



Orchard Hill, Carshalton,
London Borough of Sutton
Greater London

Post-excavation assessment report





**ORCHARD HILL, CARSHALTON,
LONDON BOROUGH OF SUTTON
GREATER LONDON**

(PLANNING REF. C2008/59820)

Post-excavation assessment report

Prepared for:
CgMs Consulting
Morley House
26 Holborn Viaduct
London
EC1A 2AT

by
Wessex Archaeology
Portway House
Old Sarum Park
SALISBURY
Wiltshire
SP4 6EB

Report reference: 69943.01

Path: \\Projectserver\WESSEX\PROJECTS\69943\Assessment report

OHH08


October 2011

DISCLAIMER

The material contained in this report was designed as an integral part of a report to an individual client and was prepared solely for the benefit of that client. The material contained in this report does not necessarily stand on its own and is not intended to nor should it be relied upon by any third party. To the fullest extent permitted by law Wessex Archaeology will not be liable by reason of breach of contract negligence or otherwise for any loss or damage (whether direct indirect or consequential) occasioned to any person acting or omitting to act or refraining from acting in reliance upon the material contained in this report arising from or connected with any error or omission in the material contained in the report. Loss or damage as referred to above shall be deemed to include, but is not limited to, any loss of profits or anticipated profits damage to reputation or goodwill loss of business or anticipated business damages costs expenses incurred or payable to any third party (in all cases whether direct indirect or consequential) or any other direct indirect or consequential loss or damage.

QUALITY ASSURANCE

SITE CODE	69943	ACCESSION CODE	OHH08	CLIENT CODE	
PLANNING APPLICATION REF.	C2008/59820	NGR		527820, 162450	

VERSION	STATUS*	PREPARED BY	APPROVED BY	APPROVER'S SIGNATURE	DATE	FILE
1	I	CH	SF		28/03/11	\\PROJECTSERVER\WESSEX\PROJECTS\69943\ASSESSMENT REPORT
2	E	SF	AB		30/03/11	\\PROJECTSERVER\WESSEX\PROJECTS\69943\ASSESSMENT REPORT
3	E	SF	AB		13/10/11	\\PROJECTSERVER\WESSEX\PROJECTS\69943\ASSESSMENT REPORT

I= Internal Draft E= External Draft F= Final

**Orchard Hill, Carshalton
London Borough of Sutton
Post-excavation Assessment Report**

Contents

	Summary	viii
	Acknowledgements.....	x
1	INTRODUCTION	1
	1.1 Scope of the document.....	1
	1.2 Planning References	1
	1.3 Location, topography and geology	1
2	THE ARCHAEOLOGY OF THE SURROUNDING AREA.....	2
	2.1 Known archaeology	2
	2.2 Recent investigations in the area	3
3	METHODOLOGY	4
	3.1 Introduction and general objectives.....	4
	3.2 Stripping and Fieldwork Methodology	4
	3.3 Finds and Environmental Strategies.....	5
4	ARCHAEOLOGICAL RESULTS.....	6
	4.1 Introduction.....	6
	4.2 Summary of the excavation results	7
	4.3 Mesolithic (c. 8,500 – 4000 BC)	8
	4.4 Neolithic to Early Bronze Age (c. 4000 – 1500 BC).....	8
	4.5 Late Bronze Age to Early Iron Age (c. 1100 – 400 BC).....	8
	4.6 Iron Age (c. 700 BC – 43 AD).....	10
	4.7 Late Iron Age to Early Romano-British (100 BC - AD 150)	11
	4.8 Later Romano-British.....	22
	4.9 Post-medieval and modern (AD1500 onwards).....	22
	4.10 Features of uncertain date.....	23
	4.11 Natural features	23
	4.12 Summary of the watching brief results	23
5	ARTEFACTS	24
	5.1 Introduction.....	24
	5.2 Pottery	24
	5.3 Ceramic Building Material (CBM)	26
	5.4 Fired Clay	26
	5.5 Worked Flint	26
	5.6 Stone	28
	5.7 Glass	29
	5.8 Slag	29
	5.9 Coin	30
	5.10 Metalwork	30
	5.11 Worked Bone.....	31
	5.12 Human Bone.....	31
	5.13 Animal Bone	32
6	ENVIRONMENTAL EVIDENCE	36
	6.1 Introduction.....	36
	6.2 Charred Plant Remains	36
	6.3 Wood Charcoal.....	37
	6.4 Land and Fresh/Brackish Water Molluscs	38

6.5	Sediments.....	38
7	FURTHER POTENTIAL	39
7.1	Overview of the stratigraphic sequence	39
7.2	Finds potential	42
7.3	Palaeoenvironmental Potential.....	43
8	PROPOSAL FOR FURTHER WORK AND METHOD STATEMENT	45
8.1	General.....	45
8.2	Stratigraphic	45
8.3	Finds.....	45
8.4	Environmental.....	48
8.5	Publication Proposal.....	49
8.6	Management Structure	50
8.7	Performance Monitoring and Quality Standards.....	50
8.8	Task list for analysis and publication	50
8.9	Designated Project Team.....	52
9	STORAGE AND CURATION	53
9.1	Museum.....	53
9.2	Archive.....	53
9.3	Conservation	53
9.4	Discard Policy.....	54
9.5	Copyright	54
9.6	Security Copy	54
10	REFERENCES	54
	APPENDIX 1: FINDS AND ENVIRONMENTAL TABLES	60
	APPENDIX 2: CHARRED PLANT REMAINS AND CHARCOAL.....	65
	APPENDIX 3: OASIS ID: WESSEXAR1-97767	74

**Orchard Hill, Carshalton
London Borough of Sutton
Post-excavation Assessment Report**

List of Figures

- 1 Site location plan
- 2 All phases plan
- 3 Bronze Age and Iron Age features
- 4 Sections and plates of Late Bronze Age/Early Iron Age features 3219, 3178, 3940, 4066 and 4341
- 5 Late Iron Age/early Romano-British features
- 6 Phasing of Late Iron Age/early Romano-British enclosures (with extrapolation)
- 7 Section and plates of Late Iron Age/early Romano-British ditches
- 8 Section and plates of Late Iron Age/early Romano-British features 3341 and 3535
- 9 Section and plates of Late Iron Age/early Romano-British feature 3676
- 10 Section and plates of Late Iron Age/early Romano-British feature 3174
- 11 Section and plates of Late Iron Age/early Romano-British features 3231 and 3879
- 12 Section and plates of Late Iron Age/early Romano-British feature 3998 and plates of neonate burials 3651 and 3809

**Orchard Hill, Carshalton
London Borough of Sutton
Post-excavation Assessment Report**

List of Plates

- | | |
|-----------------|---|
| Plate 1 | Post excavation view of pits 3219 and 3178 |
| Plate 2 | North facing section of pit 4341 |
| Plate 3 | Layer containing evidence of sheep/goat butchery in pit 3174 |
| Plate 4 | Neonate skeleton 3654 in pit 3174 |
| Plate 5 | Post excavation view of pit 3174 |
| Plate 6 | Horse burial ABG 70 during excavation |
| Plate 7 | Horse burial ABG 70 at base of pit 3231 |
| Plate 8 | South-west facing section of pit 3879 |
| Plate 9 | Dog burials ABG 61 and ABG 62 in pit 3341 |
| Plate 10 | ABG 90, ABG 91, ABG 100 and ABG 101 in pt 3535 |
| Plate 11 | ABG 115 and pot 118 with possible animal cremation related deposit 3889 at the base of pit 3535 |
| Plate 12 | Shaft/pit 3676 |
| Plate 13 | Pit 3998 showing pottery vessel, Spearhead 132 and nave hoop 133 |
| Plate 14 | Neonate burial 3651 |
| Plate 15 | Neonate burial 3809 |
| Plate 16 | Section through ditch 3814 |

**Orchard Hill, Carshalton
London Borough of Sutton
Post-excavation Assessment Report**

List of Tables

- 1 Finds totals by material type Sample Provenance Summary
- 2 Flint totals by type
- 3 Ironworking debris by context / weight (g)
- 4 Details of smithing hearth bottoms (SHBs)
- 5 Metal finds by functional category
- 6 Summary of human bone assessment
- 7 Sample Provenance Summary
- 8 Assessment of the charred plant remains and charcoal
- 9 Summary of monolith samples
- 10 Publication report synopsis
- 11 Task List
- 12 WA staff and specialists

**Orchard Hill, Carshalton
London Borough of Sutton
Post-excavation Assessment Report**

Summary

Wessex Archaeology was commissioned by CgMs Consulting to undertake a programme of archaeological works in advance of redevelopment (planning consent **C2008/59820**) of the former Queen Mary's Hospital at Carshalton prior to the relocation of Stanley Park High School. The site (NGR 527820 162450) is situated within the Greater London region, 2km south-east of Sutton, and is located on a localised superficial cap of Thanet Sand drift deposits overlying Cretaceous Upper Chalk. A watching brief was maintained on groundworks within the site and following the identification of significant archaeological remains, the relevant area was subjected to full archaeological excavation.

Following the piecemeal redevelopment of the hospital grounds through the 20th century, a number of archaeological excavations have uncovered substantial and significant evidence for Late Bronze Age and Romano-British settlement activity in the area. A large Late Bronze Age enclosure or ring work, **SM163**, lies 60m to the south of the excavation area and to the east, contemporaneous quarry pits have been identified. Two Late Iron Age/early Romano-British (LIA/ERB) enclosures (**2070** and **2071**) were identified to the immediate south of the current excavations, which suggest a rural settlement at Orchard Hill of some size. However, only short sections of the outer ditches of both enclosures were exposed, somewhat limiting the interpretation that could be made.

The subsequent phase of excavations identified evidence of a substantial LIA/ERB enclosed farmstead. The remainder of enclosure **2071** was identified, revealing it to be large and sub-rectangular with additional enclosed areas extending to the west. Three phases of the enclosure were identified, all dating to the same LIA/ERB period. A large number of deep storage pits were identified, many of which had been infilled rapidly, incorporating placed deposits. A large number of animal associated bone groups (ABGs) were excavated from within the pits, many of which were deliberately deposited. Three human neonate burials were also placed within such pits. One pit in particular contained very large numbers of animals including the butchered remains of over 25 individual sheep/goat carcasses deposited as a single layer, with additional complete skeletons of dogs, chickens and a raven. Such an 'expenditure' of valuable resources suggests a significant event relating to the creation of these deposits. The features also revealed evidence for domestic, subsistence and industrial activities including spinning and weaving, sheep husbandry and metalworking. This contributes to the evidence for a substantial and self sufficient rural settlement.

A small number of earlier prehistoric features were also identified, comprising a Late Bronze Age/Early Iron Age (LBA/EIA) trackway, some pits and postholes distributed across the excavation area. These features can be interpreted as relating to peripheral activities associated with the enclosure, which was likely to be the focus of settlement during this earlier phase.

The excavation has identified evidence for substantial phases of settlement dating to the LBA/EIA and LIA/ERB periods. When considered in conjunction with the previously identified features, the archaeology within the St. Mary's Hospital grounds has the potential to contribute to our understanding of subsistence and settlement

patterns during the Late Bronze Age, and also during the time of the Roman Conquest. In the case of the LIA/ERB storage pits, analysis of the circumstances surrounding the placed deposits might shed light on little understood aspects of ritual and ceremonial activity during this transitional period and within a rural context. The remains can be considered to be of regional significance.

It is proposed that the findings of the current excavation, together with the results from previous phases of evaluation and excavation undertaken will be the subject of analysis and published together in a Wessex Archaeology monograph.

**Orchard Hill, Carshalton
London Borough of Sutton
Post-excavation Assessment Report**

Acknowledgements

This project was commissioned by Duncan Hawkins on behalf of CgMs Consulting. Wessex Archaeology would also like to thank John Brown, Jane Sidell and Mark Stevenson of the Greater London Archaeological Advisory Service (GLAAS) who monitored the work on behalf of the Local Planning Authority.

The fieldwork was carried out by Chloe Hunnisett, Simon Flaherty, Susan Clelland, Mark Bagwell, Paul Clarke, Simon Cleggett, Brenton Culshaw, Bob Davis, Sam Fairhead, Neil Fitzpatrick, Martin Huggon, Gareth Holes, Daniel Joyce, Ray Kennedy, Adam Lord, Iain McIntyre, Adela Murray Brown, Robert Scott, Ilya Sparkes-Santos, Louis Stafford, Mark Stewart, Nicholas Taylor, Steve Thompson, Alexander Vellet, Tom Wells, Alan Whitaker and Rebecca Wills.

This report was compiled by Chloe Hunnisett, with specialist reports prepared by Lorraine Mepham (finds), Dr Joern Schuster (metalwork), Phil Harding (flintwork), Lorrain Higbee (animal bone) and Dr Nick Cooke (coins). The environmental samples were processed by Moira Watson and were assessed by Sarah F. Wyles and Dr Chris J. Stevens. Soils and sediments (including requirement and sampling for microfossils) were assessed by David Norcott. Radiocarbon potential was provided by Dr Chris J Stevens. Rob Goller prepared the figures. The project was managed on behalf of Wessex Archaeology by Sue Farr.

**ORCHARD HILL, CARSHALTON,
LONDON BOROUGH OF SUTTON
GREATER LONDON****Post-excavation assessment report****1 INTRODUCTION****1.1 Scope of the document**

- 1.1.1 Wessex Archaeology was commissioned by Mr Duncan Hawkins of CgMs Consulting to undertake a programme of archaeological works in advance of proposed redevelopment of the former Queen Mary's Hospital at Carshalton (hereafter the Site). The proposed development comprised the demolition of the existing buildings and the relocation of Stanley Park High School to the Site.
- 1.1.2 A previous archaeological evaluation and subsequent excavation had identified a number of finds and features, the majority of which were dated to the Late Iron Age/early Romano-British period (**Figure 1**).
- 1.1.3 Following the previous phases of archaeological works, an archaeological watching brief (1.32ha) was maintained on groundworks within a designated Watching Brief Area (WBA; see **Figure 1**).
- 1.1.4 Upon the identification of substantial and well-preserved archaeological features within the WBA, an archaeological excavation was carried out within an area measuring approximately 5100m² (hereafter the 'excavation area'). The current document comprises the results of this recent archaeological watching brief and excavation.
- 1.1.5 The work was undertaken between the 21st June and 16th September 2010.

1.2 Planning References

- 1.2.1 The work was required as a condition of planning consent **C2008/59820** which states:
- 1.2.2 *"No development groundworks shall be implemented without arrangements having been put in place for an archaeological monitoring exercise ('watching brief') to monitor ground works and record any archaeological evidence revealed. The monitoring exercise shall accord with the Written Scheme of Investigation (Specification for an Archaeological Monitoring Exercise, December 2008) hereby approved"* (London Borough of Sutton Planning Department Ref C2008/59820).

1.3 Location, topography and geology

- 1.3.1 The Site lies within the Greater London region, approximately 20km south-west of the City of London, and 2km south-east of Sutton. The Site is located within the grounds of the former Queen Mary's Hospital, Queen Mary's Avenue, Carshalton and is centred on National Grid Reference (NGR) 527820 162450. The topography of the Site has been modified

locally by landscaping and terracing undertaken during the hospital's construction at the turn of the 20th century.

- 1.3.2 The Site, which is situated on the dip slope of the North Downs overlooking the broad valley of the River Wandle, slopes down from c. 99m above Ordnance Datum (aOD) at the south-east to c. 94m aOD at the north-west. It lies on a localised superficial cap of Thanet Sand drift deposits overlying Cretaceous Upper Chalk (Geological Survey of Great Britain, 1:50,000 Geological Sheet 270: South London, Solid and Drift edition).
- 1.3.3 The Site was approximately bounded by Fountain Drive to the north, Wellfield Plantation to the north-west, Damson Way to the west, the Diamond Riding Centre to the south and an unnamed road and residential properties to the east.
- 1.3.4 Following the gradual decommissioning of the hospital buildings and their piecemeal demolition, the Site has remained vacant awaiting redevelopment.
- 1.3.5 The watching brief and excavation areas lay within the footprint of the 19th century former hospital buildings, however all standing buildings had been demolished within the Site at the time of the current phase of works.

2 THE ARCHAEOLOGY OF THE SURROUNDING AREA

2.1 Known archaeology

- 2.1.1 The Site lies to the north of a Late Bronze Age enclosure or ring work, which is one of the largest of the known enclosures of this date in south-east England (**Figure 1**). The enclosure is a Scheduled Monument (**SM163**).
- 2.1.2 Excavations of the Late Bronze Age enclosure were carried out during the first half of the 20th century (Robarts 1905, 1909-10; Lowther 1944-5) and were reassessed in 1985 (Adkins and Needham 1985) The enclosure appears to have been circular in shape, 150m in diameter and defined by a single ditch. The 'V'-shaped ditch was 3.6m wide and survived in places to a depth of up to 2.1m. It is one of a number of ring works that are known from the Thames estuary and the Greater London Area. Such sites are often seen as high status, they are often associated with metalwork and its production and are sometimes found in areas with well-developed co-axial field systems (Bradley 2007, 208-9).
- 2.1.3 Deposits of chalk blocks and flint nodules within the lower fills of some of the excavated ditch segments have been interpreted as the remains of a collapsed revetment from the internal bank (Lowther 1944-5, 58-9). The chalk appears to have been extracted from the slopes of the hill below the enclosure since the enclosure ditch, where examined, only cut through the overlying Thanet Sand.
- 2.1.4 Little archaeological work has been carried out within the enclosure's interior, but the limited excavation evidence available from similar enclosures (Bond 1988) may support the general suggestion that much of the associated settlement activity lay largely outside their ditches with only one or two large roundhouses inside (Needham 1993, 54). Evidence of

metalworking (crucible fragments, slag and ingot/cakes) was found outside the ditch of the enclosure.

2.2 Recent investigations in the area

- 2.2.1 Excavations carried out within the eastern part of the former Queen Mary's Hospital, to the north of **SM163**, revealed two prehistoric, north to south aligned intercutting ditches with large pits at their northern ends and a large Iron Age pit (Tucker 1989).
- 2.2.2 Excavations in 1993, south of the enclosure, revealed a large Bronze Age feature, possibly a ditch, overlain by hillwash containing a substantial quantity of Late Bronze Age pottery, perforated clay slabs, burnt flint and worked flint (Bruce and Giorgi 1994).
- 2.2.3 A previous evaluation of the redevelopment area, in 1995, defined three areas of archaeological potential to the north and east of the enclosure; the area with the largest concentration of features and artefacts (Late Bronze Age pottery, a loomweight and worked flints) lying immediately north of the enclosure (MoLAS 1995).
- 2.2.4 In 1999, further evaluation and excavation was undertaken by Wessex Archaeology both inside and to the north of the enclosure (**Figure 1**). The excavation to the north exposed a pit, containing Late Bronze Age pottery and a perforated fired clay slab, and two large chalk quarries probably associated with the enclosure, but producing Late Iron Age, Romano-British, Saxon and medieval sherds from their upper fills (Groves and Lovell 2002). Another Late Bronze Age pit was recorded inside the enclosure.
- 2.2.5 The 2008 evaluation of the development area comprised 15 trenches (Trenches 2-8, 10-15, 18-19, **Figure 1** WA 2008a). Trench 6 revealed two early Romano-British ditches and a pit containing a horse's head. Trench 7 exposed a ditch, which although containing Romano-British pottery was considered of possible Bronze Age date due to its proximity to the enclosure. Trenches 15 and 18, to the north-west, revealed a series of closely spaced parallel features interpreted as possible planting trenches used to increase food production in one of the World Wars.
- 2.2.6 A subsequent excavation was carried out in 2008 on the basis of the results of the trial trench evaluation (WA 2009). The excavation revealed two curving ditches and a number of pits of early Romano-British date, their date range potentially starting in the Late Iron Age and spanning the period of the Roman conquest. One ditch, re-cut on two occasions, appeared to define a small circular enclosure. The presence of two probable storage pits within it suggests this was a settlement enclosure, although no structures were identified within the limited area excavated in its interior. The other ditch may have defined a second enclosure associated with the settlement.
- 2.2.7 One of the pits contained a dog burial, but most of the material in these features comprised domestic waste, including pottery, ceramic building material, fired clay, burnt flint, animal bone (cattle, sheep/goat and pig), ironworking slag, and fragments of imported lava quern. Environmental remains included hulled wheat, comprising both grain and chaff, grains of barley, and associated weed seeds.

3 METHODOLOGY

3.1 Introduction and general objectives

Watching Brief

3.1.1 The aims of the archaeological watching brief were:

- To determine the presence or absence of archaeological remains, and should remains be found to be present, to ensure their preservation by record to the highest possible standard;
- To determine or confirm the approximate date or date range of the remains, by means of artefactual or other evidence;
- To determine or confirm the approximate extent, condition and state of preservation of the remains;
- To assess the associations and implications of any remains encountered with reference to the historic landscape, and to economy, status, utility and social activity;
- To determine the potential of the Site to provide palaeo-environmental and/or economic evidence and to determine the forms in which such evidence may be present;
- To determine whether the Late Iron Age/early Romano British features found during the previous phase of excavation (WA 2010) continue into the present WBA, in particular the possible enclosure ditch;
- If further contemporary features are identified, what light can these features shed upon questions addressed in the previous assessment report regarding the nature of the activity?

Excavation

3.1.2 Once archaeological remains were identified within the WBA, the aims of the archaeological excavation were as follows:

- To define the nature, extent, character and chronology of the Bronze Age and Roman occupation on the Site;
- To determine the date, extent, nature and duration of habitation of the Site;
- To ascertain whether specific agricultural or industrial activities can be determined from the excavated evidence;
- To determine whether buried soils or occupation horizons are preserved on the Site. What evidence is there for the continuity of settlement, occupation and land use from the Bronze Age through to the early Roman period and to place the evidence from this Site in its wider landscape context.

3.1.3 In format and content the investigations conformed with current best practice and to the guidance outlined in the Institute for Archaeologists' *Standard and Guidance for Archaeological Excavation* (IfA 2008) and the *Management of Research Projects in the Historic Environment* (MoRPHE, English Heritage 2006).

3.2 Stripping and Fieldwork Methodology

Watching Brief

3.2.1 In accordance with the planning condition (C2008/59820), any groundworks which entailed topsoil stripping and/or stripping into natural subsoils or made

ground deposits within the development footprint were monitored by a suitably qualified member of WA staff. The areas were stripped to formation levels using a 360° tracked excavator fitted with a toothless grading bucket under constant archaeological supervision.

3.2.2 A digital photographic record was maintained, as well as a full written and graphic record using WA *pro forma* recoding systems where appropriate.

3.2.3 The extent and location of the works were planned by hand as weather conditions prevented accurate use of a GPS.

Excavation

3.2.4 Following the discovery of archaeological features within the WBA, a revised methodology consistent with controlled archaeological excavation was implemented.

3.2.5 All mechanical stripping of overburden from this point proceeded under the full control and direction of a suitably qualified archaeologist.

3.2.6 Machine excavation ceased at the identification of archaeological deposits or at the top of the undisturbed natural geology, whichever was encountered first. This was in general well above the formation levels required by the construction project design.

3.2.7 All archaeological deposits and features were recorded using Wessex Archaeology's *pro forma* record sheets. All archaeological features and deposits were hand-planned at a scale of 1:20 with sections drawn at 1:10.

3.2.8 A full photographic record was made both of individual features and general context of the investigations, utilising colour transparencies, black and white negatives (on 35mm film) and digital images.

3.2.9 The excavated spoil was inspected for finds and all features or potential features were investigated by hand.

3.2.10 The excavation area, all archaeological features, small finds and articulated human bone was mapped using a Leica GPS survey system. All principal strata and features were related to the Ordnance Survey datum.

3.2.11 Following completion of the excavation, the archive and all artefacts were taken to the offices of Wessex Archaeology.

Human Remains

3.2.12 The excavation and assessment of human remains followed Wessex Archaeology's guidelines, in compliance with all current legislation and standards set out by the Institute for Archaeologists (IfA 2008).

3.3 Finds and Environmental Strategies

3.3.1 Appropriate strategies for the recovery of artefacts and environmental samples devised by Wessex Archaeology's Finds and Environmental staff.

3.3.2 Bulk environmental samples (up to 60 litres) were taken from well-sealed and dated features, following Wessex Archaeology's standard Environmental and Artefact sampling policy. All cremation deposits were

100% bulk-sampled. Snail column samples, pollen samples and soil monoliths were taken from appropriate deep and well-stratified features.

- 3.3.3 All artefacts were, as a minimum, washed, weighed, counted and identified. Any artefacts requiring conservation or specific storage conditions were dealt with immediately in line with First Aid for Finds (Watkinson and Neal 1998). Suitable material, primarily the pottery, worked flint and non-ferrous metalwork, were scanned to assess the date range of the relevant assemblages. All ferrous metalwork was X-rayed to provide further detail concerning their original form as part of the assessment.

4 ARCHAEOLOGICAL RESULTS

4.1 Introduction

- 4.1.1 The mechanical stripping which was undertaken within the designated WBA commenced at the northern limit of this area and proceeded in a southerly direction. The northern half of the WBA was revealed to be entirely free from archaeological finds or features.

- 4.1.2 Upon identification of archaeological features within the southern half of the WBA, excavation proceeded under the direct control of the archaeologist, as detailed above.

- 4.1.3 A watching brief was also maintained on additional groundworks within the wider Site including car parking areas, service trenches and haul roads.

Natural deposits and soil sequences

- 4.1.4 The geology of the Site is mapped as a localised cap of Thanet Sand overlying Cretaceous chalk, and this was corroborated by the results of the excavation.

- 4.1.5 The sequence found was generally as follows:

- Turf and topsoil;
- Subsoil;
- Clean yellow natural sand (Thanet Sand or similar);
- Blocky natural chalk.

- 4.1.6 A colluvial layer was found to overlie the natural sand in the south of the excavation area, comprising mid-brown silty sand with rounded pebble inclusions. This layer was not observed across the majority of the northern half of the excavation area and is likely due to modern truncation.

- 4.1.7 The total thickness of overburden was generally 0.5 to 0.7m.

Previous Impacts

- 4.1.8 Large areas of the WBA had suffered extensive modern truncation and disturbance. This took the form of:

- Foundations belonging to the former Edwardian hospital buildings which were standing during the 2008 archaeological works, but had recently been demolished;

- Terracing of the natural slope of the hill in order to accommodate the construction of the above buildings;
- Modern and later post-medieval drainage, pipework, brick-built service ducts etc;
- Hospital access roads;
- Episodes of landfill resulting in localised modern made ground deposits of varying thickness.

4.1.9 Amongst the other modern disturbance, the excavation revealed the foundations of a modern brick-built building of three sided construction. However, as the building recorded in this location during the 2009 buildings survey (WA 2009) was a small rectangular bungalow built in the 1980s, it is clear that the foundations revealed during the excavation relate to an earlier building on the Site. The location and foundation layout correspond exactly with the location of a “double cottage” style hospital building, shown on the 1913 Ordnance Survey map but demolished in the 1980s (WA 2009).

4.1.10 Archaeological features were demonstrated to have survived well below the footprint of the Edwardian hospital building. However the construction of the more recent bungalow, immediately to the south of the earlier building, seems to have entailed more intrusive foundation construction as the area of the bungalow was the most truncated area of the WBA, with only a single feature surviving within it.

4.1.11 Across the excavation area, the modern disturbances detailed above had resulted in a large degree of horizontal and vertical truncation to the archaeological features identified. Many features were partially or mostly removed, and almost certainly some had been entirely removed prior to the commencement of the archaeological investigations.

