, very probably as part of its construction process but

also through its role as an active monument in the landscape. This also implies that the bulk of the flintwork from below the mound could easily belong to one or more *in situ* flint scatters. These scatters are of Mesolithic, and very probably early Mesolithic, date.

B.1.21 Trenches 259 to 261 in the immediate vicinity of the barrow produced 15 flints with no more than four coming from any one context, in this case the early Holocene brickearth (26002) in Trench 260. The assemblage consisted of 11 flakes, one blade, one opposed platform core and two core dressing pieces (a rejuvenation flake and a crested flake). Despite the lack of blades, this group included a classic Mesolithic core form found in Trench 259 as well as the two pieces related to core maintenance that are generally early in date. The presence of flints in the brickearth is of note but careful cleaning of these horizons failed to yield evidence for any dense *in situ* activity.

B.1.22 The trenches in the central and eastern parts of the evaluated area yielded just 25 flints with no more than six in any trench (Trenches 249 and 251) and several that lacked flintwork (Trenches 248, 250 and 252). There was little archaeology in the southern half of this area, but the northern portion contained numerous linear features and an oven-type feature, a significant number of which were investigated by hand-excavation. Therefore, the lack of flints is believed to be a true reflection of flint-related activity here. The assemblage of 25 pieces comprised 14 flakes, two blade forms, six tools and three cores or related debitage. Nearly all this material came from topsoil/subsoil horizons (72%) and the remaining assemblage all came from ditch fills (28%). Ditch 24907 in Trench 249 contained three flints, two of which were crested pieces. These crested pieces are likely to be early and were located close to the bottom of the slope leading up to the barrow area. The tools recovered included three early forms that consisted of a burin, a retouched blade, and an end truncation, while one heavy awl from the subsoil in trench 254 was probably later prehistoric in date. The remaining two retouched flakes were undiagnostic.

B.1.23 Trenches 241 to 247 and 257-258 formed the villa complex. These trenches yielded 47 flints, the largest number (11 flints) from Trench 244, none in Trench 242, and between two and nine flints in the remainder. The much larger level of hand-cleaning and excavation in these trenches very probably accounts for the larger number of flints that were recovered; only 11 of the 47 flints came from the topsoil or subsoil horizons (23.40%), close to the average for the whole site. The assemblage here had a much lower blade index of 13.79% (4/29) and several of the tools looked to be later prehistoric in date. Two quite heavy piercers including one on a thermal chunk were typical of this period, as were a number of flakes with thermal platforms and hard-hammer bulbs. The keeled core is very likely to be Neolithic or later in date, while the other core fragment appeared to have been part of a levallois core of probable late Neolithic date.

B.1.24 Thirteen tools were recovered from the villa area out of 46 pieces (excluding chips), giving an extremely high tool percentage of 28.26%. These comprised six scrapers, four awls/piercers, a backed knife, a retouched flake and an end truncation. Two of the complex scrapers are very probably Neolithic or early Bronze Age in date. Only two of these pieces were distinctively early in date but the majority were undiagnostic and may have belonged to any period between the early Mesolithic and later Bronze Age. Overall, the flint material from the villa complex appeared to have been formed from a number of limited episodes of activity, and there was no indication anywhere of buried soil horizons similar to those found under the barrow. However, it is possible that such layers could survive elsewhere in the villa complex.

Discussion

B.1.25 The discovery of Mesolithic activity from below and within the barrow mound in Trenches 262-263 is of note, being the first definite evidence of activity of this period at Otterpool. Other areas have had considerable quantities of blades cores and other debitage but none have yielded unequivocally Mesolithic artefacts. Early Mesolithic activity is rare in this part of Kent. One site is known from Saltwood Tunnel along the route of HS1 but there the microliths clearly belonged to the slightly later Horsham industry (Booth *et al* 2011).

B.1.26 The site's location, along a ridge overlooking a valley bottom, is of note. While this landscape is still very wet today, it is easy to imagine a richer wetland landscape during the Mesolithic. The use of such vantage points is common in the Mesolithic and is directly comparable to the early Mesolithic scatters identified at Bexhill (OA forthcoming). These scatters also had very tool-rich inventories. These scatters reflect a specialist camp-site away from the main base camps or primary knapping sites. As such, numerous finished tools would have been brought to these locations ready for use in hunting and also probably for repairing such kit and this would have led to these tool-heavy assemblages.

B.1.27 The buried soil horizons beneath the mound are also very important as these will have preserved the flintwork leading to almost intact assemblages very suitable for detailed study. Any further work in this area should prioritise the recovery of such *in situ* assemblages.

B.1.28 The remainder of the flint assemblage is very similar to the tool-heavy collections found elsewhere at Otterpool, albeit at a less intensive scale. Here, this may be the result of the evaluation area containing a barrow that became a focus for later flint-knapping activity.

B.1.29 This flint assemblage confirms that people have been in the Otterpool landscape since the early Mesolithic. The material preserved beneath the barrow implies a sizeable *in situ* camp site. This would indicate something more than a transient visit to the area as is often cited for Mesolithic assemblages in Kent. The assemblage also adds to the very tool-rich flint-related landscape identified elsewhere on the scheme. Any further work on the barrow area should expect to recover a substantial flint assemblage of regional importance.

Methodology

B.1.30 The artefacts were catalogued according to OA South's standard system of broad artefact/debitage type (Anderson-Whymark 2013; Bradley 1999), general condition noted and dating was attempted where possible. The assemblage was catalogued directly onto an Open Office spreadsheet. During the assessment additional information on condition (rolled, abraded, fresh and degree of cortication), and state of the artefact (burnt, broken, or visibly utilised) was also recorded. Retouched pieces were classified according to standard morphological descriptions (e.g. Bamford 1985, 72-77; Healy 1988, 48-9; Bradley 1999). Technological attribute analysis was initially undertaken and included the recording of butt and termination type (Inizan *et al.* 1999), flake type (Harding 1990), hammer mode (Onhuma and Bergman 1982), and the presence of platform edge abrasion.

B.2 Prehistoric pottery

By Lisa Brown

Introduction

B.2.1 The excavations in Field 5 produced 30 sherds of prehistoric pottery weighing 99g. They were recovered from the fill of palaeochannel 25112, ditch 25732, and a buried soil (26303), podsol (26310), and cover soil (26309) associated with a mound that probably represents a round barrow. Some of the sherds are clearly of late Neolithic/early Bronze Age type, and the entire collection might date to this period, but a single sherd from ditch 25732, which is in a fabric not previously recorded from this project may be Iron Age. The pottery is generally abraded and very fragmentary, with an ASW of only 3g, and includes no rim or body sherds. Nonetheless, decoration was sufficiently well-preserved on sherds from buried soil contexts 26303 and 26310 to determine that they belong to early Bronze Age vessels.

Methodology

B.2.2 Fabrics were identified with the aid of a hand lens and binocular microscope at 20x and 10x magnification, and classified using an alpha-numeric dominant inclusion code, further subdivided on size and frequency of the inclusions, following the recommended guidelines of the Prehistoric Ceramics Research Group (PCRG 2011; 2016). The pottery was recorded by in an Excel spreadsheet by context group, feature or deposit type, and feature group. All fragments were counted and weighed. The following characteristics were entered in separate fields where possible: fabric, form, surface treatment, decoration, degree of abrasion, and spot date. Degrees of abrasion are based on three broad categories: (3) high - surface survival minimum, breaks heavily eroded; (2) moderate - surface somewhat preserved but clearly worn; (1) slight - little indication of wear apparent.

Fabrics

B.2.3 Six fabrics within three ware groups were identified, the range including some of the fabrics identified within collections from Fields 1 – 4, but additionally a previously unidentified grog-tempered fabric (G4), and a limestone-tempered type (L1). Unlike the material from Fields 1 – 4, grog-tempered fabrics predominate, but these contain red and or black ferrous inclusions in varying amounts, probably linking the potting clays to a source on the local iron-rich Cretaceous Wealden Clays. The limestone-tempered sherd is an outlier to the group, the inclusions possibly Kentish Ragstone from the Cretaceous Hythe Formation which outcrops in cliffs close to Otterpool (www.bgs.ac.uk).

B.2.4 The following fabrics were identified within the Field 5 assemblage:

F1 *Lightly sanded glauconitic clay incorporating sparse to moderate red and black ferrous inclusions, tempered with moderate to abundant ill-assorted coarse white and grey calcined flint pieces 0.5-5mm*

F4 *glauconitic sandy clay with small black and red ferrous inclusions and sparse calcined flint <2mm – more sand than flint*

G1 *soapy lightly sanded fabric with inclusions of dark grog, and abundant red powdery ferrous material, rare white calcined flint <1mm (possibly Neolithic)*

G2 *lightly sanded, soapy fabric with dark grog, abundant black oxides and sparse calcined flint pieces <2mm (possibly Neolithic)*

G4 *Coarse sandy clay with temper of abundant dark grog and black iron oxides*

L1 *very fine sandy micaceous with abundant fine crushed limestone pieces and rare red powdery ferrous oxides*

The pottery in context

B.2.5 Most of the pottery was recovered from deposits associated with the probable barrow. The fabrics recognised from these contexts are course flint-tempered (F1) and grog-tempered types G1 and G4. No substantial or distinctive vessel parts were recovered, but buried soil 26303 produced three small sherds in fabric G1 decorated with incised chevrons and impressed dots, almost certainly belonging to a thin-walled Beaker vessel. Other decorated sherds (46g) in a coarser grog-tempered fabric (G4) came from podsol 26310, which underlay layer 26303. These are relatively thick-walled body sherds, quite crudely finished, but decorated with twisted cord impressions, and could belong to a large, coarse Beaker or contemporary vessel. The flint-tempered sherds are also probably earlier prehistoric but have no distinguishing features that can allow precise characterisation or dating. The limestone-tempered sherd from ditch 25732 is handmade and probably prehistoric, but not demonstrably earlier prehistoric.

CTX	CTX2	SF	Sample	NOSH	Wt (g)	Description	Date
25113	Palaeochannel 25112			1	2	F4 body sherd	Epreh
25733	Ditch 25732			1	16	L1 body sherd	Preh
26303	Buried soil	193 201 229	125	13	29	F1, G1, G4 including Beaker	EBA
26309	Barrow cover soil	216		4	6	F1 body sherd	Epreh
26310	Podsol below 26303		126	11	46	G4 body sherds decorated with twisted cord impressions. Coarse Beaker?	EBA
TOTAL				**30**	**99**		

Table B.2.1: Summary of the prehistoric pottery

B.3 Late Iron Age and Roman pottery

By Edward Biddulph

Introduction

B.3.1 A total of 1212 sherds of pottery, weighing 14,153g, were recovered from context-groups spot-dated to the late Iron Age or Roman periods. The assemblage was scanned to identify diagnostic forms and fabrics, provide spot-dates, and make recommendations for the treatment of the material. Fabrics were assigned codes from OA's standard recording system for later Iron Age and Roman pottery (Booth 2016). Reference was also made to Monaghan's (1987) corpus of the North Kent pottery industry, standard samian ware typologies (cf. Webster 1996), and the National Roman Fabric Reference Collection (NRFRC; Tomber and Dore 1998).

B.3.2 Each context-group was quantified by sherd count and weight (grammes), and any rims present were additionally quantified by estimated vessel equivalent (EVE), which measures the proportion of rim that survives (thus, 0.3 equals 30%). The total was 11.14 EVEs. Pottery data is presented in Table B.3.4.

B.3.3 The following late Iron Age/Roman fabrics were noted (NRFRC codes in brackets):

- A10 Unsourced buff amphora fabric
- A11 South Spanish (Dressel 20) amphora fabric (BAT AM 1)
- ?A12 ?Cadiz amphora (CAD AM)
- A13 South Gaulish amphora fabric (GAL AM 1)
- B11 Dorset black-burnished ware (DOR BB 1)
- B20 Black-burnished ware, category 2 (may include CLI/COO BB 2)
- B30 Other/imitation black-burnished wares
- E30 Late Iron Age/early Roman sandy fabric
- E30 (glauconitic) Late Iron Age/early Roman sandy fabric with glauconitic grains
- E50 Late Iron Age/early Roman limestone tempered fabric
- E80 Grog-tempered ware (SOB GT)
- E810 Grog and sand-tempered ware
- F15 Terra Rubra (GAB TR 2)
- F45 Cologne colour-coated ware (KOL CC)
- F50 Unsourced colour-coated ware
- F52 Nene Valley colour-coated ware (LNV CC)
- F56 Hadham red colour-coated ware (HAD OX)
- M14 North Gaulish white/buff mortarium fabric (NOG WH 4)
- M22 Oxfordshire white ware mortarium fabric (OXF WH)
- M29 South-east buff mortarium fabric (includes COL WH)
- M30 Oxidised mortariun fabric with white slip
- O Indeterminate oxidised ware
- O10 Fine oxidised ware, including North Kent fine oxidised ware
- O20 Sandy oxidised ware
- O50 Miscellaneous oxidised ware
- O80 Coarse tempered oxidised ware
- R Indeterminate reduced ware
- R10 Fine reduced ware
- R16 North Kent fine reduced ware (UPC FR)
- R20 Sandy reduced ware
- R30 Medium sandy reduced ware

- R50 Dark surfaced ware
- R90 Coarse tempered reduced ware
- S Indeterminate samian ware
- S20 South Gaulish (La Graufesenque) samian ware (LGF SA)
- S30 Central Gaulish (Lezoux) samian ware (LEZ SA 2)
- ?S31 ?Micaceous Lezoux samian ware (LEZ SA 1)
- S32 Les Martres-de-Veyre samian ware (LMV SA)
- S40 East Gaulish samian ware
- W Indeterminate white ware
- W10 Fine/fine sandy white ware
- W20 Sandy white ware
- Z Indeterminate fabric

B.3.4 In addition, the following forms were noted:

- A Amphora
- BB Larger flagons
- C Indeterminate jars
- CC Narrow-necked jars
- CD Medium-mouthed jars
- CE Necked, squat or high-shouldered jars
- CH Bead-rimmed jars
- CI Everted rim jars
- CK 'Cooking-pot'-type jars
- CM Wide-mouthed jars
- D Jars or bowls
- DC Necked bowl or jar
- E Beakers
- FB Campanulate cups (Drag. 27)
- FC Conical cups (Drag. 33)
- H Indeterminate bowls
- HB Straight-sided bowls
- HC Curving-sided bowls
- HD Necked bowls
- I Bowls or dishes
- IA Straight-sided bowl or dish
- IB Curving-sided bowl or dish
- JA Straight-sided dish
- JB Curving-sided dish
- JC Platters
- K Indeterminate mortaria
- KA Hook-rimmed mortaria
- KC Hammerheaded mortaria
- KD Wall-sided mortaria
- KE Tall bead/stubby-flanged mortaria
- L Lids

Description

B.3.5 Context-groups dated by pottery to the early Roman period (*c* AD 43-120) accounted for 17% of the entire assemblage by sherd count or 12% by EVE (Table B.3.1). No groups were dated exclusively to the late Iron Age, although groups dated by pottery to *c* 50 BC-AD 100 could be pre-conquest. Grog-tempered pottery (E80) dominated the phase and was available mainly as jars, usually necked. Jars were also present in sandy reduced fabrics (R20 and R50). Many of the coarse wares are likely to have originated locally; glauconitic fabric E30, for example, used inclusions that derive from the band of greensand that extends through Ashford. Finer pottery arrived from North Kent and the continent. A fine cordoned necked bowl (Monaghan 1987, type 4J) was recorded in fabric R16, and the North Kent industry also supplied pottery in fine oxidised ware (O10). A fragment of a platter, probably Camulodunum form 8 (Hawkes and Hull 1947) and dating to the early to mid-1st century AD, was recorded in *terra rubra* (F15) from northern Gaul. More north Gaulish pottery arrived in the form of white- and buff-ware hook-rimmed mortaria (M14). Dragendorff (Drag.) form 27 cups were recorded in South Gaulish samian ware (S20), and a Drag. 18/31 dish from Les Martres-de-Veyre arrived during the early 2nd century. Fragments of South Spanish amphora (A11), probably olive oil container, Dressel 20, were also present.

Fabric	C Jars	D Jars/ bowls	F Cups	H Bowls	J Platters	K Mortaria	Total EVE
E30		0.1					0.1
E80	0.29						0.29
F15					0.04		0.04
M14						0.03	0.03
R16				0.38			0.38
R20	0.22						0.22
R50	0.06				0.07		0.13
S20			0.16				0.16
Total EVE	0.57	0.1	0.16	0.38	0.11	0.03	1.35

Table B.3.1: Summary of vessel class by fabric in context-groups spot-dated to the early Roman period (c AD 43-120). Quantification by EVE

B.3.6 The level of pottery deposition appears to have increased during the mid-Roman period (*c* AD 120-250). Context-groups dated by pottery to this period accounted for 26% of the assemblage by sherd count or 41% by EVE (Table B.1.2). Grog-tempered ware (E80) continued to dominate; the use of grog tempering is long-lived in the region, continuing well into the 3rd century AD and indeed beyond (Lyne 2008, 207. Jars in E80 were common, but other forms included a flagon and vessels characteristic of the period, among them plain-rimmed and bead-rimmed dishes and bowls. These open forms derived from black-burnished wares (B11, B20 and B30), which are also represented. Bead-rimmed dishes were additionally supplied in reduced and oxidised wares (R20, R30 and O20). North Kent fine ware – mainly reduced (R16) – was recorded. Other fine wares were not represented by rims, but included products from the Hadham kilns (F56), which arrived during the first half of the 3rd century. A hammerheaded mortarium from south-eastern England, probably Colchester (M29), reached the site during the later 2nd century or early 3rd century (cf. Going 1987, type D11). Continental imports were restricted to samian and South Spanish amphorae. A Drag. 33 cup, a Drag. 18/31 dish base, and fragments of Drag. 37 decorated bowls were noted in fabric S30.

A smaller amount of samian arrived from East Gaul (S40) and included a Drag. 45 mortarium with a lion-headed (actually more bat-like) spout.

Fabric	B Flagons	C Jars	D Jars/ bowls	F Cups	H Bowls	I Bowls/ dishes	J Dishes	K Mortaria	L Lids	Total EVE
B11		0.1					0.04			0.14
B20		0.05			0.67		0.05			0.77
B30						0.06				0.06
E30			0.12							0.12
E80	0.2	0.83	0.04		0.24	0.04	0.2		0.1	1.65
M29								0.03		0.03
O20						0.03				0.03
O50	0.16									0.16
R10		0.1								0.1
R16		0.08	0.01							0.09
R20		0.13					0.11			0.24
R30		0.4	0.03			0.04	0.05			0.52
R50		0.08								0.08
S20				0.2						0.2
S30				0.17	0.14					0.31
S40								0.05		0.05
Total EVE	0.36	1.77	0.2	0.37	1.05	0.17	0.45	0.08	0.1	4.55

Table B.3.2: Summary of vessel class by fabric in context-groups spot-dated to the mid-Roman period (*c* AD 120-250). Quantification by EVE

B.3.7 Context-groups dated to the late Roman period (*c* AD 250-410) accounted for 15% on the entire assemblage by sherd count or 21% by EVE (Table B.3.3). Pottery diagnostic of the period includes bead-and-flanged bowls and dishes in black-burnished ware fabrics B11, B30 and grog-tempered ware (E80). A mortarium with a tall bead and hooked flange (Young 1977, type M17) in fabric M22 arrived from Oxfordshire during the second half of the 3rd century AD. Other notable pottery included a beaker fragment in Nene Valley colour-coated ware (F52) and a cooking-pot in fabric B11. Medium-mouthed jars in fabric E80 are consistent with a late Roman date, though could be residual.

Fabric	C Jars	E Beakers	H Bowls	I Bowls/ dishes	J Dishes	K Mortaria	L Lids	Total EVE
B11	0.03		0.5					0.53
B30				0.08				0.08
E80	1.08			0.06			0.1	1.24
F52		0.1						0.1
M22						0.05		0.05
O10	0.13							0.13
O20	0.05			0.04	0.03			0.12
R20	0.14							0.14
R30	0.29							0.29
R50	0.05							0.05
S40				0.04				0.04

Total EVE	1.77	0.1	0.5	0.22	0.03	0.05	0.1	2.77

Table B.3.3: Summary of vessel class by fabric in context-groups spot-dated to the late Roman period (*c* AD 240/50-410). Quantification by EVE

B.3.8 The remaining pottery belonged to context-groups dated broadly to the Roman period. Groups contained undiagnostic sherds, often in long-lived fabrics E80, R20 and R30, and lacked associations with better dated material.

B.3.9 Two sherds weighing 18g and 8g were discovered in burnt layer 24330 on the floor of the hypocaust. These are rim sherds from similar wheel-turned vessels that appear to be from the narrow neck of flagon-like objects with a simple D-section beaded rim (diameter *c* 40mm) in a hard, oxidised fabric with abundant fairly coarse quartz sand tempering, sparse reddish clay pellets and rare flint inclusions. These remain unidentified and could be medieval, although the fabric and form would still be highly unusual for this date (John Cotter pers. comm.), and the context is securely Roman.

Discussion

B.3.10 Overall, the assemblage spans the Roman period, but the mid-Roman period (*c* AD 120-250) is particularly well represented. Although no groups dating exclusively to the late Iron Age were identified, the presence of *terra rubra*, a fabric introduced into Britain before the Roman invasion, though continuing to the Flavian period, is notable, and points to pre-Flavian or earlier activity. No context-group was dated exclusively to the 4th century, and it may be significant that the only Oxfordshire product recognised was a white ware mortarium of type M17 (Young 1977), which dated up to AD 300.

B.3.11 A wide range of forms and fabrics were identified. The presence of wares imported from the continent, among them north Gaulish mortaria and platters, samian cups, dishes and bowls, and amphorae from various sources, as well as pottery from regional sources, including North Kent, Dorset, Hadham (Hertfordshire) and the Nene Valley, are of particular interest, pointing not only to a settlement that had good access to trade networks throughout the Roman period, but one that enjoyed moderate to high status.

