Excavation of a Middle Bronze Age, Iron Age and Romano-British settlement at Rugby Gateway, Rugby, Warwickshire

Worcestershire Archaeology
Archive and Archaeology Service
The Hive, Sawmill Walk,
The Butts, Worcester
WR1 3PB

Status:	Version 2 (Final)
Date:	6 February 2015
Author:	Jonathan Webster and Robin Jackson
Contributors:	Laura Griffin, Alan Clapham, Nicholas Daffern and Elizabeth Pearson
Illustrators:	Laura Templeton and Carolyn Hunt
Project reference:	P3844
Report reference:	2064

Contents

Summary 1

Report

1 Background 2
1.1 Reasons for the project 2
1.2 Planning background 2
2 Aims 2
3 Methods 3
3.1 General 3
3.2 Fieldwork strategy and scope 3
3.3 Fieldwork methods 5
3.4 Structural analysis 6
3.5 Radiocarbon dating, by Nicholas Daffern 7
3.6 Artefact methodology, by Laura Griffin 7
3.7 Environmental archaeology methodology, by Alan Clapham 8
4 The application site 8
4.1 Topography, geology and archaeological context 8
5 Structural analysis 10
5.1 Dating and site phasing 10
5.2 Period 1: Geology, drift and other natural deposits 11
5.3 Period 2: Earlier prehistoric activity 11
5.4 Period 3: Early/Middle Bronze Age activity 12
5.5 Period 4: Iron Age activity 13
5.6 Period 5: Romano-British 27
5.7 Medieval activity 30
5.8 Post-medieval and modern activity 30
6 Artefact analysis, by Laura Griffin 30
6.1 Pottery 30
6.2 Ceramic building material 38
6.3 Fired clay 40
6.4 Metalwork 40
6.5 Glass 40
6.6 Slag 40
6.7 Clay pipe 40
6.8 The querns, by Ruth Shaffrey 40
6.9 Flint, by Robin Jackson 41
7 Environmental analysis, by Alan Clapham and Elizabeth Pearson 42
7.1 The charred plant remains, by Alan Clapham 42
7.2 The wood charcoal, by Elizabeth Pearson 42
7.3 Animal remains, by Alan Clapham 43
7.4 Discussion, by Alan Clapham and Elizabeth Pearson 43
8 Discussion 44
8.1 The prehistoric settlement 44
8.2 The Romano-British settlement 50
8.3 Post-Roman to modern 52
9 Acknowledgements 52
10 Project personnel 52
11 Bibliography 52

Figures

1 Location of the site
2 Investigation areas
3 Areas 1 and 2
4 Excavations in progress showing ground conditions
5 Views across Area 1 during excavation
6 The regional context of the site
7 Summary of results
8 Settlement Zone 1
9 Roundhouse 9
10 Roundhouse 10
11 Roundhouse 13
12 Post Alignment 3
13 Two-post structure 3
14 Enclosure 1007
15 Settlement Zone 2
16 Roundhouse 1
17 Roundhouse 2
18 Roundhouse 3
19 Roundhouse 4
20 Roundhouse 26
21 Roundhouse 5
22 Roundhouse 6
23 Roundhouse 7
24 Roundhouse 8
25 Segmented ditch
26 Segmented ditch photographs
27 Four-post structures 1 and 2
28 Four-post structure 4
29 Two-post structures 1, 2 and 5
30 Settlement Zone 2: Pits
31 Pits 1 and 10
32 Post alignment 1
33 Enclosure 1
34 Enclosure 1 sections
35 Enclosure 1 photographs
36 Enclosure 1 photographs (continued)
37 Settlement Zone 3
38 Roundhouse 11
39 Roundhouse 12
40 Roundhouse 14
41 Four post structure 3
42 Two post structures 4 and 6
43 Pits 2 and 15
44 Settlement Zone 4
45 Roundhouse 15
46 Roundhouse 16
47 Roundhouse 17
48 Roundhouse 18
49 Roundhouse 19
50 Roundhouse 20

51 Settlement Zone 5
52 Roundhouse 21
53 Roundhouse 22
54 Roundhouse 23
55 Roundhouse 24
56 Roundhouse 25
57 Southern landscape boundary
58 Pits 4 and 5
59 Enclosure 2 and associated Roman features
60 Enclosure 2 sections
61 Enclosure 2 sections (continued)
62 Enclosure 2 timber building
63 Roman pits
64 Romano-British field system
65 Iron Age pottery (nos 1-10)
66 Iron Age pottery (nos 11-21)
67 Roman pottery

Tables

1 Radiocarbon dating
2 Quantification of the artefact assemblage
3 Quantification of the Bronze Age and Iron Age pottery by fabric
4 Quantification of the Roman pottery by fabric
5 Quantification of the Roman tile by fabric
6 Excavation Area 1. Summary of biological remains and artefacts recorded in assessed samples (by Period)
7 Excavation Area 2. Summary of biological remains and artefacts recorded in assessed samples
8 Charred plant remains from selected samples
9 Samples selected for full analysis of charcoal
10 Charcoal from selected samples
11 Quantification and notes on the handpicked bone and the bone recovered from the assessed samples

Excavation of a Middle Bronze Age, Iron Age and Romano-British settlement at Rugby Gateway, Rugby, Warwickshire

Jonathan Webster and Robin Jackson

With contributions by Alan Clapham, Nicholas Daffern and Laura Griffin

Summary

A programme of archaeological investigations was undertaken at Rugby Gateway, Warwickshire (NGR SP 5080 7840) on behalf of VHE Construction and subsequently Winvic Construction. This revealed extensive evidence of prehistoric and Romano-British occupation focussed on a slight plateau overlooking the Avon Valley.

The earliest significant activity was dated to the Middle Bronze Age (17th to 16th cal BC) and comprised three post-built roundhouses, a fence and scatter of other features. A small enclosure to the south-east appears to be of comparable date. The main period of occupation fell between the 8th century BC and the 2nd century AD, with a potential hiatus in settlement between the Iron Age and Roman periods. Iron Age occupation consisted of up to twenty-three roundhouses of Early through to Late Iron Age date. These were defined by ring-gullies and were associated with two- and four-post structures and pits as well as several boundary features and an enclosure. The paucity of stratigraphic relationships and lack of precision in radiocarbon dating at this period precluded detailed phasing; however, in conjunction with the ceramic evidence a broad model for the chronological development of the Iron Age occupation is advanced based around four defined settlement zones widely spaced across the site. The earliest Iron Age activity lay to the south where a scatter of five roundhouses could be dated to the Early to Middle Iron Age (8th to 5th centuries BC). A substantial east to west aligned landscape boundary was of broadly comparable date and along with the roundhouses defined the southern limits of occupation on the plateau. Further settlement zones were defined through concentrations of roundhouses both to the west and to the north-east areas of the plateau, whilst three dispersed roundhouses in the central part of the excavated area provided a fourth settlement zone. Although these occupation areas appear to have remained effectively unenclosed, the construction of the landscape boundary to the south and of a stock enclosure to the west reflected a gradual shift through time from an unenclosed landscape to an increasingly bounded landscape as typically characterises the transition from the Late Bronze Age through to the Middle/Late Iron Age periods in the Midlands. More broadly the Iron Age settlement at Rugby bears close comparison with a pattern of unenclosed but extensive Iron Age aggregated settlements identified across much of the East Midlands and into Warwickshire.

Roman activity was represented by a timber-framed building set within a trapezoidal enclosure. This enclosure was established on a different alignment to the earlier landscape divisions perhaps suggesting a hiatus in activity or a major phase of reworking of the landscape. Small ditch defined sub-divisions within the enclosure probably demarcated areas of domestic settlement, animal pens and horticultural plots. Domestic pottery and some ceramic roof tile indicated that this represented a small rural settlement of 1st to 2nd century date and of moderate status. The settlement appears to have been abandoned by the end of the 2nd century AD. Elements of a similarly aligned field system post-dated this enclosure and were probably of later Roman date since the medieval ridge and furrow which covered the entire area lay on a differing alignment.

Report

1 Background

1.1 Reasons for the project

A programme of archaeological fieldwork was undertaken at Rugby Gateway, Warwickshire by Worcestershire Archaeology (WA). The main stage of the project was completed on behalf of VHE Construction plc, a subsidiary of Renew, with a subsequent additional stage completed on behalf of Winvic Construction. This fieldwork comprised an element of a wider programme of archaeological investigation required by Rugby District Council within a phased development scheme which in its entirety covers approximately 126ha.

The work was undertaken according to two approved Written Schemes of Investigation (WA, 20 April 2012; WA, 17 October 2013) and focussed upon the northern part of the wider development area (centred on NGR: SP 5080 7840; Figure 1).

1.2 Planning background

The programme of archaeological works described in this report fulfilled certain conditions attaching to an outline planning permission granted for development of the overall site (Planning Reference R10/1272; Conditions 5, 36, 37 and 38); specifically covering:

- Archaeological Phase 5 (as covered by Condition 36), comprising further set-piece investigation of three defined areas of high archaeological potential (Figures 2 and 3: Areas 1-3), and
- Part of Archaeological Phase 4 (as covered by Condition 38a) comprising excavation of 22 Evaluation trenches (Figure 2: Evaluation Area) and, depending on results, further mitigation works as might be warranted.

Phase 4 is proposed for residential development and public open space and also includes a primary spine road, whilst Phase 5 forms part of an area proposed for employment use.

These works were completed to both inform and support the consideration and determination of the planning conditions attaching to this outline permission; however excluded the majority of the area west of, and some parts of areas to the east of, a spine road in Archaeological Phase 4 (as covered by Condition 38a), along with potential mitigation works for areas covered by Archaeological Phases 1, 2 and 4 (as covered by Conditions 38b and 37).

2 Aims

The original aims and objectives for the Phase 5 fieldwork were to further identify, investigate and record archaeological remains present in three defined and agreed areas of archaeological interest (WA 2012a).

More specific aims were identified in the WSI (WA 2012a) and these were revised in the light of the results of the completed fieldwork and assessment which have both realised and extended most of the originally identified research aims and notably include the identification of an unexpected phase of Roman occupation. These research aims drew on local regional research frameworks including the West Midlands Regional Research Framework (Watt 2011; http://www.iaa.bham.ac.uk/research/fieldwork_research_themes/projects/wmrrfa/index.htm) and the resource assessment and research agenda specifically developed for aggregate producing areas in Warwickshire (Alexander 2008).

For both the later prehistoric and Romano-British phases of occupation, it was hoped that the site would support understanding of regional identity as expressed through building traditions, rubbish disposal patterns, settlement and landscape layout and use and character of material culture. The artefact assemblages were particularly singled out for their potential for supporting the identification of cultural (tribal) affinities of the local population and in developing an understanding of the wider

economic status of the settlement as reflected in trade networks and patterns of exchange. The location of the site, lying close to the potential boundary between three Iron Age tribal groupings, the *Dobunni*, *Catuvellauni* and *Corieltauvi* was recognised as potentially important not only for the Iron Age period but also for their continued influence into the Roman period (Morton and Holbrook 2007; Esmonde Cleary 2011).

More specifically for the Iron Age, in conjunction with independent, scientific dating evidence, the pottery assemblage was recognised as having the potential to improve poorly understood chronologies for this period, whilst for the Romano-British period, the examination of a complete enclosure and elements of later field systems was recognised as providing a rare opportunity in the county for examining the pattern, organisation, relationship and chronological development of a settlement in the Early Roman period.

The results of the excavation were therefore identified as having a high potential to inform understanding of the pattern of later prehistoric and Romano-British rural settlement and economic activity at this site and thereby provide an important contribution to archaeological research in the region.

3 Methods

3.1 General

Three areas containing potentially significant archaeological deposits were defined by the Curator as requiring detailed investigation based on the results of an evaluation undertaken by Cotswold Archaeology (CA 2010, 2011; Archaeological Phase 5; Excavation Areas 1-3; Figures 2 and 3). Twenty-two 50m long trenches were also required to provide a 4% trenching sample for part of the Archaeological Phase 4 area which had not been covered by the previous evaluation (Figure 2).

The resultant project to undertake these works conformed to two Written Schemes of Investigation prepared by WA (WA 2012a; WA 2013). These were based on an earlier WSI prepared by Cotswold Archaeology with amendments as approved by Anna Stocks, Planning Archaeologist, Warwickshire County Council, the archaeological advisor to Rugby District Council (the Curator) who assisted by Caroline Rann also monitored the fieldwork.

WA is registered as an archaeological organisation with the Institute for Archaeologists, and as such is bound to the IfA's *Code of Conduct* and bylaws and follows IfA standards and guidance on good practice (IfA 2008a, 2008b; 2008c; 2008d; Brown 2007).

The project conformed to the government advice contained in *Planning Policy Statement 5* (PPS5: DCLG 2010) and *Planning for the Historic Environment: Historic Environment Planning Practice Guide* (DCLG/DCMS/EH 2010). The project followed standard WA procedures (WA 2007; 2012b).

3.2 Fieldwork strategy and scope

3.2.1 Excavation Areas 1 and 2

Excavation Areas 1 and 2 were located adjacent to each other towards the north-east side of the development area on a slight plateau from which the ground falls to the south and west; the plateau extending to the north and east beyond the excavation limits. Details on the results of the Phase 3 evaluation covering these areas are presented within a grey literature report (CA 2011) but are summarised here.

These two excavation areas were separated into a 'Core Zone' and a 'Peripheral Zone', both of which contained archaeological features of potential interest (Figure 3). The 'Core Zones' contained concentrations of datable features which provided indications of either domestic (occupation) or other centres of activity. Features present included pits and post/stakeholes interpreted respectively as indicative of disposal/extraction functions and timber structures (domestic or agricultural buildings, shelters, workshops, etc). No great density of features was

identified nor any complexity, with few stratigraphic relationships being present. The quantity, range and quality of artefactual material present was very limited (pottery, CBM, other ceramic, clay tobacco pipe, flint and animal bone; CA 2011: appendix B) and was indicative at most of low to moderate status occupation and activity. Bone preservation was poor except for recent material and no metalwork was recovered. No environmental samples or assessment had been completed by CA and consequently it was assumed that the environmental potential of the site was low. The 'Peripheral Zones' were characterised by more widely dispersed features including undated gullies and/or ditches indicative of remnants of field systems and small undated pit/posthole features of probably agricultural origin.

Fieldwork strategy initially focussed on the stripping, mapping and investigation of the 'Core Zones' allowing subsequent discussion with the Curator as to whether further stripping was warranted to cover all, or parts, of the 'Peripheral Zones'. Within the western 'Peripheral Zone' of Excavation Area 1, a single evaluation trench was also excavated at the outset and this was targeted on a concentration of geophysical anomalies potentially indicative of a pit cluster.

In Excavation Area 1, following stripping, mapping and investigation of the 'Core Zone' (54,265m²) it was determined that no stripping of the western 'Peripheral Zone' was required. This reflected the presence of a clearly defined western extent to activity defined within the 'Core Zone' and the absence of features in the trench placed to the west. To the east, a further area was stripped due to the presence of a largely unexpected concentration of Romano-British settlement towards the eastern side of the 'Core Zone' and the potential extension of activity of this date into the 'Peripheral Zone' (Figure 3). Although no further Romano-British occupation deposits were present, Roman field boundaries were identified and more significantly an unexpected additional focus of Iron Age settlement. A further extension was therefore completed in an attempt to define the eastern extent of this activity. Lastly in Excavation Area 1, it was also agreed following discussions with the Client that two additional areas extending to the north should be exposed to enable further investigation of the extent of prehistoric activity and attempt to define the northern limits of the settlement zones. In the first instance, towards the west end of Excavation Area 1, this extension northwards was to an extent successful in that an extensive area of disturbance was identified which is understood to be associated with the construction of the M6 and had been partially defined through the geophysical survey undertaken at evaluation. Whilst this does not support definition of the extent of former settlement in this part of the site, it does effectively establish the limits of surviving deposits. Further east, attempts to define the northern limit of activity were less successful. Here a 'blank area' identified north of several roundhouses might reflect a limit of this particular focus, but some doubt must remain as to the extent that activity might extend northwards across the site plateau especially through the central part of the site.

In Excavation Area 2, the central and southern parts of the 'Core Zone' proved largely absent of archaeological deposits and consequently no stripping of the 'Peripheral Zone' was required here; however, the evident continuation of prehistoric activity in the north-east corner of this area resulted in an extension into the 'Peripheral Zone' at this location (Figure 3). With the agreement of the Client a further small additional area (690m²) to the east beyond the previously identified areas was also included to ensure recovery of the full extent of a roundhouse and try to establish the limits of settlement activity in this part of the site.

In both Excavation Areas 1 and 2, a corridor of land occupied by a mature hedge and ditch and dividing the areas was left unexcavated during the 2012 programme of investigation since at the time the intention was leave this area undisturbed. Subsequently, revisions in the development resulted in a decision to remove this hedge and in 2013 a brief second programme of investigation was completed to record deposits within this corridor.

3.2.2 Excavation Area 3

This area was characterised during the 2011 evaluation by the presence of numerous shallow, sterile and undated features (possible pits, postholes and ditches/gullies; CA 2011). These features were all undated at evaluation despite the relatively large numbers investigated, whilst

neither the fieldwalking nor geophysical survey provided any evidence of areas of interest or coherent patterning of features.

As a result the character and dating of these deposits remained undetermined and to refine understanding of the archaeological potential and determine whether this area warranted extensive investigation, six concentrations of features identified at evaluation provided the focus for enhanced trenching samples in order that their research potential could be confirmed with greater confidence. No significant deposits were present and as a result, following discussions with the Curator, no further work was required in this area.

3.2.3 Phase 4: Evaluation

Evaluation trenching in this area comprised 22 newly excavated trenches, along with two which had previously been excavated by Cotswold Archaeology (Figure 2). These represent a 4% sample of that part of the Phase 4 area lying at the north end of, and adjacent to, the proposed development spine road. With the exception of Trench 22 which had to be reduced in length due to the presence of live services, all trenches were 50m long and 1.80m wide. No significant deposits were present and as a result no further work was required in this area.

3.3 Fieldwork methods

The bulk of the fieldwork was completed over a 16 week period during May to August 2012 and coincided with the wettest recorded months of May, June and July for over 100 years (Figure 4).

Topsoil and subsoil stripping of Excavation Areas 1 and 2 was undertaken by 360° tracked excavators employing toothless buckets. Spoil was removed to storage areas by dumpers working in succession. In Area 3 and the evaluation area stripping was undertaken by 360° tracked excavator with spoil side cast to immediately adjacent areas.

All machine excavation was undertaken under close supervision of an archaeologist and a total area amounting to just over 7ha was finally excavated; Excavation Area 1 comprising 54,265m², Excavation Area 2 *c.* 13,050m² and Excavation Area 3 *c.* 3,425m².

Plant was not permitted to track across any areas where archaeological deposits had been exposed or where deposits remained unexposed but were likely to be disturbed by movement of plant (for instance during wet weather). Plant movement was largely restricted to areas where topsoil stripping had not been undertaken or to areas where archaeological excavation had been fully completed to the satisfaction of the Curator.

Immediately following machining, all archaeological deposits and features immediately identifiable within the stripped areas were mapped using a Leica NetRover with a typical positional accuracy of sub 5mm. The resultant site plans were used to inform the excavation strategy within these zones, enabling sampling to focus on those areas of the site and specific features that could most contribute to meeting the defined research aims and objectives. The mapping also supported the determination of areas beyond the 'Core Zones' requiring stripping and investigation as described above.

All excavation following machining was undertaken by hand (Figure 5) with excavation and recording of deposits undertaken according to standard WA practice (WA 2012b), with the additional requirement of the Curator that black and white photographs were taken to support the digital photographic record. In summary:

- Clean surfaces were inspected and mapped as described above;
- Selected deposits were fully or partially excavated to determine their nature and retrieve artefactual material and environmental samples;
- Artefacts were, as far as practical, cleaned, marked and quantified at the WA's offices during the course of fieldwork;

- Provisional identification and spot dating was undertaken during the course of the fieldwork in order to inform on-site strategy and sampling procedures; and.
- WA's specialist staff in artefacts and environmental evidence co-ordinate the work of the Finds Assistant and environmental processing work and provided both on-site and office based advice throughout.

Excavation concentrated on recording a phased plan of the site, and recovering sealed artefactual and ecofactual assemblages which could be related to, and date, the structural sequence. Radiocarbon dating was also considered to be of potential value and appropriate samples taken wherever possible.

Sampling rates for specific features and areas of the site were determined on-site by the Field Officer in consultation with the Senior Project Manager, project specialists (both internal and external) and the Curator. The aim was to establish working practices which maximised data retrieval and the potential to fulfil defined (or revised) research aims rather than strictly adhering to pre-determined levels of sampling or approaches to excavation and recording; however, as a guide features were sampled excavated as follows:

- All structural features (e.g. postholes and hearths), burials, industrial structures (e.g. ovens and kilns) etc. were fully excavated;
- Other discrete features (e.g. pits) of late prehistoric or later date were excavated to a minimum of 50% based on the potential for the recovery of important material or ecofactual assemblages;
- Linear features (e.g. ditches and gullies) were excavated to a maximum of 10% or until a full understanding of the feature could be ascertained. All terminals were excavated and all intersections were sampled to establish relationships and a higher percentage of excavation occurred in areas of potential domestic activity.

The second period of fieldwork investigating the unexcavated hedge corridor dividing Excavation Areas 1 and 2 was completed over a two week period in November 2013. This area had been heavily disturbed by the roots of the hedge and the 'grubbing out' process required to remove them, as well as by a field ditch running along the southern side of the hedge. Surviving deposits were consequently limited in extent and largely restricted to more substantial features. Approaches to their investigation were broadly comparable to those employed during the main stage of excavation; the focus being on ensuring that the continuation of any features previously recorded to either side of the hedge corridor was mapped and that any new deposits revealed were investigated and recorded.

3.4 Structural analysis

Following completion of fieldwork all field records were checked and a stratigraphic matrix produced. Site surveys were checked and collated into a single drawing showing all features and deposits.

Key structural and depositional information was recorded on a project database (Microsoft Access 2000) which also integrated artefact and ecofact data.

An assessment report and updated project design was produced (Webster and Jackson 2013) and following approval a programme of analysis was undertaken through a combination of structural, artefactual and ecofactual evidence, allied to the information derived from other sources.

Detailed analysis was based upon examination of the site survey, information collated in the site database and the matrix, with further reference where required to the original site records. Dating and site phasing was based upon ceramic evidence supported by the limited stratigraphic relationships present and radiocarbon dating.

Context Groups were established where a series of associated contexts could be related, for instance the cuts or fills of a series of sections excavated across a roundhouse ring-gully or along an enclosure or boundary ditch. Apart from where they could be related to roundhouses, postholes were only grouped and assigned to structures where regular patterning and comparable characteristics allowed definition of post alignments (fences), four-post structures (interpreted as representing as raised granaries) or two-post structures (interpreted as representing racks). In the case of pits, no complex fill sequences were present and the original cut number was used as the group number.

The resultant Context Groups were incorporated into the database and annotated onto the matrix which was then analysed along with the site plans to provide a higher level of interpretive grouping, the Activity Unit thus enabling the pulling together of the different elements and phases of construction of a roundhouse or phases of establishment and reworking of an enclosure. The Activity Units and their descriptions (eg AU40: Enclosure 1) provide the primary references used in the structural narrative and within the specialist reports with original context numbers referred to where specific items or material groups of interest were present.

3.5 Radiocarbon dating, by Nicholas Daffern

Six samples were submitted to SUERC (Scottish Universities Environmental Research Centre) for Accelerator Mass Spectrometry (AMS) radiocarbon dating (Table 1). Three of these were charred residues sampled from within pottery selected by the Senior Finds Archaeologist. The remaining three samples were of either charcoal or charred plant remains from the contexts associated with the aforementioned pottery thus providing 'controls' for the charred residue samples.

No sources of contamination or non-contemporaneous carbon were evident during the fieldwork or during the subsequent sub-sampling. All calibrated dates are identifiable by the prefix ‘Cal’. Where calibrated date ranges are cited in the text, these are for 95% confidence.

3.6 Artefact methodology, by Laura Griffin

3.6.1 Recovery policy

The artefact recovery policy conformed to standard WA practice (WA 2012b; appendix 2).

3.6.2 Method of analysis

All hand-retrieved finds were examined. They were identified, quantified and dated to period (Table 2). A *terminus post quem* date was produced for each stratified context. The date was used for determining the broad date of phases defined for the site. All information was recorded on *pro forma* sheets.

Artefacts from environmental samples were examined, but none were worthy of comment, and so they not included below, nor included in the Table 2 quantification.

The pottery and ceramic building material was examined under x20 magnification and where possible, recorded, where appropriate by fabric type and form according to the fabric reference series maintained by WA (Hurst and Rees 1992 and www.worcestershireceramics.org), and, for more locally produced wares, a site type-series was created. For the Bronze Age and Iron Age assemblage fabric descriptions have been included within the text and where possible, cross-referenced with those used in published reports from the region.

3.6.3 Discard policy

The following categories/types of material will be discarded after a period of six months following the submission of this report, unless there is a specific request to retain them (and subject to the collection policy of the relevant depository):

- where unstratified

- post-medieval pottery, and;
- generally where material has been assessed as having no obvious grounds for retention.

See the environmental section for other discard where appropriate.

3.7 Environmental archaeology methodology, by Alan Clapham

3.7.1 Sampling policy

Samples were taken according to standard WA practice (2012b). One hundred and eighteen samples (each of between 10 and 70 litres) were taken from the site with twenty-four being selected for assessment. Assessment revealed environmental remains to be largely poorly preserved and only sparsely present thus further analysis was not warranted for charred cereal remains or animal bone; however, wood charcoal including some non-oak charcoal was more commonly present and better preserved. As a result, three contexts in which charcoal was relatively abundant were selected from Middle Bronze Age and Early to Middle Iron Age contexts for full analysis.

3.7.2 Processing and analysis

One bucket from each of the twenty-four samples selected for assessment was processed by flotation using a Siraf tank. The flots were collected on a 300μm sieve and the residue retained on a 1mm mesh. This allows for the recovery of items such as small animal bones, molluscs and seeds.

The resultant residues were scanned by eye and the abundance of each category of environmental remains and other artefactual material estimated. A magnet was also used to test for the presence of hammerscale. The flots were scanned using a low power MEIJI stereo light microscope and plant remains identified using modern reference collections maintained by Worcestershire Archaeology, and a seed identification manual (Cappers *et al* 2006). Nomenclature for the plant remains follows Stace (2010).

For the three samples selected for analysis, the cell structure of all the non-oak charcoal was examined in three planes under a high power microscope and identifications were carried out using reference text (Hather 2000) and wood reference slides housed at Worcestershire Archaeology. Nomenclature follows that of the new *Flora of the British Isles* (Stace 2010).

Animal bone was identified with the aid of modern bone reference collections housed at the Historic Environment and Archaeology Service and identification guides (Schmid 1972 and Hillson 1992).

3.7.3 Discard policy

All unprocessed samples will be discarded after a period of 6 months after the submission of this report, unless there is a specific request to retain them.

4 The application site

4.1 Topography, geology and archaeological context

The Rugby Gateway site is located on the northern edge of Rugby and is bounded by the M6 to the north, by the A426 to the east, by development to the south, and by a canal feeder to the Oxford Canal to the west.

The development site as a whole consisted of 14 fields at the time of investigation, the majority of which were under arable cultivation or rough pasture, although areas of woodland were present in several areas. At the time of the fieldwork the large northernmost field (as affected by the majority of Excavation Area 1 and part of Excavation Area 2) was under a wheat crop with the remaining investigated areas being under rough pasture.

The underlying solid geology of the area is mapped as Mudstone of the Pleistocene era overlain by Wolston Clay in the western half of the site and Oadby Till in the east (BGS 1994). The natural substrate identified during the evaluation comprised orange-yellow to brown sand-clays with gravel and flint pebble inclusions.

Excavation Areas 1 and 2 as stated previously were focussed upon the south-west part of a broad plateau from which the ground sloped away to the west and south. Excavation Area 3 lay on lower ground to the west and adjacent to a canal whilst the Evaluation Area occupied a land parcel rising to the sloping rising to the south and east from a shallow depression which separated it from Area 2. The wider topography of the area is one of gently rolling hills interspersed with broad shallow valleys which drain to the south and west into the River Avon which runs approximately 2.5km to the south of the excavated area (Figures 1 and 6).

Prior to the excavations described in this report, a staged programme of evaluation had been completed covering the entire development area. This comprised desk-based assessment (WSP 2009), fieldwalking (CA 2010) and geophysical survey (Pre-construct geophysics 2010). In addition the entire northern and southern parts of the site had also been subject to evaluation through trial trenching (CA 2011), although the central part of the site had not been subject to any trial trenching prior to this latest (2012) phase of fieldwork.

The desk-based assessment concluded that no Palaeolithic or Mesolithic remains were known within the site and its environs. Evidence of later activity within the site boundary was similarly absent; however, Neolithic or Bronze Age flints, as well as two fragments from Bronze Age palstave axes, have been recovered locally while archaeological investigations of a deserted medieval village at Coton, immediately to the east of the site, identified Bronze Age pits along with several Iron Age and Roman enclosures (Figure 1; Maull 2001). Further excavations at Coton Park, 1km to the south, identified extensive evidence of occupation dating from the Middle to Late Iron Age and extending into the Roman period (Figure 1; Chapman 1998; Northamptonshire Archaeology 1999; Maull 2001). Further Iron Age remains have been found to the west of the site at Cosford.

The site lies within a network of roads and villages that originated at least as early as the medieval period and as noted above a deserted medieval settlement was excavated at Coton (Maull 2001). Aerial photographs of the site show that it was once almost entirely covered by ridge and furrow earthworks. These are no longer extant within the arable fields but are still visible within the pasture surviving at the southern extent.

Modern remains in the immediate vicinity include a feeder to the Oxford Canal which forms the western site boundary and which was the original route of the canal until it was re-routed in the 19th century. During the Second World War, the fields within the southern part of the site are reputed to have been used as a Home Guard training area.

An archaeological fieldwalking survey was undertaken of the site in March 2010 (as part of the staged evaluation). This only recovered small quantities of prehistoric struck flint and Roman pottery and tile, suggesting that the development area lies away from any settlement or major activity focus from these periods. Within the central part of the development area (Figure 1: Phase 4), only five pieces of worked flint, five sherds of Roman pottery, a single Anglo-Saxon pottery sherd and five medieval pottery sherds dating to the 12th to 14th centuries were recovered during the fieldwalking. A single flint flake was recovered from fieldwalking of the northern part of the overall development area (from what was to become Excavation Area 1); however, otherwise no prehistoric, Roman or medieval material was recovered. Post-medieval and modern pottery, ceramic building material, clay tobacco pipe and vessel glass was found across the entire site in small quantities. No significant distribution was apparent for this material (CA 2010).

A fluxgate gradiometer survey, also undertaken in March 2010, concluded that the majority of the site appeared to be devoid of archaeological remains that are capable of responding to magnetic survey. However, the survey did identify a number of features of potential interest. These included a possible enclosure and pits within the northern third of the development area (including within the

eventual excavation areas) and potential palaeochannels, ditches, pits or sites of burning in the central part of the wider development site (Figure 1: Phase 5). The survey also recorded widespread traces of predominately ploughed out ridge and furrow, a number of former field boundaries and at least two backfilled ponds.

Subsequent to the fieldwalking and geophysical survey, evaluation trenching was undertaken by Cotswold Archaeology. Initially, in July and August 2010, at the southern extent of the site (Figure 1: Phases 1 and 2) seventy-six trenches were excavated, some of which were located on anomalies identified by the geophysical survey. The earliest features encountered consisted of a pit and a ditch of Romano-British date. Evidence of medieval and/or post-medieval agricultural practice, comprising the ploughed out remains of ridge and furrow field systems, was identified throughout the Phase 1 area whilst extant ridge and furrow survived throughout the Phase 2 area. Post-medieval or modern features identified included a ditch, probably relating to agricultural activity or land division and seemingly isolated pits that contained ceramic building material and mortar.

A second phase of evaluation (Archaeological Phase 3) was undertaken by Cotswold Archaeology between May and July 2011 and covered the northern portion of the development area (including that to be covered within Archaeological Phase 5 and the eventual Excavation Areas 1, 2 and 3). The earliest features encountered consisted of a gully and a concentration of postholes and pits, one containing Early to Middle Bronze Age pottery. These were located within the eastern part of this area. A concentration of pits, postholes and gullies dating to the Middle to Late Iron Age was also encountered within this part of the site. In addition the presence of the enclosure indicated through the geophysical survey was proven, material from the ditches defining this feature indicating abandonment in the Late Iron Age to Early Roman period. A late 2nd to 3rd-century AD posthole and gullies broadly datable to the Romano-British period were also recorded east of the enclosure. Numerous undated pits, gullies and postholes were also encountered within the site, with concentrations apparent within the eastern part of the Phase 3 area and along its western periphery.

Evidence of medieval and/or post-medieval agricultural practice, comprising the remains of largely ploughed-out ridge and furrow, was identified throughout the Phase 3 area. Post-medieval and modern features identified included former field boundary ditches, a pond, pits, field drains and an area of disturbed ground thought to relate to construction of the adjacent M6 motorway.

5 Structural analysis

5.1 Dating and site phasing

The excavation and earlier evaluation stages produced extensive evidence of multi-phase later prehistoric and Romano-British occupation of the site. Activity and deposits of medieval, post-medieval and modern date were also identified.

Dating of deposits has been based primarily artefactual evidence supported where possible by stratigraphic relationships and morphological analysis as well as for the Iron Age period by radiocarbon dating.

Numerous undated features were present and these have largely been assigned an Iron Age date on either typological grounds (four-post structures) and/or on the basis that this was the main period of site activity and it is considered that Roman dated features would most probably yield artefacts.

Contexts have been assigned to seven broad periods:

Period 1 Geology, drift and other natural deposits

Period 2 Earlier prehistoric

Period 3 Middle Bronze Age

Period 4 Iron Age

Period 5 Romano-British

Period 6 Medieval

Period 7 Post-medieval/modern

A plan showing all investigated features is presented in Figure 7.

5.1.1 Radiocarbon dating (by Nicholas Daffern and SUERC)

As described previously, six samples from later prehistoric deposits were submitted for radiocarbon dating with the aim of refining dating of pottery in use at the site and thereby supporting development of an understanding of site chronology.

Full results are contained in Table 1 and Appendix 1.

An Early/Middle Bronze Age date of 1664 cal BC – 1501 cal BC (SUERC-47323) secured on wood charcoal from the fill of a roundhouse posthole (Roundhouse 10: context 1451) was unexpected but the form and fabric of the associated pottery was not inconsistent with a Middle Bronze Age date and it was evident that this part of the site was characterised by a different tradition of roundhouse construction than other areas. It is therefore felt that the date is probably secure but unfortunately radiocarbon dating of a pot residue from the same context was unsuccessful due to insufficient carbon and therefore a degree of caution needs to be exercised with this date.

The radiocarbon dating of the pot residues and charcoal from other two dated contexts (Segmented Ditch AU38: context 1258; and Roundhouse 22: context 4209) supported the general Iron Age dating provided by the associated ceramic assemblages. More specifically though, the dating provided earlier dates (late Early – early Middle Iron Age) for some of the Scored wares within the assemblage than had been anticipated on the basis of comparison of fabrics and forms with those from sites such as Enderby and Wanlip (Clay 1992; Beamish 1998) which have been assigned Middle to Late Iron Age dates. It should therefore be considered that these ceramic traditions (Scored wares) have earlier origins and thus a longer span of use than has previously been understood. Detailed analysis of the ceramics and the stratigraphic sequence from the site supports this notion and this is further discussed below (Section 6).

5.2 Period 1: Geology, drift and other natural deposits

The geology and drift deposits encountered over the course of the archaeological investigations varied across the site but on the whole confirmed with the British Geological Society mapping. Areas 1 and 2 presented a combination of clays and gravels with bands and isolated 'pit' like patches of silts consistent with a formerly glacially active moraine landscape. Area 3 by contrast consisted of silt rich clays that formed the river basin of the former stream channel before it was canalised.

Excavation of a representative sample of the 'pit' like features revealed that these contained distinct, well-sorted fine silty fills which were entirely devoid of finds. These probably result from rapid infilling by windblown (loessic) sediments of early Holocene date, and are grouped along with other features resulting from glacial and immediately post-glacial period activity such as ice wedges and glacial meltwater channels. This last feature type is known to form parallel to the ice flow in the initial stage of glacial melt spillway as part of an unstable anastomising river channel development (Benn and Evans 1998, 318-9, 345).

5.3 Period 2: Earlier prehistoric activity

A number of earlier prehistoric flints were recovered through fieldwalking and as residual finds in later dated deposits; however, no stratified remains of earlier prehistoric date were identified.

Earlier prehistoric flint finds were recovered in very small quantities and were widely dispersed across the investigated area with no discernible or surviving focus of domestic occupation or other

activity. It would therefore appear most likely that that these finds represent stray losses made by the essentially mobile populations of this period who were at least sporadically present in this area.

5.4 Period 3: Early/Middle Bronze Age activity

The earliest occupation evidenced at the site comprised a small settlement dated by ceramics and radiocarbon dating to the Early/Middle Bronze Age (16th-17th century BC). This settlement consisted of three roundhouses and a scatter of other features associated with a fence. Some distance to the south-west was a small sub-rectangular enclosure which pottery indicates was of comparable date.

5.4.1 Settlement Zone 1

An Early to Middle Bronze Age settlement (Figure 8) was located in the centre of the plateau on the northern limits of the excavation, where three roundhouses (Roundhouses 9, 10 and 13) were identified which were post-built. These contrasted with roundhouses in later, Iron Age settlement zones (Settlement Zones 2-5) in that the Bronze Age roundhouses were post-defined and had no eavesdrip gullies. The settlement was defined to the south-east by a distinct curvilinear post alignment (AU28; Post Alignment 2). No evidence survived to define the western limits of this settlement, although very few features were present between this and a focus of Iron Age settlement to the west (Settlement Zone 2). To the north, both heavy truncation and the limits of excavation precluded definition of the extents of the settlement. A two-post 'rack' structure (AU34) and a scatter of unassigned postholes were also present in this zone and are considered contemporary with the roundhouses and fence. Few artefacts were recovered but dating of the only diagnostic sherd recovered was consistent with the Early/Middle Bronze Age date (mid 17th to 16th century cal BC) provided by AMS dating of an associated charred cereal grain.

5.4.1.1 Roundhouse 9 (AU9: CG 1879; Figure 9)

Roundhouse 9 survived as an arc of 5 postholes defining a building of at least *c*. 5.75m in diameter. No internal surfaces, features or artefactual material were recovered and an entrance could not be established, probably reflecting truncation of the south-eastern part of the structure.

5.4.1.2 Roundhouse 10 (AU10: CG 1881; Figure 10)

Located to the south-east of Roundhouse 9, Roundhouse 10 was constructed in a similar fashion and is represented by an arc of postholes, which when postulated through a later furrow provides a structure of at least *c*. 6.50m in diameter. No entrance was identified, probably reflecting truncation of the eastern half of the structure. A large pit (1658) lay on the projected south-east perimeter of the roundhouse and displayed clear evidence of *in-situ* burning. Charcoal and carbonised residue from a single sherd of pottery recovered from the fill of one of the postholes (context 1451) were submitted for radiocarbon (AMS) dating; the former providing a date of 1664 cal BC – 1501 cal BC (SUERC-47323) but the latter unfortunately providing too little carbon to secure a date.

5.4.1.3 Roundhouse 13 (AU13: CG 1898; Figure 11)

A third post-built roundhouse can be tentatively identified within this settlement from several postholes that can be projected to form a structure with a diameter of at least *c*. 9.00m. The eastern half of the structure had been severely truncated by a furrow so that only the base of the postholes (*c.* 2mm in thickness) survived whilst those on the western half survived to a depth of as much as *c*. 0.15m. No entrance was identified. Packing stones were noted in a couple of the postholes. No dating material was recovered and no internal surfaces or associated features found.

5.4.1.4 Post Alignment 2 (AU28: CG 1431; Figure 12)

Post Alignment 2 comprised at least 20 posts with more having evidently been truncated by the later ridge and furrow. These transcribed a gentle, concave arc for approximately 32.00m and

demarcated the area occupied by the Bronze Age post-built roundhouses lying to the north and west (Roundhouses 9, 10 and 13). The individual posts averaged *c*. 0.40m in diameter by *c*. 0.20m in depth and these were spaced equally with *c*. 0.80m between posts. No dating material was recovered.

5.4.1.5 Two-post Structure 3 (AU34; CG 1896; Figure 13)

Located to south of Roundhouse 9, this structure comprised two postholes which were 0.14m deep and 0.31m and 0.37m across respectively with a slight elongation to the east sides indicative of the posts having been rocked to facilitate removal. No postpipe or packing was noted but a moderate quantity of charcoal was recovered from both. Although no dateable artefacts or evidently associated features were recorded, the comparable size and regular appearance of the postholes was indicative of a formal structure. The structure lay to the immediate west of a later furrow which may have removed associated features.

5.4.2 Enclosure 1007 (AU42)

Located in the south-west corner of Area 1, two well-defined ditches defined the southern and western sides of what is believed to have been a small sub-rectangular enclosure (Figure 14). A much truncated ditch within one of the evaluation trenches (Cotswold Archaeology trench 46) is understood to represent the north side of the enclosure whilst the eastern side had been entirely truncated by a later (Iron Age) enclosure ditch.

The enclosure measured 15.00m x 14.00m in plan with the ditch measuring 2.10m wide and 0.80m deep at maximum. The two principal sections excavated across this feature indicated a recut on the southern side and sequences of fills indicative of weathering (silting and slumping) rather than deliberate infilling. Tip lines within the fills on the west side hinted at the presence of an external bank. No entrance was identified but one could potentially have been located on the entirely truncated east side. Dating for the feature suggested that it was probably of Bronze Age date with fragments recovered from a single vessel with thumb impression decorations on the rim. The function of this small enclosure remains uncertain but, in the absence of internal features and given the apparently unenclosed nature of the landscape at this time, this may have been a stock corral.

5.5 Period 4: Iron Age activity

Iron Age activity was widespread, commencing during the Early Iron Age and probably extending throughout much of this period. A paucity of stratigraphic relationships allied to the lack of precision in radiocarbon dating at this period precluded detailed phasing; however, in conjunction with ceramic evidence it has proved possible to develop a broad model for the chronological development of Iron Age occupation based around four settlement zones.

Identification of the settlement zones was based upon the pattern of distribution of twenty-three roundhouses which occurred both in small clusters and in isolation spread widely across the plateau the site occupied. These houses were defined by the ring-gullies (eavesdrips) that had surrounded them but, with the exception of a few postholes and pits, very few internal features were present and no hearths or floors had survived. Whilst the absence of the latter can be attributed to the effects of extensive truncation by later cultivation, the very limited numbers of postholes located within the ring-gullies is considered more likely to reflect the use of mass (cob or turf) wall construction techniques.

The roundhouses were associated with a range of other features including a substantial rectilinear enclosure, pits, post alignments (fences), a number of four-post 'granary' and two-post 'rack' structures, a deeply cut segmented penannular ditch and several short lengths of ditch which probably represented boundaries within the settlements. Based upon fill characteristics and the broader nature of activity at the site, it is assumed that the majority of the unassigned and/or undated postholes, pits and short lengths of gully present were also associated with this Iron Age activity.

The earliest Iron Age occupation area (Settlement Zone 5) lay to the south where radiocarbon dating and ceramic evidence suggested that a scatter of five unenclosed roundhouses were occupied during the late Early Iron Age and early Middle Iron Age (8th to 5th century BC). A substantial east to west aligned landscape boundary was of broadly comparable date. South of this, only a pair of intercutting pits was present and thus it is evident that this landscape boundary along with the roundhouses defined the southern limits of occupation of the plateau.

To the west, a group of nine roundhouses running in a broad north-south row along the edge of the plateau defined a second settlement zone (Settlement Zone 2). Two phases of settlement seem to be present, one of late Early to early Middle Iron Age date and another of Middle to Late Iron Age date. Several roundhouses were poorly dated and could potentially belong to either phase. Here, a Middle Iron Age rectilinear enclosure was identified with an internal sub-division and east and west facing entrances. This truncated several of the earlier roundhouses which were evidently unenclosed, however, despite the fact that a number of roundhouses were located within the enclosure, this is liable to be co-incidental and the enclosure is thought more likely to have had an agricultural function, perhaps representing a large stock compound. The establishment of the enclosure therefore probably occurred prior to the latest phase of roundhouse construction in this area, although the possibility remains that some roundhouses were deliberately located within the enclosed area. The only feature present to the west of the roundhouses and enclosure was an isolated pit and it is evident that the break in slope at the edge of the plateau formed the limit of the occupation in this direction.

Other areas of settlement could only be broadly dated to the Middle to Late Iron Age and these included three dispersed and unenclosed roundhouses in the central to north part of the occupied area (Settlement Zone 3) and a cluster of six unenclosed roundhouses to the north-east (Settlement Zone 4). Neither the eastern or northern extents of Iron Age activity were firmly established within the excavation limits; the area to the north having been especially heavily truncated by cultivation and works associated with construction of the motorway, whilst identification of the eastern extent was limited by the current site boundary and the A426. It is however noted that Iron Age enclosures have been recorded to the immediate east of the A426 along with a major concentration of approximately 32 roundhouses and an associated landscape boundary at Coton Park approximately 1km to the south.

5.5.1 Settlement Zone 2

Nine roundhouses (Roundhouses 1-8 and 26) ran in an irregular north to south row across the western shoulder of the plateau that the Iron Age occupation was focussed upon. Along with a number of other structures and pits in this part of the site, these represented the most intensive area of activity at the site and yielded the greatest quantities of pottery, providing evidence for a long-lived settlement (Settlement Zone 2; Figure 15). The location of this row of roundhouses also broadly coincided with the western side of an Iron Age rectilinear enclosure (Enclosure 1), although the row extended both to the north and south of the enclosure.

Stratigraphic relationships and ceramic forms indicated that at least three of the roundhouses (Roundhouses 4, 5 and 6) and a segmented, sub-circular ditch (AU38) pre-dated Enclosure 1, with the segmented ditch truncating one of the roundhouses (Roundhouse 4) and being truncated by another (Roundhouse 5), which in turn truncated the third of the roundhouses (Roundhouse 6). Radiocarbon dating from the segmented ditch indicated occupation of this settlement zone was probably focussed sometime during the late Early/early Middle Iron Age (late 6th to early 3rd century cal BC). Ceramic assemblages associated with these roundhouses and the segmented ditch supported dating for this phase of occupation and included early examples of Scored Wares. These features pre-dated Enclosure 1 which ceramic evidence indicated was firmly of a Middle Iron Age date (early/mid 5th to late 2nd century BC). Of the remaining roundhouses, Roundhouse 7 was of Middle to Late Iron Age date and thus potentially later in date than the enclosure while Roundhouse 3 was partially truncated by the internal division within the enclosure and therefore post-date the enclosure. The remaining three roundhouses in this settlement zone (Roundhouses

1, 2 and 26) can be considered of Iron Age date but could only be broadly dated to this period. It was therefore not evident what the relationship between the enclosure and some of the roundhouses was. Despite Roundhouses 2, 3 and 26 being located entirely within the enclosed area, this may be coincidental and given the relative paucity of material culture within the enclosure ditch it is thought more likely to have had a primarily agricultural function, perhaps representing a stock compound. Construction, use and abandonment of this enclosure may therefore have occurred during a hiatus in occupation in this part of the wider Iron Age settlement.

As well as the roundhouses, three four-post structures (AU29, AU30 and AU32) and three two-post structures (AU33, 34 and 36) were located in this settlement zone. These are understood to be broadly contemporary with the roundhouses, along with further indeterminate post-built structures, a number of pits (Pits 1, 3, 9, 10, 11, 13, 14 and 26) and several short lengths of ditch which may have acted as boundaries within this part of the settlement. Undated features recorded in the area are considered most likely to represent fragmentary survival of activity associated with this Iron Age occupation.

Apart from the natural break in slope that these roundhouses and other settlement features followed, there was no evidence for a formal boundary that they respected; however, besides an isolated pit (AU43) some distance to the west and down the hillslope, this line of roundhouses effectively demarcated the western limits of the occupied plateau. A broad swathe of the site characterised by very little evidence for Iron Age activity separated this settlement zone from those to the east, with a post alignment (AU27; Post Alignment 1) and Pit 12 (AU54) being the only features of note between Settlement Zone 2 and Settlement Zone 3.

5.5.1.1 Roundhouse 1 (AU1: CG 1165/1166, 1162 and 1164; Figure 16)

Roundhouse 1 was the southernmost in the row that defined this settlement zone. It comprised a heavily truncated ring-gully *c*. 12.00m in diameter with two adjacent breaks in the north-east part of the circuit. These were separated by a small section of ditch *c*. 1.40m in length that had two parallel postholes along the exterior edge. The surviving elements of the ring-gully suggested that the entrance had probably been sited on the east side of the roundhouse, with fills indicating a single phase of construction and a relatively short period of use; no later adaptations or cleaning phases were indicated. No artefacts were recovered. No associated features were present but this may be in part due to the substantial truncation caused by later ploughing.

5.5.1.2 Roundhouse 2 (AU2: CG 1099; Figure 17)

Roundhouse 2 was located approximately 16m north-west of Roundhouse 1. Due to severe truncation by later ridge and furrow only a short length of the north-east quadrant of the pennanular ring-gully remained indicating a diameter of *c*. 9.00m. A terminus on the gully indicates the likely location of an east facing entrance. No artefacts or other features were present and as with Roundhouse 1 it is believed that this building was a single phase structure with no evidence of later cleaning or reworking identified.

5.5.1.3 Roundhouse 3 (AU3: CG 1050/1051, 1052/1053, 1114 and 1124; Figure 18)

Roundhouse 3 was situated in the central section of the row of roundhouses. It was represented by the very truncated remains of a ring-gully measuring *c*. 11.40m in diameter. Two small postholes were also present (1114 and 1124). A stone-packed terminal on the east side of the ring-gully (1096) indicates the likely location of an entrance. A small quantity of pottery was recovered (12 sherds), all of which derived from this entrance terminal (fill 1095).

It is clear from the stratigraphic evidence that this roundhouse had two phases of activity with an earlier ring-gully (1047 and 1070) measuring at least 0.24m in width by 0.14m in depth. This only survived on the north-west side of the building having apparently been entirely truncated by a re-cut (1049 and 1072) around the remainder of the circuit where this survived. A pit or post (1103)

was cut by the ring-gully terminal on the south side of the roundhouse and may reflect the presence of an earlier structural feature (possibly a porch).

An east to west gully (AU77: context 1045) running immediately north of the roundhouse was truncated by the ring-gully. This has been suggested as an internal division within Enclosure 2 and if this interpretation is correct then Roundhouse 3 post-dates the enclosure.

To the immediate south of the roundhouse, a further gully ran north-east to south-west for a length of *c*. 25.80m and this probably acted to drain water away from the building.

5.5.1.4 Roundhouse 4 (AU4: CG 1207, 1218/1219, 1203 and 1213; Figure 19)

Roundhouse 4 comprised a ring-gully approximately *c*. 9.00m in diameter and, although heavily truncated by ridge and furrow and Enclosure 1, it is believed that an entrance was located on the south-east side of the structure. In one of the sections across the ring-gully (Figure 19: Section 76) the much truncated remains of an earlier feature (1207) indicated that the ring-gully had been cleaned out or recut on at least one occasion. Pottery (39 sherds) was recovered from the ring-gully but no evident focus of deposition was identified.

A substantial pit (Pit 26) had been truncated by the southern segment of the ring-gully. Two internal postholes (1203 and 1213) were also located towards the southern side of this structure; both contained clear evidence of postpipes and stone packing, and although no dating evidence was recovered it is likely that these features formed part of a ring of supporting posts for the roundhouse roof.

A small gully (1031) ran to the south-east of the roundhouse and may have acted to drain water away from the entrance to the building.

5.5.1.5 Roundhouse 26 (AU26: CG 1891/1892; Figure 20)

Located to the immediate south-east of Roundhouse 4, Roundhouse 26 comprised a poorly preserved ring-gully truncated by later furrows and one of the evaluation trenches. There was an indication of an entrance in the south-east corner which was at least *c*. 0.50m in width; although the surviving width was affected by truncation. The overall projected size of the ring-gully was *c*. 7.50m in diameter. No artefacts were recovered. No internal features or datable evidence were recovered.

5.5.1.6 Roundhouse 5 (AU5: CG 1271 and CG 1254/1255; Figure 21)

Roundhouse 5 comprised the heavily truncated remains of four sections of ring-gully, the entrance to which is thought to have been located on the east side; the other breaks in the ring-gully appearing too small to have been further entrances. The gully measured a projected *c*. 11.50m in diameter and contained pottery (34 sherds). Truncating Roundhouse 6 to the immediate north, it is thought that Roundhouse 5 represents a later phase of that building; the site of the roundhouse having shifted to the south. No internal features were present. Of note was the recovery of heat cracked stone, animal bone and Iron Age pottery from the north-east corner of the structure (from 1270), it was clear that while the stone had not been heated *in-situ*, cooking or some other similar activity had occurred in the immediate vicinity.

5.5.1.7 Roundhouse 6 (AU6: CG 1179/1180; Figure 22)

Roundhouse 6 lay to the immediate north of Roundhouse 5 and was truncated by that as well as by the north-west corner of Enclosure 1 and by two furrows. It comprised a ring-gully *c*. 12.30m in diameter. An east facing entrance was indicated by a surviving gully terminal (1093/4). A relatively substantial assemblage of pottery (160 sherds) was recovered, of which nearly half (72 sherds) derived from the entrance terminal and this included large chunks from several vessels.