4.2 Summary of the excavation results

4.2.1 The excavation revealed a large number of archaeological features, the vast majority of which can be dated to a single broad phase, of Late Iron to early Romano-British date (**Figure 2**). The features were heavily concentrated within a restricted area, and with the exception of two pits (**3856** and **3879**), all were located to the south of the largest enclosure ditch (**4232**).

4.2.2 Phases were assigned to the features primarily on the basis of pottery spot-dating, but augmented by dates obtained from metalwork and flintwork where appropriate. These phases have been identified as:

- Late Bronze Age/early Iron Age (hereafter LBA/EIA);
- Early/Middle Iron Age;
- Middle Iron Age;
- Late Iron Age/early Romano-British (hereafter LIA/ERB);
- Later Romano-British;
- Later post-medieval and modern.

4.2.3 The majority of the finds and features identified can be dated to the LIA/ERB period.

4.3 Mesolithic (c. 8,500 – 4000 BC)

- 4.3.1 The earliest evidence of occupation of the area derives from a very small quantity of residual Mesolithic worked flint. Two diagnostically Mesolithic tranchet axe sharpening flakes and an additional blade fragment likely to date to the same period were recovered. The flint derived from three separate features of LIA/ERB date (pits **3676** and **3737** and ditch **4378**).
- 4.3.2 No archaeological features can be dated to this period.

4.4 Neolithic to Early Bronze Age (c. 4000 – 1500 BC)

- 4.4.1 There is also some evidence for human activity in the area during the earlier prehistoric period, in the form of a small assemblage of residual worked flint thought to date to the Neolithic or Early Bronze Age periods.
- 4.4.2 There are no archaeological features which can be dated to the earlier prehistoric period within the excavation area. However, the flint assemblage indicates a low level of human activity within the landscape.

4.5 Late Bronze Age to Early Iron Age (c.1100 – 400 BC)

- 4.5.1 The first significant evidence for occupation of the area dates from the LBA-EIA period. This is consistent with the large Late Bronze Age enclosure, **SM163**, at the top of the hill. The features which can be securely dated to this period are somewhat sparse, and comprise a small number of pits and gullies (**Figure 3** and **4**). It is reasonable to assume that features identified within the current excavation area may have been associated with the Scheduled Monument, and potentially are derived from activities carried out on the periphery of the main enclosure.
- 4.5.2 A number of the features which date to the LIA/ERB period on the basis of their pottery, in particular storage pits, have no dating material which derives from their initial or primary fills. In many cases, the pottery derives from the middle and upper fills of the pits, often from the final backfilling stages, potentially some considerable time after their initial creation and abandonment. It is therefore plausible that a number of such features could in fact date to the LBA/EIA phase of activity, but were not finally filled in/levelled until a later date. Further analysis could refine this interpretation.

Trackway

- 4.5.3 A linear feature **4253** extends north-west to south-east across the northern end of the excavation area, and comprises a number of shallow intercutting gullies **4239-41**, **4244** and **4249** (**Figures 2** and **3**). The feature has been identified as a trackway and has been dated to the LBA/EIA period. Although few finds were recovered from the feature, it is certainly earlier than the LIA/ERB enclosure system.
- 4.5.4 This trackway is situated at or towards the base of the hill formed by the cap of Thanet Sand, and runs approximately 90m north of enclosure **SM163**, and approximately 50m south of the previously identified Bronze Age quarry pits to the north-east of the Site (WA 1999a). The feature therefore may have acted as a transport link between the main enclosure and other activity foci within the landscape, including raw material procurement.

4.5.5 Within the present excavation area, all identified LBA/EIA features lie to the south of trackway **4253** and thus the trackway seems to have acted as the effective limit of activity. Land to the north of the trackway could be postulated to have been utilised as purely agricultural land or grazing, with settlement limited to the area to the south.

4.5.6 The trackway is cut by Phases 2-3 of the later LIA/ERB enclosure, which suggests that the trackway had fallen into disuse by the time the sub-rectangular enclosure was constructed.

Pits

4.5.7 A small number of pits can be securely dated to this period. These features seem to have no clear spatial arrangement beyond lying to the south of trackway **4253** (**Figure 3**). These features consist of four circular pits, two sub-rectangular pits and a single posthole.

4.5.8 Two intercutting pits lie within the boundary of the later enclosures **4237** and **4233** but can be securely dated to the LBA/EIA period. Pit **3219** was a fairly shallow pit which contained LBA/EIA pottery and a partially complete fired clay triangular loomweight from the upper fills. This was cut by deeper, cylindrical pit **3178**, the primary fill of which contained 14 sherds of LBA/EIA pottery, with another loomweight fragment retrieved from a later fill of the pit. Pit **3178** in particular can be identified as a storage pit, of similar profile and fill pattern to later LIA/ERB storage pits (see below).

4.5.9 Pit **4341** is a large circular pit with a stepped profile, measuring 3m in diameter and 0.92m deep. The profile of the pit is somewhat similar to pit **4367** (positioned approximately 17m to the north-west) which contains a very small quantity of both LBA/EIA and LIA/ERB pottery but cannot be definitively dated.

4.5.10 Pit **3940** is an oval pit measuring 2.55m long and 1.3m deep. The pit contains a large quantity of pottery which can be dated to the LBA/EIA phase, and the feature is cut by later pit **4066** (see below).

Grave

4.5.11 A single inhumation burial (Skeleton **3057**), in the north-western part of the excavation area, was dated to the LBA/EIA period. It was a foetal or neonate inhumation burial and is likely to have been placed within grave cut **3052**. The burial was accompanied by 15 sherds of shelly ware pottery from a shouldered jar, likely deliberately placed within the grave. The grave was cut into an earlier heavily truncated pit (**3050**) containing a small quantity of LBA/EIA pottery.

Other features

4.5.12 A short length of gully (**4250**), which contained animal bone and two sherds of pottery (possibly dating the feature to the LBA/EIA period), was identified in the south-western corner of the excavation area. Severe modern truncation in this area, entailing the removal of topsoil and subsoil deposits, meant that it was not clear whether this shallow feature terminated here, or if the feature originally continued to the north. Extrapolation of the course of ditch **4250** would cause it to meet LIA/ERB ditch **4229** at a 90° angle, suggesting the possibility that these two linear features were originally part

of the same field system. However the modern disturbance has made this impossible to demonstrate.

- 4.5.13 Two tree-throw holes, **3050** and **4228**, contained pottery dating to the LBA/EIA period.
- 4.5.14 A single posthole **4211**, located at the southern limit of the excavation area, contained a small quantity of pottery of LBA/EIA date.
- 4.5.15 Two small pits are located at the southern edge of the western part of the excavation area, with only approximately 50% of each feature surviving due to truncation by a modern pipe trench. Circular pit **3759** is cut by a smaller pit **3761**. The features are problematic to date, as the fills of both pits contain pottery dating to both the LBA/EIA and the LIA/ERB period. It seems likely that the modern pipe trench has caused considerable disturbance and admixture of the fills of the two features, however the retrieval of six sherds of LBA/EIA pottery from the fills of both features (compared with only three sherds of LIA/ERB pottery), suggests that the earlier pit **3159** is fairly likely to date to the LBA/EIA period. In addition **3759** contains two pairs of refitting flint flakes in mint condition with no surface wear. The typology of these artefacts is strongly indicative of a Late Bronze Age or earlier date, and their condition suggests they are *in situ* finds contemporary with the infilling of the pit and supports an LBA/EIA date for the feature.

4.6 Iron Age (c. 700 BC – 43 AD)

- 4.6.1 Two features within the excavation area have been dated to the Early to Middle Iron Age period, and an additional two were assigned a Middle, or Middle to Late, Iron Age date (**Figure 3**). The four features are located within the western half of the excavation area, beyond the limit of the later enclosures; however there seems to be little discernible spatial patterning beyond this.
- 4.6.2 Pit **3025** was a small, shallow circular pit which had been heavily vertically truncated by modern disturbance. The remaining portion of the pit contained 13 sherds of Early to Middle Iron Age pottery. The pit was also located 2m to the west of feature **3018**, which also contained a single pottery sherd of this date. This circular feature was shallow and heavily truncated but is likely to have represented the base of a small pit.
- 4.6.3 Pit **4066** was a large oval pit measuring 1.7m diameter with a depth of 0.9m. The earliest fill of storage pit **4066**, which cuts earlier pit **3940**, contained an iron *La Tène 1*-type brooch, indicative of a Middle Iron Age date. The pottery within earlier pit **3940** can be dated securely to the LBA/EIA phase, whilst the dating of the *La Tène I* brooch at the base of the later pit **4066** to the Middle Iron Age is also fairly reliable. However, both of these intercutting pits are capped with a single deliberate backfill of burnt flint. The deposit fills the tops of both features to a depth of c. 0.4m, indicating that both features were only partially infilled at the time this final fill was deposited. This suggests that, given the disparate dates assigned to the two features, pit **3940** at least may have remained partially open for some considerable time period before finally being filled in.

- 4.6.4 A small circular pit **4372**, which measured 0.7m diameter and 0.64m deep, was located at the western end of the excavation area. The pit contained 46 sherds of pottery which is likely to date to the Middle to Late Iron Age, as well as burnt and struck flint and animal bone. The feature seems likely to have been a small rubbish pit.

4.7 Late Iron Age to Early Romano-British (100 BC - AD 150)

- 4.7.1 The majority of the finds and features identified within the excavation area can be dated to the Late Iron Age to early Romano-British (LIA/ERB) period. This dating is derived from the fairly substantial pottery assemblage recovered from the features, and corroborated by other finds. Where there is a physical relationship between features, additional refinement of the phasing has been made on the basis of stratigraphy.
- 4.7.2 During this period the focus of settlement and activity in the area seems to have shifted geographically. During the preceding earlier prehistoric period, settlement was centred on the Scheduled Late Bronze Age enclosure at the summit of the hill to the south, and whilst there is clear evidence for activity within the current excavation area during this period, and also within the wider area of the Site to the east and south-east, the somewhat sparse nature of the archaeological evidence during the Late Bronze Age to Middle Iron Age periods suggests that the current excavation area remained somewhat peripheral.
- 4.7.3 The key element during the LIA/ERB period was the creation of a second major enclosure, situated approximately 20m to the north of the LBA enclosure **SM163 (Figure 5)**. The enclosure was identified during the 2009 excavation as ditch **2070 (WA 2009)**, although only the northern edge of the outer enclosure ditch was revealed. The southern edge of an additional enclosure of the same date was also identified, and this ditch, **2071**, continued into the current excavation area (see **Figure 5**). Therefore during this period, the excavation area contained what seems to have been a fairly major enclosure to the south, with an additional enclosure to the north, with somewhat less substantial ditched defences. It is this northernmost enclosure which forms the focus of the activity within the current excavation area, and the function of the apparently less substantial enclosure, and its relationship to enclosure **2070** to the south, which will form key research questions.

Enclosures

- 4.7.4 The excavation area is dominated by a large ditched enclosure, of which at least three phases can be identified (**Figure 6**). The latter two phases of the enclosure were laid out on broadly sub-rectangular lines, and these features are situated only 10m north of ditch **2070**, the northern edge of a more substantial LIA/ERB enclosure (see above).

Phase 1

- 4.7.5 The earliest enclosure which can be identified within the excavation area, **4242**, is heavily truncated both by later phases of the enclosure and by areas of modern disturbance, thus only parts of the northern and eastern, and possibly western, ditches remain. This earlier enclosure appears to have followed a different layout to the subsequent two phases. However,

pottery collected from the ditch deposits does not allow for any differentiation between the three phases.

- 4.7.6 The enclosure appears to have been broadly sub-rectangular in form, with a convex or curved northern side. Ditch **4242** forms the north-east corner of the enclosure. Pottery recovered from this ditch suggests a LIA/ERB date. The ditch was fairly small and shallow throughout much of its length, although much of this can be attributed to modern truncation. A typical section measured 0.47m wide and 0.2m deep, although in places the ditch was up to 2.2m wide and 0.5m deep.
- 4.7.7 Undated ditch **4229**, situated to the west cannot be definitively linked with **4242** due to modern disturbance, but the alignment of the two ditches strongly suggests that **4229** forms part of the same large enclosure. However, the presence of intervening boundaries or internal divisions cannot be ruled out and the two ditches could form separate enclosures. In addition, ditch **4250** may form part of the western arm of the enclosure, although the only pottery recovered suggests an LBA/EIA date for the ditch. There was little dating evidence within the fills of these two ditches, but what little there was has been dated to the LBA/EIA period. However, these sherds could easily be residual, giving an LIA/EBA date for the whole enclosure.
- 4.7.8 If **4250** and **4229** are the same enclosure, then a gap in the north-west corner of the enclosure could suggest a possible entrance, but the heavy modern truncation in this area makes this problematic to confirm.
- 4.7.9 This earliest phase extends further to the west than the two subsequent phases. Whilst pits and other discrete features, which lie within the boundary of all three phases of the enclosure, cannot be assigned to a specific phase, those features which lie between the ditches **4250** and **4229**, but beyond the westernmost limit of later enclosure **4255**, can be tentatively assigned as being contemporary with this first enclosure. This potentially comprises sub-rectangular pit **4333** and three circular pits (**4313**, **4315** and **4346**), with an additional LIA/ERB dated pit **4341** within the same area (**Figure 5**).
- 4.7.10 It is worth noting that ditch **4242** appears to respect LBA/EIA trackway **4253**, whereas the two later enclosures **4255** and **4254** cut across it (**Figure 2**). In addition, the few features dated to the Late Bronze Age and Early to Middle Iron Age lie within the boundaries of ditches **4242**, **4229** and **4250**, with the exception of pits **3219** and **3178** (see above). This appears to suggest that the parcel of land defined by the enclosure ditches may have been established during earlier periods, whilst the trackway was still in active use. Although there was no sign of re-cutting of the ditches this could be due to modern truncation having removed all but the basal fills. It is possible that the LIA/ERB enclosure ditches are a formalisation of an earlier more ephemeral boundary marker which has left no trace in the archaeological record.

Phase 2

- 4.7.11 A north-to-south aligned ditch **4237**, together with an additional short length of ditch to the south of this (**3480**), represents the western side of a sub-rectangular enclosure **4254** (**Figures 5-6**). Only the western side of this phase has survived due to later re-modelling of the enclosure, and also due to severe modern disturbance in the south of the excavation area, within the

footprint of the demolished hospital buildings. The ditch cuts the eastern side of earlier enclosure ditch **4242** (**Figure 7, Section 9**), but this is the only physical overlap of the two enclosures, with enclosure **4254** lying immediately to the east of earlier enclosure **4242** (see **Figure 6**).

- 4.7.12 Ditch **4237** terminates in the north of the excavation area, 3.8m south of later ditch **4232**. The terminus, which is cut by bell-shaped storage pit **3183**, seems to represent the southern side of the enclosure's entrance, situated in the north-western corner of the sub-rectangular enclosure. The opposing ditch terminus cannot be identified as later enclosure ditch **4232** overlies its probable location.
- 4.7.13 The projected area of the enclosure is likely to have been in the region of 1160 m²; however as the eastern and most of the southern sides are missing, this cannot be confirmed. It was not possible to excavate a clean slot though ditch **4237** due to later pits and other features cutting it. In addition to the modern disturbance, however, the ditch typically measured 0.6m wide and 0.35m deep.
- 4.7.14 To the west of the main sub-rectangular enclosure, two north-south aligned ditches extend across the excavation area (**4378** and **4243**) (**Figure 5**). The ditches are cut by later ditch **4232**. However given that the ditches appear to stem from this location, rather than continuing to the north, suggests the existence of an earlier phase of the outer ditch, underlying **4232**. On this basis the two north-south ditches **4378** and **4243** can be provisionally assigned to Phase 2 of the enclosure (**Figure 6**).
- 4.7.15 These additional north-south ditches potentially represent areas enclosed for agricultural, subsistence or industrial activities, being located immediately outside the more formal enclosure. No southern limit was identified for ditch **4378** as it extended beyond the limit of excavation. Ditch **4243** runs south for 20m before petering out. However, the shallowness of the feature in this area suggests that the ditch could have been removed by modern truncation rather than terminating at this point by design. The degree of modern truncation in this area was somewhat higher than the area immediately to the north due to the presence of a modern access road associated with the hospital buildings.

Phase 3

- 4.7.16 The latest and most complete phase of the enclosure, **4255**, is laid out on a very similar alignment to enclosure **4254**, but encompasses a slightly larger area, with a projected increase in size of approximately 450m², giving an approximate area of 1600m² for the main sub-rectangular enclosure. Enclosure **4255** is very similar in shape and orientation to **4254**, but extends further to the west and to the south than the earlier phase (**Figure 6**).
- 4.7.17 No entrance is identifiable in the north-western corner of enclosure **4255**, rather the northern side of enclosure ditch **4232** meets the western side to form a closed corner. Ditch **4232** then continues to run on to the west of the main enclosure for some 60m before turning 90° to run north to south (ditch **4377**).
- 4.7.18 This 'extension' to the main sub-rectangular enclosure seems likely to have been a reworking of a similar layout seen in the Phase 2 ditches, albeit with

no internal division as in Phase 2. Once again it could be postulated that the area enclosed by this ditch may have been utilised for more peripheral activities such as storage, agricultural, domestic and industrial activities.

- 4.7.19 Ditch **4233** terminates at its southern limit, suggesting an entrance located in the south-western corner for this phase of the enclosure.
- 4.7.20 Ditch **2071**, first identified during the previous phases of work (WA 2008a; WA 2009), represents the southern part of the enclosure ditch. This ditch can clearly be observed to continue into the south of the present excavation area (**Figure 5**), however once again modern truncation has obscured key relationships between enclosure ditches **2071** and **4255**. It is possible that **2071** terminates opposite ditch **4233**, forming the southern half of an entrance. However the projected alignment of the ditches suggests that **2071** in fact continues as ditch **4235**, which veers slightly to the east. This would therefore create an offset or staggered entrance (see **Figure 6**). As with **2071**, no terminus for ditch **4235** survives due to modern truncation; the projected location for such a terminus lies below the footprint of the modern bungalow. A typical section through ditch **2071** measured 1.6m wide and 0.45m deep. This is consistent with the profile of **2071** as excavated during the previous phase of works.

Pits

- 4.7.21 A large number of discrete features were identified within the excavation area, of which approximately 91 were pits dating to the LIA/ERB period (**Figure 5**). These pits can be divided broadly into functional types. Whilst the majority were general purpose pits of unknown function, and with no particular distinctive profile or fill pattern, there were a large number of pits which are best classified as storage pits.
- 4.7.22 For the purpose of this assessment report, the storage pits have been divided into three main types, based on the classification used by Cunliffe to analyse the pits at Danebury (Cunliffe 1984):
1. Beehive: with overhanging sides and generally circular plan, though sometimes oval or squarish;
 2. Cylindrical: with vertical or near vertical sides, and generally circular plan, though sometimes oval or squarish;
 3. Sub-rectangular: with vertical or near-vertical sides, but elongated oval or sub-rectangular plan, generally with rounded corners.
- 4.7.23 No pits exhibited a profile matching the specification for conical pits as described by Cunliffe (*ibid.*).
- 4.7.24 According to the above classification, of the 91 pits which date to the LIA/ERB period, 24 can be classified as beehive pits, and at least 28 as cylindrical pits. In addition three sub-rectangular pits were identified. Of the remaining pits, a small number are likely to have been quarry pits, but most seem to have been more generic storage or refuse pits, or potentially former beehive or cylindrical pits which have been heavily truncated to the extent that their profiles do not match the above classifications.
- 4.7.25 The issue of attempting to assign specific functions to features identified as prehistoric storage pits has been discussed in some detail elsewhere

(Cunliffe 1984; 1991a), and assumptions of this nature can be problematic. However it is thought likely that pits with a beehive profile, characterised by a narrower mouth than base, are more likely to have been used for the storage of grain, or more likely seed corn, due to the increased ability to create an airtight seal. However this cannot be taken as an absolute rule, and there may not be a direct relationship between pit form and function. In addition there is the possibility that some pits classified as cylindrical or other in profile at the time of excavation were in fact originally beehive pits but have lost their undercutting profile due to erosion and collapse of the pit mouth.

- 4.7.26 The spatial distribution of storage pits does appear to follow some identifiable trends. Pits lie mainly within the compass of the two sub-rectangular enclosure ditches **4254** and **4255**. However there are one or two exceptions to this, for example pit **3879**. Pits **3183**, **3231**, **3341** and **3419** are situated within ditch **4233** of enclosure **4255** but immediately outside, or cutting, earlier ditch **4254**, and these pits could therefore be tentatively assigned as contemporary with later enclosure **4255** (**Figure 6**).
- 4.7.27 Initial analysis suggests no obvious spatial patterning of the different forms of pits. However whilst the sub-rectangular enclosure contains both cylindrical and beehive pits, the latter are confined to the eastern half of the excavation area. Further analysis may identify additional spatial patterning.

Placed Deposits

- 4.7.28 The pits are notable for the high number of placed deposits contained within them, most notably the large number of animal associated bone groups (hereafter ABGs), representing the deposition of entire or partial animal carcasses with the pits. Whilst articulated animal bone in itself does not necessarily denote anything more than disposal of agricultural and domestic refuse, a number of the ABGs suggest deliberate deposition due to the recovery of complete skeletons, and in some cases the arranging of animal carcasses in a specific manner. For example two dog burials within pit **3341** were placed within the pit with their back legs intertwined, a position suggestive of one dog mounting the other; at least one puppy was placed beneath the adult dogs (see **Figure 8, Plate 10**). In addition, two of the pits contained human neonate skeletons (pits **3174** and **3458**), with additional neonate skeletal material recovered from a third pit **3220**. The human skeletal material is discussed below.
- 4.7.29 A total of 72 ABGs were recovered from within the excavation area, all from within pits dating to the LIA/ERB period. The ABGs were distributed within 12 pits, although 56 derive from single pit **3174** and comprised both complete or near complete, and partial skeletons, including limbs, skulls and portions of axial skeletons.
- 4.7.30 Animal burials appear to occur more frequently within the boundary of enclosure ditch **4255**. However five of the pits outside this enclosure do contain ABGs. Seven of the 12 pits containing animal burials are cylindrical in profile (pits **3053**, **3037**, **3870**, **3535**, **3341**, **3223** and **3220**) whilst five are beehive (pits **3174**, **3229**, **3241**, **3846** and **3419**), indicating no clear distinction was made. However none of the pits which were not classified as storage pits contained animal burials.

- 4.7.31 Due to the large number of pits identified within the excavation area, a small selection only will be described below in further detail. These features form a fairly representative selection of the various pit types identified, excavated and recorded. In addition, a number of pits which are considered to be of special interest have been discussed, in particular pit **3174** which is unusual in terms of its rich contents.

Pit 3535

- 4.7.32 This feature was located within the north of the excavation area, immediately to the west of the phase 2 and phase 3 enclosure ditches. The pit was oval in plan with a diameter of 2.06m and a depth of 1.95m. The sides were near straight and vertical with a flat base.

- 4.7.33 Pit **3535** was one of the few pits to contain datable material within the lowest fills, and the stratigraphy and contents of this feature leaves no doubt that the lower third of the pit was filled through deliberate, structured deposition. Two lenses of deliberate backfill covered the centre of the pits base (with similarities to 'basal deposits' found within pits at Danebury; Cunliffe 1991), the lowest fill overlying a complete dog skeleton, which had been covered with burnt material which although initially thought to be a human cremation burial contained burnt animal. A smashed pot was placed over the dog's head (**Figure 8; Plate 11**). The deposits were overlain by a deliberate backfill measuring 0.4m thick; this layer contained few finds and seems to have acted to cover the items in the pit's base. The overlying backfill layer contained the skeletons of an additional nine animals, comprising remains of three dogs, two sheep/goat, a horse's skull, two complete cattle skeletons and a cattle leg (**Figure 8; Section 5**). The remainder of the pit (just over half) was filled with a single deliberate backfill deposit up 1.6m thick, potentially infilled as a single event.

- 4.7.34 The filling of pit **3535** can be interpreted as having taken place during a single episode, possibly followed by a separate backfilling episode.

Shaft pits

- 4.7.35 Pit **3676** was an extremely deep pit with vertical sides, with a surviving depth of 4m (**Figure 9: Section 6, Plate 12**). The pit was part of a cluster of shallower features thought to be quarry pits (**3683, 3430, 3434 and 3423**), however the relationship of **3676** to these features was lost due to severe truncation caused by the concrete foundations of the hospital building. As the foundations extended to a depth of almost 2m, excavation of the full width of pit **3676** was not possible due to health and safety considerations.

- 4.7.36 The pit was filled with predominantly naturally derived deposits, and the basal 2.25m of the pit was filled exclusively with primary fills, derived from multiple episodes of collapse of the sides of the feature. Whilst the secondary fills above this point contained material dating to the LIA/ERB period, the primary fills contained no archaeological material; nevertheless the entire feature was demonstrably anthropogenic rather than natural in origin. Given the vertical sides and considerable depth of the feature, it is likely that the infilling of the basal two thirds of the pit was due to edge collapse over a short time period, due to the instability of the sides. The feature was cut through a vertical seam of natural sand which had permeated a wide crack in the underlying chalk; this would have only

increased the likelihood of the collapse of large amounts of natural sand into the open pit before the feature stabilised itself. Therefore the creation of the pit does not necessarily predate the upper fills by any great period, and there is no indication that the pit was left open long enough to silt up naturally.

- 4.7.37 The purpose of this feature remains somewhat unclear, due to its extreme depth, sterile fills and the vertical sides. The pit does not match the expected profile of a quarry pit. The profile is possibly consistent with a well, however the water table was never reached during excavations; moreover the fills are in no way indicative of waterlogged deposits. Further analysis could reveal whether the water table is likely to have shifted since the LIA/ERB period, and therefore whether the feature could indeed have been a well; it is possible that this was a failed attempt to reach the water table. An alternative interpretation would suggest that the creation of the shaft pit was not dictated by practical considerations, but rather related to possible ritual activity. However the lack of deposits or any other finds below the upper third of the pit might suggest this to be less likely
- 4.7.38 Pit **3225**, located near the southern limit of the excavation area (**Figure 5**), was similar in profile and depth to **3676**, with straight vertical sides and extending to a depth of 3.9m. As with **3676**, the lower two thirds of the feature were filled with entirely sterile deposits created by edge collapse; however in pit **3225** these primary fills were interspersed with layers of dark, topsoil-derived material, indicative of deliberate backfill or perhaps collapse of a spoil heap.
- 4.7.39 The features seem to exhibit some parallels with shaft pits excavated at Priest's Hill Farm, Ewell (Cotton 2001), and further analysis could potentially elucidate the purpose of these features.

Pit 3174

- 4.7.40 This feature, near the inner northern edge of **4232** (**Figure 5**), was a very substantial beehive storage pit, containing an extremely rich finds assemblage including two neonate inhumation burials, over 175 sherds of pottery, 2 partial vessels, a whetstone, a stone spindle-whorl and an iron bar. A large quantity of hammerscale and slag, indicative of industrial activity, and in particular ironworking, including smithing hearth bottoms (SHBs), was also recovered from palaeo-environmental samples. The pit contained a huge quantity of animal bone, mainly from 56 ABGs.
- 4.7.41 The pit, located within the north-west corner of the Phase 2 enclosure ditch **4254** and at its entrance, may be more likely to be contemporary with Phase 3 enclosure ditch **4255**, whose entrance is located well to the south.
- 4.7.42 The pit measured 3.95m diameter at the mouth, and was 2.75m deep. The profile of the pit was a beehive shape with vertical sides which undercut just above the base (**Figure 10: Section 3, Plate 5**). The widening of its mouth is likely to represent erosion and collapse of the undercut edges. It is likely that this occurred after the pit was emptied of the material originally stored within it (potentially grain), and the series of primary deposits which fill the bottom 0.5m of the pit are indeed consistent with such a collapse. The subsequent fills show no sign of being related to the (supposed) original

purpose of the pit as a storage vessel, but represent a different phase in the pit's use and function.