B.3.12 The condition of the pottery is mixed. The pottery has an overall mean sherd weight (MSW; weight divided by number of sherds) of 12g, indicating an assemblage of small fragments. However, the range of values for each context-group was wide, extending from 1g to 114g, and assemblage condition seems rather when better measured by rim values. The average rim EVE per context (EVE divided by the number of vessels represented by rim) is 0.25 EVE or 25%; one vessel, a black-burnished ware bowl, had an EVE value of 67%. The condition of the assemblage suggests that the pottery has been subject to multiple episodes of disturbance, but with deposition in features relatively close to the settlement core, as well as in features that are more peripheral.

B.3.13 Much of the pottery is concentrated in Trenches 245, 246 and 257 though there is a degree of variation over time. For instance, Trench 242 contained groups spot-dated to the early/mid and mid Roman period, but the early and late Roman periods were not represented. Similarly, Trench 257 contained little pottery dated to the mid-Roman period, but other ceramic periods were much better represented.

Recommendations regarding the conservation, discard and retention of material

B.3.14 The pottery reported on here has the potential to inform future research through re-analysis and thus it is recommended that all the pottery is retained. This follows the advice set out in the 'Standard for Pottery Studies in Archaeology' (PCRG, SGRP, MPRG 2016).

Roman pottery data

Context	Sherds	Weight (g)	Ware	Type	EVE	Early ctx date	Late ctx date
24100	4	61	E80			-50	100
24101	13	90	B11	JA	0.04	170	250
24101	0	0	E30	DC	0.05	170	250
24101	0	0	E80	C	0.06	170	250
24101	0	0	E80	D	0.04	170	250
24101	0	0	R16, E50			170	250
24107	0	0	E30	DC	0.07	120	200
24107	0	0	E80	BB	0.2	120	200
24107	18	445	R16, A11, R10, O10, W10			120	200
24107	0	0	S30	HC	0.1	120	200
24110	0	0	R16			50	250
24110	2	28	R30	C	0.06	50	250
24111	2	12	E80, R20			43	410
24117	12	126	R10, E50, R20			43	410
24117	0	0	R30	C	0.05	43	410
24120	2	228	B11	HB	0.5	250	410
24200	5	130	E80, R30			43	410
24202	21	311	A11, E80, R20, R16, O20			50	250
24203	0	0	E30	DC	0.1	50	100
24203	4	63	R16, E30 (glauconitic)			50	100
24204	12	82	A11, E80, E30 (glauconitic)			50	100
24204	0	0	E80	C	0.14	50	100
24210	2	11	R20			43	410
24212	0	0	B20	CK	0.05	120	200
24212	0	0	O50, R16, E80			120	200
24212	1	10	S30	FC	0.17	120	200
24307	2	94	E80, O			43	410
24307	2	4	O20	C	0.05	43	410
24312	1	10	E80			-50	410
24314	10	82	O20 (residual)	JA	0.03	1050	1500
24314	0	0	S20, E80 (residual)			1050	1500
24317	2	16	E80			-50	100
24318	0	0	B11	CK	0.1	170	240
24318	0	0	B20	JA	0.05	170	240
24318	0	0	E80	HC	0.08	170	240
24318	0	0	F50, R10, O20			170	240

24318	0	0	R30	C	0.05	170	240
24318	19	199	S40	KD	0.05	170	240
24319	0	0	E80	CI	0.14	200	250
24319	0	0	F56			200	250
24319	0	0	O50	BB	0.16	200	250
24319	13	208	R20	JA	0.11	200	250
24319	0	0	R30	C	0.06	200	250
24320	2	176	A11			50	250
24320	0	0	E30			50	250
24320	2	11	R30	C	0.09	50	250
24326	0	0	B11			120	410
24326	3	15	R20	C	0.06	120	410
24334	0	0	E80, O10			43	100
24334	0	0	R50	C	0.06	43	100
24334	18	232	R50	JC	0.07	43	100
24401	1	18	R16			50	250
24408	0	0	E80, O20, R16, O10, F50			50	250
24408	15	130	R30	C	0.05	50	250
24409	0	0	B30	I	0.06	170	220
24409	0	0	E80	C	0.22	170	220
24409	0	0	E80	HC	0.07	170	220
24409	0	0	E80	JB	0.2	170	220
24409	1	21	M29	KC	0.03	170	220
24409	0	0	O20, S40, M30			170	220
24409	0	0	R16	CE	0.08	170	220
24409	85	1065	R30	CD	0.2	170	220
24409	0	0	R30	JA	0.05	170	220
24415	4	28	E80	C	0.1	100	150
24415	0	0	F45			100	150
24417	5	15	E80	IA	0.04	200	250
24417	0	0	R20, O20, S30, F56			200	250
24419	2	19	E80			-50	410
24421	1	5				0	0
24423	3	41	E80	HC	0.07	120	300
24423	0	0	R30, B20			120	300
24427	6	68	E80, O10			50	250
24430	2	5	E80			-50	410
24431	1	3	E80			-50	410
24435	1	5	O20			43	410
24439	1	38	E80			-50	410
24501	6	33	O10, R10, S (residual)			1050	1500
24504	0	0	E80, R16, R50			50	110
24504	50	393	S20	FB	0.06	50	110
24506	7	48	E80	C	0.08	43	410
24506	0	0	R20			43	410

24508	0	0	E80	C	0.03	120	200
24508	0	0	R10	C	0.1	120	200
24508	0	0	R50	C	0.08	120	200
24508	25	206	S30	H	0.04	120	200
24510	0	0	E80	C	0.13	140	240
24510	0	0	E80	HC	0.05	140	240
24510	72	542	E80	L	0.1	140	240
24510	0	0	O20, R20, R50, S40, S30, R16			140	240
24510	0	0	R20	C	0.05	140	240
24510	0	0	R30	CD	0.09	140	240
24511	0	0	B11	CK	0.03	250	300
24511	0	0	E80	C	0.48	250	300
24511	146	1731	E80	CD	0.49	250	300
24511	0	0	E80	IA	0.06	250	300
24511	0	0	F52	E	0.1	250	300
24511	0	0	M22	KE	0.05	250	300
24511	0	0	O10	CH	0.13	250	300
24511	0	0	O20	C	0.05	250	300
24511	0	0	O20	IA	0.04	250	300
24511	0	0	R10, R16			250	300
24511	0	0	R30	CD	0.17	250	300
24511	0	0	R50	C	0.05	250	300
24511	0	0	S40	I	0.04	250	300
24512	0	0	E80	C	0.04	150	240
24512	0	0	E80	CH	0.05	150	240
24512	14	193	S40			150	240
24513	12	106	B20, E80, W20			120	300
24516	5	35	O20, R10, E80			43	410
24517	8	47	S, E80, O20			120	240
24601	0	0	E80			70	200
24601	15	178	R16	E	0.04	70	200
24604	0	0	A10	A	0.14	50	250
24604	0	0	E80	C	0.11	50	250
24604	0	0	O20, R16, A13, ?A12			50	250
24604	0	0	R10	E	0.09	50	250
24604	100	1449	R20	C	0.11	50	250
24605	39	360	E80	C	0.07	50	70
24605	0	0	F15	JC	0.01	50	70
24605	0	0	O10, R16			50	70
24606	30	748	B20	HB	0.67	120	200
24606	0	0	E80	C	0.16	120	200
24606	0	0	O20	IB	0.03	120	200
24606	0	0	R16	D	0.01	120	200
24606	0	0	R20	C	0.08	120	200
24606	0	0	S30			120	200

24607	0	0	E80	C	0.08	50	70
24607	0	0	F15	JC	0.03	50	70
24607	0	0	M14	KA		50	70
24607	54	680	R20	CE	0.15	50	70
24608	16	127	E80, A11, O10			50	250
24611	0	0	R	C	0.02	50	250
24611	5	14	R16, R20			50	250
24613	0	0	?S31			120	410
24613	0	0	E80	CM	0.04	120	410
24613	27	144	R20	C	0.11	120	410
24613	0	0	R20	JA	0.04	120	410
24705	2	31	E80			43	410
24901	1	35	S			120	240
24908	1	5	E80			43	410
24909	3	10	R30, S			120	240
25011	1	1	R10			43	410
25024	1	15	E80			43	410
25105	5	79	E80, O10, R16			50	250
25107	1	9	E80			43	410
25111	4	53	O10, E80			50	250
25117	3	6	O10			50	250
25204	1	3	O10			43	410
25205	1	8	E80			-50	410
25206	3	4	E80			-50	410
25704	8	188	A11, R20, E80, R30, E30 (glauconitic)			50	250
25705	2	31	E80, O20			100	120
25705	13	100	S32			100	120
25706	0	0	A11, R16			50	150
25706	0	0	E80	C	0.24	50	150
25706	0	0	E80	DC	0.08	50	150
25706	39	439	R20	H	0.14	50	150
25711	0	0	A11, E80, W			50	120
25711	0	0	R16	HD	0.3	50	120
25712	0	0	E30, O10			43	410
25712	0	0	E80	C	0.15	43	410
25712	19	184	R30	C	0.14	43	410
25713	0	0	E80			50	120
25713	0	0	R16	HD	0.08	50	120
25713	0	0	R20	C	0.07	50	120
25718	0	0	B30	IA	0.08	250	410
25718	30	272	E80	C	0.08	250	410
25720	4	26	E80, F50			100	410
25727	3	59	E80	HC	0.03	43	410
25729	0	0	E80	HC	0.04	120	150
25729	3	74	S30			120	150

25733	5	50	R16, E80			50	250
25739	1	11	E30			43	410
25803	0	0	E80 (residual)	C	0.03	1050	1500
25803	0	0	E80 (residual)	L	0.1	1050	1500
25803	56	575	E80, R20, O80 (residual)			1050	1500
25803	0	0	R20 (residual)	CC	0.14	1050	1500
25803	0	0	R30 (residual)	C	0.12	1050	1500
25805	0	0	E80			50	110
25805	0	0	M14	K	0.03	50	110
25805	13	117	S20	FB	0.1	50	110
25806	5	42	E80	JA	0.05	120	410
25806	0	0	R30	C	0.06	120	410
25815	2	9	A11, R20			50	250
25817	1	20	E80			-50	410
25818	0	0	R30	DC	0.03	120	250
25818	0	0	R30	IA	0.04	120	250
25818	9	119	S20	FB	0.2	120	250
25904	20	173	R90, R10, R30			43	410
25905	5	144	E80	CK	0.2	120	410
25906	3	45	E810	C	0.07	43	200
25906	0	0	O20			43	200
26001	1	8	E80			-50	410
26203	0	0	E30			-50	100
26203	6	37	E80			-50	410
26305	1	2	Z			0	0
26309	3	4	O10			43	410

Table B.3.4: Roman pottery data

B.4 Medieval pottery

By John Cotter

B.4.1 Four sherds of medieval pottery weighing 87g were recovered from four contexts. Given the small size of the assemblage a separate catalogue has not been constructed and instead the pottery is simply described and spot-dated below. No further work is recommended. Fabric codes referred to are those of the Kent fabric type series housed at Canterbury Archaeological Trust and which the author helped to develop. Medieval (and some post-medieval) Kent fabrics are fully described in a report on pottery from Townwall Street, Dover (Cotter 2006). It should be stated that there are identification issues with some of the sherds here owing either to their poor condition and small size, or because they are atypical or non-Kentish fabrics. Other than for dating purposes the pottery has little value. No further work is recommended apart from the retention of the sherds for possible re-examination at some future date.

Context (24314) Spot-date c 1350-1500?

B.4.2 Description: 2 sherds (16g). 1x flat base (11g) from a wheel-turned vessel in a hard grey fabric with abundant quartz sand tempering. Fabric identification uncertain but quite possibly North France/Flanders grey sandy ware (Fabric M15) or less likely late medieval Tyler Hill ware (Fabric LM1), from the Canterbury area. The vessel (possibly a jug?) appears to have a trace of thumbed impression on the external basal angle. A 14th-15th century date is likely in either case. 1x abraded body sherd (5g) probably from a wheel-turned vessel in a fairly soft coarse sandy fabric with a light grey-brown core and weakly oxidised external surface. Probably identifiable as Ashford/Wealden sandy ware (Fabric M40B, c 1175-1400).

Context (24501) Spot-date 10th to early 13th century?

B.4.3 Description: 1 sherd (15g). Fairly abraded rim sherd from a jar/cooking pot (diameter 210mm). Fairly hard fabric with abundant, medium-coarse, quartz tempering and moderate inclusions of very coarse red-brown and grey clay pellets up to 2.5mm across. Also present is a single very coarse rounded inclusion or hard grey mudstone (possibly local septaria?). The fabric colour is variable from the rim tip down to the neck/shoulder area and has probably been scorched and discoloured. The core is mainly grey-brown with light grey surfaces but the rim is a bright orange-brown colour with a dark grey band set back from this - probably due to the effects of scorching/cooking. There is no evidence for sooting but this may be because the original surface has been lost. The vessel is handmade and of Late Saxon/Norman appearance with a plain flaring rim with a bevelled or flattened tip. The external neck junction bears a couple of slight fingernail impressions typical of handmade vessels of this period and indicating that a separately made rim was attached to the body of the vessel. Although discoloured, the fabric resembles, fairly closely, that of medieval Ashford/Wealden sandy ware (Fabric M40B, c 1175-1400) and is therefore probably a local precursor of this fabric using the same general clay sources. Otherwise it is not easy to correlate the fabric with anything in the Kent type series.

Context (25803) Spot-date c 1225-1400?

B.4.4 Description: 1 sherd (56g). Fairly fresh rim sherd from a wheel-turned jug with a strap handle attached below the rim. Oxidised light orange-brown surfaces and margins with a light grey core. Fabric with abundant, fairly coarse, quartz tempering and moderate inclusions of coarse orange-brown clay pellets. Unglazed apart from a speck of clear glaze under the handle. Probably Ashford/Wealden sandy ware (Fabric M40B, c 1175-1400). Jug with thickened flat-topped rim, possibly a slack collared rim (form obscured by handle). Strap handle of gently furrowed or crescent cross-section with bevelled edges. Upper surface of handle covered with small piercings or pricking and secured internally by a few more piercings through the vessels wall and into the handle. General appearance very similar to contemporary Tyler Hill ware jug handles (mainly after c 1225), but the fabric is much more like M40B.

B.5 Worked stone

By Ruth Shaffrey

B.5.1 Fragments from two rotary querns were recovered from contexts 24511 and 24111. The former is a small fragment of Millstone Grit quern that retains part of a flat pecked grinding

surface but no other diagnostic features. The second is a collection of seven fragments of worn and friable Mayen lava, which is only known to have been used for rotary querns and millstones in this country.

B.5.2 Several samples of stone were retained for identification. These include fragments of Kentish Rag (24318 and 24307) and fine-grained ferruginous sandstone (25705). A large slab of ironstone was recovered from context 25004. It is not worked, but would have been ideally suited to structural use. These items can be discarded.

B.5.3 Two columns were found on the site. One of these was left *in situ*, but was sampled so that the stone type could be identified. The column was recorded on site, but is too damaged for its dimensions or profile to be reconstructed

B.5.4 A large fragment of column base from layer 24317 was excavated and submitted for recording and analysis. This is sufficiently complete for its full profile to be established and for the diameter of the column shaft to be estimated. Another large piece of the same type of stone (see below) was found in context 24307. This is burnt and has irregular surfaces. It does not bear any tool marks or mouldings and could either be a large piece of the raw material or a heavily damaged column element.

B.5.5 The mouldings of the column comprise a double tori divided by scotia moulding and fillets with cavetto moulding and final fillet above. With the exception of the highest fillet, this profile fits with Blagg's Type IIA column base type.

B.5.6 Both columns were made from Marquise stone from Boulogne (France), a coarsely oolitic 'millet-seed' limestone. It was not widely used by the Romans in Britain but it does occur in other locales in Kent, notably at Richborough, where it was used as a building material and as rubble infill (Pearson 2003, 47; Worrsam and Tatton Brown 1990, 57). It was also used more decoratively at Richborough for a carved slab of a goddess figure (ibid); for an altar at Lympne (RIB 66, K. Hayward pers. comm.), for a statue of a goddess at Dover and a column capital from Canterbury (Worrsam and Tatton Brown 1990, 57-58).

B.5.7 The Otterpool column measures approximately 35cm diameter across the shaft. This is at the higher end of the range for small columns, the majority of which measure between 15 and 35cm diameter across the shaft but with a peak between 27.5 and 35cm (Blagg 2002, 144). This size of column is typically found on villas, town houses, Romano-Celtic temples and auxiliary forts (ibid) whilst the Type IIA design of column base is more typically found on rural sites than urban sites (Blagg 2002, 186). It is also worth noting that (in 2002) there were no columns of this type dated to the 1st century; they probably do not post-date the 3rd century.

B.5.8 In profile the Otterpool column most closely resembles examples from the Walbrook Mithraeum and the portico of the baths in Lincoln (Blagg 2002, fig. 27). In the case of both of these, but particularly Lincoln, the design and the dimensions are very similar to the Otterpool example, suggesting that they originated in the same workshop (Blagg 2002, 186). Neither of these are made from the same stone types with the Walbrook Mithraeum column made of Bath Stone and the Lincoln one of millstone Grit (K. Hayward pers comm).

Context	Function	Notes	Size	Wt (g)	Lithology
24511	Rotary quern	Small fragment with part of pecked worn grinding face	Measures 29mm thick	121	Millstone Grit

24111	Rotary quern	Non diagnostic friable fragments		528	Lava
24317	Column sample	Fragment from column that was left in situ. Photographs indicate that this column was either unfinished or heavily worn. It is not possible to determine its original profile properly or dimensions			Probably a Windrush valley limestone
24317 (SF 120)	Column base	Part of profile of column base with double tori divided by scotia moulding and fillets with cavetto moulding and final fillet above.	Measures approximately 350mm diameter on the column shaft x 550m diameter on lowest torus. Height of mouldings 225mm		Marquise stone
24703	Unworked imported stone	Large boulder of the same limestone as SF120. This is burnt and appears unworked but was presumably part of a column or other architectural feature originally. Same stone type as SF 120			Marquise stone

Table B.5.1: Worked stone

B.5.9 The significance of the presence of at least two (and possibly originally three) columns cannot be underestimated. The number of villas with architectural ornament is far smaller than that with mosaics, with only about 40 recorded by Blagg (Blagg 2002, 189). The implication is that most villas with porticos, corridors or verandahs were supported by wooden uprights and that where stone adornment is found, it is a far stronger indication of wealth and status than the mosaic (Blagg 2002, 189). Indeed, very little in the way of architectural ornament is known from villas and rural sites in Kent though a capital was found at Lullingstone (Blagg 2002, 134). The column base and other column elements at Otterpool are therefore indicative of a very high status building close by.

B.6 Ceramic building material

By Cynthia Poole

Introduction and methodology

B.6.1 A large quantity of ceramic building material amounting to 1617 fragments weighing 73kg was recovered from 16 trenches encompassing 75 individual contexts. The assemblage consists almost entirely of Roman tile, except for two complete cylindrical field drain tiles of mid-19th- to early 20th- century date. Apart from these and a complete imbrex, the material is fragmentary with few pieces preserving any complete dimensions other than thickness. The mean fragment weight is low for Roman tile at 79g for the hand collected element and only 45g when including sieved material.

B.6.2 Key elements of the assemblage have been recorded on an Excel spreadsheet, which may be extended to complete recording in accordance with guidelines set out by the Archaeological Ceramic Building Materials Group (ACBMG 2007). The assemblage is

summarised by context in Table B.6.1 below. The terminology follows Brodribb (1987); coding for markings, tegula flanges, etc. follows that established by OA for the recording of CBM and tegula cutaway types follow Warry (2006). Fabrics were characterised on macroscopic features and with the aid of x20 hand lens to establish the range and variety.

Fabrics

B.6.3 Fabrics all comprised a very fine sandy or silty clay matrix, often powdery, containing few coarser inclusions of sparse quartz sand and more commonly small red iron oxide inclusions. Most were red-orange in colour, but one distinct group were cream-pink (fabric A). Preliminary categories are:

- Fabric A: pink or cream, often laminated clay with darker or paler streaks, and commonly containing red iron oxide inclusions
- Fabric B: red-orange, dark red, brownish red, fine clay characterised by moderate density of dark red iron oxide usually less than 5mm
- Fabric C or Cf: red orange containing moderate density of fine or medium quartz sand
- Fabric D: red-orange, sometimes brownish, fine clay, no inclusions generally, sometimes sparse medium quartz sand
- Fabric E: red, orange, light orange, pinkish orange, laminated clay with paler streaks, (E1) sometimes with buff clay pellets and red iron oxide inclusions (E2)

Character of the assemblage

B.6.4 The assemblage included all standard forms of Roman tile commonly found including tegula and imbrex roof tile, brick, and a variety of flue tile.

B.6.5 Tegulae (159 fragments, 18467g) formed a quarter of the assemblage and were made in all fabrics. Thickness ranged from 15 to 31mm. Extensive knife trimming of the base was noted in a third of examples, all in fabrics A, B and E. Flanges included curved and rectangular profiles including the most common varieties, but included some more distinctive including a more triangular variety and a rectangular type with undercutting inner surface. Triangular flanges were a significant component of the tegulae recovered from Northfleet villa (Poole 2011, 328-30). Cutaways were fairly equally divided between Warry's types B6 and C5, which he broadly dates to AD 100-180 and AD 160-260 respectively. Three had complete lengths ranging from 70-78mm long. A single example of his late type D16 dated to AD 240-380 was recovered from the fill of ditch 25703. Three tegulae had signature marks in the most common semi-circular hoop form made with one and two finger grooves. A partial imprint overlapping the edge of the tile appeared to be that of the foot of a child, possibly in the age range of 8-10 years and may be evidence of children working in the tileries. A single diagonal line 100mm long scored in the upper surface of one tile is of the same type as markings found at Springhead/Ebbsfleet (Poole 2011, 335), where they were interpreted as tally marks.