To the immediate east of the enclosure entrance was a small posthole (1324), 0.20m in diameter with steep vertical sides that dropped onto a flat base 0.11m in depth. It is thought that this

posthole may have formed part of the south side of an entrance porch structure; the potential location of a post to the north having been removed by the later enclosure ditch.

5.5.1.8 Roundhouse 7 (AU7: CG 1344/1345; Figure 23)

Roundhouse 7 was located at the northern limit of the area of investigation on the edge of the hillcrest. Due to this position on the ridge it had been heavily truncated by ploughing and only the southern extent survived where the topsoil/subsoil were a little deeper. The surviving ring-gully section indicates a diameter of *c*. 11.00m in diameter with the surviving gully terminus indicating at least one entrance on the south-east side. Both pottery (50 sherds) and animal bone were present.

5.5.1.9 Roundhouse 8 (AU8; Figure 24)

Located to the immediate west of Roundhouse 7, Roundhouse 8 was only recorded in plan. It had been heavily truncated and only the south-eastern quadrant was observed, much of the projected structure lying beyond the northern limit of excavation. The ring-gully diameter can be estimated at *c*. 11.00m. No evidence was present for an entrance within the observed segment. No artefacts were recovered.

5.5.1.10 Segmented Ditch (AU38; CG 1215; 1249; 1308; 1258/1259; 1260/1261 and 1284/1285; Figures 25 and 26)

A curvilinear segmented ditch enclosing an area *c*. 12.80m in diameter was identified in the row of roundhouses within Settlement Zone 2. This comprised four lengths of ditch, the north-east section being the longest at *c*. 6.00m. The width of the ditches was on average *c*. 0.70m and the sides dropped steeply, almost vertically onto rather flat bottomed bases. The fills of the ditch segments were distinct, dark, silt rich clays and these included a moderate quantity of charcoal flecking and pottery (42 sherds) suggesting that they had been backfilled with a quantity of domestic waste after they had gone out of use.

The segmented ditch was truncated by Roundhouse 4 to the south and Enclosure 1 to the west but truncated Roundhouse 5 to the north. No internal floor surfaces or associated structures or deposits were noted as being associated with this structure and it is uncertain what function it fulfilled. Radiocarbon samples were submitted from one of the fills (1258) and provided dates of 391 – 209 cal BC (SUERC-47321; GU30913) and 519-385 cal BC (SUERC-47322; GU30914). Along with ceramic and stratigraphic evidence these dates indicate that occupation of this settlement zone was probably focussed sometime during the 3rd to late 6th centuries BC.

5.5.1.11 Four-post Structure 1 (AU29; CG 1890; Figure 27)

Located to the east of Roundhouse 5, this comprised four postholes demarcating a square structure *c*. 3.50m^2 aligned on a roughly north-south axis. The posts averaged 0.24m in depth and although no post-pipes or packing were recovered it was clear from the profiles of two of the posts that upon disuse the posts had been removed. Iron Age pottery (4 sherds) was recovered from one of the posts but no other artefactual evidence was recovered.

5.5.1.12 Four-post Structure 2 (AU30; CG 1893; Figure 27)

This structure lay across the northern gully of Roundhouse 4 which it must have either pre- or post-dated. It was made up of three regularly placed surviving posts, the fourth having been truncated. The structure would have been square shaped, *c*. 1.40m^2, and was aligned on a roughly north-south axis. No artefacts were recovered from any of the postholes which averaged *c*. 0.20m in depth. The profiles of some of the posts indicate that the post had been removed forcefully.

5.5.1.13 Four-post Structure 4 (AU32; CG 1883; Figure 28)

Situated towards the south of the settlement zone, were eight postholes interpreted as a four-post structure with a rebuild. The structure was aligned on a roughly north-south axis and measured *c*.

3.00m^2. The postholes varied from 0.30m to 0.76m in diameter with the large posts set to the north and the smaller ones to the south. One of the postholes contained postpacking (1151/1152) but no postpipes were identified. No artefacts were recovered.

5.5.1.14 Two-post Structure 1 (AU33; CG 1889; Figure 29)

Located to the west of Roundhouses 4 and 5, this structure comprised two postholes *c*. 2.00m apart. The posts were of comparable size in plan and measured 0.25m and 0.10m deep respectively. They contained no evidence of a postpipe or postpacking. Although no dateable artefacts or evidently associated features were recorded, the comparable diameters and regular appearance of the postholes were indicative of a formal structure.

5.5.1.15 Two-post Structure 2 (AU34; CG 1894; Figure 29)

Situated to the east of the row of roundhouses and towards its northern end in an area devoid of any other archaeological features, this comprised two postholes *c*. 1.50m apart. They contained no evidence of a postpipe or postpacking. Although no dateable artefacts or evidently associated features were recorded, the comparable size and regular appearance of the postholes were indicative of a formal structure.

5.5.1.16 Two-post Structure 5 (AU36; CG 1910; Figure 29)

This structure comprised two posts, *c*. 0.25m in diameter with single fills *c*. 0.24m in depth. The comparable size and regular appearance of the postholes were indicative of a formal structure. They contained no evidence of a postpipe or postpacking but the northernmost post included a high concentration of charcoal indicative of burning of the post *in situ*. The profile of the second post suggested that the post had been rocked to facilitate removal.

5.5.1.17 Pit 1 (AU43: CG 1033; Figures 30 and 31)

Situated at the extreme west of Area 1, off the main plateau and on a slight step on the western slope as it descended into the river valley, was a large oval pit measuring 1.50 x 1.15 X 0.30m. This contained a single fill (1032) which included a large quantity of fire-cracked stone, charcoal and some Iron Age pottery (3 sherds). It was clear from the scorched natural that surrounded the pit that burning had occurred *in situ* and it is thought that this probably represents a cooking pit or an earth oven. To the immediate west, two stakeholes were recorded, averaging *c*. 0.12m in diameter and surviving up to a depth of 0.09m. Further stakeholes may have been present on the east side but truncation was more severe here and it is possible that a rack or light shelter is represented. No associated features were identified in the immediate vicinity and it appears that this feature was set well away from any area of occupation.

5.5.1.18 Pit 3 (AU45: CG 1299; Figure 30)

Located in the vicinity of Roundhouses 6, 7 and 8, Pit 3 was teardrop shaped with the long axis aligned north to south. It measured 2.50 x 0.86 x 0.45m and had steep sloping sides to a concave base. The fill was sterile and silt rich. The pit is liable to have been associated with one of the nearby roundhouses but its function could not be determined, although use as a cess pit or borrow pit is possible.

5.5.1.19 Pit 9 (AU51: CG 1134; Figure 30)

Located to in the south-east part of Settlement Zone 2, Pit 9 was a sausage-shaped feature with steeply sloping slightly concave sides and a concave base. It was 0.56m wide and 0.16m deep. The single fill (1133) comprised a lightly charcoal flecked but largely naturally derived silt rich deposit consistent with erosion of the sides. A single fragment of Iron Age pottery was recovered. The function of this pit remains uncertain.

5.5.1.20 Pit 10 (AU52: CG 1146; Figures 30 and 31)

Pit 10 was located to the south-east of Four-post Structure 4. The pit measured 0.50m in diameter and 0.30m deep and had steep sloping, concave sides and a rather flat base. The fill (1145) included heat cracked stones and charcoal and the natural into which the pit had been dug had been scorched indicating burning *in-situ* and suggesting that this pit had functioned as a cooking pit or an earth oven. A single small abraded sherd of Iron Age pottery was recovered.

5.5.1.21 Pit 11 (AU69: CG 1269; Figure 30)

This pit was heavily truncated by Enclosure 1. It lay to the immediate south of Roundhouse 5 and appears to have truncated the segmented ditch (AU38), although the possibility remains that it represented a recut section of the segmented ditch. The feature had steeply sloping sides and a relatively flat base. It was effectively only recorded in section (due to truncation by the enclosure ditch) and therefore dimensions could not be established but it was 0.65m in depth. The single fill (1269) contained 11 sherds of Iron Age pottery and a fragment of saddle quern.

5.5.1.22 Pit 12 (AU54: CG 1423; Figures 8 and 30)

This somewhat isolated pit was located between the Middle Bronze Age settlement (Settlement Zone 1) and Settlement Zone 2 at some distance from the roundhouses and to the east of Enclosure 2. It measured 0.32m in diameter and had been partially truncated by a furrow so that only the base of the feature survived to a depth of 0.08m. The pit was filled with a single, charcoal rich deposit (1422) containing 27 sherds of Iron Age pottery from at least two separate vessels. The function of the pit remains uncertain, however, the substantive quantity of pottery (relative to the shallow survival of the feature) from two separate vessels may indicate that these were structured deposits placed within a pit specifically excavated for their deposition.

5.5.1.23 Pit 13 (AU55: CG 1136; Figure 30)

Located in the south-east corner of Settlement Zone 2 and east of Roundhouse 1, this pit measured 0.49m in diameter. It had a single fill (1135) rich in charcoal and heat cracked stones. The latter had apparently been burnt *in-situ* since the natural into which the pit had been dug had been scorched suggesting that this pit had functioned as a cooking pit or an earth oven. Although no datable material was recovered it is thought that it is most likely of Iron Age date.

5.5.1.24 Pit 14 (AU56: CG 1343; Figure 30)

Located to the south of Two-post Structure 2 (AU34), Pit 14 was oval in plan and measured 0.85 x 0.75m. It had concave sides sloping to a roughly flat base. The fill (1342) was characterised by the presence of a large number of heat cracked stones and charcoal that appeared to have been burnt *in situ*, scorching the surrounding natural in the process. Although no artefacts were recovered, this probably represents a cooking pit or an earth oven of Iron Age date associated with the roundhouses.

5.5.1.25 Pit 26 (AU75: CG 1199; Figure 19)

Pit 26 was relatively substantial sub-circular pit approximately 1.20m in diameter and 0.37m deep. It had been truncated on its north side by Roundhouse 4. The single fill (1198) was silt rich and included a small quantity of Iron Age pottery (12 sherds). The function of this pit remains uncertain though it may represent a waste pit.

5.5.1.26 Post Alignment 1 (AU27: CG 1329; Figure 32)

Post Alignment 1 comprised at least 18 posts, although it is evident that many more had been present and had been removed by later furrows and the Iron Age enclosure ditch (Enclosure 1). The alignment ran for approximately 30m and was orientated broadly north-east to south-west with the south end of the alignment curving gently to a more west facing orientation. The posts were

spaced equally apart with roughly 0.90m between each of the posts. The majority of the posts were almost identical in size and depth being an average of *c.* 0.30m in diameter by *c.* 0.20m in depth with silt rich, naturally derived, sandy fills. A couple of examples contained a high concentration of burnt material which may reflect the *in-situ* burning of the posts. Two of the posts also showed evidence of having been rocked to facilitate removal from the ground (Figure 32: Posts 1361 and 1395). Although this almost certainly represents a fence, it was not evident what this demarcated since no difference was discernible between activities represented to either side of it.

5.5.2 Enclosure 1

Enclosure 1 was identified prior to excavation through cropmark evidence and geophysical survey (Figure 3). It was subsequently investigated during both evaluation and excavation (AU40 and AU77; CG 1010 and 1216; Figures 33-36).

The enclosure encompassed a total internal area of *c.* 4,250m^2 stretching across the ridge at the western end of the plateau with a dominant position overlooking the river to the west and valleys to the north, south and west. It was rectilinear in plan and was primarily defined by a wide U-shaped ditch containing two naturally derived, silting or weathering fills along the majority of its route (Figures 34-36). The east boundary was straight with an entrance located half way along its *c.* 80.00m length. Fairly sharp right-angled corners led from this side of the enclosure onto the northern and southern arms which were both slightly outwardly curving and extended *c.* 50.00m. The circuit was completed on the western side by a continuation of the wide U-shaped ditch, however, towards its northern extent two intercutting and rather sinuous ditches provided evidence for a phase of reworking of at least this part of the enclosure. These ditches also diverged slightly before rejoining at the corner of the enclosure (Figure 33).

Entrances were present to both the east and west; the former being *c.* 5.50m wide, the latter having been blocked and largely destroyed by the reworking of the north-west side of the enclosure which left only the southern terminal surviving (Figure 35, Entrance terminal 1279). Both entrances were very basic in form and appeared identical.

An internal dividing ditch (AU77) ran east to west across the enclosure separating it into two approximately equal halves, each with an entrance. This internal division was badly truncated and did not survive across the entire width of the enclosure, however, centrally a terminal was recorded and this probably reflects the location of a gate between the northern and southern parts of the enclosure. A relatively small quantity of pottery (in relation to the size and extents of the enclosure) was recovered from enclosure ditch (97 sherds) and indicated a Middle Iron Age date. Iron Age pottery (3 sherds) was also recovered from the internal dividing ditch.

This enclosure clearly post-dated several of the roundhouses within Settlement Zone 2 (Roundhouses 4, 5 and 6) as well as the segmented ditch since these were truncated by both phases of enclosure ditch construction. Ceramic dating of two of the other roundhouses (Roundhouses 3 and 7) suggested that these may have post-dated construction of the enclosure. Roundhouse 3 also truncated the internal dividing ditch. The spread of roundhouses also did not respect the enclosure, extending to both north and south of it, and despite the fact that several roundhouses lay within its bounds where dating was present it seems to indicate that roundhouses in this area either pre- or post-dated construction of the enclosure. Consequently, it is suggested that the period of construction, use and abandonment of the enclosure was essentially sandwiched between two phases of settlement activity and that, given the relative paucity of material culture within the fills (in comparison with the quantities recovered from some of the roundhouses), it more probably functioned as a stock enclosure. If this were the case then the division of the enclosure into two, the provision of an entrance into both the north and south parts of the enclosure and the presence of a gate through the internal ditch would have facilitated the control and sub-division of stock.

Phase 1 The earlier phase of enclosure construction was only observed in the north-west corner where it hadn't been entirely truncated by the later phase. This initial phase of construction was represented by a shallow length of ditch *c.* 20.00m long and 0.63m wide which survived to an

average depth of *c*. 0.20m. It was filled with a single naturally derived band of silt that appeared to have gradually eroded into it (Figure 34: Section 110, context 1267). Towards the southern extent of this surviving section of the Phase 1 ditch, the feature deepened culminating in the surviving southern terminus of the western entrance (Figure 35, Entrance terminal 1279). The entrance appears to have been simple in design with the ditch coming to a rounded terminus. Unfortunately no dating material was found within the fill but it is understood that the duration between the early and later phases of enclosure was fairly minimal and that the whole construction was of Middle Iron Age in date.

Phase 2 Virtually the entire circuit of the later phase of the enclosure survived. This later phase of construction resulted in the truncation of the western entrance by the reworked enclosure ditch in such a manner that the only surviving evidence for the earlier entrance was the remnants of its southern terminal. This later enclosure phase had an entrance on the east side, however, it is unclear whether this east facing entrance had been present during the earlier phase. The enclosure may therefore have only had a single entrance at any one time; the earlier one facing west and the later facing east. The later east-facing entrance, like the earlier one was basic in design having two simple rounded terminals defining a gap *c.* 5.50m wide. With the exception of the south side where only a single fill was present, the fill around much of the enclosure ditch comprised two naturally derived silt deposits that appeared to have eroded into the feature over a considerable period of time; no evidence was found beyond that described above for the west side that the ditch had ever been cleaned out or re-cut.

5.5.3 Settlement Zone 3

To the east of Settlement Zone 2, three ring-gully defined roundhouses (Roundhouses 11, 12 and 14) were recorded within the central part of the occupied plateau (Figure 37). Each lay at some distance from the others and from any of the roundhouse clusters but no evidence was recovered to suggest why the pattern of occupation here was dispersed rather than aggregated as was the case in the other areas. Dating evidence was very limited with only Roundhouse 14 producing any pottery, in this instance indicative of an early Middle Iron Age date.

A four-post structure (AU31) and two two-post structures (AU35 and 37) were also identified in this area along with two pits (Pits 2 and 15). None of these could be associated with any certainty with any of the roundhouses while the four-post structure almost certainly either pre- or post-dated Roundhouse 12. A number of undated features (pits and posts) located within this settlement zone are also considered liable to represent fragmentary survival of activity associated with this settlement zone but could not be assigned to individual structures.

5.5.3.1 Roundhouse 11 (AU11: CG 1429; Figure 38)

Roundhouse 11 was located on the top of the plateau at the southern edge of Excavation Area 1. It comprised a ring-gully with a 1.70m wide gap on its eastern side that probably reflects the location of the entrance. The gully measured *c*. 9.70m in diameter; no evidence of cleaning or re-cuts was noted and no artefacts or internal features were present.

5.5.3.2 Roundhouse 12 (AU12: CG 1582; Figure 39)

Roundhouse 12 was represented by a ring-gully *c*. 9.20m in diameter with an apparent large entranceway facing to the south-east. A single posthole was noted in the centre of the structure but as it was both small and contained no post-packing seems unlikely to have been load bearing. A four-post structure (AU31) lay within the building but it is not thought that this was contemporary; although whether it represents an earlier or later structure could not be determined. No artefacts were recovered nor were any internal surfaces or associated features present.

5.5.3.3 Roundhouse 14 (AU14: CG 1464; Figure 40)

Truncated by a post-medieval furrow and the later Romano-British enclosure (Enclosure 2), Roundhouse 14 survived in the form of at least three distinct ring-gully sections defining a circuit *c*.

11.00m in diameter. Potential entrances faced east and north-west. A large posthole (context 1498) located in the terminal end of the north-east ring-gully segment contained evidence of post-packing and may reflect the presence of a door or porch post. The fill of the ring-gully would suggest that it had been in use for a relatively short period of time and had silted up naturally, there being no evidence of cleaning or re-cutting. All the pottery recovered (29 sherds) derived from one of the entrance terminals (context 1534). This included residual material but indicated that the roundhouses dated from the early part of the Middle Iron Age.

A small, shallowly surviving, stakehole was noted in the middle of the entrance but otherwise no internal features survived possibly in part due to severe truncation of much of the internal area by post-medieval cultivation. Pit 2 to the north seems likely to have been related to occupation of the roundhouse.

5.5.3.4 Four-post structure 3 (AU31; CG 1628; Figure 41)

Lying within the area occupied by Roundhouse 12 but not believed to have been contemporary, this comprised four postholes set in a roughly rectangular arrangement *c*. 1.40m by *c*. 0.90m orientated with the longer side aligned roughly north to south. The individual posts averaged 0.19m in depth and were filled with fine silt. No postpipe or packing was evident and no dateable material was recovered.

5.5.3.5 Two-post structure 4 (AU35; CG 1909; Figure 42)

This comprised two postholes with no evidence of postpipes or packing being present. The post to the west was roughly half the size of the eastern one (0.39m as opposed to 0.65m) but they both survived to a depth of *c*. 0.17m. No datable material was recovered and no evidently associated features were present in the immediate area.

5.5.3.6 Two-post structure 6 (AU37; CG 1897; Figure 42)

Located to the immediate south of Post Alignment 2 and the west of Roundhouse 12, this post structure comprised two posts *c*. 0.40m in diameter with steep concave sides and a rounded base. No dateable material was recovered from the silt-rich, naturally derived fills of these features and there was no evidence of a postpipe or post packing. It is possible that this feature was related to Pit 15, an earth oven or cooking pit, located to the immediate south but in the absence of dating evidence in the structure or physical relationships this could not be demonstrated.

5.5.3.7 Pit 2 (AU44: CG 1547; Figure 43)

Pit 2 was revealed to the immediate north of Roundhouse 14. This was lozenge shaped and measured 0.70 x 0.30 x 0.10m. Two fragments of Iron Age cooking pot were recovered from the otherwise sterile fill (1546). Its proximity to Roundhouse 14 suggests it may be related but the pit does not appear to have been a refuse pit or have any other visibly obvious function and allied to a lack of similar features in the surrounding area this precludes further interpretation.

5.5.3.8 Pit 15 (AU57: CG 1474; Figure 43)

Located to the west of Roundhouse 12, Pit 15 was a sub-oval feature, 1.41m in length, 0.87m in width and 0.28m deep. It had moderately sloping sides that dropped to a slightly concave base. The pit contained a sequence of three silty fills (contexts 1471, 1472 and 1473) which included high concentrations of charcoal. In the absence of evidence for burning *in-situ*, it appears that this probably represents debris dumped from a hearth or oven, possibly associated with the nearby roundhouse.

5.5.4 Settlement Zone 4

A closely spaced cluster of six roundhouses (Roundhouses 15-20; Figure 44) was identified in the north-eastern part of the excavation site. The southern, eastern and western extents of this apparently unenclosed settlement zone were identified; however, although the excavation area

was extended in an attempt to define the northern limits of the settlement zone this remains undetermined lying within a heavily truncated area and beyond the final extents of the investigated area.

Due to truncation by later cultivation and to the north by groundworks associated with construction of the motorway, the majority of the roundhouses (Roundhouses 15 and 18-20) survived only as short sections of curvilinear gullies, although the nature of these was sufficiently distinct and comparable to the better defined examples (Roundhouses 16 and 17) to allow them to be confidently identified as such. To the east of these and potentially demarcating the limits of this settlement zone was a length of north-south aligned ditch (AU67).

Few associated features were present probably reflecting the high levels of truncation; however, two substantial pits (Pits 27 and 28) were recorded, truncating Roundhouses 16 and 17 respectively and potentially representing features associated with the abandonment of these buildings. The few undated features present in the vicinity are liable to represent fragmentary survival of activity associated with this settlement zone.

5.5.4.1 Roundhouse 15 (AU15: CG 1791; Figure 45)

Located to the immediate south of Roundhouses 16 and 17, Roundhouse 15 had been severely affected by truncation with only two short lengths of ring-gully surviving; a shallow section to the south (*c.* 0.07m in depth) and a further small segment to the north which was cut by both pits and a furrow. These indicated a diameter of *c.* 11.00m. Due to the truncation it could not be determined where the entrance had been located and no internal structural features were present. A small assemblage of pottery (23 sherds) was recovered.

5.5.4.2 Roundhouse 16 (AU16: CG 1849; Figure 46)

Roundhouse 16 survived in the form of three sections of a ring-gully defining a circuit *c*. 11.00m in diameter. An entrance appears to have been located in the south-east quadrant to the immediate south of a smaller gap (*c*. 0.90m) that may also have acted as an entrance. A recut pit (Pit 27) truncated the northern gully segment and may have been associated with abandonment of the roundhouse.

No datable material was found and no internal features were present although in part this almost certainly reflects high levels of truncation. There was no evidence of re-cutting or cleaning out of the naturally silted up gullies indicating a relatively short span of use.

5.5.4.3 Roundhouse 17 (AU17: CG 1817; Figure 47)

Roundhouse 17 survived as a single ring-gully defining the south and east portion of a circuit with a diameter of *c*. 11.00m. A large pit (Pit 28) with a distinct band of burning was present truncating the southern side of this gully and may have been dug at the entrance to the building; however, truncation by a furrow meant the presence of an entrance could not be proven. The northern half of the structure appears to have been entirely truncated by later cultivation. No dating material was recovered. Two small postholes were recorded within the area enclosed by the ring-gully and, although their function could not be established, it seems probable that they represent an internal structure of some description.

5.5.4.4 Roundhouse 18 (AU18: CG 1907; Figure 48)

Roundhouses 18, 19 and 20 were identified as a result of the opening of additional areas to try to find a northern limit to the spread of this settlement zone. These had all been very heavily truncated by cultivation and also lay in area which appears to have been disturbed during construction of the motorway. Roundhouse 18 only survived in the shape of a short and very shallow (0.04m) length of the northern arc of the ring-gully. The projected diameter of the ring-gully would have been *c*. 8.00m. Within the limited surviving extents, no evidence was revealed for an entrance or internal features and no dating evidence was recovered.

5.5.4.5 Roundhouse 19 (AU19: CG 1908; Figure 49)

Located in a small area of additional trenching to the north of Area 1, this roundhouse was only observed in plan in the form of a short section of curvilinear gully and a large posthole. The projected line of the gully encompassed an area *c.* 8.50-9.00m in diameter.

5.5.4.6 Roundhouse 20 (AU20: CG 1909; Figure 50)

Located to the immediate east of Roundhouse 19, Roundhouse 20 was also only recorded in plan in the form of a short length of curvilinear gully which was not excavated. A diameter of *c.* 11.00m can be postulated.

5.5.4.7 Pit 27 (AU76: CG 1840 and 1843; Figure 46)

This apparently recut pit was located on the north side of Roundhouse 16, truncating the ring-gully. The earlier pit (1843) measured 0.92m in length by 0.35m in width and 0.23m deep. It had a single sterile, silty fill (1842). This was truncated by a second pit (1841) which probably represents a recut. This was sub oval, 1.32m in length, 1.06m in width and 0.53m in depth and had moderately steep sides that dropped to a concave base. It had a single silt rich fill from which a relatively large quantity (35 sherds) of Iron Age pottery was recovered. It was not possible to determine whether these represented a single vessel but it is apparent that these fragments were deliberately deposited into the pit perhaps representing domestic refuse from one of the other roundhouses to the immediate east or north or alternatively a deposit placed to mark the abandonment of the Roundhouse 16.

5.5.4.8 Pit 28 (AU78: CG1824; Figure 47)

A large pit was revealed in the south-east corner of Roundhouse 17 where it truncated the ring-gully. It contained three fills (1821, 1822 and 1823), the lower two of which included high concentrations of charcoal. The middle deposit (1822) composed almost pure charcoal fragments and heat shattered stone that may have been burnt *in situ* since the lowest fill (1823) as well as being charcoal rich had been scorched. The upper fill (1821) comprised a fine silty deposit that was consistent with natural silting through erosion of surrounding material into the pit. This clearly post-dated Roundhouse 17 and it is possible that it represents an earth oven or a cooking pit associated with one of the roundhouses to the immediate west and north.

5.5.4.9 Boundary ditch (AU67: CG 1867; Figure 44)

To the east of the roundhouses a 24m length of north-south aligned ditch was recorded. This was *c.* 0.60m wide and *c.* 0.20m deep. This probably represents a boundary marking the limits of this settlement zone since no features or structures were identified to the east. A single moderately large fragment of Iron Age pottery was recovered from both of the sections excavated across this feature, and these are considered unlikely to be residual. This feature appears to terminate at the intersection with a broadly east-west aligned ditch forming part of a Romano-British field system (AU63); however, it could not be determined whether this later Roman ditch followed the course of an earlier, east-west Iron Age boundary which it had replaced and entirely truncated, whether it referenced and truncated the still visible remains of the terminus of this north-south Iron Age ditch (AU67) or whether the latter had once continued further south but was truncated by Romano-British and possibly later cultivation (ploughing) beyond this boundary. Of these options, the latter seems most probable as the alignment of this Iron Age ditch is not matched by that of the Romano-British field system (AU63) and furthermore the latter is understood to be of Late Roman date and thus a considerable period elapsed between the abandonment of the Iron Age ditch and the establishment of the Roman field system.

5.5.5 Settlement Zone 5

Five roundhouses (Roundhouses 21-25; Figure 51) defined the southernmost occupied area of the site. These were located on the line, and to the immediate north, of a major east-west aligned Iron

Age landscape boundary (AU39) which post-dated at least two of these roundhouses (Roundhouses 21 and 23). No further features were recorded; however, undated features present are liable to represent fragmentary survival of activity associated with this settlement zone. The west and north limits of the zone were defined by the extent of the roundhouse grouping; however, the eastern side of this zone lay beyond the development and therefore the currently investigated limits of the site.

Radiocarbon dates from Roundhouse 22 allied to ceramic evidence suggest that this was the earliest of the Iron Age settlement zones with occupation dated to the late Early to early Middle Iron Age period (mid 8th to late 5th century cal BC). Along with some limited stratigraphic evidence, the ceramic assemblage and radiocarbon date suggest that the roundhouses to the east (Roundhouses 21-23) may slightly pre-date the construction of the boundary and Roundhouses 24 and 25. A number of pits were also present and were closely associated with roundhouses, Pits 22, 24 and 25 truncating the ring-gully of Roundhouse 22 and Pit 23 being associated with Roundhouse 24.

It is noted that the alignment followed by the Landscape boundary was broadly respected even by those roundhouses it truncated, suggesting it traced the route of a potentially earlier feature, and with the exception of a pair of Middle Iron Age pits (4 and 5) located about 80m to the south no Iron Age features were present beyond this feature.

5.5.5.1 Roundhouse 21 (AU21: CG 4196; Figure 52)

Roundhouse 21 survived as the heavily truncated remains of at least two segments of ring-gully and had been truncated to the north by the Landscape boundary (AU39). The east section of gully extended for *c*. 2.30m in length and survived to a depth of 0.16m at the northern terminus which is likely to reflect the location of the house entrance. To the south, the gully petered out reflecting truncation by later cultivation which also limited the surviving extents of the western section of gully. The projected line of the ring-gully indicates a diameter of *c*. 10.00m. Fragments of pottery (29 sherds) were recovered from the gully along with a band of charcoal rich material that may represent the swept-out remains from a hearth.

5.5.5.2 Roundhouse 22 (AU22: CG 4206; Figure 53)

Roundhouse 22 was located to the north of the Landscape boundary (AU39) and to the immediate north-east of Roundhouse 23. Although a modern boundary had truncated much of the northern half of the ring-gully, this would have measured *c*. 10.40m in diameter. Pottery was recovered from the ring-gully (45 sherds), mostly deriving from the west side of the gully (contexts 4209 and 4210).

A gully terminus indicated the location of an entrance situated on the east side of the structure. This terminus was in turn truncated by three pits (Pits 22, 24 and 25) of which two (Pits 22 and 25) contained substantial dumps of charcoal, daub and pottery. The latter may represent material deposited following either the deliberate or accidental destruction of the house through fire, with some of the material culture present potentially representing deliberately placed material as opposed to casually discarded domestic waste. Radiocarbon samples were submitted from one of the fills (4209) and provided dates of 765-416 cal BC (SUERC-47327; GU30917) and 752-409 cal BC (SUERC-47328; GU30918), and along with ceramic evidence indicates that occupation of this settlement zone was probably focussed sometime during the 5th to 8th centuries BC.

5.5.5.3 Roundhouse 23 (AU23: CG 4123; Figure 54)

Located to the immediate south-west of Roundhouse 22 and truncated by the Landscape boundary (AU39), Roundhouse 23 survived in the form of two lengths of ring-gully which defined a *c*.10.40m diameter circuit. The southern section of the gully was heavily truncated but the surviving northern section averaged 0.30m in depth and had a terminal at both ends. This appears to indicate that the roundhouse had two entrances directly opposite each other to the east and west sides of the building. Although truncation had affected both 'entrances', the western one would have been at

least 3.00m in width whilst the eastern one was at least 1.50m wide. A small quantity of flint and pottery (14 sherds) was recovered from the excavated east side entrance terminal whilst a large quantity of charcoal was concentrated within the north part of the gully. The latter did not result from *in situ* burning but is thought had been swept into the gully from a hearth in the immediate vicinity. No internal surfaces or other structural features survived.

5.5.5.4 Roundhouse 24 (AU24: CG 4167; Figure 55)

To the north of the Landscape boundary (AU39) and partially truncated by Roundhouse 25, Roundhouse 24 was defined by a ring-gully that defined the southern, eastern and northern parts of the structure and suggested an overall diameter of *c*. 8.20m with a west facing entrance *c*. 6.00m in width. The southern gully section contained pottery (4 sherds) and fragments of worked flint. This roundhouse is interpreted as having been replaced by Roundhouse 25. A post (4147) and pit (Pit 23) were recorded within this area, the latter probably representing a storage/waste pit within the roundhouse.

5.5.5.5 Roundhouse 25 (AU25: CG 4065; Figure 56)

To the immediate north of Roundhouse 24, Roundhouse 25 was represented by two sections of ring-gully defining the north and south quadrants of a circuit *c.* 9.30m in diameter. Two potential entrances were defined by gaps in the ring-gully, that to the east measured *c*. 1.50m wide and that to the west *c*. 4.00m across. Pottery (43 sherds) and an iron nail were recovered. The gullies themselves survived to an average depth of 0.16m in the north and 0.23m in the south. As was the case for Roundhouse 24, several posts or small pits were present (4120 and 4149) but did not appear likely to have been structural and consequently are interpreted as storage/waste pits.

5.5.5.6 Pits 22, 24 and 25 (AU71, 73 and 74; Figure 53)

One of the terminals of Roundhouse 22 was cut by a sequence of three pits (Pits 22, 24 and 25). Pit 22 was a sub-oval pit that had truncated the terminus of the ring-gully defining Roundhouse 22. This measured 0.50m in width, 0.78m in length and 0.20m in depth. The pit had almost vertical sides and a flat base. It had a single soft sandy fill that contained a relatively large quantity of Iron Age pottery (52 sherds). The second pit (Pit 25), was elongated 2.50m long, 0.70m wide (becoming narrower to the north) and 0.32m deep. This contained a single fill (4184) that contained a large quantity of charcoal and daub and produced 33 sherds of pottery. Burning may have occurred *in situ* since the surrounding natural was scorched, whilst the material within them may represent deposition following the accidental destruction of Roundhouse 22 through fire. Pit 25 was in turn truncated to the east by Pit 24, a 0.54m diameter and 0.10m deep pit with a single silt rich fill (4190) that contained a large quantity of heavily degraded pot (53 sherds of pottery) from at least two separate vessels. The pottery present within these pits suggested the deposition of entire or substantial proportions of a number of vessels and potentially represents deliberately placed material as opposed to casually discarded refuse.

5.5.5.7 Pit 23 (AU72; Figure 55)

Pit 23 was well-defined and *c*.0.85m across and 0.30m deep. A silt rich, sterile fill 4182 was overlain by a charcoal rich deposit (4181) 0.24m in depth. It was clear that the burning had occurred *in situ* with the area around the pit having been scorched. This upper deposit contained two sherds of Iron Age pottery that appeared to have been dumped into the top of the feature. The pit lay within Roundhouse 24 with which it was probably associated, perhaps having had a storage function.

5.5.6 Landscape boundary

A substantial ditch extended across the whole width of the southern excavation area and coincided along its entire route with a later furrow (AU39: Figure 57). The ditch was *c*.1.40m in width and on average 0.75m deep with moderately steep sides and a concave base. It was filled along its entire

route with two main fills, both of which appeared to result from erosion of naturally derived material into the feature. There was no evidence of any phases of re-cutting or cleaning out. Clearly later than both Roundhouse 22 and 24, this ditch demarcated the southern limit of the settlement zone with only two isolated intercutting pits located further to the south (Pits 4 and 5). Dating evidence recovered from the ditch fills (54 sherds of pottery) provided an Early to Middle Iron Age date.

This is interpreted as a landscape boundary located on the southern lip of the natural escarpment from which land drops away gently to the south.

5.5.7 Pits 4 and 5

Two intercutting pits (AU46 and AU47: CG 4006 and 4009) were revealed c. 80.00m south of any other archaeologically significant features at the southern end of Excavation Area 2 (Figures 51 and 58). Pit 5 was evidently later than Pit 4 which it partially truncated. Both pits contained a large quantity of charcoal and heat cracked stones that appeared to have been heated *in situ* given scorching observed on surrounding natural. Iron Age pottery was recovered from both pits (Pit 5: 4004, 45 sherds; Pit 4: 4007, 8 sherds) but no other artefacts were recovered. These pits are interpreted as cooking pits or earth ovens. It is uncertain what these were associated with since dating suggests that these were somewhat later in date than the nearest occupation within Settlement Zone 5.

5.6 Period 5: Romano-British

Romano-British occupation of the site was focussed on a trapezoidal enclosure (Enclosure 2) which was sub-divided internally into a number of plots which probably provided a combination of occupation areas and small agricultural plots or stock compounds. At least one timber building (AU68) can be postulated within the interior. Several pits (Pits 6, 7, 8, 16, 19, 20 and 21) were also present within or close to the enclosure but activity was somewhat limited perhaps reflecting only a short period of occupation. Large quantities of domestic pottery and some ceramic roof tile were recovered and indicate that the settlement can be dated to the 1st to 2nd century AD.

Elements of a Roman or possibly slightly later field system were also recorded. The alignment of these features follows a different axis from that of the Period 2 Iron Age enclosure and major boundary, suggesting either a major reworking of the landscape at this time or potentially a hiatus in occupation at the site between the Iron Age and Roman periods.

5.6.1 Enclosure 2

A series of ditches defined a trapezoidal enclosure (AU41; Figures 59-61) defined to the north and south by east-west aligned ditches and to the east and west by approximately north-east to south-west aligned ditches. These enclosed an overall area slightly in excess of 1,500m^2 measuring approximately 43.00m in length (north to south) and 35.00m in width.

Limited stratigraphic evidence suggested that the initial phase of enclosure saw the establishment of the main enclosure with an entrance provided in the south-east corner. Due to truncation and later reworking it was not possible to establish the original width of this entrance. A second entrance lay in the south-west corner and measured *c*. 4.00m across, although later truncation again may have exaggerated the visible width.

Internal divisions were created within this main enclosure through the addition of further ditches. Two east-west ditches partitioned the interior into three and further sub-divisions were created by the addition of spurs and sections of segmented ditch. The northern part of the enclosure was divided into two areas (A and B) through the addition of a spur extending from the northern arm of the main enclosure towards the first of the east-west partitioning ditches. The southern terminus of this spur lay just short of a staggered break in the partition ditch leaving a well-defined entrance at the corner of Area A which measured approximately 10.00m by 12.00m in plan. The central area was similarly sub-divided into two (C and D) through the addition of a spur running north of the central partitioning ditch. This terminated just short of the northerly partition ditch, providing access to areas either side. Lastly, the southern area (south of the central partition ditch) had two small

compounds added to its eastern side and an annex added to the south. The first of these (E) was created through the addition of a southerly spur extending off of the central partition ditch and a further ditch extending off the east end of the partition ditch, curving round to the west to almost meet the spur but leaving an entrance gap in the south-west corner. This sub-division measured *c*. 8.00m (east-west) and *c*. 9.00m (north-south). In the south-east corner of the original enclosure a further sub-division (F) was defined by the addition of a slightly curvilinear-sided compound open to the south and measuring *c*. 8.00m (east-west) and 6.00m (north-south). This enclosed an area of *c*.48m^2 and truncated the southern side and south-east corner of the original enclosure ditch. The divisions to the south also further defined the entrance located on the east side of the main enclosure providing a *c*. 5.00m wide corridor into the interior of the enclosure. Lastly an annex (G) was present (?added) to the southern end of the main enclosure. This was only defined on three sides, to the north by the southern boundary of the main enclosure, and to the west and south by further ditches. However, there was no ditch present to the east suggesting either that this was defined by a hedge which has left no trace, a fence-line which has been entirely truncated or possibly that this was open on this side.

Other short internal spurs and lengths of ditch provided further evidence of internal partitioning but not on any evident pattern. Pits and a timber structure provided the only evidence of internal activity.

5.6.1.1 Timber building (AU68: CG 1719/1720 and 1689/1690; Figures 59 and 62)

A timber building was recorded within the southern part of the enclosure and comprised three shallow beam slots (CG 1689/1690) each measuring approximately 0.40m wide and 0.06m deep and having almost vertical sides and flat bases. The west side of the building was formed by two lengths of north-south beam slot separated by a gap of *c.* 1.80m. The third beam slot ran east from the gap forming a roughly T-shaped arrangement and this provided an internal partition to the building. The east end of this 'partition wall' had been truncated by a furrow and this is liable to have also truncated any evidence for the east side of the building. No evidence was located for the walls at the north and south ends of the projected building which would have measured roughly 10.50m in length by 6.00m wide. The internal floor space provided would have been approximately 63m^2 with the internal partition providing a larger room to the north end.

An unusual arrangement of five parallel narrow linear depressions or slots (CG 1790/1720; Figure 62) orientated north to south was located at the south-east corner of this building. These averaged *c*. 3.00m in length by *c.* 0.40m in width and had an average depth of *c*. 0.04m (Figure 62: Sections 285, 286 and 287). They had steep sloping sides and rather flat bases. They had been excavated in close proximity to each other without overlapping, suggesting that they are probably contemporary, and it is possible that these reflect the presence of a number of parallel beams which had supported a porch or other comparable structure located at the east end of the smaller of the two defined rooms.

5.6.2 Pits

5.6.2.1 Pits 6 and 7 (AU48 and 49: CG 1502 and 1504; Figures 59 and 63)

Pits 6 and 7 were revealed in the south-west corner of Enclosure 2, near its south-west entrance. Pit 7 partially truncated Pit 6. The fill of Pit 6 (1501) contained the substantial remains (111 fragments) of a large Romano-British cooking pot which had been broken before being placed in the ground with the fragments stacked up on top of each other. The fills of both pits were dark and organic in nature suggesting that these features were probably waste pits associated with the Roman enclosure and probably occupation of the nearby timber building (AU68).

5.6.2.2 Pit 8 (AU50: CG 1714; Figures 59 and 63)

Pit 8 was located immediately to the south of Enclosure 2 and comprised a nearly circular pit 0.65m in diameter and 0.28m deep with moderately steep sides dropping to a flat base. The single

fill (1713) was made up of fine laminations of naturally derived, eroded silt and sand. It was completely sterile with the exception of a single fragment of Romano-British pottery that was recovered from near the top of the feature. In the absence of quantities of waste or evidently organic fills, the function of this pit remains undetermined though it may have been a quarry/borrow pit or a cess pit.

5.6.2.3 Pit 16 (AU58: CG 1509; Figures 59 and 63)

Pit 16 was located within Enclosure 2 and was truncated by one of the east-west partition ditches sub-dividing the enclosure. The pit was sub-oval in plan measuring 1.00m long, 0.70m wide and 0.34 deep. It had steeply sloping sides that dropped to a flat base. The single fill (1508) appeared to have been the result of a low energy natural silting processes with no evidence of deliberate infilling or deposition of domestic waste although 4 sherds of highly abraded pottery were recovered. In the absence of quantities of waste or evidently organic fills, the function of this pit remains undetermined though it may have been a quarry/borrow pit or a cess pit.

5.6.2.4 Pit 19 (AU61: CG 1594; Figures 59 and 63)

Located in the south-east corner of Enclosure 2, Pit 19 truncated one of the internal ditches. The pit was tear-drop shaped in plan measuring 0.60m at its widest point, 0.80m in length and 0.19m deep. The sides were steeply sloping and concave and dropped to a concave base. The single fill (1593) was organic rich and included 6 fragments of abraded Romano-British pottery. The pit probably represents a domestic refuse pit or cess pit.

5.6.2.5 Pit 20 (AU62: CG1680; Figures 59 and 63)

Lying roughly 11m to the south-west of Pit 19, Pit 20 was truncated by the southern ditch defining Enclosure 2. The single fill (1679) contained a large quantity of redeposited charcoal dumped into the pit along with several fragments of CBM and a single highly abraded piece of Samian. This probably functioned as a domestic refuse pit.

5.6.2.6 Pit 21 (AU70: CG1712; Figures 59 and 63)

Pit 21 measured *c*. 2.30m in diameter and 0.54m in depth with moderate sloping sides dropping to a concave base. It was filled with two fills (1710 and 1711). The earlier deposit was naturally derived material located to the western side and this had slumped into the pit prior to a second fill (1710) being deposited. This contained moderate charcoal flecks, heat shattered stones and domestic waste that suggested that the pit had been used for the disposal of domestic refuse. The pit had been truncated by the eastern side of Enclosure 2.

5.6.3 Later Roman field system

A series of shallowly surviving ditches (AU63; Figure 64) provided evidence for a field system of later Romano-British date laid out on a comparable axis to Enclosure 2 and extending across much of the investigated area.

The main axis of this field system (1075) ran on a broadly east-west alignment for at least 276m across the site. This extended beyond the limit of excavation to the east and appeared to have been ploughed out towards the west where it truncated Enclosure 1. This ditch averaged *c*. 0.40m in width by *c*. 0.15m in depth and had a steep sided U-shaped profile. Of particular note is its apparent relationship with an earlier Iron Age boundary (AU67) which appears to terminate at the Roman feature. As discussed previously, it is unclear whether this reflects earlier origins to the field system or truncation of the extension of the Iron Age ditch to the south by Roman cultivation of the area south of the boundary.

Parallel ditches to the south (1176, 1900 and 1904) formed other surviving elements of the system on this axis. Extending to the south of the main axis were two further ditches. The first aligned on a south-west to north-east (1651 and 4091) lay on a parallel alignment with the orientation of

Enclosure 2 and extended across the excavation areas for a distance of *c*.173m with a single gate/entrance 1.80m wide located to the immediate north of the modern boundary. The ditch was 0.40m wide and averaged 0.30m deep with steep sides that dropped onto a concave base. The second linear extending to the south (1902) can be less certainly associated since it's orientation was at odds with the principal elements of the system being aligned south-east to north-west; however, it met the main east-west axis ditch (1075) at precisely the same point as the main south-west to north-east ditch and this seems unlikely to be co-incidental. This ditch extended for *c*.80m to the south boundary of Excavation Area 1, was 0.66m in width by 0.28m in depth and had an almost identical profile to the other elements of the system.

These ditches combined to form a partial herringbone pattern of land division. They produced small quantities of Roman dated pottery in the vicinity of Enclosure 2, elements of which they truncated; the pottery may therefore be residual and have derived from the phase of activity associated with that enclosure. However, alignment of elements of the system coincided with that of Enclosure 2 and potentially re-used parts of the enclosure (the main western, eastern and southern boundaries), implying that only a limited period of time elapsed between the use/disuse of Enclosure 2 and the establishment of this field system.

5.7 Medieval activity

The surviving remnants (furrows) of ploughed out ridge and furrow (AU64 and 65) extended across the entire excavated area and provided evidence of the medieval arable landscape. These were present on both east-west and north-south alignments and analysis of the blocks of furrows suggests that the site occupied part of two former open fields separated by the current field boundary, thus indicating that this boundary is at least of medieval origin.

5.8 Post-medieval and modern activity

Post-medieval and modern activity comprised land-drains and field boundaries extending across the area on a number of alignments but principally in the case of the land-drains on east to west and north-east to south-west alignments. Two lengths of former field boundary were also recorded, one on a north-south alignment and truncating parts of Enclosure 2, the other on an east-west alignment and partially coinciding with the field boundary dividing the excavation areas.

6 Artefact analysis, by Laura Griffin

Material could be dated from the Bronze Age to mid Roman periods with small amounts of later material present in top- and sub-soil contexts. Level of preservation was fair with the majority of material displaying moderate levels of abrasion. The most abundant material type recovered was pottery (Table 2).

6.1 Pottery

All sherds have been grouped and quantified according to fabric type (Tables 3 and 4). Where possible, fabric types and diagnostic sherds have been cross-referenced to fabric and type series within published reports of local sites as referenced below.

A total of 1,896 sherds weighing 12.13kg were retrieved and analysed. The assemblage was dominated by Iron Age pottery with smaller but significant amounts of Earlier Prehistoric and Roman sherds also present. Pottery of later periods was found in only very small quantity and comprised sherds of medieval and modern date.

6.1.1 Earlier prehistoric and Iron Age

This site produced an interesting and relatively substantial assemblage of 1,196 sherds of pottery dating to the Bronze Age and Iron Age periods (Tables 2 and 3; Figures 65 and 66). This included a good proportion of diagnostic sherds, which alongside a programme of radiocarbon dating has enabled the closer dating of some form and fabric types than has previously been possible, and

also highlighted an area of Early/Middle Bronze Age settlement on the site which was not recognised as such during the assessment stage.

6.1.1.1 Middle Bronze Age

Sixteen sherds of definite Middle Bronze Age date were identified within the site assemblage deriving from Roundhouse 10 (AU10) in Settlement Zone 1 and from the small enclosure to the south-west (Enclosure 1007; AU42). All came from two diagnostic vessels and the dating of one was confirmed by a radiocarbon sample from within the ditch from which it came.

Although of different fabric types (fabrics 1 and 4), the sherds were very similar in form, and particularly in decoration, with both having two rows of finger/thumb impressions around the neck and rim (Figure 65: 1 and 2).

6.1.1.2 Iron Age

The majority of pottery (1,180 sherds) from the site could be attributed to the Iron Age with forms indicating activity from the Late Early Iron Age through to the end of the period.

A total of eight different fabric types were identified amongst these sherds, some of which appear to have been long-lived and used for a variety of form types which span the period. These fabric types are described below and where possible, have been cross-referenced to other regional assemblages such as Grove Farm, Enderby (Clay 1992) and Wanlip (Beamish 1998). Likewise, forms could also be closely paralleled with known types from elsewhere in the East Midlands region. However, dating of these forms and fabrics was problematic due to a lack of well-dated, published assemblages from the region. In an attempt to aid dating of the pottery from this site, radiocarbon dating was carried out on a number of sherds with carbonised residues alongside charcoal from associated fills and this has proven extremely useful in the establishment of both pottery typology and of settlement chronology.

Fabrics and forms

The descriptive terms are applied in accordance with definitions set out by the Prehistoric Ceramic Research Group (1997).

Fabric 1:

Unevenly fired fabric with a light, corky appearance and soapy feel. Contains moderate ill-sorted quartz, frequent organic and occasional large, red ?mudstone/clay pellet inclusions and has frequent lenticular voids.

Forms: Jar and bowl

Decoration: Scored lines, fingertip impressions, stabbed pattern, incised pattern with inlaid calcareous slip

Period: Bronze Age-Middle Iron Age

Equivalent to: Wanlip Fabric V

Fabric 2:

Reduced fabric with a coarse feel. Contains frequent, ill-sorted granodiorite inclusions, common ill-sorted quartz and moderate-rare clay pellets.

Forms: Jar

Decoration: Scored lines, fingertip impressions

Period: Middle-Late Iron Age

Equivalent to: Wanlip Fabric Q2

Fabric 3:

Oxidised fabric with a sandy feel. Contains rare grog, frequent soft, white calcareous inclusions, moderate, ill-sorted black inclusions and moderate ill-sorted, sub-angular quartz.

Forms: Jar

Decoration: Scored lines

Period: Early-Middle Iron Age

Fabric 4:

Unevenly fired fabric varying from reduced to oxidised across a single vessel. Sandy fabric with a coarse feel. Contains occasional subangular orange grog, moderate ill-sorted, subangular moderate quartz, moderate organic, white mica and occasional red inclusions.

Forms: Jar and bowl

Decoration: Scored lines, fingertip impressions, stabbed pattern, stamped pattern

Period: Early-Late Iron Age

Fabric 5:

Unevenly fired, light, corky fabric with a soapy feel. Mudstone tempered with a mix of large and lenticular voids, the latter probably from burnt-out organic temper.

Forms: Jar and bowl

Decoration: Scored lines, fingertip impressions, stabbed pattern

Period: Early-Late Iron Age

Fabric 6:

Thick, oxidised fabric with a soapy feel. Frequent, ill-sorted plate shell with occasional oxidised grog and sub-rounded red inclusions.

Forms: Jar

Decoration: Scored lines, fingertip impressions

Period: Early-Middle Iron Age

Equivalent to: Wanlip Fabric S1

Fabric 7:

Sandy fabric with oxidised exterior and black core and interior and soapy feel containing frequent, ill-sorted grey grog and ill-sorted, moderate plate shell inclusions

Forms: Jar

Decoration: Scored lines, fingertip impressions

Period: Early-Middle Iron Age

Fabric 8:

Black fabric with frequent grog and quartz, large flakes of mica and ill-sorted granodiorite inclusions

Forms: Jar

Decoration: None

Period: Middle Iron Age

Equivalent to: ?Wanlip fabric RQ1

6.1.1.3 Discussion of the Bronze Age and Iron Age pottery by settlement zone

Settlement Zone 1 and Enclosure 1007

Very little pottery was retrieved from the areas associated with Bronze Age activity with just 16 sherds from two individual vessels identified. However, sherds from both were diagnostic and alongside a radiocarbon date from charred material recovered from one of the postholes defining Roundhouse 10 (AU10) made it possible to allocate an Early/Middle Bronze Age date to this phase of activity.

The first vessel (fabric 1; Enclosure 1007: AU42) was identified as a jar form decorated with thumb impressions around the neck and further indentations around the top of the rim (Figure 65.1). This could be closely paralleled with a jar from Wanlip (Marsden 1998, fig. 25 no.1). The second vessel (fabric 4; Roundhouse 10: AU10) was also a jar and again decorated with thumb impressions, this time in two rows (Figure 65.2). The form of this jar could be paralleled with one from Twywell in Northamptonshire (Harding 1975, fig. 22 no.49). However, it should be noted that both of the vessels from Wanlip and Twywell were considered to be somewhat later than the Early/Middle Bronze Age date indicated by the radiocarbon date from Rugby.

Settlement Zone 2

A total of 444 sherds of pottery spanning the Early to Late Iron Age were found in this zone of the site with sherds coming from five separate roundhouses, an enclosure ditch and associated features. Within this zone, it was possible to separate activity chronologically by the pottery forms and fabrics present.

Roundhouses 3, 4, 5 and 6 and Segmented ditch (AU38)

The earliest activity was related to Roundhouses 3, 4, 5 and 6 and the Segmented Ditch (AU38) with 287 sherds recovered. Here pottery could be dated based on radiocarbon dating from a sherd residue and charcoal within the Segmented Ditch (AU38) which gave a late Early-/early Middle Iron Age date. This ditch cut one of the roundhouses (Roundhouse 4) but was truncated by another (Roundhouse 5).

Fabric types 1-7 were represented amongst the sherds from these features and all diagnostic sherds were from shouldered jars with upright rims (eg. Figure 65: 6, 7 and 9). Decoration included stabbed patterns and fingertip impressions, but by far the most common was numerous incised lines usually associated with Scored Ware, a tradition commonly seen on Iron Age sites of the East Midlands (eg. Figure 65.10). All but one of the decorated sherds from the segmented ditch, which has been dated to between 500-200BC by radiocarbon dating, were of Scored ware, indicating that this tradition was firmly established by the Middle Iron Age. Fingertip decoration was confined to the top of the rim on all three sherds displaying this type of decoration, a feature commonly associated with the Middle Iron Age period. Stabbed decoration was also noted on three individual sherds and took the form of circular or square dots running around the bottom of the pot just above the base angle (eg. Figure 66.11).