- 4.7.43 The primary deposits are overlain by layer **3711**, a deliberate backfill which contains 51 of the 56 animal burials within this pit. This layer contains the butchered partial carcasses of approximately 25–30 animals, almost all of which are sheep/goat, ranging from foetal/neonate to older animals (**Figure 10: Plate 3**). Further analysis could confirm if this was a single butchery event, as seems to be the case. This layer also contained the complete skeletons of two domestic fowl, two dogs, a perinatal horse and a complete raven.
- 4.7.44 The deposition of the butchered sheep/goat carcasses could potentially be derived from agricultural practices, potentially following an outbreak of disease. However many of the other burials within the pit cannot be explained by purely practical considerations, for example the inclusion of non-domestic animals such as a raven, and also the burial of a breed of dog considered to indicate high status (see below).
- 4.7.45 In addition to the animal burials, pit **3174** contained inhumation burials of two neonate human infants. Skeleton **3654** was a deliberate inhumation burial of a neonate placed in a flexed position within the pit (**Figure 10: Plate 4**). Unlike Skeleton **3483**, there was no visible sign of a grave cut, but the skeleton was placed on a number of flat pebbles which were possibly deliberately positioned. The burial was situated approximately 1.8m above the base of the pit and was therefore carried out when the storage pit was already more than half filled. An additional inhumation burial **3690** had been placed at a lower level within the same pit, approximately halfway through the sequence of infilling following the disuse of the pit. This burial was also a neonate, and had been placed against the wall of the pit before chalk rubble from the pit's sides was levered free to cover the burial.
- 4.7.46 The complexity of this feature and the large amount of material recovered from it suggest that further work is required in order to fully understand the processes and timescale which resulted in its infilling. However it might be tentatively suggested that disposal/deposition of such a large quantity of valuable domestic animals must have been related to either an outbreak of disease, or to an event outside the normal sphere of domestic operations. When this is considered in conjunction with the burial of complete carcasses of animals which have been considered in some prehistoric contexts to have ritual connotations, and not least the burial of two neonate infants, the evidence suggests that the infilling of pit **3174** may well represent a significant event, perhaps with either social or ritual connotations, potentially involving feasting, votive offerings and/or sacrifice. The 'expenditure' of animals alone suggests this would have required considerable preparation and investment, likely above and beyond more routine ritual acts of 'decommissioning' disused storage pits.

Pit 3231

- 4.7.47 Pit **3231** was a large beehive storage pit located immediately within the western ditch of enclosure **4255**, and just outside earlier enclosure **4254**, suggesting it is more likely to be contemporary with the later phase of the enclosure. The pit was circular in plan with a diameter at the top of 1.66m and a depth of 1.43m. The sides were convex, vertical and undercutting at

the base (**Figure 11; Section 4, Plates 6 to 8**). This pit was one of the relatively few to exhibit a clear rapid fill sequence, with the majority of the pit infilled by two separate backfilling events. The basal fill of the pit derived from deliberate backfilling and contained articulated cervical cattle vertebrae likely to have come from one individual. Pottery from this initial fill dated the feature securely to the LIA/ERB period. Following a thin lens of either natural silting or edge collapse, a piglet (probably a neonate) was placed within the pit with an adult horse (**ABG 70**) then placed on top. The pit was deliberately backfilled with deposit **3232**, a mixed fill derived from topsoil and natural deposits. The remainder of the pit was subsequently filled by a single deliberate backfill episode **3233**. This topsoil-derived backfill was chalky and homogenous. The angle of the fills could suggest a re-cut of the pit; however this could equally have resulted from slumping of the underlying fill **3232**, especially if organic materials had been incorporated into the fill and subsequently decomposed. The final backfilling could have occurred some considerable time after the initial filling sequence of the animal burials, and could have been undertaken to infill the considerable void left following settling and slumping of the underlying deposits.

- 4.7.48 Articulated skeleton **ABG 70** was of a horse; however both front legs, scapulae and several ribs were missing. Given the fully articulated state of the rest of the skeleton, and the fact that the head and the hind feet remained attached, it is unlikely that removal of the front limbs could have either occurred accidentally during burial, or been undertaken for practical purposes. The reason for this specific treatment of the carcass remains unclear, and further analysis may highlight the presence of butchery marks or other indicators which could shed light. However it should be assumed for now that, in light of this seemingly anomalous and unusual treatment, the carcass of the horse was deposited within the pit for reasons other than, or in addition to, purely practical motivations.

Pit 3998

- 4.7.49 This feature was a shallow sub-rectangular pit located in the south of the excavation area. The pit measured 1.65m by 0.9m and was 0.4m deep. A number of items had been placed within the pit as a structured deposit (**Figure 12: Section 7, Plate 13**). The pit contained approximately half of a large vessel, seemingly deliberately broken. Over this was placed an iron nave hoop, an iron spearhead of probably Late Iron Age date, and a chasing hammer head. The pit also contained a bundle of birch tar and twisted fibres whose purpose/function is unknown but was possibly used to repair broken pottery vessels (see 6.2.9 below). The presence of these valuable items within the pit, in particular the spearhead, suggests that their placement may have been an offertory act of some sort. Further analysis may shed light on the meaning of the assemblage and the function and significance of the organic fibres.

Pit 3344

- 4.7.50 In contrast to the features above which appear to have been filled with deliberately placed deposits of animal carcasses and other materials, pit **3344** seems mainly to have been filled on a slow cycle, with the majority of the fills naturally derived. The pit is located within enclosures **4254** and **4255**, in the north-eastern corner. The feature was 2.4m wide at the mouth

and 1.2m deep, with a beehive profile, with vertical sides which undercut above the base.

- 4.7.51 The feature was filled in with deposits derived from slow natural silting, interspersed with episodes of edge collapse. The lower third of the pit is particularly sterile, however above this the natural fills are interspersed with thin lenses of deliberate dumps of material. However comparatively little archaeological material was retrieved from the pit. It is likely that this pit may have been allowed to infill naturally, whilst being used on an occasional basis as a refuse pit. The later fills of the pit comprised a deliberate backfill, presumably to fill in and level the feature, and a capping deposit of solid chalk comprises the final fill.

Structures

- 4.7.52 Very few structures were identified within the excavation area, and both lie immediately outside enclosures **4254** and **4255** (**Figure 5**).

Roundhouse 4246

- 4.7.53 A ring gully was identified within the southern area of the excavation area, located immediately to the west of enclosures **4254** and **4255**. The feature comprised a very shallow and ephemeral circular gully, measuring an average of only 0.11m deep and 0.31m wide. The diameter of the gully is approximately 14m, and there is a 2.9m wide entrance on the western side. The feature is cut by a series of parallel north-south aligned modern services and a brick conduit, which have removed significant portions of the feature, and may also have removed any internal features.
- 4.7.54 Gully **4246** is likely to represent the drip gully of a fairly substantial roundhouse. Three postholes (**4125**, **4127** and **4161**) are located within the roundhouse. All three postholes exhibit clear evidence of *in situ* decay of the wooden posts, and are of similar diameter and depth. Two contained a single sherd of LBA/EIA pot, whilst **4161** contained three LIA/ERB sherds. In addition, two pits **4105** and **4079** were also located within the roundhouse. Pit **4079** contained no finds whatsoever whilst **4105** contained only one sherd of LBA/EIA pot, therefore the pits cannot be definitively tied to the roundhouse
- 4.7.55 The roundhouse gully itself (**4246**) contained very few finds, despite 100% excavation of the ring gully. Only two sherds of LIA/ERB pottery were retrieved, in addition to small fragments of animal bone and burnt flint. This suggests a LIA/ERB date for the feature, however given the uncertain dating, an earlier prehistoric date is plausible.
- 4.7.56 Assuming that the roundhouse is of LIA/ERB date, then its location suggests that it is highly unlikely to be contemporary with the Phase 3 enclosure, as roundhouse **4246** is located directly in the entrance of enclosure ditches **2071** and **4255**. Therefore the feature is far more likely to be contemporary with either Phase 1 or Phase 2.

Structure 4247

- 4.7.57 A small square post-built structure, measuring 2.8m by 3.1m, is located immediately beyond the south-west corner of enclosure ditch **2071**, less than 5m south of roundhouse **4246**. Five posts survive, however it is highly

likely that a sixth was originally present, but has been lost due to modern disturbance. The posts were possibly originally fairly substantial, as **3995** measures almost 0.5m in diameter. However the posts are shallow, suggesting truncation by modern activity.

- 4.7.58 The function of **4247** is uncertain, although it is typical of four-post-structures that are assumed to be for agricultural or domestic use such as a grain store.

Neonate Burials

- 4.7.59 A small number of neonate inhumation burials were identified within the excavation area and have been dated to the LIA/ERB period. Human bone was recovered from a total of five contexts dated to this period, all of which were within fills of pits. These contexts relate to three separate inhumation burials, within two features, with additional disarticulated human bone recovered in association with articulated animal bone within pit **3220**.
- 4.7.60 In addition, a single femur of a human neonate was recovered from the fill of ditch **2009** during the previous phase of excavation (WA 2009). The human bone was associated with a deposit of articulated animal bone.
- 4.7.61 Skeleton **3483** was an inhumation burial of a neonate, placed in a flexed position within pit **3458**. The burial was deposited within the upper third of the bell-shaped storage pit, once the pit had fallen into disuse and a large portion of the feature had been filled. The burial was placed in a shallow oval grave and backfilled/covered with the excavated material.
- 4.7.62 Large, bell-shaped storage pit **3174** contained inhumation burials of two neonate infants; see 4.7.45 above for details.
- 4.7.63 These three inhumations, which are contemporary with the enclosures, had been deliberately deposited within disused storage pits. The burials were made at various points within the infilling cycle of the pits but two were deposited when the pits had already been at least half filled, through various combinations of either natural silting or deliberate backfill. No burials from other feature types, for example individual grave cuts, can be dated to this phase of activity, and all human skeletal material was derived from neonates or foetuses. The lack of adult or juvenile burials potentially suggests that the neonates (or at least those neonates buried within pits) were treated in a different manner to the rest of the population, who were presumably given alternative funerary treatment, most likely cremation.
- 4.7.64 It should be noted that the burials within pit **3174** do not seem to have been treated distinctly from the animal burials within the same pit in any obvious way, having been placed deliberately within the pit. This does not suggest implications regarding the treatment of the dead and social status of neonates but is rather a practical observation. Further analysis may provide clarification on this matter.

Other features

- 4.7.65 A number of small pits, which can be distinguished from postholes on the basis of their fill, and possibly their size, are distributed across the excavation area. Pit **3088**, of which only 50% survives due to modern disturbance, contained a large quantity of pottery, much of which appeared

to have been deliberately placed by stacking the sherds on top of each other.

- 4.7.66 In addition to the main enclosure ditches, a small number of ditches and gullies were identified which may represent internal divisions or other feature within the main enclosures, or in some cases may represent remnant fragments of earlier features such as field boundaries. For example ditch **4234** is a short section of east west aligned gully of LIA/ERB date which is cut by both enclosure ditches, **4254** and **4255**.

4.8 Later Romano-British

- 4.8.1 A small number of features cut the latest phase of the enclosure ditch **4255**. These include pits **3513** and **3898**. No differentiation in pottery dating was observed for these features, so it must be assumed that there was not a significant hiatus.

- 4.8.2 A small number of the neonate inhumation burials identified within the excavation area had been deposited within the upper fills of earlier LIA/ERB features. The burials have been assigned to this later Romano-British phase based on the observed stratigraphic relationships alone, as no dating material was found in association with them. Skeleton **3466** was buried within the upper fills of ditch **4242**, whilst skeleton **3809** was buried in the upper fills of pit **3901** immediately inside enclosure ditch **4232**. These burials were made within the upper fills of earlier features, suggesting that the cut features were by this point almost entirely infilled and not in current use.

- 4.8.3 Skeleton **3652** was the only inhumation burial placed within a separate, clearly identifiable grave cut. The neonate was buried within a small but clearly defined grave, and whilst the lack of accompanying grave goods precludes dating, the grave has been assigned to the later Romano-British period on the basis that the burial is at the same OD height as SK **3809** and **3466**, and therefore is likely to have been made when the adjacent features were no longer in use.

4.9 Post-medieval and modern (AD1500 onwards)

- 4.9.1 A small number of later post-medieval features were revealed during the excavation. These mainly comprised a series of parallel linear or sub-rectangular features, located in the north-east and eastern parts of the excavation area. Some were aligned north to south, but the majority were aligned east to west and were located against the hoarding at the eastern Site limit. A number of these features were excavated to reveal assorted modern finds of a probable early 20th century date, including modern china, glass, metal and brick fragments. These finds were not retained. The features were generally fairly shallow (on average 0.3m depth) with steep sides and a flat base. It is probable that these features are wartime planting trenches for the purpose of increasing food production, similar to features identified during the 2008 trial trench evaluation within Trenches 15 and 18 (WA 2008a).

- 4.9.2 The excavation area had been subjected to extensive modern disturbance in the form of pipe trenches, services, terracing and landscaping, and the construction of hospital buildings at the turn of the 20th century (see 4.1.8 above). No finds or features relating to the use of the Site as a hospital were

identified during the excavation, beyond the foundations of the hospital ward which overlay the majority of the LIA/ERB enclosure.

4.10 Features of uncertain date

4.10.1 A considerable number of the features identified within the excavation area contained no dateable material and as such cannot be assigned a secure date/phase. In some cases their similarity to, or their relationship with, adjacent features, allows a date to be assigned, for example pits **3423** and **3578** are assumed to be of LIA/ERB date due to their proximity and relationship with other features of this phase.

4.10.2 However a number of discrete features remain undated. These are generally small pits which contain little diagnostic material. Those features which contained material indicative of a generic prehistoric date, for example struck and burnt flint, and animal bone, have been marked as such on **Figure 2**.

4.11 Natural features

4.11.1 A number of features of natural origin were identified within the excavation area. Several of these represent large tree-throw holes, which seem to be confined to the western half of the excavation area, beyond the limit of the LIA/ERB enclosures.

4.11.2 In general, however, the excavation area seems to have been fairly clear of trees, an interpretation which is borne out by the palaeo-environmental evidence indicative of a fairly open environment (e.g. mollusc species derived from pit **3058**).

4.11.3 A number of the tree-throw holes contained archaeological material, for example LBA/EIA pottery within **3977** and LIA/ERB pottery from **3973**. This material is likely to have become incorporated within the fills of the tree-throw holes through natural erosion processes.

4.12 Summary of the watching brief results

4.12.1 The watching brief maintained within the designated WBA, and the additional watching briefs carried out on groundworks with the Site, identified very few archaeological features. Several features investigated to the north of the excavation area were proven to be geological and/or vegetational in nature.

4.12.2 A pipe trench excavated immediately to the west of the excavation area (**Figure 1**) revealed a single linear feature (**3569**) running approximately north to south. The feature could only be recorded in section due to the narrow width and the excavated depth, of the pipe trench.

4.12.3 No dating was obtained for this feature but it is probable that the ditch dates to the same LIA/ERB phase as the majority of the archaeological features to the east.

4.12.4 No additional archaeological finds or features were identified during the watching brief.

5 ARTEFACTS

5.1 Introduction

- 5.1.1 Fieldwork on the Site in 2010 produced a large finds assemblage (**Table 1**), in which animal bone, burnt (unworked) flint and pottery in particular are well represented. This augments the smaller assemblage already recovered and reported on, from evaluation and excavation in 2008 (WA 2008a and WA 2009). The date range of the material already recovered is echoed within the current assemblage (largely Romano-British, with a smaller proportion of prehistoric material), but the overall range of types represented is increased. In particular, human remains from several inhumation burials were recovered. Another significant addition to the assemblage already recovered is a large group of unusual deposits of animal bone.
- 5.1.2 The following section gives summary descriptions of the assemblage by material type for the 2010 assemblage. Full details of the previously recovered assemblage are not repeated here, although reference will be made to specific types where appropriate, and quantifications are included. Given that the size of the assemblage is now much expanded, recommendations for the further treatment of the finds assemblage as put forward previously are now superseded.
- 5.1.3 All finds have been recorded by material type within each context, and this data has been entered into the project database (MS Access), alongside the data from the previously recorded assemblage. Summary totals by material type are presented in **Table 1**.

5.2 Pottery

- 5.2.1 The pottery assemblage is largely of Late Iron Age to Romano-British date (2978 sherds, 88% by count), with a smaller proportion of Late Bronze Age material, and one modern sherd. In general, condition is good, with sherds showing low levels of surface and edge abrasion. Mean sherd weight overall is 15.5g.
- 5.2.2 For the purposes of this assessment, the whole assemblage has been quickly scanned and quantified by broad date range, to enable spot dates to be assigned on a context by context basis. No quantification of fabric types or vessel forms has been made, but the overall range is summarised below.

Prehistoric

- 5.2.3 Later prehistoric material (364 sherds) occurs largely as flint-tempered sherds, in a range of coarseness. There are also smaller proportions of shelly and sandy wares. It should be noted that very similar shelly wares also occur within the Late Iron Age/Romano-British assemblage (see below), and this has led to some uncertainty over dating small groups of shelly wares in the absence of diagnostic features or accompanying wares; there are, however, sufficient diagnostic sherds to date some groups definitively as belonging to the post-Deverel-Rimbury ceramic tradition of the Late Bronze Age and Early Iron Age. Interestingly, shelly wares were absent from both the previously excavated assemblage (which was exclusively flint-tempered), and also from assemblages recovered from the nearby Late Bronze Age site at Queen Mary's Hospital, Carshalton (Adkins and Needham 1985; Mephram 2002), although some parallels are known, for

example from recent excavations at Heathrow (Leivers *et al.* 2010). Shelly wares, and particularly the sandy wares, mark a date range later in the post-Deverel-Rimbury sequence, and this is supported by the vessel forms.

- 5.2.4 Vessel forms present consist largely of coarseware shouldered jars, occasionally with finger-impressed shoulders and/or rims. These clearly belong to the post-Deverel-Rimbury repertoire, but have a fairly lengthy currency through the Late Bronze Age and Early Iron Age. The presence alongside these coarsewares of some fineware bowls, at least two of which show traces of 'red-finishing' (red slipped surface treatment), suggest that at least some of this group can be more closely dated to the Early Iron Age, possibly extending into the Middle Iron Age with some round-shouldered forms in fine sandy wares (from tree-throw hole **3018** and pit **3025**), although these are confined to just one or two contexts. Likewise, sandy sherds from just two contexts have been very tentatively attributed to the Middle/Late Iron Age (pit **4372**, and residual in pit **4315**).
- 5.2.5 In terms of distribution across the Site, prehistoric pottery was found within 30 features, mainly pits and postholes, a few tree-throw holes and ditches. Only two features produced more than 25 sherds: pit **3940** (27 sherds) and pit **4372** (46 sherds). Of interest, however, is a small group of 15 shelly ware sherds, possibly all from the same vessel (a shouldered jar), recovered from grave **3052**, presumably deposited as a grave good.

Late Iron Age/Romano-British

- 5.2.6 Even with the possible addition of a few Early/Middle and Middle/Late Iron Age pottery groups, there does appear to have been an effective hiatus in the sequence of activity on the Site, recommencing sometime in the period around the conquest, either 1st century BC or, more probably 1st century AD. The assemblage from this period is dominated by coarse grog-tempered and shelly wares in bead rimmed and necked jar forms. Sometimes these wares occur alone, and sometimes accompanied by 'Romanised' wheelthrown sandy wares. Some chronological sequence from pre- to post-conquest might be surmised, but in general the quantities of pottery per context are too small to support such dating with any degree of confidence. The 'Romanised' wares consist largely of greywares, in necked and everted rim jar forms; there are also a few whitewares, including identifiable beaker and flagon forms. Finewares are limited to 12 sherds of samian; there are also three sherds from Spanish Dressel 20 amphorae. Overall, as for the 2008 assemblage, the date range appears to extend no later than the 2nd century AD, and perhaps fairly early within that century, and the range of ware types is very similar to that previously encountered, with the addition of the samian.
- 5.2.7 LIA/ERB pottery came from a number of features across the Site, nearly all pits and ditches. Eighteen features yielded more than 25 sherds, of which the most productive was pit **3513** (220 sherds), including large parts of at least two vessels. A similarly large group came from pit **3174** (181 sherds), including two jar profiles. Also of interest is a cordoned jar which had functioned as a container for possible cremated remains (pit **3535**).

Modern

- 5.2.8 A single modern sherd (refined whiteware) came from modern disturbance **4197**.

5.3 Ceramic Building Material (CBM)

- 5.3.1 Only one fragment of ceramic building material was recovered, and this can be added to the single fragment from the previously excavated assemblage. Both fragments are undiagnostic, but almost certainly of Romano-British date on the grounds of fabric.

5.4 Fired Clay

- 5.4.1 This category includes fragments of probable objects, as well as undiagnostic fragments that are likely to be largely of structural origin.
- 5.4.2 A total of 80 fragments were identified as deriving from loomweights of triangular form, mostly on the presence of diagnostic features such as perforations and/or corners, although a few fragments were more tentatively identified on the presence of flat surfaces and a similarity of fabric type with the more diagnostic pieces. The fabric used for the loomweights varies from a relatively dense, slightly sandy clay matrix with few coarse macroscopic inclusions, to more poorly wedged fabrics with more frequent inclusions, including organic material and coarse pebbles. Most of the fragments have oxidised surfaces, but many show an unoxidised core, probably the result of a short firing period, insufficient for full oxidisation. Some of the weights were clearly more crudely formed, with irregular surfaces. None of the loomweights are complete, and none preserve complete side lengths; the most complete example came from LBA/EIA pit **3219**, where at least two corner perforations are visible. The remainder consist largely of corner fragments, and few preserve even one perforation. Triangular loomweights appeared first during the Iron Age, and continued to be used into the Romano-British period; there is a possibility that some of these examples could belong to the Late Bronze Age/Early Iron Age phase of activity (see Mephram 2010), which could be the case at Orchard Hill.
- 5.4.3 Perhaps interestingly, there are no examples here (or in the previously excavated assemblage) of perforated clay tablets, an object type known from other Late Bronze Age sites in the lower Thames Valley, including the Carshalton ring work, which produced a number of tablet fragments (Adkins and Needham 1985, 33-8).
- 5.4.4 Of the remaining fired clay, approximately half the number of fragments could derive from further loomweights, although having no clearly diagnostic features (some surfaces, but no corners or perforations). The other half comprises small, undiagnostic fragments, often heavily abraded. Some have surviving surfaces, and one or two preserve wattle impressions. Fabric varies; some contain coarse inclusions, either flint gravel or, more frequently, chalk. The latter mix can be described as 'cob', a substance used structurally, and it is likely that much if not all of these undiagnostic fragments have a structural origin, either from upstanding structures or from pit or hearth linings. A few small fragments from LIA/ERB pit **3174** appear to have been subjected to intense heat, although for what purpose remains uncertain.

5.5 Worked Flint

- 5.5.1 The worked flint assemblage, comprising 518 pieces from 182 contexts, has been quantified by type, and the results are summarised in **Table 2**.

5.5.2 The quantification indicates that there is a relatively low density of flint from the excavated features. The largest single group comprised 26 pieces from LIA/ERB pit **3223**, with a mean from all contexts of 2.8 pieces. There are therefore no groups of sufficient size or stratified context to warrant further detailed metrical analysis.

5.5.3 The flint was a cherty mottled grey/black material, which was undoubtedly sourced from the local Chalk, almost certainly surface nodules. Flaking quality ranges from relatively good quality material to other pieces riven with thermal fractures. There was also a relatively frequent use of Bullhead flint, a result of the contact between the Chalk and overlying Thanet Sand. This material is also of variable quality.

Mesolithic

5.5.4 The earliest occupation of the Site is demonstrated by two residual Mesolithic tranchet axe sharpening flakes from LIA/ERB pits **3676** and **3737**. There is also the distal end of a notched blade from LIA/ERB ditch **3092**, which, although not conclusive, may represent failed microburin technique. Irrespective of the precise numbers, blades, flakes and cores from this period are believed to have been recovered from the immediate area during previous excavations (Lowther 1944-5) and additional material, including occasional microliths, known from the wider area (Wymer 1977). Wymer listed only one tranchet axe from the area, from a gravel quarry at Beddington.

Neolithic/ Early Bronze Age

5.5.5 The bulk of the worked flint is dominated by flakes, which account for 73% of the assemblage total, with only 7% blades and bladelets. A small number of pieces are patinated and probably residual, being of Neolithic or Early Bronze Age date. The patinated component includes some of the blades and artefacts with traces of platform abrasion as a means of core preparation. Retouched material includes a partially patinated discoidal implement, possibly a scraper or knife, which is made on a thermal fragment that was recovered from a tree-throw hole (**3907**), which also included LBA/EIA pottery.

5.5.6 Most of the flakes are unpatinated; of these a number are characterised by a glossy surface and frequently with slight traces of post-depositional edge damage. This material includes a microdenticulate (unphased pit **3467**), probably also Neolithic, and may also be residual.

LBA/EIA & LIA/LRB

5.5.7 These pieces grade into flakes and cores that are in mint condition with no hint of surface gloss. This group is most likely to be contemporaneous with the main phase of LBA/EIA activity at the Site. Most importantly it includes a small collection of flakes and debitage from LIA/ERB pit **3759** that contained two pairs of refitting flakes, confirming that they are contemporaneous with the filling of the pit. The technology and condition of these pieces is sufficiently distinctive to make it possible to allocate a selection of other material with similar attributes to this date.

5.5.8 These characteristics include hard hammer percussion (Early/Middle Iron Age pit **3025**, LIA/ERB pits **3513**, **3676**, **3683** and modern feature **4197**),

poorly prepared flake cores (LBA pit **3050**, LIA/ERB pits **3231**, **3223**, **3225**, **3430**, **3683**, **3825**, **4072**, **4131**, **4315**, LIA/ERB ditch **4148**) often with incipient cones of percussion on the striking platform (LBA/EIA pit **3050**, LIA/ERB pit **3683**, LIA/ERB ditch **4148**), relatively frequent primary flakes (unphased pits **3307**, **3344**, LIA/ERB pits **3535**, **3676** and ditch **3485**) that hint at cores with relatively limited productivity and flakes with cortical butts (unphased pit **3344**, LIA/ERB pits **3174**, **3183**, **3412**, **3467**, **3513**, **3599**, **3676**, **3683**, **3737**, **3921** and ditches **3150**, **3342**), which also reflects poorly prepared cores. Retouched pieces are absent. These characteristics are synonymous with it being of probable Late Bronze Age date, contemporary with small quantities of mostly poorly stratified material that have been recovered from former excavations (Bruce and Giorgi 1994) at Orchard Hill.

- 5.5.9 However detailed dating of the pottery and the consequent phasing of individual features suggests that most of this distinctive worked flint not only indicates prolonged use of flint into the Iron Age at the Site, but also into the Early Roman period. This is well beyond the LBA/EIA date that is accepted as marking the end of regular flint working in Britain.
- 5.5.10 This ambiguity should be addressed in subsequent phases of post excavation analysis. Further study should consider in more detail how much of this worked flint was recovered from primary contexts and how much from secondary contexts and its relationships to the associated pottery.
- 5.5.11 The distribution and density of this element of the worked flint assemblage across the Site is also important, as is its relationship to other features, particularly those of Late Bronze Age date. It is possible that despite the unambiguous presence of refitting material and its relatively fresh condition that in low density it may represent redeposited material. It should also be considered whether material with similar technological characteristics was recovered from the Late Bronze Age enclosure to the south (SM 163).