B.6.6 Imbrex (110 fragments, 10119g) included a complete example (ctx 24405) used to form a drain with a second example that was not removed. It was made in fabric A weighed 2911g and measured 368mm long, 135-170mm wide and 75-95mm high with a wall thickness of 19mm increasing to 26mm at the edges and corners. It had an angular profile with sharply rounded apex. One other complete profile measured 180mm wide and 80mm high. Others

only partially preserved were estimated and fall within these ranges. Several had a very similar angular profile to the complete examples, but curved profiles were also present and two in fabric A and B had a distinctive internal polygonal profile made by the shape of the former used to shape the slab of clay. This profile was noted at Northfleet villa (Poole 2011, 131, fig.131.5) and is sufficiently idiosyncratic to suggest it was a feature peculiar to the regional tile production.

B.6.7 A range of flue tile was recovered which included scored and combed tubuli (box flue), voussoirs and wall tile. Wall tile and scored flue tile was produced during the first and early second century, whilst combed flue tile replaced the earlier forms and became standard from the second century onwards. The wall tile (1555g) was 41mm thick and had been scored with two wavy lines form a large sinuous cross. A second small surface flake had the same type and pattern of keying suggesting it too derived from a wall tile. Wall tiles were used in conjunction with cylindrical spacer bobbins and iron clamps to create the cavity for hot air to flow through. The scored flue tile measured between 14 and 22mm thick and one had a width of about 118mm. In all examples scoring was diagonal in two directions forming diamonds or more correctly parallelograms. Two size groups were apparent with closely spaced lines of 7-17mm apart and more widely spaced c 20-30mm apart. One of these had a rectangular cut vent set 178mm from one end, which if equidistant would indicate a tile height in the region of 400mm.

B.6.8 The combed flue tile (19 fragments, 1342g) was made predominantly in fabrics C and D, with single examples in E and A. They ranged from 11 to 23mm thick and one had a width estimated as 170mm. The combed keying was generally quite coarse with teeth frequently 3-6mm in size. Comb size varied from 32mm wide to over 57mm and from three to seven or more teeth. One had part of rectangular vent over 47mm wide cut into the adjacent plain face. Three tiles (1361g) were identified as voussoirs. One appeared to be the base end measuring 90 to 97mm wide and over 90 mm deep and may have had very faint remnants of combing. A second piece formed the upper half of a trapezoidal side face measuring 175mm wide tapering to less than 160mm and with a height of over 160mm. It had three straight bands of combing running across its width. The top end of a voussoir with two bands of combing forming an X was pierced centrally by a small circular perforation 24mm in diameter tapering to 14mm. It measured 156mm wide and had an estimated length of about 210-220mm. The small hole is a feature of other voussoirs from Kent and Brodribb (1987, 81) notes examples from Beauport Park, Bodiam, Reculver, Richborough and Canterbury.

B.6.9 Brick (66 fragments, 12538g) was identified on the basis of thickness or form. Any tile of 40mm or more thick are normally considered be brick and thinner pieces may be identified as brick based on corner fragments or edge finish if consistent with character of the assemblage. A range of brick sizes must have been present based on the evidence of thickness which ranged from 30mm to over 60mm thick. No complete bricks were recovered, though a number of complete bricks were observed in the excavation of the hypocaust, but were left *in situ*. Pedalis bricks (approximately 1 ft square) were used at the base of the pilae and lydions (*c* 1 by 1.5 ft) appear to have been used in the walls of the flue and the arch over the flue. A less common variety of brick was a semi-circular example from the demolition layer 24318. This was made in the fine sandy fabric Cf and measured 240mm in diameter and 58mm thick. The primary function of such bricks was no doubt to create columns or other architectural features such as pilasters, but they have also been found used (or re-used) as hypocaust pilae

and at Fishbourne had been used to create seating in the third period plunge bath. Burning occurred on the surfaces of 11 bricks and may indicate their use in hearths or ovens. One which had been vitrified may have been built into the structure of the glass furnace (see Fired clay below).

B.6.10 Only one brick has a signature mark in the form of a large horseshoe shaped type made with two fingers. A second brick was marked with a curved line that appeared to be scored with a stick or similar object, rather than the finger: it is uncertain whether this is a deliberate mark or accidental. One brick appears to have a tally mark in the edge in the form of a thick impressed vertical line, with a much thinner shallower line alongside.

Discussion

B.6.11 The ceramic building material comprises an extensive range of forms and varieties of tile that would be expected to be used in the construction of a high status building such as a villa. The most glaring omission is the absence of tesserae, as mosaics or tessellated pavements might have been anticipated. The CBM indicates tile was used to roof the building (s); the variety of pale pink and cream together with red-orange tile may have been combined to produce a pleasing dappled effect or used separately on different sections of roof to create contrast. The range of flue tile indicates heated rooms and hypocausts were present from the earliest phases of the buildings and that they had undergone refurbishments or additions in later periods, reflected by the change in tile types. The voussoir tiles indicate at least one room had a vaulted roof, most commonly occurring as part of a bathhouse. The semi-circular brick may indicate the presence of decorative architectural features.

B.6.12 The presence of burning on some fragments indicates tile was being reused in hearths, ovens or furnaces. The low mean fragment weight suggests much of the tile was removed for re-use elsewhere when the buildings fell into disuse.

B.6.13 The two tally marks hints at a possible military or official connection. Tally marks are most commonly associated with military sites (Brodribb 1987, 132) though not exclusively. The possible tally mark on the upper surface of a tile forms a link with tile at Northfleet Villa, where it has been suggested there were strong links between the villa owner and the imperial authorities (Biddulph 2011, 229).

Cntxt	Form	Nos	Wt g	Spot date	Comments
24202	Flat tile	8	372	Roman	
24203	Flat tile	2	35	Roman	
24203	Imbrex	1	10	Roman	
24203	Tegula	1	39	Roman	
24212	Flat tile	4	42	Roman	
24214	Flat tile	2	114	Roman	
24214	Imbrex	1	86	Roman	
24300	Brick RB	3	2900	Roman	Signature type 2.2
24300	Flat tile	1	333	Roman	
24300	Tegula	2	560	Roman AD 160-260	
24307	Flat tile	4	142	Roman	
24307	Flue	4	223	Roman	Combed keying
24307	Imbrex	3	74	Roman	
24307	Indeterminate	576	2196	Roman	

24307	Tegula	5	88	Roman	
24312	Flat tile	2	48	Roman	
24317	Brick RB	3	143	Roman	
24317	Flat tile	1	26	Roman	
24317	Indeterminate	6	71	Roman	
24317	Tegula	2	1358	Roman AD 160-260	Signature type 1.1
24318	Brick RB	3	1236	Roman	incl segmental circular or semicircular brick
24318	Flat tile	10	952	Roman	
24318	Flue	3	453	Roman	Combed keying
24318	Imbrex	1	343	Roman	
24318	Indeterminate	38	123	Roman	
24318	Tegula	2	723	Roman	Signature
24319	Brick RB	1	364	Roman	
24319	Flat tile	1	263	Roman	
24319	Flue (voussoir)	2	1189	Roman	Combed keying; circular vent in keyed surface
24319	Imbrex	1	677	Roman	
24319	Tegula	3	561	Roman	
24319	Flue (wall tile)	1	1555	Roman	Scored keying
24320	Brick RB	1	226	Roman	
24320	Flue	1	76	Roman	
24320	Imbrex	1	83	Roman	
24320	Tegula	1	320	Roman AD 100-180	Signature type 1.2
24326	Tegula	1	19	Roman	
24328	Flat tile	2	37	Roman	
24330	Indeterminate	49	200	Roman	
24330	Tegula	3	51	Roman AD 100-180	
24405	Imbrex	1	2911	Roman	
24408	Flat tile	12	646	Roman	
24408	Imbrex	6	684	Roman	
24408	Tegula	3	211	Roman AD 100-180	
24409	Brick RB	1	430	Roman	
24409	Flat tile	11	401	Roman	
24409	Flue	8	567	Roman	Keying scored and combed
24409	Imbrex	7	287	Roman	
24409	Indeterminate	18	144	Roman	
24409	Ridge?	1	22	Roman	
24409	Tegula	2	378	Roman AD 160-260	
24415	Brick RB	2	88	Roman	
24415	Flat tile	2	105	Roman	
24415	Flue	1	296	Roman	Combed keying
24417	Indeterminate	1	9	Roman	
24419	Flat tile	2	115	Roman	
24419	Flue	4	428	Roman	Scored keying
24423	Flat tile	2	87	Roman	
24427	Indeterminate	1	19	Roman	
24429	Ridge?	1	83	Roman	
24430	Flat tile	5	163	Roman	
24430	Imbrex	1	65	Roman	
24431	Flat tile	1	7	Roman	

24500	Brick	1	260	Roman	
24501	Flat tile & Imbrex	16	649	Roman	Signature type 1.2
24504	Flat tile	4	39	Roman	
24508	Flat tile/Brick	16	437	Roman	
24510	Flat tile, Imbrex, Brick, ?Tegula, Flue	20	1207	Roman	Scored keying
24511	Imbrex, Brick	28	1692	Roman	
24512	Brick, Flue, Flat tile	6	275	Roman	Combed keying
24513	Brick	8	210	Roman	
24516	Indeterminate	7	35	Roman	
24517	Imbrex	7	87	Roman	
24601	Brick, Flat tile, Indet	3	239	Roman	
24604	Brick, Imbrex, Tegula, Flue, Flat tile	33	1858	Roman AD 160-260	Signature type 1.3; Tally mark on upper surface; Inscribed zigzag keying, possibly flake of wall tile
24605	Tegula, Flue, Flat tile, Indet	17	977	Roman: C1-C2; AD 100-180	Scored keying
24606	Tegula, Flat tile	2	162	Roman	
24607	Flat tile	20	411	Roman	
24613	Flat tile	3	168	Roman	
24613	Imbrex	1	223	Roman	
24613	Indeterminate	6	76	Roman	
24703	Imbrex	1	67	Roman	
24804	Indeterminate	1	12	Roman	
24816	Field drain	1	1353	MC19-EC20	Complete cylindrical pipes
24818	Field drain	1	1312	MC19-EC20	
24908	Flat tile	1	68	Roman	
24908	Flue	1	98	Roman	Coarse combing in form of an X
25004	Flat tile	3	2041	Roman	
25005	Tegula	1	285	Roman	
25015	Tegula, Imbrex	64	5871	Roman AD 160-260	Imprint: Partial child's footprint
25024	Indeterminate	1	20	Roman	
25101	Flat tile	1	1012	Roman	
25105	Indeterminate	1	18	Roman	
25105	Tegula	1	427	Roman	
25111	Flat tile	3	143	Roman	
25111	Flue	1	73	Roman	Coarse combing in form of an X
25111	Imbrex	26	148	Roman	
25113	Tegula	1	256	Roman	
25204	Brick RB	3	34	Roman	
25204	Tegula	1	51	Roman	
25601	Flat tile	1	80	Roman	
25704	Brick RB	10	2181	Roman	
25704	Flat tile	2	52	Roman	
25704	Imbrex	12	1475	Roman	
25704	Indeterminate	3	48	Roman	
25704	Tegula	5	1096	Roman AD 240-380	One with late type D cutaway
25705	Brick RB	2	327	Roman	

25705	Flat tile	5	363	Roman	
25705	Imbrex	3	563	Roman	
25706	Flat tile	4	334	Roman	
25706	Imbrex	5	251	Roman	
25706	Indeterminate	1	15	Roman	
25706	Tegula	2	224	Roman	
25711	Brick RB	1	105	Roman	
25711	Tegula	7	391	Roman	
25712	Brick RB	1	180	Roman	
25712	Flat tile	2	59	Roman	
25713	Flat tile	2	180	Roman	
25713	Tegula	1	117	Roman	
25714	Brick RB	1	254	Roman	
25718	Flat tile	3	230	Roman	Signature
25718	Flue	1	33	Roman	Combed keying?
25720	Indeterminate	2	21	Roman	
25727	Tegula	4	275	Roman	
25733	Flat tile	1	36	Roman	
25803	Brick RB	13	1815	Roman	Possible signature
25803	Flat tile	84	3327	Roman	Possible signature
25803	Flue (tubulus & voussoir)	14	1094	Roman AD 160-260	Scored & combed keying on tubuli. Rectangular vents.
25803	Imbrex	21	909	Roman	
25803	Indeterminate	155	1328	Roman	
25803	Tegula	26	1570	Roman	
25805	Tegula, Brick, Flat tile	15	1660	Roman	
25806	Imbrex, Flat tile	7	403	Roman	
25818	Tegula, Imbrex, Brick, Flat tile	6	1143	Roman	Tally mark on edge of brick
25904	Tegula, Flat tile	1	70	Roman	
25905	Flat tile	6	1560	Roman	
25906	Tegula, Flat tile	2	414	Roman	
26403	Flat tile	1	332	Roman	
	Total	1609	76701		

Table B.6.1: Summary of the CBM by context

B.7 Wall plaster and mortar

B.7.1 A modest assemblage of wall plaster (26 fragments, 2456g) and mortar (402 fragments, 4965g) was recovered mainly from the infilling of a robbed hypocaust in Trench 243 with a few scraps from ditch fills in Trenches 244 and 257. All was made in a lime mortar with little evidence of sand, but generally a high density of coarse aggregate. The most common variety was a cream lime mortar (M2) mixed with coarse flint grit, gravel and pebbles up to about 20mm in size and very rarely limestone and sandstone fragments up to 37mm. Less common were mortar fabric M3, which is a cream lime mortar containing sand and coarse angular tile grit up to 8mm, and a pink lime mortar (fabric M4) coloured by finely ground tile dust and containing small tile grits together with flint grit, gravel and pebbles up to 16mm. Several fragments of tufa were found amongst the mortar, including one squared block. Tufa was frequently used in roof vaulting, but it is possible that tufa offcuts were also used in lime

production. Two pieces had fragments of glass waste or vitrified furnace lining embedded in the mortar.

B.7.2 Much of the mortar was indeterminate unshaped structural material probably from wall cores or foundations. A few pieces formed thin flat pieces of wall render 12-18mm thick.

B.7.3 Blocks of wall plaster consisted of a thin white plaster skim over the mortar base and had been painted white (or left white), or red. Only one small fragment indicated the use of two colours comprising a white ground with an adjacent block or stripe of maroon red. Two small pieces had been finished with a thin red plaster veneer with a slightly corrugated surface. Most of the painted plaster had been skimmed on a base of M2 mortar, but this frequently had patches of M3 or M4 tile gritted mortar attached to the back. Pink tile gritted mortar was usually used as waterproof mortar in baths. Some of the red painted plaster had calcareous deposits on the surface.

B.7.4 The mortar and wall plaster are all likely to derive from a bath-house possibly from the actual plunge baths themselves or mortar floor surface rather than the walls proper in view of the absence of any decorative features.

Cntxt	S.No	Nos	Wt (g)	Material	Fabric	Comments
24318	~	9	1076	Mortar	mostly M2, plus M3 & M4	Structural wall, foundation & render
24318	<105>	344	1288	Mortar	M2	Structural, wall including one red plaster surface
24318	~	3	269	Plaster	M4	wall including one red plaster surface
24318	~	4	86	Plaster	M2	Plaster with remnants of red paint
24319	~	2	1921	Mortar	M2	Unshaped mortar blocks
24319	~	16	2092	Plaster	M2, M4	White and red painted plaster
24330	<108>	25	424	Mortar	M2, M3	Structural
24330	~	3	9	Plaster	M2	Red painted and maroon red on white ground
24409	~	4	20	Mortar		Mix of mortar & tufa
25703	~	4	28	Mortar	M4	Pink wall render
25705	~	14	208	Mortar		Mix of mortar,& tufa & limestone

Table B.7.1: Summary of the mortar and wall plaster by context

B.8 Fired Clay

By Cynthia Poole

Introduction

B.8.1 A large quantity of fired clay was recovered from Field 5, amounting to 729 fragments (14378g) from 30 contexts distributed through Trenches 242-6, 249-252, 257-9, and 263. Most of the fired clay had been dumped in fills of ditches 25003, 25106, 25108, 25110, 25703 and 25903. Fired clay cannot normally be dated on intrinsic characteristics except in the case of a small number of diagnostic forms and structural material remains similar in character across all periods. In this assemblage all the fired clay is associated with Roman structures or other Roman material and the whole assemblage is regarded as being Roman in date. The condition of the material is variable ranging from small worn amorphous fragments to large well-preserved pieces of structure, which is reflected in the high mean fragment weight of 20g.

Character of the assemblage

B.8.2 Two fabrics were used for the fired clay one was a fine sandy or silty clay often poorly fired or baked and quite soft and powdery. The second was a sandy clay containing variable quantities of medium and coarse quartz sand and scattered flint grit up to about 20mm in size. Both fabrics are likely to derive from local clay deposits and in general have been utilised without the addition of further except in one case of the silty fabric which had deliberately added chaff inclusions. In any other examples where chaff impressions were observed these appeared to be superficial and incidental.

B.8.3 The largest group of diagnostic material came from Trench 250 and consisted of wattle supported structure. These formed flat slabs between 20 and 97mm thick with a flat, roughly moulded, exterior surface and on the reverse impressions of interwoven wattles. Only a sample of wattles were measured, which range in size from 11 to 31mm in diameter. These were slightly larger in size with an average of 17mm diameter. Those from the unmeasured groups also appeared to be of the same dimensions. This is larger than those most commonly found on fired clay with an average of 12-15mm diameter, which are generally interpreted as oven structure. This implies that this structural material derived from something larger either a large oven with a substantial suspended floor, such as a large crop drying oven or from a building with wattle and daub walls. The rough surface finish suggests that some sort of oven may be more likely than a building. Associated carbonised plant remains may provide corroborative evidence for one interpretation over the other. This material was recovered primarily from dumps in ditch 25003, but some was also recovered from the top fill of gully 25007 and from the fill of construction cut 25010, which may be significant.

B.8.4 The second diagnostic group of fired clay consisted of pieces with a heavily vitrified surface made in a fine sandy fabric uniformly fired to shades of maroon, brown, purple, grey and black. The vitrified surface was coated in a thick opaque pale green glassy veneer, frequently crazed and cracked. The fragments ranged from 17 to 54mm thick. Most pieces had a single flat surface, but one had to surfaces set at an angle of 145°, which may have formed the edge of a vent through the furnace wall or an internal ledge. There were also some irregular oblong and oval lumps, which may be ad hoc props or supports or repairs to the structure. The material has been compared to material from an experimental Roman glass furnace and the colour and finish of the internal surface is near identical to the Otterpool examples. It may be reasonably concluded that that this fired clay derives from a glass furnace, which was probably used to produce window glass for the villa buildings. Fragments of vitrified furnace structure or glassy waste was also found embedded in some of the mortar fragments. Fragments of furnace structure were recovered from Trenches 242-4 and 247-8 from a variety of deposits including yard, make-up and abandonment layers and a wall structure. No feature was identified in the evaluation trenches that might be interpreted as a glass furnace and no potential furnace was identified amongst the anomalies on the geophysics survey. However, the scatter of furnace structure may indicate that it was partly or wholly demolished, and any element of the structure that survives in situ may be masked by the villa structures.

Discussion

B.8.5 The fired clay provides evidence of two significant structures. One may be a substantial oven or a building with wattle and daub infill and the second a glass furnace. Although there

is extensive evidence for glass working in Roman Britain, though mainly confined to urban and military sites, evidence for glass furnaces is extremely rare (English Heritage 2011a, 25). Although the fired clay evidence is limited, the implications are of national significance in relation to glass working during the Roman period in Britain.

Recommendations for retention and discard

B.8.6 It is recommended that all of the fired clay should be retained. The material with wattle imprints is part of an unusual structure possibly associated with malting, and such structures have rarely been identified in Roman Britain.

B.8.7 The fired clay with glass slag should be retained, as it has the potential for further scientific analysis. Should the site proceed to full excavation, it is recommended that particular attention should be paid to the possible survival of all or part of a glass furnace, and should this be discovered, relevant specialists are informed and a site visit arranged at the earliest opportunity.

Acknowledgements

B.8.8 I am grateful to Mark Taylor and David Hill (Roman Glassmakers) for examining and discussing the furnace material and allowing comparison to material from their experimental furnaces.

Cntxt	S. No	Nos	Wt (g)	Fabric	Form	Comments
24202	~	1	225	Sandy	Furnace str	pale green thick glassy opaque glazed surface
24204	~	2	15	Sandy	Furnace str	Green glazed surface
24307	<104>	12	62	Sandy	Furnace wall str	Green glazed surface
24318	~	1	262	Sandy fine	Furnace wall str	Green glazed surface
24408	~	9	168	Silty with chaff	Furniture: plate	Thin slabs 17-21mm thick with smooth flat surfaces
24409	<107>	28	77	Silty	Indeterminate	
24409	~	1	13	Silty	Indeterminate	
24430	~	2	26	Sandy	Furnace wall str	Green glazed surface
24439	~	6	139	Silty	Indeterminate	
24516	~	4	15	Silty	Wattle supported str	
24604	~	10	64	Silty	Structural	
24605	~	2	13	Silty	Indeterminate	
24605	~	4	107	Silty	Structural	
24606	~	19	57	Silty	Indeterminate	
24607	~	1	1	Silty	Indeterminate	
24607	~	8	21	Silty	Indeterminate	
24613	~	8	26	Sandy	Oven?	Small stem impressions 5-7mm dia
24908	~	2	14	Silty	Indeterminate	
25004	<116>	271	1406	Sandy	Wattle supported str	Wattle impressions 11-22mm dia
25004	~	12	3954	Sandy	Wattle supported str	Large number interwoven wattle impressions *c* 20mm dia
25004	~	48	1756	Sandy	Oven Structure	
25005	~	18	2878	Sandy	Wattle supported str	
25005	~	24	1115	Sandy	Oven Structure	

25008	<117>	92	1125	Sandy	Wattle supported str	Same as ctx 25004
25011	<118>	78	155	Sandy	Wattle supported str	Same as ctx 25004
25011	<118>	13	168	Sandy	Indeterminate	
25107	~	11	21	Silty	Indeterminate	
25109	~	6	5	Silty	Indeterminate	
25111	~	1	2	Sandy	Indeterminate	
25116	~	3	25	Silty	Indeterminate	
25117	<106>	8	12	Sandy	Indeterminate	
25204	~	1	2	Silty	Indeterminate	
25705	<120>	1	80	Silty	Furnace wall lining?	Heavily fired but not vitrified
25716	~	1	6	Sandy	Indeterminate	
25803	~	9	356	Sandy	Furnace wall str	Green glazed surface
25904	<122>	2	5	Silty	Indeterminate	
26303	<124>	1	2	Silty	Indeterminate	

Table B.8.1: Summary of fired clay by context

B.9 Roman coins

By Paul Booth

B.9.1 Ten Roman coins, all of 3rd-4th-century date, were recovered. They are in very variable condition ranging from very good to extremely poor, and consequently were identified at different levels of precision.