Enclosure Ditch 1 (AU40)

This ditch could be firmly dated to the Middle Iron Age both stratigraphically and by the pottery with a total of 97 sherds retrieved. Once more, fabrics 1-7 were represented and all diagnostic sherds were jar forms but with a more rounded profile and out-turned/everted rim (eg. Figure 66.12 and 17) than those associated with the earlier roundhouse and segmented ditch discussed above. Decorated sherds showed a heavy bias towards scored wares, with just one sherd possibly having fingertip decoration (ie. uncertain whether deliberate).

Roundhouse 7, Pit 1 and Pit 9

A total of 50 sherds were retrieved from the ring-gully of Roundhouse 7, with further material present in Pit 1 (AU43) and Pit 9 (AU51). All of these features lay outside of Enclosure 1. Pottery from these features indicated a Middle to Late Iron Age date for both.

Sherds were of fabrics 1, 2, 4 and 5 and all diagnostic sherds were from slack-profiled jar forms with flat-topped rims (eg Figure 66.16, 18, 19 and 20). There were notably less decorated sherds

within this group of material, with just one scored ware jar (fabric 4, Roundhouse 7). However, this example was particularly unusual due to both internal and external surfaces being scored and the additional presence of a line of stabbed dots towards the rim. Despite the level of decoration, the vessel was crudely formed with uneven surfaces and many finger-marks from shaping. The other decorated vessel was also from Roundhouse 7 and was a slack-profiled jar (see above). The decoration took the form of fingertip indentations around the flat top of the rim (Figure 66.20).

Settlement Zone 3

There were three roundhouses in this settlement zone but only one, Roundhouse 14, contained any pottery. A total of 29 sherds were retrieved from the ring-gully of this building, 26 of which were from a large bowl form (fabric 5; Figure 65.3). The large size of this vessel and the thickness of the sherds may suggest it to be residual with the only other diagnostic sherd being a roughly formed, slack-shouldered jar (Figure 65.8) of early Middle Iron Age date similar to examples seen at Wanlip in Leicestershire (*cf* Marsden 1998, fig. 28, no. 54).

Settlement Zone 4

Twenty-three sherds of pottery (fabric 4) from a single vessel were retrieved from within the ring-gully of Roundhouse 15. Being undiagnostic and undecorated they were dated to the Middle–Late Iron Age.

Settlement Zone 5

A total of 248 sherds of pottery of Early and Middle Iron Age date were retrieved from features within Settlement Zone 5. Sherds came from five separate roundhouses, a large boundary ditch (AU39), two pits within the main area of activity (Pits 22 and 23) and two further pits some distance to the south (Pits 4 and 5). As was the case for Settlement Zone 2, it was possible to separate activity chronologically by the pottery forms and fabric present.

Roundhouses 21, 22 and 23

The earliest activity in this settlement zone was related to Roundhouses 21, 22 and 23 with 88 sherds recovered. The pottery could be dated from the later Early Iron Age based on radiocarbon dating from a sherd residue and charcoal from the ring-gully of Roundhouse 22. The positioning and size of these roundhouses would suggest that they were contemporary.

Fabric types 1, 3, 4, 5, 6 and 7 were represented amongst the sherds from these roundhouses. Two jar forms could be identified, although the lack of diagnostic rim sherds prevented more specific classification. Decoration indicated that Scored wares (fabrics 1, 3 and 4) were the dominant class of pottery in this part of the site. Decorated sherds from a further vessel from Roundhouse 22 were oxidised, relatively thick compared to the others from this vicinity and displayed thumb impressions; it may well be residual.

Roundhouses 24 and 25, Landscape boundary (AU39) and Pits 22 and 23

A total of 107 sherds were retrieved from these features which were dated to between the later Early–Middle Iron Age based both on forms and fabric, as well as on stratigraphy, with the Boundary ditch (AU39) cutting Roundhouses 21 and 23.

Much of the pottery from the Landscape boundary ditch in particular, was highly abraded and very few diagnostic sherds were identified. Fabrics represented were 1, 3, 4 and 5 and once again, Scored ware jars (fabric 4) formed the largest proportion of decorated wares. However, one of the most distinctive sherds from the whole site came from the Landscape boundary ditch, taking the form of a very fine, dark grey body sherd from a carinated bowl decorated with an incised pattern which had in turn been inlaid with a calcareous slip (Figure 65.4). Parallels for this vessel and decoration type have been identified within Early Iron Age assemblages from the Thames Valley area (Gibson 2002, fig. 62, no.2). A further distinctive carinated bowl with a stamped decoration derived from Pit 22 (AU71; Figure 65.5) while a crudely formed bowl came from Pit 23 (AU72; Figure 66.15).

Pits 4 and 5 (AU 46 and 47)
The latest features in this settlement zone were intercutting pits at the southernmost end of the excavated area. A total of 55 sherds were retrieved from these pits, the latest of which were identified as being firmly Middle Iron Age in date. Two slack-shouldered jars with upright rims similar to those excavated at Wanlip (Marsden 1998, fig.25, no.8) were the only diagnostic sherds within this group (Figure 66.13 and 14). The only decorated sherds within the group took the form of 32 fragments from a scored ware vessel which was found in the later pit (Pit 5: AU47). Only fabrics 4 and 5 were identified amongst these sherds.

6.1.1.4 Illustrated Bronze Age and Iron Age pottery (Figures 65 and 66)

1. Jar with finger/thumb impressions around neck and rim, fabric 1, Rectilinear Enclosure (AU42: context 1006), Middle Bronze Age

2. Jar with finger/thumb impressions around neck and rim, fabric 4, Roundhouse 10 (AU10: context 1451), Middle Bronze Age

3. Bowl, fabric 5, Roundhouse 14 (AU14: context 1534), Late Bronze Age/Early Iron Age

4. Carinated bowl with incised decoration inlaid with a calcareous slip, fabric 1, Landscape Boundary (AU39: context 4020), Early Iron Age

5. Carinated bowl with stamped decoration, fabric 4, Pit 22 (AU71: context 4197), Early Iron Age

6. Barrel-shaped, slack-shouldered jar with upright, flattened rim, fabric 1, Segmented Ditch (AU38: context 1258), Late Early-Early Middle Iron Age

7. Barrel-shaped, slack-shouldered jar with upright, flattened rim, fabric 2, Roundhouse 5 (AU5: context 1270), Early Middle Iron Age

8. Barrel-shaped, slack-shouldered jar with upright, flattened rim, fabric 4, Roundhouse 14 (AU14: context 1534), Early Middle Iron Age

9. Barrel-shaped, slack-shouldered jar with upright, flattened rim, fabric 4, Roundhouse 6 (AU6: context 1272), Early Middle-Middle Iron Age

10. Scored ware jar, fabric 4, Roundhouse 6 (AU6: context 1112), Early Middle-Middle Iron Age

11. Base of jar with row of stabbed decoration, fabric 5, Roundhouse 6 (AU6: context 1094), Early Middle-Middle Iron Age

12. Slack-shouldered jar, fabric 4, Enclosure 1 (AU40: context 1031), Late Middle-Early Late Iron Age

13. Barrel-shaped, slack-shouldered jar with upright, flattened rim, fabric 4, Pit 5 (AU47: context 4004), Middle Iron Age

14. Barrel-shaped, slack-shouldered jar with upright, flattened rim, fabric 4, Pit 4 (AU46: context 4007), Middle Iron Age

15. Crudely formed bowl, fabric 4, Pit 23 (AU72: context 4181), Middle Iron Age

16. Barrel-shaped, slack-shouldered jar with upright, flattened rim, fabric 8, Pit 9 (AU51: context 1133), Middle Iron Age

17. Slack-shouldered jar with everted, tapering rim, fabric 4, Enclosure 1 (AU40: context 1031), Middle-Late Iron Age

18. Slack-shouldered jar with upright, flattened rim, fabric 4, Roundhouse 7 (AU7: context 1380), Middle-Late Iron Age

19. Slack-shouldered jar with upright, flattened rim, fabric 4, Roundhouse 7 (AU7: context 1381), Middle-Late Iron Age

20. Large, slack-shouldered jar with upright rim decorated with fingertip indentations, fabric 5, Roundhouse 7 (AU7: context 1374), Middle-Late Iron Age

6.1.2 Roman pottery

A total of 661 sherds were retrieved from the site, all from Excavation Area 1 and the vast majority coming from Enclosure 2 (AU41). Remaining sherds were found in small quantities within a series of pits (AU48, 50, 52, 57, 58, 61 and 62). The assemblage comprised a standard range of forms and fabrics consistent with a rural settlement, with locally produced coarsewares and jar forms dominating (Table 4; Figure 67).

6.1.2.1 Fabrics and forms

Locally produced reduced wares

The coarseware assemblage was dominated by reduced wares, the majority of which were of a distinctive sandy fabric typical of local assemblages (fabrics A-I). Identifiable forms in these reduced fabrics consisted primarily of small, bead-rimmed jars or beakers of early Roman date, the majority of which could be paralleled with examples from Jewry Wall, Leicester (Kenyon 1948), Causeway Lane, Leicester (Connor and Buckley 1999) and Alcester (Cracknell and Mahany 1994). Other forms identified included two tankards possibly of Mancetter-Hartshill production (AU41, fabrics B and C).

In addition to the sandy reduced wares, there were also a number of finer grey wares, commonly finished with a dark grey/black surface. Vessels of this fabric type are commonly termed 'dark-surfaced wares' (Willis 2012; fabrics E, F and G) and are once more characteristic of early Roman assemblage. In this fabric type, two small jars/beakers with channelled rims (Enclosure 2: AU41; Figure 65: 1 and 2) were particularly distinctive. Such rims are generally thought to be characteristic of early military pottery (Jane Evans pers comm).

Locally produced oxidised wares

Oxidised wares of the same sandy fabric (fabrics OA–OF) formed a far smaller proportion of the assemblage, but where identifiable, forms were of the same narrow range, with jars predominating. There were also two bowl/dish forms in oxidised fabrics OB and OC (Figure 67.10) and two beakers (fabric OE; eg. Figure 67.3), all from the fill of one of the ditches defining Enclosure 2 (AU41).

Non-local coarsewares

Non-local coarsewares consisted of just 21 sherds of Black-burnished ware 1 (BB1). It is possible that the small proportion of this ware is due to locally produced wares fulfilling the cooking vessel role commonly attributed to BB1 vessels or it could be due to the early date of the assemblage. This notion is further strengthened by the only diagnostic sherds of this ware within the assemblage being of a carinated bowl form (Seager Smith and Davies 1993, *WA* type 15; AU41) dating between the late 1st and early 2nd centuries.

Finewares
There was very little fineware present within the assemblage. Colour-coated wares consisted of a single sherd from a Nene Valley colour-coated ware beaker with scaled decoration (fabric 28; unstratified) and there was a small group of highly abraded Samian ware fragments of South and Central Gaulish production (AU 41 and AU62). In addition, four sherds from a Mancetter-Hartshill whiteware flagon (fabric 41; AU41) and the lower portion of a small pedestal or folded beaker in a fine oxidised ware (fabric OD; AU41) were also identified.

Mortaria
Mortaria within the assemblage consisted of a base sherd (AU61) and a hooked rim sherd (unstratified). Both were of Mancetter-Hartshill production, which is unsurprising due to the location of the site.

6.1.2.2 Dating

Dating of the pottery has indicated Roman settlement of the site to be relatively short-lived, starting at the beginning of the period and not appearing to continue much beyond the second half of the 2nd century. This date is based not only on the narrow range of forms present but also on the low occurrence of BB1 and Mancetter-Hartshill mortaria, combined with a complete lack of Oxfordshire wares.

6.1.2.3 Illustrated Roman pottery (Figure 67)

1. Channel-rimmed jar, fabric F, Enclosure 2 (AU41: context 1589), Mid-late 1st century
2. Channel-rimmed jar, fabric F, Enclosure 2 (AU41: context 1577), Late 1st-early 2nd century
3. Beaker, fabric OE, Enclosure 2 (AU41: context 1646), 1st-early 2nd century
4. Necked jar, fabric B, Enclosure 2 (AU41: context 1646), 1st-2nd century
5. Everted rimmed jar with cordon, fabric H, unstratified find from Area 1 (context 4000), 1st-2nd century
6. Jar with hooked rim, fabric C, Enclosure 2 (AU41: context 1646), 2nd century
7. Everted rimmed jar, fabric H, Enclosure 2 (AU41: context 1517), Mid 2nd century
8. Everted rimmed jar, fabric I, Enclosure 2 (AU41: context 1517), Mid 2nd century
9. Tankard, fabric B, Enclosure 2 (AU41: context 1723), 2nd century
10. Flange rimmed dish, fabric OB, Pit 19 (AU61: context 1593), 2nd century

6.1.3 Medieval and later pottery

Pottery of later periods was found in only very small quantity and comprised eleven sherds of medieval (topsoil and a furrow AU65), and the same of post-medieval date (topsoil and furrow AU65), and seven modern sherds (topsoil). All were of commonly identified fabric types and domestic in form.

6.2 Ceramic building material

6.2.1 Roman

6.2.1.1 Introduction

The site produced a small assemblage of 26 fragments of Roman tile, weighing 3,183g.

Tile from each context was grouped according to fabric and where diagnostic, recorded by form. The presence of signature marks was also recorded and although no tiles were complete enough for length or width to be measured, thickness was recorded for all fragments.

A summary of the tile types and fabrics identified within the assemblage is presented in Table 5.

6.2.1.2 Fabrics

Four fabric types were recognised using a binocular microscope (x20).

The fabrics identified were categorised as below:

Fabric T1: Fine orange micaceous fabric

Fabric T2: Sandy brownish orange fabric with organic inclusions

Fabric T3: Hard brownish-orange fabric

Fabric T4: Sandy orange fabric

Fabric T1: Fine orange micaceous fabric

Colour: pale orange with buff streaks.
Soft with a powdery feel and fine fracture.
Mica: abundant, well-sorted, <0.6mm, flat, white.
Quartz: sparse, well-sorted <0.6mm, sub-angular, opaque.
Soft black inclusions: moderate, well-sorted, <1.0mm, sub-rounded, opaque.
Non-ferrous, soft red inclusions: frequent, ill-sorted, <4.0mm, sub-rounded.
White clay pellets: sparse, ill-sorted, <2.0mm, sub-angular.

Fabric T2: Sandy brownish-orange fabric with organic inclusions

Colour: brownish orange.
Soft with a coarse feel and fine fracture.
Mica: abundant, ill-sorted, <0.6mm, flat, white.
Black organic inclusions: moderate, ill-sorted, lenticular, <2.0mm
Quartz: moderate, ill-sorted, sub-rounded, <2.0mm, opaque and glassy
White clay pellets: rare, ill-sorted, sub-angular, <1.0mm

Fabric T3: Hard brownish-orange fabric

Colour: brownish orange.
Hard with a soapy feel and hackly fracture.
Mica: abundant, well-sorted, <0.6mm, flat, white.
Multi-coloured quartz: moderate, ill-sorted, sub-rounded, <1.0mm, opaque and glassy
Black inclusions: sparse, well-sorted, sub-angular, <0.6mm
?Granodiorite: rare, ill-sorted, sub-rounded, <2.0mm

Fabric 4: Sandy orange fabric

Colour: orange.
Soft with a coarse feel and hackly fracture.
Mica: frequent, well-sorted, <0.6mm, flat, white.
Multi-coloured quartz: frequent, ill-sorted, <1.0mm, sub-rounded, glassy and opaque.
Non-ferrous, soft red inclusions: occasional, ill-sorted <6.0mm, sub-angular
Soft white inclusions: occasional, ill-sorted, <3.0mm, sub-angular.
Black inclusions: sparse, well-sorted, <1.0mm, rounded.

6.2.1.3 Tile types

Owing to the abraded and fragmentary nature of much of the tile assemblage, the vast majority of fragments were undiagnostic. However, those which could be identified as of a specific type are discussed below.

Imbrex
A single fragment of imbrex was identified. It was residual and highly abraded being retrieved from the remains of a shallow furrow (context 4095). It was made of fabric T1 and unsanded.

Tegulae
Two fragments could definitely be identified as *tegula* by the presence of a flange and a further 4 fragments from two different tiles were recorded as possibly of this type due to the presence of signature marks. In addition, a significant number of the undiagnostic fragments are likely to also be from *tegulae*.

The first of the definite fragments was large in size and of fabric T4. It was lightly sanded on its base, although it is unclear whether this was deliberate or merely a result of where the tile was left to dry. The flange itself tapered sharply from one end of the fragment to the other. This tile was retrieved from the fill of one of the ditches defining Enclosure 2 (AU41: context 1646) and is thought to reflect deliberate disposal of rubbish within the ditch; associated pottery indicated a 2nd century date for the context.

The second tegula fragment consisted of just a small piece of flange in fabric T3. As with the example above, this piece was lightly sanded and also came from the fill of a field boundary ditch (AU63: context 1652) of Roman or possibly early medieval date.

The two tiles with signature marks, also presumed to be from tegulae were very similar in appearance, both being of the fabric T4, unsanded on the base and with identical thin double arcs incised into the upper surface. Both derived from fills of ditches associated with Enclosure 2 (AU41), one (context 1577) was found alongside pottery of 2nd century date, whilst the other (context 1667) could only be dated to the broad Roman period.

Undiagnostic
All remaining 20 fragments fell into this category with examples of fabrics T1, 2 and 3. Thickness varied between 16 and 37mm, therefore it would appear that a range of different tile types are represented within this group.

6.2.1.4 Significance

Although only a small assemblage, the presence of Roman tile on this site would suggest the presence of a building of some stature either on the site itself or in the near vicinity.

6.2.2 Medieval and post-medieval

In addition to the Roman building material, seventeen fragments of medieval and one of late post-medieval roof tile were also retrieved from top- and sub- soil contexts.

The medieval fragments were all of the same distinctive sandy fabric type and relatively thin ranging between 12 and 15mm thick. One example was diagnostic having both a round peg hole

and a nib, indicating a date of *c.*13th - 14th century with this form being almost universally superseded by purely nibbed forms during the 15th century (Drury 1981, 131).

6.3 Fired clay

An assemblage of 58 pieces of fired clay weighing 581g was mainly undiagnostic fragments, only two 'objects' being present. The first was made up of seven fragments which adjoined to form a 'ball' of fired clay (context 1000). Although very friable, the fabric of this object bore a strong resemblance to that of the early pottery found on the site and it has been tentatively identified as an un-pierced loomweight. Unfortunately due to the object being unstratified, there is no dating information to aid identification. The second object (context 1236) was equally baffling having a definite shape but being of no discernible form. However, the firing of the clay would suggest that it could be a metalworking mould.

6.4 Metalwork

6.4.1 Iron

A total of 13 iron objects were retrieved from the site. Two were obviously modern and came from top- and subsoil contexts (1000 and 4002) but the remainder were of Iron Age and Roman date. These included five nails from Pit 20 (AU62), Roundhouse 25 and a furrow (Excavation Area 3: context 6205); three hobnails from furrows (AU65 and from Excavation Area 3: context 6205); and three highly corroded, unidentified objects from Roundhouses 6 and 22 and from Enclosure 2 (AU41).

6.4.2 Copper alloy

Copper alloy retrieved from the site was highly corroded and fragmentary. The only recognisable piece was the spring from a brooch retrieved from the subsoil (context 4002). This was accompanied by numerous tiny fragments, presumably from the same object. Unfortunately these fragments were too small and undiagnostic to attribute them to a specific brooch type.

6.5 Glass

Two pieces of vessel glass of Roman date were identified within the assemblage. One was part of an angular ribbon handle with reeding in a pale greenish blue colour from Enclosure 2 (AU41) and dated to the 1st-2nd century AD (Price and Cottam 1998, fig.2.5). The other piece came from the base of a small, narrow vessel with a kick, which was pale green in colour from a furrow (AU65).

6.6 Slag

Just two fragments of ironworking slag were retrieved from the site (AU38 and context 4190).

6.7 Clay pipe

Four stem fragments of post-medieval date were recovered (topsoil 4001 and furrow AU65).

6.8 The querns, by Ruth Shaffrey

6.8.1 Analysis

Excavations at Rugby Gateway produced three quern fragments: two saddle querns and one rotary quern. The two saddle querns were recovered from a Middle Bronze Age posthole which formed part of Roundhouse 13 (AU13: context 1606) and from the fill of Pit 11, an Iron Age pit (AU69: 1268). Both examples have roughly shaped undersides with worn and slightly concave grinding surfaces and both are made from medium grained sandstones, the example from 1606 being sarsen and the quern from 1268 being a more quartzitic sandstone. The quern from 1268 has seen significant exposure to heat, being now very cracked.

A third quern was found in the fill of one of the ditches defining the early Roman dated Enclosure 2 (AU41: 1660). This is a fragment of thin rotary quern with distinctive grooves radiating out from a projecting hopper. These grooves continue down the edges. The quern is made from a not very distinctive medium grained sandstone – it could be Millstone Grit, Old Red Sandstone (ORS) or another less well known sandstone, but it would require a thin section to determine which. It is also of an uncommon form with a projecting hopper. Curwen considered projecting hopper querns to be late Roman; however, his type had a rectangular perforation not seen on this quern. Other examples recorded by the author also lack the rectangular hopper, and these do not appear to date to any specific period with examples of both Roman and medieval date. They are, however, uncommon - the author's database of 1100 rotary querns from central and southern England contains only 18 examples of projecting hopper querns. Four of these are from sites of relatively close geographical proximity to Rugby – one from Chesterton Roman camp , one from Bubbenhall (Shaffrey 2006) and two from the M6 Toll road, sites 15 (Langley Mill) and 29 (Shenstone; Shaffrey 2008, 273 and 319). The quern, whilst distinctive because of its form, is also unusual because of the decorative grooving on its upper surface. It seems likely to have been a quern belonging to someone of relatively high status, or which was bestowed as a gift.

6.8.2 Catalogue of worked stone

Saddle quern. Middle section with smooth grinding surface worn slightly concave along its length. It is heavily heat affected (shattered with lots of cracks). The base is rounded and largely natural although some pecking indicates that shaping took place. Measures 190 wide x >130 long x 75 thick. Sarsen. Weighs 2506g. Roundhouse 13, posthole (AU14: context 1606). Middle Bronze Age.

Saddle quern. Approximately half a saddle quern, with one end missing. The grinding surface is pecked and slightly concave across its width. The underside has had some rough shaping. Measures 175 wide x >190 long x 83mm thick. Medium grained quartzitic sandstone. Pit 11 (AU69: 1268). Early-Mid Iron Age

Upper rotary quern. Fragment with pecked but worn grinding surface with some rotational wear and slightly concave, straight vertical edges with vertical ridges and a roughly flat top with projecting ridge around the hopper. The upper surface is decorated with crude ridges radiating out towards the circumference. Measures 400mm diameter x 13-36mm thick. Possibly Old Red Sandstone, medium grained moderately sorted, well cemented with some feldspar and frequent rock fragments. SF 205. Enclosure 2 (AU41: context 1660). Early Roman, 1st-early 2nd century.

6.9 Flint, by Robin Jackson

A total of 57 flint items were recovered. Thirty-five of these had been worked with twenty-two fragments of unmodified gravel flint also recovered.

A significant component of the worked material (16 items) was recovered from topsoil and subsoil during machining and of the stratified material all was recovered from Iron Age (17 items) or Roman contexts (2 items).

The majority of the worked material comprised either waste flakes or pieces of irregular debitage, although one core fragment was present (subsoil 1002) from which a number of small bladelets had clearly been removed. This had been re-used as a hammer stone. A D-shaped scraper (subsoil 1002), a thumbnail scraper (Segmented Ditch AU38: context 1250) and a bladelet with a notch (Segmented Ditch AU38: context 1244) were the only retouched pieces present.

Apart from the bladelet core and blade recovered from the subsoil (1002) which are liable to be of Mesolithic or Early Neolithic date and the two scrapers which are liable to be of Late Neolithic or Beaker date, the material contained no diagnostic dateable traits. It is, however, noted that that the debitage appeared to reflect the result of testing of nodules of locally available, but rather poor quality, gravel flint for suitability for working. Although this may be residual material from earlier prehistoric activity in the area, it has been suggested that opportunistic use of flint may have

persisted into the later prehistoric period including the Iron Age (Butler 2005, 189-90) and be characterised by rather squat flakes and irregular debitage produced by inexpert knappers flaking locally available flint nodules to create a sharp edged tool which would be discarded immediately after use. In the light of this, the rather irregular character of the debitage recovered and the association of much of the stratified material with contexts of Iron Age date may be no co-incidence and reflect somewhat expedient creation and use of flint tools.

7 Environmental analysis, by Alan Clapham and Elizabeth Pearson

Twenty-four samples were processed and assessed for charred plant remains. Charred plant remains were present in small numbers and therefore their use for determining past agricultural activities at the site was limited. The presence of a small number of wheat and barley grains may suggest some agricultural activity but the lack of cereal chaff and weeds precludes whether crop processing occurred on the site.

The presence of charcoal on the site indicates that the local woodlands were exploited for fuel wood with indications from the small sample analysed that a wider range of species was exploited in the Middle Bronze Age period than the Iron Age when oak was almost exclusively used.

Animal bone was very limited in quantity and poorly preserved, with that present (mostly of cow teeth) only indicating that some animal economy was practised.

The environmental evidence recovered is summarised in Tables 6-11.

7.1 The charred plant remains, by Alan Clapham

Of the 24 samples assessed from this site (Tables 6 and 7), only four contexts (Table 8) produced charred plant remains, which were present in low quantities. All of the charred plant remains were found in contexts from Excavation Area 1, no charred plant remains in the form of seeds were recovered from Excavation Area 2. The preservation of the charred plant remains was sufficiently good to allow positive identifications. The majority of the samples contained modern roots and a few modern weed seeds, which are possibly related to the modern use of the site.

Cereal remains were recorded from ditches associated with the Roman dated enclosure (Enclosure 2; AU41: contexts 1517 and 1520) and from the primary fill of a Roman pit (Pit 21: context 1711). The cereal remains consisted of a few grains of wheat (*Triticum* sp) which was present in all contexts. Hulled barley (*Hordeum vulgare*) grains were recorded from the pit fill (1711) along with 10 fragments of indeterminate cereal grains. No other crop remains were recorded from the assessed samples.

Other charred plant remains recorded from the samples included rye grass (Lolium sp) and onion couch tubers (*Arrhenatherum elatius* var *bulbosum*) from the primary fill of a Roman pit (Pit 6: context 1501). An onion couch tuber was also recorded from one of the ditches defining the Roman enclosure (Enclosure 2; AU41: context 1711) along with a single mallow (*Malva* sp) seed, a fragment of a brome grass (*Bromus* sp), possible lesser celandine (*Ficaria verna*) tubers and a sedge nutlet.

A brome grass fragment was also recorded from a Middle Bronze Age posthole (Post Alignment 2; AU28: context 1542).

7.2 The wood charcoal, by Elizabeth Pearson

Fragments of charcoal in varying quantities were noted from most samples at assessment (Tables 6 and 7). The preservation of the charcoal was variable with the size of the charcoal fragments found within the flots generally being too small to allow for an accurate identification but larger pieces being present within many of the residues. The majority of the charcoal was of oak (*Quercus* sp) but non-oak charcoal was noted in some of the samples, including the three selected for analysis (Table 9).

The charcoal identified at analysis is presented in Table 10. Preservation of charcoal was variable. In contexts 1605 and 4184 preservation was poor as the majority of fragments were warped and the cell structure affected by mineralisation. As a result only a small number of non-oak fragments were identifiable.

Charcoal from a Middle Bronze Age posthole (AU13: 1605) forming part of Roundhouse 13 was dominated by *Prunus* sp (sloe/damson/cherry/plum), some only tentatively identified, associated with occasional fragments of oak (*Quercus robur/patraea*), alder (*Alnus* sp) or alder/hazel (*Alnus/Corylus* sp).

Only a small number of fragments from an Early to Middle Iron Age pit (AU74: Pit 25, context 4184) could be identified on account of the poor preservation and these included possible oak and ash (*Fraxinus excelsior*). Many poorly preserved fragments could only be identified as a ring-porous species, but mostly likely either oak or ash. The material within this pit may result from the destruction of a roundhouse and thus the charcoal species recorded may represent those used in this structure. The composition of material recovered from another Iron Age pit (AU 57: Pit 15, context 1473) was dominated by oak with occasional fragments of guelder rose (*Viburnam opulus*), possible pear/apple/whitebeam/hawthorn (cf Maloideae sp) and birch (*Betula* sp). This pit is interpreted as a waste pit for debris from a hearth associated with Roundhouse 12.

7.3 Animal remains, by Alan Clapham

The animal remains in the form of bones were found sporadically across the site. A total weight of 896 grams of bone was recorded which suggests that bone was poorly represented over the whole site. The majority of bones were hand-picked during excavation with very few large bone fragments being recorded from the processed environmental samples (Table 11). The majority of the animal remains consisted of bovine teeth and tooth fragments.

Burnt bone was also recorded from a number of contexts (Table 11), but in the majority of cases, identification to a specific animal was not possible due to the very fragmented nature of the material.

Possible small mammal was recorded from an Iron Age Segmented Ditch (AU38: context 1214) and possible bird bone from one of the roundhouse gullies (Roundhouse 5; AU5: context 1270) and from an Iron Age pit (Pit 28; AU78: context 1822).

7.4 Discussion, by Alan Clapham and Elizabeth Pearson

The lack of charred plant remains from this site makes it difficult to assess the importance of the site in terms of local economics. The presence of some cereal grains (both wheat and barley) in Roman dated contexts may suggest an arable element within the settlement's agricultural economy but there was a lack of evidence for crop processing, i.e. cereal chaff and weed seeds. The presence of onion couch and lesser celandine tubers may suggest the use of turf or they may represent abandoned agricultural land.

The results of limited charcoal analysis undertaken appear to show a change in use of timber fuel resources from the Middle Bronze Age to Iron Age period which may reflect changes in woodland or scrub environment, collection strategies, or the activities for which the wood fuel was used. More detailed interpretation is difficult for these small assemblages. Ash is common on base-rich soils (Taylor 1981) and is likely to reflect the underlying bedrock and drift geology which includes some limestone within the Lias geology and the overlying till.

The scarcity and poor preservation of bone on the site rendered the material inappropriate for analysis beyond that undertaken at assessment. The presence of large mammal bone, with some of it being burnt does suggest that there was some food preparation on site. The presence of large numbers of bovine teeth may suggest that this was the main meat animal. The greater proportion of teeth in the contexts could be explained by taphonomic processes as they are more resistant to decay than other bone elements.

8 Discussion

8.1 The prehistoric settlement

8.1.1 Settlement character and regional parallels

The earliest significant activity on the plateau can be dated to the Early/Middle Bronze Age (16th - 17th BC) when three post-built roundhouses were constructed together with a fence and scatter of other features. The recovery of a small quantity of pottery and a quern fragment support interpretation as an unenclosed domestic settlement, probably representing the homestead of a single family. The relatively limited artefactual and palaeoenvironmental evidence recovered did not allow specific functions to be assigned to any of the structures, although it is likely that at least one of the roundhouses would have provided living quarters. A small sub-rectangular enclosure to the south-east appears to be of comparable date and probably represents a stock corral within an otherwise unenclosed landscape.

Evidence for Middle Bronze Age settlements remains elusive in Warwickshire and the wider region (Palmer 2001; Hurst 2011), a problem exacerbated by the fact that many key sites remain unpublished. Of these the most important, in terms of comparisons for Rugby Gateway, are those from excavations at the deserted medieval settlement of Coton and at Coton Park, both lying within 1km of the excavated area at Rugby Gateway (Figure 1). At both of these Bronze Age pit groups have been recorded, one group containing thick walled shreds from two, plain urns of probable Middle Bronze Age date and a small copper alloy knife (Northamptonshire Archaeology 1999) and the other group, a significant Deverel-Rimbury assemblage (unpublished report cited in Palmer 2001). Slightly further afield a small group of at least three roundhouses of Late Bronze Age date and associated features have been recorded at Ling Hall Quarry, Church Lawford, nr Rugby (Figure 6; Archaeology Warwickshire nd; Palmer 2002) while elsewhere in Warwickshire, traces of three possible post-built roundhouses of Bronze Age date have been postulated at Barford (Figure 6; Hingley 1996). Excavations in advance of quarrying at Meriden to the west have produced evidence for Early Bronze Age activity in the form of an undated post-built roundhouse that is understood to have been associated with a pit group (Figure 6; Stevens 2005), although here the ceramics from the pit were indicative of a somewhat earlier period of activity (1800-1600 cal BC; Woodward 2005) than that represented at Rugby Gateway. Evidence from all of these sites suggests that settlements in the region were typically small-scale and unenclosed and based around single family units or small kin groups, a pattern consistent with the limited evidence from much of the rest of the Midlands (Willis 2006; Fitzpatrick 2008; Hurst 2011).

The main period of prehistoric occupation at Rugby Gateway fell between the 7/8th century BC and the end of the Iron Age (43 AD). Occupation consisted of numerous roundhouses along with associated posthole structures and pits, a major landscape boundary and a stock enclosure. Twenty-three roundhouses were identified and analysis has enabled four settlement zones to be defined dispersed across a wide part of the plateau, including a cluster of roundhouses, two rather linear groupings and a number of isolated examples. From the wide distribution and numbers of Iron Age roundhouses present, it seems unlikely that these were contemporaneous. A paucity of stratigraphic relationships, poorly defined regional ceramic chronologies and lack of precision in radiocarbon dating at this period have limited detailed phasing of the settlement; however, a broad chronological model for the development of the settlement has been advanced using the limited evidence available.

The earliest Iron Age activity lay in the southern part of the excavated area where radiocarbon dating and ceramic evidence suggested a rather linear grouping of roundhouses was of late Early to early Middle Iron Age date. A single substantial east to west aligned ditch was also recorded here following the same alignment as the roundhouse grouping and this appears to be of broadly similar date to the roundhouses. This ditch crossed the entire width of the excavated area and clearly represents an important landscape boundary. It truncated two of the roundhouse ring-gullies but with the exception of two isolated pits some way to the south this effectively demarcated the southern extents of the Iron Age settlement. On the west side of the excavated area, dating

suggested another rather linear grouping of roundhouses dated to both the Early/Middle Iron Age and Middle/Late Iron Age periods. Here, a rectilinear enclosure with east and west facing entrances was also identified, the west facing entrance having been blocked at some stage. Whilst several of the roundhouses appear to have been enclosed within the enclosure, this may be co-incidental and the enclosure is thought more likely to have had an agricultural function, perhaps representing a stock enclosure construction and use of which post-dated some of the roundhouses and pre-dated others. A further poorly dated cluster of roundhouses lay in the north-east part of the excavated while the central area included three widely dispersed and isolated examples.

The form of the Iron Age settlement at Rugby Gateway is comparable to a number of 'aggregated' open settlement sites of this period which have been identified across a region encompassing Leicestershire, Northamptonshire and Warwickshire (see Thomas 2011 for discussion). These are characterised by the large extents of the occupied areas and the presence of numerous ring-gully defined roundhouses which often feature evidence for several phases of rebuilding. These roundhouses occur in clusters and linear groupings as well as in isolation and where grouped may reflect the homes and ancillary structures of extended family or kin groups. Another characteristic is that these were essentially open settlements, although at some components of the settlements are set within enclosures and at most major landscape boundaries are also present in the form of both ditches and pit alignments.

This group of sites includes that at Coton Park only 1km to the south of the Rugby Gateway settlement. Although this site has not been published, the assessment report identifies several distinct settlement components including a major east-west landscape boundary and an associated north-south ditch demarcating the east limit of the settlement (Northamptonshire Archaeology 1999). The associated occupation pattern at Coton Park, although set within this system of landscape boundaries, was like that at Rugby Gateway essentially one of open settlement areas. Thirty-two ring-ditches largely denoting roundhouses were recorded in total and many of these had been recut on more than one occasion, providing a denser and more complex pattern of occupation than the more extensive but less intensive spread presented by the settlement zones at Rugby Gateway. As at Rugby Gateway the roundhouses were mostly arranged in clusters or rows but also included scattered examples, although at Coton Park the latter were set between small 'empty' enclosures. Coton Park also featured a 'focal' roundhouse which lay within its own enclosure and formed part of a row of roundhouses. Another group of roundhouses was set around a small enclosure and this area was associated with substantial assemblages of debris from bronze, antler and bone working (Northamptonshire Archaeology 1999). Preliminary dating of the sizable pottery assemblage recovered suggests a predominantly Middle Iron Age date for the settlement but elements were present indicative of an earlier Middle Iron Age origin. This suggests that despite their relative proximity, occupation of the two settlements largely overlapped. Lastly, it should also be noted that Iron Age activity was also recorded under the medieval settlement at Coton, just to the west of the Rugby Gateway site and, although few details are known of this excavation, clearly indicates a further spread of occupation or other activity areas in the immediate vicinity.

Comparable very extensive 'aggregated' settlement areas have also been investigated just over the border in Northamptonshire at Crick (Figure 6). Here open settlement areas were present alongside lesser enclosed settlement components. These settlement areas respected major landscape boundaries with occupation extending across an area of *c.* 12ha to either side of a river. At the peak of occupation at Crick as many as nineteen separate household clusters can be defined, each potentially representing an individual family or kin group (Chapman 1995; Willis 2006; Woodward and Hughes 2007). Similar mixtures of unenclosed and enclosed settlement components associated with landscape boundaries have been recorded at Ling Hall Quarry, Church Lawford (Archaeology Warwickshire nd; Palmer 2002), Wood Farm Quarry, Bubbenhall (C Jones 2004), Park Farm, Barford (Hingley 1996) and Warwick University (Hill 2002), Warwickshire; later Iron Age enclosed phases of settlement at Ling Hall and Wood Farm having succeeded earlier phases of unenclosed settlement associated with landscape boundaries. Unfortunately

none of these key local sites have been published beyond interim reports meaning that that detailed comparisons cannot be made, while although during the excavations along the M6 Toll a mixture of enclosed and unenclosed or open settlement areas were identified, only relatively restricted areas of settlements were excavated within the confines of the road corridor and thus overall settlement morphology remains unclear (Fitzpatrick 2008). Slightly further afield, sites at Beaumont Leys and Humberstone/Elms Farm in Leicestershire are also characterised by the presence of numerous roundhouses, household clusters and the presence of long-lived major boundary features (Thomas 2011). As with the sites previously discussed, although the settlement areas are essentially open, there was a strong relationship between the landscape boundaries and the extents of settlement areas.

More broadly, although Iron Age occupation areas at Rugby Gateway appear to have remained unenclosed, the construction of a landscape boundary and stock enclosure during this period and the subsequent establishment of an enclosed Romano-British settlement reflect a gradual shift from an unenclosed landscape to an increasingly defined and bounded landscape, a pattern which typically characterises the transition from the Late Bronze Age through to the Middle/Late Iron Age periods in the Midlands and further afield (Hingley 1996; Thomas 1997).

8.1.2 Structural remains and pits

Roundhouses Two contrasting forms of roundhouse were identified at Rugby Gateway, an earlier post-built form associated with a phase of Middle Bronze Age occupation (15 to 16th centuries BC) and a later form evidenced through the presence of ring-gullies which was in use during the Iron Age. Ring-gullies were not noted in conjunction with the Bronze Age roundhouses while very few post or stakeholes were recorded in association with the Iron Age examples. The earlier post-built roundhouses were smaller in diameter than the later ones, the two best surviving examples being 5.75 and 6.50m in diameter, although it is possible that the posts represented the support ring for a roof structure rather than the other wall line and thus the internal dimensions of the buildings could have been larger. Conversely the larger ring-gullies of the later roundhouses which averaged between 10.00 and 12.00m in diameter are understood to represent ring-gullies to drain water from the roofs and therefore would be greater than the diameter of the walls which the roofs would have overhung.

More widely across the region and beyond, roundhouses defined by post circles appear to have been the predominant Bronze Age and earlier Iron Age type, with those defined by ring-gullies becoming increasingly common during the course of the Iron Age (Moore 2006). These ring-gullies are usually interpreted as representing either wall slots or as at Rugby eavesdrips. Internal post structures are commonly encountered within these ring-gullies although none were defined at Rugby. Here, the survival of earlier post-built roundhouses and of other forms of Iron Age structures suggests that the paucity of structural features (postholes) within the Iron Age eavesdrip gullies is unlikely to result from truncation. This therefore more probably reflects construction traditions which have minimal below ground impact and therefore result in a limited archaeological footprint. A strong possibility is that a form of mass (turf or cob) wall construction was employed as has been suggested for Iron Age settlements elsewhere in the region (Palmer 2001; Thomas 2011) as well as further afield as in the Thames Valley (Allen *et al* 1984).

Where entrances were defined these were primarily east or south-east facing as has been typically observed for prehistoric roundhouses in region and beyond (Oswald 1997; Clay 2001). The lack of evidence for hearths or floors associated with the roundhouses probably reflects the high levels of truncation at the site. Few pits were identified within the roundhouses and it appears for the most part that these were external to the buildings. No convincing evidence for porches was recorded but in a couple of instances a deepening or possible post pit was present in the eavesdrip terminals and this could potentially reflect the location of porch posts.

In the absence of internal architecture and with artefact assemblages largely limited to domestic pottery little can be deduced about the use of these buildings, although it is safe to assume that a mixture of domestic and ancillary functions (workshops, stores, etc) were present. Due to variable

levels of survival, the quantity of domestic pottery from any individual roundhouse is not a reliable indicator of a domestic function. However, relatively large assemblages of pottery recovered from those roundhouses where a substantial proportion of the ring-gully circuit survived is likely to reflect a domestic function the case of Roundhouses 4, 5, 6 and 7 within Settlement Zone 2, Roundhouse 14 within Zone 3, Roundhouse 15 in Zone 4 and from Roundhouses 21, 22 and 25 in Zone 5. In contrast, despite relatively good survival, Roundhouses 1 and 3 in Zone 2, 16 in Zone 4 and 23 in Zone 5 all produced only limited quantities of material and thus may have fulfilled non-domestic functions.

Detailed analysis of the distribution of material culture within the ring-ditches was not undertaken, however, there was no strong evidence for the deliberate placement of pottery or other artefacts such as quernstones within gully terminals as has been suggested elsewhere in Warwickshire (Palmer 2001) as well as much more widely during the Iron Age (Hill 1995). It may therefore be that this material mostly derived from domestic middens accumulated close to the roundhouses as has been suggested at Beaumont Leys and Humberstone (Thomas 2011) and even in the couple of cases at Rugby where slightly greater quantities of material were recovered from entrance terminals (Roundhouses 3, 6, 14 and 23) this may simply reflect the location of such middens immediately outside the entrances to the buildings.

Two- and Four-post structures A range of two- and four-post structures were present and these were associated with the prehistoric occupation areas. Such structures are commonly encountered on later prehistoric settlement sites, two-post structures usually being identified as representing drying racks or upright looms whilst four-poster structures are usually interpreted as raised granaries or fodder stands.

No evident rows or areas of the settlement were particularly associated with the four-post structures as is the case at some sites and it seems likely that they related to individual houses or families rather than having a communal function.

Pits Pits were not common on this site and those that were identified were largely isolated, there being none of the pit clusters present on many Iron Age settlement sites. Few of the pits contained evidence for waste disposal and none yielded quantities of charred cereals indicative of below ground storage of grain. This may partially reflect ground conditions in that the site was very poorly drained and thus the potential for rubbish disposal or storage in pits might have been restricted. Despite this, Pit 15 in Settlement Zone 3 appears to have excavated for disposal of rakings out from a hearth. Several pits that contained comparatively large assemblages also warrant consideration. Pits 22, 24 and 25 all truncated the ring-gully of Roundhouse 22 and all contained substantial quantities of pottery, daub and burnt material. These may represent clearance following the accidental destruction of the roundhouse through fire or alternatively the building may have been deliberately burnt at the end of its useful 'life' and these may therefore represent deliberately placed closure deposits. It may be no co-incidence that these were all associated with Settlement Zone 5, the earliest of the Iron Age occupation areas. Pit 27 truncating the ring-gully surrounding Roundhouse 16 in Settlement Zone 4 may have fulfilled a similar 'closure' function. Lastly, Pit 12 the isolated pit lying to the east of Settlement Zone 2 was also notable for the presence of a charcoal rich fill containing a relatively large assemblage of pottery representing substantial chunks of at least two vessels. Again the possibility that this represents a placed deposit with some significance should not be excluded.

A more functional interpretation can be suggested for those pits which included large quantities of fire cracked stone and charcoal. In these instances the natural deposits through which they had been dug showed evidence of scorching (Settlement Zone 2: Pits 1, 10, 13 and 14; Settlement Zone 4: Pit 28; and Pits 4 and 5) indicating that fires had been set within the pits or at least that the stones had been hot when placed into the pits. These features were mostly located at some distance from the roundhouses and in two instances a considerable distance from them and this probably reflects a desire to reduce the risk within the areas of domestic occupation. They seem most likely to have functioned as cooking pits or earth ovens with the absence of food waste within

their fills probably reflecting poor preservation of bone at the site, however, other interpretations where hot stone technology might have been employed (such heating of water to provide steam in craft/production related activities) should not be entirely excluded.

8.1.3 Boundaries and enclosures

Boundaries Boundary features included post alignments (fences) and ditches or gullies as well as the substantial Landscape boundary. For the most part these boundaries would have functioned to sub-divide areas of domestic settlement and/or separate domestic zones from those where animals were kept or different activities undertaken. A particularly clear example was the fence (AU28: Post Alignment 2) demarcating the south-eastern limits of the Middle Bronze Age settlement zone, whilst the north-south ditch (AU67) to the east of Settlement Zone 4 probably defined the extents of that occupation area. Other boundaries such as the fence within Settlement Zone 1 (AU27: Post Alignment 2) can be less well understood but are liable to have functioned in a comparable manner. Such boundaries would have been important within an essentially unenclosed landscape.

Much more substantial and distinct from these lesser boundaries was the boundary ditch (AU39) which delineated the southern extents of Iron Age occupation on the plateau and which extended beyond the site limits to both the east and west. This landscape boundary post-dated construction and disuse of at least some of the roundhouses, however, the arrangement of the roundhouses across this area respected the alignment of the later boundary ditch, indicating that this was already a 'reality' in the landscape. A similar 'non-visible boundary' can also be suggested for the western extents of settlement as defined by the north-south row of roundhouses which defined Settlement Zone 2.

Within this part of Warwickshire and across much of the region to the north and east, such extensive 'landscape' boundaries are relatively commonplace both in the form of major ditches as at Rugby Gateway and in the form of substantial pit alignments as at Ling Hall (Palmer 2001; Willis 2006). These are not known to date before the Late Bronze Age in Warwickshire, but on several sites it has been demonstrated that when such boundaries have been investigated they can form part of an organised system of later prehistoric estates and land-units (Palmer 2001). The 'landscape' boundary at Coton Park was also east-west aligned (Chapman 1998) reflecting that of the one at Rugby Gateway, indicating a more extensive pattern of landscape division in this area. As discussed above such 'landscape' boundaries have been observed as forming part of the wider pattern of occupation at a number of comparable (aggregated but essentially unenclosed settlement) sites extending across north Warwickshire and north into Leicestershire and beyond (Thomas 2011, 152) and clearly landscape boundaries formed an important component of the later prehistoric landscape in the region. Typically in Warwickshire these boundaries seem to have pre-dated the establishment of the settlements with which they have been associated (Palmer 2001), however, at Rugby at least some of the roundhouses in the southern part of the site pre-date the boundary. Despite this, the spread of roundhouses does extend further south than the subsequent ditch suggesting that this boundary was already a recognised part of the landscape prior to being formalised through the excavation of a ditch.

Enclosure Two enclosures were identified, one small sub-rectilinear enclosure of Early/Middle Bronze Age date (Enclosure 1007) and a large rectilinear enclosure dated to the Middle Iron Age (Enclosure 1).

The earlier enclosure was small and set apart from an apparently contemporary area of occupation to the north-east (Settlement Zone 1). There was little to indicate what function this might have had but, in the absence of internal features or evident domestic associations, it seems most likely that this was a small stock corral within an otherwise unenclosed landscape.

The other enclosure (Enclosure 2) was of Iron Age date and was much more substantial. This had been reworked along its western side but in its original form had been provided with an entrance on both the west and east sides and an internal division with a gate to enable access between the northern and southern areas. With an overall enclosed area of about 0.425ha it sits towards the

high end of the typical size range for enclosures in the region where the commonest size range is from 0.2-0.3ha but where many enclosures are up to 0.6ha (Hingley 1989; Moore 2006). As discussed earlier the most likely function for the enclosure is a stock enclosure, the provision of two entrances and an internal division with a gate through it probably supporting management of stock movement and sub-division of herds. Unfortunately poor preservation of palaeoenvironmental remains at the site means that supporting evidence for this interpretation is not available from animal bone assemblages or other environmental indicators, though it is noted that soils locally are clay rich and generally more favourable for pastoral use.

8.1.4 Iron Age society, economy and identity

Extensive and open 'aggregated' settlements, such as that at Rugby Gateway and the neighbouring (possibly associated) settlement at Coton Park, provide a strong contrast to the numerous small ditched farmstead enclosures which are the most widely recognised type site for the Middle and Late Iron Age periods in central Britain. The latter are usually interpreted as representing the farmsteads of single extended families and typically include small numbers of roundhouses and other structures. Although the range and form of structures is similar at both site types, clearly different forms of social grouping are represented. Despite the difficulties that exist in establishing reliable chronologies for the development and phasing of occupied areas within aggregated settlements, and thus understanding to what degree areas were simultaneously occupied, the extents and complexity of 'aggregated' settlements strongly indicates that they housed larger communities than the single family units understood to have occupied ditched enclosures. As has been discussed elsewhere (Thomas 2011), there would have been considerable potential benefits from forming such a community, including shared access to a greater range of resources and specialist skills. Although the evidence from Rugby Gateway did not allow identification of any specialist craft or production areas, the site at Coton Park only 1km away produced evidence for a bronze and bone working area focussed around a small enclosure and other less archaeologically 'visible' specialist functions may have been undertaken at the Rugby Gateway settlement.

It is difficult to draw any conclusions about the agricultural/subsistence economy of the Iron Age settlement due to the very poor preservation of both bone and charred plant remains. At the adjacent Coton Park site, bone preservation was good (81.80kg recovered) and assemblages were dominated by the major domestic species commonly recorded at Iron Age sites though they also included deer. Otherwise, as at Rugby Gateway, environmental evidence from Coton Park was very limited with wood charcoal but only very small quantities of carbonised plant remains recovered (Northamptonshire Archaeology 1999). This poor survival of palaeoenvironmental remains reflects a wider pattern of poor organic survival across much of Warwickshire and the region and results from generally acidic soil conditions which limit preservation (Palmer 2001). Understanding of the economic basis of these sites therefore remains problematic and as at Rugby Gateway relies on the few tentative observations which can be made from the limited evidence available. Quernstones and four-post granary structures provide indirect evidence for consumption and storage of cereals but in the absence of charred plant remains it could not be determined what cereals or other crops were being exploited and to what extent these were cultivated by the inhabitants and to what extent they were imported. Similarly whilst the sub-divided enclosure has been interpreted as a stock holding and management feature, and thus suggests a pastoral component to the agricultural basis of the settlement, the paucity of the animal bone assemblage prevents any meaningful conclusions being drawn about the range of species being exploited and their relative importance. It is perhaps however worth noting that at comparable sites where the surviving evidence allows more refined analysis that there appears to be a strong bias towards cattle herding and the possibility has been raised that this distinct form of settlement may have developed as a reflection of the lifestyle and expression of social identity of pastoral farmers (Thomas 2011).

In terms of the wider economic links that the settlement may have enjoyed, the cultural affinities of the Iron Age pottery assemblage probably provide the best indicators. These are characterised by

the presence of Scored ware, a ceramic tradition which finds parallels at other sites in this part of Warwickshire as well as numerous sites to the east and north, extending across Leicestershire, Northamptonshire and into Staffordshire (Knight 2002). Perhaps notably this distribution largely coincides with that of the open aggregated sites which provide the closest parallels to the Rugby sites. The distribution and date range of such sites and Scored wares is still emerging and of note at Rugby Gateway are the early dates associated with some elements of the Scored ware assemblage. These include a date of 752-409 cal BC (SUERC-47328) secured from a sooted residue on the internal surface of a Scored ware vessel which is supported by a second date of 765-416 cal BC (SUERC-47327) secured on charcoal from the same context. A second Scored ware sherd with external sooting provided a slightly later, though still comparatively early, date of 519-385 cal BC (SUERC-47322). Scored ware is usually dated no earlier than the 5/4th centuries cal BC (Knight 2002) but at Rugby Gateway these dates provide a strong indication that in this area at least the Scored ware tradition extends back at least to this date and possibly slightly earlier.

Lastly some consideration should be given to the wider social identity and affiliations that the occupants of the settlement at Rugby Gateway may have had. The site lies close to the boundary between three culturally distinct groupings in the region which appear to largely co-inicide with the 'tribal' areas traditionally associated with the *Dubonni*, the *Catuvellauni* and the *Corieltauvi*. Mapping of these regional groupings relies principally on the distribution of Iron Age coinage issued by Late Pre-Roman Iron Age tribal leaders and of distinctive elements of Middle and Late Iron Age material culture (Cunliffe 1999). At Rugby Gateway, ceramic affinities and comparable settlement types lie to the east and north into areas which are traditionally associated with the *Corieltauvi* and consequently it seems likely that, although located on the periphery of this 'tribal area', that the occupants of Rugby Gateway had economic and social affiliations in this direction rather than with the *Dobunni* to the west or the *Catuvellani* to the south and east.