5.6 Stone

- 5.6.1 A small number of portable objects were identified amongst the stone recovered. These comprise two chalk spindlewhorls and a possible roughout; a whetstone, and two quern fragments.
- 5.6.2 The two complete spindlewhorls came from the same context (LIA/ERB pit **3341**); both are of chalk. One is of flattened globular shape, and the other is bun-shaped or sub-conical; both have central drilled perforations. Each weighs 19g. The possible roughout (from pit **3174**) comprises half of a roughly disc-shaped piece of chalk with a central perforation; the object has apparently not been finished. All three objects have utilised the local Upper Cretaceous Chalk.
- 5.6.3 The whetstone also came from pit **3174**; this is of flattish, sub rectangular form, slightly waisted, and with one end broken off; there are no obvious wear marks. The object is in a hard, calcareous sandstone, identified as Kentish Ragstone, from the Lower Cretaceous Hythe Beds of the Maidstone area.
- 5.6.4 One small fragment of lava from ditch **3796** (and another from the previously excavated assemblage) derive from imported quernstones. Lava querns

were imported from the Rhineland during the Romano-British period, then again from the middle Saxon into the medieval period. In this instance both fragments came from LIA/ERB features. In addition, two fragments of possible greensand (LIA/ERB ditch **3380**, LBA/EIA pit **3734**) could also derive from quern stones, but the identifications require further confirmation. Both are of Lower Greensand, one from the Bargate Beds, accessible either locally or from Farnham, while the other is probably Lodsworth Greensand from West Sussex.

- 5.6.5 Four rounded pebbles were recovered, of which only one, a flattish, rounded example with polished surfaces, (slightly burnt), carries convincing signs of utilisation in the form of probable pecking around one end (LIA/ERB pit **3458**). All are flint pebbles from the local Upper Cretaceous Chalk.
- 5.6.6 One piece of roofing slate came from the upper fill of LIA/ERB pit **3183**; this is likely to be post-medieval and intrusive. Its source lies in the south-west peninsula, probably the Delabole/Wadebridge area of Cornwall.
- 5.6.7 A number of fragments (92) of chalk are all unworked, but could have been deliberately brought to the Site; chalk was used, for example, as an admixture to clay to form building material ('cob', see above). The chalk came from five separate features, all Late Iron Age/Romano-British.
- 5.6.8 Three very small pieces of iron ore were found with skeleton **3057** and may have been deliberately placed within the grave.

5.7 Glass

- 5.7.1 Two pieces of glass were recovered, one certainly from a post-medieval bottle, intrusive within LIA/ERB pit **3231** (final fill **3233**); and the second also of probable post-medieval (although an identification as Romano-British is possible) from ditch **3967**.

5.8 Slag

- 5.8.1 Approximately 9.27kg of material initially identified as metalworking slag or related debris, was submitted for assessment.
- 5.8.2 The condition of the material is fresh to moderate, with the majority of the slag fragments unabraded or only slightly abraded around the edges.
- 5.8.3 All of the material was examined visually or by the use of a hand lens to identify type and form. Hammerscale was collected by running a magnet over environmental samples sieved to 4mm-2mm and 2mm-0.5mm. A summary of the identifications is presented in **Table 3**.
- 5.8.4 Approximately 9.10kg of the slag, all from pit **3174**, derives from ironworking and although much is undiagnostic, is most likely to be debris from iron smithing. This slag is typically highly vesicular and rather amorphous, though there are a number of relatively thin, somewhat 'brittle' pieces, many of which have become broken, probably during deposition and burial. There are occasional denser fragments, but these too are likely to derive from iron smithing. A further 108g of undiagnostic material, occurring in small quantities in three contexts, is possibly also a product of smithing.

- 5.8.5 The assemblage includes as many as 12 smithing hearth bottoms (SHBs), as well as numerous other pieces which are likely to be fragments of SHBs. These SHBs are the hemispherical bowl-shaped accumulations of slag which formed at the base of smithing hearths. Details of the complete or near-complete SHBs can be found in **Table 4**. All of the SHBs are relatively small in size and moderately vesicular. The sizes vary from 65 x 60 x 30mm to 100 x 90 x 45mm, and their weights range between 105g and 412g.
- 5.8.6 Plate- or flake-hammerscale (along with charcoal) was present in some quantity in the sample from deposit **3659** (pit **3174**), which produced the second largest quantity of slag from the Site. However, none was identified in two other layers in the same pit which also contained notable amounts of slag (see below).
- 5.8.7 No hearth lining was present, nor any other debris certainly derived from ironworking. Five contexts produced a total of 51g of pale grey, vesicular, fuel ash slag (FAS) which is likely to have formed as a result of a high temperature process, perhaps an intense fire, but is not necessarily a product of metalworking. Other finds include a small (4g) pyrites nodule, possibly associated with a burial and unlikely to have had a metallurgical connection.
- 5.8.8 Overall, the quantity of the ironworking slag is relatively small, but there is a clear concentration of debris in pit **3174**. This substantial Romano-British pit produced the majority of the smithing slag (9104g), including all 12 SHBs identified. The largest quantity (4510g) of slag came from context **3711** towards the base of the pit, though this material was very broken up and included no identifiable SHBs. Deposit **3659** within the centre of pit **3174** was a relatively thin, charcoal-rich layer that produced 2507g of slag, including six SHBs, as well as a concentration of hammerscale indicative of iron forging. Together, this group of material from **3659** appears to have been disposed of directly from smithing activity nearby. Context **3246**, immediately above **3659**, contained 2087g of debris including a further six SHBs. Quantities of possible ironworking debris from features other than pit **3174** are negligible.
- 5.9 Coin**
- 5.9.1 A single coin was recovered from ditch **3816**. This is a small corroded Late Roman 'Urbs Roma' issue of the House of Constantine, probably struck between AD330 and AD345. Because of its size, it is likely to be a contemporary copy of an 'official' issue.
- 5.9.2 Episodes of copying were a feature of the late 3rd and 4th centuries AD, and copies were probably struck to compensate for gaps in supply of coinage to Britain, supplying sufficient small change for the province's needs. It is unclear whether these copies were officially sanctioned, if at all, but they are not uncommon, and seem to have circulated in the same fashion as officially struck coins.
- 5.10 Metalwork**
- 5.10.1 The metalwork assemblage comprises 39 (excluding the single coin, see 5.9 above) individual entries (170 by fragment count). The majority of the objects were recovered from pit fills, with only five items recovered from,

mainly secondary, ditch fills. The ten intrinsically dateable items are predominantly of LIA/ERB date, with the exception of a single Middle Iron Age iron brooch and a modern button.

- 5.10.2 The assemblage was scanned and object types identified with the help of X-radiographs. Objects were attributed to functional categories following Crummy (1983, 5–6) and are briefly discussed in the sequence as presented in **Table 5**.
- 5.10.3 The objects of personal adornment were dominated by four brooches of which three copper alloy examples are of types belonging to the 1st century AD (Nauheim-derivative, strip-bow, and two-piece Colchester). A fourth iron brooch from pit **4066** was made in the La Tène I-scheme, indicating a Middle Iron Age date. Two groups of hobnails of at least 79 and 40 nails respectively were found in pit **3183**. A plain D-shaped copper alloy buckle is of a type that is intrinsically undatable.
- 5.10.4 An iron nave hoop with D-shaped section, similar to known examples of LIA/ERB date, was found with a spearhead and chasing hammer (see below) in pit **3998**.
- 5.10.5 A chasing hammer from pit **3998** and the fragment of a saw from pit **3535** are the only identifiable tools. As utilitarian objects, where form is defined by function, both objects have a potentially large date range from the Iron Age to the modern period.
- 5.10.6 The category of fittings is dominated by nails or nail shanks but includes fragments of a chain with figure-of-eight shaped links from pit **3183** and a ferrule from pit **3458**.
- 5.10.7 Two items belong in the category of weapons. The spearhead from pit **3998** is of probable Late Iron Age-form, and its shape can be compared to a more ornate example of an Iron Age spearhead found in the Thames at Datchet (ref). Apart from a penannular fitting riveted to the edge of the blade base, and as yet only visible in the X-radiograph, the Carshalton spearhead appears to have no other decoration. An arrowhead with a broken socket was found in Iron Age pit **3025**. The willow leaf-shaped form of the blade can be compared to some of the smaller spearheads from Danebury (Cunliffe and Poole 1991, no. 2.286), thus indicating an Iron Age date.
- 5.10.8 A small iron bar from pit **3852** may be an indicator of metalworking.

5.11 Worked Bone

- 5.11.1 One piece of worked bone was recovered; this is a small fragment decorated with multiple incised ring-and-dot motif. The fragment, which came from LIA/ERB pit **3599**, appears to have been slightly burnt.

5.12 Human Bone

Introduction

- 5.12.1 The assessed human bone was excavated from 12 contexts, including the remains of seven *in situ* burials, and the rest comprises disturbed and redeposited bone recovered from a ditch fill and in association with deposits of animal bone (ditch **2067** and pit **3220**).

Methods

- 5.12.2 The bone was rapidly scanned to assess its condition, the age and sex of the individual, potential for indices and the presence of pathological lesions. The bone was quantified by percentage of skeletal recovery or by fragment count. Assessment of age and sex was based on standard methodologies (Buikstra and Ubelaker 1994; Scheuer and Black 2000). Grading for bone preservation followed McKinley (2004, fig 6).

Results

- 5.12.3 A summary of the results is presented in **Table 6**.
- 5.12.4 The grave cuts were all discrete. The burial deposits had however, been subject to low level disturbance during excavation. Grave cuts were difficult to identify, whilst others burials were encountered unexpectedly within pit fills. Consequently, many of the surviving burial depths (0.03m to 1.31m) are unlikely to be representative of true surviving depth.
- 5.12.5 Bone condition was generally very good to excellent in both the *in situ* and redeposited assemblages. Low skeletal recovery rates were caused by truncation and disturbance rather than decay. There is only slight to moderate localised fragmentation, with a good proportion of skeletal elements being complete or near complete.
- 5.12.6 The remains of a minimum of eight neonates are represented; one from each of the identified graves and one from amongst the redeposited material, not likely to be associated with the known burial remains.
- 5.12.7 No pathological changes were observed, though the bone surfaces from five contexts appear more porous than those in the rest of the assemblage. It is often very difficult to distinguish normal growth from pathological bone growth in individuals so young. Comparison of the bone surfaces of the individuals within this assemblage will be particularly useful.
- 5.12.8 Some additional neonatal bones may remain in the animal bone assemblage, which should be recovered during the full analysis stage.

5.13 Animal Bone

Introduction

- 5.13.1 The assemblage comprises 28,468 fragments (or 107.224kg) of animal bone, the vast majority of which were recovered by hand during the normal course of excavation, the rest were retrieved from the residues of bulk soil samples after processing by wet-sieving. Approximately 83% of the assemblage is from pits, a further 10% is from ditches and the remaining 7% is from gullies, postholes and tree-throw holes.
- 5.13.2 Approximately 40% of the assemblage was rapidly scanned for the assessment; the assessed sample includes material from two LBA/EIA pits, 14 LIA/ERB pits and both the inner and outer enclosure ditches.
- 5.13.3 The assemblage includes a large number (N = 90) of associated bone groups (or ABGs) all of which are from LIA/ERB pits. These types of deposits were originally defined by Grant (1984) as animal burials, skulls and articulated limbs but have recently been redefined as whole/partial

articulated skeletons and animal remains that were deposited in articulation but have become disarticulated through taphonomic processes (i.e. secondary deposition after a period of surface exposure) or constitute disarticulated remains from a single animal that are deposited in association (Morris 2008a-b and 2010).

Methods

- 5.13.4 The assemblage was rapidly scanned and the following information quantified where applicable: species, skeletal element, preservation condition, fusion data, tooth ageing data, butchery marks, metrical data, gnawing, burning, surface condition, pathology and non-metric traits. This information was directly recorded into a relational database (in MS Access) and cross-referenced with relevant contextual information and dating evidence.

Results

Preservation condition

- 5.13.5 Bone preservation across the Site is generally good, although some poorly preserved fragments were recorded from a few ditch fills. This evidence suggests that at least some of the bones recovered from the ditches accumulated randomly as a consequence of taphonomic processes rather than through deliberate deposition, as appears to be the case for the pits. The distribution of gnawed bones indicates that at least some of the material deposited into pits was accessible to scavenging carnivores for a period prior to burial. The taphonomic history of the assemblage is therefore quite complex but closer examination of these factors should reveal any obvious differences between deposits or features.

- 5.13.6 A small number of charred and calcined bone fragments are present; these probably result from normal food preparation (i.e. cooking on open fires). Deliberate incineration as a means of waste disposal does not appear to have been practised.

Species represented

- 5.13.7 The assemblage is dominated by bones from livestock species. The assessment sample indicates that sheep/goat was the most important species, followed by cattle and then pig. Other domestic species include horse, dog and chicken. The only wild species identified in the assessment sample is a raven. All of these species are represented by ABGs, while the disarticulated part of the assemblage is largely made-up of bones from livestock species.
- 5.13.8 Bones from small mammals (e.g. mice, voles, shrews and moles) and amphibians (e.g. frog/toad) are also present. These species are non-anthropogenic in origin and simply represent the remains of pitfall victims (see for example Piper and O'Connor 2001). In addition three fish scales were recovered from flotation in sample 138 of fill 3922 from pit 3921. With the exception of fish with modified scales (for example turbot), these elements are extremely difficult to identify to species (Wheeler and Jones 2009, 116-20). No other fish bone elements, such as skull and/or vertebrae were identified in the 40% assessment sample of the hand-recovered bulk finds, therefore no further comment can be made at this point about the exploitation of freshwater, estuarine or marine resources.

Late Bronze Age/Early Iron Age

- 5.13.9 Only a small number of bone fragments were recovered from this phase of occupation, and the bones are generally poorly preserved and more fragmented than those from LIA/ERB contexts. As a result only a small proportion of fragments from the two pits (**3178** and **3219**) included in the assessment sample could be identified to species and skeletal element. Four species are represented; these are sheep/goat, cattle, pig and horse.

Associated bone groups (or ABGs)*Late Iron Age/early Romano-British*

- 5.13.10 The LIA/ERB assemblage includes 90 ABGs from 14 separate pits. All of these deposits were assessed to check identifications made in the field and to establish their general composition in terms of species and body parts. Sheep/goat ABGs feature strongly (56% of the total) and most are complete or partial skeletons. Cattle and dog ABGs are also fairly common (17% and 15% respectively); the cattle ABGs are mostly articulated limbs or sections of vertebral column, while the dog ABGs are all complete skeletons. There are also five horse ABGs, these include two articulated limbs, two skulls complete with mandibles and cervical vertebrae, and one complete skeleton. The pig, chicken and raven ABGs are all complete or partial skeletons.
- 5.13.11 In general the pattern of relative species proportions as suggested by the ABGs is broadly similar (i.e. sheep-dominated) to many other contemporary sites in the region (see Hambleton 1999) and therefore reflects the local livestock economy.

Pit 3027

- 5.13.12 The assemblage from this feature includes two ABGs, a cattle foreleg and a sheep skull and associated mandibles, and a small number of disarticulated bones. The disarticulated bones include two sheep horn cores, one of which had been sawn through at the base in order to detach it from the skull. This evidence indicates that the keratinous outer sheath was utilised as a raw material.

Pit 3174

- 5.13.13 Almost 3,000 fragments of animal bone were recovered from the various fills of this feature; the largest concentration is from context **3711**, which yielded over 2,000 fragments (or 74% of the total). The assemblage is almost entirely made-up of ABGs, most (75%) of which are complete or partial sheep/goat skeletons. A rough estimate of minimum numbers suggests that there are between 25-30 individuals represented from foetal and neonatal lambs to old adults whose bones show signs of degenerative arthritis. The preliminary results of this assessment suggest that these animals were primarily slaughtered over the winter and into the spring lambing season, however closer examination of the age structure of this group is required before this can be confirmed.
- 5.13.14 The other ABGs from this feature include nine articulating cattle limbs, several of which are from calves, two complete dog skeletons, the partial skeleton of a foetal horse, two complete raven skeletons and one complete chicken skeleton. The dog skeletons are from different breeds, one is medium-sized with a terrier-like skull morphology (i.e. a pronounced sagittal crest), while the other is small with a domed-shaped skull (usually referred to

as a Pomeranian-type morphology). Small lap-dogs with this type of skull morphology were introduced to Britain by the Romans; they are reasonably rare during this period and this has led to the suggestion that they are an indication of high status (Cram 2000, 171).

- 5.13.15 The pit also includes a number of bones from mice, voles, shrews and amphibians. The majority of these pitfall victims are from context **3711**, which would suggest that the ABGs from this context were deposited over a prolonged period of time, rather than as a single event. Egg shell was also noted from this context.

Pit 3229

- 5.13.16 A total of 667 bone fragments were recovered from this feature, although most belong to three sheep/goat ABGs. These include two partial skeletons from adult animals and the hindquarters from a juvenile individual. The disarticulated material includes a small number of other sheep/goat bones, a few cattle bones, a mandible from a young horse, a fragment of pig skull and a bird vertebra.

Pit 3231

- 5.13.17 The assemblage includes 838 bone fragments, most of which belong to three ABGs. These include complete skeletons from a pig and a horse, and several articulating cattle vertebrae. The disarticulated remains include a small number of bones from livestock species and one bone from a horse.

Enclosure ditch Group 2071

- 5.13.18 Four contexts from the inner enclosure ditch were included in the assessment sample. The sample of material is relatively small and only a fraction could be identified to species. The identified material includes sheep/goat, cattle and horse bones.

Enclosure ditch Group 4232

- 5.13.19 Ten contexts were assessed. The bones from large domestic mammals (i.e. cattle and horse) are more numerous than those of medium-sized domestic mammals (i.e. sheep/goat and pig). This contrasts with the material from the pits and suggests that larger bones were deposited towards the periphery of the enclosure (see Wilson 1996) rather than in pits within the interior. Some articulating groups were also noted from this feature but have not been assigned ABGs at this stage.

Other ditches

- 5.13.20 The animal bones from 12 other ditch sections were also included in the assessment sample. The majority of the bones from these contexts are disarticulated remains. Cattle bones are almost twice as common as sheep/goat bones, which would seem to suggest that the general distribution pattern noted above (i.e. larger bones ended up in ditches rather than pits) is consistent across the Site. A small number of horse and pig bones were also identified.

6 ENVIRONMENTAL EVIDENCE

6.1 Introduction

Environmental samples taken

- 6.1.1 A total of 98 bulk samples were taken from a range of features within each phase, particularly from pits (see **Table 7**). Of these samples, 61 were 20 litres or less, as they had been taken from discrete contexts, and these samples were processed in full. As previous work on the Site has demonstrated high potential for good preservation of charred material within features 20 litres per sample was processed (at this stage) of the remaining 37 samples. It was thought that this would be a large enough sample size to produce good charred assemblages for analysis, particularly as there were multiple samples from 18 of the sampled features. The samples were processed for the recovery and assessment of charred plant remains and charcoals.
- 6.1.2 Two monoliths were taken from the Site to facilitate more detailed soil descriptions and to enable further detailed analysis if necessary. Monolith 152 was taken from the LIA/ERB ditch group **4232** (cut **3816**) and monolith 110 from a possible former land surface **3698**.

6.2 Charred Plant Remains

- 6.2.1 Bulk samples were processed by standard flotation methods; the flot retained on a 0.5mm mesh, residues fractionated into 5.6mm, 2mm and 1mm fractions and dried. The coarse fractions (>5.6mm) were sorted, weighed and discarded. Flots were scanned under a x10 – x40 stereo-binocular microscope and the preservation and nature of the charred plant and wood charcoal remains recorded in **Table 8**. Preliminary identifications of dominant or important taxa are noted below, following the nomenclature of Stace (1997).
- 6.2.2 The flots varied in size with low to high numbers of roots and modern seeds that are indicative of stratigraphic movement and the possibility of contamination by later intrusive elements. Charred material comprised varying degrees of preservation.
- 6.2.3 The two samples from the LBA/EIA pits, **3734** and **3940**, produced good numbers of charred plant remains. The charred cereal remains, included grain fragments of barley (*Hordeum vulgare*) and grain and chaff fragments of hulled wheat, spelt or emmer (*Triticum dicoccum/spelta*). A number of hazelnut (*Corylus avellana*) shell fragments were recovered together with a few tubers. The weed seeds observed included seeds of oats/brome grass (*Avena/Bromus* spp.), vetch/wild pea (*Vicia/Lathyrus* spp.), knotgrass (Polygonaceae), mallow (*Malva* sp.), rye-grass/ fescue (*Lolium/Festuca* spp.), clover/meddick (*Trifolium/Medicago* sp.) and goosefoot (*Chenopodium* sp.).
- 6.2.4 Only sparse quantities of charred remains were recovered from the M/LIA pit **4372**.
- 6.2.5 The LIA/ERB enclosure ditches groups **2071** and **4378** (enclosure **4254**) contained high numbers of charred plant remains. These included grain fragments of barley and grain and chaff fragments, glumes and spikelet

forks of hulled wheat, spelt or emmer, with some glume fragments again clearly identifiable as emmer. Spelt wheat glumes were also identified in the deposits. Hazelnut shell fragments were also observed in these samples. The weed seed species included seeds of oat/brome grass, vetch/wild pea, knotgrass, goosegrass (*Galium* sp.) and brassicas (*Brassicaceae*).

- 6.2.6 Large quantities of charred plant remains were recovered from 21 of the 31 sampled LIA/ERB pits, in particular pits **3467**, **3174**, **3183**, **3870**, and **3921**. The high numbers of cereal remains include grain fragments of hulled wheat and barley and glume fragments and spikelet forks of hulled wheat, with chaff fragments of emmer wheat observed in 15 pits. Barley rachis fragments were recorded in two pits, **3174** and **3229** and oat awn fragments in six pits, **3027**, **3174**, **3183**, **3225**, **3870** and **3921**. Spelt wheat glumes were also identified in these deposits. Hazelnut shell fragments, tubers including those of false oat grass (*Arrhenatherum elatius* var. *bulbosum*), buds (possibly those of oak) and sloe (*Prunus spinosa*) stone fragments were recorded in a number of these pits. Which?
- 6.2.7 The weed seeds recovered included seeds of oats, brome grass, goosefoots, vetch/wild pea, possible celtic bean (*Vicia faba*), buttercup (*Ranunculus* spp.), corn gromwell (*Lithospermum arvense*), docks (*Rumex* spp.), knotgrass, redshank/ pale persicaria (*Persicaria maculosa/lapathifolia*), clover/meddick, brassicas, knotgrass, mallow, ryegrass/fescue, sedge (*Carex* sp.), field madder (*Sherardia arvensis*), ribwort plantain (*Plantago lanceolata*), blinks (*Montia* sp.), cleavers, orache (*Atriplex* sp.), meadow grass/ cat's tails (*Poa/Phleum* spp.), dandelion (*Taraxacum officinale*), hedge-parsley (*Torilis* sp.), campion (*Silene* sp.), red bartisia (*Odontites vernus*) and scentless mayweed (*Tripleurospermum inodorum*).
- 6.2.8 A number of birch tar lumps and stems/?twisted fibres were retrieved from context **4114** in pit **3998**. Birch tar can be used to make repairs in pottery (see Seagar Smith forthcoming) and it is possible that the stems/?twisted fibres, possibly nettles, were intended to form some sort of binding. Nevertheless a large number of other uses of birch tar have been recorded (Seagar Smith forthcoming).
- 6.2.9 The two unphased samples with good quantities of charred plant remains were taken from pits **3317** and **4079**. The assemblages were similar to those recovered from the LBA/EIA and the LIA/ERB pits.
- 6.2.10 The presence of emmer in a significant number of the LIA/ERB pits and ditches is noteworthy as spelt has generally become the more prevalent wheat throughout much of southern England by this period. The weed seed species are generally typical of those recovered from arable, field edge and grassy environments. A number of them maybe more typical of woodland environments such as blinks or wetter areas such as sedge and mallow.

6.3 Wood Charcoal

- 6.3.1 Wood charcoal was noted from the flots of the bulk samples and is recorded in **Table 8**. Wood charcoal fragments of >4 mm were retrieved in high numbers from the probable LIA/ERB posthole **3301** and LIA/ERB pits **3027**, **3174** and **3998**. The deposit with a large amount of charcoal in pit **3174** also

contained a significant quantity of slag and hammerscale. The charcoal was mainly mature wood pieces.

6.4 Land and Fresh/Brackish Water Molluscs

- 6.4.1 A 1500g sample was processed by standard methods (Evans 1972) for land snails from a possible former land surface **3697**. The flot (0.5mm) was rapidly assessed by scanning under a x10 – x40 stereo-binocular microscope to provide some information about shell preservation and species representation with nomenclature according to Kerney (1999).
- 6.4.2 No molluscs were recovered from the possible old land surface **3697**. However, molluscs were recorded in a number of the bulk sample flots. The presence of these shells may aid in broadly characterising the nature of the wider landscape.
- 6.4.3 The small number of molluscs observed in the LBA/EIA pits and posthole included the shade-loving species *Aegopinella nitidula*, the intermediate species *Trichia hispida* and the open-country species *Vallonia* spp., *Helicella itala* and *Vertigo pygmaea*.
- 6.4.4 The M/LIA pit **4372** contained a small quantity of molluscs, including the intermediate species *Cochlicopa* sp. and the open country species *Vallonia* spp.
- 6.4.5 Molluscs were preserved in a number of the LIA/ERB features in low to high amounts. The species present included the shade-loving species *Aegopinella nitidula*, *Oxychilus cellarius*, *Vitrea* spp. and *Ena* sp., the intermediate species *Trichia hispida*, *Cochlicopa* sp., *Cepaea* spp., *Punctum pygmaeum* and *Vitrina pellucida* and the open-country species *Helicella itala*, *Vallonia* spp., *Pupilla muscorum* and *Vertigo pygmaea*. The relatively rare, obligatory xerophile *Truncatellina cylindrica*, indicative of a very open environment such as short grassland, was recorded in pit **3058**. Pit **3870** contained a few specimens of the marsh species *Succinea/Oxyloma* spp. and the fresh water Planorbids. There were also a few opercula of *Bithynia* spp., fresh-water species indicative of moving water.
- 6.4.6 The unphased features only produced a few mollusc shells, which included those of *Trichia hispida*, *Helicella itala* and *Vallonia* spp.
- 6.4.7 The mollusc assemblages generally reflect an open environment with some areas of shade, such as patches of long grass. There was also an indication of a small wetter environment in the vicinity in pit **3870**.

6.5 Sediments

- 6.5.1 During the excavations monolith samples were taken from two deposits; a possible buried soil (3698) and LIA/ERB enclosure ditch **4232** (see **Table 9** below).

Monolith <110>

- 6.5.2 A monolith was taken through a possible buried soil (**3698**). Whilst most bulk samples from the Site were relatively abundant in mollusca the bulk samples from this sampled layer (**3698**) contained no molluscs, charred material or other ecofacts or artefacts, as detailed above. This, in conjunction with the

examination of the context records and photographs, indicate that this is a natural layer formed by chalk dissolution and downwards translocation of clay through the profile, with a dark reddish colouration caused by iron and manganese staining/enrichment, rather than a buried soil or former land surface.