B.9.2 The earliest identified coin is a radiate of Trebonianus Gallus (AD 251-3) in good condition. Such coins are rare as site finds; for example, the catalogue of some 3785 coins from Cirencester excavations published by Reece (1998) contains no examples of Gallus, while the corresponding Cirencester Museum collection, of over 6600 coins, has only seven. A fragmentary large ?radiate (SF 135) has a relatively high silver content and might therefore date to a similar period, rather than to the later decades of the 3rd century when the silver content of most coins was very low.

B.9.3 The remaining material, of later 3rd and 4th-century date, is relatively unremarkable and includes a number of irregular issues. The status of probable radiate SF 124 is uncertain as it almost entirely encrusted. Amongst the 4th-century irregular issues SF 146 is notable. In character it is strongly suggestive of the irregular issues of the period after AD 348, typically dominated by imitations of the Fel Temp Reparatio issues, as (probably) SF 125. SF 146, however, is cut down from an earlier Beata Tranquillitas issue of 321-3, identified from the distinctive legend and rectangular frame of the altar on the reverse of this type.

B.9.4 Overall, the chronological range of the assemblage is characteristic of most rural sites. The group is too small for it to be possible to say if the absence of coins after the mid-4th century is significant.

SF No.	Context	Est. date	Reece period	Denomination	Obverse	Reverse	Mint	Ref.	Condition	Comment
124	24100	later 3C		?radiate 14-18mm						encrusted, ID on general character. Clean
125	24101	350-364	18	AE4 12-13mm	head r	Fel Temp Reparatio fallen horseman?			W/W	incomplete, irregular
128	24401	271-274	14?	radiate 15-16mm	I]MPCTETR[ICVS ….	figure l			SW/W	incomplete, rev partly eroded, ?irregular
127	24401	313-314	15	AE2 20-21mm	IMPCONSTANTINVSAVG	SOLIINVIC TOCOMITI	S/F//PLG	RIC VII Lyons, 4	SW/SW	
129	24401	341-348	17	AE3 15-16mm	CONSTANTI VSPFAVG	VICTORIAE DD AVGGQNN	G//		SW/W	mm uncertain
135	24511	3C		??radiate 22mm					E/E	incomplete and surfaces largely eroded and encrusted. Silvery
146	24604	350-364?	18	AE4 9-11mm	face r (cut down)	VO/TIS/XX on altar			W/VW	irregular, cut down from Beata Tranquillitas type of *c* 321-323
133	25101	later 3C		radiate fragment	radiate head				E/E	eroded fragment
115	25109	251-253	12	radiate, 20-21mm	IMPCAECVIBTREBGALLVSAVG	FELICITAS PVBLICA		RIC 33	SW/SW	
134	25701	275-285	14	radiate 17mm	]CPI[ ]SCAE[radiate head r	figure extreme l			W/VW	irregular, probably for Tetricus II

Table B.9.1: Roman coins

B.10 Metal

By Ian R Scott

Introduction

B.10.1 The metalwork assemblage from Field 5 contrasts with very limited metal finds from Fields 1, 2 and 3, the small metals assemblage from Field 4. The Field 5 assemblage comprises 244 objects (404 frags). The largest single class of finds is nails which number 140 (200 frags).

Assemblage distribution and composition (Tables B.10.1 & B.10.2)

B.10.2 The metal finds are very obviously concentrated on trenches in the N part of the site (Table B.10.1). The finds from these trenches unsurprisingly are dominated by nails. The nails comprise for the most part examples with circular to sub square, flat or very slightly domed heads. These would not be out of place in Roman setting because they conform to Manning's Type 1 nails (Manning 1985). It is however possible to find similar nails in later periods. The majority of the nails were in the topsoil or subsoil, although a number were within Roman contexts.

Trench	Nails	other metal finds	Totals
244	32	21	53
242	20	8	28
243	16	7	23
257	15	6	21
258	10	5	21
250	10	9	19
245	7	7	14
241	5	6	11
251	7	6	11
246	3	7	10
249	3	6	9
248	6	1	7
256	2	4	6
247		5	5
254		1	1
Unstrat	4	1	5
Totals	140	18	244

Table B.10.1: Summary of Quantities of all Metal finds and Nails by Trench (object count)

B.10.3 There is a small number of Roman objects. These include a simple bow brooch with four coil spring (Tr 242) of 1st-century date, a two-piece Colchester brooch (Tr 245) of later 1st-century date and a broken nail cleaner (Tr 244), which belongs to Eckardt's and Crummy's group of cast nail cleaners with moulded neck and shouldered blade examples of which are known from 1st-century contexts (Eckardt and Crummy 2008, 121-22, fig 59). There are also four hobnails which probably Roman, but these were found Trenches 244 (n = 2), 256 and 257. Finally, there is small but distinctive Roman linch pin.

B.10.4 Post Roman finds include two fragments of an iron paten of post medieval date from Trench 250, a late medieval or post medieval cu alloy buckle from Trench 244 and three late

18th- or 19th-century plain coat buttons with shanks from Trench 247 and Trench 258 (n = 2). There are three probable horseshoe fragments from Trench 247 and Trench 249 (n = 2), and a possible cart fitting from Trench 244. The latter is most likely to be late post-medieval. The most recent find is part of a reed plate from a harmonica (mouth organ) found in Trench 242.

B.10.5 Finally, there are also a few very small pieces of slag or cinder recovered from soil samples from contexts 24330, 24706, 24604 and 24605, and a very small quantity of possible hammerscale from context 24330.

B.10.6 The metal finds are concentrated in trenches in the north part of the site and this is also where the handful of Roman finds was recovered, and the location of the villa. Although not conclusive on its own the distribution of the metals is suggestive that the majority of the metalwork is of Roman date.

	Function											
Context	Transport	Leisure	Personal	Footwear	Household	Structural	Nails	Misc	Query	Undiag	Waste	Totals
Unstrat							4	1				5
24100							1					1
24101									2		4	6
24117							4					4
24201							4	3			3	10
24202							2					2
24203			1									1
24204		1					6					7
24205							7					7
24210							1					1
24300						1	11					12
24301								1	2		1	4
24314							5		2			7
24330												0
24400	1			1		1	5					8
24401			2	1			10	1	3	2	1	20
24408	1					1	4	2	2			10
24409							9	2				11
24415							2					2
24417							1					1
24427							1					1
24501							3		1			4
24508									1			1
24510							1		1			2
24511							2		2			4
24512								1				1
24516			1									1
24517							1					1
24600									1			1
24601							3	1				4
24604							*					*
24605							*					*
24606								5				5
24607							*					*
24700			1					1				2
24701	1								2			3
24706												*
24800							2	1				3
24801							4					4
24900	2						1		2	1		6
24901							2					2
24908								1				1
25000					1		3	1		1		6
25001				1			5					6
25006							1	4	1			6
25024							1					1
25100							1		1			2

Context	Function											Totals
	Transport	Leisure	Personal	Footwear	Household	Structural	Nails	Misc	Query	Undiag	Waste	
25101							3					3
25105							1					1
25111						1	2				1	4
25113								1				1
25401											1	1
25600				1			1	2				4
25601								1				1
25700							2				1	3
25701								1	1			2
25705				1			3		1			5
25706							9				1	10
25720							1					1
25800			1				3				2	6
25801			1				2		1	2	3	9
25803							5	1				6
25917							1					1
Totals	5	1	7	5	1	4	140	31	26	6	18	244

* Indicates presence of nail stem fragment(s) only, but nail head(s)

Table B.10.2: Summary quantification of the metal finds by context and function (object count)

B.11 Glass

By Ian R Scott

B.11.1 There is very little glass (n = 7), but it does include a number of small sherds from square blue Roman bottles (Nos. 1-5). These were recovered from Trenches 243 and 257 in the northern part of Field 5. The small sherd of wine bottle (No. 6) and the complete beer bottle (No. 7) were both from Trench 263 in the southern part of the field.

Context 24317 (1) **Window glass**. Small piece of possible Roman matt/glossy cast window glass. Very pale grey green. Sf 121

Context 25706 (2) **Square bottle?** Sherd probably from a Roman square blue bottle. Blue. Sf 147

(3) **Square bottle**. Flat body sherd with curve for a corner at one end. From a Roman square bottle. Blue. Sf 148

Context 25704 (4) **Square bottle**. Flat sherd with corner along one edge, from the side or **possibly the base of a Roman square bottle. Blue. Sf 149**

Context 25720 (5) **Square bottle**. Small but thick sherd, probably from a Roman square bottle. Blue. Sf 133

Context 26306 (6) **Wine bottle**. Small body sherd in green glass. Probably post medieval.

Context 26300 (7) **Beer bottle**, complete. Moulded body with applied finish with internal screw thread for screw cork. Embossed: "MACKESON & C^{O} L^{TD} / BREWERS / HYTHE". Embossed on the base "E B & C^{O} L^{D}" for Edgar Breffit & Co of Castleford Also embossed "13531", either a mould or design number. Dark green glass. Ht: 205mm; D: 62mm.
The embossing of the base indicates that the bottle was made between 1884 and c 1920.

B.12 Slag

By Geraldine Crann

B.12.1 Two contexts produced a small amount of undiagnostic slag.

Context	Description
24408	1 fragment, 13g
25803	6 fragments, 159g

Table B.12.1: Slag from Field 5

APPENDIX C ENVIRONMENTAL REPORTS

C.1 Environmental Samples

By Sharon Cook

Introduction

C.1.1 Fifteen bulk samples were taken from the evaluation of Field 5 at Otterpool, Stanford, Kent, primarily for the retrieval of Charred Plant Remains (CPR) and artefacts. In addition, eight small samples were taken for the retrieval of Waterlogged Plant Remains (WPR). Samples 121 and 127 are monoliths taken for later reference from the soils of the barrow mound and below with samples 129, 130, 132, 133 and 134 being associated 'grab samples'.

Method

C.1.2 The CPR bulk samples were processed at Oxford Archaeology using a modified Siraf-type water flotation machine. The flots were collected in a 250µm mesh and heavy residues in a 500µm mesh and dried. The residue fractions were sorted by eye while the flot material was sorted using a low power (x10) binocular microscope to extract cereal grains and chaff, smaller seeds and other quantifiable remains.

C.1.3 The WPR samples were processed by hand flotation to 250µm for both flots and residues and the resulting material was kept wet to facilitate preservation. A proportion of the flot was then examined using a low power (x10) binocular microscope and reported as for the CPR. For larger waterlogged samples such as sample 109 and 119 additional material was processed by bulk flotation to ascertain the existence of further dating evidence.

C.1.4 Identifications were carried out using standard morphological criteria for the cereals (Jacomet 2006), identification of wild plant remains is with reference to the Digital Seed Atlas of the Netherlands (Cappers *et al*. 2006) and by comparison with modern reference material. Classification and nomenclature of plant material follows Stace (2010). Where fewer than twenty-five individuals are present for any material type, these have been fully quantified.

Results

C.1.5 Table C.1.1 lists the charred taxa identified from each CPR sample in Field 5 while Table C.2.2 lists the waterlogged and charred taxa identified from each WPR sample for Field 5.

C.1.6 The samples from this field are from a variety of features which while mostly Roman in date also include a Late Neolithic/Early Bronze Age barrow with associated buried soils.

C.1.7 The samples from the trenches over the barrow are rich in charcoal with little or no other charred material within the scanned portion of the flots. By contrast those dated to the Roman period contain crop related material such as grain – primarily wheat (*Triticum* sp.) together with barley (*Hordeum* sp.) and accompanied by oat/brome (*Avena/Bromus*) and other common crop contaminants.

C.1.8 The waterlogged samples from enclosure ditch 25409 and 25110 contain a mixture of both charred and waterlogged material, with both the charred and the waterlogged material in generally good condition.

C.1.9 Finds extracted from the dried residues comprise: Pottery from samples 104, 105, 107, 108, 117, 118, 120, 122, 125 and 126. CBM from samples 104, 105, 106, 107, 108, 109, 110, 116, 118, and 120. Flint from 104, 106, 107, 116, 117, 120, 123, 124, 125, 126 and 128. Bone from samples 104, 105, 108, 109, 117 and 120. Burnt clay from samples 106, 107, 118 and 122. Painted plaster from sample 108. Mortar from samples 104, 105, 107, 108, and 120. Iron from 107, 108, 110 and 120. Marine shell from sample 110 and slag from sample 122. These finds are included in the relevant specialist reports.

Discussion

Late Neolithic/Early Bronze Age

C.1.10 Samples 128 and 123 originated from within the barrow mound itself (26309). Both are very rich in charcoal – mostly small in size – but with some fragments >2mm and potentially suitable for wood species identification. Due to the size of the flots these were only part-scanned but no other charred material was observed. Samples 124 and 125 came from a layer of buried soil, 26303, under mound 26309. As with the mound material itself these are generally charcoal rich but contain little other charred material. There were however two wheat grains in poor condition within sample 124. Finally, sample 126 (26310) from a layer beneath the buried soil also contains charcoal and two indeterminate cereal grains.

C.1.11 While it is unusual for barrows to contain much material with an origin in settlement activity, such as food crops and/or cereal processing waste, they are commonly associated with the interment of cremations and as such charcoal is not an unexpected find. In this case, however, the charcoal was not associated with cremated bone. The material from the buried soil beneath the mound may represent clearance prior to its construction, or an earlier and unrelated episode of clearance. The charcoal within the mound itself was probably incorporated from the underlying charcoal during construction.

C.1.12 The presence of wheat grains in the buried soil is of interest, as charred cereals are generally rare in assemblages of Beaker date, and provide useful evidence of crop cultivation somewhere in the vicinity.

Roman

The Charred Samples

C.1.13 The Roman samples cluster roughly into two groups; the samples to the northern side of the field (104, 105, 107, 108 and 120) and the samples in the central area of the field (106, 116, 117 and 118) with sample 122 an outlier in the southern part of the field. The material in all these samples is broadly similar, and is comparable to that observed for the Roman period elsewhere on the site in Fields 3 and 4.

C.1.14 The lack of flot material from yard surface 24307 (sample 104) is not unexpected since yards are likely to be cleaned whilst in use. Demolition layer 24318 (sample 105) contains both chaff and grain fragments although these are relatively infrequent and may be accidental inclusions.

C.1.15 The fills of ditches 24410 (sample 107) and 25703 (sample 120) contain much larger quantities of charred material including both chaff and cereal grains (mainly wheat) as well as a few uncultivated plant seeds which are likely to be crop contaminants. A small fragment of hazelnut shell (*Corylus avellana*) in sample 107 may indicate the consumption of hazelnuts, although as a single small fragment it may be residual. A single grain in 107 is possibly rye (*Secale cereale*) although since it is poorly preserved, this identification is tentative. The large quantity of chaff and grain fragments in these two samples suggests they represent dumps of crop processing waste from a stage following the initial threshing and coarse sieving. As ditch fills it is possible that this material has built up over time rather than being the result of single dumping episodes.

C.1.16 Sample 108 came from a charcoal layer sitting upon the floor of a robbed hypocaust associated with the Roman villa, and is generally poorer in charred remains. This does not come from the stokehole, but is probably derived from the fuel used to heat the hypocaust, and was partly sealed from contamination by a later mortar floor.

C.1.17 The three samples from Trench 250 vary in character. Ditch fill sample 116 contained only a small quantity of charred material, while sample 117 (the upper fill of ditch 25007) and sample 118 (the fill of an oven-type feature 25010) are rich in grain, chaff and the seeds of uncultivated plants. 25007 probably cut through the edge of structure 25010, so may derive from this structure as well. It is possible that this indicates the use of crop processing waste as a firing material although the amount of grain observed within these flots seems too large. The fact that a number of grains were either sprouting or had collapsed which often indicates a sprouted grain may indicate the destruction of spoiled grain as a fuel source or the use of this structure in a crop related process such as malting. Evidence for malting has been discovered at a number of villa sites including Northfleet in Kent (Smith 2011).

C.1.18 The fill of pit 25106 (sample 106) in Trench 251 east of Trench 250 is also rich in charred material including oat awns, chaff and uncultivated plant material, possibly also indicating that grain cleaning and/or processing was taking place in the vicinity.

C.1.19 The flot of ditch 25904 (sample 122) on the west side of the site contains frequent charcoal and a similar, although smaller amount, of identifiable crop processing waste, although in this case chaff is infrequent and the grain in poor condition.

C.1.20 The majority of charred material from the site is in fairly poor condition as a result of damage caused by burning, which has resulted in the majority of cereal grains being unidentifiable. Given the large quantity of glume base fragments, the majority of the unidentified grain is likely to be wheat (*Triticum* sp.) which is also the most common cereal among the identified grains. Although the glume base fragments are also generally in poor condition, a small number are sufficiently well preserved to identify as spelt wheat (*Triticum spelta*), which is consistent with the Roman date of most of the sampled contexts. There is also a small amount of barley (*Hordeum* sp.) grain but, as has been found in previous areas, insufficient to confirm if this was sown as a crop in its own right. The oat/brome (*Avena/Bromus*) is likely to be a crop contaminant as are the majority of wild plant seeds including vetches (*Vicia/Lathyrus*).

The Waterlogged Samples

C.1.21 The waterlogged samples mainly come from Trench 245 (samples 109-115) and from fills of ditch 24509. Both charred and waterlogged material is present within these samples, and the charred material is similar in character to that from the other charred plant samples from Field 5. The waterlogged material is in a reasonable state of preservation with some more delicate material such as dock (*Rumex* sp.) fruits still within the perianth, although other seeds have been less well-preserved. The majority of seeds observed in these samples are those commonly found within damper areas of deserted, neglected or marginal land. Some insect remains have been observed which indicate a potential for further work.

C.1.22 Sample 119 from ditch 25110 in Trench 251 has very similar contents, and is likely to result from similar site processes.

Recommendations

C.1.23 These results should be taken into account should the site proceed to further excavation. Some samples, especially those associated with the Roman structures and richer ditch fills including samples 107 and 120, would warrant consideration for full analysis at that time since these have potential to provide valuable information about the agrarian activities taking place at and around the villa.

C.1.24 The charcoal within the barrow and associated buried soil should be identified as far as possible, as this is likely to provide useful information pertaining to the local prehistoric environment, even if not securely tied to any ceremonial activity. As a comparison it would also be worthwhile obtaining charcoal identifications for several of the richer Roman samples.

C.1.25 Anaerobic preservation has been demonstrated in Trenches 245 and 251 and there is potential within the evaluation samples for analysis of the waterlogged plant remains, pollen and insect remains. The potential for these categories of environmental information should be considered in any future sampling strategy to characterise the local landscape.

C.1.26 The soil monoliths from the barrow should be logged and photographed by a geoarchaeologist and consideration given to any further work such as thin-section analysis depending on the nature of the deposits.

C.1.27 In general, if further excavation is carried sampling should be carried out in accordance with the most recent sampling guidelines (eg. Oxford Archaeology 2017 and Historic England 2011b). In particular, a sampling strategy for the villa and associated features should be devised to investigate activities taking place within and around the complex.

Retention and discard

C.1.28 The flots warrant retention at least until all archaeological works on this site are complete, when the relationships of these features are better understood, at which point a firm decision on discard and retention will be more easily made.

Sample no.	Context no.	Area/Trench	Sample vol. (L)	Feature /Deposit	Date	Flot vol. (ml)	Charcoal >2mm	Grain	Chaff	Weeds	Molluscs	Other	Notes
104	24307	243	40	Surface (24307)	Roman 43-410	50	++	+					Mostly modern material with very little CPR. Charcoal generally small. 4 small indet cereal grains.
105	24318	243	35	Layer (24318)	Roman 170-240	35	+++	+++	++	+	+++		Rich in modern roots, straw and insects. Grain is clinkered. Land snails include *Cecilioides acicula*. Charcoal in clean condition. 14 glume base fragments, 27 indet cereal grains, 5 *Avena/Bromus*, 7 *Triticum* sp., 7 *Hordeum* sp. 2 grass seeds, 2 *Rumex* sp.
106	25117	251	40	Middle fill of Pit [25106]	Roman 50-250	125	+++	++++	++++	++++			100ml only scanned. Very heavy encrustation on grains which are mostly in a 'clinkered' condition. Some grains are collapsed. *Triticum/Hordeum* awns, also *Avena* awns. 100+ glume base fragments including some spikelet forks. Rich in small grain fragments (not quantified). 25+ rachis fragments. 10+ coleoptiles, 3 detached embryos, 100+ indet cereal grains, 100+ *Avena/Bromus* grains, 50+ *Triticum* sp., 10 *cf Hordeum* sp. Wild seeds inc 25+ *Rumex* spp., 1 *Chenopodium* sp., 1 *Vicia/Lathyrus* <2mm, 2 grass seeds, 1 *Caryophyllaceae* fragmented, 2 small Fabaceae - broken, 2 *Tripleurospermum* - interiors only, 2 indet seeds.