8.2 The Romano-British settlement

There may have been a hiatus in occupation between the Iron Age and Roman periods but if so it was probably of a short duration, although dating evidence for the relatively limited Late Iron Age activity present was not sufficiently well established to be certain. What is evident is that Roman occupation was focussed in and immediately around a rectilinear enclosure (Enclosure 2). This was established during the early part of this period and occupation appears to have been short-lived, having not extended beyond the second half of the 2nd century AD.

The enclosure was laid out upon a comparable east-west axis to the earlier, Iron Age landscape boundary and enclosure (Enclosure 1) but unlike the north-south boundaries within the Iron Age landscape, the other axis of the Roman enclosure was aligned north-east to south-west. This realignment may result from a deliberate reworking of the landscape or may support the idea that a hiatus in occupation occurred.

Evidence for occupation within the enclosure was restricted probably due in part to truncation but also perhaps in reflection of the relatively short period of occupation. Only one building was identified, the evidence for which indicated that this had been a rectangular timber-framed building constructed on beams set into shallow foundation trenches. An internal dividing wall separated this into two bays and a porch may have been located at the south-east corner of the building. The 1st-2nd rectilinear timber building identified is unusual in Warwickshire or indeed the wider region at this date since certainly within rural settlements the tradition of roundhouse construction remained commonplace until at least the 2nd century and indeed at some sites beyond that period (Booth 2001; Taylor 2006). In contrast rectilinear buildings are rare until the late 2nd or into the 3rd century, although the building bears some comparison in form with a rectilinear figure-of-eight shaped structure excavated at Ling Hall Quarry (Archaeology Warwickshire nd). At the latter site the structure has been tentatively suggested as a local shrine. The absence of other buildings within the enclosure at Rugby may reflect that the timber-framed building was the only one present, however, this seems unlikely. It may therefore be the case that other less substantial timber-

framed buildings were present and have been entirely truncated or that mass walled structures occupied areas defined and drained by some of the internal divisions and lesser gullies.

Apart from the unusual building, the enclosure included a scatter of rubbish pits and had been internally sub-divided into a number of areas interlinked with entrances/gates. The internal sub-divisions probably represent areas used for a range of functions such as occupation, production, paddocks, corrals and cultivation plots. Unfortunately artefactual and palaeoenvironmental evidence did not support detailed consideration of the different functions each area might have supported. It is however noted that the southern part of the enclosure was associated with the timber building, most of the pits and also the main concentrations of material cultural and this probably indicates that this was the domestic/productive focus of the settlement whilst the northern areas were more probably associated with cultivation and/or stock holding.

Regionally, a hiatus between Iron Age and Roman occupation phases or re-configuration has been noted at other sites in Warwickshire at this time but clear sequences and sufficiently refined dating within this transitional period are not commonly available. As a result it remains difficult to make any generalisations about the nature or impact of the transition from Iron Age to Roman (Booth 2001). One problem with defining the transition is that in morphological terms the most common site type across the Midlands from the Middle Iron Age and into the Roman period is the enclosed rural settlement, rectilinear forms such as that at Rugby Gateway being the most commonly encountered (Booth 2001; Esmonde Cleary 2011). In this respect the apparent change at Rugby Gateway from unenclosed to enclosed settlement may be of note and support the suggestion that there was a hiatus. At the other end of the settlement chronology, abandonment by the end of the 2nd century AD is consistent with a regional pattern of settlement dislocation in the 2nd century AD as observed in the Avon, Severn and Upper Thames valleys (Henig and Booth 2000; Booth 2001). Beyond this date at Rugby Gateway there was no evidence for occupation or anything other than agricultural activity with the establishment of a later Roman field system laid out on comparable axes to the enclosure.

More generally and at a national scale, the site is located close to a boundary which can be defined running diagonally across the region. To the south and east of this is an area (Cotswold/Avon) which is most comparable to the wider culture-province of south-eastern England (Esmonde Cleary 2011). The latter is characterised by high levels of Roman-style cultural markers such as the development of a settlement pattern which includes towns, villas and many roadside nucleated settlements alongside other more indigenous rural settlement forms, and these are all characterised by the use of a wide repertoire of 'romanised' material culture. This contrasts with areas to the north and west which are characterised by the continuing development of indigenous Iron Age settlement traditions and by comparatively low levels of occurrence, use and adoption of Roman-style settlement forms and cultural material (Taylor 2006; Esmonde Cleary 2011). This regional divide in turn reflects elements of the later Iron Age cultural 'tribal' divisions discussed above and may reflect a longer term pattern of contrast in cultures between the populations of a pastorally dominated socio-economic zone to the north and west and those to the south and east where arable cultivation may have played a far greater role. Discussing the Roman sites investigated along the nearby route of the M6 Toll, Booth (2008) contrasted the relative poverty of material culture recovered with that from sites only some 35km to the south and east in the Avon Valley. This was not only reflected in relatively modest-sized assemblages of pottery but also the very low numbers of coins, metal objects and glass present and these were suggested as a reflection of cultural and social factors (rather than economic ones) indicative of cultural affinities with the populations to the north and west. Unfortunately data from areas to the west and especially to the north is not extensive and few synthetic studies have been undertaken so at present it is hard to place sites like Rugby Gateway within the wider social and cultural landscape of the Roman period in the Midlands. Although at Rugby only a modest quantity and range of Roman pottery was recovered, quantities of tile were present and may indicate the presence of a higher status building than might have been anticipated on the basis of the pottery and other finds. This might relate to the rectilinear timber-framed building, itself a culturally 'romanised' type of

building rarely encountered on rural settlements at this time in the region. Further a quern of a type usually associated with higher status settlements was also recovered. Despite these somewhat anomalous finds, overall the form of the settlement and material assemblages recovered do suggest that the Roman settlement, like its Iron Age predecessor, can be tentatively suggested to have more in common with sites to the north than to the south since only modest levels of material culture were recovered. This may in turn reflect an extension of the pre-Roman pattern of cultural affinities seen in the earlier occupation and assemblages at Rugby.

8.3 Post-Roman to modern

Post-Roman activity at the site provided little of interest being restricted to agricultural features, including medieval ridge and furrow systems and later land-drains and field boundaries which probably date from the enclosure period onwards.

9 Acknowledgements

Worcestershire Archaeology would like to thank the following for their kind assistance in the successful conclusion of this project:

From VHE Construction: Tim Collins (Managing Quantity Surveyor) whose involvement and support throughout the project ensured its successful implementation and delivery; Steve Lilly (Construction Director) and Mark Jones (Site Foreman) along with the site staff and plant operators who worked closely with the archaeological team to overcome exceptionally wet and difficult ground conditions and enable the main stage fieldwork to be successfully completed.

From Winvic Construction: Ian Goodhead, Robert Burnett and the plant operator who enabled the second stage of fieldwork.

From Warwickshire County Council: Anna Stocks (Planning Archaeologist) and Caroline Rann (Assistant Planning Archaeologist) provided much constructive input and support throughout the project.

10 Project personnel

The Project Manager responsible for the quality of the project and production of the Updated Project Design was Robin Jackson.

The main stage of fieldwork was led for the most part by Jonathan Webster with Andrew Mann, Fiona Keith-Lucas deputising. Laurence Jones led the second stage fieldwork.

Fieldwork was undertaken with great stoicism through terrible weather and in very difficult ground conditions by a site team comprising from Worcestershire Archaeology: Graham Arnold, Lara Bishop, Richard Bradley, Tim Cornah, Christopher Gibbs, Peter Lovett, Michael Nicholson and Simon Sworn; and from Archaeology Warwickshire: Bryn Gethin, Rob Jones and Kevin Wright.

Analysis was undertaken by Jonathan Webster and Robin Jackson with the assistance of Laura Griffin (finds), Alan Clapham and Elizabeth Pearson (environment) and Carolyn Hunt and Laura Templeton (Illustration).

Stuart Palmer from Archaeology Warwickshire supported design of the fieldwork and provided much useful advice and information.

11 Bibliography

Archaeology Warwickshire, undated *Ling Hall Quarry, Church Lawford 1989-2007. Excavation of a prehistoric and Romano-British landscape*, available at http://www.warwickshire.gov.uk/web/corporate/pages.nsf/Links/42F31DEC8C968A4B80256DD400515547 (accessed 11 November 2011)

Alexander, M, 2008 *Archaeological Resource Assessment of the Aggregates Producing Areas of Warwickshire and Solihull*, Warwickshire County Council and English Heritage

(EH/ALSF PNUM 4681), http://archaeologydataservice.ac.uk/archives/view/warksagg_eh_2008/index.cfm

Allen, T, Miles, D and Palmer, S, 1984 Iron Age buildings in the Upper Thames region, in Cunliffe, B, and Miles, D, (eds) 1984 *Aspects of the Iron Age in Central Southern England,* OUCA Monograph, **2**, Oxford University Committee for Archaeology

Beamish, M, 1998 A Middle Iron Age site at Wanlip, Leicestershire, *Transactions of the Leicestershire Archaeological and Historical Society,* **72**, 1-91

Benn, D I, and Evans, J A, 1998 *Glaciers and Glaciation,* London, Arnold Publishing

BGS (British Geological Survey) 1994 *Geological Survey of England and Wales, Coventry, Solid and Drift,* Sheet **169**

Booth, P, 2001 *Warwickshire in the Roman period, West Midlands Regional Research Framework for Archaeology. Seminar 3: The Roman period* http://www.birmingham.ac.uk/schools/historycultures/departments/caha/research/arch-research/wmrrfa/seminar3.aspx (accessed 13 November 2013)

Booth, P, 2008 Romano-British period discussion, in Powell *et al*, 516-35

Brown, D H, 2007 *Archaeological archives. A guide to best practice in creation, compilation transfer and curation,* Institute for Archaeologists.

Butler, C, 2005 *Prehistoric Flintwork*, Stroud: The History Press

CA (Cotswold Archaeology), 2010 *Rugby Urban Extension, Warwickshire; Archaeological Fieldwalking Survey for WSP Environment and Energy Ltd,* Cotswold Archaeology, Unpublished report, **10052**

CA (Cotswold Archaeology), 2011 *Rugby Gateway (Phase 3), Rugby, Warwickshire, Archaeological Evaluation,* Cotswold Archaeology, Unpublished report, **11163**

Cappers, T R J, Bekker, R M, and Jans, J E A, 2006 *Digitale Zadenatlas van Nederland: Digital seed atlas of the Netherlands*, Groningen Archaeological Studies, **4**, Barkhuis Publishing and Groningen University Library: Groningen

Chapman, A, 1995 Crick, *South Midlands Archaeology*, **25**, 37-9

Chapman, A, 1998 Coton Park, Rugby, *West Midlands Archaeology, **41**, 95-7*

Clay, P 1992 An Iron Age Farmstead at Grove Farm, Enderby, Leicestershire, *Transactions of the Leicestershire Archaeological and Historical Society,* **66**, 1-82

Clay, P, 2001 Leicestershire and Rutland in the first millennium BC, *Transactions of the Leicestershire Archaeological and Historical Socieity*, **75**, 1-19

Connor, A, and Buckley, R, 1999 *Roman and Medieval Occupation in Causeway Lane, Leicester. Excavations 1980 and 1991*, Leicester Arch. Monographs No.**5**

Cooper, N J, (ed), 2006 *The archaeology of the East Midlands. An archaeological resource assessment and research agenda*, Leicester Archaeological monograph, **13**, Leicester: University of Leicester and English Heritage

Cracknell, S, and Mahany, C, 1994 *Roman Alcester: Southern Extramural Area. 1964-1966 Excavations. Part 2: Finds and Discussion*, CBA Research Report, **97**

Cunliffe, B, 1999 *Iron Age Communities in Britain*, (4th edn), London

Drury, P J 1981 The production of brick and tile in medieval England in D W Crossley (ed) *Medieval Industry*, CBA Res Rep **40,** *126-142*

DCLG 2012 *National Planning Policy Framework*, Department for Communities and Local Government

DCLG/DCMS/EH 2010 *PPS5 Planning for the historic environment: historic environment planning practice guide*, Department for Communities and Local Government/Department for Culture, Media and Sport/English Heritage

Esmonde Cleary, S, 2011 The Romano-British period: an assessment, in (ed) S Watt 2011, 127-48

Fitzpatrick, A P, 2008 Prehistoric discussion, in Powell *et al*, 503-15

Gibson, A, 2002 *Prehistoric Pottery in Britain and Ireland*, Tempus

Harding, D W, 1975 The Pottery, in D A Jackson, *An Iron Age site at Tywe, Northamptonshire,* Northamptonshire Archaeology, **10**, 31-93

Hather, J G, 2000 *The identification of the northern European hardwoods: a guide for archaeologists and conservators*, Archetype Publications Ltd

Henig, M, and Booth, P, 2000 *Roman Oxfordshire*, Alan Sutton, Stroud

Hill, J D, 1995 *Ritual and rubbish in the Iron Age of Wessex*, British Archaeological Reports (Brit Ser), **242**, Oxford: BAR

Hill, S, 2002 Interim Report: Archaeological Work at Westwood Running Track, University of Warwick, Coventry. SP 2690 7660 (June-August 2002), University of Warwick. Centre for Lifelong Learning, unpublished typescript

Hillson, S, 1992 Mammal bone and teeth: an introductory g*uide to methods of identification*, The Institute of Archaeology, University College London

Hingley, R, 1989 Iron Age settlement and society in central and southern Warwickshire: directions for future research, in A Gibson (ed), *Midlands Prehistory: some recent and current researches into the prehistory of central England*, BAR (British Series), **204**, Oxford, 122-56

Hingley, R, 1996 Prehistoric Warwickshire: a review of the evidence, *Transactions of the Birmingham and Warwickshire Archaeological Society*, **100**, 1-24

Hurst, D, 2011 Middle Bronze Age to Iron Age: a research assessment overview and agenda, in (ed) S Watt 2011, 101-26

Hurst, J D, and Rees, H, 1992 Pottery fabrics; a multi-period series for the county of Hereford and Worcester, in S Woodiwiss (ed), *Iron Age and Roman salt production and the medieval town of Droitwich*, CBA Research Report, **81**, 200-209

IfA, 2008a *Standard and guidance for archaeological field evaluation,* Institute for Archaeologists

IfA, 2008b *Standard and guidance for archaeological excavation,* Institute for Archaeologists

IfA, 2008c *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*, Institute for Archaeologists

IfA, 2008d *Code of approved practice for the regulation of contractual arrangements in field archaeology*, Institute for Archaeologists

Jackson, R, and Dalwood, H, 2007 *Archaeology and aggregates in Worcestershire: a resource assessment and research agenda*, Historic Environment and Archaeology Service, Worcestershire County Council and Cotswold Archaeology, HEAS internal report, **1477**, available at http://archaeologydataservice.ac.uk/archives/view/worcsagg_eh_2007/ (accessed 13 November 2013)

Jones, C, 2004 Bubbenhall, Wood farm Quarry, *West Midlands Archaeology*, **47**, 66

Kenyon, K M, 1948 *Excavations at the Jewry Wall Site, Leicester*, Society of Antiquaries

Knight, D, 2002 A Regional Ceramic Sequence: Pottery of the First Millenuim BC between the Humber and the Nene, in A Woodward and J D Hill 2002 (eds), 119-142

Marsden, P, 1998 The prehistoric pottery, in M, Beamish, *A Middle Iron Age site at Wanlip, Leicestershire*, Transactions of the Leicestershire Archaeological and Historical Society, **72**, 44-62

Martin, T S, and Wallace, C R (eds), 1997 A research design for the study of Roman pottery in the East Midlands and East Anglia, in S Willis 1997 (ed), 35-50

Maull, A, 2001 *Excavation of the Deserted Medieval Village of Coton at Coton Park, Rugby, Warwickshire 1998*, Unpublished archive report, Northamptonshire Archaeology

Moore, T, 2006 *Iron Age societies in the Severn-Cotswolds. Developing narratives of social and landscape change*, BAR (British Series), **421**, Oxford: Archaeopress

Morton, R and Holbrook, N, 2007 *Later pre-Roman Iron Age to sub-Roman period,* cited in Jackson and Dalwood 2007

Northamptonshire Archaeology, 1999 *Excavation of An Iron Age Settlement at Coton Park, Rugby, Warwickshire. Assessment Report and Updated Research Design*, Northants County Council, Northants Archaeology

Oswald, A, 1997 A doorway on the past: practical and mystical concerns in the orientation of roundhouse doorways, in A Gwilt and C Haselgrove (eds), *Reconstructing Iron Age Societies*, Oxford: Oxbow monograph, **71**, 87-95

Palmer, S C, 2001 *An archaeological resource assessment for the Middle Bronze Age to Iron Age in Warwickshire and Solihull*. *West Midlands Regional Research Framework for Archaeology. Seminar 2,* available at http://www.birmingham.ac.uk/schools/historycultures/departments/caha/research/arch-research/wmrrfa/seminar2.aspx (accessed 13 November 2013)

Palmer, S C, 2002 *Ling Hall Quarry, Church Lawford, Warwickshire*, Archaeological Excavations 1989-99, Warwickshire Museum Report, **0210**

PCRG, 1997 *The Study of Later Prehistoric Pottery: General Policies and Guidelines for Analysis and Publication*, Occasional Papers, **1** and **2** (Revised 1997)

Powell, A B, Booth, P, Fitzpatrick, A P, and Crockett, A D, 2008 *The Archaeology of the M6 Toll 2000-2003*, Oxford Wessex Archaeology monograph, **2**

Pre-Construct Geophysics, 2010 *Rugby Urban Extension, Warwickshire: Geophysical Survey*, Pre-Construct, Unpublished Report

Prehistoric Pottery Research Group, 2010 *The study of later prehistoric pottery: general policies and guidelines for analysis and publication*, Occasional Papers **1** and **2**, **3** edition

Price, J, and Cottam, S, 1998 *Romano-British Glass Vessels: A handbook*, Practical Handbook in Archaeology **14**

Schmid, E, 1972 *Atlas of animal bones for prehistorians, archaeologists and Quaternary geologists*, Amsterdam, London & New York: Elsevier

Seager Smith, R, and Davies, S M, 1993 Black Burnished Ware type series. The Roman pottery from excavations at Greyhound Yard, Dorchester, Dorset. Offprinted extracts from P J Woodward, S M Davies, and A H Graham, 1993, *Excavations at the Old Methodist Chapel and Greyhound Yard, Dorchester 1981-1984*, Dorset Natural History Archaeol Soc Monograph Series, **12**

Shaffrey, R, 2006 *Grinding and Milling. Romano-British Rotary Querns made from Old Red Sandstone*, BAR British Series

Shaffrey, R, 2008 Worked Stone in A B Powell, P Booth, A P Fitzpatrick and A D Crockett, *The Archaeology of the M6 Toll 2000-2003*, Oxford Wessex Archaeology Monograph **2**, 72

Stace, C, 2010 *New flora of the British Isles*, Cambridge University Press, (3rd edition)

Stevens, C, 2005 Bronze Age and Iron Age settlement at Meriden Quarry, Solihull, *Transactions of the Birmingham and Warwickshire Archaeological Society*, **109**, 1-26

Taylor, J, 2006 The Roman period, in N J Cooper (ed), 137-60

Taylor, M, 1981 *Wood in archaeology*, Shire Archaeology Series, C I Thomas 7 Sons, (Haverfordwest) Ltd

Thomas, R, 1997 Land, kinship relations and the rise of enclosed settlement in first millennium BC Britain, *Oxford Journal of Archaeology*, **16**, 211-17

Thomas, J, 2011 *Two Iron Age 'Aggregated' settlements in the environs of Leicester. Excavations at Beaumont Leys and Humberstone*, Leicester Archaeology monograph, **19**

WA, 2007 *Manual of Service Practice: archiving*, Historic Environment and Archaeology Service, Worcestershire County Council, internal report, **1582**

WA, 2012a Written Scheme of Investigation for Archaeological Works at Rugby Gateway, Warwickshire (P3844), Worcestershire Archive and Archaeology Service, unpublished document

WA, 2012b *Manual of Service Practice: recording manual*, Worcestershire Archaeology internal report, **1842**

WA, 2013 Written Scheme of Investigation for Archaeological Works at Rugby Gateway, Warwickshire. Hedgeline removal within Archaeological Phase 5, Worcestershire Archive and Archaeology Service, unpublished document

Watt, S, (ed) 2011 *The archaeology of the West Midlands. A framework for research*, Oxford, Oxbow Books

Webster, J, and Jackson, R, 2013 Assessment and Updated Project design: Excavations at Rugby Gateway, Rugby, Warwickshire 2012, Worcestershire Archive and Archaeology Service, unpublished document

Willis, S, 2012 The Iron Age and Roman pottery, in R, Jackson, *Ariconium, Herefordshire. An Iron Age and Romano-British 'Small Town'*, Oxbow Books, 41-109

Willis, S, 2006 The Later Bronze Age and Iron Age, in N J Cooper (ed), 89-136

Woodward, A, 2005 The early Bronze Age pottery, in Stevens 2005, 16-18

Woodward, A, and Hughes, G, 2007 Deposits and doorways: patterns within the Iron Age settlement at Crick Covert Farm, Northamptonshire, in Haselgrove, C, and Pope, R, (eds), 2007 *The Earlier Iron Age in Britain and the near Continent*, Oxford: Oxbow Books

WSP (WSP Environment UK), 2009 *Archaeological Desk-Based Assessment of Rugby Urban Extension*, WSP, Unpublished report

Tables

Activity Unit: Context number	Laboratory code	Material	13C/12C	Radiocarbon Age BP	OxCal calibrated age (95.4% probability or 2 sigma)
Segmented ditch AU38: 1258	SUERC-47321 (GU30913)	Charcoal: *Corylus avellana*-type	-29.9‰	2250 ± 26	391 cal BC – 209 cal BC
Segmented ditch AU38: 1258	SUERC-47322 (GU30914)	Pot residue	-25.0 ‰ assumed	2360 ± 29	519 cal BC – 385 cal BC
Roundhouse 10 AU10: 1451	SUERC-47323 (GU30915)	Charcoal: Maloideae	-27.3‰	3300 ± 29	1664 cal BC – 1501 cal BC
Roundhouse 10 AU10: 1451	GU30916	Pot residue	Failed: insufficient carbon		
Roundhouse 22 AU22: 4209	SUERC-47327 (GU30917)	Charcoal: Maloideae	-26.9‰	2474 ± 29	765 cal BC – 416 cal BC
Roundhouse 22 AU22: 4209	SUERC-47328 (GU30918)	Pot residue	-28.6‰	2447 ± 27	752 cal BC – 409 cal BC

Table 1: Radiocarbon dating

Material type	Total	Weight (g)
Bronze Age pottery	12	92
Iron Age pottery	1180	2186
Roman pottery	661	4978
Medieval pottery	11	51
Post-medieval pottery	11	162
Modern pottery	7	46
Roman tile	26	3183
Medieval tile	17	1455
Post-medieval tile	1	54
Fired clay	58	581
Iron	13	364
Copper alloy	3 (+frags)	11
Glass	2	24
Slag	2	69
Clay pipe	4	14
Stone	3	836
Flint	35	-

Table 2: Quantification of the artefact assemblage

Fabric no.	Total	Weight (g)
1	187	885
2	20	145
3	126	461
4	600	3574
5	150	1211
6	53	273
7	44	193
8	1	7
Misc.	1	1
Totals	*1178*	*6736*

Table 3: Quantification of the Bronze Age and Iron Age pottery by fabric

Fabric no.	Common fabric name	Total	Weight (g)
A	-	30	396
B	-	54	310
C	-	212	1566
D	-	24	242
E	-	119	627
F	-	39	285
G	-	42	311
H	-	16	203
I	-	6	76
OA	-	12	49
OB	-	5	78
OC	-	6	29
OD	-	4	14
OE	-	18	51
OF	-	1	2
22	Black-burnished ware 1	21	215
28	Nene Valley colour-coated ware	1	4
32	Mancetter-Hartshill mortaria	3	289
41	Mancetter-Hartshill whiteware	5	37
43	Samian ware	29	174
98	Miscellaneous Roman wares	15	22
Totals		*662*	*4980*

Table 4: Quantification of the Roman pottery by fabric

Fabric	Tile type	Total	Weight (g)
T1	Imbrex	1	35
T1	Tile	3	141
T2	Tile	6	939
T3	Tegula	1	78
T3	Tile	10	1064
T4	?Tegula	4	466
T4	Tegula	1	460
Totals		*26*	*3183*

Table 5: Quantification of the Roman tile by fabric

Activity Unit	Period	Context	Sample	large mammal	small mammal	charcoal	charred plant	Comment
5	4	1270	1035	occ				occ pot, fired clay, heat cracked stone
7	4	1346	1040			occ		occ fired clay
11	4	1483	1060	occ (burnt)		occ		occ fired clay fragments
13	4	1605	1071	occ (burnt)		abun		mod heat cracked stone
28	4	1542	1067	occ (burnt)		occ		occ fired clay fragments
38	4	1214	1028	occ (burnt)	occ	mod		occ pot, fired clay
38	4	1248	1034	occ (burnt)		occ		occ fired clay
40	4	1016	1002			occ		occ pot
40	4	1017	1003	occ (burnt)		mod		occ stone, fired clay
57	4	1472	1056	occ (burnt)		mod		abun fired clay,
57	4	1473	1057	mod (some burnt)		abun		mod fire clay, occ heat cracked stone, occ pot
78	4	1822	1091		occ (burnt)	abun		occ fired clay, pot
41	5	1517	1068			occ	occ	occ fired clay, mod pot
48	5	1501	1062	occ (burnt)		occ		occ pot sherds
70	5	1711	1086			mod	occ	occ pot
-	-	1412	1043	occ (burnt)		mod		

Table 6: Excavation Area 1. Summary of biological remains and artefacts recorded in assessed samples (by Period)

Activity Unit	Period	Context	Sample	large mammal	charcoal	Comment
22	4	4214	2029	occ	abun	mod fired clay, occ heat cracked stone
23	4	4126	2010		occ	
23	4	4139	2011	occ	mod	occ fired clay
39	4	4061	2006		occ	occ fired clay
46	4	4007	2002	occ (burnt)	abun	occ fired clay, pot, heat cracked stone
47	4	4004	2000	occ (burnt)	abun	occ fired clay, pot, heat cracked stone
74	4	4184	2020	occ	abun	occ fired clay and heat cracked stone
74	4	4184	2024	occ	abun	abun fired clay, occ burnt flint

Table 7: Excavation Area 2. Summary of biological remains and artefacts recorded in assessed samples

Latin name	Common name	Habitat	AU48: 1501	AU41: 1517	AU28: 1542	AU70: 1711
Charred						
Triticum sp grain	wheat	F		4		7
Hordeum vulgare grain (hulled)	barley	F				3
Hordeum vulgare grain fragments (hulled)	barley	F				1
Cereal sp indet grain (fragment)	cereal	F				10
Ficarica verna tubers	lesser celandine	CDE				9
Malva sp	mallow	AB		1		
Carex sp (2-sided) nutlets	sedge	CDE				1
Lolium sp grain	darnel	AB	1			
Arrhenatherum elatius var *bulbosum* tubers	onion couch	AB	2	1		
Bromus sp grain fragment	brome grass	AF		1	1	

Table 8: Charred plant remains from selected samples

Habitat
A= cultivated ground
B= disturbed ground
C= woodlands, hedgerows, scrub etc
D = grasslands, meadows and heathland
E = aquatic/wet habitats
F = cultivar

Key to Table 8

Activity Unit	Context	Sample	Feature	Fill of	Period	Sample volume (L)
13	1605	1071	Roundhouse 13 Posthole	1607	3	10
57	1473	1057	Pit 15	1474	4	20
74	4184	2020	Pit 25	4185	4	20

Table 9: Samples selected for full analysis of charcoal

Latin name	Family	Common name	Habitat	Context		
				1473	1605	4184
cf *Prunus* sp	Rosaceae	sloe/damson/plum/cherry etc	CF		4	
cf Maloideae sp	Rosaceae	pear/apple/whitebeam/hawthorn	CF	1		
Quercus robur/petraea wood	Fagaceae	oak	C	63	3	
cf *Quercus robur/petraea* wood	Fagaceae	oak	C			1
Betula sp	Betulaceae	silver birch	C	1		
Alnus glutinosa (wood)	Betulaceae	alder	CE		1	
Alnus/Corylus sp	Betulaceae	alder/hazel	C		3	
Fraxinus excelsior (wood/charcoal)	Oleaceae	ash	C			1
cf *Fraxinus excelsior*	Oleaceae	ash	C			2
Viburnum opulus	Caprifoliaceae	guelder rose	C			

Table 10: Charcoal from selected samples

Habitat
A= cultivated ground
B= disturbed ground
C= woodlands, hedgerows, scrub etc
D = grasslands, meadows and heathland
E = aquatic/wet habitats
F = cultivar

Context	Weight (g)	Comments
1006	77	12 fragments of large mammal long bone, not identifiable
1012	9	3 fragments of large mammal bone and 2 fragments of bovine tooth
1017	13	Fragments of bovine tooth, small fragment of burn bone, not identifiable
1031	150	A mixture of large mammal , some burnt bone fragments
1071	<1	1 fragment of burnt bone
1082	6	1 fragment of bovine tooth
1094	2	2 fragments of burnt bone, not identifiable
1112	1	Small fragment of burnt bone
1181	14	3 fragments of bovine tooth
1214	274	large number of bovine teeth and fragments, 1 small mammal bone
1244	5	6 fragments of large mammal burnt bone
1248	<1	5 small fragments of burnt bone, not identifiable
1258	10	3 fragments of burnt bone, not identifiable
1268	6	2 fragments of large mammal bone, not identifiable
1270	16	Numerous small fragments of large mammal long bone, 2 burnt not identifiable
1270	<1	1 possible bird bone
1276	12	5 fragments of bovine tooth and large mammal tarsal
1382	1	3 fragments of bovine tooth
1290	6	3 fragments of large mammal bone, burnt, not identifiable
1293	8	Fragments of bovine teeth
1376	12	2 fragments of large mammal long bone, not identifiable
1412	<1	Small fragments of burnt bone
1472	<1	3 small fragments of burnt bone, not identifiable
1473	46	10+ fragments of bovine tooth
1483	<1	3 small fragments of burnt bone, not identifiable
1501	<1	4 very small fragments of burnt bone
1540	8	7 fragments of large mammal bone, 3 fragments of burnt bone
1733	1	Fragment of burnt bone, not identifiable
1822	<1	Possible bird bone, not identifiable
1822	<1	Small fragment of bone, not identifiable
1840	3	4 fragments of bovine tooth
4000 (u/s)	73	2 pieces of large mammal long bone, 1 piece with drill hole at one end
4000 (u/s)	20	Fragment of large mammal long bone, not identifiable
4004	<1	10+ fragments of burnt bone, not identifiable
4007	<1	10+ small fragments of burnt large mammal long bone, not identifiable
4028	6	10+ small fragments of large mammal long bone, not identifiable
4036	52	1 fragment of a possible sheep scapula
4052	51	Very fragmented burnt bone, not identifiable
4184	2	10+ small fragments of burnt large mammal long bone, not identifiable
4214	1	<10 small fragments of large mammal bone, some burnt
Total wt (g)	**896**	

Table 11: Quantification and notes on the handpicked bone and the bone recovered from the assessed samples

Appendix 1: Radiocarbon dates

Scottish Universities Environmental Research Centre

Director: Professor R M Ellam

Rankine Avenue, Scottish Enterprise Technology Park,
East Kilbride, Glasgow G75 0QF, Scotland, UK
Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

01 August 2013

Laboratory Code	SUERC-47321 (GU30913)
Submitter	Nick Daffern Worcestershire Archaeology The Hive, Sawmill Walk The Butts, Worcester WR1 3PB
Site Reference	Rugby Gateway
Context Reference	1258
Sample Reference	P3844 / 1258 / 1031
Material	Charcoal : Corylus avellana-type
$\delta^{13}C$ relative to VPDB	-29.9 ‰
Radiocarbon Age BP	2250 ± 26

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

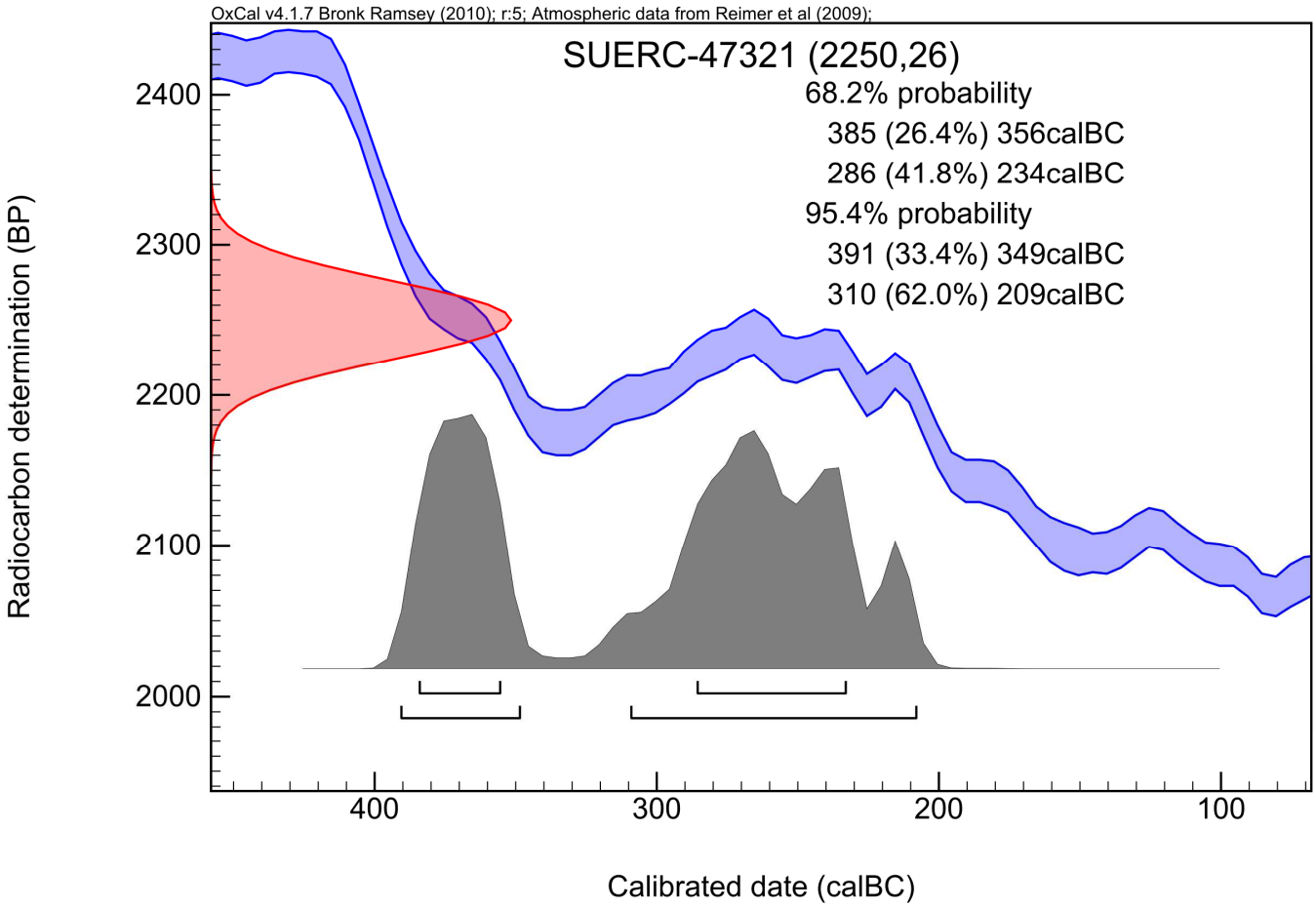
The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :- Date :-

Checked and signed off by :- Date :-

Calibration Plot



Scottish Universities Environmental Research Centre

Director: Professor R M Ellam

Rankine Avenue, Scottish Enterprise Technology Park,
East Kilbride, Glasgow G75 0QF, Scotland, UK
Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

01 August 2013

Laboratory Code	SUERC-47322 (GU30914)
Submitter	Nick Daffern Worcestershire Archaeology The Hive, Sawmill Walk The Butts, Worcester WR1 3PB
Site Reference	Rugby Gateway
Context Reference	1258
Sample Reference	P3844 / 1258 / POT
Material	Pot residue
$\delta^{13}C$ relative to VPDB	-25.0 ‰ assumed
Radiocarbon Age BP	2360 ± 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

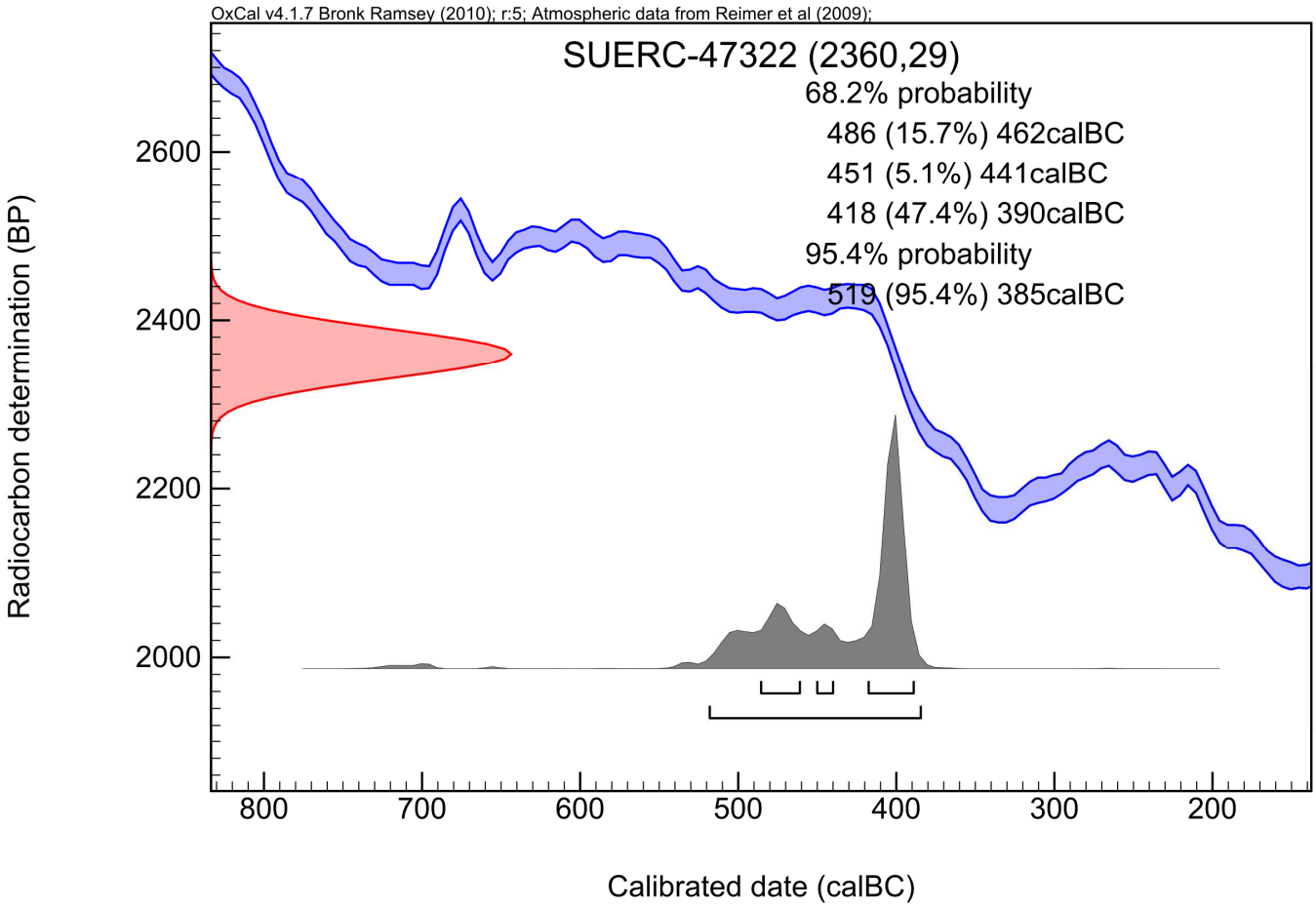
The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :- Date :-

Checked and signed off by :- Date :-

Calibration Plot



Scottish Universities Environmental Research Centre

Director: Professor R M Ellam

Rankine Avenue, Scottish Enterprise Technology Park,
East Kilbride, Glasgow G75 0QF, Scotland, UK
Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

01 August 2013

Laboratory Code	SUERC-47323 (GU30915)
Submitter	Nick Daffern Worcestershire Archaeology The Hive, Sawmill Walk The Butts, Worcester WR1 3PB
Site Reference	Rugby Gateway
Context Reference	1451
Sample Reference	P3844 / 1451 / 1053
Material	Charcoal : Maloideae
$\delta^{13}C$ relative to VPDB	-27.3 ‰
Radiocarbon Age BP	3300 ± 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

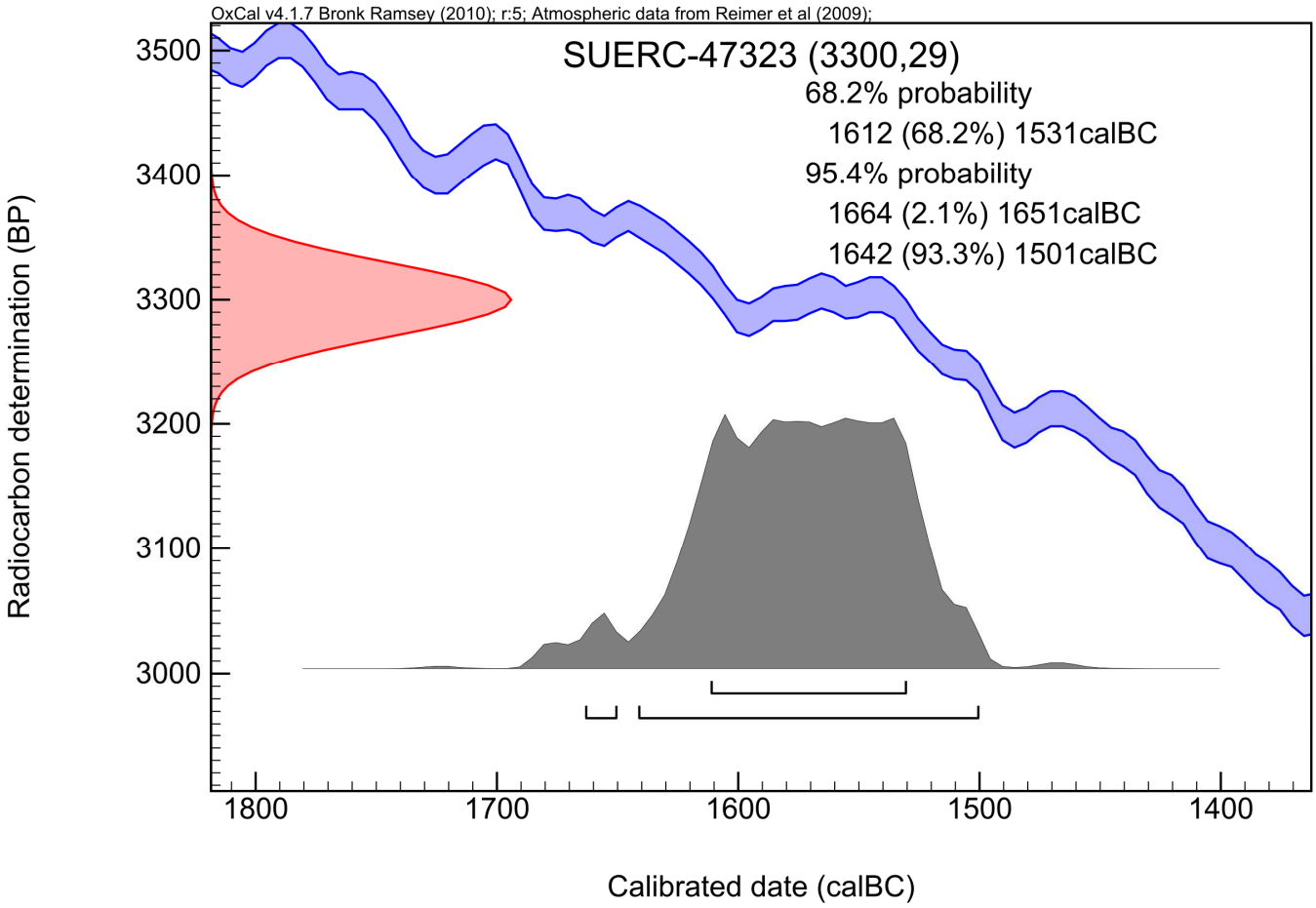
The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :- Date :-

Checked and signed off by :- Date :-

Calibration Plot



Scottish Universities Environmental Research Centre

Director: Professor R M Ellam

Rankine Avenue, Scottish Enterprise Technology Park,
East Kilbride, Glasgow G75 0QF, Scotland, UK
Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

01 August 2013

Laboratory Code	GU30916
Submitter	Nick Daffern Worcestershire Archaeology The Hive, Sawmill Walk The Butts, Worcester WR1 3PB
Site Reference	Rugby Gateway
Context Reference	1451
Sample Reference	P3844 / 1451 / POT
Material	Pot residue
Result	Failed: insufficient carbon.

N.B. Any questions directed to the Radiocarbon Laboratory should quote the GU coding given above.

The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Checked and signed off by :- Date :-

Scottish Universities Environmental Research Centre

Director: Professor R M Ellam

Rankine Avenue, Scottish Enterprise Technology Park,
East Kilbride, Glasgow G75 0QF, Scotland, UK
Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

01 August 2013

Laboratory Code	SUERC-47327 (GU30917)
Submitter	Nick Daffern Worcestershire Archaeology The Hive, Sawmill Walk The Butts, Worcester WR1 3PB
Site Reference	Rugby Gateway
Context Reference	4209
Sample Reference	P3844 / 4209 / 2026
Material	Charcoal : Maloideae
$\delta^{13}C$ relative to VPDB	-26.9 ‰
Radiocarbon Age BP	2474 ± 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

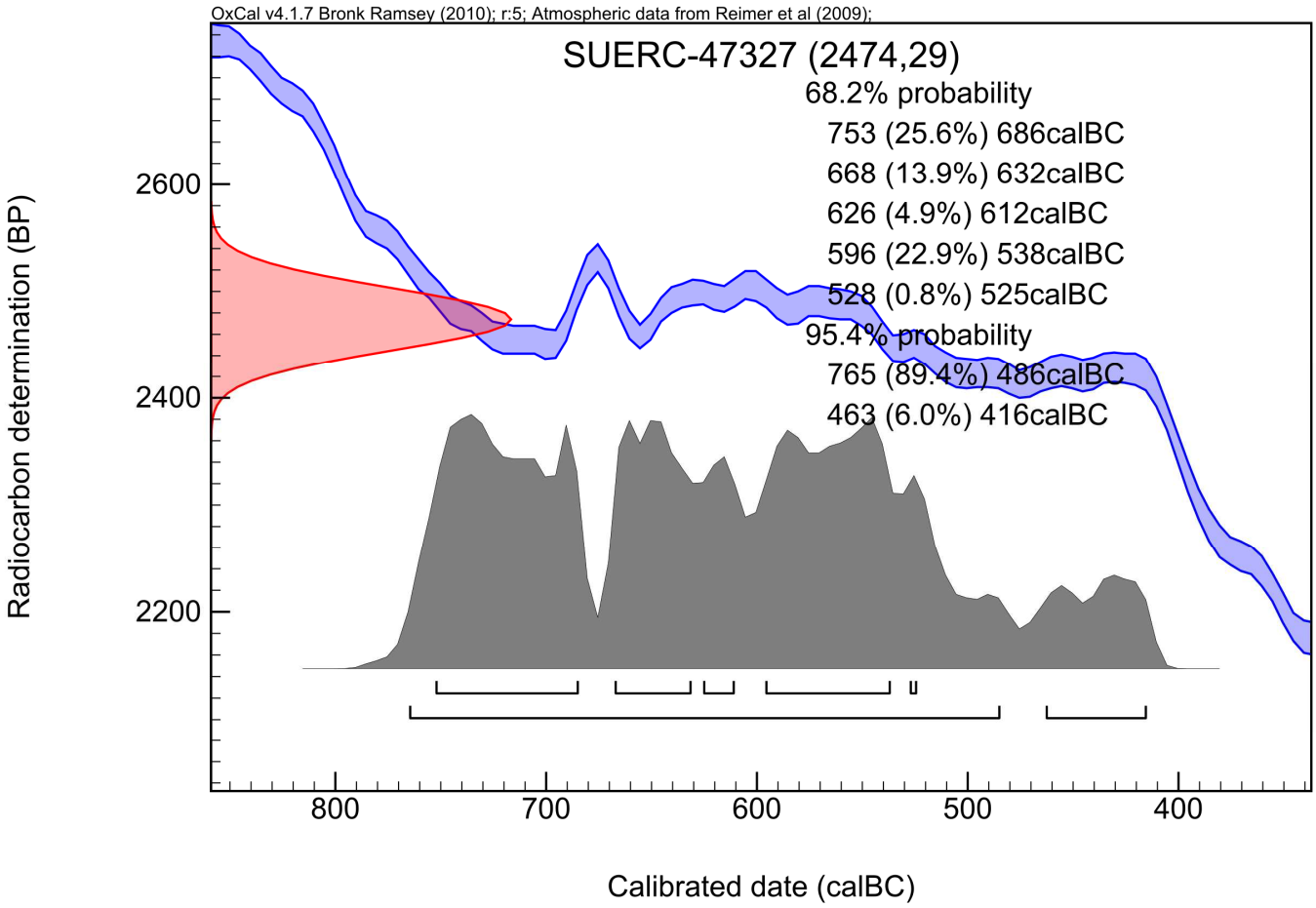
The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :- Date :-

Checked and signed off by :- Date :-

Calibration Plot



Scottish Universities Environmental Research Centre

Director: Professor R M Ellam

Rankine Avenue, Scottish Enterprise Technology Park,
East Kilbride, Glasgow G75 0QF, Scotland, UK
Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

01 August 2013

Laboratory Code	SUERC-47328 (GU30918)
Submitter	Nick Daffern Worcestershire Archaeology The Hive, Sawmill Walk The Butts, Worcester WR1 3PB
Site Reference	Rugby Gateway
Context Reference	4209
Sample Reference	P3844 / 4209 / POT
Material	Pot residue
$\delta^{13}C$ relative to VPDB	-28.6 ‰
Radiocarbon Age BP	2447 ± 27

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

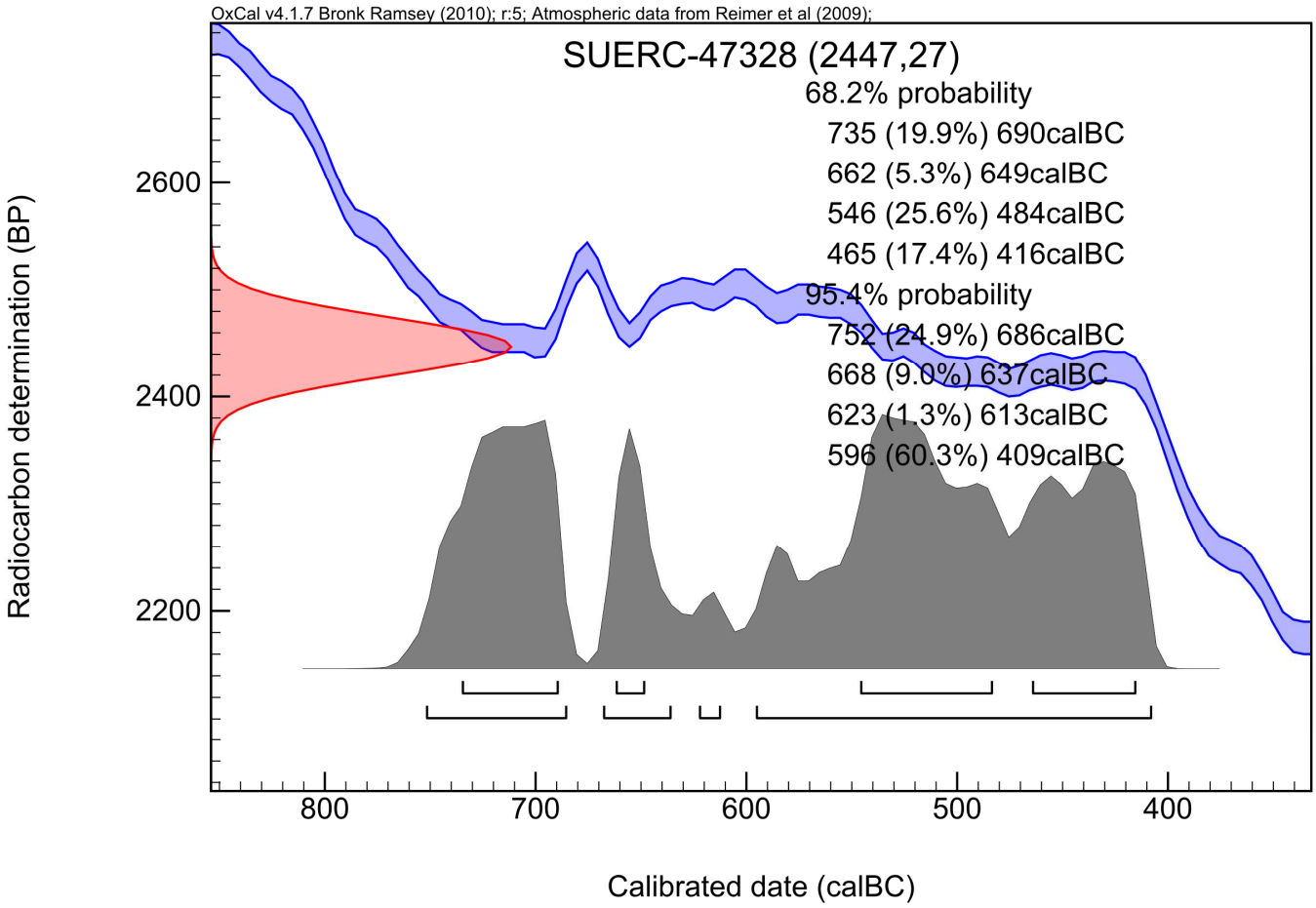
The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