Monolith <152>

- 6.5.3 A second monolith was taken through the fills within the LIA/ERB ditch **4232** (cut **3816**) to determine the nature of the ditches infilling and their suitability for pollen analysis.
- 6.5.4 Two fills were represented in this ditch profile sample: a lower fill c. 0.6m thick with characteristics of both primary and secondary fills (10YR 4/3 brown silt loam with common chalk rubble <40mm, with common macropores), and a stonefree upper fill representing a phase of feature stability with slow accumulation (10YR 4/4 dark yellowish brown silt loam with common macropores).
- 6.5.5 The sediments of this fairly typical shallow chalky ditch section are calcareous and fully aerated, indicating that pollen is very unlikely to survive. In addition no charcoal or other useful stratified material is present.

Small animal and fish bones

- 6.5.6 During the processing of bulk soil samples for the recovery of charred plant remains and charcoal, small animal bones were noted, and recorded (**Table 8**), in the flots. These included those of small mammals. A small number of fish scales were recorded in pit **3921**. These small bones have been considered within the animal bone assessment (above).

7 FURTHER POTENTIAL

7.1 Overview of the stratigraphic sequence

- 7.1.1 The current phase of excavation has identified a significant and substantial concentration of features, the majority of which can be dated to the LIA/ERB period.
- 7.1.2 The previous excavations carried out within the St. Mary's Hospital grounds had identified a large LBA enclosure or ring work (**SM163**) which, although only partially investigated, seems to have been bounded by substantial ditch-and-bank defences with revetments. To the north of the LBA enclosure, immediately downslope, a second substantial ditched enclosure **2070** was identified in 2008, this time dating to the LIA/ERB period. A further 20m to the north a third, apparently less substantial, enclosure ditch **2071** was identified.
- 7.1.3 The present phase of excavations has added significantly to the body of archaeological evidence in the Orchard Hill area by identifying not only the remainder of enclosure **2071**, but also revealing three distinct phases of development. Perhaps more significantly, the current excavations have exposed almost the entire enclosure, including the interior, whereas previous phases of excavation had, due to their locations, only clipped the edges of the various enclosures. The current excavations will therefore allow more detailed analysis of the potential function/use of the enclosure,

activities carried out both within it, and in the wider vicinity, settlement patterns and structures, and other aspects of agricultural, domestic and social life.

Bronze Age and Iron Age

- 7.1.4 The presence of **SM163** on the hilltop suggests that during the LBA/EIA period the focus of activity in the area lay principally to the south of the present excavation area. This suggestion is borne out by the somewhat sparse evidence for LBA/EIA activity within the present excavation area. Only a small handful of features can be securely dated to this period, although it is possible that further analysis will identify additional features which may date to this phase. The principal landscape feature dating to this period is trackway **4253**. This trackway could well have been linked to the quarry pits of the same date found to the east (WA 1999a) and have been related to resource procurement for enclosure **SM163** to the north.
- 7.1.5 The four features which date from the Early to the Late Iron Age should also be considered of significance, as evidence for this intervening period between the LBA/EIA features and the LIA/ERB settlement is sparse within the wider Site. The four pits suggest that the area was not abandoned entirely. Indeed, the Phase 1 LIA/ERB enclosure ditch, **4242**, which potentially forms a larger enclosure with ditches **4229** and **4250**, respects LBA/EIA trackway **4253** to its north. This suggests some degree of continuity of land use, or survival of landscape features such as the trackway, between the earlier prehistoric period and the LIA/ERB transition.
- 7.1.6 It is worth noting that whilst the number of archaeological features dating to the LBA/EIA is small, the finds assemblage as a whole contains a fair quantity of pottery dating to this period, much of it residual within later features. This is in contrast with the Middle and Late Iron Age pottery, which comprises only the material collected from the four features discussed above. This does suggest a much reduced level of activity within the Site during the middle to later Iron Age.
- 7.1.7 Although few in number, the Bronze Age and Iron Age features have the potential to contribute to the existing evidence for subsistence and settlement during this period, especially when considered in conjunction with the features of a similar date to the east and south. The features dating to this period within the Site itself should be considered of local importance.

Late Iron Age/Early Romano-British

- 7.1.8 As discussed above the bulk of the archaeological features within the excavation area date to the transitional period spanning the Late Iron Age to early Romano-British period. Although the pottery assemblage does not allow for a great degree of refinement of the dating of the features, initial analysis based on stratigraphic relationships between features (dated to the period) has identified a changing pattern of land use over this period. Traces of the earliest Phase 1 enclosure can be picked out below the later features, and this first enclosure hints at some continuity of earlier prehistoric landscape divisions. Subsequently a new enclosure was created immediately to the east, laid out along different lines (Phase 2). Phase 3 saw the remodelling and enlargement of the enclosure with evidence of continued maintenance in the form of recutting of ditches, however the layout was otherwise retained with few changes.

- 7.1.9 The enclosures seem to represent rural settlement on a farmstead-type scale. The finds assemblage has provided clear evidence of agricultural activity, with a potential emphasis on sheep/goat husbandry if the animal bone assemblage can be interpreted in this way; although see below. The importance of sheep husbandry is supported by evidence for the prevalence of weaving and associated activities in the form of loomweights and spindle whorls from a number of the pits.
- 7.1.10 There is also some evidence for industrial activity in the form of metalworking and iron smithing. No features directly related to such industrial activity have been identified, but a large quantity of hammerscale and slag from pit **3174**, in addition to a small quantity of tools from other features, strongly suggests that such activities were carried out in the immediate area.
- 7.1.11 The specific function of the three phases of enclosure is not certain, and neither of the two structures identified are situated within the main sub-rectangular enclosure. It is possible that the sub-rectangular enclosure was utilised as a stock enclosure, either exclusively or additionally.
- 7.1.12 A key feature of the Site is the presence of a large number of deeply cut features which have been interpreted as storage pits. Whilst some pits have been allowed to silt up naturally, many have been filled in deliberately following the end of their use as storage receptacles. The process of infilling often involved the placement of unusual and significant deposits, notably a large number of animal burials, and a small number of neonate infant inhumation burials, in addition to pottery and presumably plant material. One pit in particular, **3174**, contained a very large number of animal carcasses including a layer containing the partial butchered carcasses of 30 sheep/goat. The circumstances surrounding the creation of the deposits which filled many of the pits within the enclosures are of great interest and could shed light upon activities within both the enclosure and the wider landscape.
- 7.1.13 It could be suggested that, as some of the deposits within the pits are considered to represent events and acts beyond the everyday sphere of operation, the pits have more potential to answer questions regarding cultural, social and ritual systems than those relating directly to subsistence and settlement. This would hinge on the theory that the filling-in of the pits is more likely to be associated with unusual and extreme events than regularly enacted activities. This could potentially relate to feasting/hosting, propitiatory acts or other activities. Potential links between acts of this type and times of political or social duress or upheaval could be assessed with reference to other sites, particularly with regard to the issue of the transition from the Iron Age to the Romano-British period, and all the connotations this entails.
- 7.1.14 The LIA/ERB features identified during the current excavation should, in conjunction with the known features to the east and south, be considered of regional importance.

7.2 Finds potential

Late Bronze Age/Early Iron Age

7.2.1 The late prehistoric component within the finds assemblage is relatively small, comprising pottery, animal bone and worked flint. There is a possibility also that some of the loomweights may belong to this phase of activity. The potential is correspondingly limited, and there is very little functional evidence (possible quernstone fragment). The animal bone assemblage is too small to warrant further analysis, but the pottery should be recorded to a minimum archive level, to clarify the date range (and to re-examine sherds assigned with lesser degrees of confidence), to set the assemblage in its local and regional context, and to enable inter-site comparison. The single vessel deposited with a grave warrants particular comment.

Late Iron Age/Romano-British

7.2.2 The LIA/ERB assemblage is more substantial and, in particular, this includes a large, well preserved and securely stratified faunal assemblage. This includes a large number of unusual pit deposits similar to those recorded at other contemporary sites in southern England (see Morris 2008a). These deposits vary in their composition and it is only through detailed analysis that we can begin to understand the human actions that lead to their creation. It is also important that these more unusual elements of the assemblage are not interpreted in isolation, particularly given the differences noted in species ratios between pits and ditches.

7.2.3 A significant amount of age, biometric and butchery data is available from the faunal assemblage. The livestock economy of the Site can be established from mortality profiles reconstructed from mandibular tooth wear and epiphysial fusion data. This information will allow comparisons with other local and regional assemblages. Detailed analysis of the age data for the large group of sheep/goat skeletons from pit **3174** is particularly important and should provide some indication of seasonality. From the biometric data it should be possible to reconstruct the size and conformation of species, and compare the Orchard Hill animals with those from contemporary sites in the region. While closer examination of butchery and taphonomic evidence will help to clarify the extent to which carcasses were utilised and any differences in the treatment of animals or carcass parts, as well as any discrete spatial differences in the disposal of waste from different processes.

7.2.4 The pottery assemblage is restricted in the range of fabric and form types, probably reflecting a relatively tight timespan around the conquest period. Detailed fabric and form analysis is proposed, to set the assemblage within its local and regional context, and this may also help to refine the chronology, although this is unlikely to result in any significant changes to the existing Site phasing. The generally good condition of the assemblage should allow some comment to be made on intra-site distribution and modes of deposition.

7.2.5 Other categories of material provide functional evidence, for textile working (ceramic loomweights, stone spindlewhorls) and grain processing (quernstone fragments), but evidence for lifestyle is fairly minimal (4 brooches, pair of hobnailed shoes).

7.2.6 Although only of limited size, the metalwork assemblage from Carshalton nevertheless has the potential to contribute significant information to the understanding of the Site, not least because it includes a number of rare objects. Of special significance are the three objects from pit **3998** (spearhead, nave hoop and hammer) since it can be assumed that they had been deposited together. The four brooches will provide closer dating for their respective contexts. The deposition of the two hobnailed shoes from pit **3183** should be considered in terms of ritual deposition since shoes often form part of such practices.

7.2.7 The date of the inhumation burials is unconfirmed, but the human remains were associated with rural settlement activity largely of Late Iron Age to Romano-British date, although there is also some evidence for Late Bronze Age activity on the Site. Infant and neonatal burials of Romano-British date (although not in later phases) are often found in non-cemetery contexts, preferable locations being agricultural or domestic settlement locations (Philpott 1991, 97-102; Scott 1999, 115; McKinley 2009, 16).

7.3 Palaeoenvironmental Potential

Charred plant remains

7.3.1 The charred plant remains have the potential to inform on crop husbandry practices, agricultural techniques and the nature of the settlement during the LBA/EIA and LIA/ERB periods. In some instances the samples are particularly rich and have a reasonably wide range of weed seeds that can inform on both the range of soils under cultivation, as well as information on storage practices and processing. Information on charred plant remains for more rural sites of these periods in this part of Greater London are fairly scarce. The analysis of these samples will augment information from the charred plant remains from previous work on the Site (Giorgi 1991, Wessex Archaeology 1999, Scaife 2002a). It can be compared with the material recovered from excavations of LBA/EIA features at Westcroft Road, Carshalton (Scaife 2002b) and further away with the charred remains from the multi-period site at St John's Vicarage, Kingston-Upon-Thames (Hinton 2001).

Wood charcoal

7.3.2 There is a small potential for the analysis of some wood charcoal assemblages to provide some information on the composition, exploitation and management of the local woodland resource and whether any species selection criteria were employed during the LBA/EIA and LIA/ERB periods. It may assist in determining any areas associated with industrial activities, such as the evidence for metal working in deposits within pit **3174**, and any species selection for these industrial processes.

Land Snails and fresh/brackish water molluscs

7.3.3 There is no potential for the analysis of these mollusc assemblages to provide a more detailed interpretation of the local landscape due to the variation of molluscan preservation and the general feature types. Mollusc assemblages from within deep pits may reflect the micro-environments of within the pits themselves rather than the local surrounding environment.

Sediments

7.3.4 The sediments have no further potential.

- 7.3.5 Sample <110> ('buried land surface') is of natural origin, whilst the ditch sample <152> has very low potential to contain intact pollen or other microfossils, being calcareous and fully aerated.

Scientific Dating

- 7.3.6 The purpose of this section is to outline the potential for scientific dating in relation to the following updated research questions:

- What is the date of construction of the enclosures (50 years before or after 1AD, or indeed after 50 AD). Is the duration of associated activity quite short (25-50 years) or much longer (50-150 years);
- Do the key animal bone deposits belong to a single event or a series of events?
- Can a radiocarbon chronology confirm or enhance our understanding of the pottery dating and local/regional typologies?

- 7.3.7 Radiocarbon dating can be used to date material of otherwise unknown age (eg unaccompanied human burials and animal burials) and to provide a refined chronology for archaeology events using the Bayesian approach to radiocarbon modelling (eg the establishment and duration of a settlement; the interval between two episodes of cemetery use; the construction date and use of a monument).

- 7.3.8 The Bayesian approach to archaeological dating has been outlined by Buck et al. (1996) and Bayliss et al. (2007). Whereas radiocarbon dating will simply return the calendar age of the submitted sample, the Bayesian technique will provide estimates of actual archaeological events. This is achieved by combining known stratigraphic (prior) information with radiocarbon dates to produce age estimates (posterior density). Overall the method tends to produce chronologies that are routinely more precise than conventional radiocarbon dating (sometimes 50 years instead of 200 years). The technique allows the following to be generated and measured: start and end dates; first and last; duration (span); and interval (hiatus in activity). It can also be used to estimate events within a radiocarbon dated sequence (eg date of construction). Date estimates for archaeological events can also be compared. The OxCal programme can also be used to order radiocarbon dates e.g. to sequence burials within a Saxon cemetery or a prehistoric barrow.

- 7.3.9 The potential for further dating to address the above research questions was discussed with Alex Bayliss (English Heritage, Head of Scientific Dating) at a meeting held at Wessex Archaeology. In order to assess the potential a simulation model based on the Site stratigraphy and available radiocarbon samples (articulated animal/human bone) was designed using the OxCal programme. The model was run twice with two sets of simulated radiocarbon dates ranging between 10-40 BC (BC model) and 10-40 AD (AD model). For the simulated BC model the settlement starts between 40 BC and 4 AD and ends at some time between 5 and 54 AD with a span of 55 years (68% probability).

- 7.3.10 For the simulated AD model the settlement starts between 22 and 42 AD and ends at some point between 40 and 55 AD with a span (length of occupation) of up to 39 years. Both models would require approximately 15 radiocarbon dates.

8 PROPOSAL FOR FURTHER WORK AND METHOD STATEMENT

8.1 General

8.1.1 The known archaeology in the vicinity of the Site will be re-examined by reviewing published reports and available grey literature. This will contribute towards the discussion of the Site within its wider landscape and its relationship to other nearby sites.

8.1.2 An Access database and AutoCAD drawings have been constructed to facilitate rapid cross-examinations and updating of the archive during post-excavation analysis.

8.1.3 Once the initial post-excavation analysis is completed, revisions will be made as required to the phasing. The publication text will be written and will integrate the key results of the proposed specialist work. Illustrations will be prepared to accompany the report. The results will be discussed in their local and regional context.

8.2 Stratigraphic

8.2.1 The provisional stratigraphic phasing will be checked and refined at the analysis stage. It is anticipated that a number of the context groups of ambiguous date (marked and noted as possible or unphased in the text and figures) will be reconsidered. Through spatial analysis and by re-examining the pottery it is hoped some of the stratigraphic relationships can be resolved.

8.3 Finds

Introduction

8.3.1 Further analysis will consider the finds from all stages of work on the Site between 2008 and 2010; the proposals made here will supersede any made for the previously excavated assemblage (WA 2009).

Pottery Task

8.3.2 The prehistoric and Romano-British assemblage will be subjected to fabric and form analysis, following the standard Wessex Archaeology pottery recording system, and using (for the Romano-British assemblage) the Museum of London type series for fabrics and vessel forms, correlated to the national fabric reference collection for Romano-British pottery where appropriate (Tomber and Dore 1998). Details of manufacturing technique, surface treatment and decoration will also be recorded. The results of the analysis will be presented as a description of the assemblage in terms of the range of types present; for the Late Iron Age/Romano-British component, this is likely to consist largely of tabulated data, as both fabrics and forms fall within well established type series.

8.3.3 Relevant parallels will be sought amongst other local and regional assemblages in order to support the proposed dating (e.g. Hanworth and Tomalin 1977, 24-45; Adkins and Needham 1985; Needham 1991, chapter 9; Leivers *et al.* 2010). The preliminary spot dating will be refined if possible in the light of this research, and any resulting chronological sequence(s) discussed. Any other implications of the assemblage for the functional and/or economic understanding of the Site will also be considered; this is

likely to relate more to the larger, Late Iron Age/Romano-British component. The intra-site pottery distribution will be considered, and any 'special deposits' (e.g. pots accompanying burials) will be briefly discussed.

- 8.3.4 The report will be supported by a limited number of illustrations: a maximum of ten prehistoric and 15 Late Iron Age/Romano-British vessels.

Fired Clay

- 8.3.5 The descriptions of the ceramic loomweights will be enhanced by more detailed fabric examination, and their chronological context will also be re-examined in order to clarify their date range. The evidence for textile working as a whole (including the stone spindlewhorls) will be reviewed for each chronological period. No illustration is proposed for the loomweights, but one of the complete chalk spindlewhorls could be illustrated.

Slag

- 8.3.6 No further analysis of the metalworking debris is proposed, and the information presented in the assessment can be adapted for publication by our in house specialist. However, the evidence for ironworking will be reviewed in terms of the function of the Site, specifically that of the Romano-British enclosure, and placed in its local and regional setting.

Metalwork

- 8.3.7 Further analysis is required to place the objects into their regional and wider context. Further parallels will be sought for this purpose, and to confirm the dating, and catalogue entries will be enhanced accordingly where appropriate. For publication, the finds will be discussed by functional group.
- 8.3.8 To support the publication text, 11 objects will be illustrated, to which may be added the two hobnailed shoes.

Human Bone

- 8.3.9 It is recommended that full recording and detailed analysis are undertaken on this assemblage. This will allow more accurate gestational age estimates of individuals with complete long bone diaphyses, and consequently enable relative age estimations to be made for those without. Generally it is not possible to establish the sex of neonatal individuals through standard osteological analysis.
- 8.3.10 Comparison of the bone surfaces of all individuals will allow a more informed interpretation regarding normal vs. abnormal bone growth. In addition, the results will provide useful data for ongoing research into the complex area of infant palaeopathology (Mary Lewis *pers. comm.*).
- 8.3.11 It is strongly recommended that firmer dating be sought in order to set the remains in their temporal context, and allow them to be considered in their regional and national contexts. Radiocarbon dates should be obtained for a selection of the skeletal remains. The selection will be made on the basis of archaeological and osteological criteria so that the potential of the results is maximised, specifically focusing on skeletons **3809**, **3466** and **3652** which are considered to be of a later Romano-British date, and skeleton **3057** which is likely to be LBA/EIA in date.

- 8.3.12 All the unsorted small fraction residues from samples taken during excavation will be subject to a rapid scan to extract any identifiable material, osseous or artefactual.
- 8.3.13 Taphonomic factors potentially affecting differential bone preservation will be assessed. Age of individuals will be estimated using longbone measurements (Scheuer and Black 2000).
- 8.3.14 Should any be encountered, pathological changes will be recorded in text and via digital images. Although not anticipated, certain pathological changes may require X-radiographing, and/or photographing for publication.

Animal Bone

- 8.3.15 The animal bone from LBA/EIA contexts is small and of limited interpretive value. However, a brief summary of this material is recommended since the material is at least of local interest and it will add to the small amount of information obtained from contemporary sites in the area, such as Westcroft Road (Proctor 1999) and Queen Mary's Hospital (Adkins and Needham 1985; Smith 2002).
- 8.3.16 The substantial Late Iron Age/Early Romano-British animal bone assemblage is of local and regional importance and merits further detailed analysis to record the following information: species, skeletal element, preservation condition, fusion data, tooth ageing data, butchery marks, metrical data, gnawing, burning, surface condition, pathology and non-metric traits. This information will be directly recorded into a relational database and cross-referenced with relevant contextual information and spot dating evidence, and the resulting database will form part of the Site archive. It is recommended that a detailed archive report that fully describes and discusses the analysis results be prepared that includes supporting summary data in the form of tables and figures. This report should be scaled-down for publication purposes. The archive and publication reports should seek to describe and discuss the following aspects of the assemblage; the livestock economy of the Site, the significance of the ABGs, any spatial patterning in disposal practices, mortality profiles and any evidence for seasonal slaughter patterns, the size and conformation of species, butchery evidence, pathology and non-metric traits. The report should also seek to place the assemblage within a wider context via comparison with contemporary sites in the region and elsewhere.

Radiocarbon dating

- 8.3.17 Our assumption from the artefactual evidence is that the settlement could belong somewhere within the period 20 BC to 60 AD, and possibly between 40 AD to 80 AD. Although the artefactual evidence is unlikely to provide any closer resolution than this (i.e. 80 years), in contrast the radiocarbon dating could potentially place the settlement within a 40 or 50 year interval and, therefore to either before or after the Conquest.
- 8.3.18 Further works will agree the dating questions to be addressed and produce contextual information for potential sample selection. A review of the potential sample material will be undertaken and the simulation models will be rerun, to retest the number of samples which are required;

- 8.3.19 Initially, seven radiocarbon samples will be submitted to clarify the existing phasing. The models will then be rerun with the seven results and the number (minimum) of simulated dates calculated. If further dates are required, up to 8 further dates will be submitted. The publication will include a review of the results, final modelling and will be incorporated into the publication report.

Other categories

- 8.3.20 Other categories of finds (CBM, glass, worked bone) do not warrant any further analysis, although details of these finds as presented in this report could be incorporated in the publication report.

8.4 Environmental

Charred Plant Remains

- 8.4.1 It is proposed to analyse twenty-one samples in total from a selection of the LBA/EIA pits and the LIA/ERB pits and ditches. The eighteen samples proposed for analysis from this stage are indicated with a "P" in the analysis column in **Table 8**.

- 8.4.2 The original proposals for the analysis of charred plant remains from the previous work on this Site (excavation 69944 and evaluation 69941) have been reviewed in light of the results from this further stage of work. It is proposed to analyse the charred plant remains from three samples from the earlier stages of work to augment the samples selected from this phase. These additional samples are listed at the end of **Table 8**.

- 8.4.3 All identifiable charred plant macrofossils will be extracted from the 2 and 1mm residues together with the flot. Identification will be undertaken using stereo incident light microscopy at magnifications of up to x40 using a Leica MS5 microscope, following the nomenclature of Stace (1997) and with reference to modern reference collections where appropriate, quantified and the results tabulated.

Wood Charcoal

- 8.4.4 It is proposed to analyse the wood charcoal from a targeted selection of features: probable LIA/ERB posthole **3301** and the Late Iron Age/Early Romano-British pits **3027**, **3174** and **3998**. The four samples proposed for charcoal analysis are indicated with a "C" in the analysis column in **Table 8**.

- 8.4.5 Identifiable charcoal will be extracted from the 2mm residue together and the flot (>2mm). Larger richer samples will be sub-sampled. Fragments will be prepared for identification according to the standard methodology of Leney and Casteel (1975, see also Gale and Cutler 2000). Charcoal pieces will be fractured with a razor blade so that three planes can be seen: transverse section (TS), radial longitudinal section (RL) and tangential longitudinal section (TL). They will then be examined under bi-focal epi-illuminated microscopy at magnifications of x50, x100 and x400 using a Kyowa ME-LUX2 microscope. Identification will be undertaken according to the anatomical characteristics described by Schweingruber (1990) and Butterfield and Meylan (1980). Identification will be to the lowest taxonomic level possible, usually that of genus and nomenclature according to Stace (1997), individual taxon (mature and twig) will be separated, quantified, and the results tabulated.

Land snails and fresh/brackish water molluscs

8.4.6 No further work is proposed.

Sediments

8.4.7 No further work is proposed. The sediments are recommended for discard.

Dating

8.4.8 It is not believed that radiocarbon dating of deposits on the Site would provide any clearer indication of their date than pottery analysis is likely to provide. As such no further work is proposed at this stage.

8.5 Publication Proposal

8.5.1 It is proposed that the 2008 and 2010 excavations and watching brief results, incorporating the findings from the WA 1999 investigations will be published as a volume in the well-established Wessex Archaeology monograph series.

8.5.2 This combined with website distribution and a short popular publication aimed at the school and local residents will enable relatively rapid publication as well as dissemination to as wide an audience as possible. The publication will include appropriate illustrations and photographs in support of the text.

8.5.3 In addition, an Online Access to Index of Archaeological Investigations (OASIS) online record <http://ads.ahds.ac.uk/projects/oasis/> has been initiated. All appropriate parts of the OASIS online form have been completed for submission to the Greater London Historic Environment Record. Once approved, this will include an uploaded .pdf version of the entire report (a paper copy will also be included with the archive).

8.5.4 The proposed format of the report is outlined below in **Table 10**. The final format and precise word counts and illustrations will be subject to variation during the course of final analysis work. The views of the GLAAS to the recommendations will also need to be taken into account.

Table 10: Publication report synopsis

Section heading	Pages (c. 1000 words pp)	Figures and Plates	Tables
Title:			
Summary	0.5		
Chp 1			
Introduction	0.5	1 Site plan	
Geology and Topography	0.5		
Archaeological background	1		
Fieldwork Methodology	0.5		
Results		1 plan of Mitigation Area locations	
Introduction	0.5		
Overview	1		
1999 Excavation	1		
2008 Excavation	5		Specialist finds and environmental remains,
2010 Excavation	25	1 plan combining area excavation and plates	Specialist animal bone, pottery, human remains, environmental, C14 analysis

LIA/EIA Pits	5	Spatial distribution of pit types incorporating ABGs	
RB Enclosures	3	1 plan of enclosure and ditch sections	Specialist, finds and environmental remains.
Finds illustration	3	Ceramics (25 vessels), metal objects (11)	
Discussion – Research themes for LBA/EIA and LIA/ERB chronology, function/use of Site, subsistence and settlement patterns, economy, industrial activity and ritual practices	4		
Acknowledgements & Archive	0.5		
Bibliography	7		
Appendices (optional)	5		
Totals	63		

8.6 Management Structure

8.6.1 Wessex Archaeology operates a project management system. The team will be headed by the Project Manager, in this instance Sue Farr, supported by the Post-excavation Manager (Alistair Barclay). Sue Farr will assume ultimate responsibility for the implementation and execution of the project specification as outlined in the Proposal for Analysis and Publication and the achievement of performance targets, be they academic, budgetary, or scheduled.

8.6.2 The Manager may delegate specific aspects of the project to other key staff, who both supervise others and have a direct input into the compilation of the report. They may also undertake direct liaison with external consultants and specialists who are contributing to the publication report, and the museum named as the recipient of the project archive. The Manager will have a major input into how the publication report is written. She will define and control the scope and form of the post-excavation programme.

8.7 Performance Monitoring and Quality Standards

8.7.1 The Post-excavation Manager (Alistair Barclay) will be assisted by the Reports Manager (Julie Gardiner), who will help to ensure that the report meets internal quality standards as defined in Wessex Archaeology's guidelines. The overall progress will be monitored internally by the Salisbury Regional Head (Nick Truckle).

8.8 Task list for analysis and publication

8.8.1 **Table 11** below lists the stages and tasks, the personnel and scheduled work duration required to achieve the project objectives.