107	24409	244	40	Fill of Ditch [24410]	Roman 170-220	300	++++	++++	+++	++			100ml only scanned. Some modern material but mostly charcoal, some externally encrusted. Grain is heavily clinkered and encrusted. 100+ indet cereal, 50+ glume base fragments, 50+ *Triticum* sp., 10 *Avena/Bromus*, 1 cf *Secale cereale* in poor condition - may be distorted grain of other type. 1 legume frag >4mm - poss pea/bean. 1 v small *Corylus avellana* shell fragment. 12 *Rumex* sp., 2 *Vicia/Lathyrus* <2mm. 3 indet seeds.
108	24330	243	9	Burnt Layer (24330) upon hypocaust floor	Roman 43-410	22	+++	+	+	+	++		Some modern material. Charcoal mostly small but generally clean. 4 indet cereal grains, 2 glume base fragments. 1 detached embryo fragment. 1 *Vicia/Lathyrus* 2mm, 1 *Rumex* sp., 3 indet seeds. Occasional land snails including *Cecilioides acicula.*
116	25004	250	35	Fill of Ditch [25003]	Roman 43-410	15		++	+	++			Mostly modern roots with very little CPR. No charcoal >2mm. Grain in poor condition. 2 *Triticum* sp., 4 *Avena/Bromus*, 1 indet cereal. 1 glume base fragment. 2 *Chenopodium* sp., 4 Asteraceae in poor condition.

117	25008	250	40	Upper fill of Ditch [25007]	Roman 43-410	125	+++	+++	+++	+++		+	100ml only scanned. Fine modern roots present. Unidentified small fragments of clinkered material. Seeds and chaff in poor condition with badly damaged or missing exteriors. Occasional oat awns. 50+ glume base fragments. 24 indet cereal grains, 15 *Avena* sp., 12 *Avena/Bromus*, 8 *Triticum* sp., 3 *cf Triticum* sp., 20 detached embryos with 2 beginning to sprout. 1 *Vicia/Lathyrus* <2mm, 2 small fragments of *Raphanus raphanistrum* seed capsule. 1 grass seed, 3 *cf Juncus* sp., 19 *Rumex* sp. in v poor condition. 2 *Persicaria* sp., 11 *Anthemis cotula*, 4 *Tripleurospermum* sp., 30 + Asteraceae seeds, 9 indet seeds.
118	25011	250	40	Fill of oven construction cut [25010]	Roman 43-410	40	+++	++++	+++	+++			Rich in fine roots. Charcoal is reasonably clean. Grains are clinkered and heavily encrusted. 100+ indet cerealia. Occasional grains sprouted, some also collapsed. 50+ *Triticum* sp., 25+ *cf Triticum* sp., 10 *Hordeum* sp., 8 *cf Hordeum* sp., 30+ small glume base fragments, 1 rachis fragment, 11 *Avena/Bromus*, 9 detatched embryos - 1 appears to be sprouting, 1 coleoptile. 6 *Rumex* in poor condition, 1 *Vicia/Lathyrus* 2-4mm, 10 Asteraceae missing exteriors, 1 *Plantago lanceolota.*
120	25705	257	40	Fill of Ditch [25703]	Roman 100-120	250	++++	+++	++	+++		+	100ml only scanned. Charcoal is of a good size but some is heavily encrusted, forms majority of flot. Occasional indet clinkered material. 9 *Triticum* sp., 7 *cf Triticum* sp.,1 *Avena* sp., 3 *Avena/Bromus*, 25 indet cereal grains. 21 glume base fragments - 2 are *Triticum spelta*. 1 *Vicia/Lathyrus* 2-4mm. 24 *Rumex* sp. in poor condition, 1 small Fabaceae, 2 indet seeds.

122	25904	259	30	Fill of ditch [25903]	Roman 43-410	155	++++	++		++			100 ml only scanned. Charcoal is generally clean, although some larger fragments have been heavily encrusted. 20 frags indet cereal, 3 cf *Triticum* sp. Seeds in poor condition. 8 *Anthemis cotula*, 2 Asteraceae, 6 indet seeds.
123	26309	263	25	Mound material from (26309)	L Neo /EBA	125	+++						100ml only scanned. Mostly small charcoal with a little modern material. 25+ charcoal >4mm. Some heavy external encrustation. No other CPR.
124	26303	263	40	Buried soil (26303) under mound (26309)	L Neo /EBA	400	++++	+					100ml only scanned. Rich in uncharred straw and root fragments - modern. Very rich in charcoal. Uncharred seeds and insects present. Charcoal externally encrusted. Fungal fruiting bodies. 2 *Triticum* sp. in poor condition.
125	26303	263	37	Buried soil (26303) under mound (26309)	L Neo /EBA	450	+++						100ml only scanned. Rich in uncharred straw and root fragments - modern. Very rich in charcoal. Uncharred seeds and insects present. Charcoal externally encrusted. Fungal fruiting bodies. No other CPR in scanned portion.
126	26310	263	9	Lower podsol (26310) under (26303)	L Neo /EBA	25	++	+					Rich in modern material. Charcoal rich - heavily encrusted. Fungal fruiting bodies. 1 indet cereal grain.
128	26309	263	25	Mound material from (26309)	L Neo /EBA	250	++++						100ml only scanned. Large amounts of modern material. Charcoal generally with minor external encrustation. No other CPR. Fungal fruiting bodies present.

Key: +=present (up to 5 items), ++=frequent (5-25), +++=common (25-100) ++++=abundant (>100)

Table C.1.1: The Charred Material from Field 5

Sample no.	Context no.	Area/Trench	Sample vol. (L)	Feature /Deposit	Date	Flot vol. (ml)	Grain	Chaff	Weeds	Molluscs	Other	Notes
109	24512	245	1	Top of Basal fill of Ditch [24509]	Roman 150-240	175		+++	###		#	10ml wet flot scanned. Contains mix of WPR and CPR. Wood fragments including twiggy roundwood, charred and uncharred. Some charcoal is heavily externally encrusted. Occasional Insect fragments. Charred material comprises 25+ glume base fragments. Waterlogged material: 2 *Sambucus nigra*, 100+ *Urtica dioica*, 5 *Ranunculus acris/repens/bulbosus*, 2 badly damaged 3 sided *Carex/Rumex*, 7 *Rumex* sp. mixed condition, 5 *Persicaria* sp., 1 medium Apiaceae, 7 small Apiaceae. 8 *Rumex* fruits with perianth. 8 indet waterlogged seeds. 1 large frag of *Corylus avellana*.
110	24512	245	0.75	Top of Basal fill of Ditch [24509]	Roman 150-240	80	+	++	####		#	10ml wet flot scanned. Contains mix of WPR and CPR. Wood fragments including twiggy roundwood, charred and uncharred. Some charcoal is heavily externally encrusted. Occasional Insect fragments. Fragments of oyster shell. Rich in waterlogged seeds in reasonable condition although some are less well preserved than others. Charred material includes; 6 glume base fragments, 2 *Avena/Bromus*, 1 *Tanacetum parthenium*, 1 *Ranunculus acris/repens/bulbosus,* 1 small Fabaceae. Waterlogged material: 27 *Sambucus nigra*, 100+ *Urtica dioica*, 9 *Ranunculus acris/repens/bulbosus*, 3 *Lepidium* sp., 1 partial *Rubus* sp., 5 badly damaged 3 sided *Carex/Rumex*, 5 *Rumex* sp. poor condition, 3 *Carex* sp., 1 *Fallopia convolvulus*, 2 *Lamiaceae* sp. in poor condition, 1 *Juncus* sp., 1 indet charred seed. 1 indet waterlogged seed. 1 frag of *Corylus avellana*.

111	24511	245	0.5	Top of Middle fill of Ditch [24509]	Roman 250-300	10	+	+	## +			100% of wet flot scanned. Almost entirely charred material. Charcoal small with only occasional fragments 4-2mm, rare fine roots, occasional small bones. Charred material includes 4 glume base fragments, 1 *Triticum* sp., 2 indet cereal frags, 1 indet charred seed, 2 *Juncus* sp., 1 small Fabaceae. Waterlogged: 5 *Sambucus nigra*, 1 *Urtica dioica*.
112	24510	245	1	Top of Upper fill of Ditch [24509]	Roman 140-240	5		+				100% of wet flot scanned. Almost entirely fine roots. Small quantity of charred material. 1 charred glume base fragment.
113	24512	245	0.75	Bottom of Basal fill of Ditch [24509]	Roman 150-240	100		+	####			10ml of wet flot scanned. Contains mix of WPR and CPR. Wood fragments including twiggy roundwood, charred and uncharred. Some charcoal is heavily externally encrusted. Occasional Insect fragments. Seeds in better condition than 110. Charred material: 4 glume base fragments. Waterlogged material: 100+ *Urtica dioica*, 4 *Sambucus nigra*, 4 *Persicaria* sp., 1 *Chenopodium* sp., 1 *Ranunculus acris/repens/bulbosus*, 23 Apiaceae in poor condition - 7 may be *Conium maculatum*, 17 *Rumex* sp., 3 *Carex* sp., 1 *Cirsium* sp., 1 *Mentha* sp., 1 Lamiaceae, 3 indet seeds. 3 *Rumex* fruits with perianth.
114	24511	245	0.5	Bottom of Middle fill of Ditch [24509]	Roman 250-300	30	+	+	+ ###			10ml of wet flot scanned. Fine roots and mostly charred material inc charcoal >4mm. Charred roundwood also present. Charred material: 1 *Triticum* sp., 1 *cf Hordeum* sp., 1 *Avena/Bromus*, 1 glume base frag. 1 *Chenopodium* sp. fragment. Waterlogged material: 8 *Sambucus nigra*, 3 *Ranunculus acris/repens/bulbosus*, 14 *Urtica dioica*, 1 *Carex* sp., 1 grass seed, 1 indet seed.

115	24510	245	0.75	Bottom of Upper fill of Ditch [24509]	Roman 140-240	5			+			100% of wet flot scanned. Fine roots and small charred material with fibrous WPR; 1 charred grass seed.
119	25120	251	10	Fill of Ditch [25110]	Roman	350	+++	+++ ####	+			10ml scanned. Contains mix of WPR and CPR. Wood fragments including twiggy roundwood, charred and uncharred. Some charcoal is heavily externally encrusted and vivianite staining observed. Occasional Insect fragments. Rich in waterlogged seeds in reasonable condition although some are poor. Charred material includes: 50+ glume base fragments 10 of which are *Triticum spelta*. 3 rachis internode fragments, 10 *Avena/Bromus* some beginning to sprout, 12 *Triticum* sp. with 3 sprouting, 8 indet cereal fragments. 7 spikelet forks. 2 *Leucanthemum/Tripleurospermum*, 1 indet seed. Waterlogged material is; 100+ *Urtica dioica*, 11 *Ranunculus acris/repens/bulbosus*, 1 badly damaged 3 sided *Carex/Rumex*, 3 *Rumex* sp. poor condition, 2 *Persicaria* sp (2 sided), 1 *Carduus/Cirsium* sp. flattened, 1 small Apiaceae. 1 indet waterlogged seed.

Key: + =present (up to 5 items), ++=frequent (5-25), +++=common (25-100) ++++=abundant (>100) Charred
=present (up to 5 items), ##=frequent (5-25), ###=common (25-100) ####=abundant (>100) Waterlogged

Table C.1.2: The Waterlogged Material from Field 5

C.2 Animal Bone

By Lee G. Broderick

Introduction

C.2.1 A total of 248 animal bone specimens were recovered from the site (Tables C.2.1 and C.2.2) most of which were collected by hand. This material was recorded in full, with the aid of the Oxford Archaeology skeletal reference collection and standard identification guides, using a diagnostic zone system (Serjeantson 1996, 194–223 for mammals; Cohen and Serjeantson 1996 for birds). Environmental samples were also taken and sieved at 10mm, 4mm, 2mm and 0.5mm fractions. Only identifiable material was recorded from these samples, following the same criteria as the hand-collected material. Features on the site were dated on the basis of associated ceramic and other finds, principally to the early Roman and middle Roman periods.

Description

C.2.2 The assemblage was generally in moderate condition (Figure C.2.1) and was dominated by domestic cattle (*Bos taurus taurus*). All of the other domestic mammals most commonly found in Britain were also present – i.e. caprine (sheep [*Ovis aries*] and/or goat [*Capra hircus*]), pig (*Sus* scrofa domesticus), horse (Equus caballus), dog (Canis familiaris) and cat (Felis cattus). Little evidence for body part selection could be found in the assemblage for any of these species. Among the caprines specimens, it was possible to identify a right mandible from AD 140-240, context 24510, as being specifically sheep.

C.2.3 Also recovered from a middle Roman context was part of a red deer antler. This was a single tine from context 24508. It is possible that this represents industrial/craft waste, although there are no indicative butchery marks on the specimen.

C.2.4 Butchery marks were observed on a total of nine specimens, all from Roman contexts. These specimens were a caprine tibia, a horse humerus and domestic cattle scapula, radius and metapodials as well as large mammal ribs. The ribs have oblique cutmarks whilst all the other bones have been chopped through obliquely at or near the distal end, suggesting rough and rapid primary butchery. Exceptions to this were the domestic cattle scapula (from AD 200-250, context 24319) which has had the spine removed with a cleaver, and a domestic cattle femur, which has superficial axial chopmarks on the lateral side.

C.2.5 The kind of quick butchery seen here is most often associated with Roman towns, rather than rural sites (Seetah 2006, 109–116). The butchery recorded on the scapula is more unusual but it is worth noting that the most common butchery mark on scapulae in the Roman period is also the only mark common to both towns and rural sites, that is the presence of stray cleaver marks on the spine of scapulae. This has been associated with the curing of shoulder joints of meat and has fuelled debate as to whether the presence of these butchery marks shows a similarity of practice between rural and urban sites or is evidence for trade of processed meat rather than live animals (Seetah 2006, 109–116; Maltby 2007, 59–76). It seems possible that the butchery mark here is related to this pattern, perhaps suggesting a particularly unskilled or rushed butcher.

C.2.6 Lesions, consistent with osteochondrosis, a benign pathology, were observed on two domestic cattle specimens and a total of nine specimens had been gnawed by canids, probably dogs (Table C.2.3). All were from Roman contexts.

C.2.7 Environmental samples included a cf. house mouse (Mus musculus) humerus from 2nd century AD context 25705 in ditch 25703, frog/toad (Rana temporaria /Bufo bufo) specimens from ditch 24509 and vole specimens from demolition layer 24318. The most diverse sample was from middle Roman context 24330. This was a burnt layer directly overlaying the floor of the hypocaust. It included wood mouse/yellow-necked mouse (*Apodemus sylvaticus/flavolicus*) and passeriform as well as a snake vertebra.

Conclusions

C.2.8 This is a much larger assemblage, in much better condition, than that recovered from earlier phases of excavation at the site. Those phases have been characterised by Iron Age - Roman period large mammal finds, however, and so are consistent with this assemblage. It is common for Romano-British sites to have a large amount of domestic cattle present but even by those standards the proportion of domestic cattle to caprine is high on this site. Combined with tentative indications of a consistent butchery pattern the site has high potential for increasing our understanding of the extent of Romanisation in the south east of the country.

C.2.9 The presence of cat on the site is also worth noting. Although far from unknown in Roman Britain it is still relatively unusual, having been found on only 82 sites so far, including 6 in Kent (Allen *et al.* 2015).

Recommendations regarding the conservation, discard and retention of material

C.2.10 The assemblage should be retained and studied alongside any material excavated from the site in future.

	AD50-110	AD50-120	AD50-150	AD50-250	AD100-120	AD120-200	AD120-250	AD120-300	AD140-240	AD150-240	AD170-240	AD200-250	AD250-300	AD250-410	AD43-410	AD1050-1500	Undated
domestic cattle	1	4	1	1			1	1	2		4	2	6			5	2
caprine	1			1	1								4		1		1
sheep									1								
pig										1			1				
horse				1					1			1					
dog																	1
dog?															1	1	
cat										1							
red deer						1											
small mammal											1						
medium mammal		3		2	1				5	2			2		1		7
large mammal		1	5		3			1	36	1	20	1	6	12	3	4	19
Total Mammal	2	8	6	5	5	1	1	2	45	5	25	4	19	12	6	10	30
bird															1	1	
Total NISP	2	8	6	5	5	1	1	2	45	5	25	4	19	12	7	11	30
Total NSP	4	13	8	7	5	9	1	11	45	5	25	4	19	12	7	14	30

Table C.2.1. Total NISP (Number of Identified Specimens) and NSP (Number of Specimens) figures per period from hand-collected material from the site

	AD 100-120	AD 150-240	AD170-240	AD43-410	Undated
caprine?	1				
dog				1	
mouse					1
wood mouse/yellow-necked mouse					2
house mouse?	1				
bank vole/field vole/common vole			8		
micro mammal					2
medium mammal	4				1
large mammal					1
Total Mammal	6	0	8	1	7
passeriform					2
Total Bird	0	0	0	0	2
snake	1				
Total Reptile	1	0	0	0	0
frog/toad		4			
Total Amphibian	0	4	0	0	0
Total NISP	7	4	8	1	9

Table C.2.2: Total NISP Number of Identified Specimens) and NSP (Number of Specimens) figures per period from environmental (sieved) samples from the site

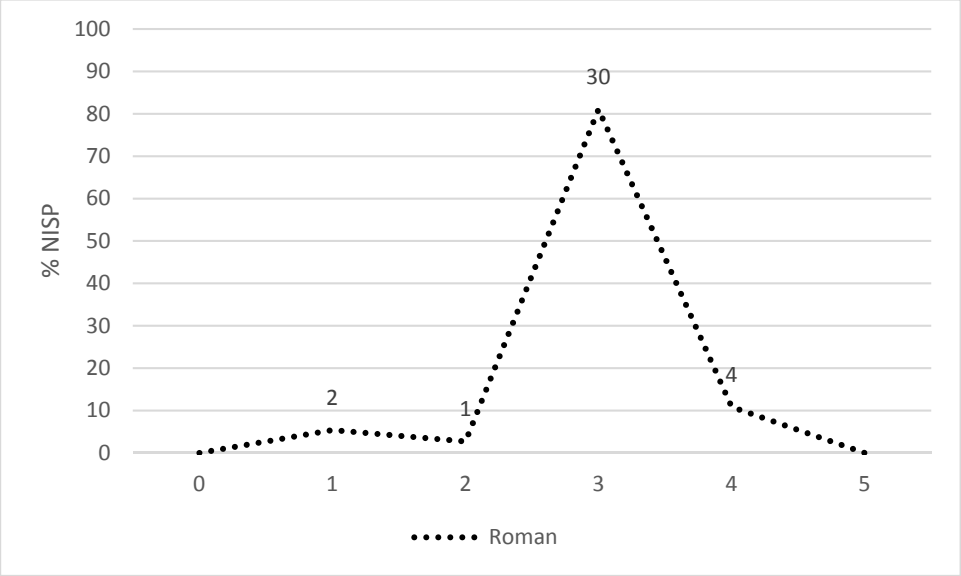

Figure C.2.1: Condition of identified specimens (Following Behrensmeyer 1978, 150-162)

	Butchery marks	Pathologies	Gnawed	Ageing data	Biometric data
domestic cattle	4	2	5	10	3
caprine	1		1	1	
pig			1		
horse	1			2	1
dog					1
wood mouse				1	
house mouse				1	
bank vole/field vole/common vole				2	
large mammal	3		2		
Total	9	2	9	17	5

Table C.2.3: Non-taxonomic data recorded for material from the site

Context	NSP	Mass (g)
24117	1	12
24202	1	5
24318	33	877
24319	4	275
24330	9	24
24423	1	5
24504	3	31
24508	9	59
24510	45	238
24511	19	417
24512	9	27
24513	10	6
24516	2	9
25105	1	2
25109	21	55
25704	5	216
25705	12	55
25706	8	21
25711	13	460
25712	2	10
25716	3	234
25717	6	13
25718	12	133
25803	14	285
25805	1	4
25818	1	19
26309	1	0

Table C.2.4: NSP and total mass per context

C.3 Marine Shell

By Rebecca Nicholson

C.3.1 A very small assemblage of oyster shells (*Ostrea edulis* L.), in fair-poor condition and weighing 78g was recovered from Field 5. These came from surface 24203 (two small left valves and one small right valve); enclosure ditch fills 24512, sample <110> (one right valve) and 24513 (fragment of right valve); and demolition layer 24318 (3 left valve fragments). Additionally, layer 25806 produced two edge fragments of cockle (*Cerastoderma* sp.). Shellfish, especially oysters, were favoured by the Romans and would be expected finds from a villa site.

C.4 Fish Bone

By Rebecca Nicholson

C.4.1 Fish bones were recovered from bulk sample residues from demolition layer 24318 (sample <105>) and from burnt layer 24330 which overlay the hypocaust floor (sample <108>) although the bones from this sample were not burnt. The bones from 24330 comprise two precaudal and two caudal vertebrae from a right-eyed flatfish (Pleuronectidae) most similar to plaice (Pleuronectes platessa (L.)). By comparison with reference fish of known size, these bones probably came from a single fish of about 30cm long. The two bones, both vertebrae, from 24318 were clupeid, probably herring (Clupea harengus L.).

C.4.2 Unlike the native population, the Romans favoured seafood and fish remains are often found on villa sites in south and south-east England and in Roman towns, although rarely in significant quantities (Locker 2007). Both the flatfish and herring are likely to have been caught in coastal waters or, in the case of flatfish, in tidal traps. As an oily fish, the herring may have been salted, but equally given the site's location the consumption of fresh herring would have been possible. Some fish enjoyed by the Romans were imported as preserved products (Ibid.) but the majority is likely to have been caught locally.

C.4.3 The extent of seafood consumption among both the Roman elite and the native population is an under-researched topic, largely due to the inconsistent recovery of small bones. Unlike domestic mammals, fish remains are almost entirely recovered through the sieving of soil samples, and consequently a targeted sampling programme for any future excavation of the villa should aim to maximise the recovery of these important items. Fish remains usually derive from kitchen or table waste and consequently are most likely to be found in floor deposits, hearths and feature fills with other domestic debris associated with these activities.