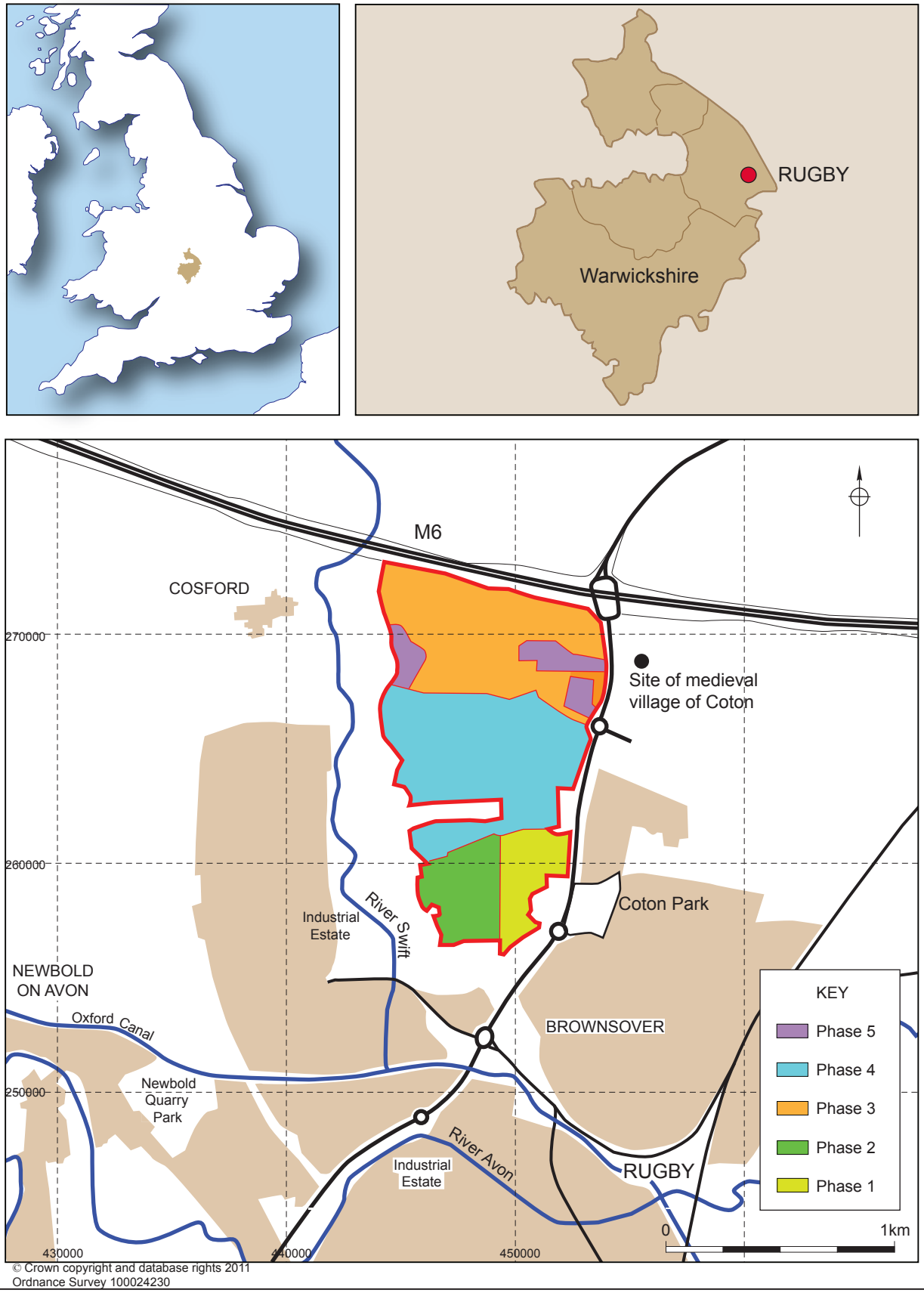
Conventional age and calibration age ranges calculated by :- Date :-

Checked and signed off by :- Date :-

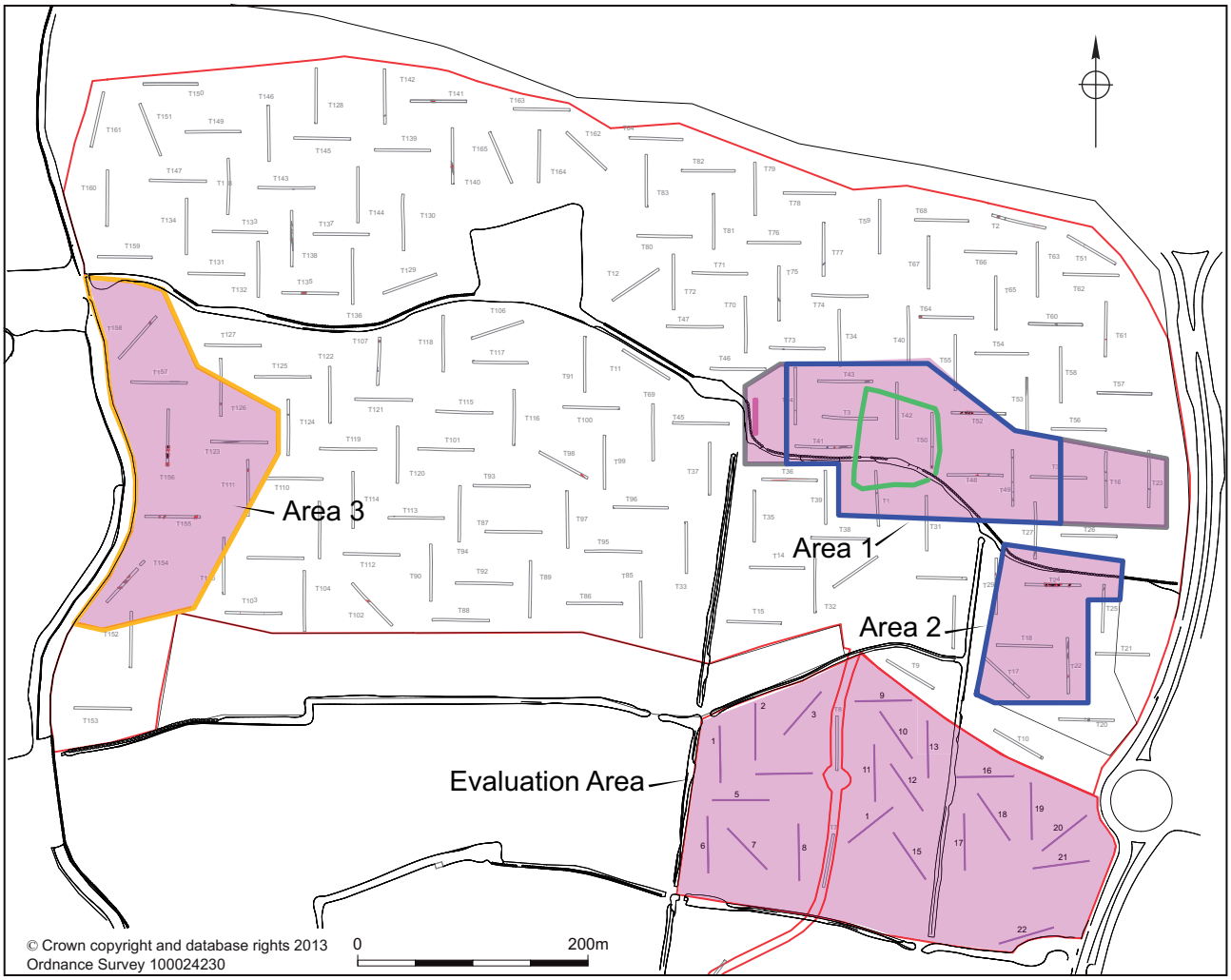
Calibration Plot



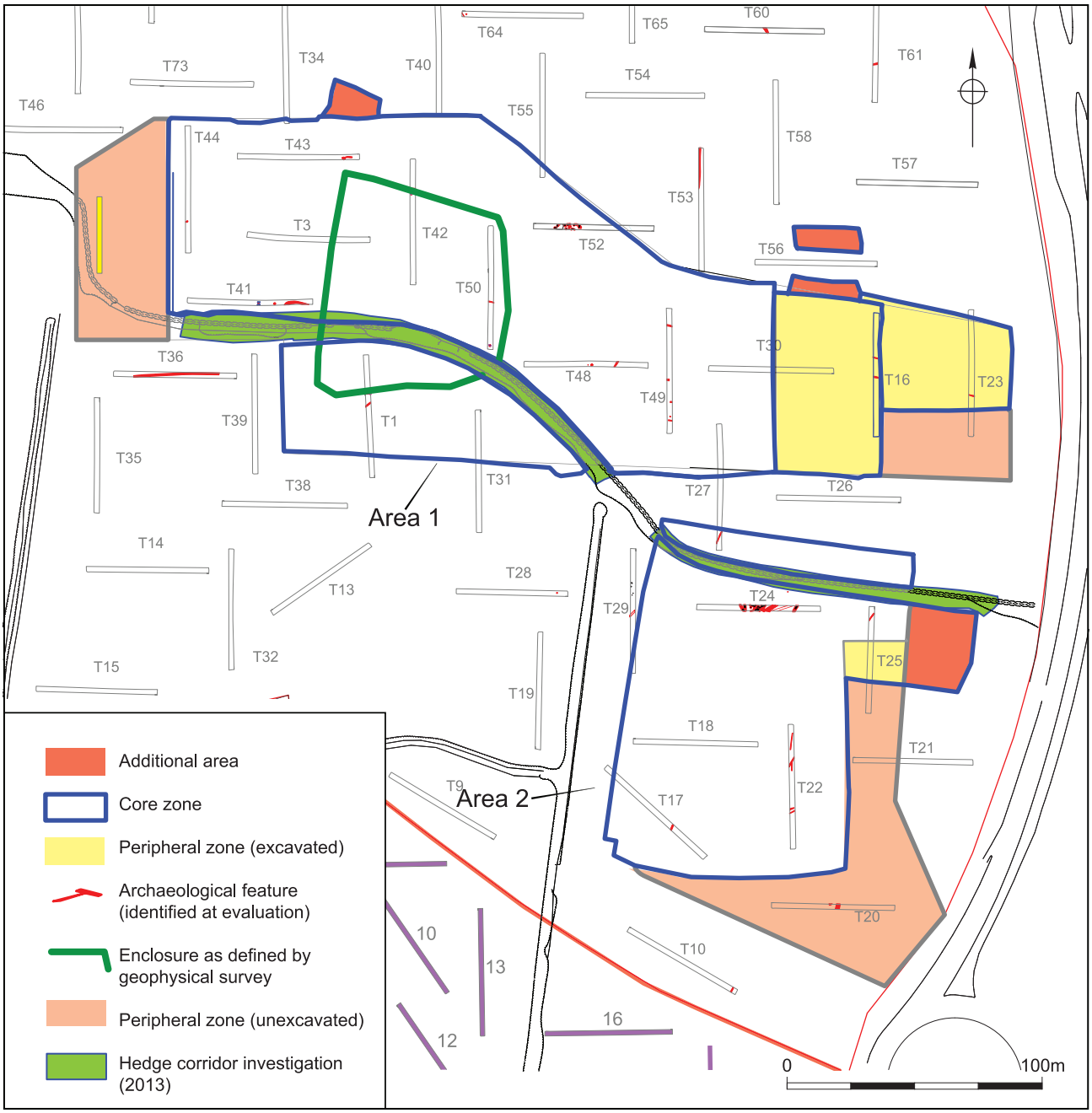
Figures



Location of the site *Figure 1*



Investigation areas *Figure 2*



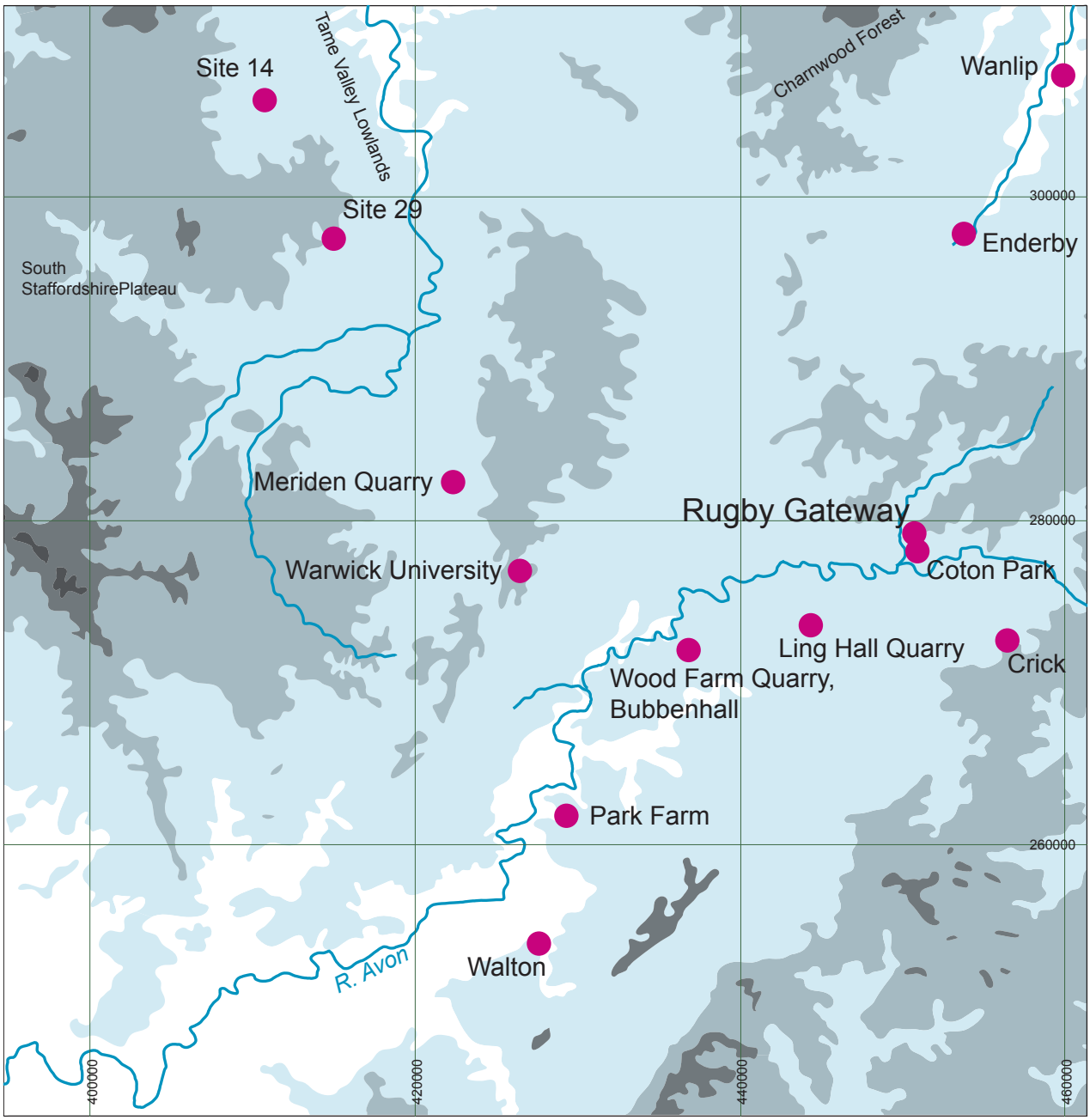
Areas 1 and 2

Figure 3

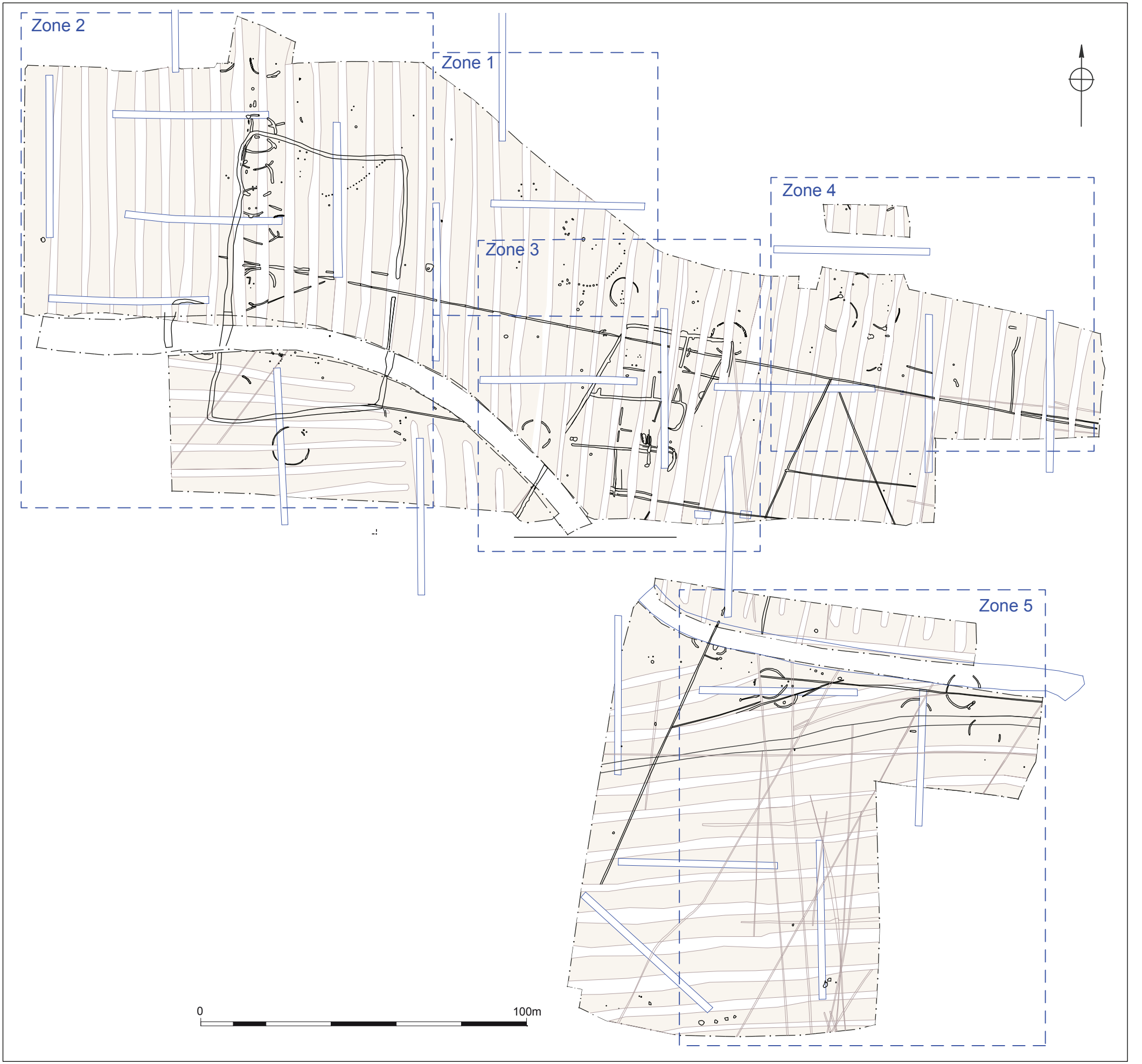
Excavations in progress showing ground conditions

Figure 4

Views across Area 1 during excavation *Figure 5*

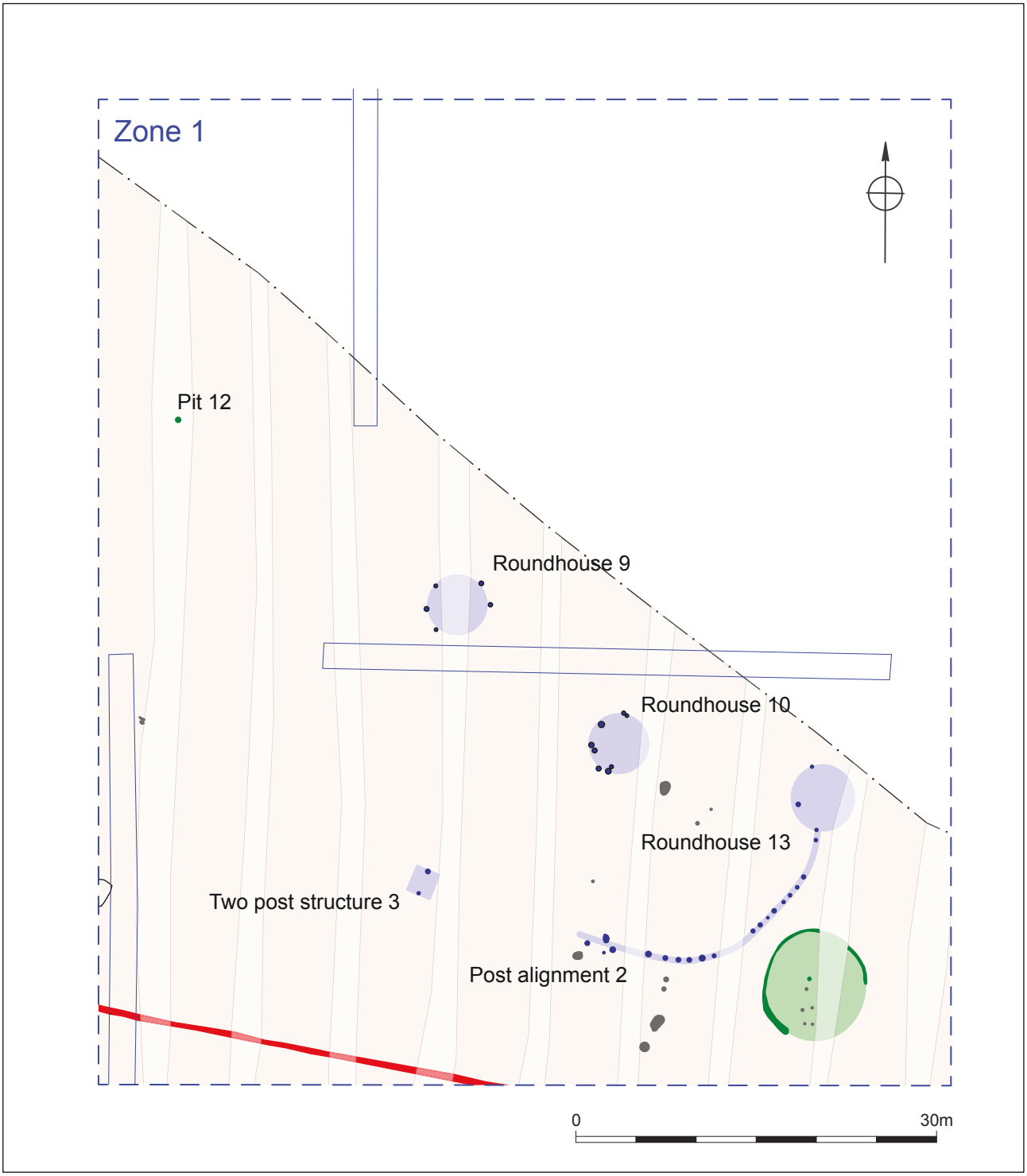


Location of the site *Figure 6*

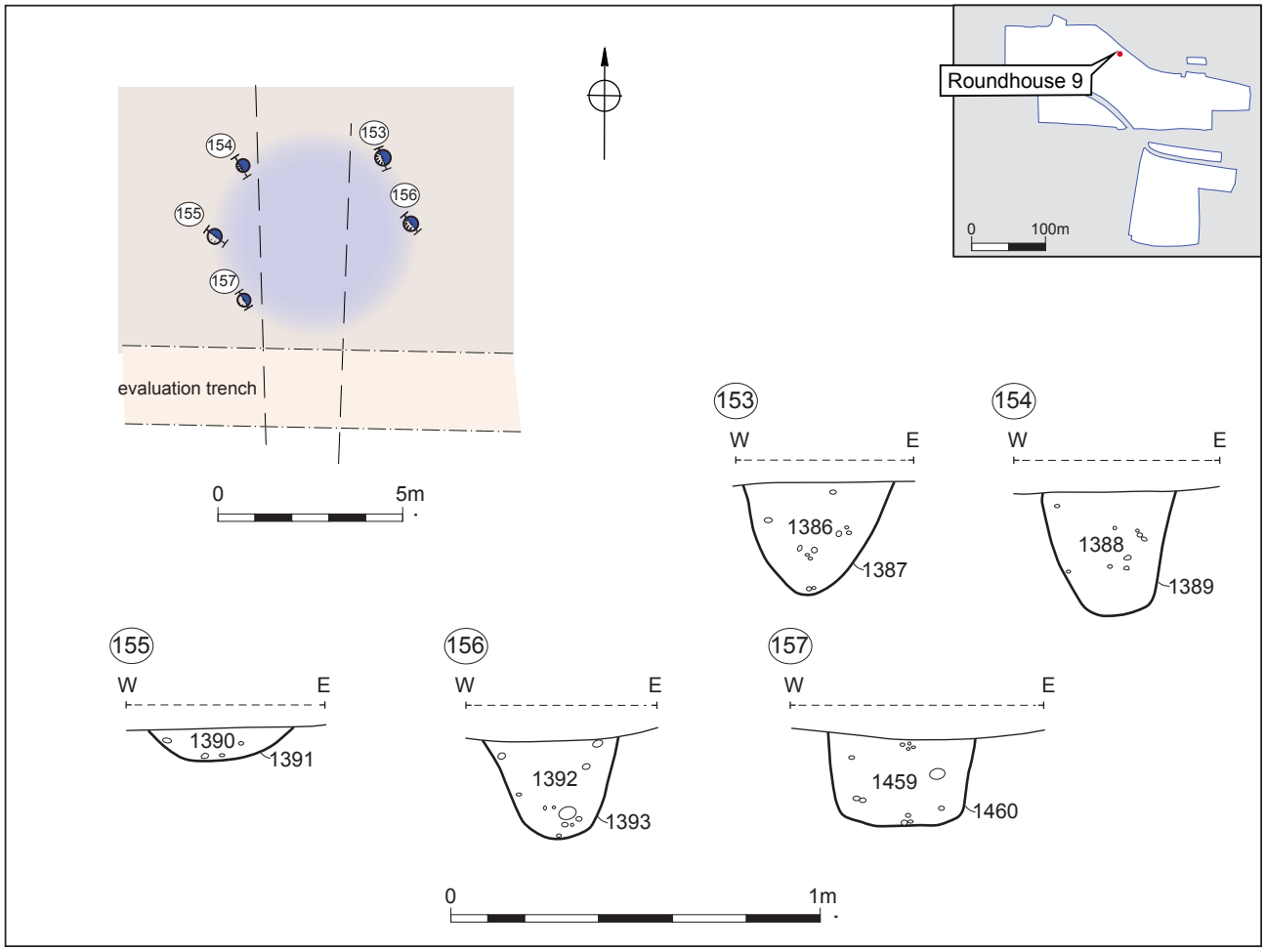


Summary of results

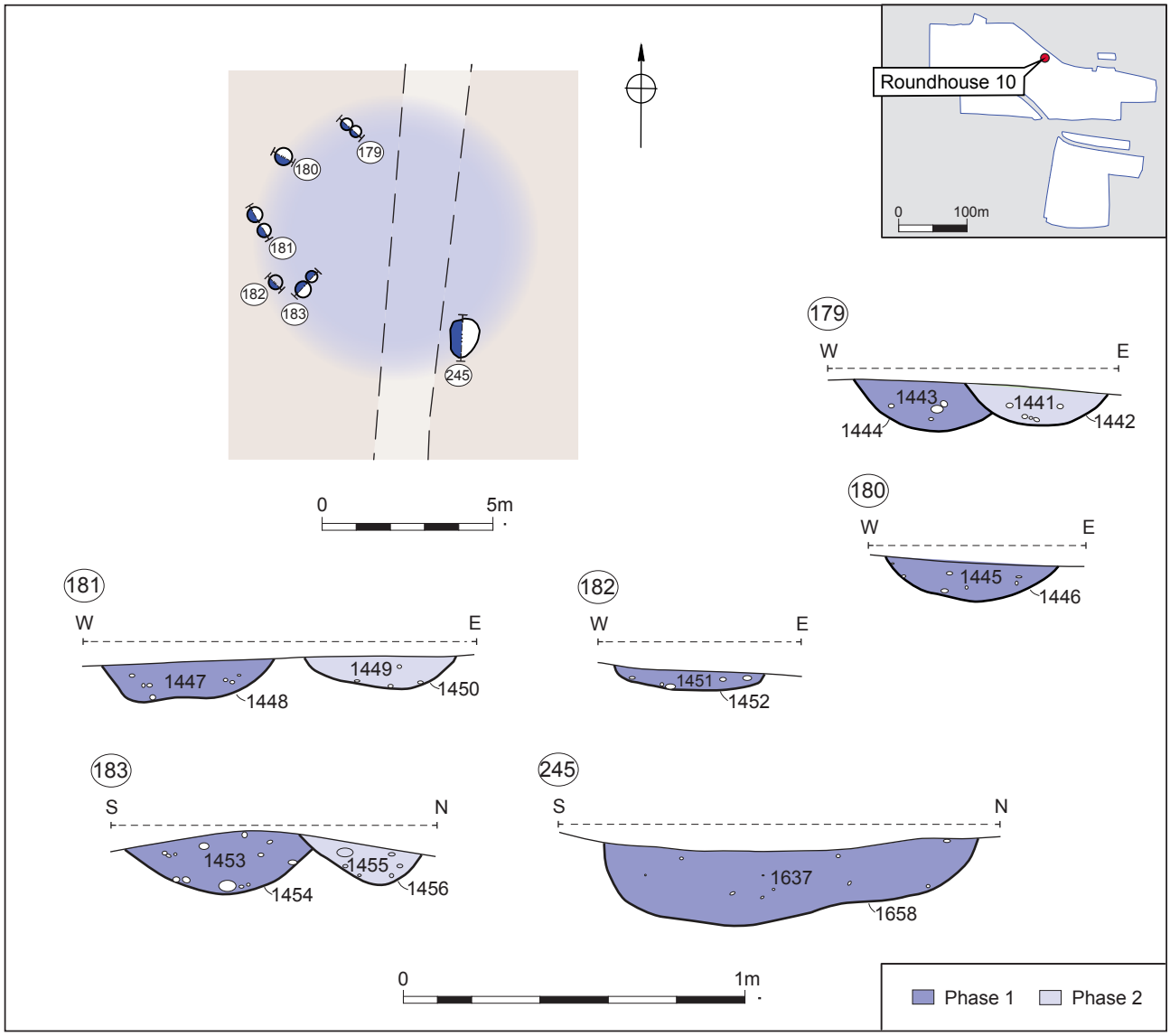
Figure 7



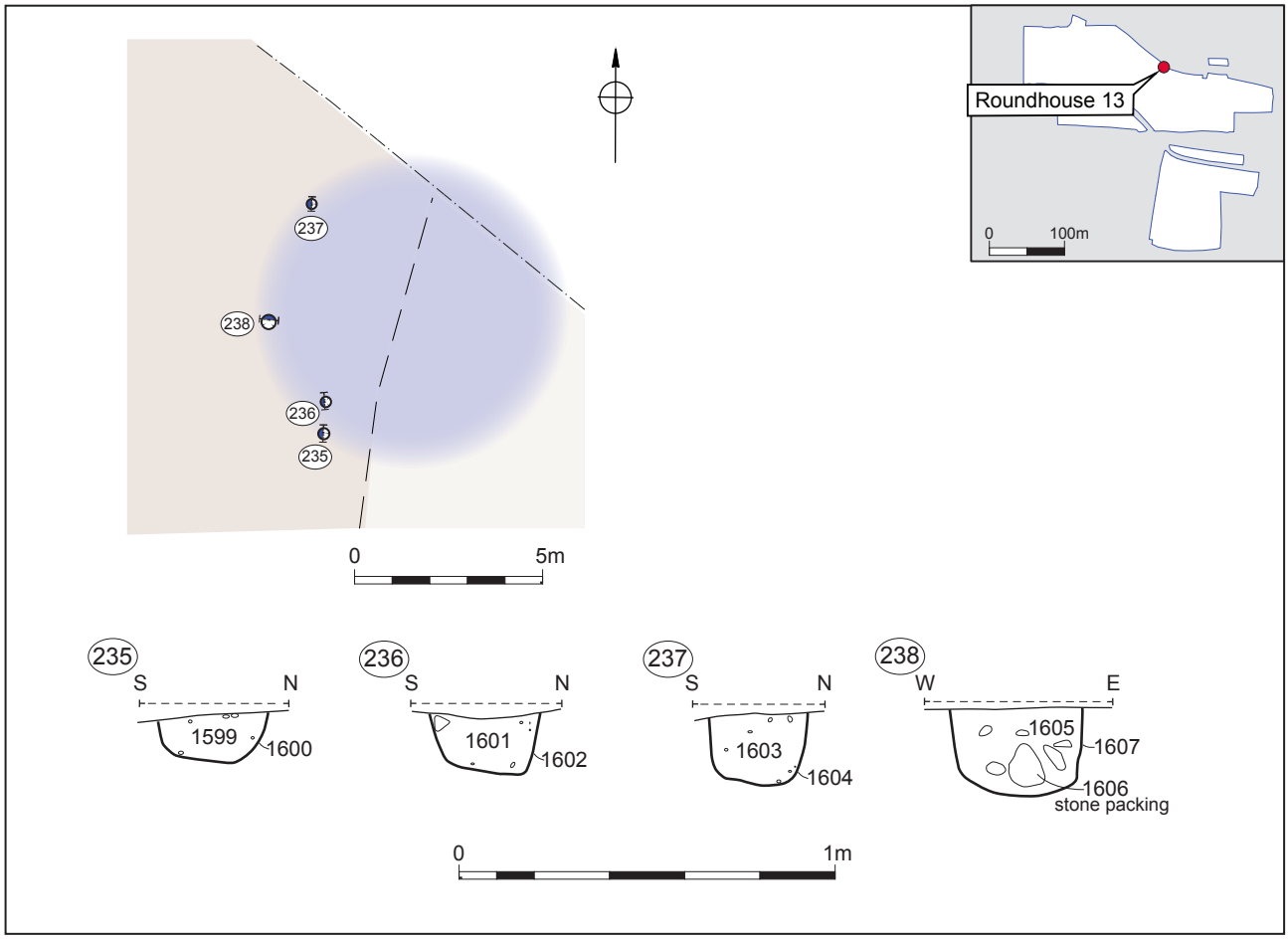
Settlement Zone 1 *Figure 8*



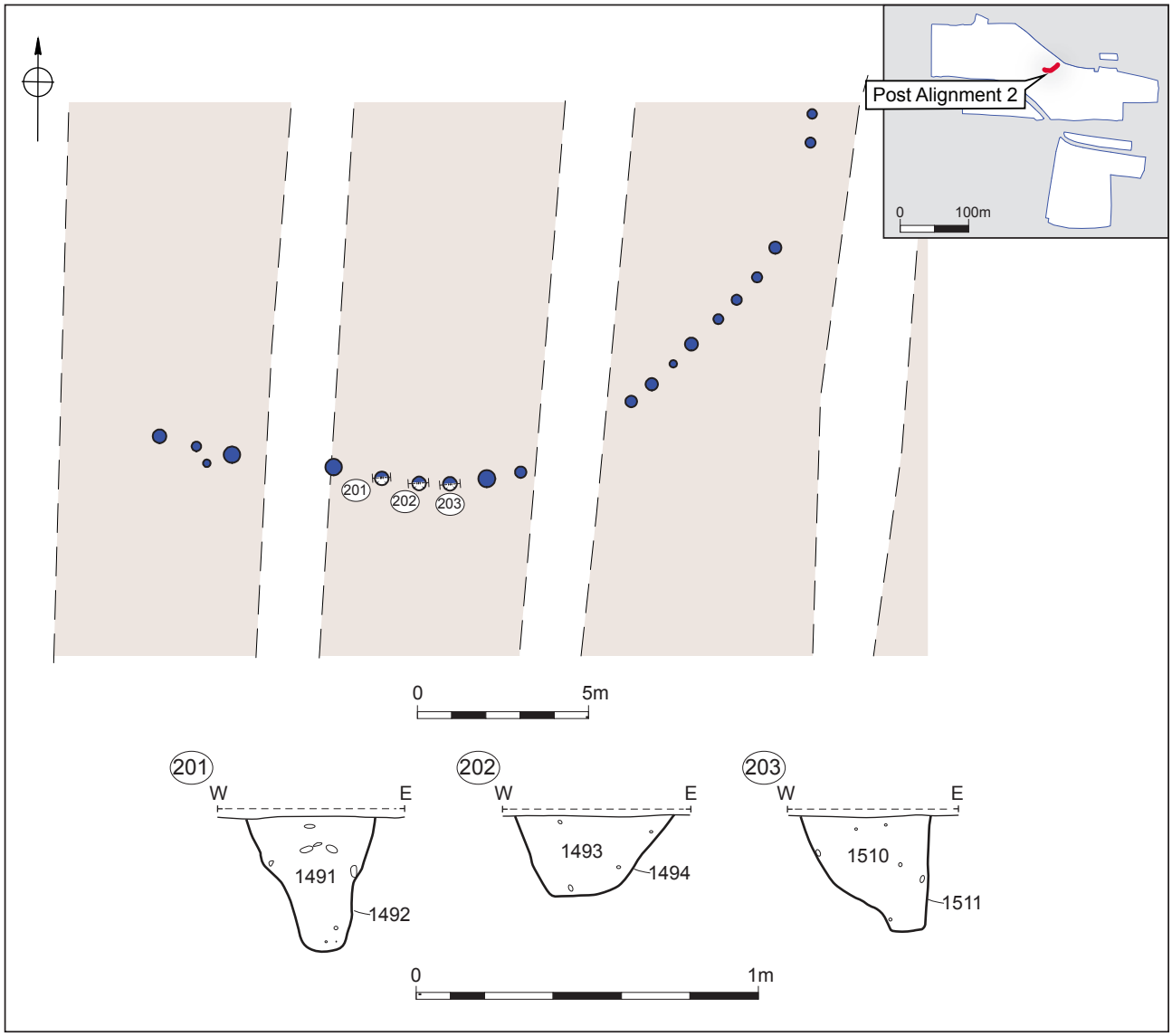
Roundhouse 9 *Figure 9*



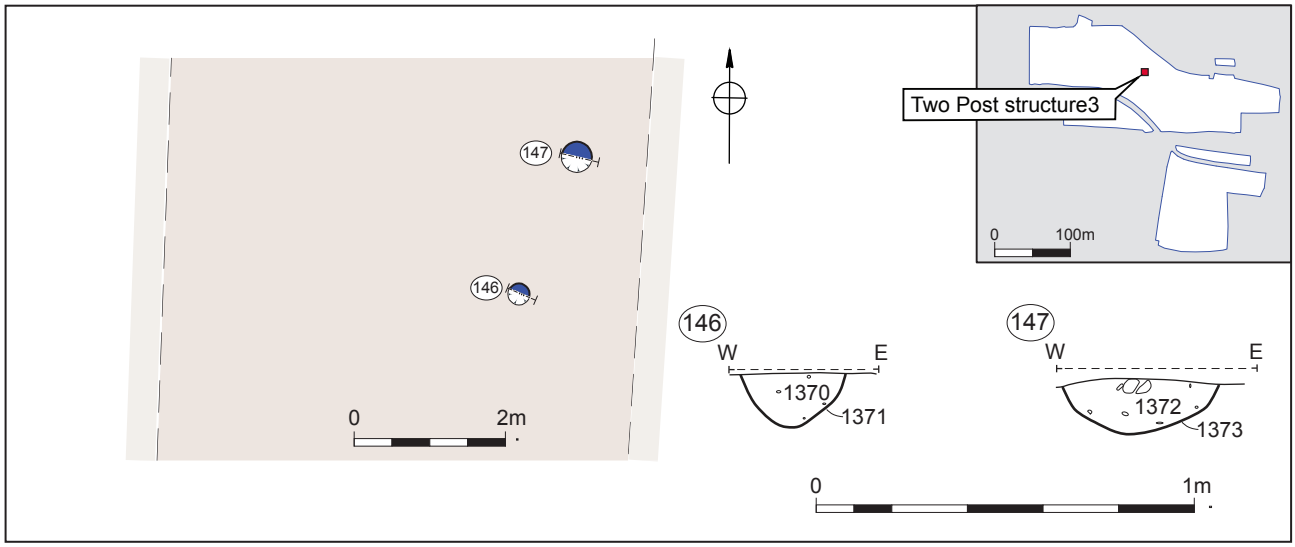
Roundhouse 10 *Figure 10*



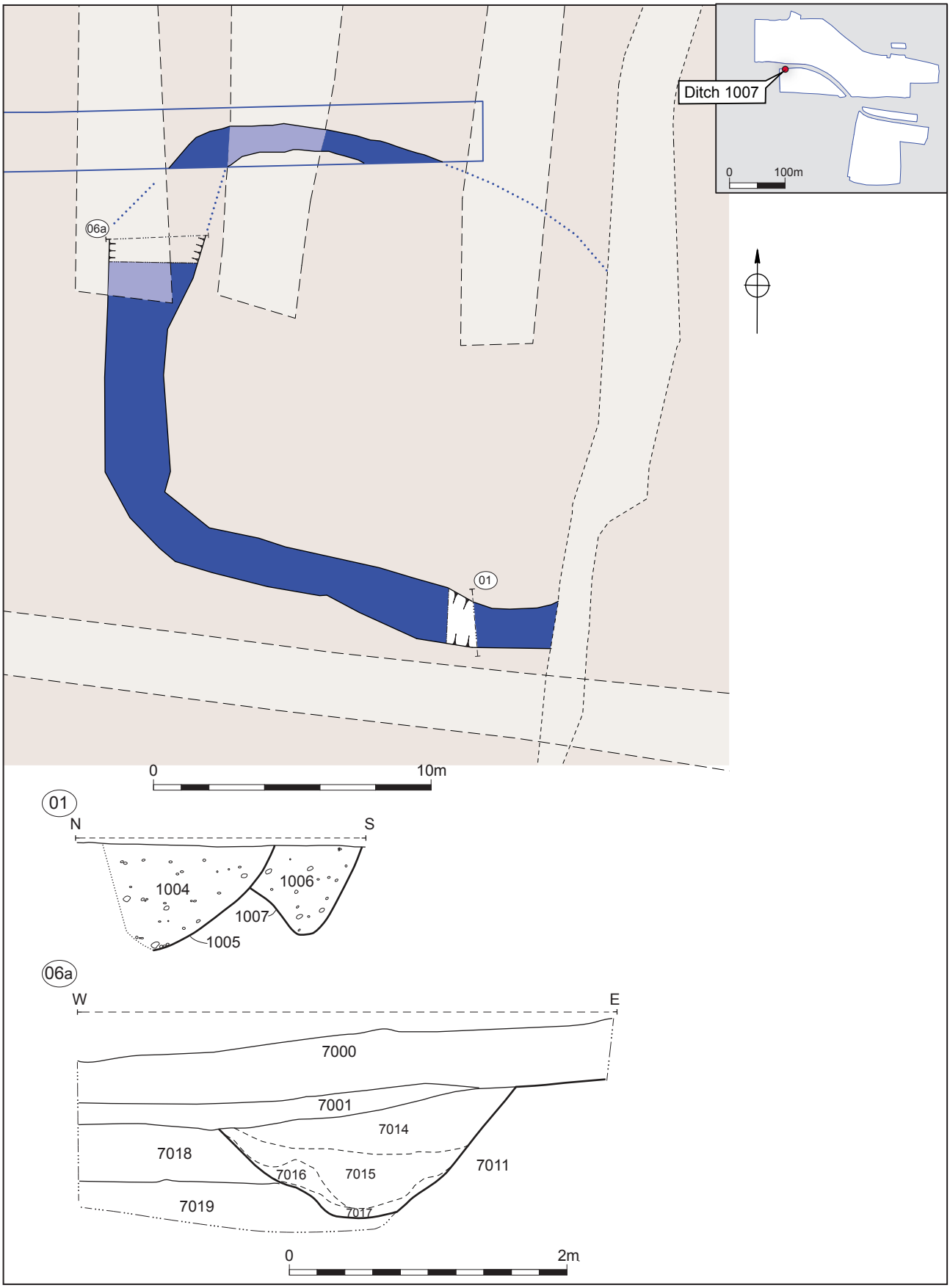
Roundhouse 13 *Figure 11*



Post alignment 2 *Figure 12*

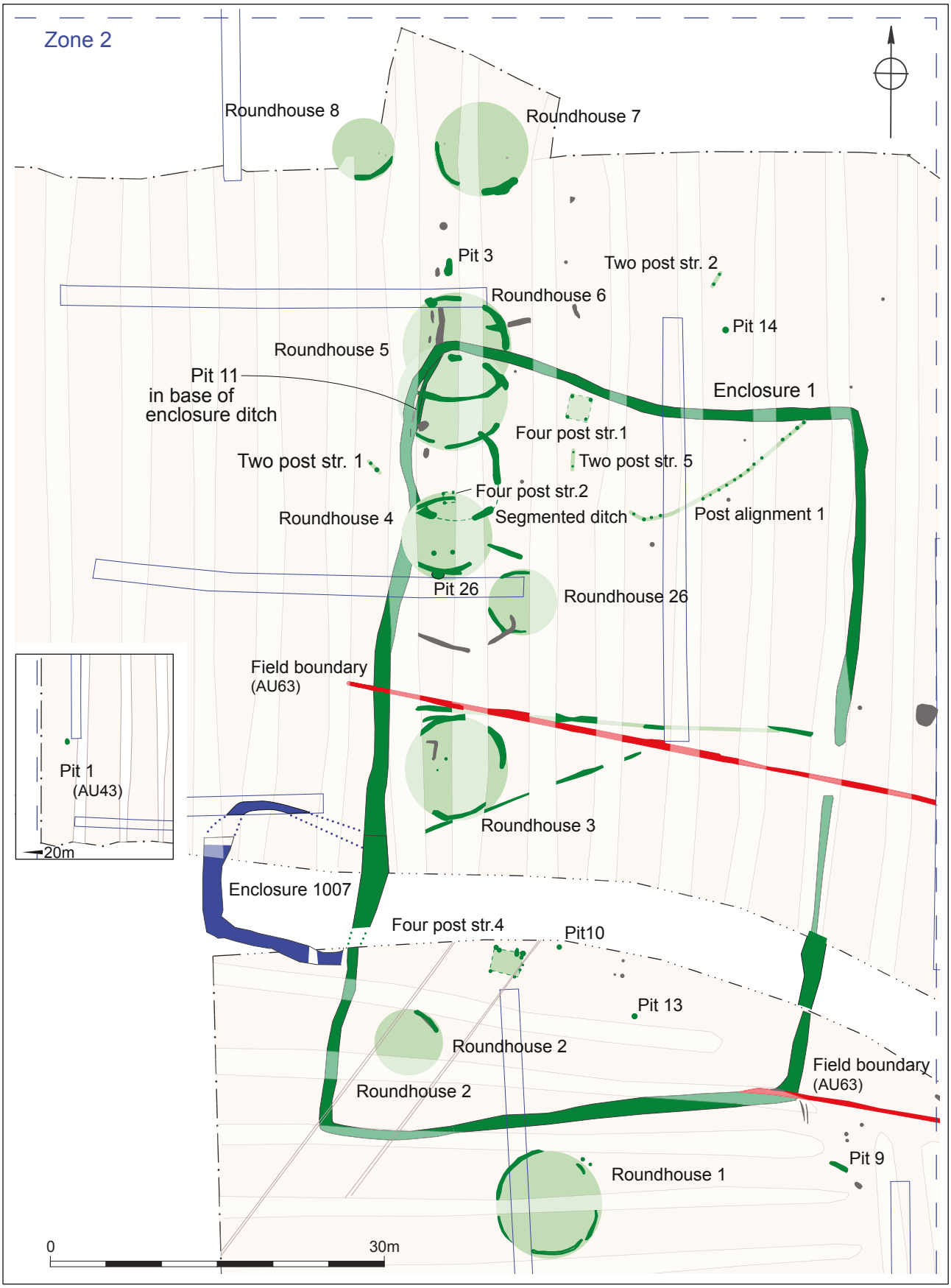


Two post structure 3 *Figure 13*

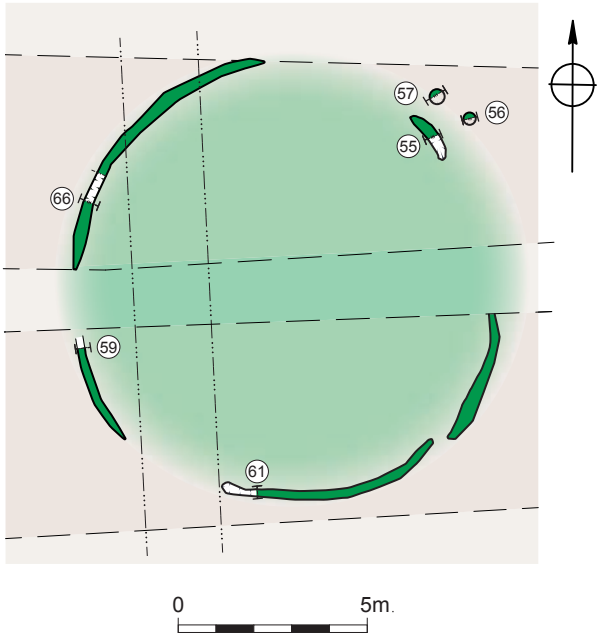


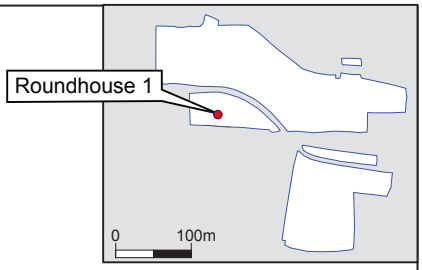
Enclosure 1007

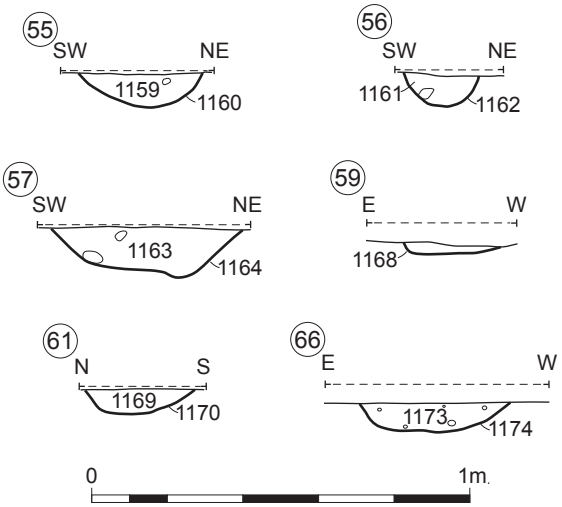
Figure 14



Settlement Zone 2 *Figure 15*

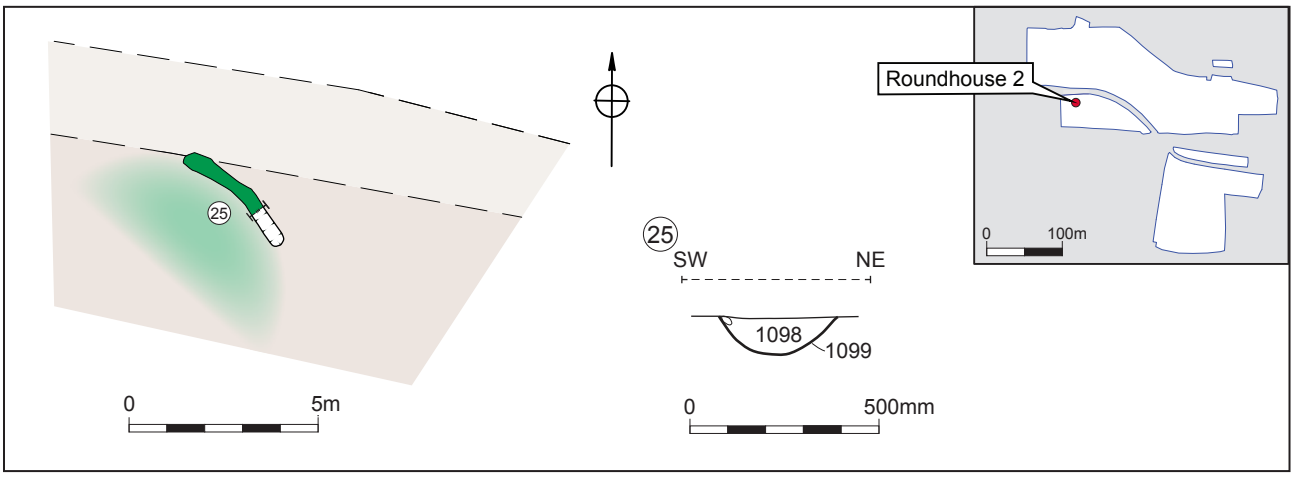




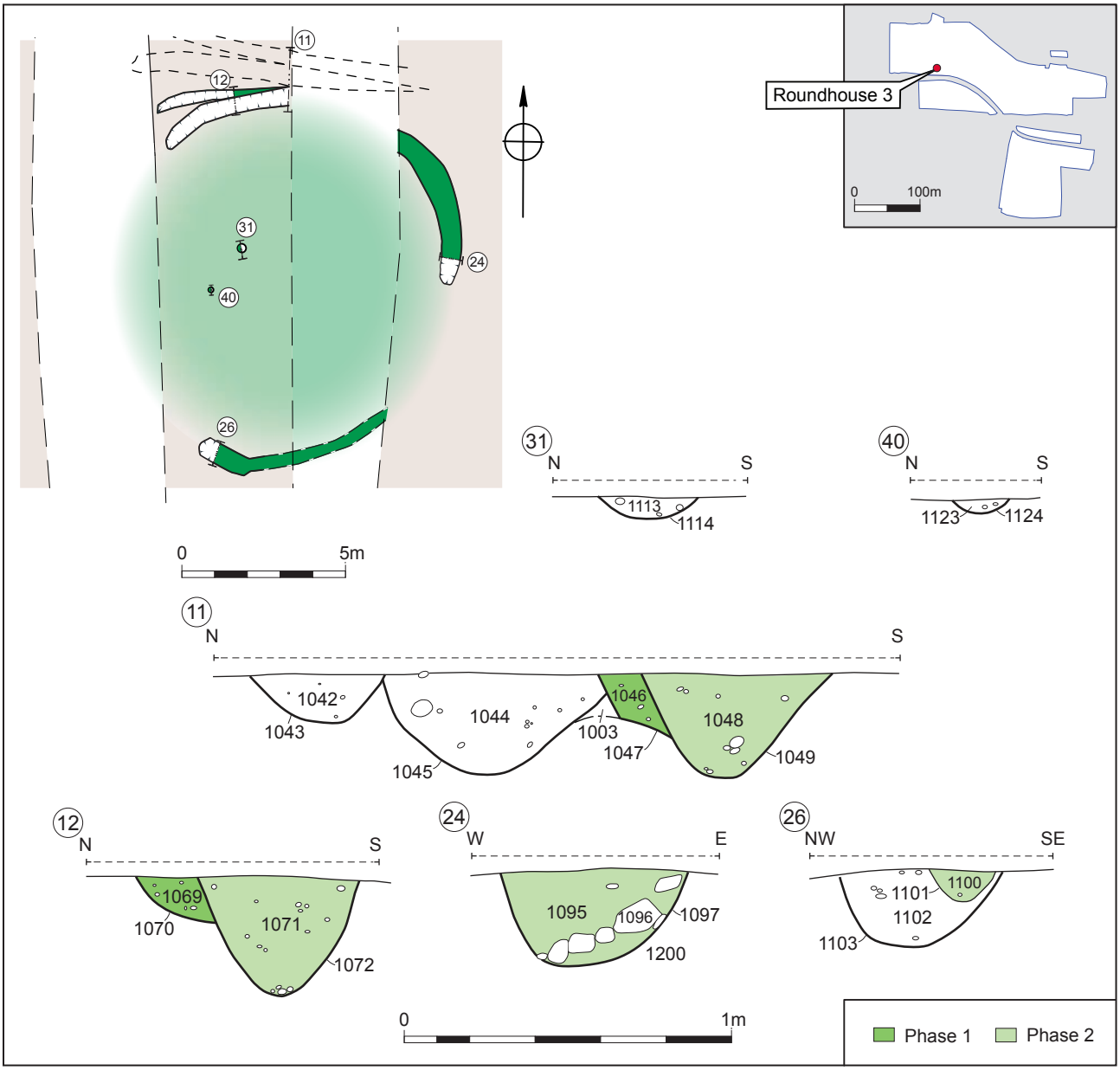


Roundhouse 1 (facing East)