Table 11: Task list for analysis and publication

Task No.	Task	Grade	Name	Days
	Management			
1	General management	PM	Farr S	2
2	Finds management	PM	Mepham L	1
3	Environmental management	EM	Crockett A	0.5
4	Post-excavation management	PEM	Barclay A	3

5	Graphics management	DO	Coleman L	1
6	IT Management & Support	PM	Neuberger J	1
	Preliminary analysis and setup			
7	Check phasing	PO	Hunnisett C	1.5
8	Amend database	PO	Hunnisett C	1
9	C14 preparation/selection	PO	Barclay A	1
10	Radiocarbon dating (up to 15 samples)		Ext	15
11	Conservation Treatment	SPO Ext.	L Wootten Wiltshire Council	4 25hrs
12	Check digitising	DO	Illustrator	2
13	Extraction of charred plants and charcoal (23 samples)	PO	Wyles S	6
	WA Monograph			
	Stratigraphic analysis and reporting - Chps 1-4			
14	Project Background	PO	Hunnisett C	0.5
15	Analysis	PO	Hunnisett C	10
16	Site narrative	PO	Hunnisett C	20
	Finds analysis and reporting - Chp 5			
17	Flint	PO	Harding P	3
18	Pottery	PO	Brown K/Jones G	14
19	Fired Clay	PO	Brown K/Jones G	1.5
20	Slag	PM	Andrews P	0.5
21	Metalwork	PO	Jones G	2.
22	Human Bone	PO	Egging Dinwiddy K	3
23	Animal Bone	SPO	Higbee L	54
24	Radiocarbon report	SPM	Barclay A	3
	Environmental analysis and reporting - Chp 6			
16	Analysis Charred Plant Remains (21 samples)	SPO	Stevens C	12
25	Analysis Wood Charcoals, (4 samples)	SPO	Barnett C	4
27	Overview and Palaeoenvironmental Summary	SPO	Stevens C	1.5
	Illustrations- all Chps			
28	Site & Discussion Figs	DO	Illustrator	10
29	Photographs	DO	Illustrator	2
30	Finds illustrations (up to 25 pottery vessels, 11 metal objects)	DO	Illustrator	6
31	Tables	DO	Illustrator	1
32	Mapping and OS License	DO	Illustrator	Ext cost
33	Digitising	DO	Illustrator	2

Report				
34	Write discussion	PO	Hunnisett C	5
35	Assemble report, intro, background, captions, bibliography	PO	Hunnisett C	5
36	Edit Report	PM	Barclay A	4
Publication				
37	Review Report	PM	Gardiner J	4
38	Revise report: text & figures	PM/PO	All	4
39	Type setting & copyedit	DO	Illustrator/Gardiner J	14
40	Index and Foreign language summaries	Ext		
41	Cover	DO	Illustrator	2
42	Publication costs	Ext		
43	Popular publication costs, inclusive of distribution	Ext		
Archive Preparation				
44	Archive: final ordering and indexing of paper records	PO	Hunnisett C	1
45	Final checking of finds archive	PS	Nelson S	0.5
46	Final checking of environmental archive	PO	Wyles S	0.5
47	Security copy: preparation and checking	PO	MacIntyre H	0.5
48	Microfilm jobsheets/checking	PO	MacIntyre H	0.5
49	Microfilming paper records	Ext		
50	Archive Deposition	PO	MacIntyre H	1
51	Box storage grant			1
52	Travel costs	-		-

8.9 Designated Project Team

- 8.9.1 The team consists primarily of internal Wessex Archaeology staff. The post-excavation project will be managed by Sue Farr. **Table 12** summarises the WA staff and external specialists that are scheduled to undertake the work as outlined in the task list (**Table 11**) and the programme. The lead author will be responsible for the compilation of each respective volume.
- 8.9.2 Internal and external finds and environmental analysis, conservation work and scientific analyses will be coordinated by Kayt Brown, Chris Stevens and Alistair Barclay.

Table 12: WA Staff

Position	Name
Salisbury Regional Head	Nick Truckle
Project Manager	Sue Farr
Post-excavation Manager	Alistair Barclay
Senior Technical Manager Publications	Julie Gardiner

Graphics Manager	Linda Coleman
Environmental Manager	Andy Crockett
Project Officer (post-excavation)	Chloe Hunnisett
Project Officer (human bone specialist)	Kirsten Dinwiddy
Project Manager (finds)	Lorraine Mephram
Project Manager (slag)	Phil Andrews
Senior Project Officer (environmental)	Chris J. Stevens
Project Officer (flint)	Phil Harding
Project Officer (environmental)	Sarah Wyles
Project Officer (finds)	Sue Nelson
Senior Project Officer (animal bone)	Lorrain Higbee
Charcoal specialist	Catherine Barnett
Graphics Officer	Elizabeth James
Archives Officer	Helen MacIntyre

9 STORAGE AND CURATION

9.1 Museum

9.1.1 It is recommended that the project archive resulting from the excavation be deposited with the Museum of London. The Museum has agreed in principle to accept the project archive on completion of the project. Deposition of the finds with the Museum will only be carried out with the full agreement of the landowner.

9.2 Archive

9.2.1 The complete Site archive, which will include paper records, photographic records, graphics, artefacts and ecofacts, will be prepared following the standard conditions for the preparation of archaeological archives by the Museum of London, and in general following nationally recommended guidelines (Walker 1990; SMA 1995; Richards and Robinson 2000; Brown 2007).

9.2.2 All archive elements are marked with the MoL site code (OHH08), and a full index will be prepared. The physical archive comprises the following:

- 110 cardboard boxes or airtight plastic boxes of artefacts and ecofacts, ordered by material type (this will reduce slightly following the sorting of human bone residues);
- six files/document cases of paper records and A3/A4 graphics.

9.3 Conservation

9.3.1 No immediate conservation requirements were noted in the field. Finds which have been identified as of unstable condition and therefore potentially in need of further conservation treatment comprise the metal objects.

9.3.2 Metal objects have been X-radiographed as part of the assessment phase, as a basic record and also to aid identification. On the basis of the X-rays, the range of objects present and their provenance on the Site, ten objects have been selected for further conservation treatment, involving investigative cleaning and stabilisation.

9.3.3 In addition, it is possible that certain pathological changes amongst the human bone may require X-radiographing in order to determine details; this has been allowed for in the conservation estimate.

9.4 Discard Policy

9.4.1 Wessex Archaeology follows the guidelines set out in Selection, Retention and Dispersal (Society of Museum Archaeologists 1993), which allows for the discard of selected artefact and ecofact categories which are not considered to warrant any future analysis. In this instance, and following the specific discard policy of the Museum of London, burnt (unworked) flint has been discarded, as has the unworked chalk. No further artefact discard is anticipated.

9.4.2 The discard of environmental remains and samples follows the guidelines laid out in Wessex Archaeology's 'Archive and Dispersal Policy for Environmental Remains and Samples'. The archive policy conforms with nationally recommended guidelines (SMA 1993; 1995; English Heritage 2002) and is available upon request.

9.5 Copyright

9.5.1 The full copyright of the written/illustrative archive relating to the Site will be retained by Wessex Archaeology Ltd under the Copyright, Designs and Patents Act 1988 with all rights reserved. The recipient museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use shall be non-profitmaking, and conforms with the Copyright and Related Rights regulations 2003.

9.6 Security Copy

9.6.1 In line with current best practice, on completion of the project a security copy of the paper records will be prepared, in the form of either microfilm or PDF file. In the case of microfilm, the master jackets and one diazo copy of the microfilm will be submitted to the National Archaeological Record (English Heritage), a second diazo copy will be deposited with the paper records, and a third diazo copy will be retained by Wessex Archaeology.

10 REFERENCES

Adkins, L. and Needham, S., 1985, New research on a Late Bronze Age enclosure at Queen Mary's Hospital, Carshalton, Surrey Archaeol. Collect. 76, 11-49

Bayliss, A., Bronk Ramsay, C., van der Plicht, J., and Whittle, A., 2007 'Bradshaw and Bayes: Towards a Timetable for the Neolithic', in Bayliss, A. and Whittle, A. (eds), 'Histories of the dead: building chronologies for five southern British long barrows', Cambridge Archaeological Journal, 17,1 (Supplement), Cambridge University Press, 1-28.

Bond, D., 1988, Excavation at the North Ring Mucking, Essex, East Anglian Archaeology 43

- Bradley, R., 2007, *The Prehistory of Britain and Ireland*. Cambridge, Cambridge University Press
- Brown, D.H., 2007, *Archaeological archives; a guide to best practice in creation, compilation, transfer and curation*, Archaeological Archives Forum
- Bruce, P. and Giorgi, J., 1994, Recent work at Orchard Hill, Queen Mary's Hospital, Carshalton, *London Archaeologist* 7(7), 171-7
- Buck, C E., Cavanagh, W G., and Litton, C D., 1996 *Bayesian Approach to Interpreting Archaeological Data*, Chichester, Wiley.
- Buikstra, J.E. and Ubelaker, D.H. 1994 Standards for data collection from human *skeletal remains* Arkansas Archaeological Survey Research Series 44
- Butterfield, B.G. and Meylan, B.A., 1980, *Three-Dimensional Structure of Wood. An Ultrastructural Approach*, London and New York: Chapman and Hall
- Cotton, J., 2001, Prehistoric and Roman Settlement in Reigate Road, Ewell: fieldwork conducted by Tom K Walls 1945-52. *Surrey Archaeological Collections* 88: 1 – 42
- Cram, L., 2000, Varieties of dog in Roman Britain, in S.J. Crockford, *Dogs Through Time: An Archaeological Perspective*. Proceedings of the 1st ICAZ symposium on the history of the domestic dog. Eighth congress of the International Council for Archaeozoology. Brit. Archaeol. Rep. Int. Ser. 889, 171-80
- Crummy, N., 1983, *The Roman small finds from excavations in Colchester 1971-9*, Colchester: Colchester Archaeol. Rep. 2
- Cunliffe, B. 1984, *Danebury: an Iron Age Hillfort in Hampshire. Volume 1: The excavations 1969-1978: the site*. Council for British Archaeology
- Cunliffe, B., 1991, *Danebury: an Iron Age Hillfort in Hampshire. Volume 4: The excavations 1979-1988: the site*. Council for British Archaeology
- Cunliffe, B., 1995, *Danebury: an Iron Age Hillfort in Hampshire. Volume 6: A hillfort in community perspective*. Council for British Archaeology
- Cunliffe, B.W., and Poole, C., 1991. *Danebury: an Iron Age hillfort in Hampshire. Vol.5, The excavations, 1979-1988. The finds*, Counc. Brit. Archaeol. Res. Rep. 73
- English Heritage 2002, *Environmental Archaeology; a guide to theory and practice of methods, from sampling and recovery to post-excavation*, Swindon, Centre for Archaeology Guidelines
- Evans, J.G., 1972, *Land Snails in Archaeology*, London: Seminar Press.

- Gale, R and Cutler, D, 2000, *Plants in Archaeology*, Westbury and Royal Botanic Gardens, Kew
- Giorgi, J., 1995, Appendix 2; the carbonised plant remains from Orchard Hill Farm, in MoLAS, The Former Queen Mary's Hospital site, Carshalton, London Borough of Sutton; stage one archaeological evaluation
- Grant, A., 1984, Animal husbandry, in B. Cunliffe (ed.), *Danebury: an Iron Age Hillfort in Hampshire. Volume 2. The Excavations 1969-1978: the Finds*. London: Counc. Brit. Archaeol. Res. Rep. 52, 498-548
- Groves, J. and Lovell, J., 2002, Excavations with and close to the Late Bronze Age enclosure at the former Queen Mary's Hospital, Carshalton, *London Archaeologist* 10(1), 13-9
- Hambleton, E., 1999, Animal Husbandry Regimes in Iron Age Britain: A Comparative Study of Faunal Assemblages from British Archaeological Sites, Oxford: Brit. Archaeol. Rep. 282
- Hanworth, R. and Tomalin, D.J., 1977, *Weybridge: the excavation of an Iron Age and medieval site 1964-5 and 1970-71*, Surrey Archaeol. Soc. Res. Vol. 4
- Hinton, P., 2001, Charred plant remains in Andrews, P. 2001 Excavations of a multi-period settlement site at the former St John's Vicarage, Old Malden, Kingston upon Thames, *Surrey Archaeological Collections* 88, 161-224
- Hodgson, J.M., 1997, *Soil Survey Field Handbook*, Harpenden, Soil Survey Technical Monograph No. 5
- Institute for Archaeologists 2008, Standard and Guidance for an archaeological excavation
- Kerney, M.P., 1999, *Atlas of the Land and Freshwater Molluscs of Britain and Ireland*, Colchester: Harley Books
- Leivers, M. with Every, R. and Mepham, L., 2010, 'Prehistoric pottery', specialist report for J. Lewis, M. Leivers, L. Brown, A. Smith, K. Cramp, L. Mepham and C. Phillpotts, Landscape Evolution in the Middle Thames Valley: Heathrow Terminal 5 Excavations Volume 2, Oxford/Salisbury: Framework Archaeology Mono. 3 (CD-Rom)
- Leney, L. and Casteel, R.W., 1975, Simplified Procedure for Examining Charcoal Specimens for Identification, *Journal of Archaeological Science* 2, 53-159
- Lowther, A.W.G., 1944-45, Report on excavations on the site of the Early Iron Age camp in the grounds of Queen Mary's Hospital, Carshalton, Surrey, *Surrey Archaeol. Collect.* 49, 56-74

- Lowther, A.W.G., 1947, Excavations at Purberry Shot, Ewell, Surrey: a pre-Roman and Roman occupation site, *Surrey Archaeol. Collect.* 50, 9-46
- McKinley, J.I., 2004, *Compiling a skeletal inventory: disarticulated and co-mingled remains*, in M. Brickley and J.I. McKinley (eds), *Guidelines to the Standards for Recording Human Remains*. British Association for Biological Anthropology and Osteoarchaeology and Institute for Field Archaeology, 13-16
- McKinley, J.I., 2009, Human Bone, in K. Egging Dinwiddy, *A late Roman cemetery at Little Keep, Dorchester, Dorset*. Wessex Archaeology Online Publication, 11-35 (<http://www.wessexarch.co.uk/reports/64913/little-keep-dorchester>)
- Mephram, L., 2002, Finds, in J. Groves and J. Lovell, Excavations within and close to the Late Bronze Age enclosure at the former Queen Mary's Hospital, Carshalton, 1999, *London Archaeologist* 10 (1), 17-18
- Mephram 2010
- MoLAS 1995, *The Former Queen Mary's Hospital Site, Carshalton, London Borough of Sutton, Stage One Archaeological Evaluation*, unpublished client report QMA95
- Morris, J., 2008a, Re-examining Associated Bone Groups from Southern England and Yorkshire, c.4000BC to AD1550, Bournemouth University, PhD Thesis
- Morris, J., 2008b, Associated bone groups; one archaeologists rubbish is another's ritual deposition, in O. Davis, N. Sharples and K. Waddington (eds), *Changing Perspectives on the First Millennium BC*, Oxford: Oxbow Books, 83-98
- Morris, J., 2010, Associated bone groups; Beyond the Iron Age, in J. Morris and M. Maltby (eds), *Integrating Social and Environmental Archaeologies; Reconsidering Deposition*, Oxford: Brit. Archaeol. Rep. Int. Ser. 2077, 12-23
- Needham, S.P., 1991, *Excavation and Salvage at Runnymede Bridge: the Late Bronze Age waterfront site*, London: British Museum
- Needham, S.P., 1993, The structure of settlement and ritual in the Late Bronze Age of south-east Britain, in C. Mordant and A. Richard (eds), *L'habitat et l'occupation du sol à l'Age du Bronze en Europe*, Paris, Actes du Colloque International de Lons-le-Saunier 16-19 Mai 1990, 49-69
- Philpott, R., 1991, *Burial Practices in Roman Britain*, Oxford: Brit. Archaeol. Rep. 219
- Piper, P.J. and O'Connor, T.P., 2001, *Urban small vertebrate taphonomy: a case study from Anglo-Scandinavian York*. *Internat. J. Osteoarchaeol.* 11(5), 336-44

- Proctor, J., 1999, Late Bronze Age/Early Iron Age placed deposits from Carshalton. *London Archaeologist*, 19 (2), 54-90
- Richards, J. and Robinson, D., 2000, *Digital Archives From Excavation and Fieldwork: a guide to good practice*, Archaeology Data Service
- Robarts, N.F., 1905, Notes on a recently discovered British camp near Wallington, *J. Roy. Anthropol. Inst.*, new ser 8, 387-97
- Robarts, N.F., 1909, Recent discoveries at Wallington, *Surrey Archaeol. J.* 22, 195-6
- Robarts, N.F., 1910, (1905-6), The British town of Wallington in the first century BC, *Proc. Croydon Natur. Hist. Soc.* 6, 143-52
- Scaife, R., 2002a, Charred plant remains, 18, in Groves, J. and Lovell, J., Excavations within and close to the Late Bronze Age enclosure at the former Queen Mary's Hospital, Carshalton, 1999, *London Archaeologist* Vol10, No 1
- Scaife, R., 2002b, The Charred Plant Remains, 93-94, In Procter, J. Late Bronze Age/Early Iron Age placed deposits from Westcroft Road, Carshalton: their meaning and interpretation, *Surrey Archaeological Collections* 89, 65-103
- Scheuer, L. and Black, S., 2000, *Developmental Juvenile Osteology*, London: Academic Press
- Schweingruber, F.H., 1990, *Microscopic Wood Anatomy* (3rd edition), Birmensdorf: Swiss Federal Institute for Forest, Snow and Landscape Research
- Scott, E., 1999, *The archaeology of infancy and infant death*, Oxford: Brit. Archaeol. Rep. Int. Series 819
- Seager Smith, R., Brown, K. and Mills, J.M., Seager Smith, R. forthcoming *The pottery from Springhead*, in Andrews, P., Biddulph, E. and Hardy, A., forthcoming, *Settling the Ebbsfleet Valley: CTRL excavations at Springhead and Northfleet, Kent - the late Iron Age, Roman, Saxon and medieval landscape*, Volume 2, Late Iron Age - Roman Finds Reports. Oxford and Salisbury: Oxford Wessex Archaeology
- SMA 1993, *Selection, Retention and Dispersal of Archaeological Collections*, Society of Museum Archaeologists
- SMA 1995, *Towards an Accessible Archaeological Archive*, Society of Museum Archaeologists
- Smith, P., 2002, Animal bone, in J. Grove and J. Lovell, *Excavations within and close to the Late Bronze Age enclosure at the former Queen Mary's Hospital, Carshalton*, 1999, *London Archaeologist* 10 (1), 17-18

- Stace, C., 1997, *New flora of the British Isles* (2nd edition), Cambridge: Cambridge University Press
- Tomber, R. and Dore, J., 1998, *The national Roman fabric reference collection: a handbook*, MoLAS Monogr. 2
- Tucker, S., 1989, *Archaeological Evaluation of a Re-development Site at Orchard Hill, Queen Mary's Hospital for Sick Children, Queen Mary's Avenue, Carshalton, Sutton 1989*, unpublished report
- Walker, K., 1990, *Guidelines for the Preparation of Excavation Archives for Long-Term Storage*, UKIC Archaeology Section
- Watkinson, D. and Neal, V., 1998, *First Aid for Finds*
- Wessex Archaeology 1999a, Former Queen Mary's Hospital, Carshalton, London Borough of Sutton: Archaeological Evaluation and Excavation (Area 2), unpublished client report 46156.02
- Wessex Archaeology 1999b, Former Queen Mary's Hospital, Carshalton, London Borough of Sutton. Assessment Report on the Excavation within Scheduled Monument 163, unpublished client report WA Ref 46151.01
- Wessex Archaeology 2008a, Former Queen Mary's Hospital, Carshalton, London, Archaeological Evaluation Report, unpublished client report WA Ref 66940.03
- Wessex Archaeology 2008b, Orchard Hill, Carshalton, London Borough of Sutton, Greater London, Project Design for an Archaeological Excavation, unpublished client report 66941.01
- Wessex Archaeology 2009, Orchard Hill, Carshalton, London Borough of Sutton: Post-excavation Assessment Report. WA Ref 69944.01
- Wessex Archaeology 2010, Former Queen Mary's Hospital, Orchard Hill, Carshalton, London Borough of Sutton: Historic Building Recording Volume 1: Historical Background and Level 3 Buildings. WA Ref 69945
- Wheeler, A. and Jones, A. K. C., 2009. *Fishes* (2nd edition). Cambridge Manuals in Archaeology
- Wilson, B., 1996, *Spatial patterning amongst animal bones in settlement archaeology: an English regional exploration*, Brit. Archaeol. Rep. Brit. Ser. 251; Oxford: Tempus Reparatum
- Wymer, J.J., (ed.) 1977, *Gazetteer of Mesolithic sites in England and Wales*. CBA Res Rep 20, London

APPENDIX 1: FINDS AND ENVIRONMENTAL TABLES
Table 1: Finds totals by material type

Material Type	2008/9		2010		TOTAL	
	No.	Wt. (g)	No.	Wt. (g)	No.	Wt. (g)
Pottery	266	3183	3106	50,195	3372	53,378
<i>Later prehistoric</i>	18	295	346	-	364	-
<i>LIA/Romano-British</i>	248	2888	2730	-	2978	-
<i>Modern</i>	-	-	1	-	1	-
Ceramic Building Material	1	20	1	38	2	58
Fired Clay	10	584	777	27,235	787	27,819
Stone	2	119	110	2432	112	2551
Flint	52	1903	518	13,617	570	15,520
Burnt Flint	284	8363	5323	6923	5607	153,505
Glass	-	-	2	7	2	7
Slag	-	107	-	9160	-	9267
Metalwork	3	-	168	-	171	-
<i>Coin</i>	-	-	1	-	1	-
<i>Copper Alloy</i>	2	-	3	-	5	-
<i>Iron</i>	1	-	164	-	165	-
Human Bone	-	-	7 individ.	-	7 individ.	-
Worked Bone	-	-	1	-	1	-
Animal Bone	839	7933	27,622	99,272	28,461	107,205
Marine Shell	-	-	48	2	48	2

Table 2: Flint totals by type

Type	Number
Flake/broken flake	379
Flake core/core frag	36
Blade/broken blade	34
Bladelets	3
Rejuvenation tablet	2
Scrapers	4
Other tools	1
Misc. retouch	9
Axe thinning flake	3
Microdenticulate	1
Debitage	32
Chips/microdebitage	14
TOTAL	518

Table 3: Ironworking debris by context / weight (g)

Context	Feature	Smithing	Smithing?	FAS	Other	Totals
605	-		23			23
608	-		84			84
3049	3050		1			1
3057	3057				4	4
3089	3088			4		4
3246	3174	2087				2087
3251	3250			1		1
3356	3344			13		13
3441	3436			5		5
3455	3436			28		28
3659	3174	2507				2507
3711	3174	4510				4510
Totals		9104	108	51	4	9267

Table 4: Details of smithing hearth bottoms (SHBs)

Context	Weight(g)	Dimensions (mm)	Notes
3246	412	100 x 90 x 45	
3246	209	75 x 75 x 30	
3246	150	-	Fragment
3246	113	-	Fragment
3246	106	-	Fragment
3246	72	-	Fragment
3659	236	85 x 85 x 30	
3659	230	90 x 70 x 30	
3659	228	120 x 100 x 35	
3659	169	125 x 70 x 30	
3659	138	80 x 80 x 20	Fragment
3659	105	65 x 60 x 30	

Table 5: Metal finds by functional category

Function Group	Total
Personal	8
Transport	1
Tools	2
Fittings	14
Weapons	2
Metalworking	2
Unknown	10
Grand Total	39

Table 6: Summary of human bone assessment

context	Cut/type/depth	deposit type	date	quantification	age/sex	pathology	comment
2010	2009 (ditch) 0.35m	Redep.	?IA/RB	r. femur	neonate	?hyperporotic	1; assoc. with ABG. Measurable
3051 = 3057	3052 (?treethrow) 0.30m	Redep.	?IA/RB	1 rib, 2 MtTs	foetus/neonate		0-1
3057 = 3051	3052 (?treethrow) 0.30m	<i>In situ</i> (flexed, on right side)	?IA/RB	c. 90%	foetus/neonate	?hyperporotic; striated bone - ribs	0; some measurable. Slight mixing, some sorting.
3222 = 3221	3220 (pit) 0.21m	Redep?	?IA/RB	1 rib, a few frags	?human neonate		0; assoc. with animal bone (3268)
3466	4224 (unid grave) c. 0.03m	<i>In situ</i> (?flexed, on right side)	?IA/RB	c. 10% a. l.	neonate		0; measurable
3483	3482 (unid grave) c. 0.03m	<i>In situ</i> (?flexed, on right side)	?IA/RB	c. 65%	neonate		0; pristine condition, excellent for comparison. Some mixing of limbs. Teeth to sort.
3652	3651 (grave) 0.10m	<i>In situ</i> (flexed on left side)	?IA/RB	c. 65%	neonate	?hyperporotic	0-3; Some moderate fragmentation. Measurable. Some sorting required. Position interpretation incorrect during excavation.
3654 = 4219	3174 (pit) 1.04m	<i>In situ</i> (flexed on left side)	?IA/RB	c. 80%	neonate		0-3; Mostly excellent with localised erosion. All but skull complete or near complete elements, measurable. Sides mixed, some incorrect bagging. sorting required.
3690	3174 (pit) 1.31m	<i>In situ</i> (disturbed)	?IA/RB	c. 15%	neonate		1; mostly complete or near complete elements. Two measurements.
3809 = 3813	3812/pit 3901 0.03m	<i>In situ</i> (crouched, on right side)	?IA/RB	c. 50%	neonate	?hyperporotic	2-4; moderately fragmented. Few measurements possible, Some mixing and incorrect bagging.
3813 = 3809	3812/pit 3901 0.03m	Redep	?IA/RB	17 frags. s. a. u.	neonate	?hyperporotic	2-3; minimal rewashing

4219 = 3654	3174 (pit) 1.04m	Redep.	?IA/RB	10 bones s. a. u	neonate		0-1
----------------	---------------------	--------	--------	------------------	---------	--	-----

KEY: s. – skull, a. – axial skeleton, u. – upper limb, l. – lower limb (skeletal area represented where all are not present); pnb – periosteal new bone

Table 7: Sample Provenance Summary

<i>Phase</i>	<i>No of samples</i>	<i>Volume (litres)</i>	<i>Feature types</i>
LBA/EIA	4	65	Pits, Posthole
M/LIA	1	15	Pit
LIA/ERB	5	88	Ditches
LIA/ERB	78	1008.375	Pits
Unphased	2	11	Ditches, Gullies
Unphased	6	56	Pits, Posthole
Unphased	2	25	Shaft, ?Old land surface
Totals	98	1268.375	

Table 9: Summary of monolith samples

<i>Monolith/ core sample no.</i>	<i>Feature</i>	<i>Description</i>
110	3698	unphased ?old land surface
152	4232	LIA/ERB ditch group 4232, cut 3816

APPENDIX 2: CHARRED PLANT REMAINS AND CHARCOAL
Table 8: Assessment of the charred plant remains and charcoal