C.5 Waterlogged Wood

By Julia Meen

C.5.1 Wood was recovered from three waterlogged contexts in Field 5. Numerous pieces of timber and roundwood were recovered from context 24511, and a worked wooden 'plug' was found in context 24512; both are middle/lower fills of an enclosure ditch. A further piece of wood was recovered from the surface of context 26306. With the exception of the worked piece from context 24512, all pieces were examined to identify, where possible, the species.

Thin sections were taken from each piece on the transverse, radial and tangential sections as required, mounted onto slides, and examined under transmitted light using a Brunel Metallurgical SP-400BD microscope. Identifications were made by observing diagnostic anatomical characteristics of the wood, and with reference to Schweingruber (1990).

C.5.2 The four pieces of 'timber' from context 24511 were well preserved and could easily be identified as ash (Fraxinus excelsior). The pieces clearly showed the ring porous structure and paired vessels in both early and latewood that is very characteristic of ash.

C.5.3 The eight pieces of roundwood from the same context were more problematic to identify. Many of these had a spongey structure due to the waterlogged conditions in which they were preserved, and were difficult to successfully thin section. However, it is clear that at least four different species are present. Two of the small roundwood branches were identified as alder or hazel (Alnus/Corylus) and a further two as probable alder (cf Alnus glutinosa). Another small branch is provisionally identified as slow grown ash, although the very closely spaced annual rings makes it difficult to see the vessel patterning clearly. One item of roundwood could not be identified further than as blackthorn or hawthorn-type (Prunus/Maloideae), and the final two pieces could not be identified to species.

C.5.4 The piece of wood from layer 26306 was very well preserved, and likely modern. This piece was identified as Scots Pine (Pinus sylvestris), on the basis of a sharp transition between early and late wood, the presence of resin canals, large pits, and tooth-shaped protrusions in the walls of the transversal tracheids.

C.5.5 The final item of wood, the worked 'plug' from context 24512, was not thin-sectioned to avoid damaging the object. Therefore, an inspection of the exterior was made under low magnification. The item was made from a piece of diffuse porous roundwood. Rays appeared to be uniseriate, but probable aggregate rays were also seen. Without examining the wood at a high magnification, no conclusive identification can be made, although (Corylus avellana) is a strong possibility.

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APPENDIX E SITE SUMMARY DETAILS

Site name:	Field 5, Otterpool Park, Sellindge, Kent. Archaeological Evaluation report
Site code:	STOT 17
Grid Reference	611700 136500
Type:	Evaluation
Date and duration:	April and early May 2018
Area of Site	6 ha.
Location of archive:	The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with Folkestone Museum in due course, under the following accession number: tbc.
Summary of Results:	The remains of a mound surviving up to 0.55m high and overlying a buried soil was found in Trenches 262 and 263 on the south. The mound soil covered an area at least *c* 35m across. The buried soil contained sherds of Beaker pottery, providing a *terminus post quem* for the construction of the monument. Additionally, a significant assemblage of early Mesolithic struck flint was found in the soils under the mound, indicating that the mound had preserved an area of earlier Mesolithic activity beneath it. No ditch that could be associated with the mound was found, nor any evidence of human remains, but it seems likely that the mound represents a barrow. A Roman villa was found in the northern part of the field. This included the foundations and lowest courses of limestone walls, as well as associated stone spreads and ground surfaces in varying states of preservation. Two structural phases could be recognised. The stone buildings included a hypocaust whose infilling included painted wall plaster. Other structures included a possible malting oven, a substantial boundary ditch and associated wall, and a large posthole possibly indicating a timber building. Other features include a probable road, linear ditches and pits. The predominant orientation of the ditches and buildings was NW-SE/NE-SW. The southern extent of the villa was approximately defined, but was not confirmed in the other directions. The material culture recovered spans most of the Roman period. Some structural features and a large boundary ditch can be dated to the first century, and a small amount of possible Conquest-period pottery was discovered. However, the majority of the features date to the middle Roman period. Coins and pottery of the late Roman period were also found, but no late Roman structural features.

The presence of stone column bases, one of imported limestone, strongly suggests the presence of a building of high status. Fragments of fired clay with vitrified green glaze were discovered, and indicate a former glass furnace on the site, presumably for construction of window glass.

Waterlogged Roman ditches containing preserved wooden objects and environmental material have the potential to produce not only rarely preserved artefacts but also valuable information about the contemporary environment. These factors indicate that the villa complex is of regional importance.

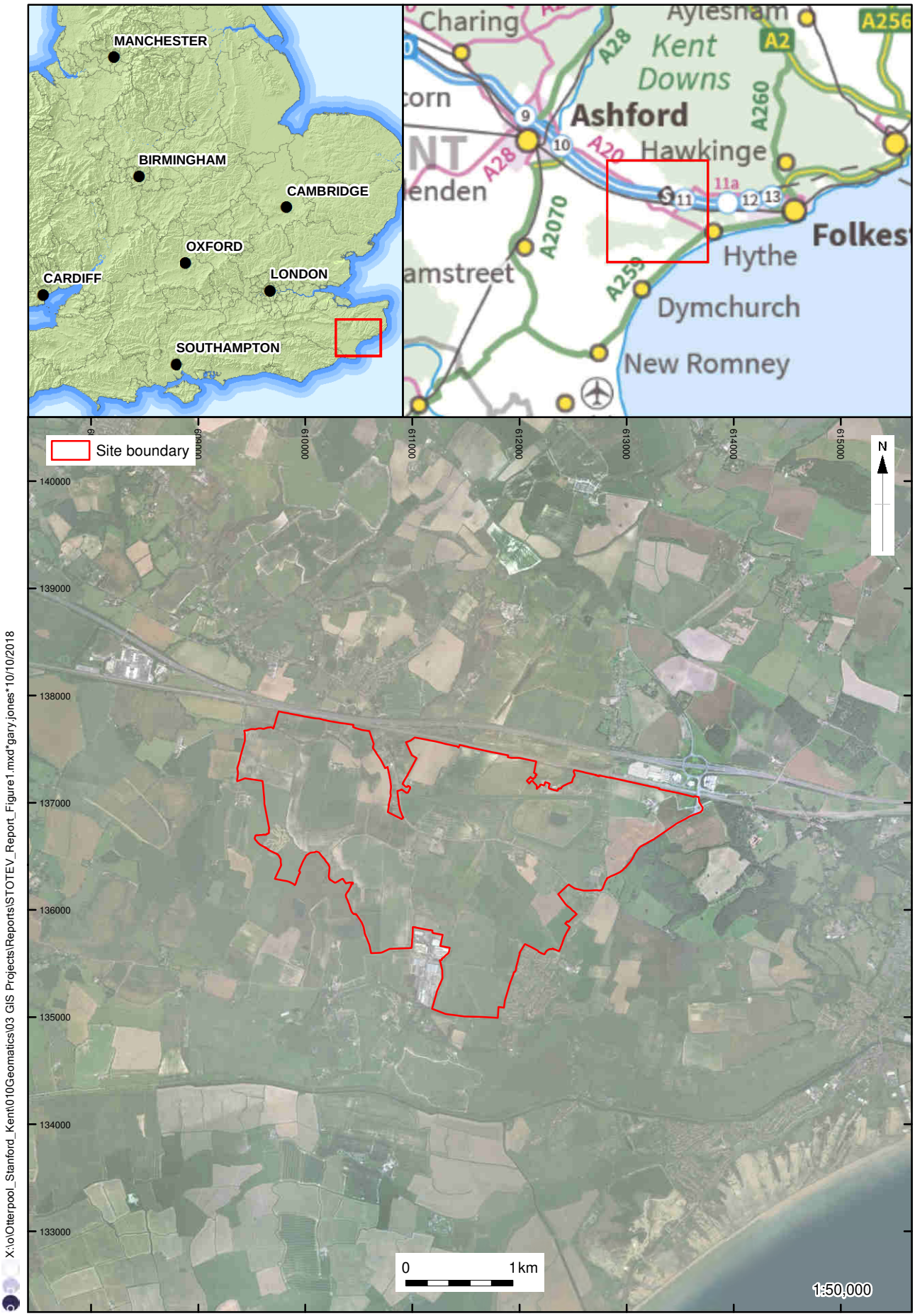

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Figure 1: Site location

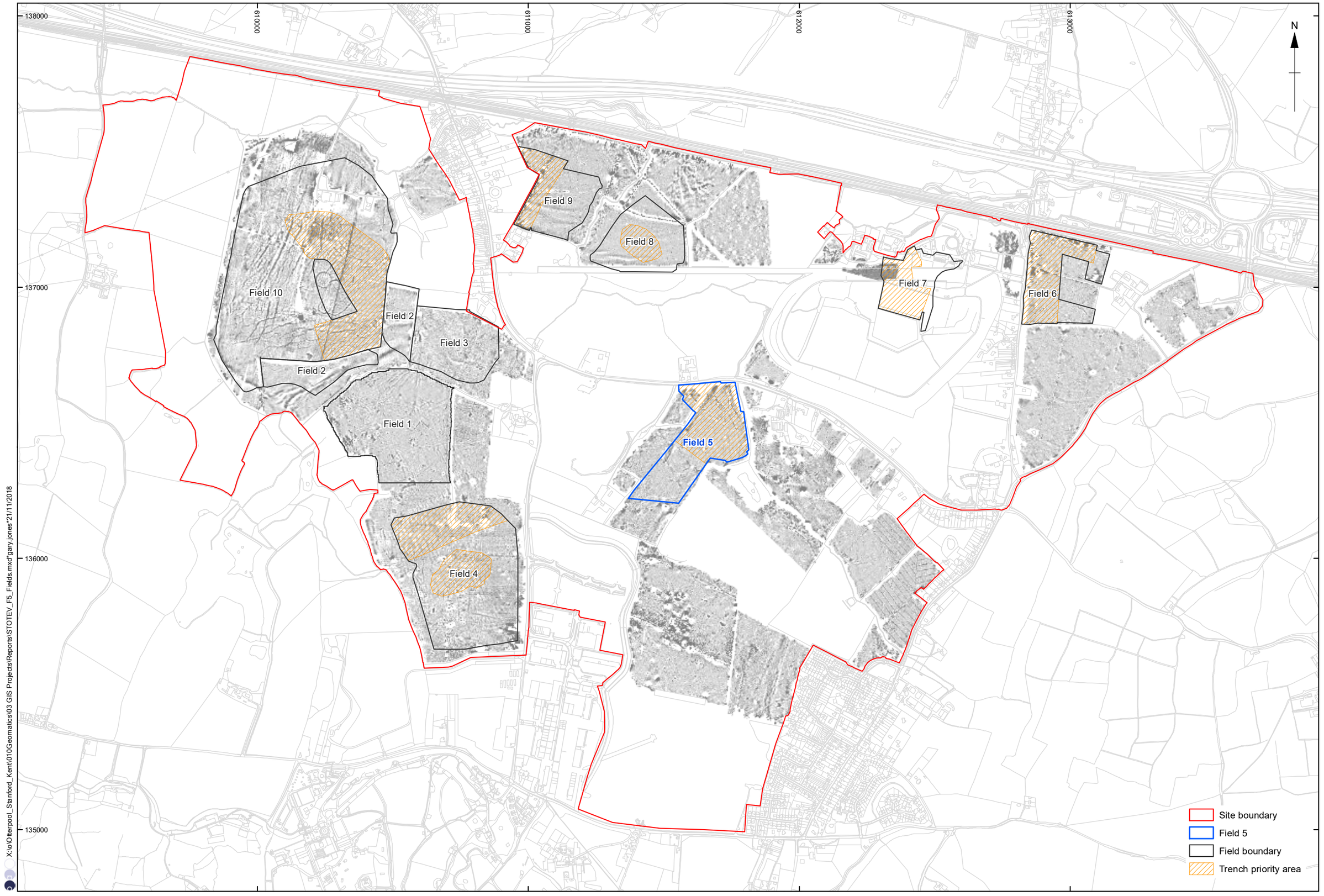

Figure 2: Field 5 in relation to the rest of the site

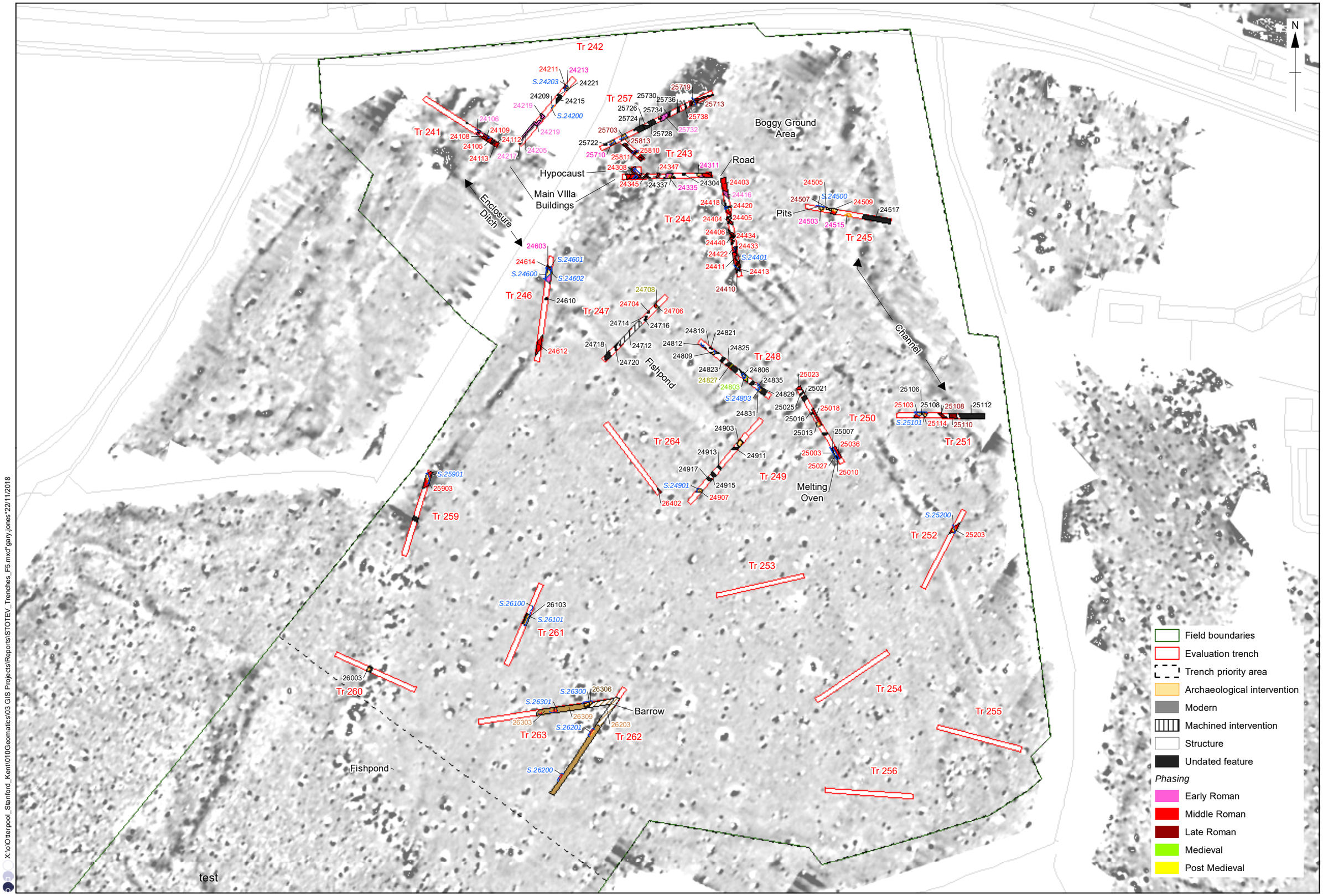

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Figure 3: Overview of the trenches and features in Field 5

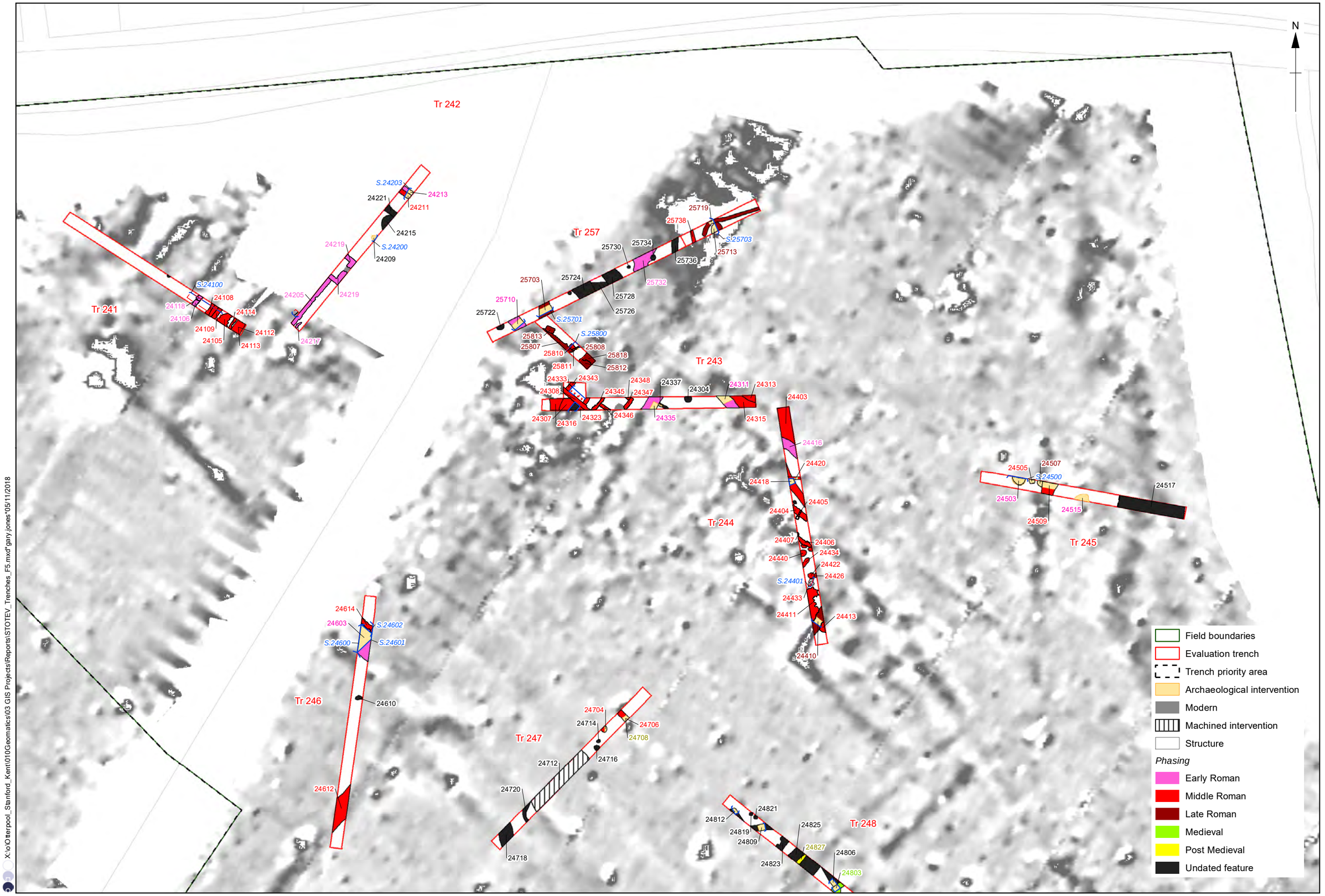


Figure 4: The northern trenches and features in Field 5 phased by finds

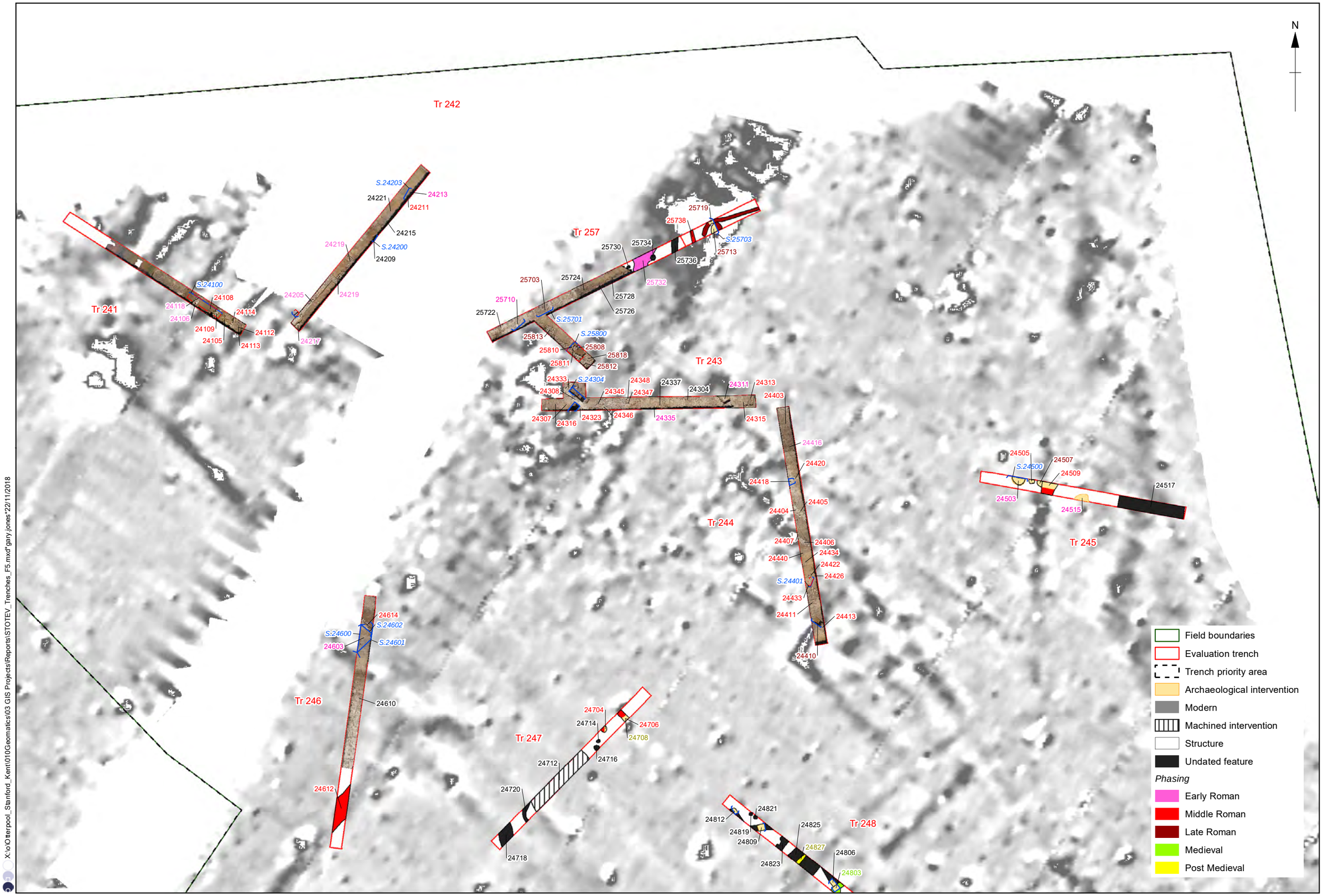
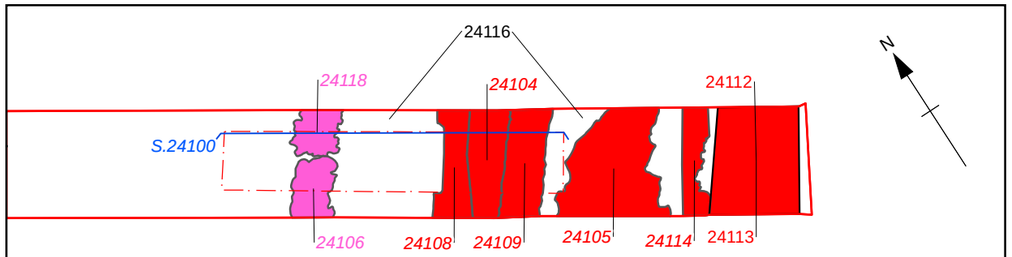