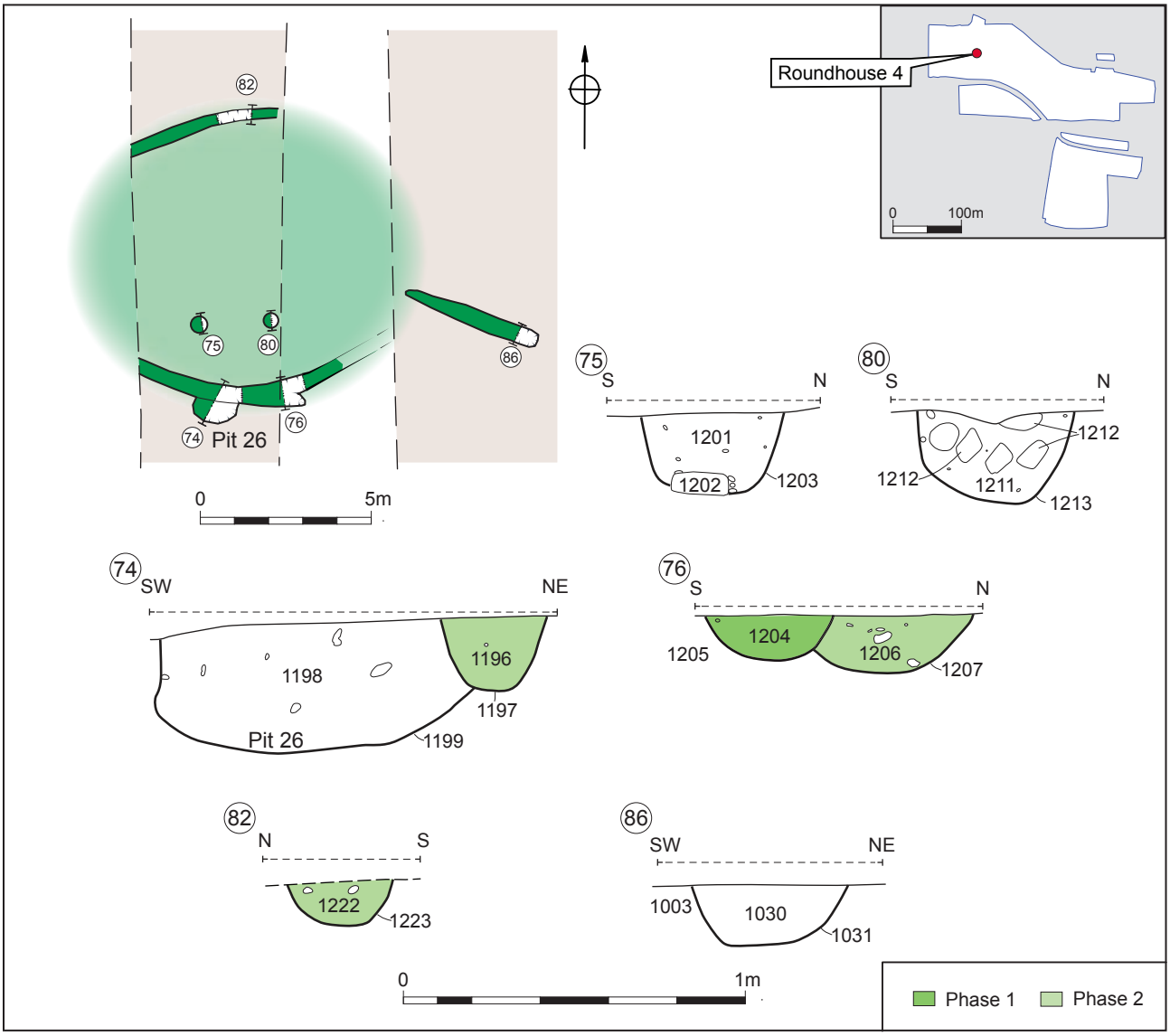
Roundhouse 1 *Figure 16*



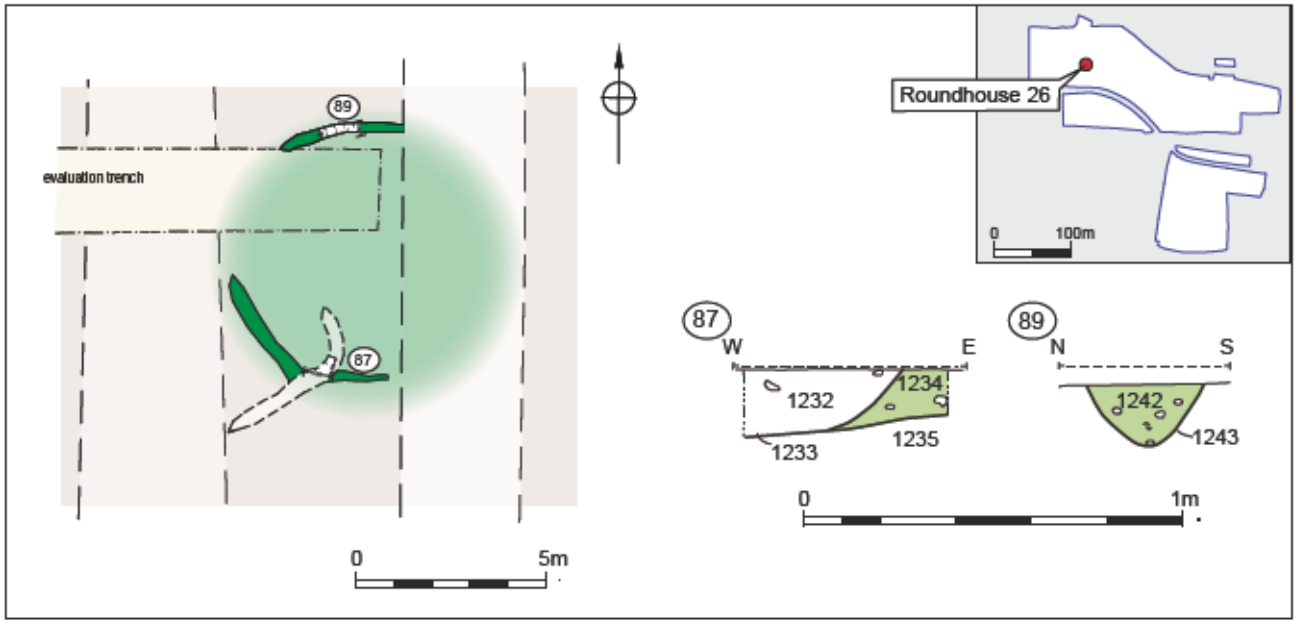
Roundhouse 2 *Figure 17*



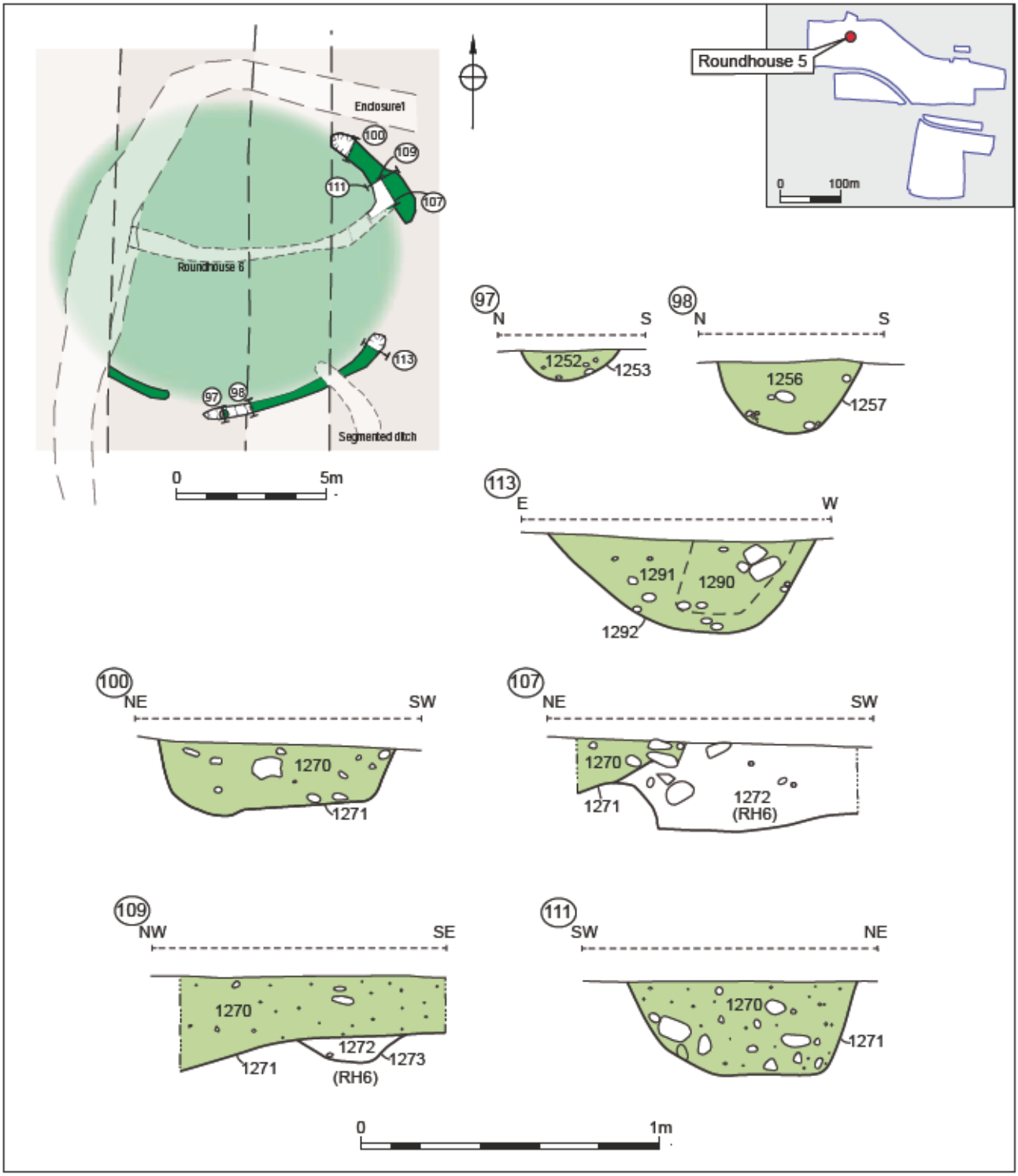
Roundhouse 3 *Figure 18*



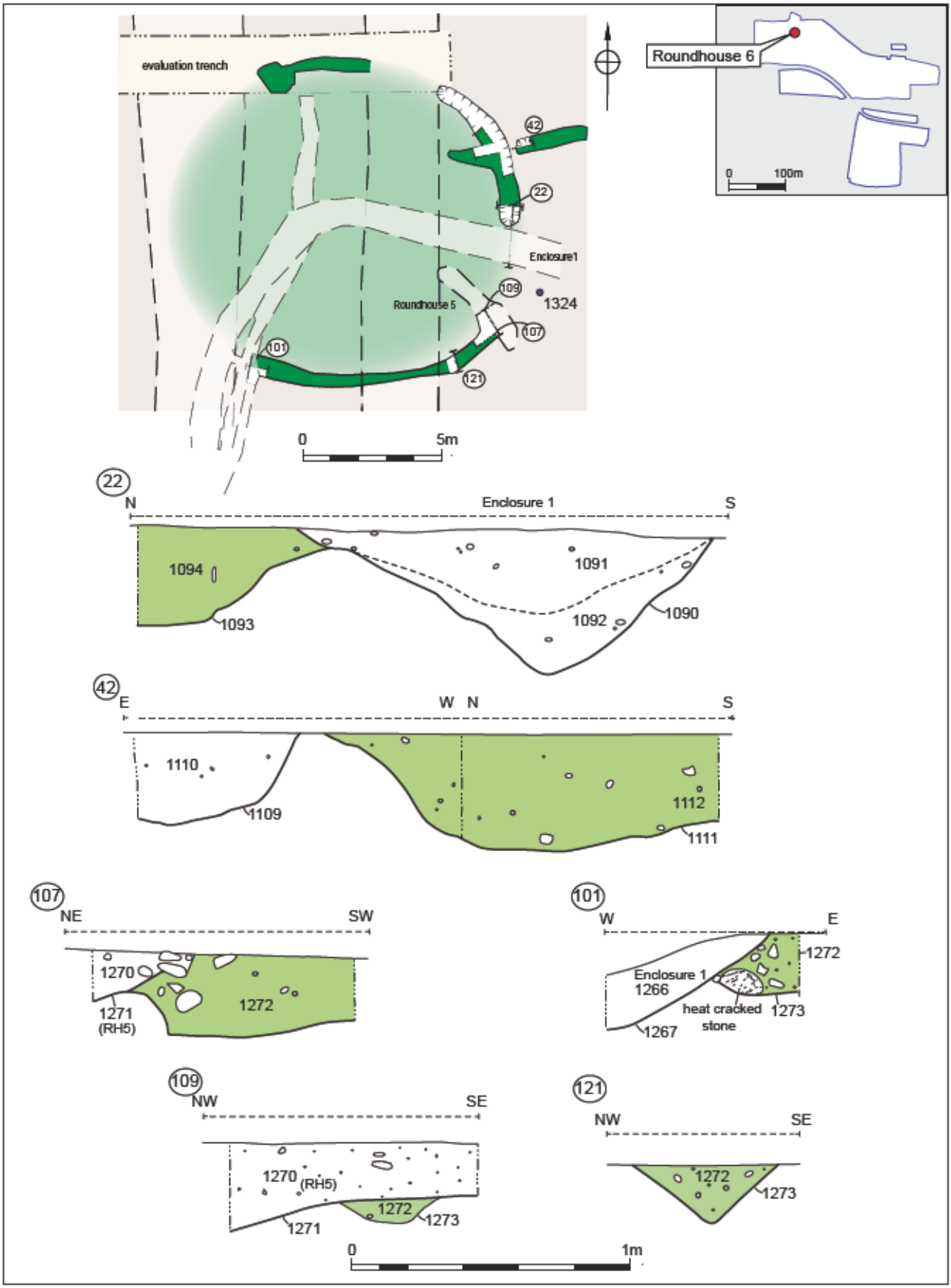
Roundhouse 4 *Figure 19*



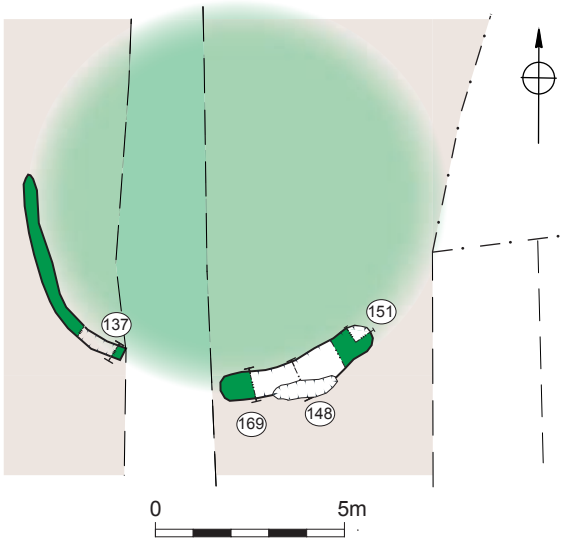
Roundhouse 26 *Figure 20*

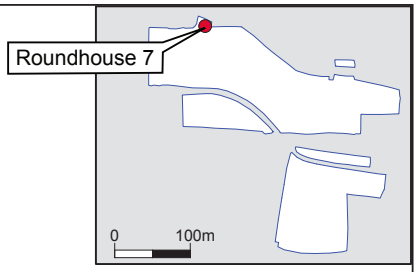


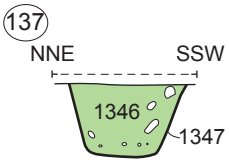
Roundhouse 5 *Figure 21*

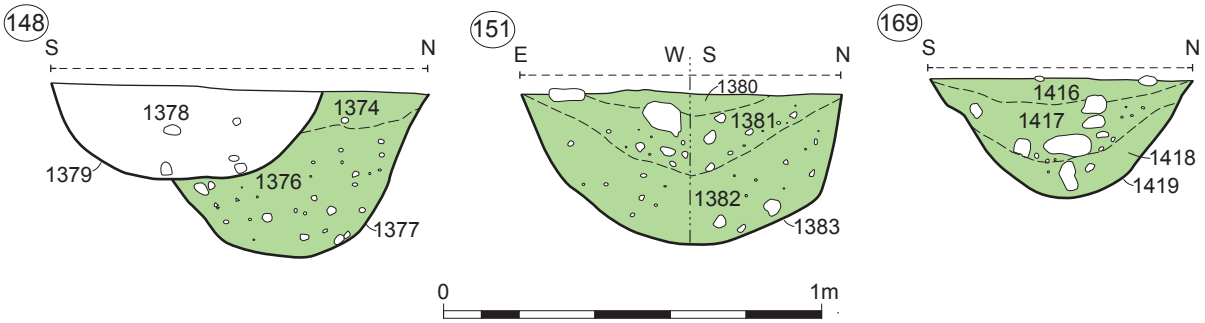


Roundhouse 6 *Figure 22*

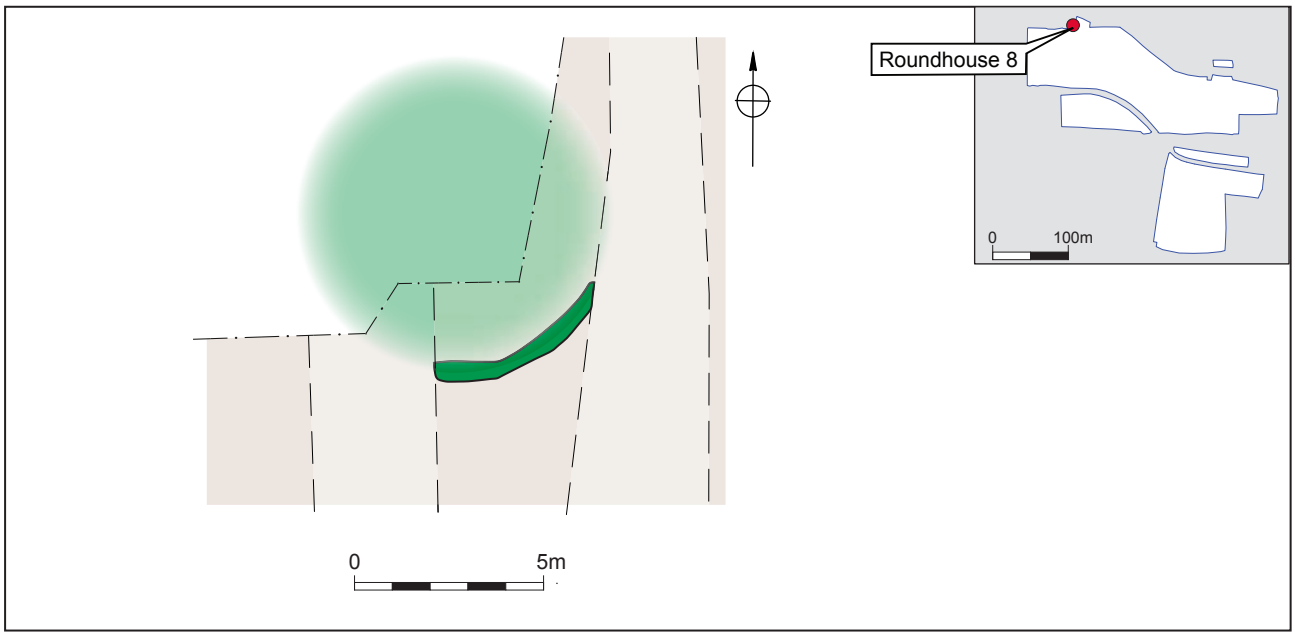

137
151
169
148
0
5m


Roundhouse 7
0
100m

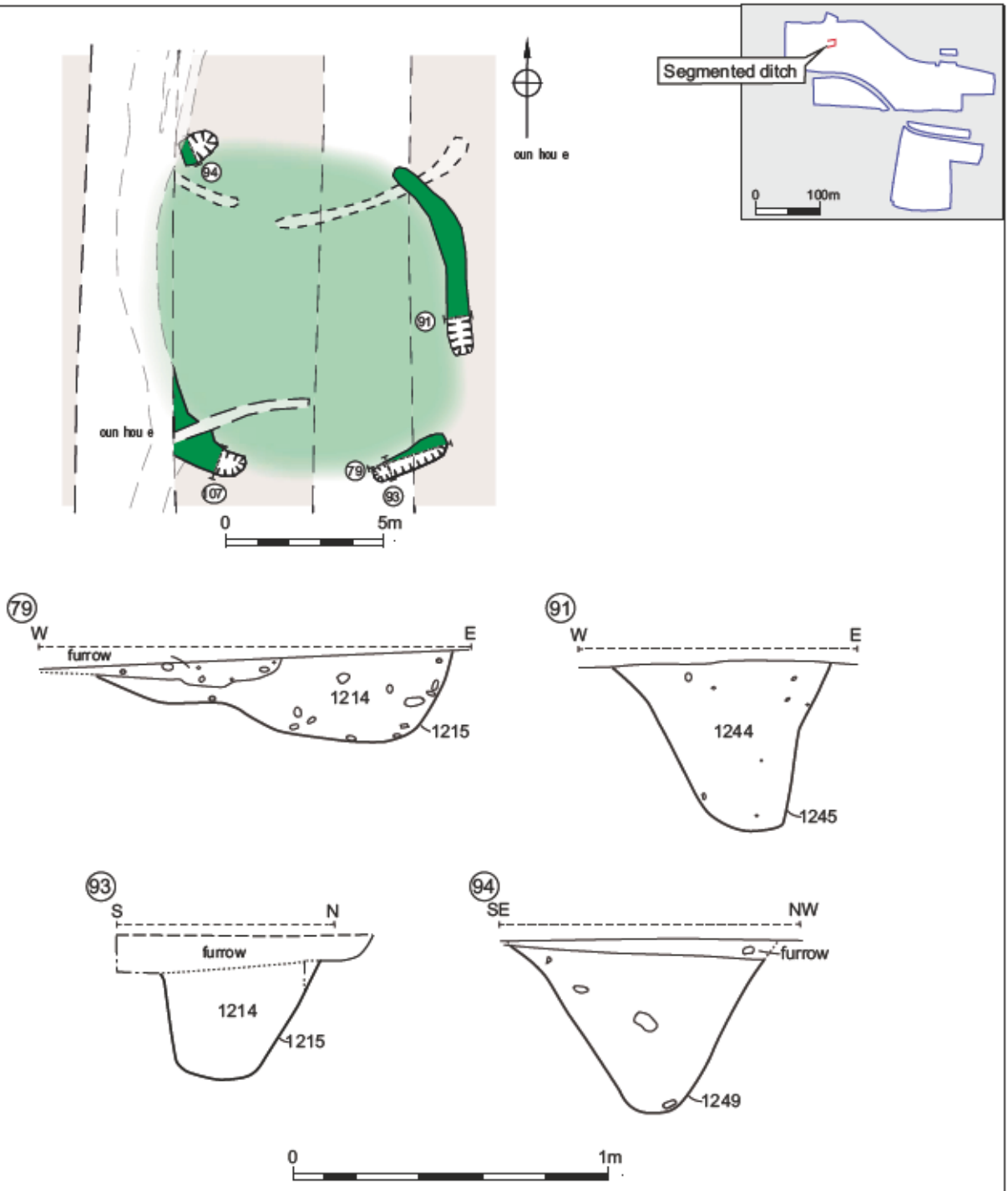

137
NNE
SSW
1346
1347


148
S
N
1378
1374
1379
1376
1377
151
E
W
S
N
1380
1381
1382
1383
169
S
N
1416
1417
1418
1419
0
1m

Section 148



Roundhouse 8 *Figure 24*



Segmented ditch *Figure 25*

Segmented ditch 1249 and Enclosure 1

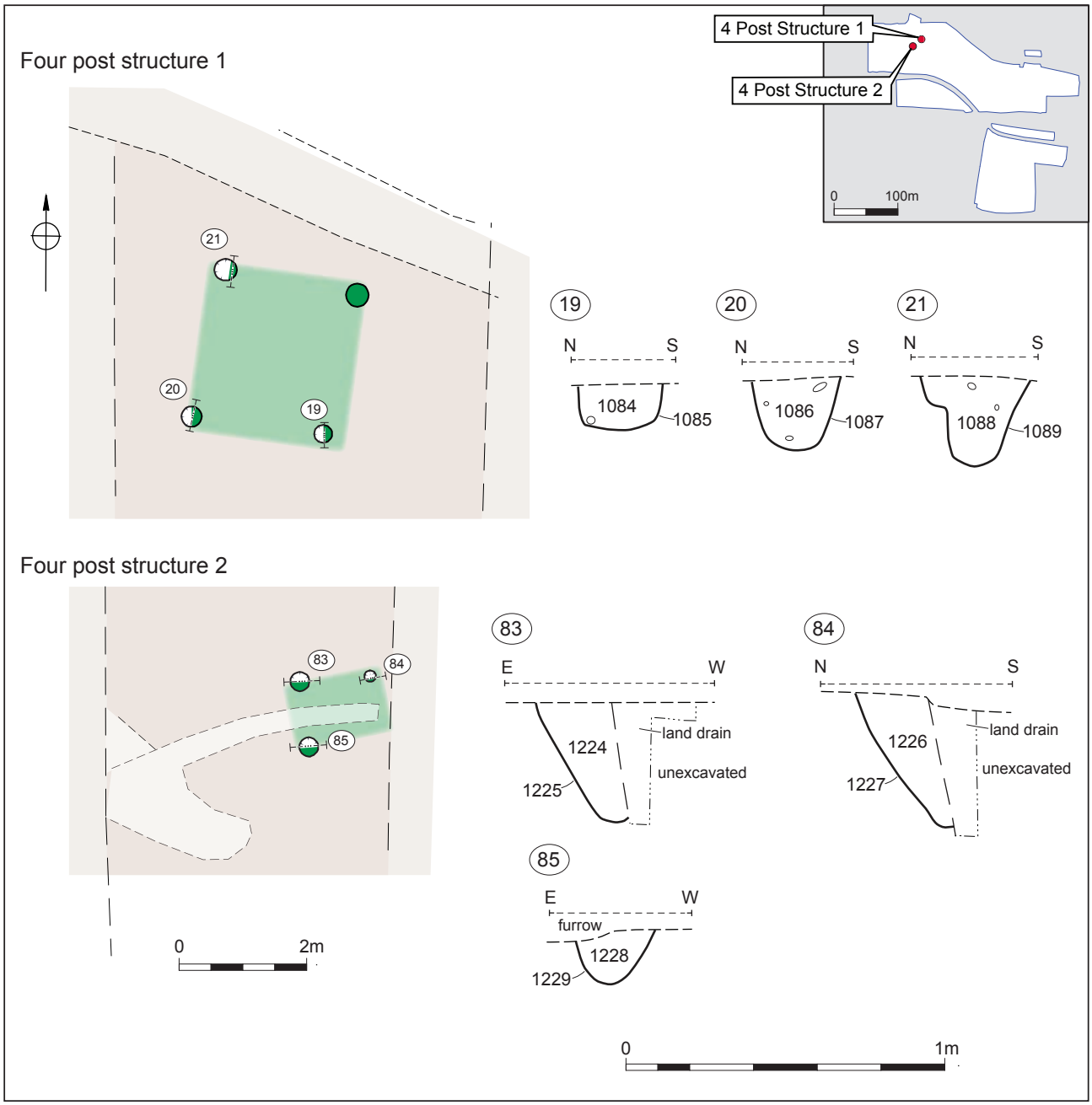
Segmented ditch 1245 - Section 91

Segmented ditch 1249 - Section 94

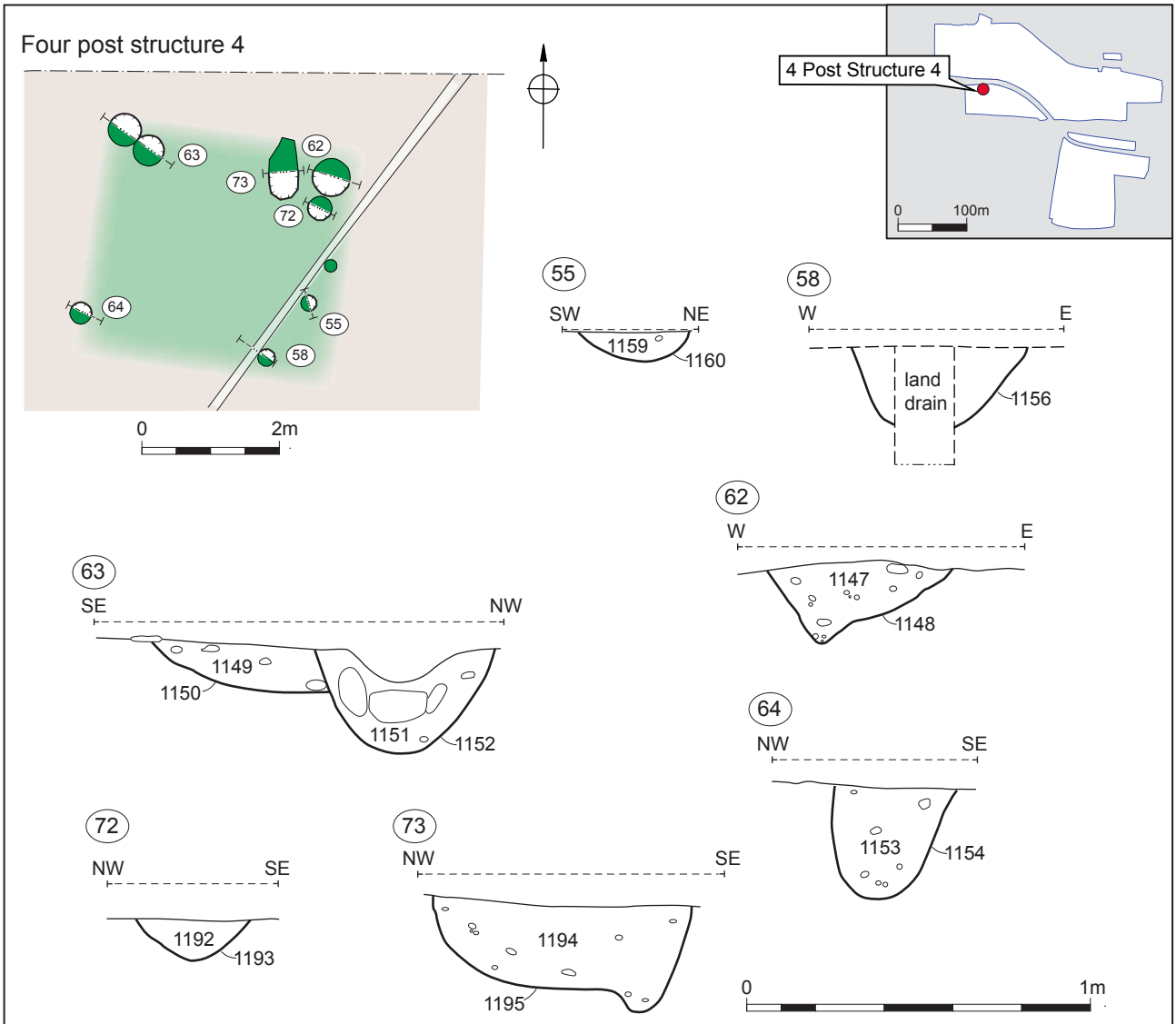
Segmented ditch 1251 - Section 102

Segmented ditch photographs

Figure 26

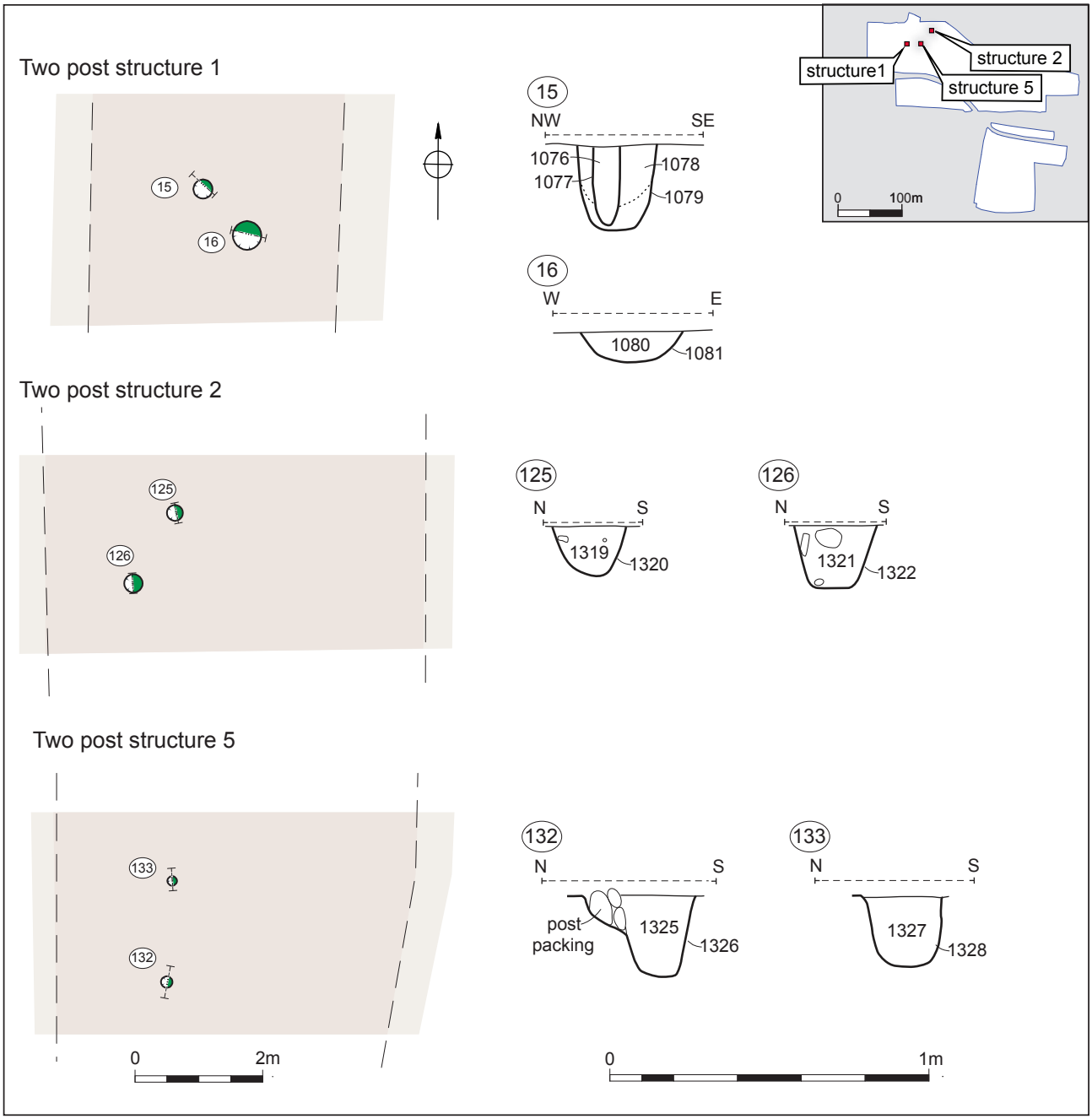


Four post structures 1 and 2 *Figure 27*

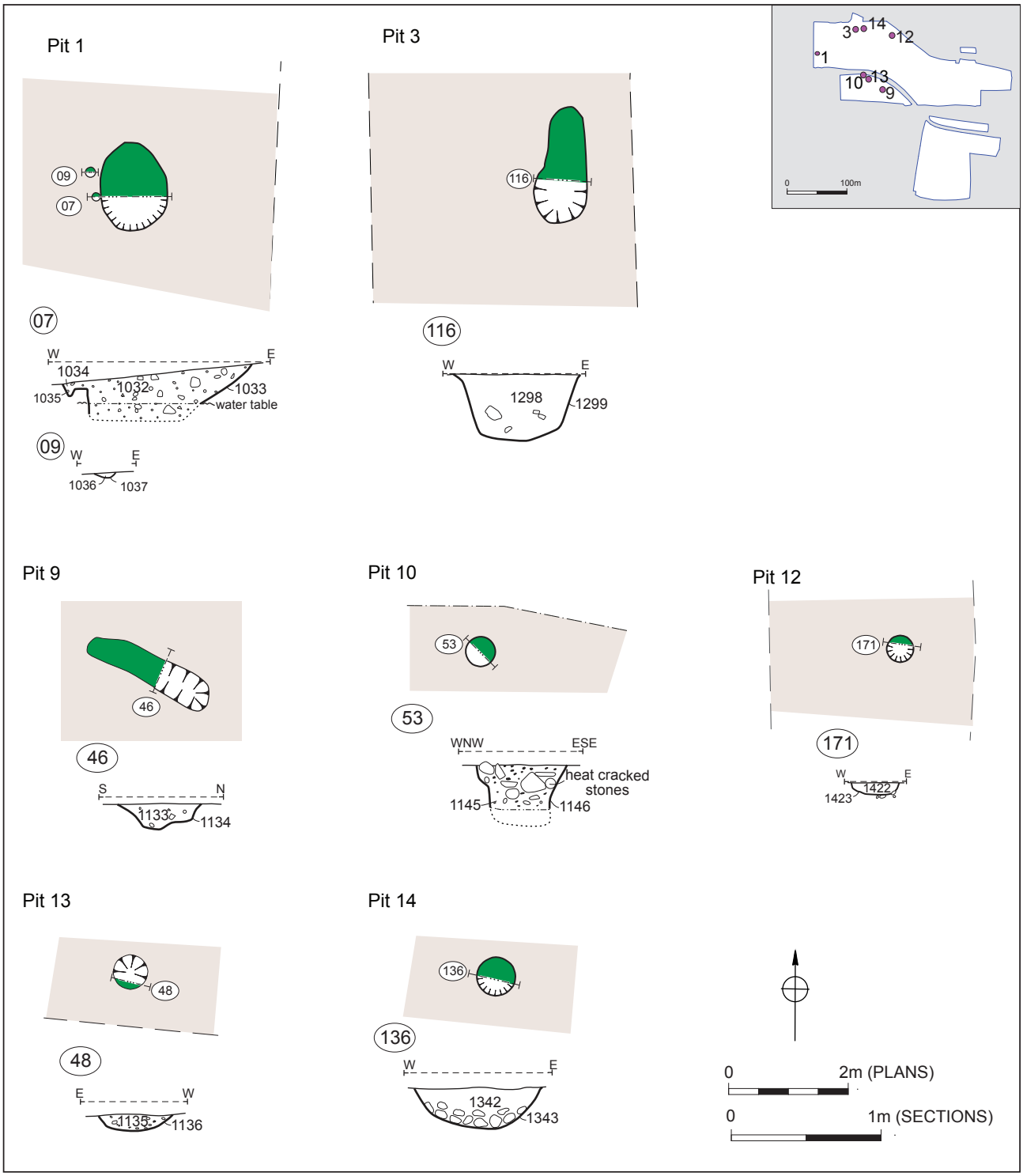


Four post structure 4 (facing south)

Four post structure 4 plan and sections *Figure 28*



Two post structures 1,2 and 5 *Figure 29*

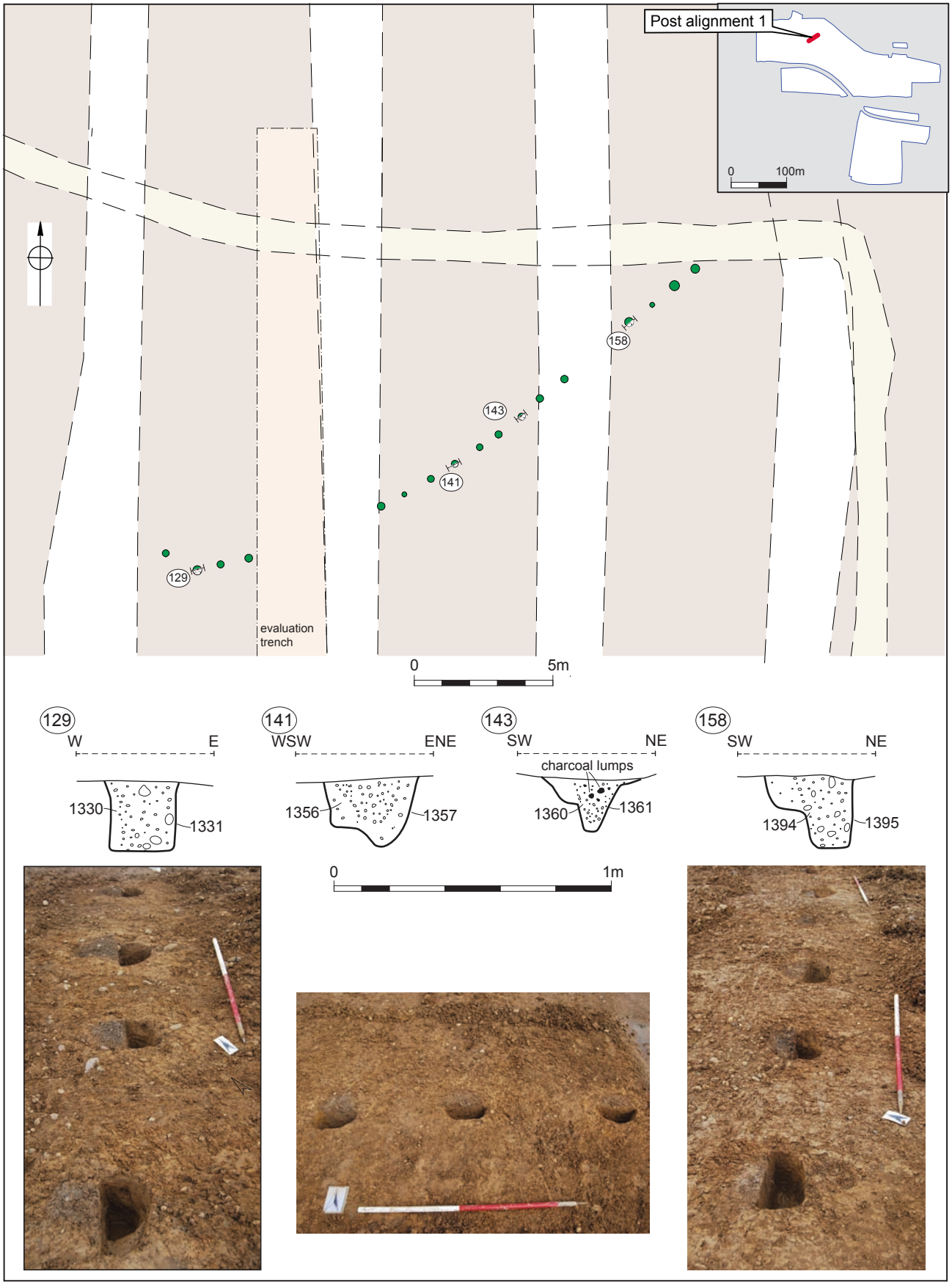


Settlement Zone 2: Pits *Figure 30*

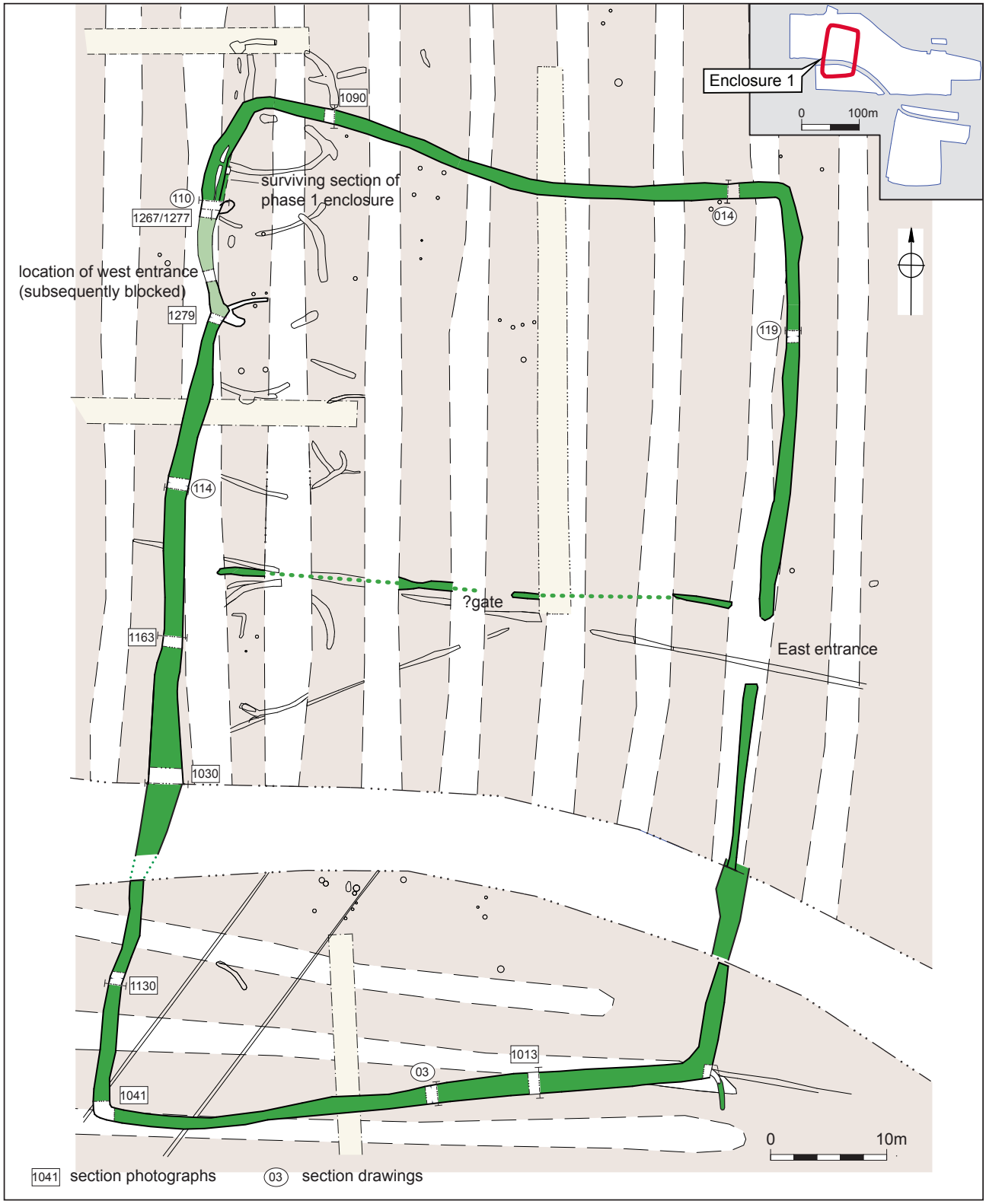
Pit 1

Pit 10

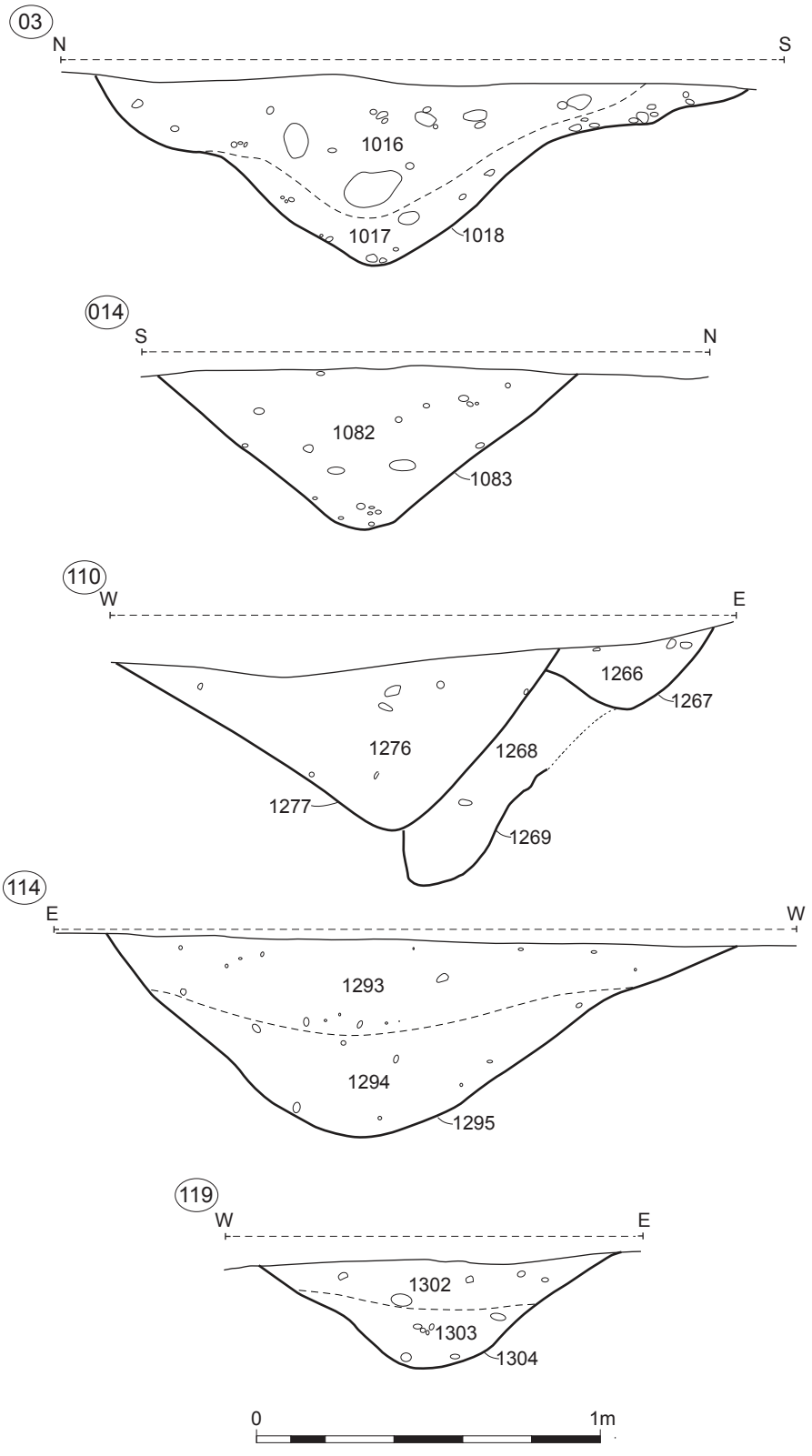
Pits 1 and 10 Figure 31



Post alignment 1 *Figure 32*



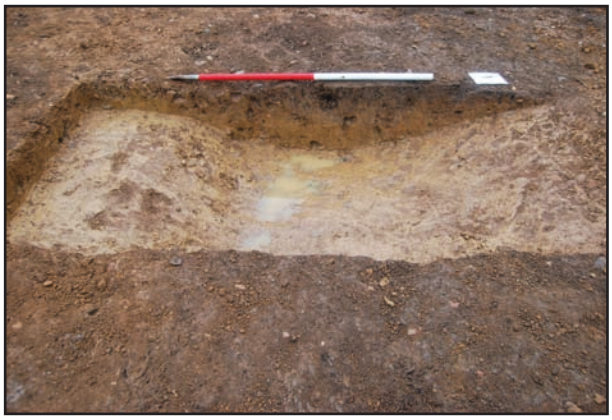
Enclosure 1 *Figure 33*



Enclosure 1 sections *Figure 34*

Enclosure 1 Excavation of west side (facing north)