Feature Number	Context	Sample	Size Litres	Flot Size ml	Roots %	Grain	Chaff	Cereal Notes	Charred Other	Notes for Table	Charcoal >4/2mm	Other	Analysis
Late Bronze Age/Early Iron Age													
Pits													
3734	3736	118	10	25	10	A	C	Hulled wheat + barley grain frags, glume frags	A	<i>Avena/Bromus, Vicia/Lathyrus, Polygonaceae</i>	1/2 ml	Moll-t (B)	P
3940	3941	144	20	80	5	A	A	Hulled wheat + barley grain frags, glume frags	A	<i>Avena/Bromus, Polygonaceae, Vicia/Lathyrus, Lolium/Festuca, Trifolium/Medicago, Chenopodium, Tubers</i>	12/10 ml	Moll-t (C)	P
Middle/Late Iron Age													
Pit													
4372	4373	159	15	80	70	C	C	Indet. grain frags, glume frags	B	<i>Avena/Bromus, Polygonaceae, Vicia/Lathyrus</i>	0/1 ml	Sab (A), Moll-t (B)	
Late Iron Age/Early Romano-British													
Enclosure Ditches													
3714 gp 4232	3512	97	18	40	75	C	-	Indet. grain frags	-	-	0/2 ml	-	
3006 gp 2071	3008	70	20	130	65	A*	A**	Hulled wheat + barley grain frags, spelt + emmer glume frags + spikelet frags	A*	<i>Avena/Bromus, Vicia/Lathyrus, Galium, Polygonaceae, Brassicaceae</i>	0/2 ml	Sab (C)	P
3068 gp 4378	3066	61	20	75	10	A*	A	Hulled wheat + barley grain frags, glume + spikelet frags	B	<i>Avena/Bromus, Corylus avellana shell frags</i>	0/1 ml	Sab (C), Moll-t (A**)	P
	3066	62	10	15	55	B	-	Indet. grain frags	C	<i>Avena/Bromus</i>	1/<1 ml	Sab (C), Moll-t (A)	
3092 gp 4378	3095	60	20	60	30	A*	A	Hulled wheat + barley grain frags, spelt + emmer glume frags	B	<i>Avena/Bromus, Polygonaceae</i>	1/2 ml	Sab (C), Moll-t (A**)	

Feature Number	Context	Sample	Size Litres	Flot Size ml	Roots %	Grain	Chaff	Cereal Notes	Charred Other	Notes for Table	Charcoal >4/2mm	Other	Analysis
Pits													
3467 gp 3015	3472	86	20	10	5	A	A	Hulled wheat + barley grain frags, glume frags	A	<i>Avena/Bromus, Ranunculus, Chenopodium, Vicia/Lathyrus, Lithospermum</i>	1/1 ml	Sab (C), Moll-t (C)	
	3499	87	20	25	5	A*	A*	Hulled wheat + barley grain frags, spelt + emmer glume frags, spikelet forks	A	<i>Avena/Bromus, Rumex, Trifolium/Medicago, Chenopodium, Brassicaceae, Polygonaceae, Vicia/Lathyrus, Fruit/tuber</i>	1/2 ml	Sab (A)	P
	3500	88	20	30	5	A	A	Hulled wheat + barley grain frags, glume frags	A	<i>Avena/Bromus, Rumex, Bromus, Trifolium/Medicago, Chenopodium, Polygonaceae, Vicia/Lathyrus</i>	2/1 ml	Sab (B), Moll-t (C)	
	3515	89	20	20	5	A	B	Hulled wheat + barley grain frags, glume frags	A	<i>Avena/Bromus, Bromus, Sherardia, Vicia/Lathyrus, Malva, Chenopodium, Lolium/Festuca</i>	1/2 ml	Sab (B), Moll-t (C)	
3027	3029	52	4	10	15	B	A	Indet. grain frags, glume bases + spikelet forks	B	<i>Avena/Bromus, Vicia/Lathyrus, Rumex</i>	1/2 ml	Moll-t (C)	
	3043	53	10	15	7	C	-	Indet. grain frags	B	<i>Vicia/Lathyrus, Avena/Bromus, Carex</i>	3/4 ml	-	
	3045	54	4	15	5	C	A	Indet. grain frags, glume bases + spikelet forks, awn frags	B	<i>Avena/Bromus, Polygonaceae, Corylus avellana shell frags</i>	2/2 ml	Sab (C)	
	3046	55	20	130	5	B	A	Hulled wheat grain frags, spikelet + glume frags inc. those of emmer	A	<i>Vicia/Lathyrus, Galium, Sherardia, Avena/Bromus, Carex, Plantago, Corylus avellana shell frags, Parenchyma</i>	20/20 ml	Sab (A), Moll-t (A)	P C
	3048	56	2	10	5	C	-	Indet. grain frag	C	<i>Avena/Bromus</i>	0/1 ml	-	
3058	3059	57	8	50	70	A*	A*	Hulled wheat + barley grain frags, spelt + emmer glume frags+ spikelet frags	B	<i>Avena/Bromus, Vicia/Lathyrus, Brassicaceae, Montia</i>	2/3 ml	Moll-t (A*)	P
3088	3089	59	20	60	70	A	A	Hulled wheat + barley grain frags, spelt + emmer glume frags+ spikelet frags	A	<i>Avena/Bromus, Rumex, Polygonaceae, Vicia/Lathyrus, Chenopodium, stem frag</i>	3/3 ml	Moll-t (A)	P

Feature Number	Context	Sample	Size Litres	Flot Size ml	Roots %	Grain	Chaff	Cereal Notes	Charred Other	Notes for Table	Charcoal >4/2mm	Other	Analysis
3135	3136	155	0.025	1	10	-	-	-	-	-	0/<1 ml	-	
3174	3177	66	20	60	5	A**	A**	Hulled wheat + barley grain frags, spelt + emmer glume frags+ spikelet frags, culm node, <i>Avena</i> awn	A*	<i>Avena/Bromus, Galium, Vicia/Lathyrus, Polygonum, Rumex, Carex, Trifolium/Medicago</i>	2/5 ml	Sab (A), Moll-t (A)	P
	3246	71	6	20	50	C	A	Indet. grain frags, glume frags inc. those of emmer	A	<i>Avena/Bromus, Polygonaceae, Vicia/Lathyrus, Montia</i>	0/1 ml	Sab (C)	
	3246	120	0.4	2	20	C	B	Indet. grain frags, glume frags, barley rachis	B	<i>Avena/Bromus, Carex, Rumex, Chenopodium</i>	0/<1 ml	-	
	3659	116	20	1100	2	B	-	Hulled wheat + barley grain frags	C	<i>Galium</i>	300/350 ml	Sab (C), Slag	C
	3711	117	0.75	7	5	C	-	Indet. grain frag	C	<i>Rumex, Polygonaceae</i>	1/2 ml	-	
	4183	153	20	30	5	A	A*	Hulled wheat + barley grain frags, spelt + emmer glume frags+ spikelet frags, culm node, barley rachis	A	<i>Avena/Bromus, Vicia/Lathyrus, Lithospermum, Chenopodium, Atriplex</i>	3/2 ml	Sab (A), Moll-t (A)	
	4188	154	20	30	5	C	A	Hulled wheat, glume frags	B	<i>Avena/Bromus, Rumex, Galium, Trifolium/Medicago</i>	0/2 ml	Sab (A)	
3183	3194	74	20	25	5	A*	A*	Hulled wheat + barley grain frags, glume frags + spikelet forks	A	<i>Avena/Bromus, Vicia/Lathyrus, Trifolium/Medicago, Rumex, Brassicaceae, Poa/Phleum</i>	0/2 ml	Sab (A), Moll-t (A*)	
	3197	113	20	40	15	A*	A*	Hulled wheat + barley grain frags, spelt and emmer glume frags, spikelet forks, <i>Avena</i> awns	A*	<i>Avena/Bromus, Rumex, Vicia/Lathyrus, Carex, Polygonaceae, Chenopodium, Lolium/Festuca, Poa/Phleum, Trifolium/Medicago, Lithospermum</i>	3/5 ml	Sab (B), Moll-t (A)	P
	3669	119	40	50	20	A	A	Hulled wheat + barley grain frags, glume frags	A*	<i>Avena/Bromus, Rumex, Vicia/Lathyrus, Lithospermum, Galium, Torilis, Polygonaceae, Montia, Trifolium/Medicago, Taraxacum officinale</i>	8/7 ml	Sab (A), Moll-t (A*)	P
	3673	106	20	10	15	C	C	Hulled wheat grain frags, glume frags	C	<i>Chenopodium</i>	0/1 ml	Sab (C), Moll-t (A*)	

Feature Number	Context	Sample	Size Litres	Flot Size ml	Roots %	Grain	Chaff	Cereal Notes	Charred Other	Notes for Table	Charcoal >4/2mm	Other	Analysis
3220	3266	67	20	10	20	C	A	Inlet. grain frags, glume bases	B	<i>Avena/Bromus, Torilis, Chenopodium</i>	0/1 ml	Sab (A), Moll-t (C)	
3223	3224	65	8	15	15	A	-	Hulled wheat + barley grain frags	B	<i>Avena/Bromus, Galium, Polygonaceae, Tuber</i>	1/1 ml	Moll-t (C)	
	3265	78	20	10	40	A	C	Hulled wheat + barley grain frags, glume frags	B	<i>Avena/Bromus, Silene, Galium, Torilis</i>	1/1 ml	Sab (C), Moll-t (C)	
3225	3366	79	20	15	60	A	B	Hulled wheat + barley grain frags, spelt + emmer glume frags	C	<i>Avena/Bromus, Poa/Phleum</i>	0/2 ml	Moll-t (C)	
	3367	80	20	15	40	B	B	Hulled wheat + barley grain frags, glume frags	C	<i>Avena/Bromus</i>	0/1 ml	Sab (C), Moll-t (B)	
	3709	114	10	5	30	C	C	Hulled wheat + barley grain frags, ?emmer glume frag, <i>Avena</i> awn frags	-	-	<1/<1 ml	-	
3229	3562	94	18	50	40	B	A	Hulled wheat and barley grain frags, glume frags, barley rachis frags	A	<i>Avena/Bromus, Vicia/Lathyrus, Chenopodium</i>	0/2 ml	-	
3231	3232	99	20	20	5	A	A	Hulled wheat + barley grain frags, spelt + emmer glume frags, spikelet forks	B	<i>Avena/Bromus, Chenopodium, Corylus avellana</i> shell frags	1/1 ml	Sab (A), Moll-t (C)	
	3598	100	20	15	5	A	A	Hulled wheat + barley grain frags, spelt and emmer glume frags	A	<i>Avena/Bromus, Chenopodium, Corylus avellana</i> shell frags, <i>Poa/Phleum, Vicia/Lathyrus, tuber ?Arrhenatherum, Polygonaceae</i>	1/1 ml	Sab (A), Moll-t (C)	P
3250	3251	68	20	10	25	B	C	Hulled wheat grain frags, culm node	-	-	0/1 ml	Sab (B)	
3289	3290	72	20	15	7	A	A	Hulled wheat + barley grain frags, spelt + emmer glume frags	B	<i>Avena/Bromus, Vicia/Lathyrus</i>	1/1 ml	Sab (B), Moll-t (A)	
	3292	73	20	15	7	A	A	Hulled wheat + barley grain frags, spelt + Emmer glume frags	B	<i>Avena/Bromus, Galium, Vicia/Lathyrus, Sherardia</i>	2/2 ml	Sab (C), Moll-t (B)	

Feature Number	Context	Sample	Size Litres	Flot Size ml	Roots %	Grain	Chaff	Cereal Notes	Charred Other	Notes for Table	Charcoal >4/2mm	Other	Analysis
3341	3263	76	20	80	5	A	C	Hulled wheat + barley grain frags, glume frags	A	<i>Avena/Bromus, Rumex, Chenopodium, Lolium/Festuca, Poa/Phleum</i> , bud	5/4 ml	Sab (A), Moll-t (A)	
	3727	115	5	5	5	C	C	Indet. grain frags, glume frags	C	<i>Avena/Bromus</i>	<1/<1 ml	Sab (A), Moll-t (A)	
	3749	121	20	10	10	C	-	Indet. grain frags	C	<i>Avena/Bromus, Vicia/Lathyrus</i>	0/<1 ml	Sab (A), Moll-t (A*)	
3344	3354	77	2	2	25	B	C	Hulled wheat + barley grain frags, glume frags inc. those of emmer	C	<i>Avena/Bromus</i>	<1/<1 ml	Moll-t (C)	
3458	3543	93	8	25	35	A	B	Indet. grain frags, glume frags inc. those of emmer	A	<i>Avena/Bromus, Bromus, Vicia/Lathyrus, Galium, Rumex, Silene, Trifolium/Medicago</i>	1/1 ml	Moll-t (C)	
3503	3657	105	20	10	15	C	B	Indet. grain frags, glume bases	C	<i>Avena/Bromus</i>	1/1 ml	Sab (B), Moll-t (B)	
3513	3552	90	20	25	70	C	B	Indet. grain frags, glume frags inc. those of emmer	C	<i>Lolium/Festuca, Chenopodium, Avena/Bromus</i>	1/1 ml	-	
	3552	91	2	5	20	-	-	-	C	<i>Vicia/Lathyrus</i>	<1/<1 ml	-	
	3646	98	20	40	70	C	C	Indet. grain frags, glume frags	B	<i>Avena/Bromus, Chenopodium</i>	1/2 ml	-	
	3647	103	1	20	50	A	B	Hulled wheat + barley grain frags, glume frags	A	<i>Avena/Bromus, Carex, Poa/Phleum, Vicia/Lathyrus, Rumex, Galium, Polygonaceae, Chenopodium</i>	2/2 ml	-	
	3647	104	20	50	60	A*	A	Hulled wheat + barley grain frags, glume frags	A*	<i>Avena/Bromus, Carex, Plantago, Vicia/Lathyrus, Rumex, Galium, Polygonaceae, Chenopodium, Lolium/Festuca, Arrhenatherum tuber, Poa/Phleum, Corylus avellana shell frags, stem frags</i>	1/3 ml	Sab (A)	P
3535	3537	127	20	25	30	B	C	Hulled wheat grain frags, glume frags	C	<i>Avena/Bromus, Rumex</i>	0/1 ml	Sab (B), Moll-t (A)	
	3889	129	0.8	3	30	C	B	Indet. grain frags, glume frags	C	<i>Bromus</i>	0/<1 ml	Moll-t (A)	

Feature Number	Context	Sample	Size Litres	Flot Size ml	Roots %	Grain	Chaff	Cereal Notes	Charred Other	Notes for Table	Charcoal >4/2mm	Other	Analysis
	3889	130	2	15	10	C	-	Indet. grain	B	<i>Avena/Bromus</i> , ?Oak buds (B)	2/2 ml	Moll-t (A)	
	3889	131	2	20	15	C	-	Hulled wheat grains	C	<i>Avena/Bromus</i> , <i>Vicia/Lathyrus</i>	2/2 ml	Moll-t (B)	
	3889	132	2	8	20	C	-	Barley grain frags	C	<i>Avena/Bromus</i> , <i>Rumex</i>	1/2 ml	Moll-t (A)	
	3889	133	1.8	20	10	C	-	Hulled wheat grain frags	C	<i>Avena/Bromus</i>	3/2 ml	Sab (C), Moll-t (B)	
	3889	134	1.8	30	10	A	C	Hulled wheat + barley grain frags, glume frags	B	<i>Avena/Bromus</i> , <i>Vicia/Lathyrus</i> , <i>Lithospermum</i>	2/4 ml	Moll-t (A)	
	3889	135	1.5	10	20	B	-	Indet. grain frags	C	<i>Avena/Bromus</i>	3/2 ml	Moll-t (B)	
	3889	136	1	15	10	B	C	Hulled wheat + barley grain frags, glume frags	A	<i>Avena/Bromus</i> , <i>Vicia/Lathyrus</i> , <i>Rumex</i> , <i>Trifolium/Medicago</i> , Buds	2/2 ml	Moll-t (A)	
	3889	137	0.8	20	10	C	C	Indet. grain frags, glume frags	B	<i>Avena/Bromus</i> , <i>Vicia/Lathyrus</i>	3/2 ml	-	
	3890	143	20	35	50	B	B	Hulled wheat + barley grain frags, glume frags	B	<i>Avena/Bromus</i> , <i>Vicia/Lathyrus</i> , ? <i>Vicia faba</i>	3/2 ml	Sab (A), Moll-t (A)	
3579	3609	102	20	25	35	A	A	Hulled wheat + barley grain frags, glume frags	A	<i>Avena/Bromus</i> , <i>Carex</i> , <i>Galium</i> , <i>Vicia/Lathyrus</i> , <i>Polygonaceae</i>	2/2 ml	Moll-t (A*)	P
3599	3600	101	20	25	5	B	B	Hulled wheat + barley grain frags, glume frags inc. some emmer	A	<i>Avena/Bromus</i> , <i>Rumex</i> , <i>Trifolium</i> , <i>Carex</i> , <i>Sherardia</i> , <i>Chenopodium</i> , <i>Vicia/Lathyrus</i> , <i>Polygonaceae</i> , <i>Brassicaceae</i> , <i>Poa/Phleum</i>	3/2 ml	Sab (B), Moll-t (B)	
3635	3638	96	20	30	70	C	-	Indet. grain frags	C	<i>Poa/Phleum</i>	1/1 ml	Sab (A), Moll-t (B)	
	3641	95	20	40	55	A	A	Hulled wheat + barley grain frags, glume frags	B	<i>Avena/Bromus</i> , <i>Corylus avellana</i> shell frags, <i>Prunus spinosa</i> stone frag	1/1 ml	Moll-t (C)	
3737	3789	124	20	3	25	B	C	Hulled wheat + barley grain frags, glume frags	C	<i>Avena/Bromus</i>	0/<1 ml	Sab (C), Moll-t (B)	
3759	3760	122	20	25	40	C	C	Hulled wheat grain frags, glume frags	C	<i>Avena/Bromus</i> , <i>Corylus avellana</i> shell frag	0/2 ml	Moll-t (A*)	
3790	3792	126	10	5	10	B	C	Indet. grain frags, glume frags	C	<i>Vicia/Lathyrus</i>	0/1 ml	Moll-t (A)	

Feature Number	Context	Sample	Size Litres	Flot Size ml	Roots %	Grain	Chaff	Cereal Notes	Charred Other	Notes for Table	Charcoal >4/2mm	Other	Analysis
3856	3857	128	20	50	70	A*	C	Hulled wheat + barley grain frags, glume frags	B	<i>Avena/Bromus, Vicia/Lathyrus, Corylus avellana</i> shell frags	1/2 ml	Moll-t (A)	
3870	3871	142	1.5	25	50	A*	A*	Hulled wheat + barley grain frags, glume frags, spikelet forks, culm nodes	A*	<i>Avena/Bromus, Vicia/Lathyrus, Polygonaceae, Chenopodium, Rumex, Poaceae, Lolium/Festuca, Trifolium/Medicago, Galium, Tripleurospermum, Silene</i>	1/1 ml	Moll-t (B)	P
	3949	140	2	25	40	A	A	Hulled wheat + barley grain frags, glume frags	A	<i>Avena/Bromus, Vicia/Lathyrus, Polygonaceae, Chenopodium</i>	2/1 ml	Moll-t (B)	
	3949	141	2	15	35	A	C	Hulled wheat + barley grain frags, glume frags	B	<i>Avena/Bromus, Vicia/Lathyrus, Polygonaceae</i>	0/2 ml	Moll-t (B), Moll-f (C)	
	4109	149	1	5	10	B	C	Hulled wheat + barley grain frags, glume frags, awn frags	A	<i>Avena/Bromus, Polygonaceae, Vicia/Lathyrus, Trifolium/Medicago, Chenopodium, Poaceae, Carex, Sherardia arvensis, Galium</i>	0/<1 ml	Moll-t (C), Moll-f (C)	
	4112	158	20	25	50	A	A	Hulled wheat + barley grain frags, glume frags	A	<i>Avena/Bromus, Polygonaceae, Vicia/Lathyrus, Rumex, Chenopodium, Silene, Sherardia arvensis, Bud</i>	1/2 ml	Sab (A), Moll-t (A)	
3918	3912	139	20	30	60	B	A	Hulled wheat + barley grain frags, glume frags inc. those of emmer	B	<i>Avena/Bromus, Malva, Corylus avellana</i> shell frags	1/1 ml	Sab (B), Moll-t (A)	
3921	3922	138	20	30	10	A*	A*	Hulled wheat + barley grain frags, glume frags, awn frags	A*	<i>Avena/Bromus, Galium, Vicia/Lathyrus, Polygonaceae, Rumex, Sherardia arvensis, Poaceae, Chenopodium, Silene, Odontites</i>	5/2 ml	Sab/f (C), Moll-t (C)	P
	4175	156	20	25	7	A	A	Hulled wheat + barley grain frags, glume frags inc. those of emmer and spikelet forks	B	<i>Polygonaceae, Vicia/Lathyrus, Rumex, Avena/Bromus</i>	2/1 ml	Sab (B), Moll-t (C)	
	4176	157	5	5	10	C	C	Hulled wheat, chaff frags	B	<i>Rumex, Avena/Bromus, Trifolium/Medicago</i>	0/1 ml	-	

Feature Number	Context	Sample	Size Litres	Flot Size ml	Roots %	Grain	Chaff	Cereal Notes	Charred Other	Notes for Table	Charcoal >4/2mm	Other	Analysis
3998	3999	145	20	10	5	A	C	Hulled wheat + barley grain frags, glume frags	A*	Polygonaceae, <i>Chenopodium</i> , <i>Rumex</i> , <i>Atriplex</i> , <i>Corylus avellana</i> shell frags, <i>Trifolium/Medicago</i> , <i>Avena/Bromus</i> , <i>Vicia/Lathyrus</i> , <i>Carex</i> , <i>Silene</i> , Poaceae	<1/<1 ml	Sab (C)	P
	3999	146	10	12	5	B	C	Hulled wheat + barley grain frags, glume frags	A*	Polygonaceae, <i>Chenopodium</i> , <i>Rumex</i> , <i>Atriplex</i> , <i>Corylus avellana</i> shell frags, <i>Trifolium/Medicago</i> , <i>Avena/Bromus</i> , <i>Vicia/Lathyrus</i> , <i>Carex</i> , <i>Tripleurospermum</i> , <i>Lolium/Festuca</i> , Poaceae	2/1 ml	Sab (C)	
	3999	161	2	5	10	C	-	Indet. grain frag	A	Polygonaceae, <i>Carex</i> , <i>Chenopodium</i>	<1/1 ml	-	
	4114	151	10	75	5	A*	C	Hulled wheat + barley grain frags, glume frags	A*	Birch tar lumps and stems/ twisted fibres, Polygonaceae, <i>Chenopodium</i> , <i>Rumex</i> , <i>Atriplex</i> , <i>Persicaria</i> , <i>Carex</i> , <i>Trifolium/Medicago</i> , <i>Avena/Bromus</i> , <i>Vicia/Lathyrus</i> , <i>Lolium/Festuca</i> , Poaceae	15/10 ml		P C
4346	4350	160	2	10	60	C	A	Indet. grain frags, glumes inc. those of emmer	A	<i>Avena/Bromus</i>	<1/1 ml	Moll-t (B)	
Posthole													
3301	3300	81	15	400	2	C	-	Hulled wheat + barley grain frags	-	-	30/100 ml	Sab (C), Moll-t (C)	C
Unphased													
Ditch													
3139	3140	148	1	7	15	C	C	Hulled wheat + barley grain frags, glume frags inc those of emmer	C	Polygonaceae	3/2 ml	-	
Gully													
4032	4030	150	10	7	30	C	-	Hulled wheat and barley grain frags	A*	<i>Vicia/Lathyrus</i> , <i>Sherardia arvensis</i>	0/<1 ml	Moll-t (C)	
Pits													
3317	3318	75	20	25	5	A*	A	Hulled wheat + barley grain frags, glume frags	A	<i>Avena</i> , <i>Bromus</i> , Polygonaceae, <i>Chenopodium</i>	1/2 ml	Moll-t (B)	

Feature Number	Context	Sample	Size Litres	Flot Size ml	Roots %	Grain	Chaff	Cereal Notes	Charred Other	Notes for Table	Charcoal >4/2mm	Other	Analysis
3436	3437	83	20	40	65	-	-	-	-	-	0/1 ml	Moll-t (C)	
3451	3452	84	3	5	10	-	-	-	-	-	0/0 ml	-	
	3454	85	10	5	10	C	C	?Hulled wheat grain frags, glume frags	-	-	0/<1 ml	-	
4079	4084	147	2	15	30	A	A	Hulled wheat + barley grain frags, glume frags inc. those of emmer, awn frags	A	<i>Avena/Bromus, Trifolium/Medicago, Vicia/Lathyrus, Chenopodium, Poaceae</i>	1/1 ml	-	
Posthole													
3170	3171	63	1	5	30	-	-	-	-	-	0/<1 ml	-	
Shaft													
3255	3256	69	20	20	75	-	C	Glume frag	-	-	>1/1 ml	Sab (C)	
?Old Land Surface													
	3698	123	5	5	50	-	-	-	-	-	0/<1 ml	-	
SAMPLES SELECTED FOR ANALYSIS FROM PREVIOUS EXCAVATION 69944 Late Bronze Age/Early Iron Age													
Pit													
2017	2020	20	10	10	60	B	B	Indet. grain frags, glume frags	A	<i>Rumex, Stellaria, Polygonum sp. Leucanthemum, Poa/Phleum sp</i>	-	-	P
Iron Age/Romano-British													
Pit													
2025	2029	19	10	30	10	A	C	Hulled wheat (Spelt/Emmer) grain, v. few glumes + Barley	A*	<i>Stellaria, Vicia, Avena, Bromus, Arrhenatherum, Rumex sp., Chenopodium, Leucanthemum++</i>	2/2 ml	-	P
Romano-British													
Ditch Group 2071													
2051	2053	26	1.7	25	30	A	A	Hulled wheat (Spelt/Emmer) grain + glumes. Emmer.	A	<i>Bromus, Poa/Phleum, Vicia, Sherardia/Torilis.</i>	2/1 ml	-	P

Key: A*** = exceptional, A** = 100+, A* = 30-99, A = >10, B = 9-5, C = <5. Sab/f = Small animal/fish bones, Moll-t = terrestrial molluscs, Moll-f = freshwater molluscs;
 Analysis: C = charcoal, P = plant

APPENDIX 3: OASIS ID: WESSEXAR1-97767**Project details**

Project name Orchard Hill, Carshalton

Short description of the project Wessex Archaeology was commissioned by CgMs Consulting to undertake a programme of archaeological works in advance of redevelopment of the former Queen Mary's Hospital at Carshalton prior to the relocation of Stanley Park High School. A watching brief was maintained on groundworks within the site and following the identification of significant archaeological remains, the relevant area was subjected to full archaeological excavation. Three phases of an enclosure were identified, all dating to the same LIA/ERB period. A large number of deep storage pits were identified, many of which had been infilled rapidly, incorporating placed deposits. A large number of animal associated bone groups were excavated from within the pits, many of which were deliberately deposited. Three human neonate burials were also placed within such pits. One pit in particular contained very large numbers of animals including the butchered remains of over 25 individual sheep/goat carcasses deposited as a single layer, with additional complete skeletons of dogs, chickens and a raven. A small number of earlier prehistoric features were also identified, comprising a Late Bronze Age/Early Iron Age trackway, some pits and postholes distributed across the excavation area. These features can be interpreted as relating to peripheral activities associated with the enclosure, which was likely to be the focus of settlement during this earlier phase. The excavation has identified evidence for substantial phases of settlement dating to the LBA/EIA and LIA/ERB periods.

Project dates Start: 21-06-2010 End: 31-03-2011

Previous/future work Yes / Yes

Any associated project reference codes 69943 - Contracting Unit No.