Figure 5: The northern trenches and features in Field 5, showing orthophotographs of villa buildings

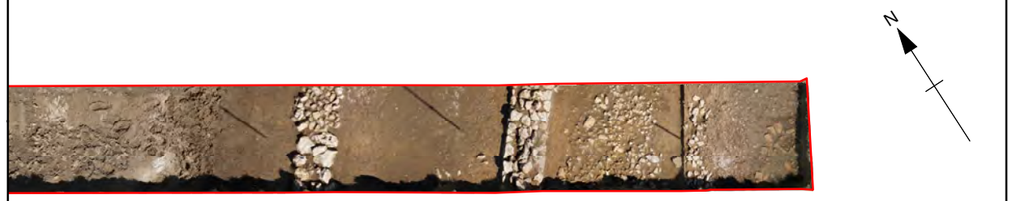
Evaluation trench
Archaeological intervention
Tree Throw hole
Natural
Modern
Sections

Phasing

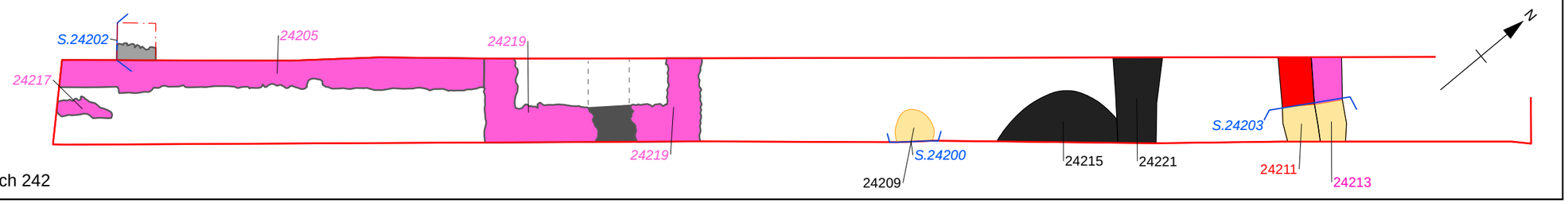
Neolithic
Early Bronze Age
Middle Bronze Age
Late Bronze Age
Late Bronze Age / Early Iron Age
Early / Middle Iron Age
Early Roman
Middle Roman
Late Roman
Early Medieval
Medieval
Post Medieval
Undated feature



Trench 241

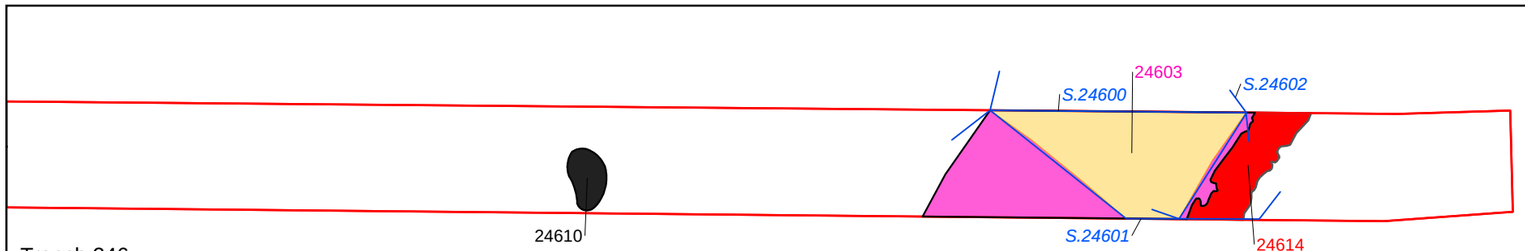


Trench 241 - Orthomosaic



Trench 242

Trench 242 - Orthomosaic



Trench 246

Trench 246 - Orthomosaic

0 1:100 @ A3 4 m

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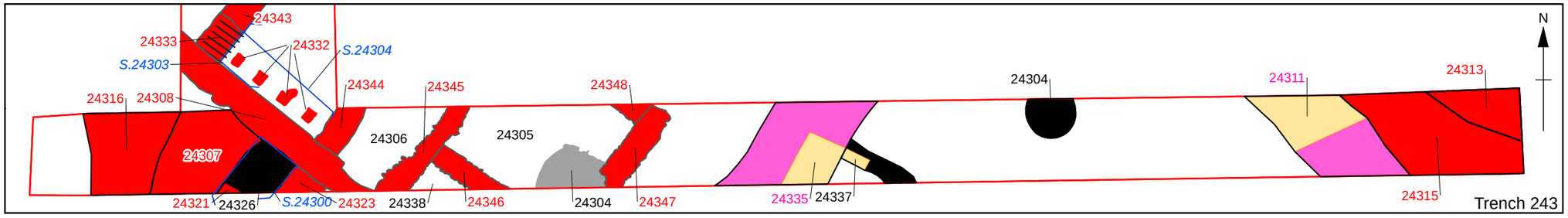
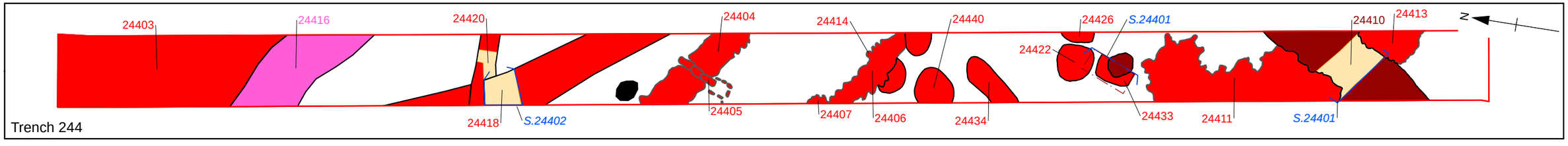
Figure 6: Detailed plans and orthophotographs ov villa trenches 241, 242 and 246

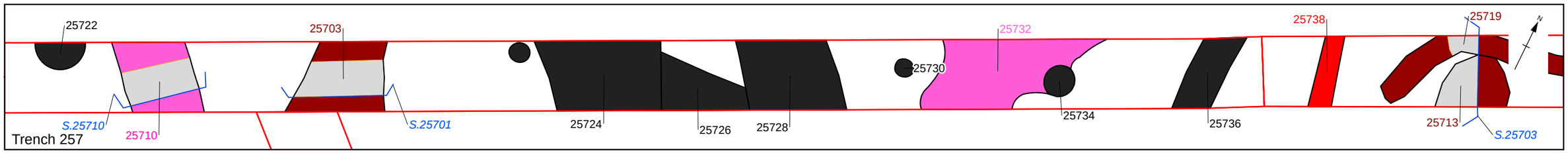
Evaluation trench
Archaeological intervention
Modern
Sections

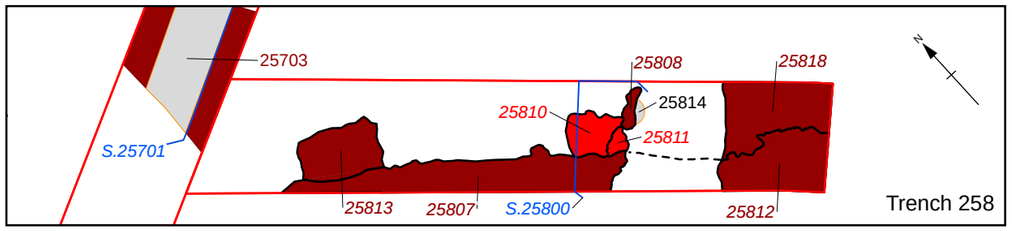
Phasing

Neolithic
Early Bronze Age
Middle Bronze Age
Late Bronze Age
Late Bronze Age / Early Iron Age
Early / Middle Iron Age
Early Roman
Middle Roman
Late Roman
Early Medieval
Medieval
Post Medieval
Undated feature









0 1:100 @ A3 4 m

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Figure 7: Detailed plans and orthophotographs ov villa trenches 243-4 and 257-8

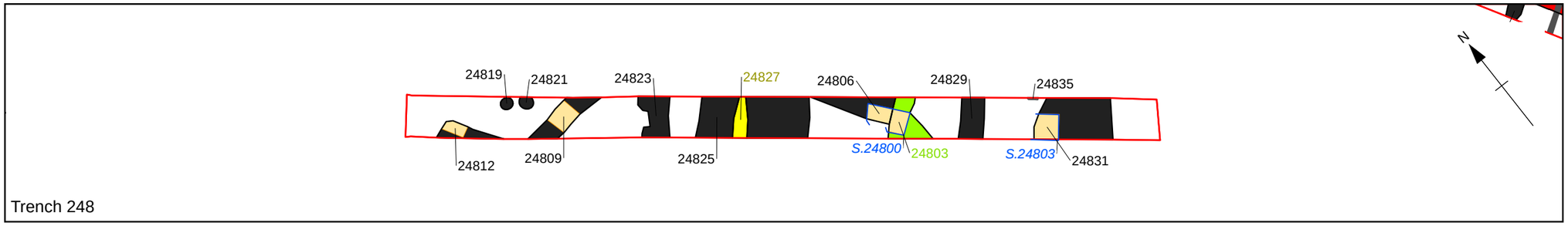
Evaluation trench
Archaeological intervention
Tree Throw hole
Natural
Modern
Disturbed mound?
Sections

Phasing

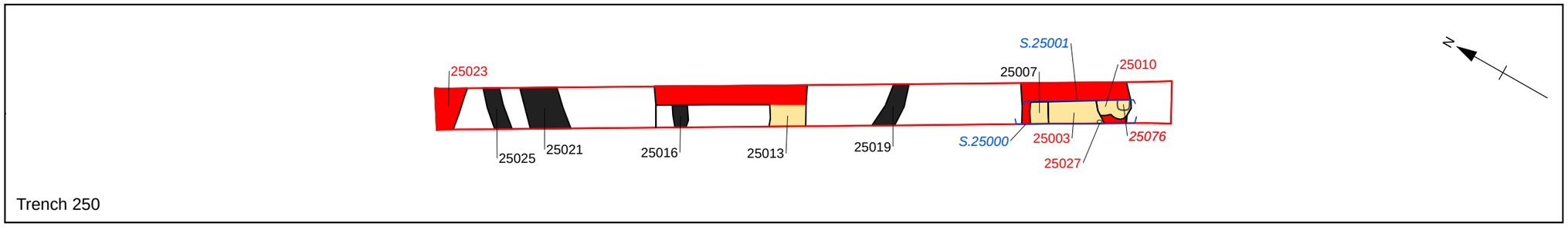
Neolithic
Early Bronze Age
Middle Bronze Age
Late Bronze Age
Late Bronze Age / Early Iron Age
Early / Middle Iron Age
Early Roman
Middle Roman
Late Roman
Early Medieval
Medieval
Post Medieval
Undated feature

Finds from mound and buried soils

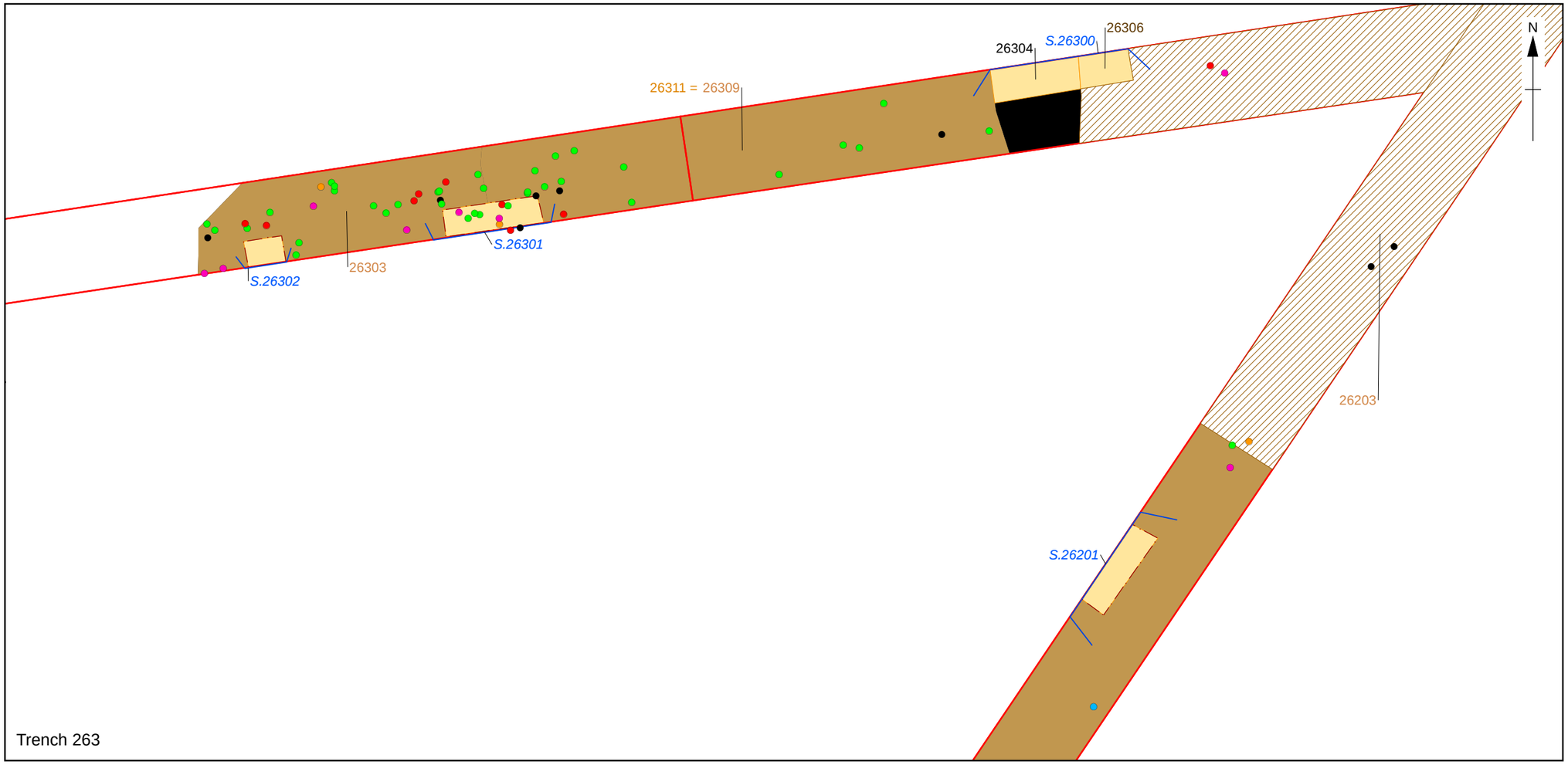
Flint - Unspecific
Flint - Blade
Flint - Cores
Flint - Flake
Flint - Tool
Pottery



Trench 248



Trench 250



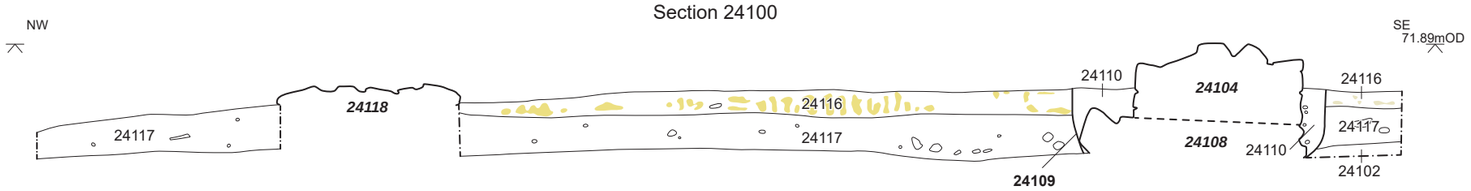
Trench 263

0 1:200 @ A3 4 m

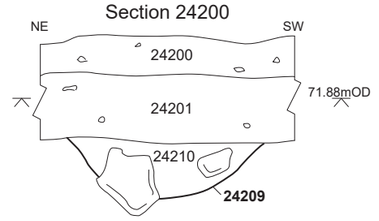
X:\o\Otterpool_Stanford_Kent\010Geomatics\03 GIS Projects\Reports\STOTEV_F5_DetailedTrenches3.mxd*gary.jones*05/11/2018

Figure 8: Detailed plans of trenches 248, 250 and finds from mound trench 263

Section 24100



Section 24200



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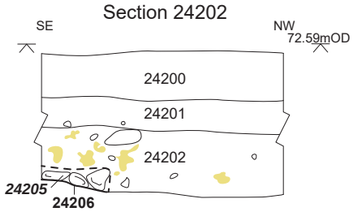

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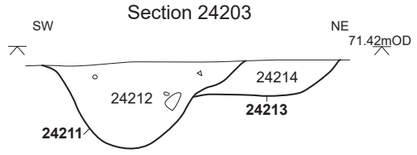

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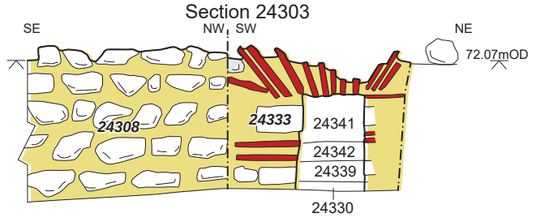

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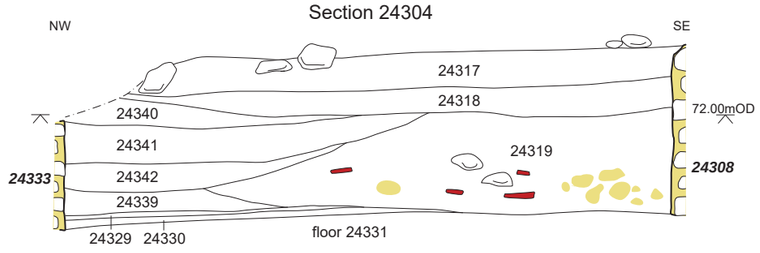
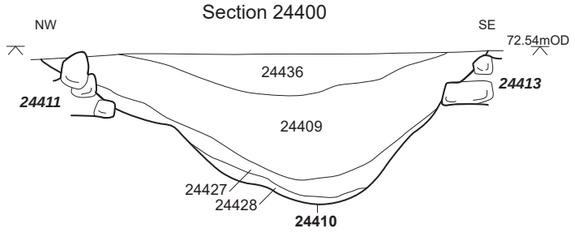
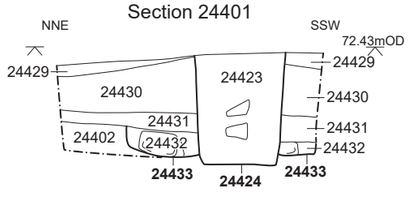