Phase 1 Entrance terminal [1279] and Phase 2 recut [1283] (facing east)



Section 1013 (facing east)

Section 1030 (facing south-east)

Section 1130 (facing north)

Section 1041 (facing east)

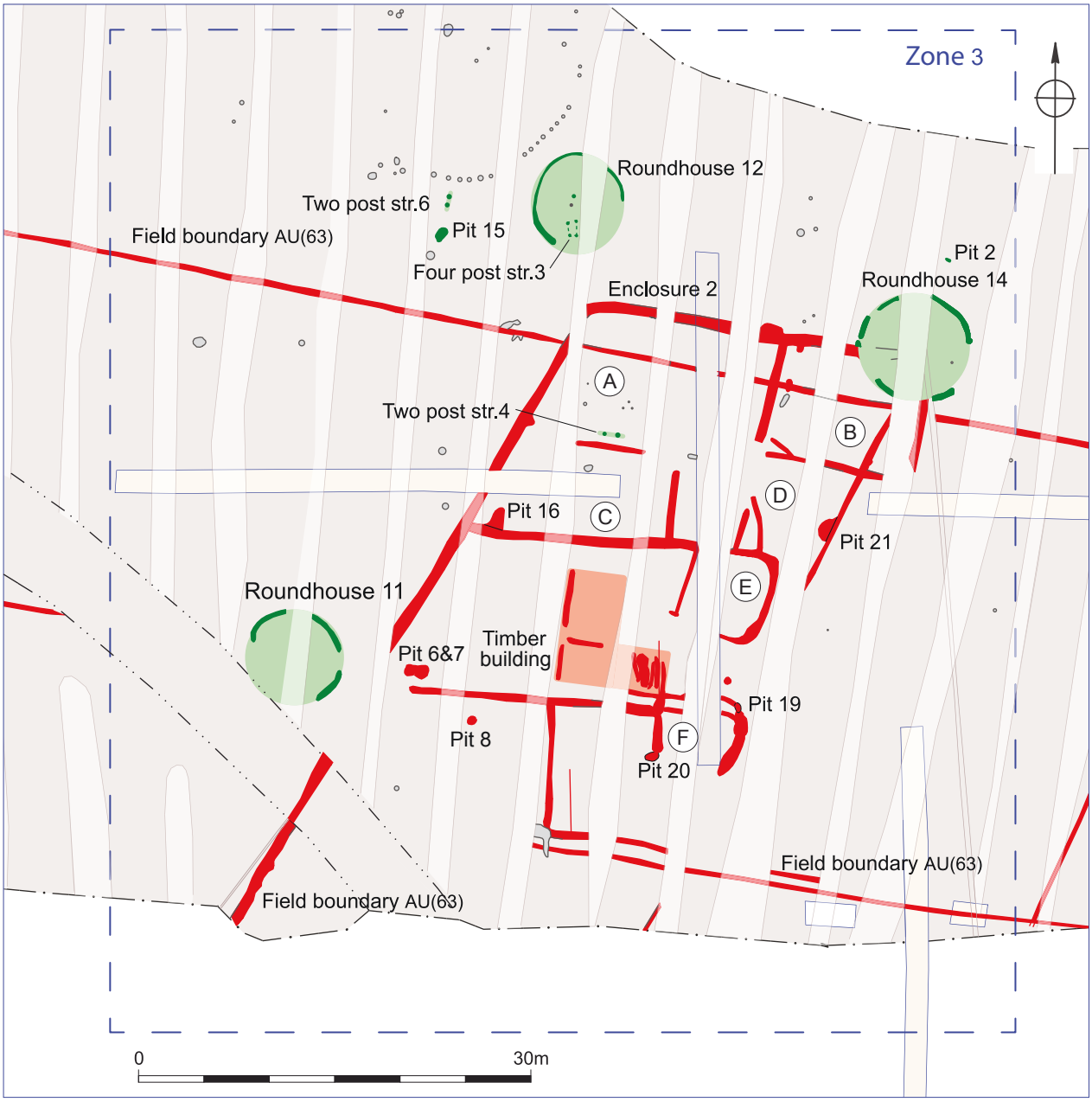
Enclosure 1 photographs *Figure 35*

Section 1090 (facing east)

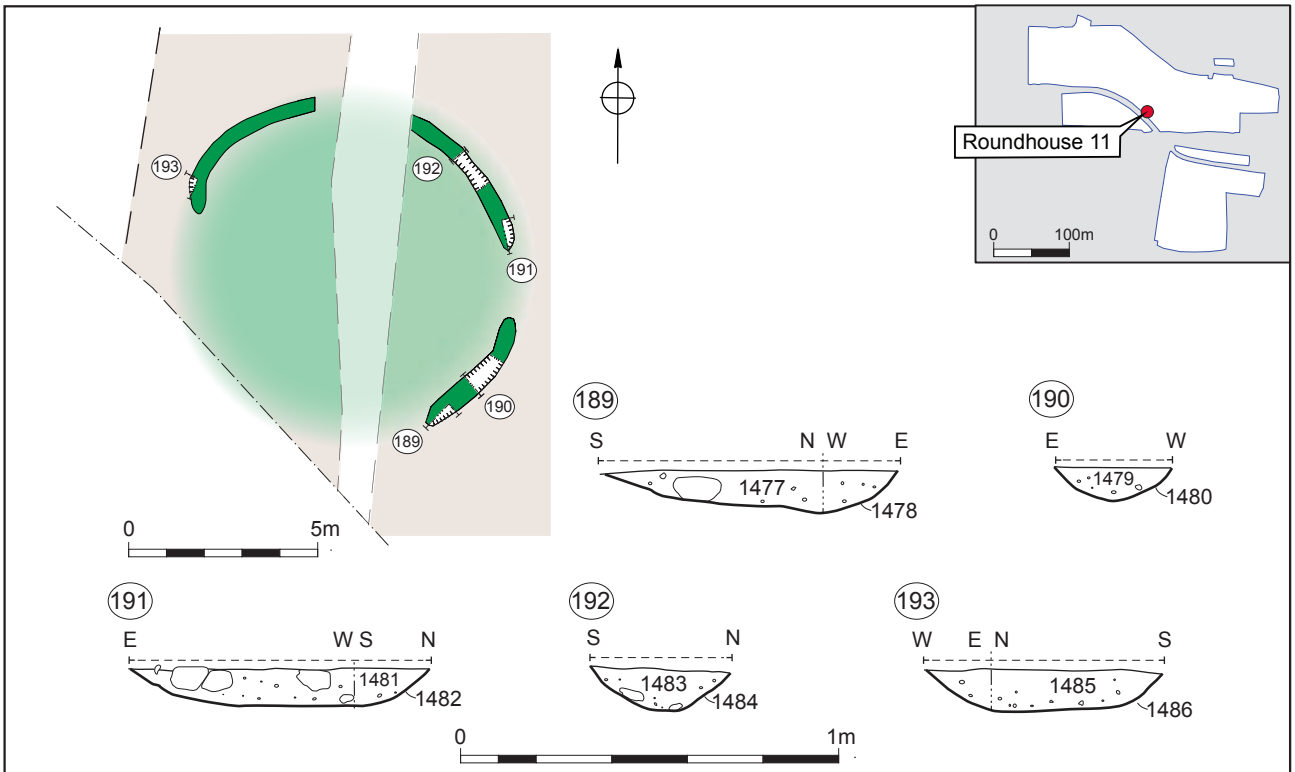
Section 1183 (facing north)

Section across Phase 1 [1267] and Phase 2 recut [1277] (facing north)

Enclosure 1 photographs (continued) *Figure 36*

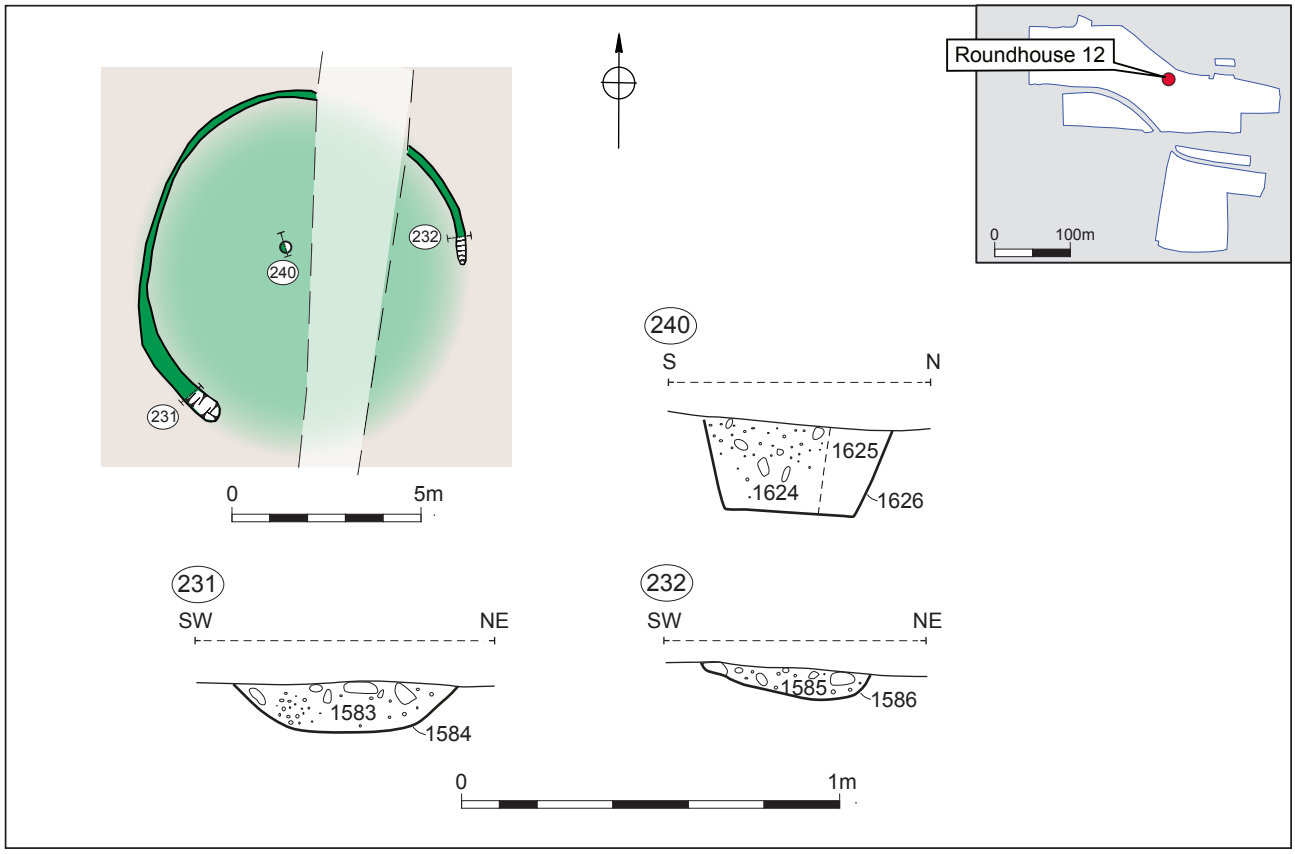


Settlement Zone 3 *Figure 37*

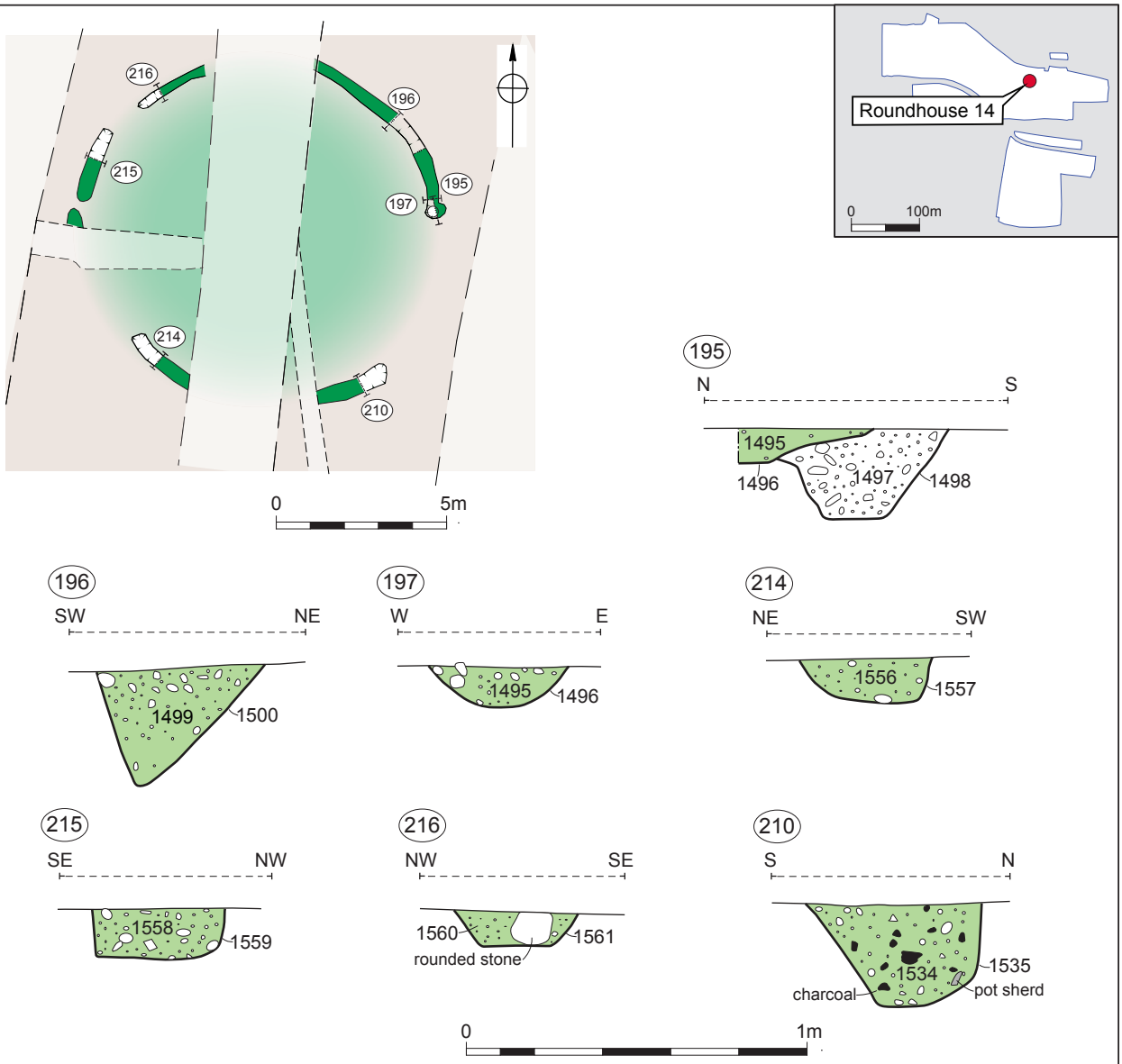


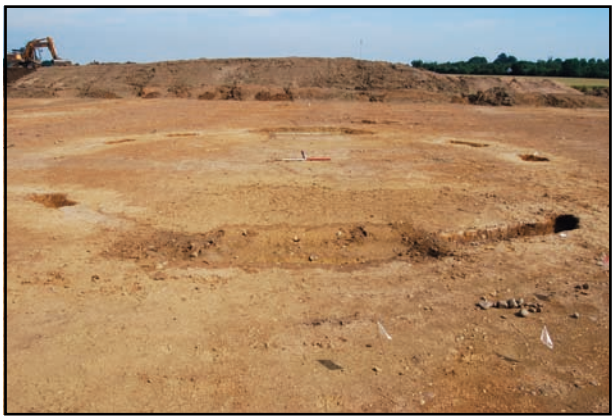
Roundhouse 11 facing north-west

Roundhouse 11 *Figure 38*



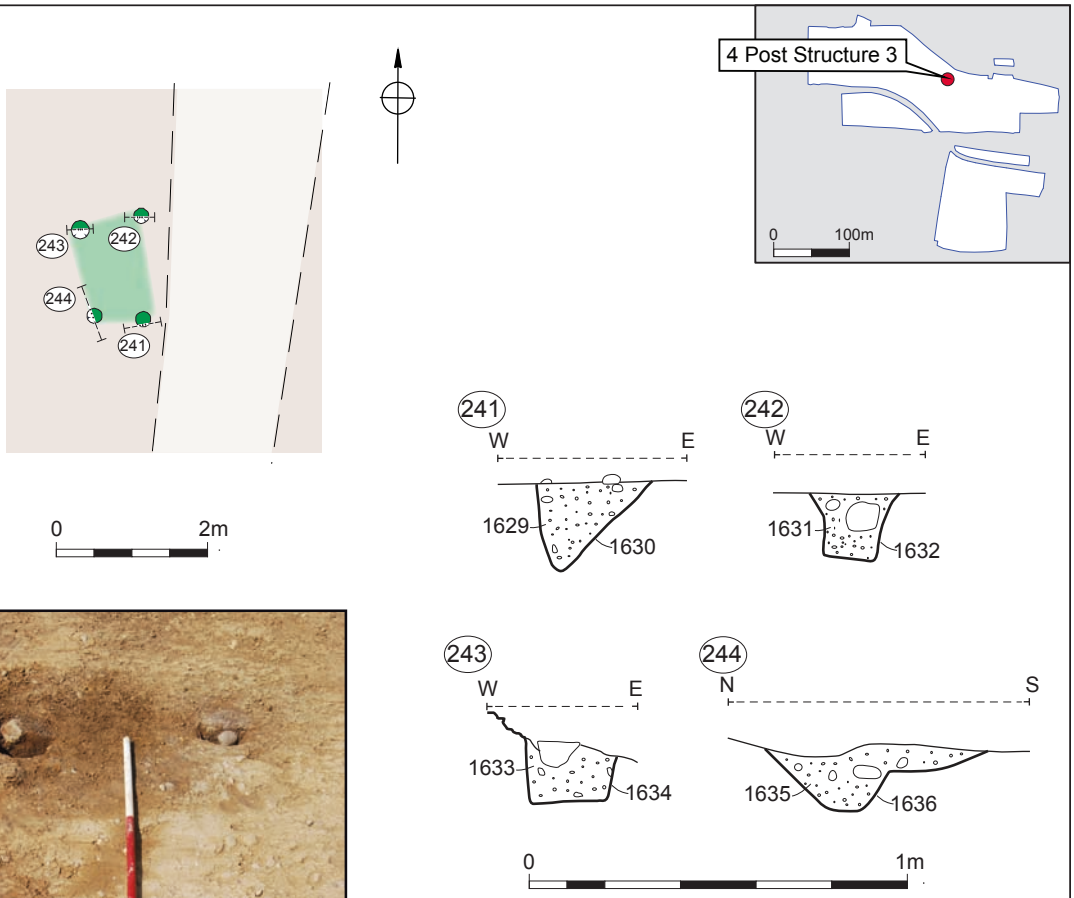
Roundhouse 12 *Figure 39*





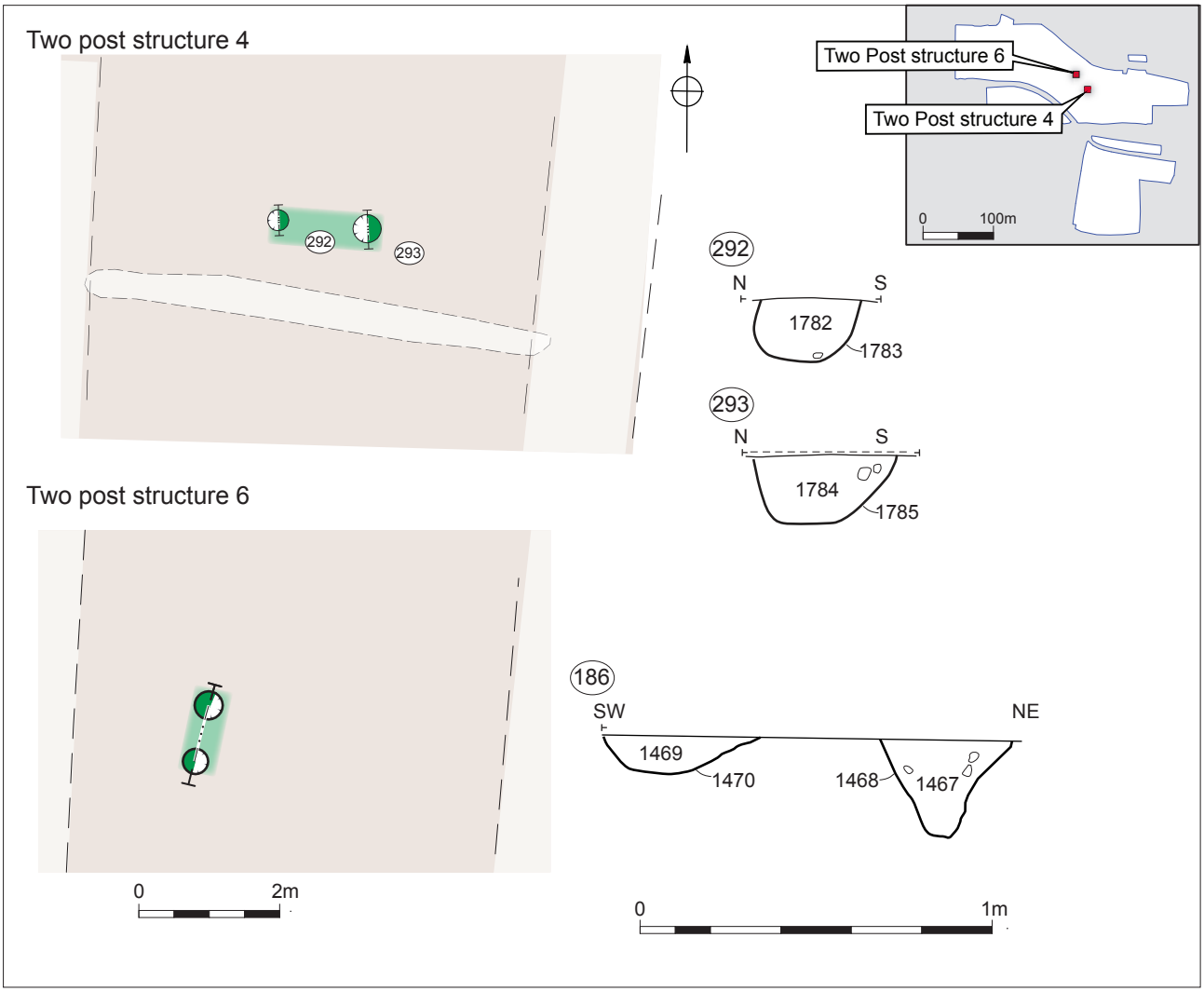
Roundhouse 14 (facing north)

Roundhouse 14 *Figure 40*

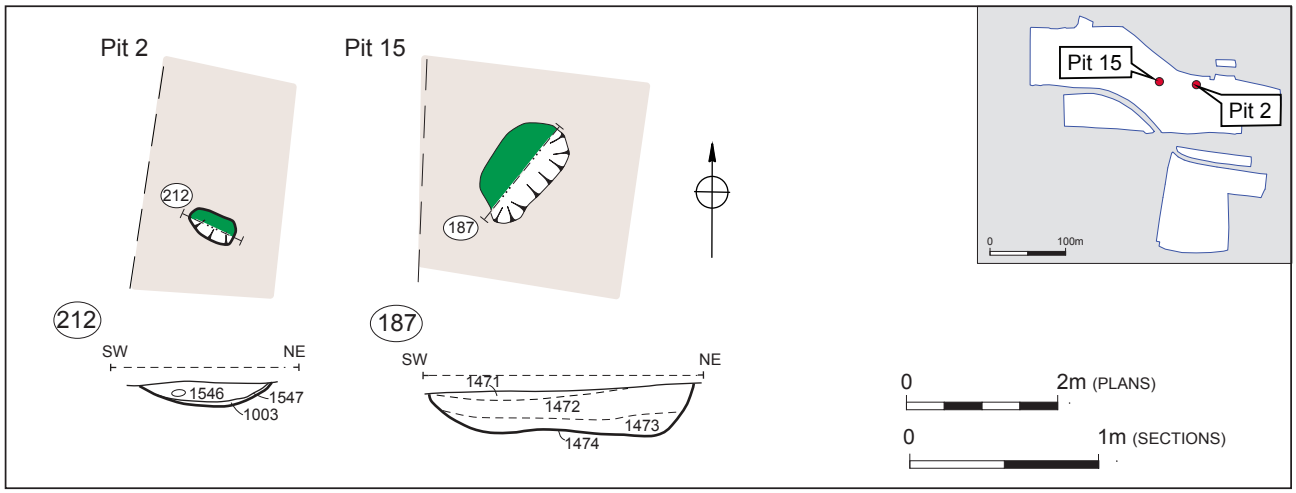


Four post structure 3 (facing north)

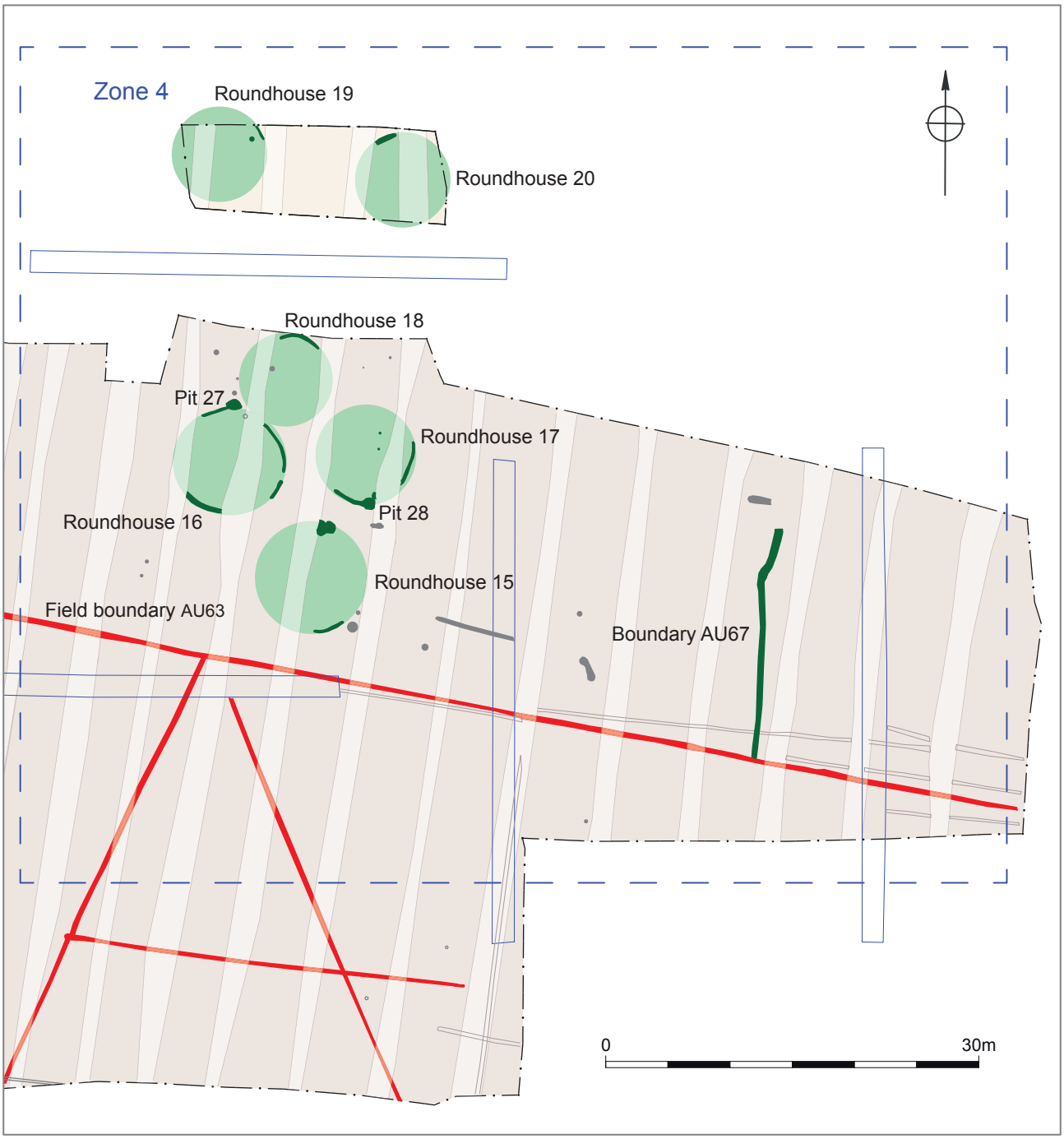
Four post structure 3 *Figure 41*



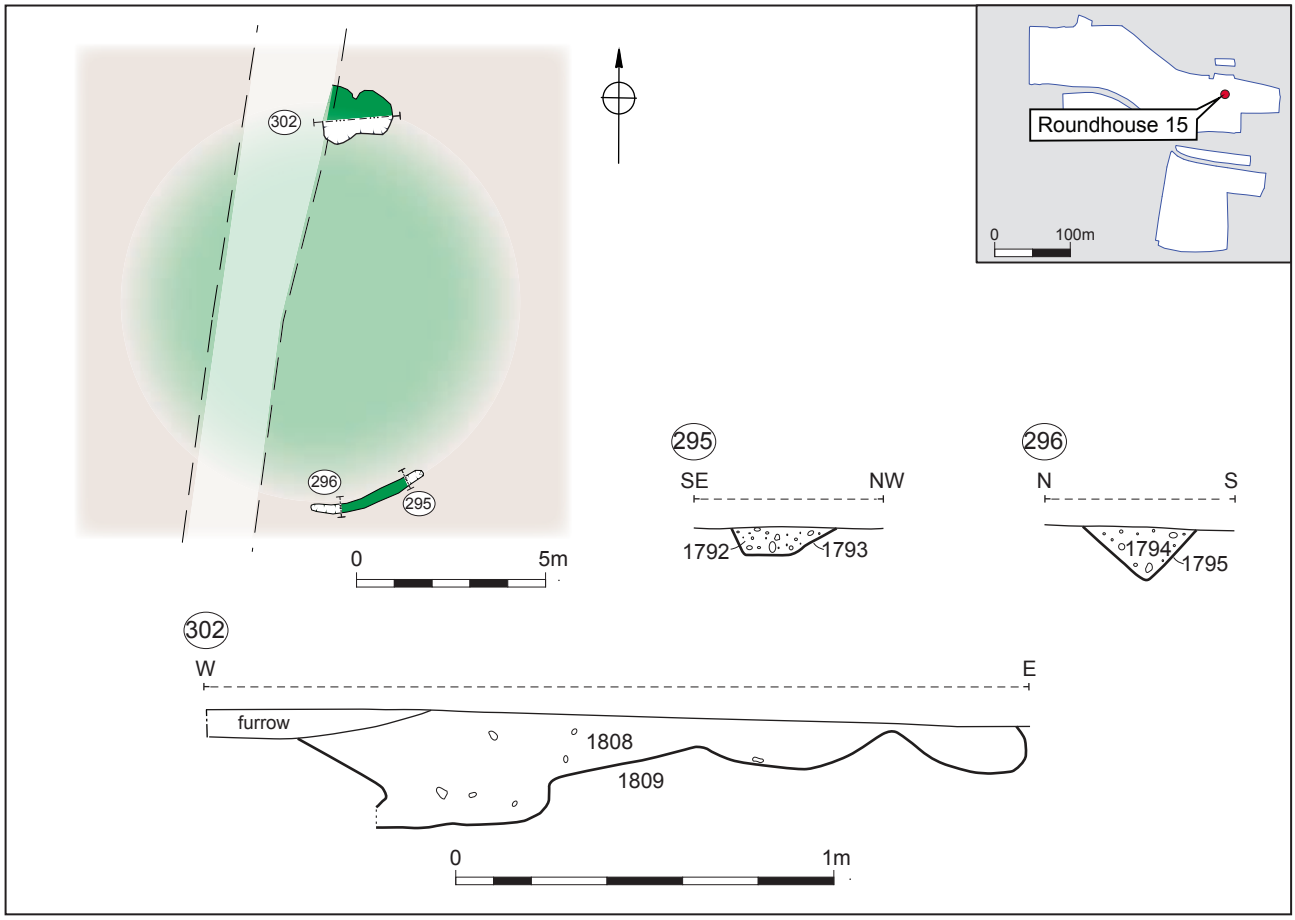
Two post structures 4 and 6 *Figure 42*



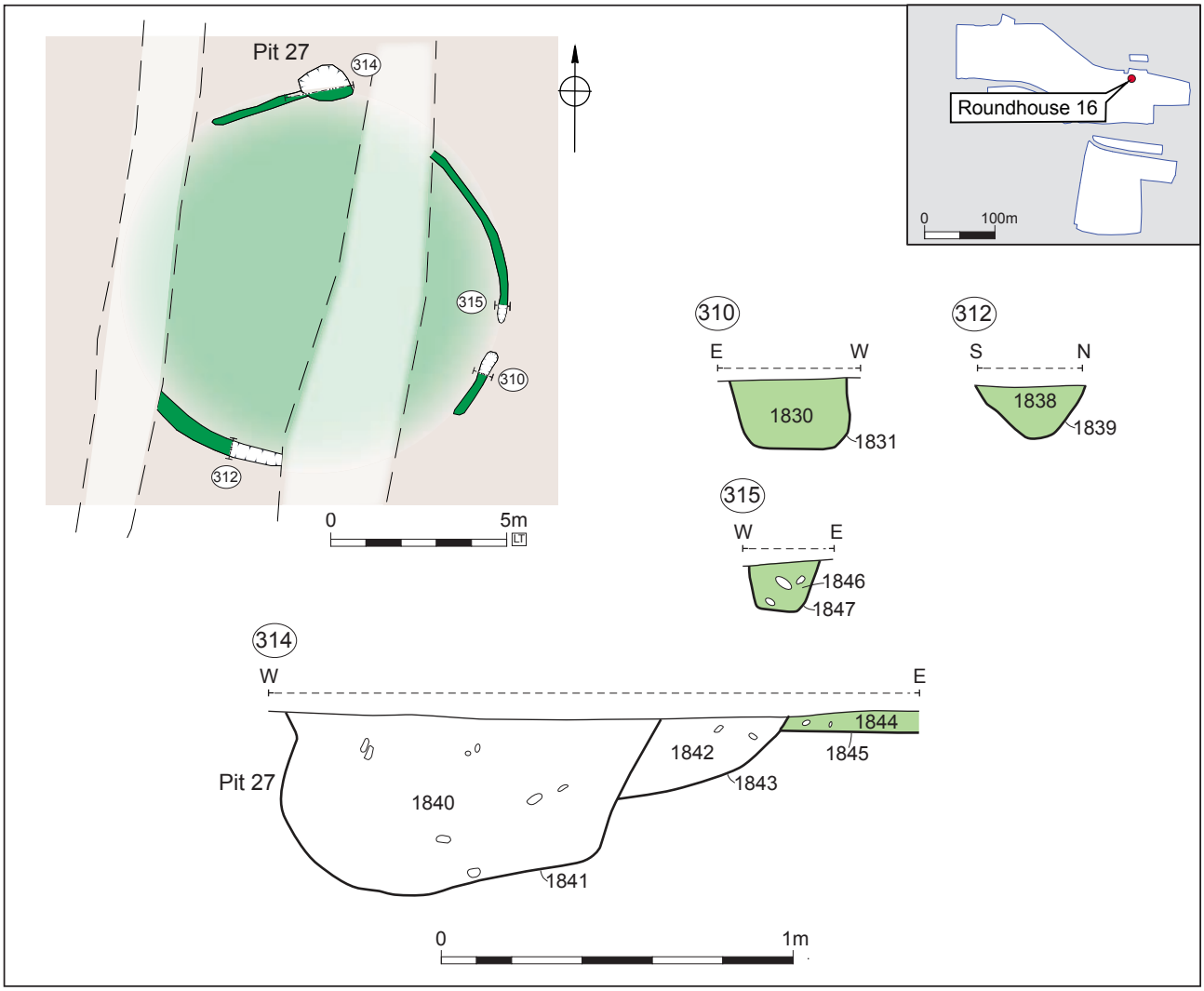
Settlement area 3: Pits plans and sections *Figure 43*



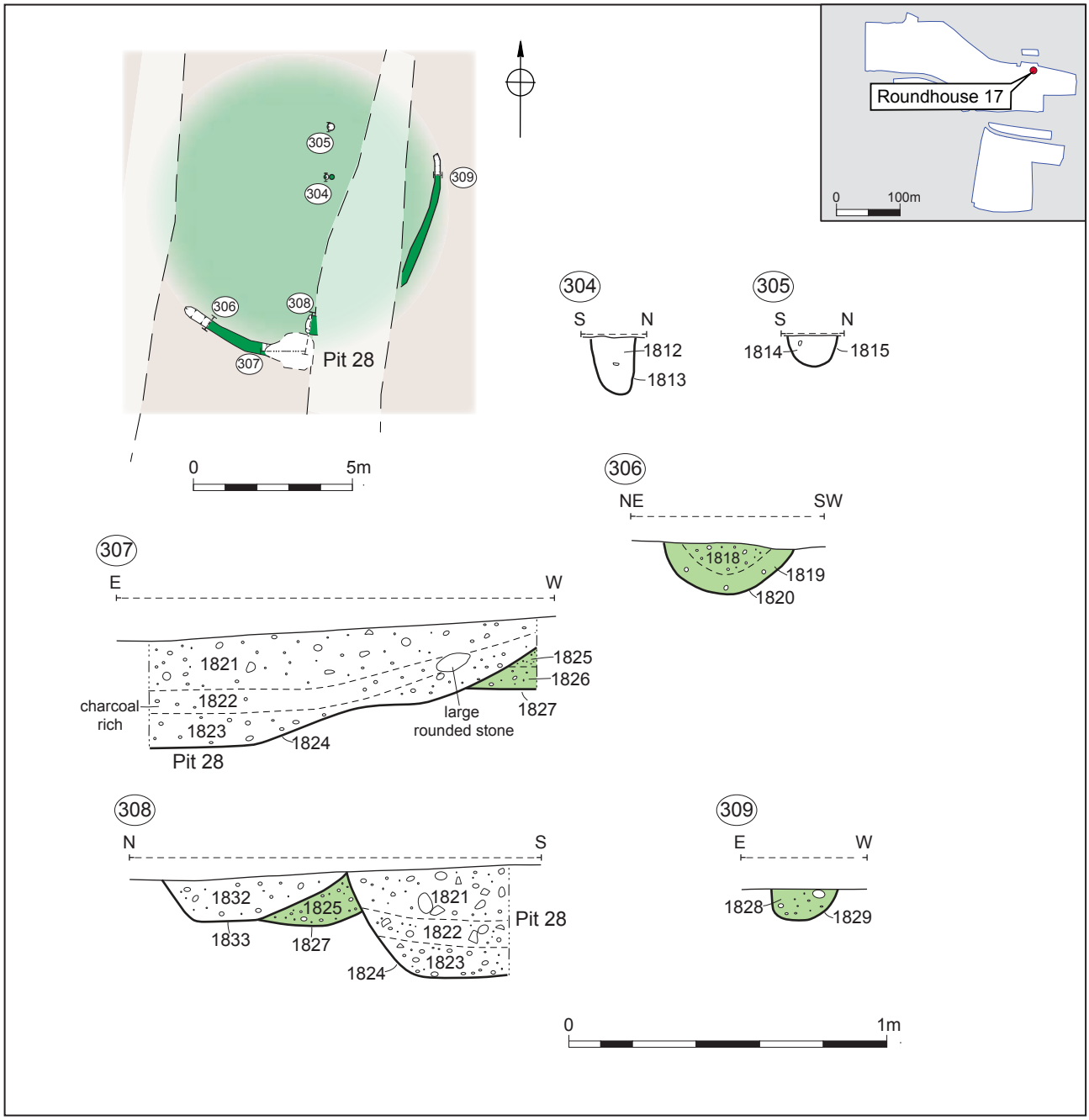
Settlement Zone 4 *Figure 44*



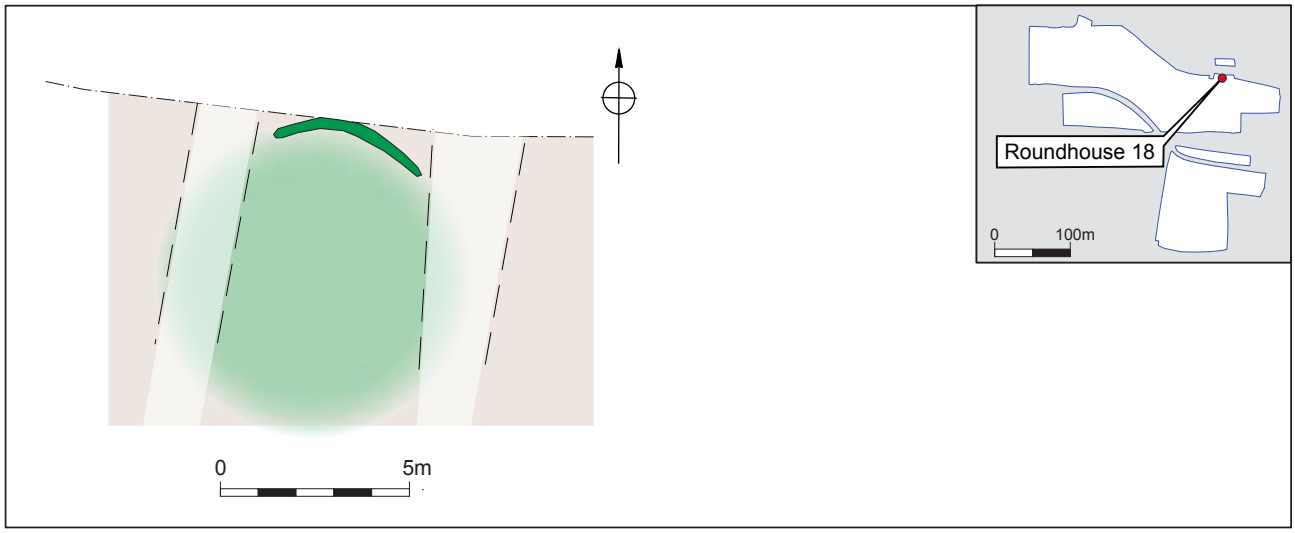
Roundhouse 15 *Figure 45*



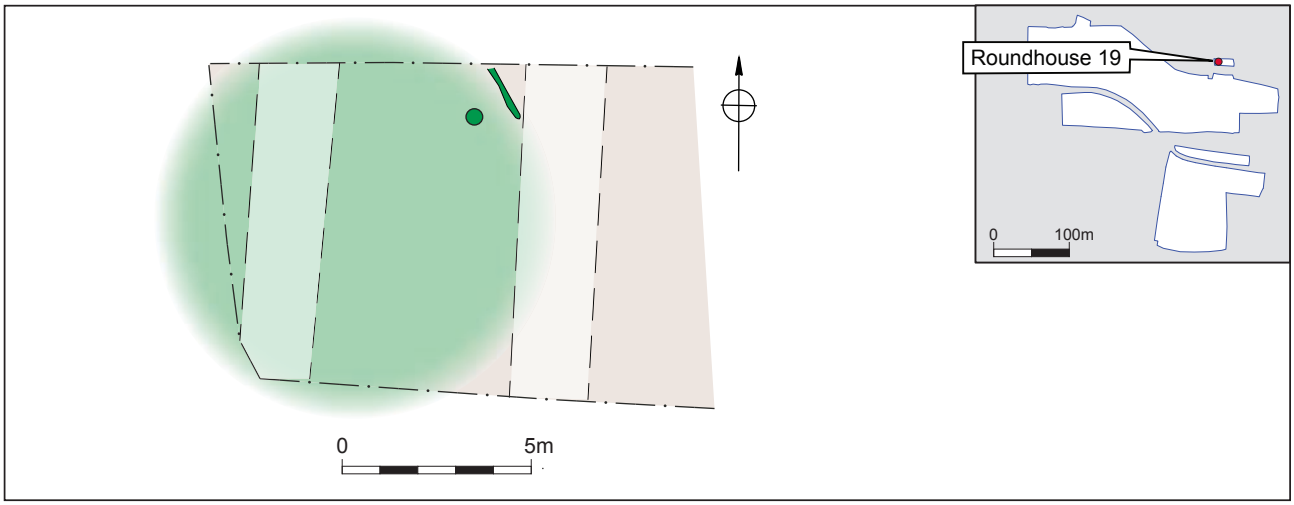
Roundhouse 16 *Figure 46*



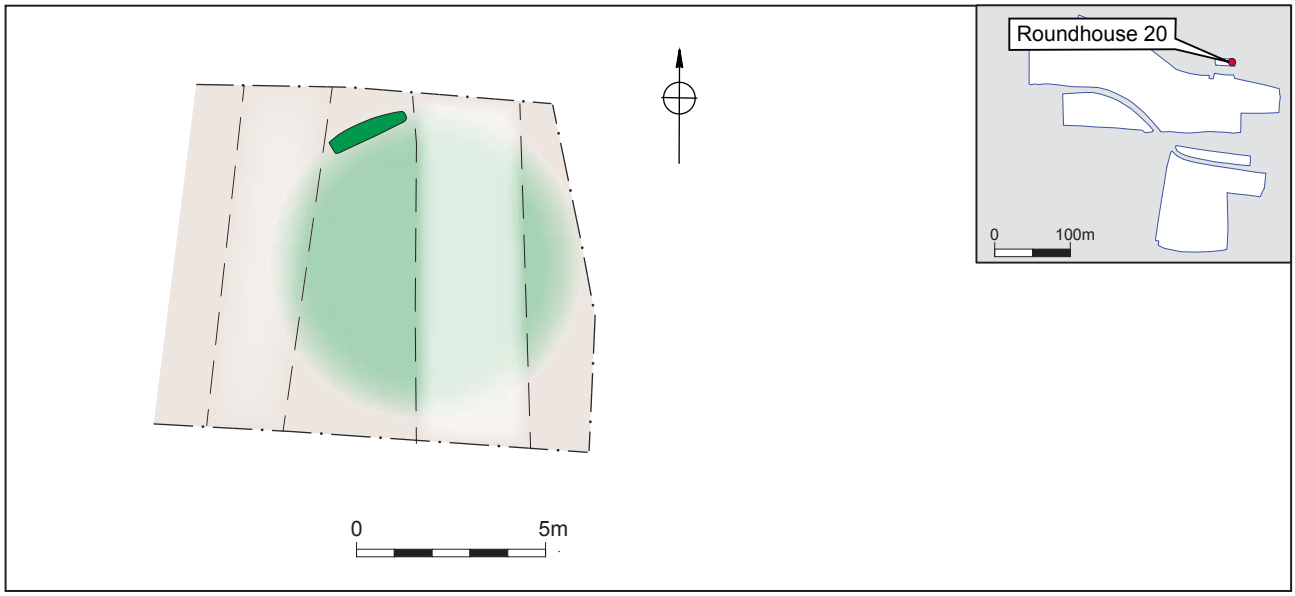
Roundhouse 17 *Figure 47*



Roundhouse 18 *Figure 48*

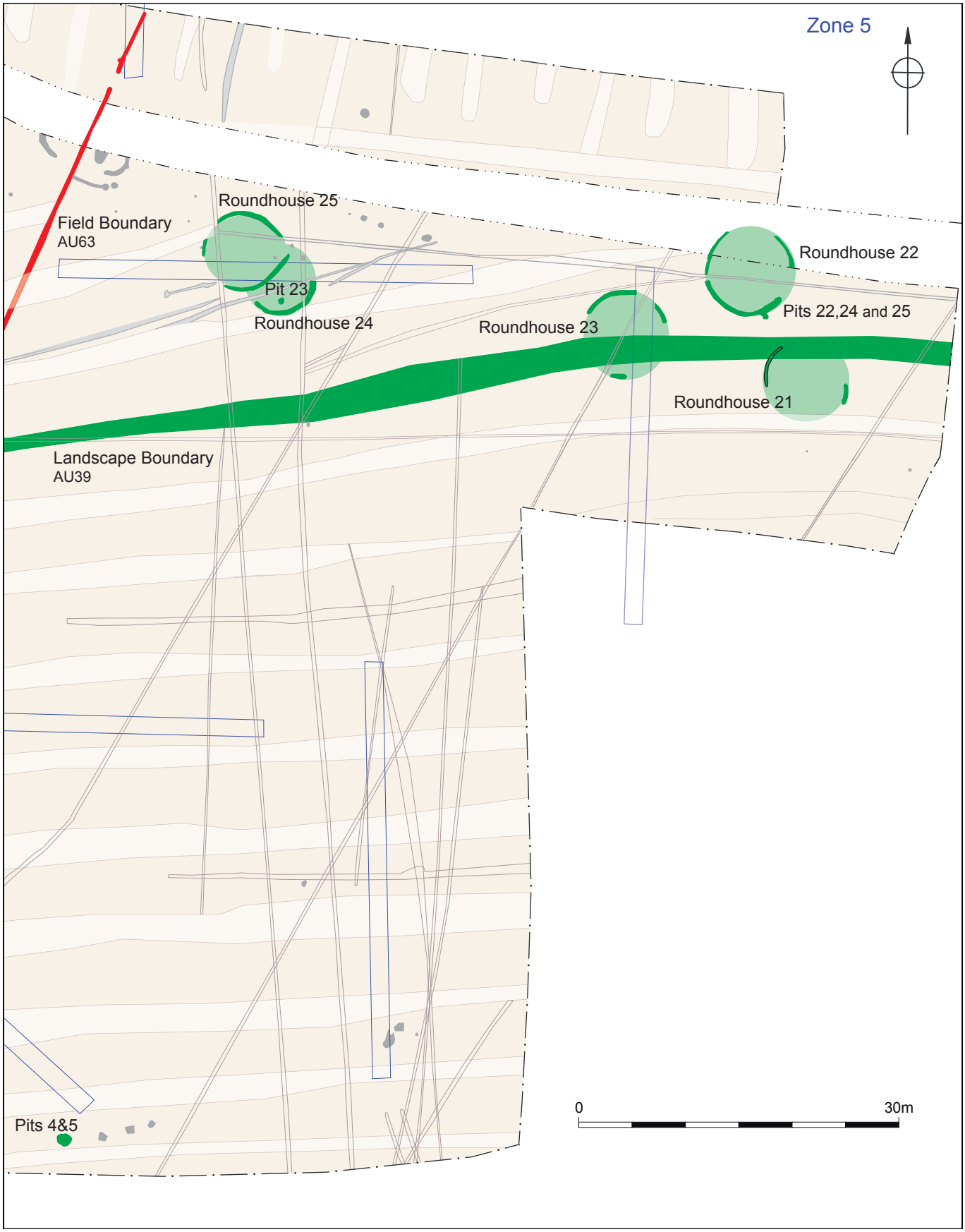


Roundhouse 19 *Figure 49*

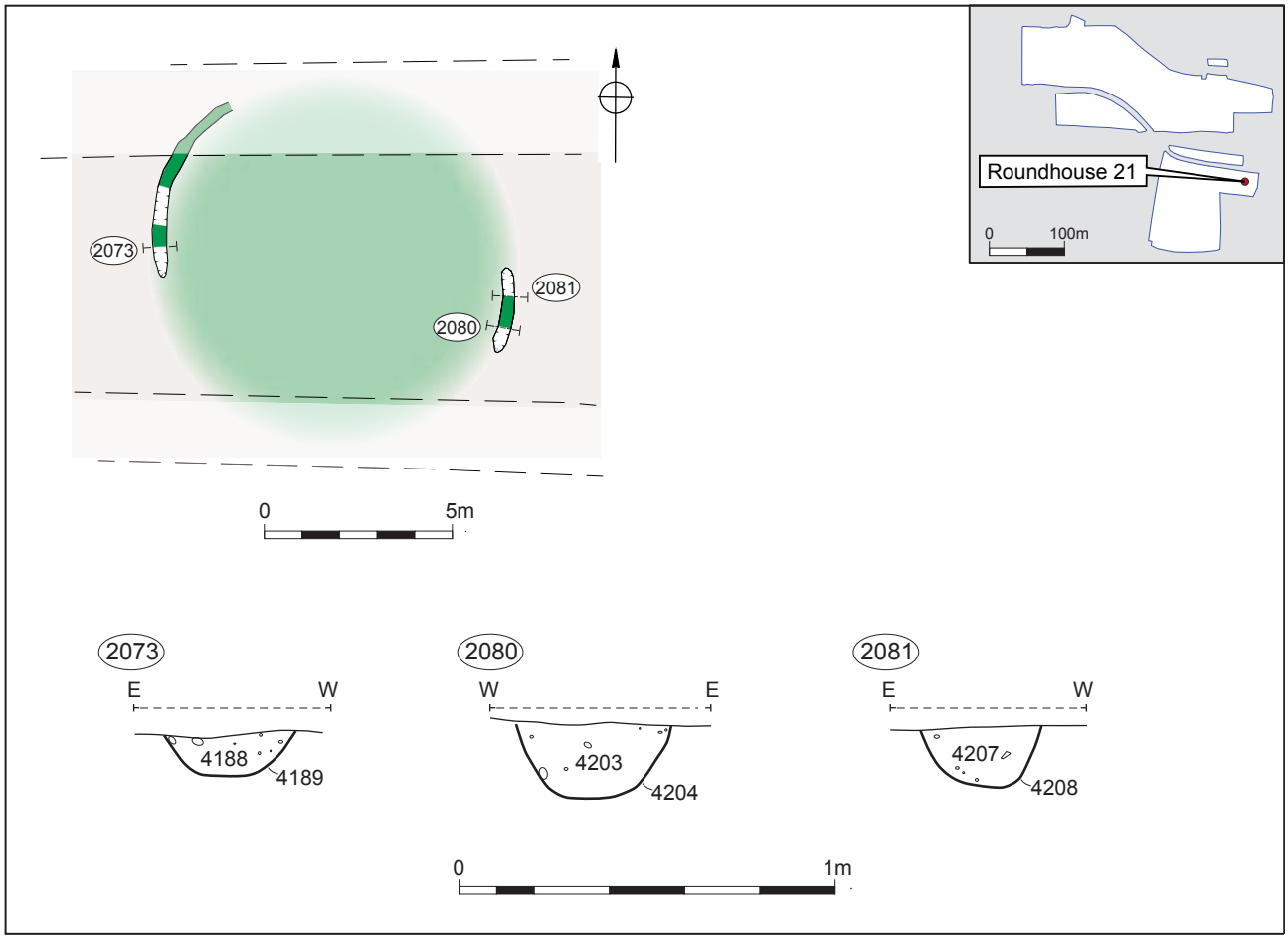


Roundhouse 20

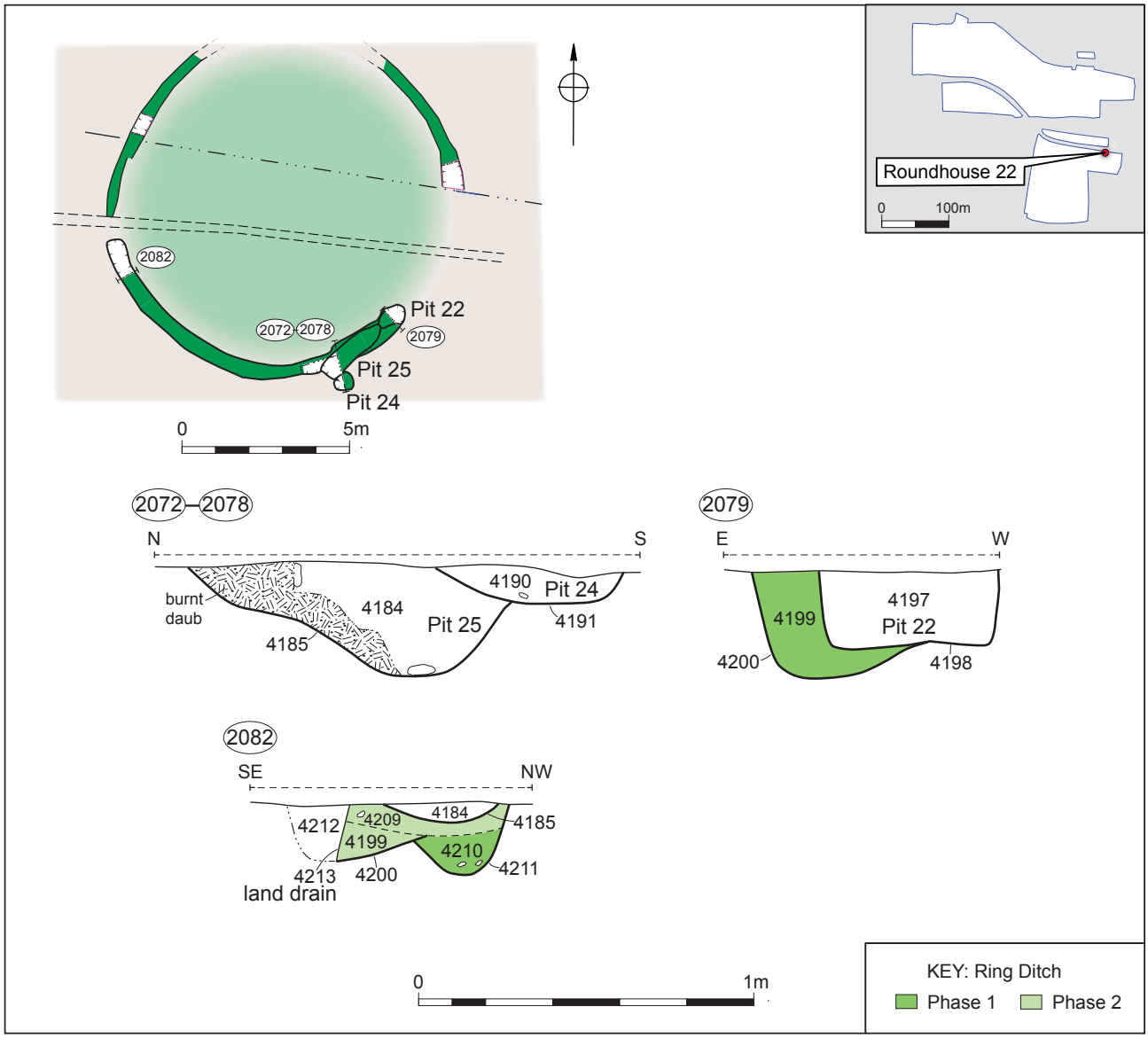
Figure 50



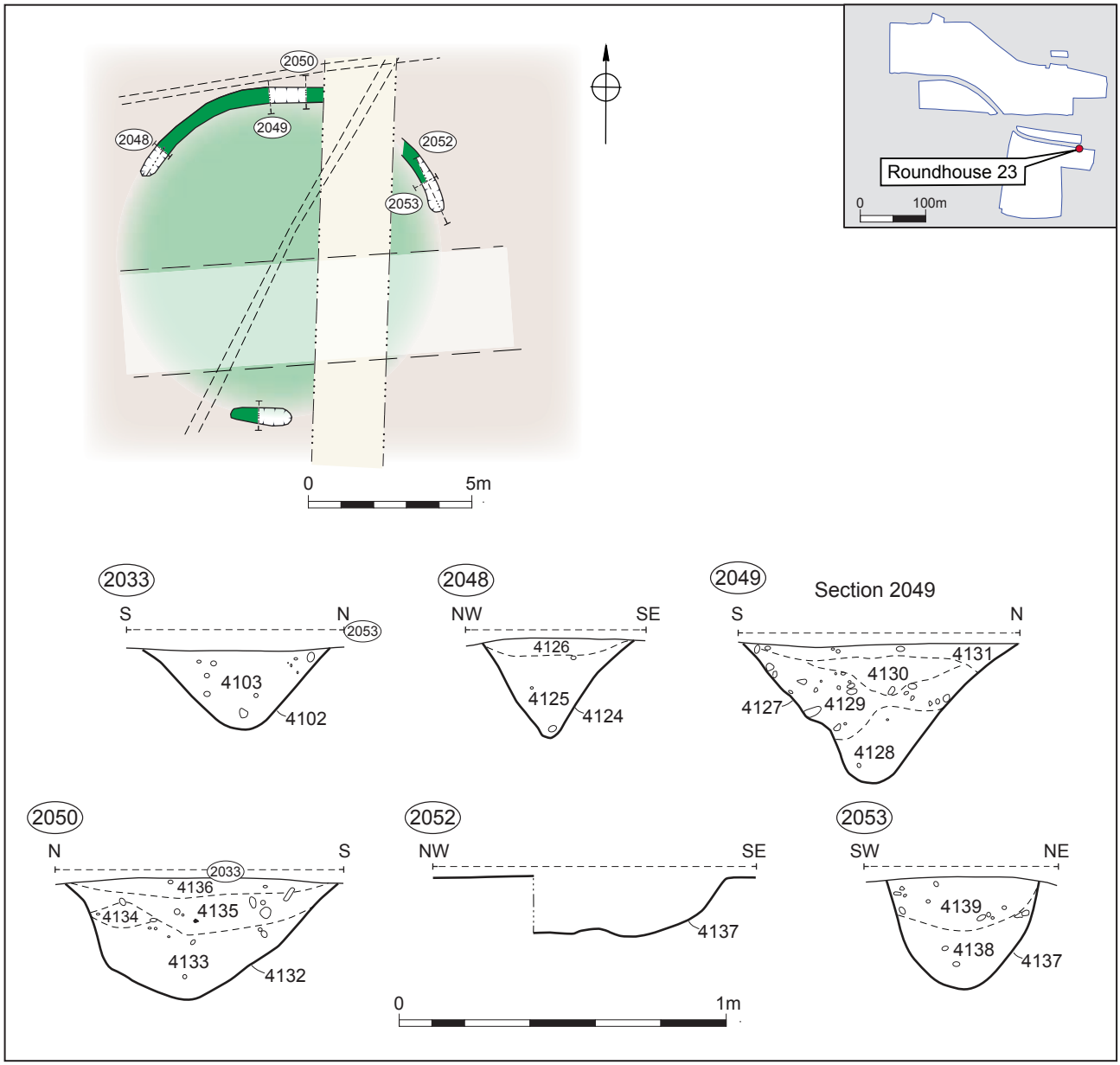
Settlement Zone 5 *Figure 51*



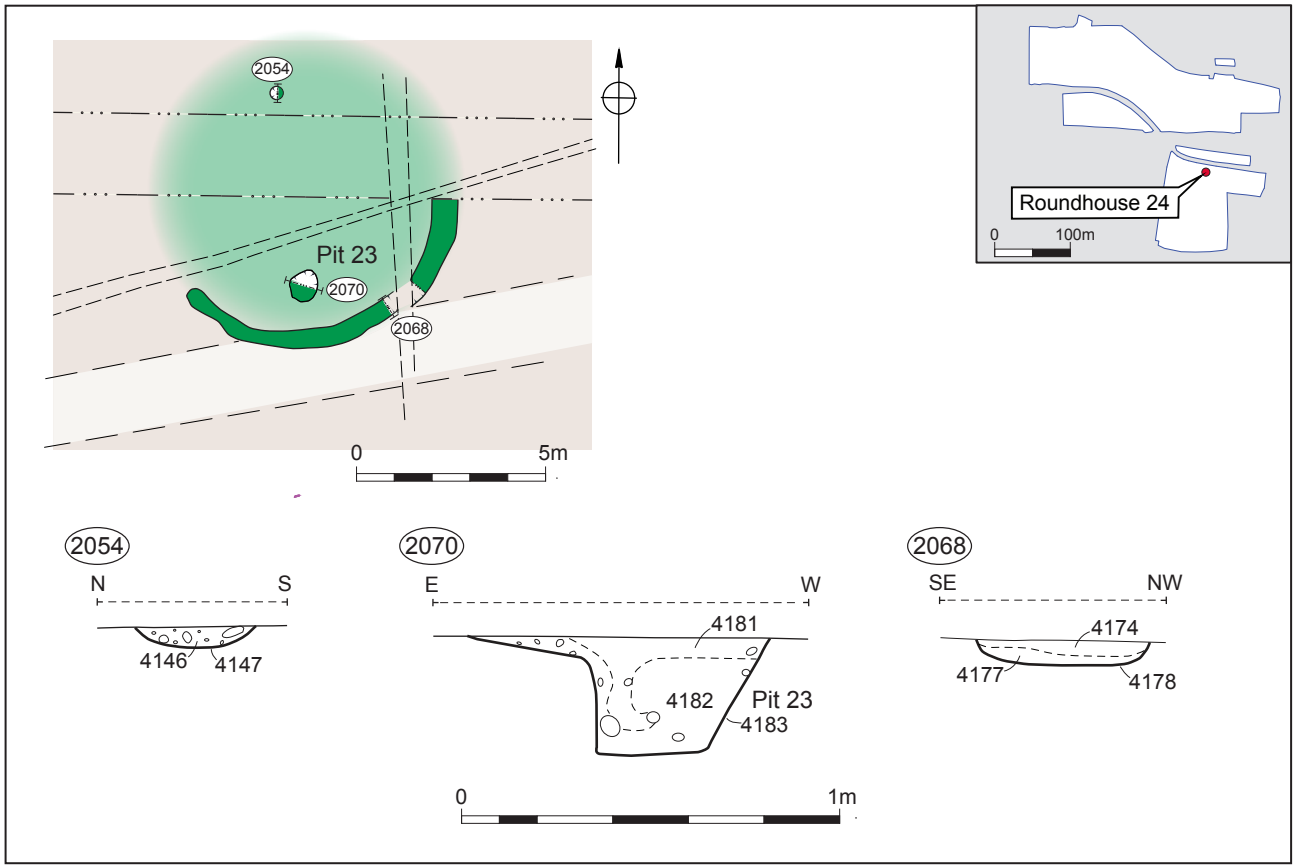
Roundhouse 21 *Figure 52*



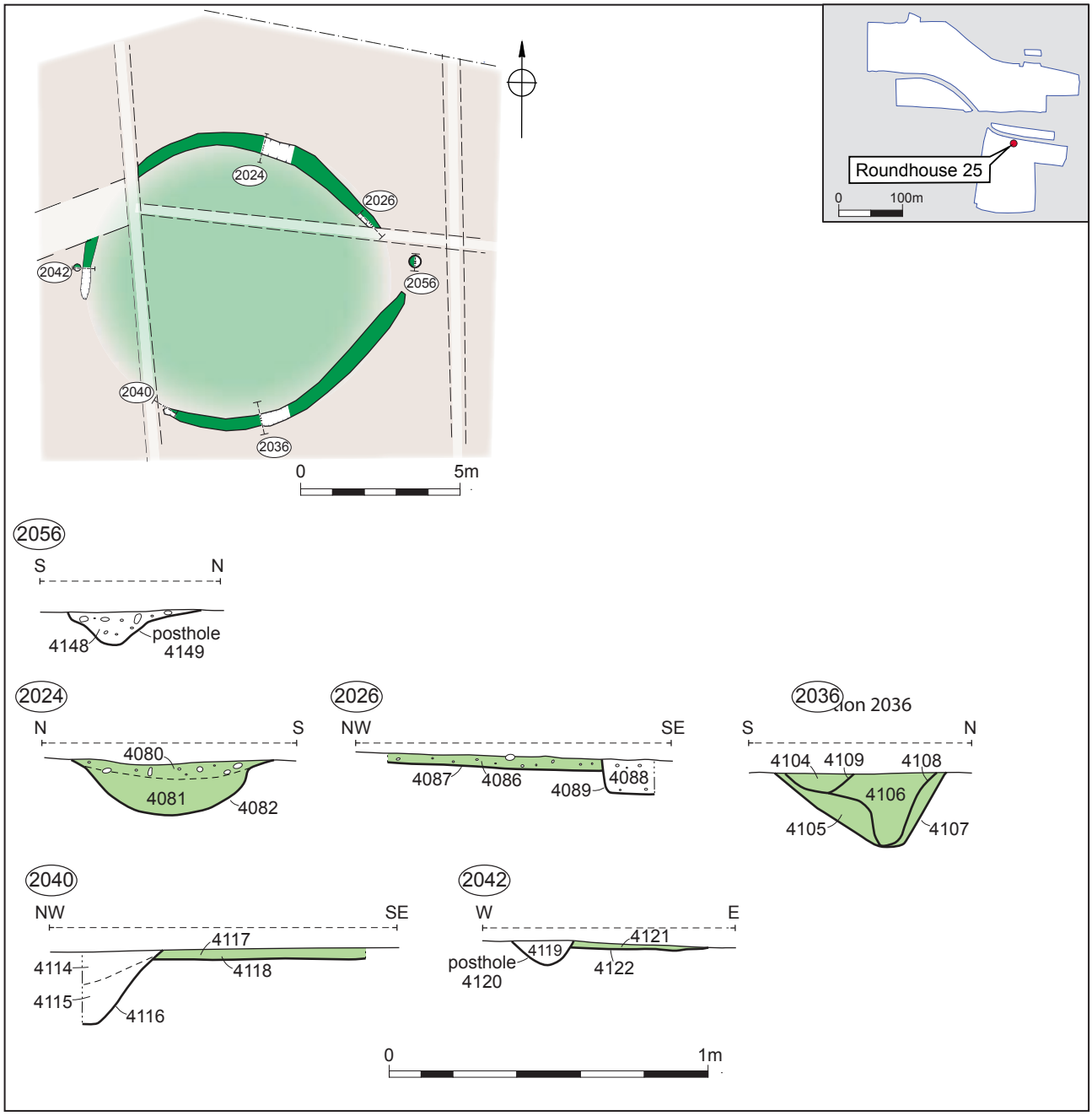
Roundhouse 22 *Figure 53*



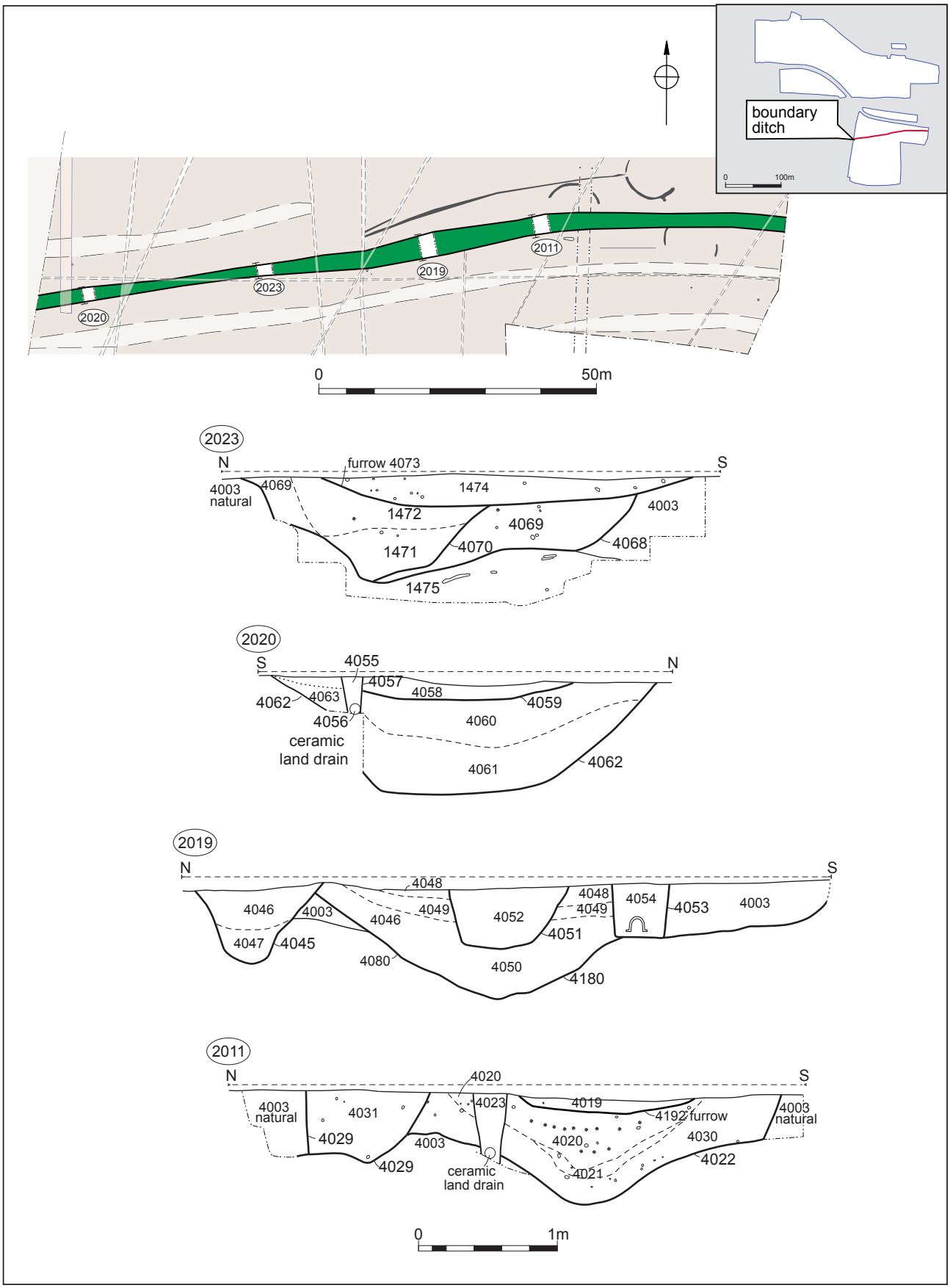
Roundhouse 23 *Figure 54*



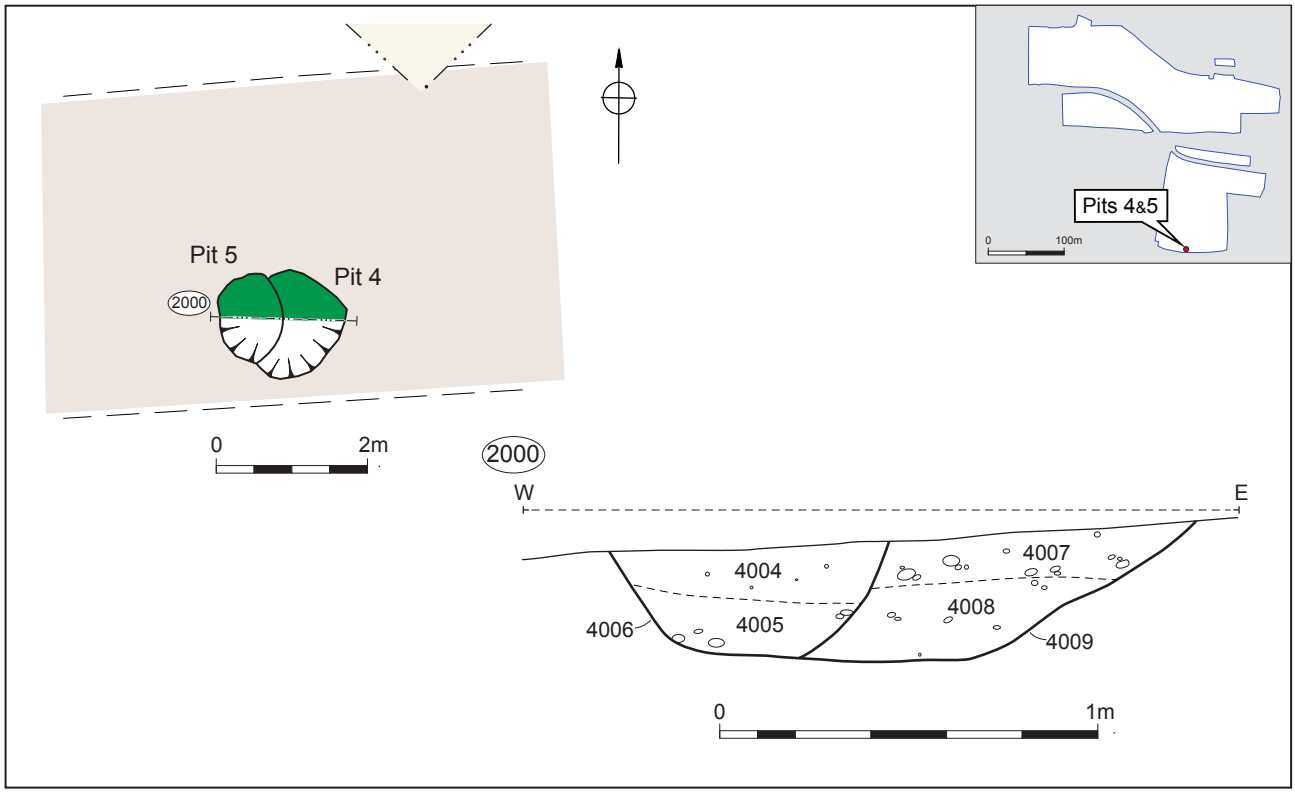
Roundhouse 24 *Figure 55*



Roundhouse 25 *Figure 56*

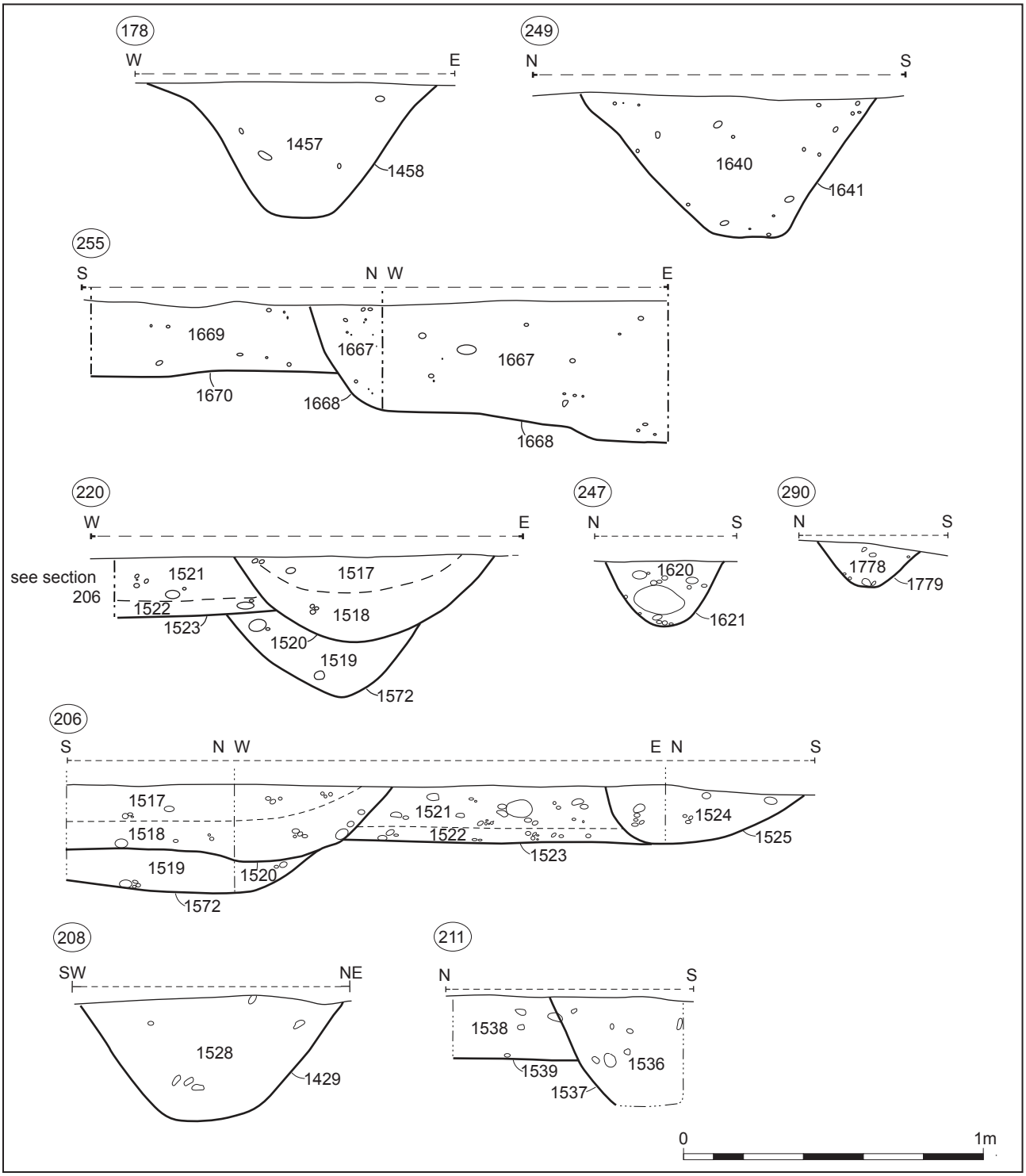


Southern Landscape Boundary *Figure 57*



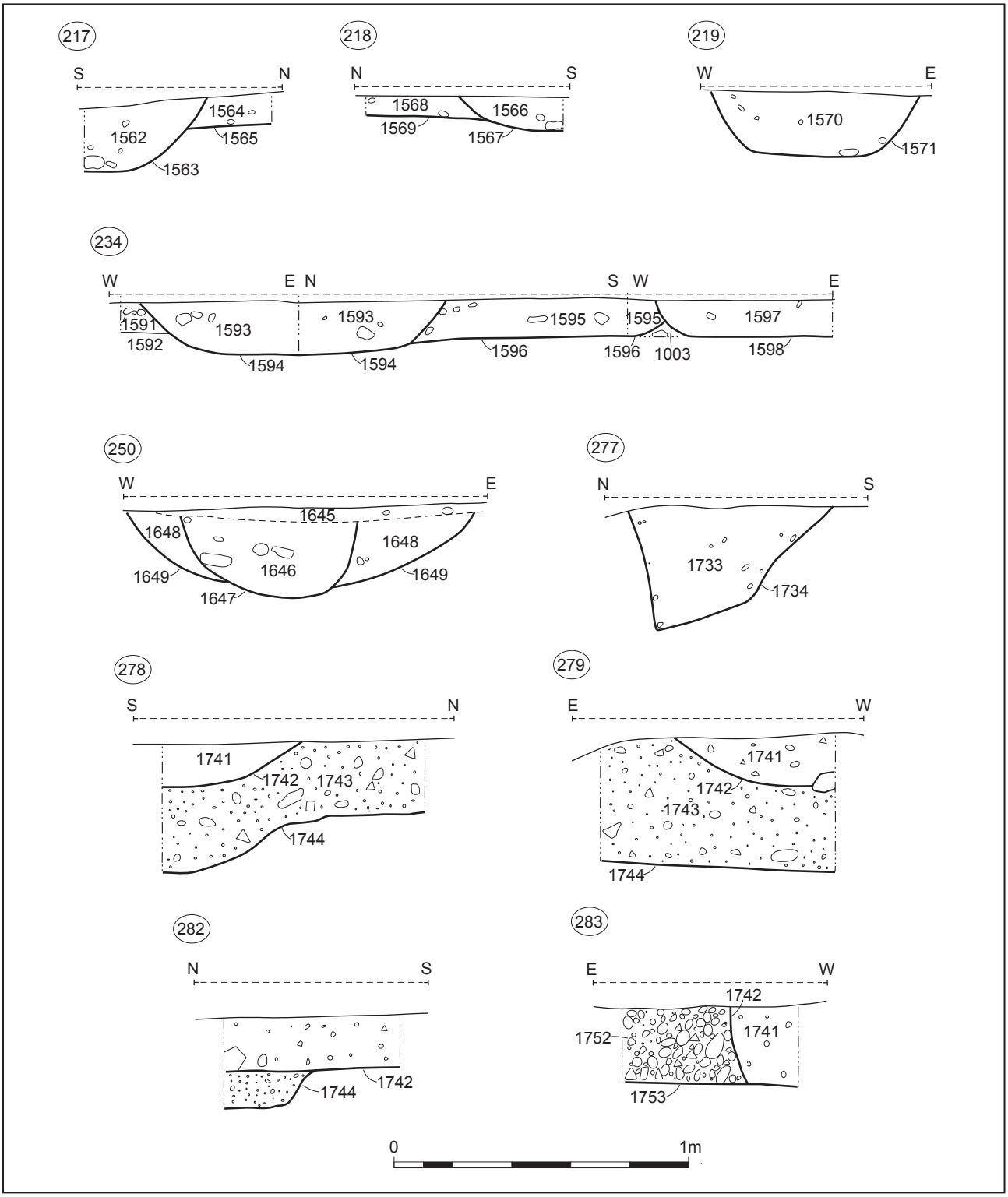
Pits 4 and 5 *Figure 58*

Enclosure 2 and associated Roman features *Figure 59*

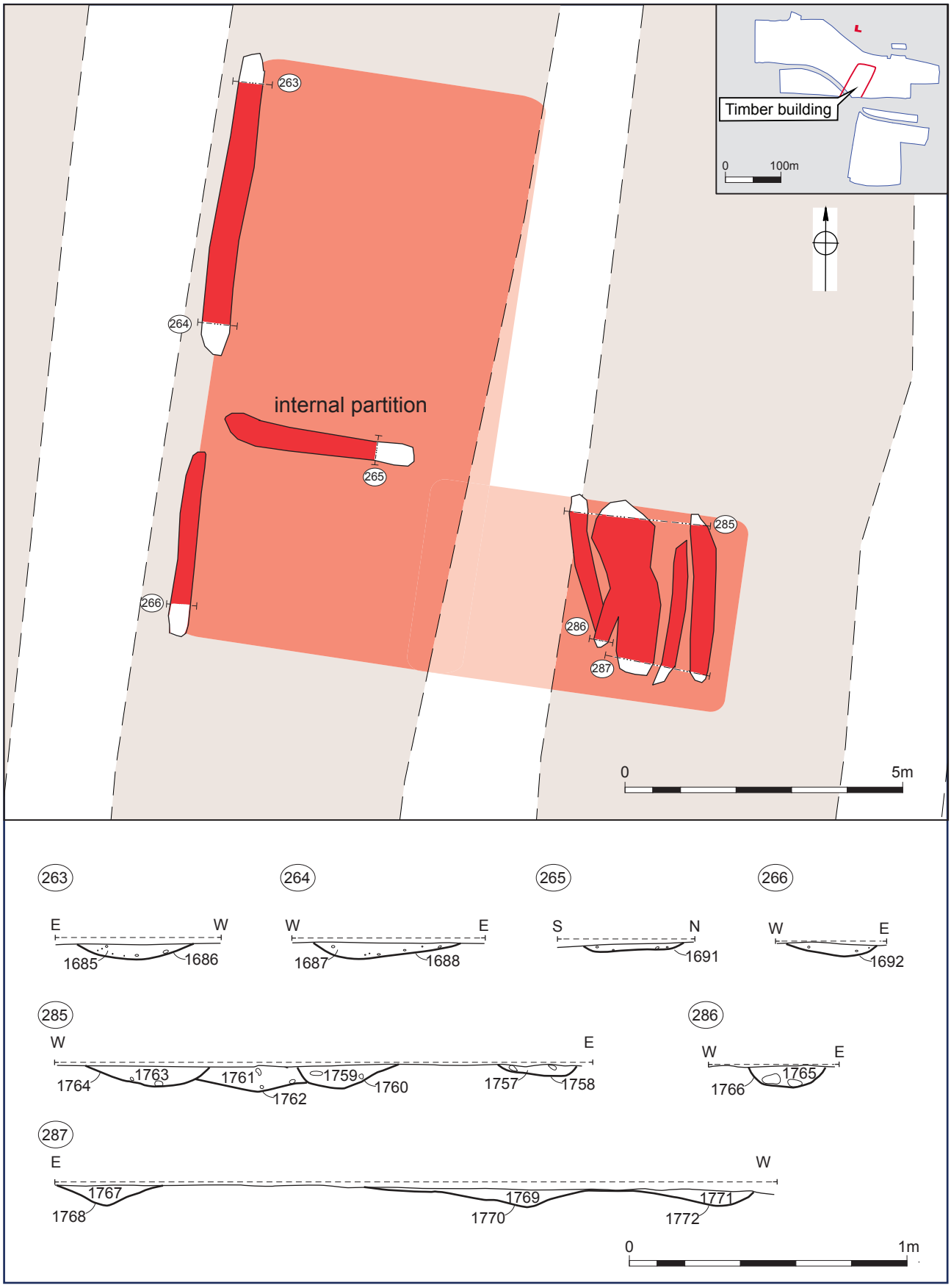


Enclosure 2 sections

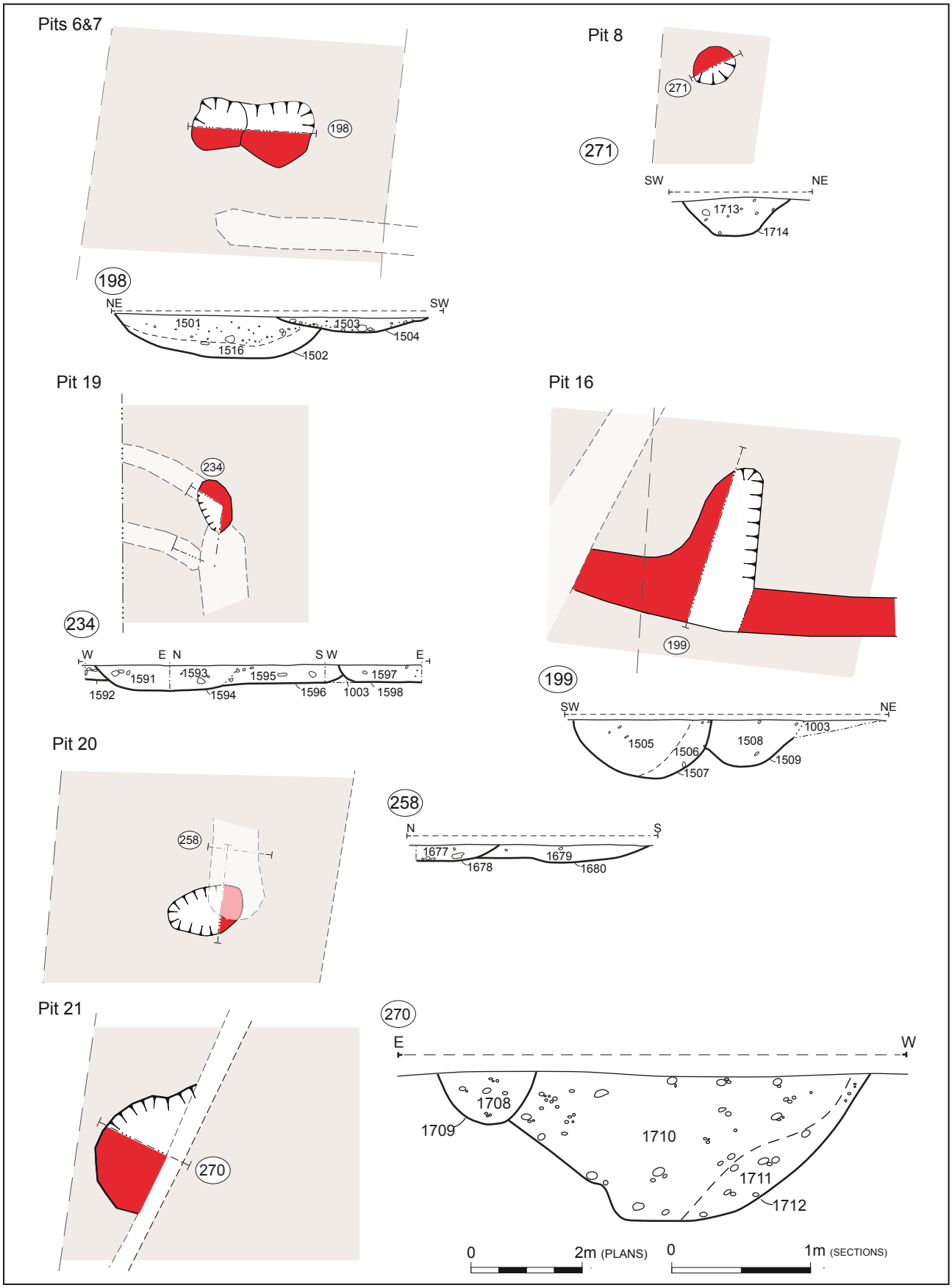
Figure 60



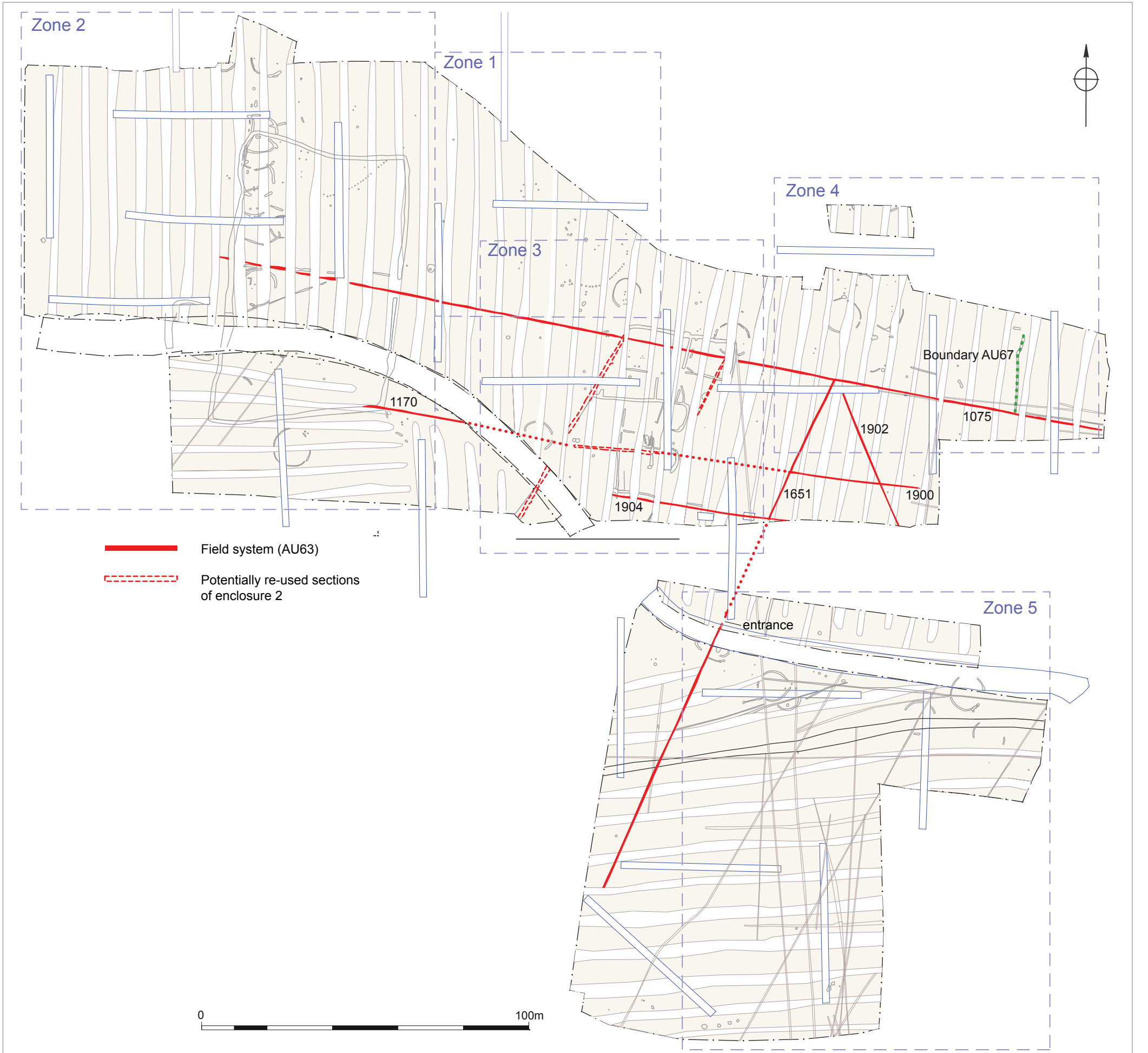
Enclosure 2 sections (continued) *Figure 61*



Enclosure 2 timber building *Figure 62*

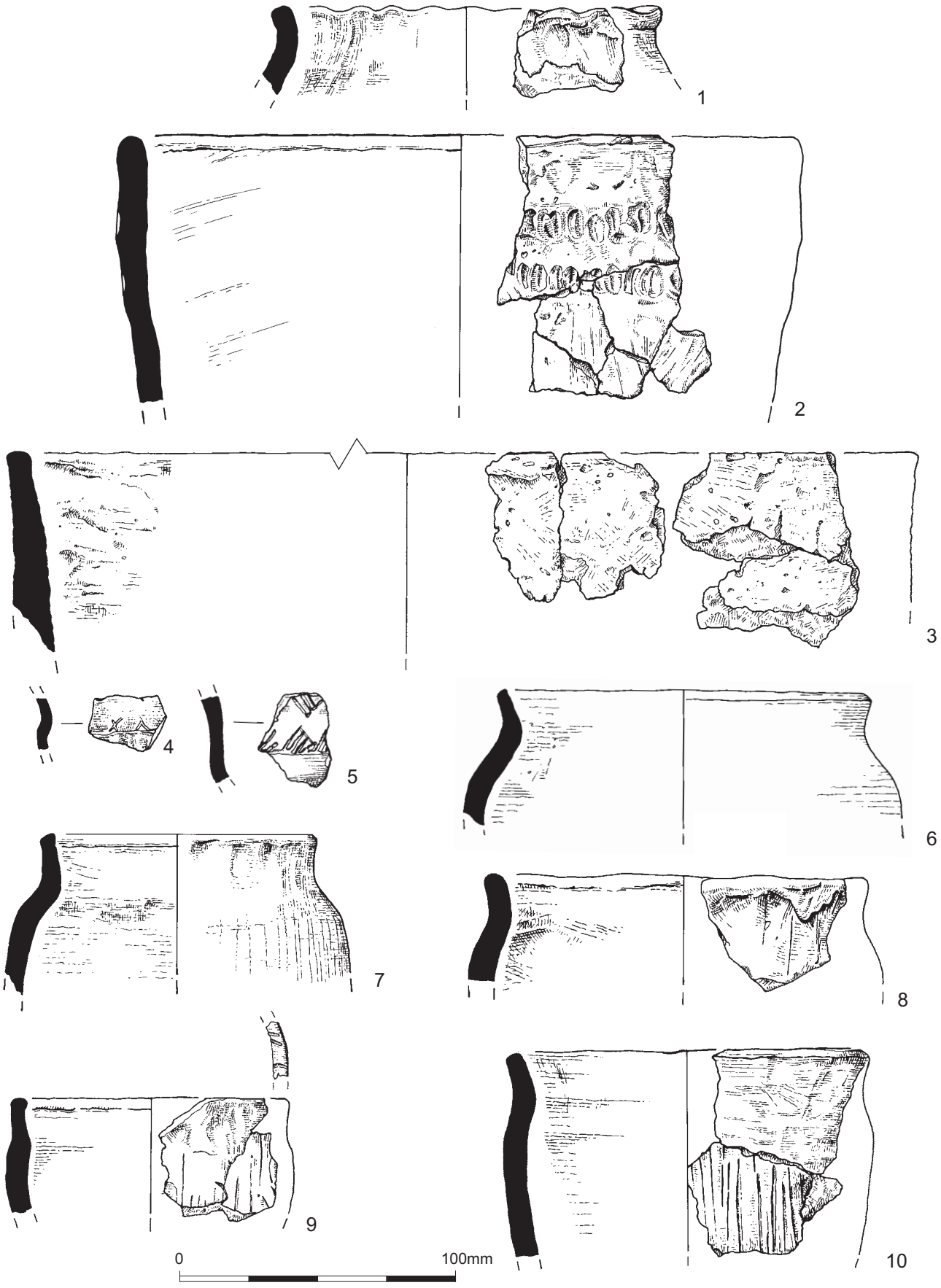


Settlement area 3: Pits, plans and sections *Figure 63*

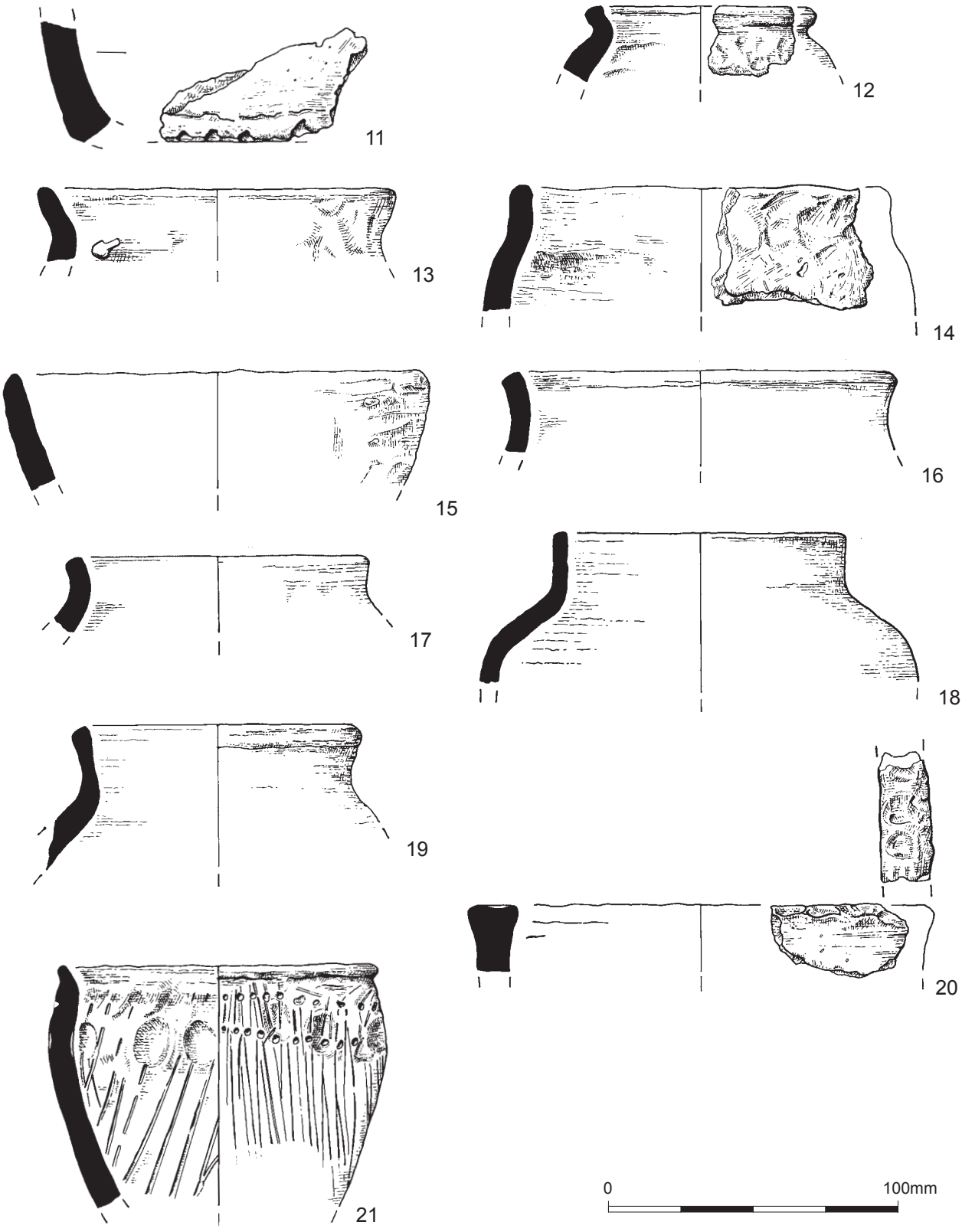


Romano-British field system (AU63)

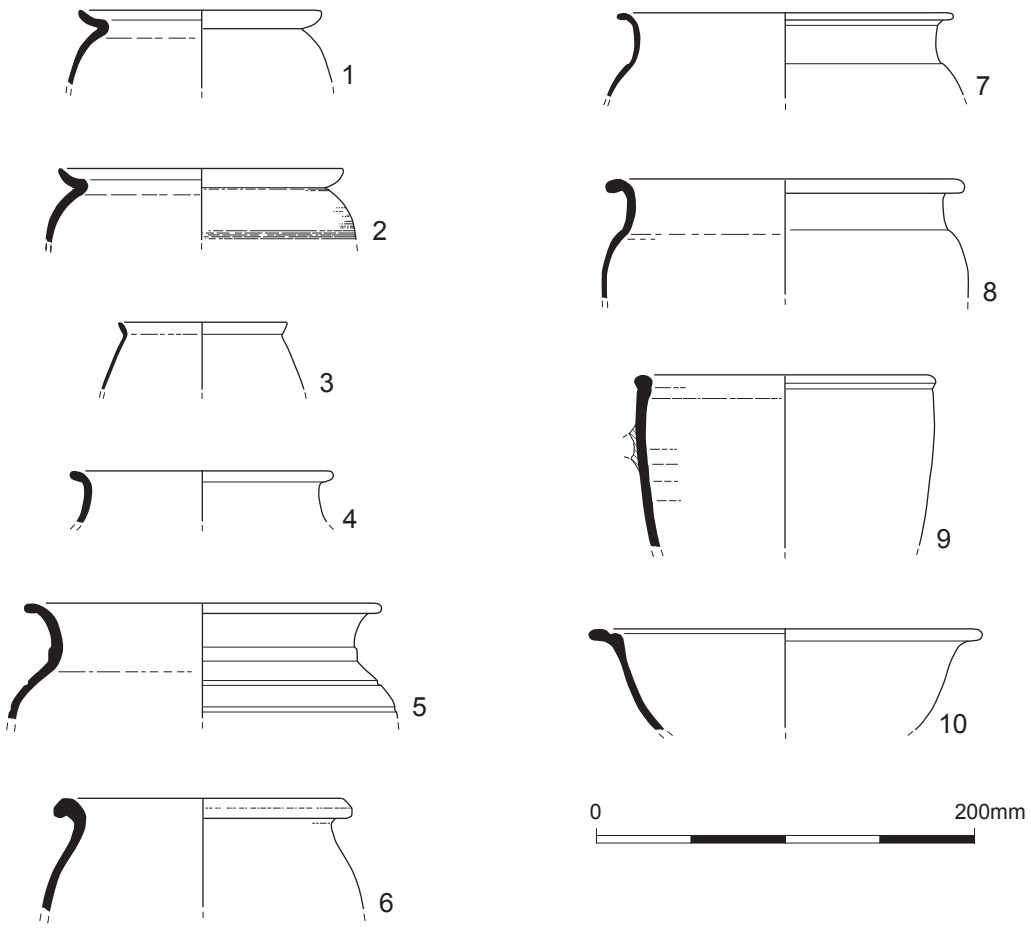
Figure 64



Iron Age pottery 1–10 *Figure 65*



Iron Age pottery 11–21 *Figure 66*



Roman pottery *Figure 67*