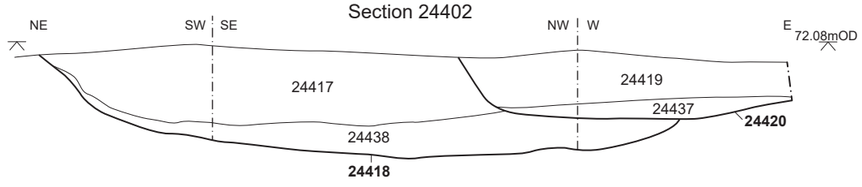
Section 24400



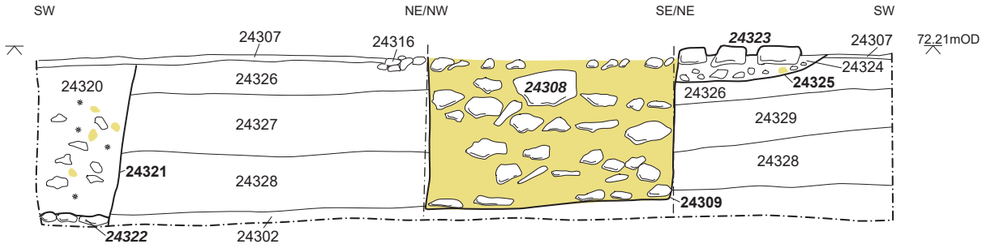
Section 24401



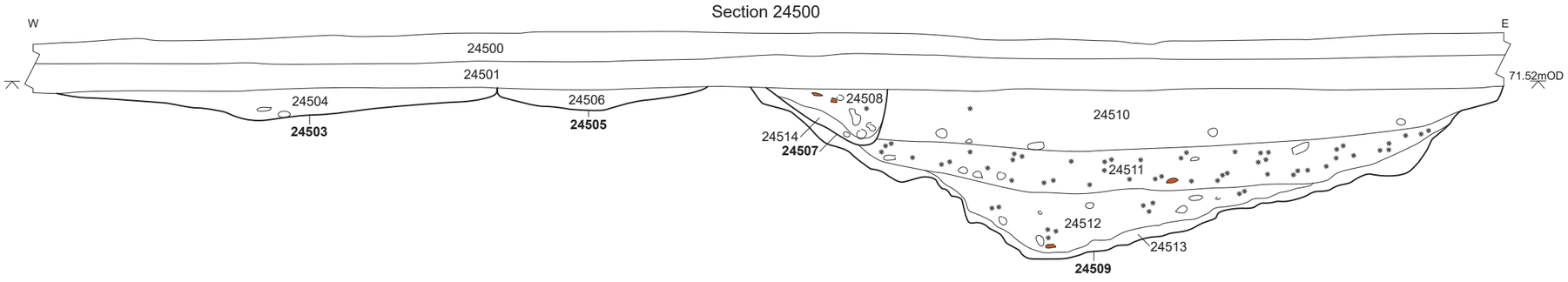
Section 24402



Section 24300



Section 24500

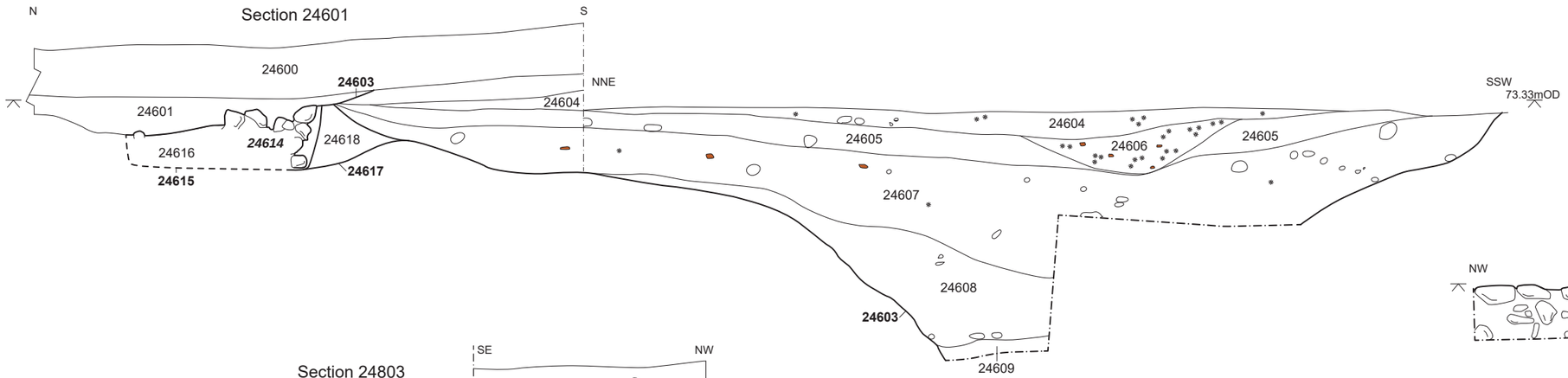


Charcoal
Stone
Pottery
Mortar
Tile

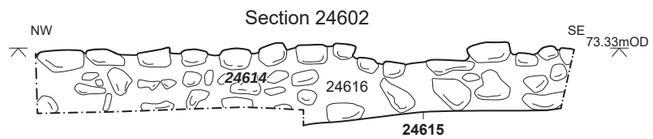
0 1m
1:25

Figure 9: Sections of features from Field 5, Trenches 241-246

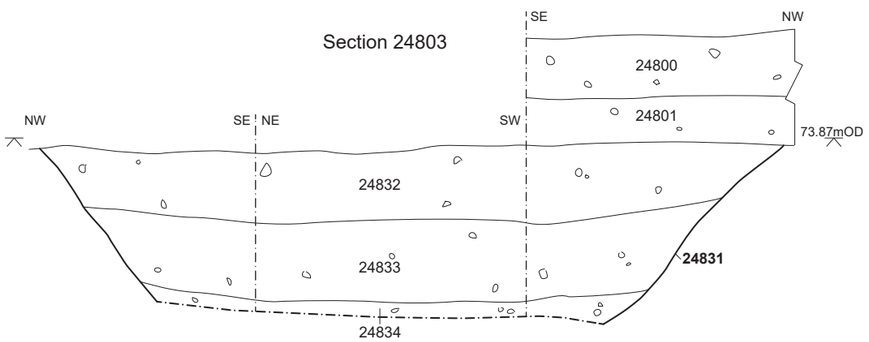
Section 24601



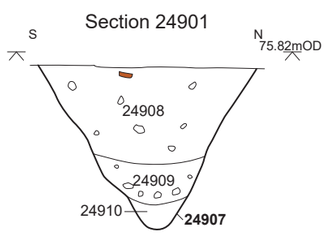
Section 24602



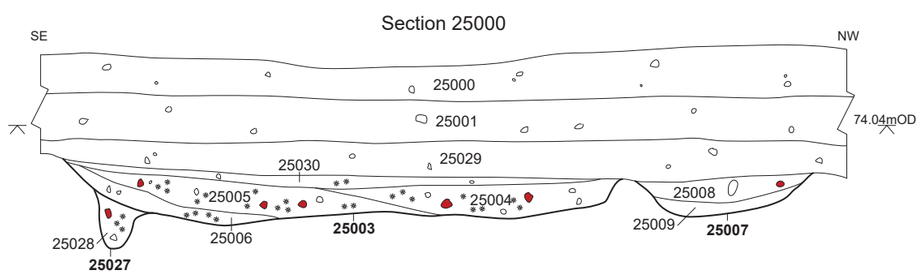
Section 24803



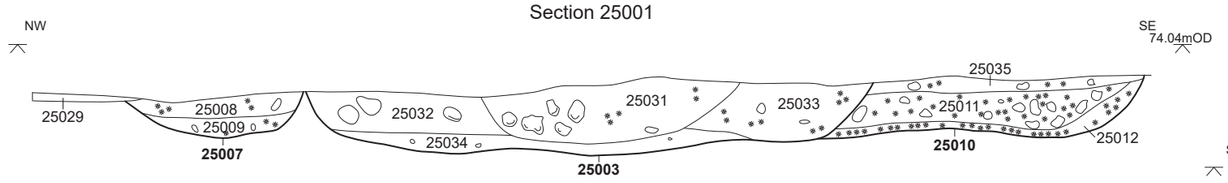
Section 24901



Section 25000

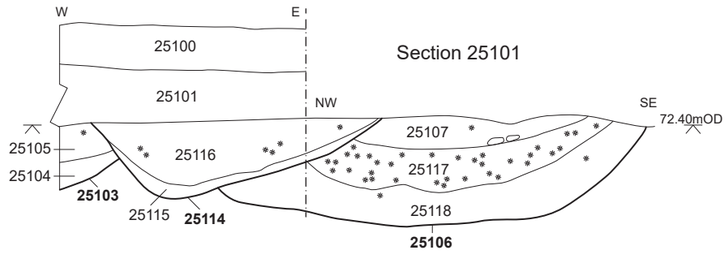


Section 25001

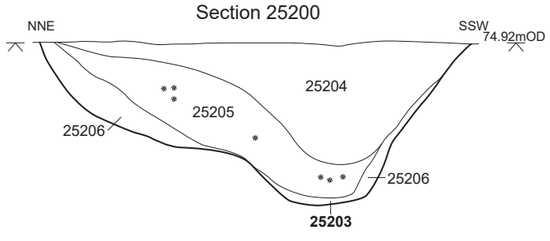


Section 25100

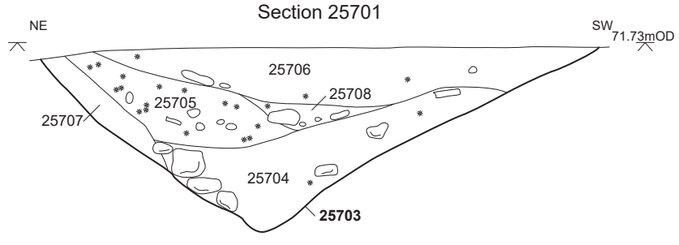
Section 25101



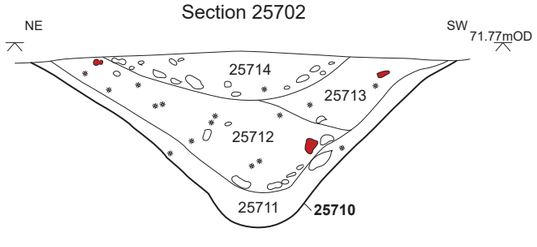
Section 25200



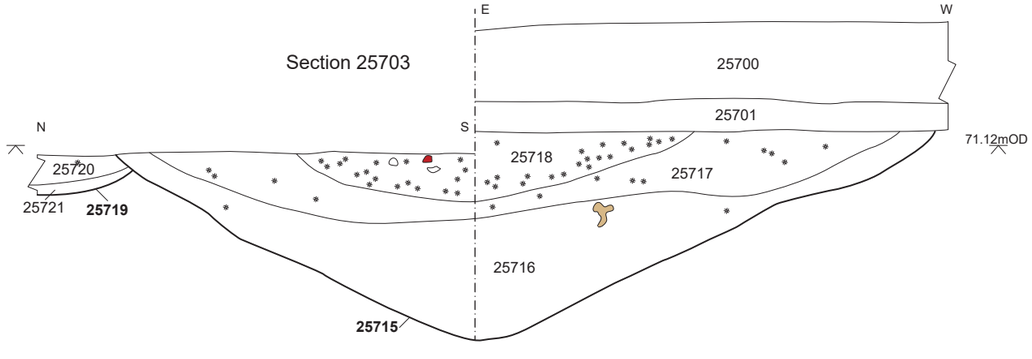
Section 25701



Section 25702



Section 25703

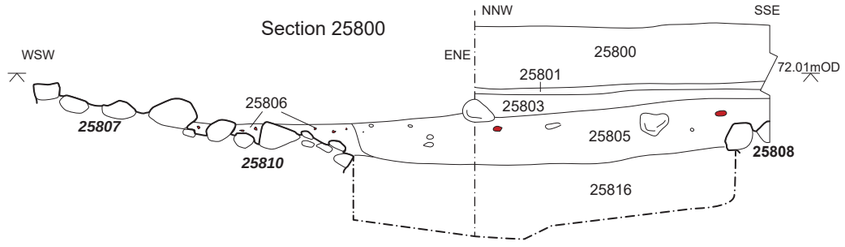


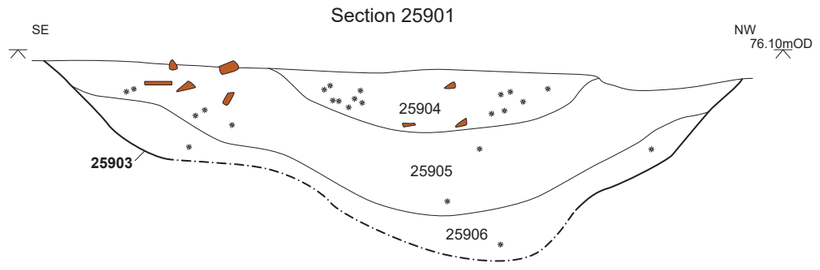
Charcoal
Stone
Pottery
Bone
Tile

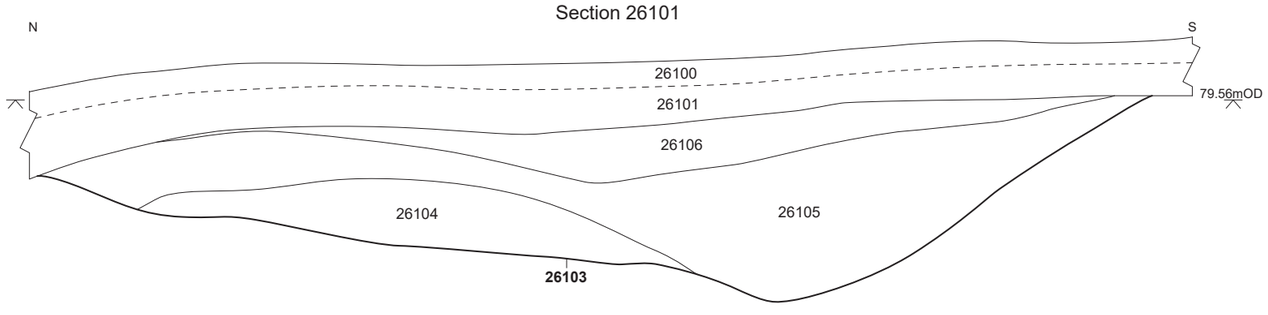
0 1m

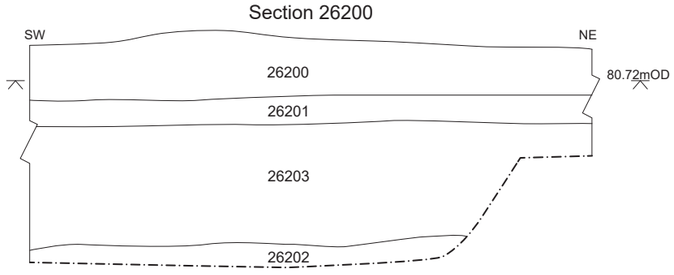
1:25

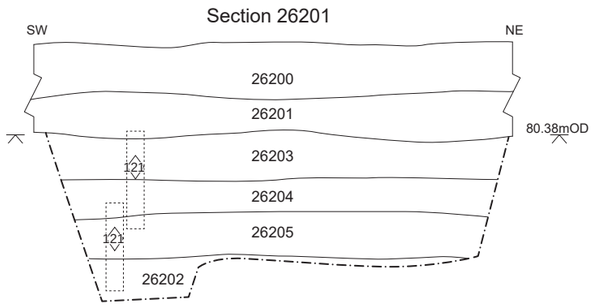
Figure 10: Sections of features from Field 5, Trenches 246-257

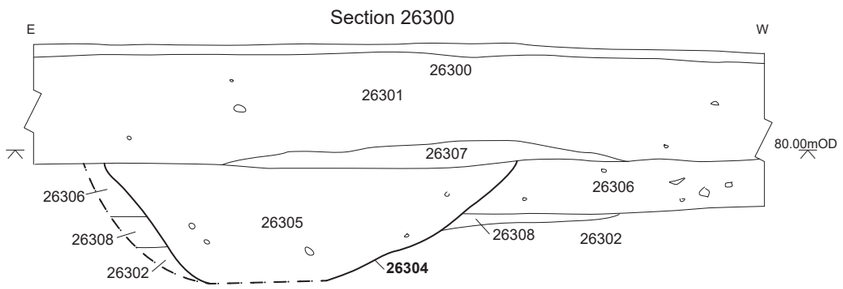


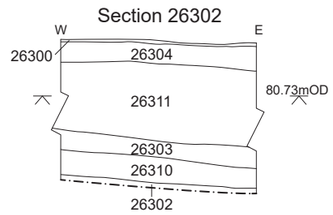












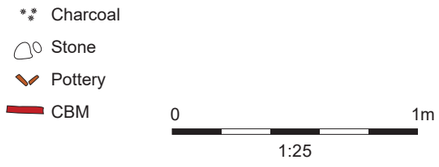


Figure 11: Sections of features from Field 5, Trenches 258-263

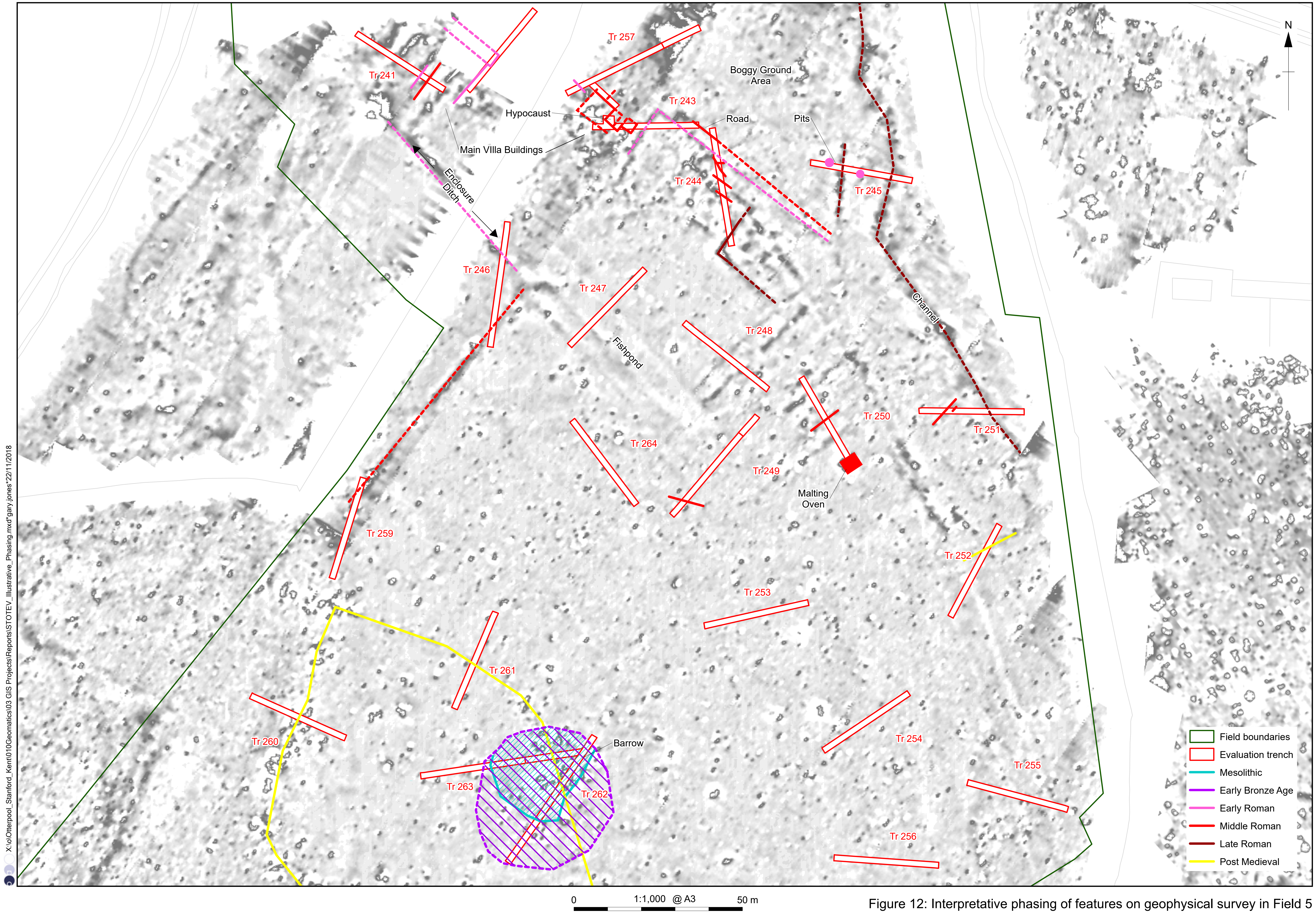

Tr 241
Tr 257
Boggy Ground Area
Hypocaust
Tr 243
Road
Pits
Main VIlla Buildings
Enclosure Ditch
Tr 244
Tr 245
Tr 246
Tr 247
Channel
Fishpond
Tr 248
Tr 250
Tr 251
Tr 264
Tr 249
Malting Oven
Tr 259
Tr 252
Tr 253
Tr 261
Tr 260
Barrow
Tr 254
Tr 255
Tr 263
Tr 262
Tr 256
N
Field boundaries
Evaluation trench
Mesolithic
Early Bronze Age
Early Roman
Middle Roman
Late Roman
Post Medieval
0
1:1,000 @ A3
50 m
X:\o\Otterpool_Stanford_Kent\010Geomatics\03 GIS Projects\Reports\STOTEV_Illustrative_Phasing.mxd*gary.jones*22/11/2018

Figure 12: Interpretative phasing of features on geophysical survey in Field 5

Plate 1: Trench 241, looking north-west

Plate 2: Wall 24106 looking south-east

Plate 3: Wall 24104 and cobbled surface 24105, looking south-east

Plate 4: Building 24219 with damage to south-east end in the foreground, and wall 24205 behind, looking south-west

Plate 5: Junction of wall 24205 (left) and wall 24219 (right), looking north-west

Plate 6: Wall 24219 in construction cut 24220, abutted by layer 24204, looking south-west

Plate 7: Trench 258, showing buttress 25818 in the foreground, with walls 25811, 25810 and 25808 in the centre, leading to 25807 on the far left, and wall 25813 at the end, looking north-west

Plate 8: Walls 24347 and 24348 in foreground, with 24305 behind, looking west

Plate 9: Hypocaust in Trench 243, looking north-west

Plate 10: Columns in layer 24317, with wall 24308 in the background, looking south

Plate 11: Sondage south of wall 24308, showing robber trench 24321, looking west

Plate 12: Walls 24404 and 24406, looking north

Plate 13: Wall 24404 with drain 24405, looking north-west

Plate 14: Wall 24411=24413 cut by ditch 24410, looking north-east

Plate 15: Ditch 24603 in front of wall 24614, looking south-west

Plate 16: Feature 24712, looking south-east

Plate 17: Pit 24704, looking north-west

Plate 18: Wall 24835, looking north-west

Plate 19: Oven-type structure 25036, cut by ditch 25003, also showing ditch 25007. Looking north-east

Plate 20: Detail of pilae stack in feature 25010, looking north-west

Plate 21: Ditch 25110 (after collapse), looking south-east

Plate 22: Barrow soil 26203 overlying soils 26204 and 26205, looking north-west

Plate 23: Barrow soil 26311=26309 overlying darker buried soil 26303, looking south

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