Type of project Recording project

Site status None

Current Land use Other 3 - Built over

Monument type ENCLOSURE Late Iron Age

Significant Finds POTTERY Roman

Significant Finds	POTTERY Late Iron Age
Significant Finds	POTTERY Middle Iron Age
Significant Finds	POTTERY Late Bronze Age
Significant Finds	BROOCH Roman
Significant Finds	BROOCH Middle Iron Age
Significant Finds	SPEARHEAD Late Iron Age
Investigation type	'Full excavation', 'Watching Brief'
Prompt	Direction from Local Planning Authority - PPG16

Project location

Country	England
Site location	GREATER LONDON SUTTON CARSHALTON Orchard Hill, Carshalton
Postcode	SM5 4EF
Study area	1.32 Hectares
Site coordinates	TQ 278 624 51.3457797986 -0.164780044283 51 20 44 N 000 09 53 W Point
Height OD / Depth	Min: 94.00m Max: 99.00m

Project creators

Name Organisation	of Wessex Archaeology
Project originator	brief Consultant
Project originator	design Wessex Archaeology

Project director/manager Sue Farr

Project supervisor Chloe Hunnisett

Type of Consultant sponsor/funding body

Name of CgMs Consulting sponsor/funding body

Project archives

Physical Archive Museum of London recipient

Physical Archive OHH08 ID

Physical Contents 'Environmental','Human Bones','Industrial','Metal','Worked stone/lithics','Animal Bones','Ceramics'

Digital Archive Museum of London recipient

Digital Archive ID OHH08

Digital Contents 'Animal Bones','Ceramics','Environmental','Human Bones','Industrial','Metal','Stratigraphic','Survey','Worked stone/lithics'

Digital available Media 'Database','GIS','Images raster / digital photography','Images vector','Spreadsheets','Survey','Text'

Paper Archive Museum of London recipient

Paper Archive ID OHH08

Paper Contents 'Animal Bones','Ceramics','Environmental','Human Bones','Industrial','Metal','Stratigraphic','Survey','Worked bone','Worked stone/lithics'

Paper available Media 'Context sheet','Drawing','Map','Matrices','Microfilm','Miscellaneous Material','Notebook - Excavation',' Research',' General Notes','Photograph','Plan','Report','Section','Survey ','Unpublished Text'

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)

Title Orchard Hill, Carshalton, London Borough of Sutton, Greater London

Author(s)/Editor(s) Hunnisett, C

Other bibliographic details 69943

Date 2011

Issuer or publisher Wessex Archaeology

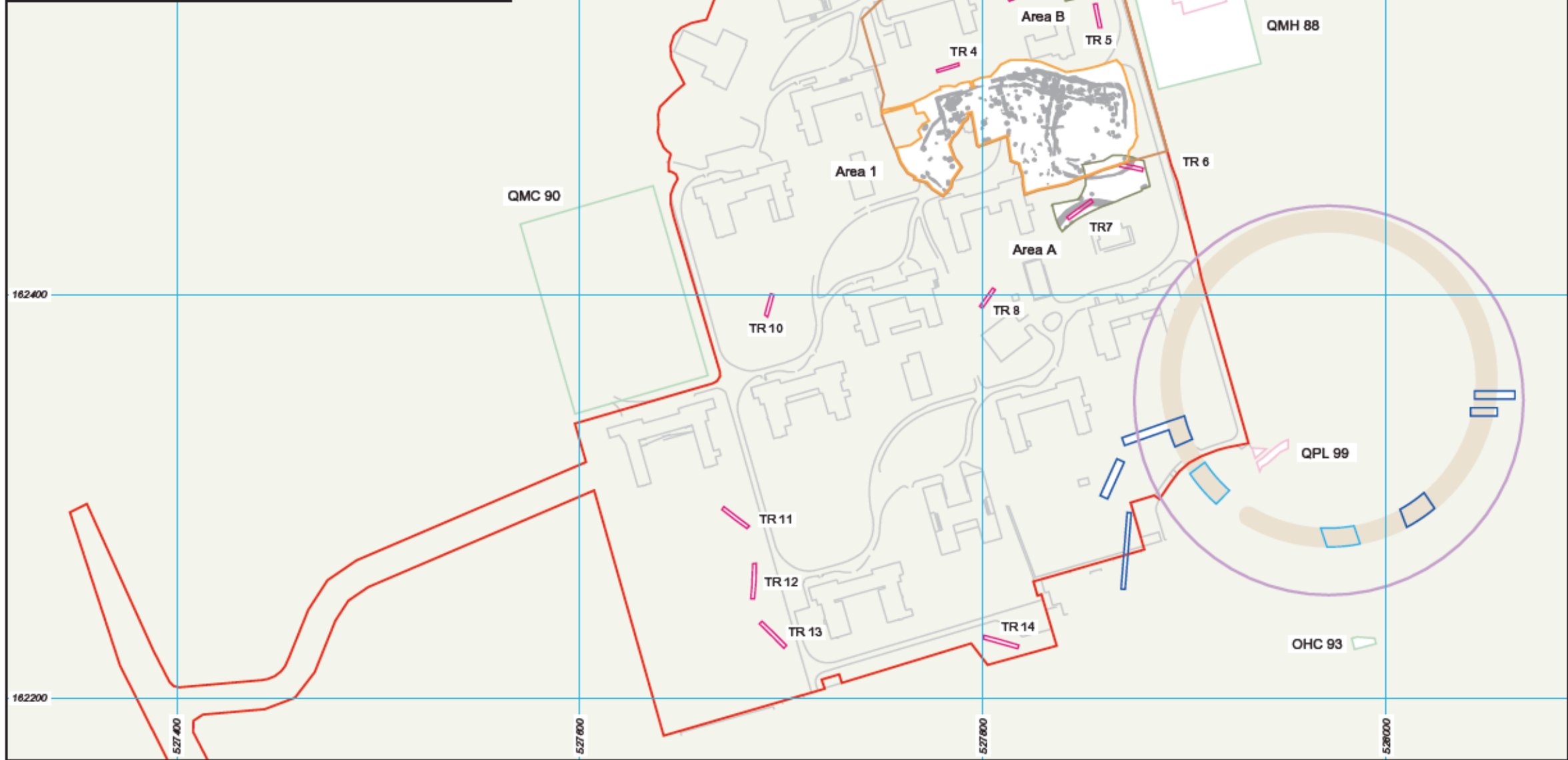
Place of issue or publication Salisbury

Description Post-excavation assessment report

URL <http://www.oasis.ac.uk>

Entered by S Farr (s.farr@wessexarch.co.uk)

Entered on 31 March 2011



- ▭ Site outline
- ▭ Wessex Archaeology 2010 excavation area
- ▭ Wessex Archaeology 2010 watching brief area
- ▭ Archaeological feature
- ▭ Roberts/Colyer 1903-04 investigations*
- ▭ Lowther 1937/39 excavations*
- ▭ MoLAS archaeological works 1989/90/93*
- ▭ Wessex Archaeology excavations 1999
- ▭ Wessex Archaeology assessment trenches 2008
- ▭ Wessex Archaeology excavations 2008
- ▭ Scheduled monument 163
- ▭ Presumed line of Bronze Age enclosure ditch

* cannot guarantee accuracy of location



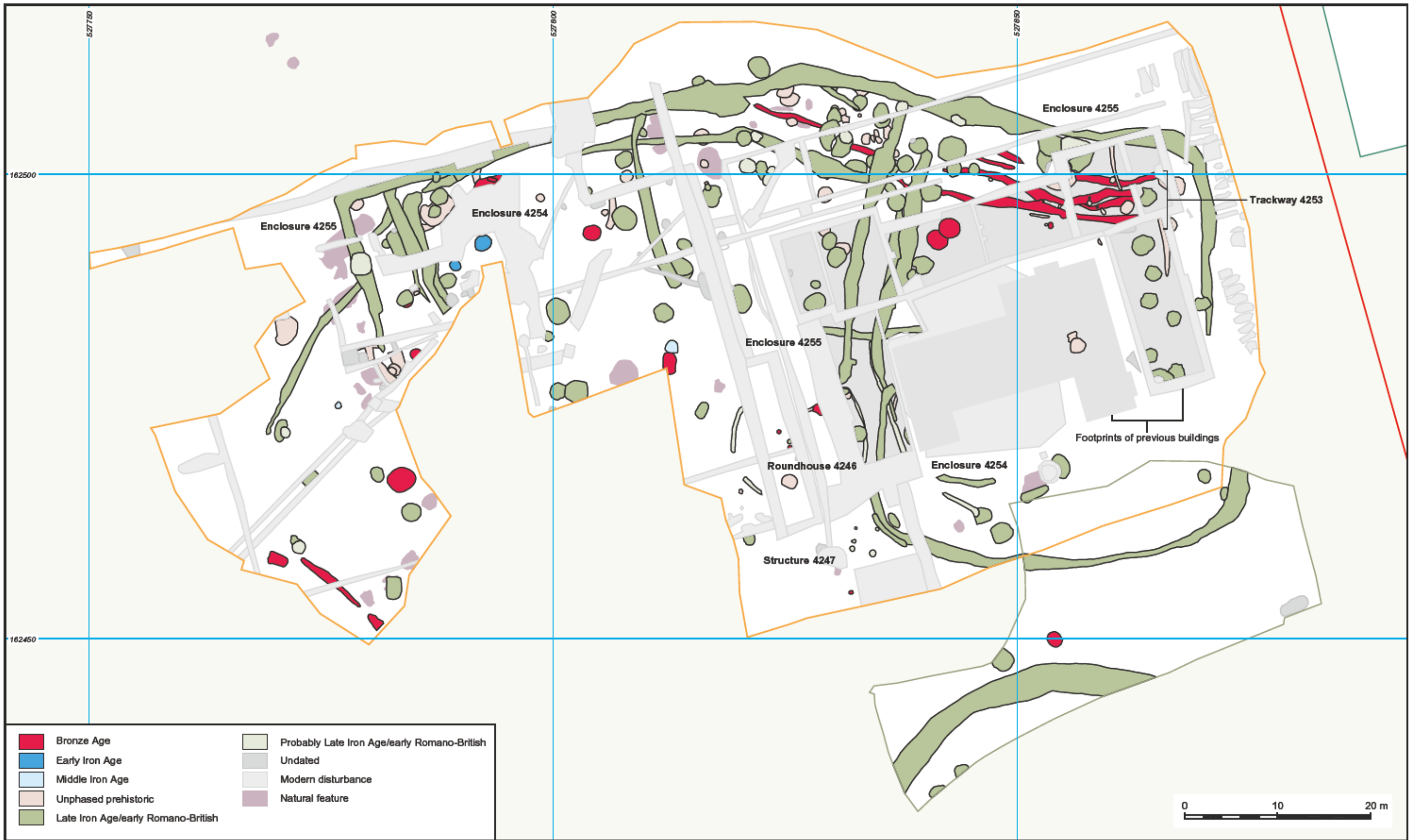
Reproduced from the 2001 Ordnance Survey 1:25000 Explorer® map with permission of the controller of Her Majesty's Stationary Office © Crown copyright, Wessex Archaeology, Portway House, Old Sarum Park, Salisbury, Wiltshire. SP4 6EB. Licence Number: 100028100.

Digital map data from client site survey
 All rights reserved. Reference Number: 100020440.
 This material is for client report only © Wessex Archaeology.
 No unauthorised reproduction.

Revision Number:	0
Illustrator:	RG
Date:	14/03/11
Scale:	1:25000 & 1:2500 @ A3
Path:	Y:\Projects\69943\Drawing Office\
Report Figs\assessment\11_03_10\69943_master.dwg	

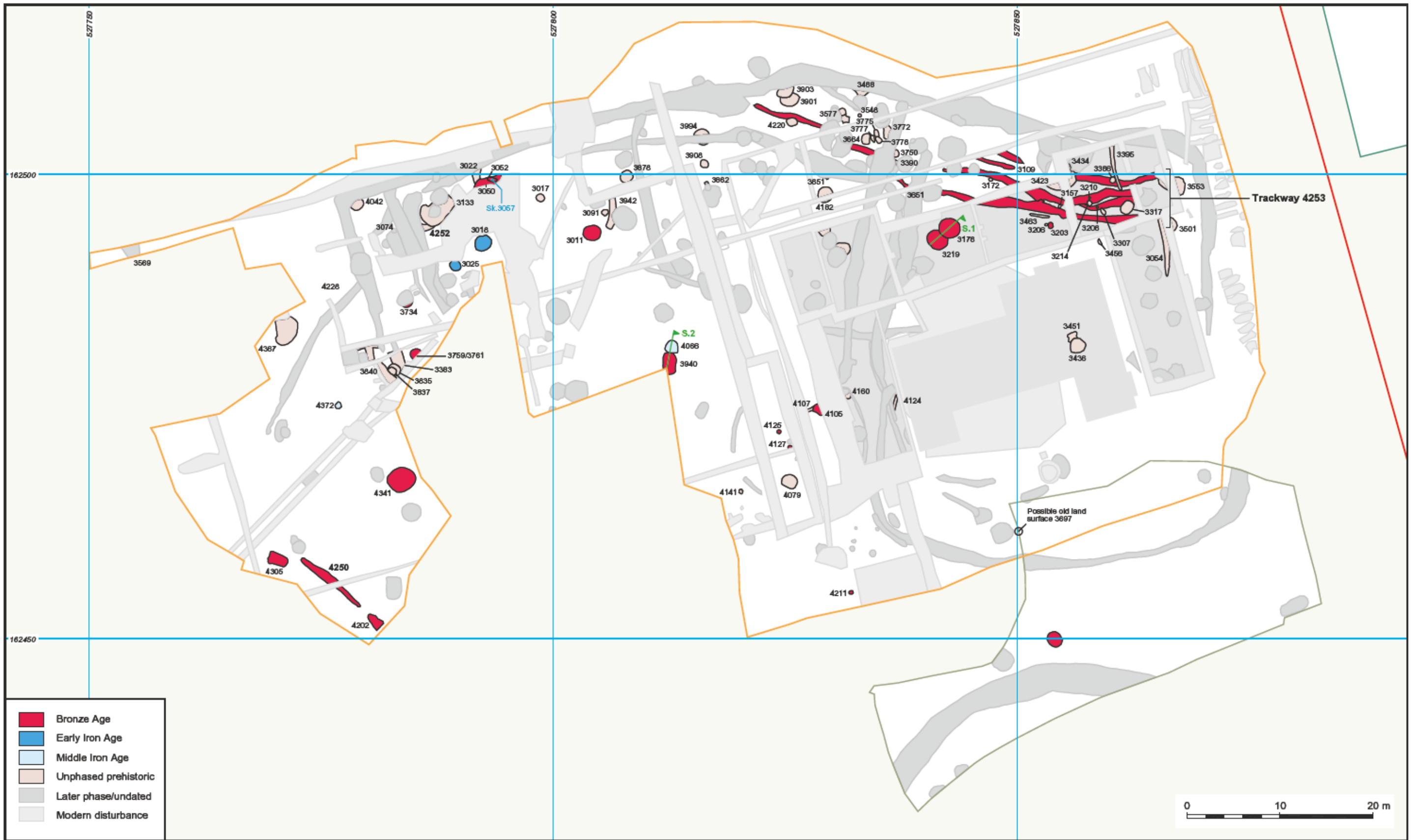
Site location plan

Figure 1



This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date:	14/03/11	Revision Number:	0
Scale:	1:400 @ A3	Illustrator:	RG
Path:	Y:\Projects\69943\Drawing Office\Report Figs\assessment\11_03_10\69943_master.dwg		



- Bronze Age
- Early Iron Age
- Middle Iron Age
- Unphased prehistoric
- Later phase/undated
- Modern disturbance



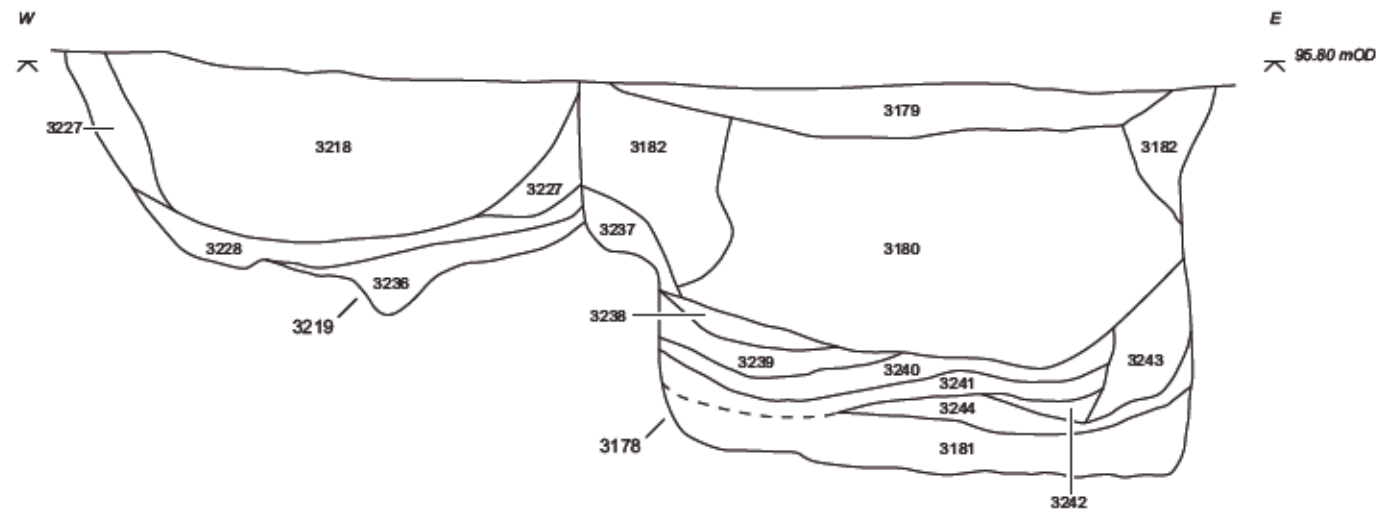
This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date:	14/03/11	Revision Number:	0
Scale:	1:400 @ A3	Illustrator:	RG
Path:	Y:\Projects\69943\Drawing Office\Report Figs\assessment\11_03_10\69943_master.dwg		



Bronze Age and Iron Age features

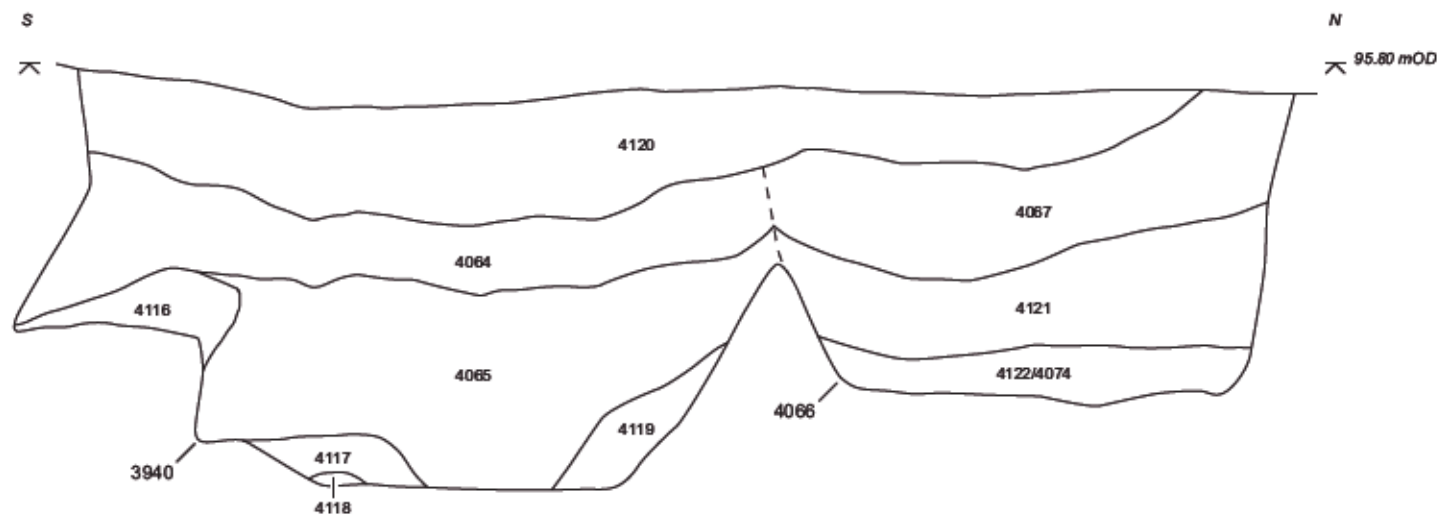
Figure 3



Section 1: South-east facing section of pits 3219 and 3178



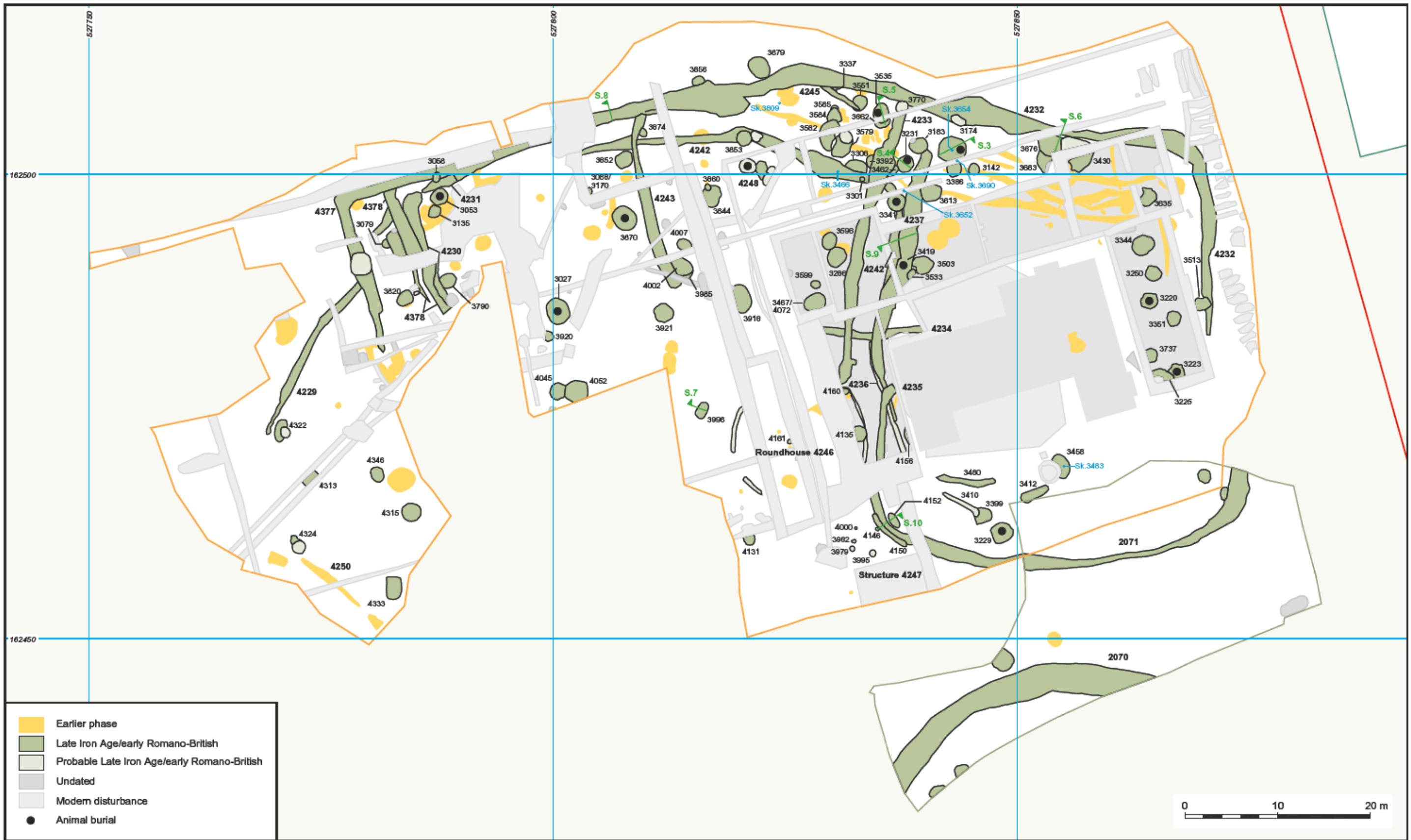
Plate 1: Post excavation view of pits 3219 and 3178



Section 2: East facing section of pits 3940 and 4066



Plate 2: North facing section of pit 4341



- Earlier phase
- Late Iron Age/early Romano-British
- Probable Late Iron Age/early Romano-British
- Undated
- Modern disturbance
- Animal burial

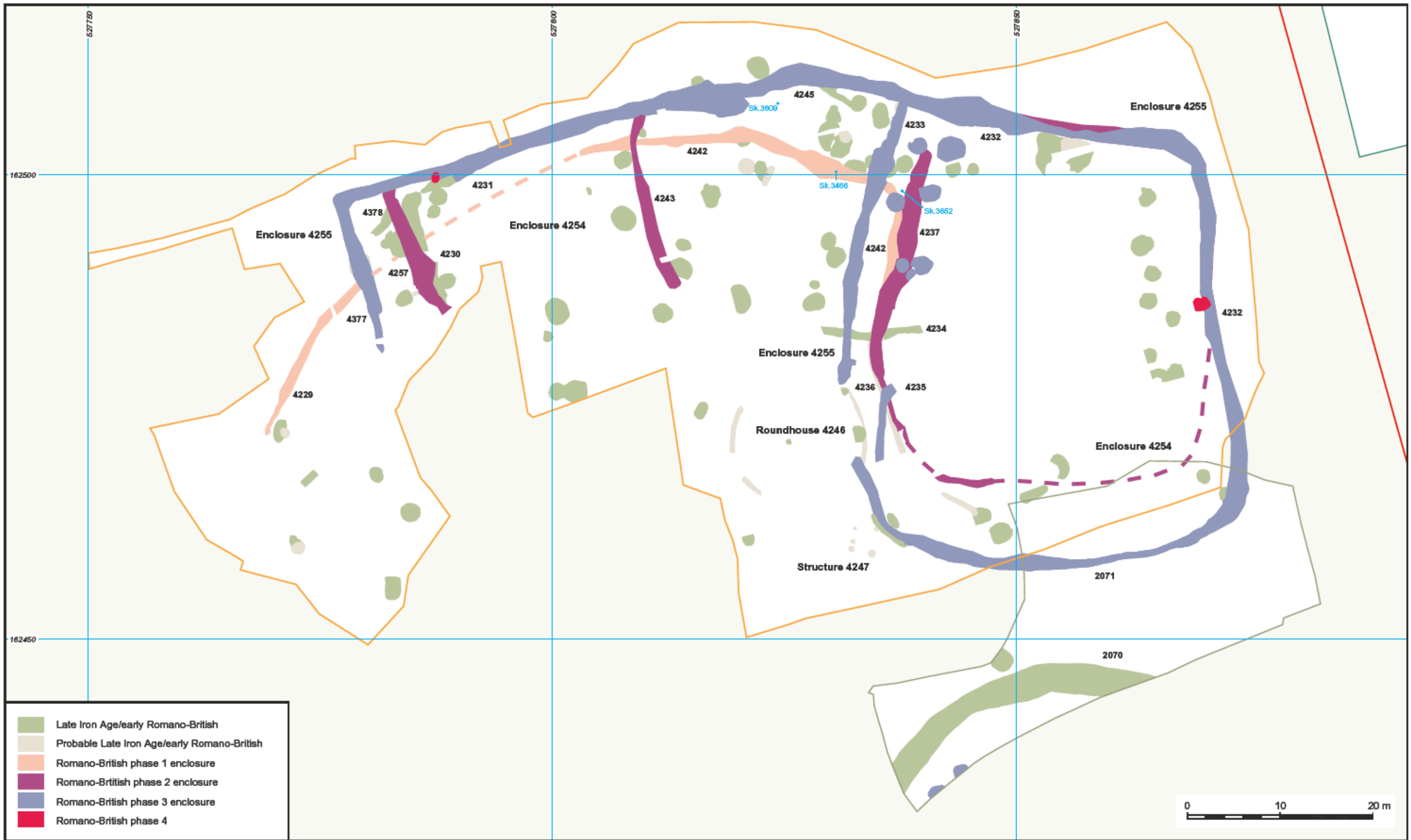


This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date: 14/03/11	Revision Number: 0
Scale: 1:400 @ A3	Illustrator: RG
Path: Y:\Projects\69943\Drawing Office\Report Figs\assessment\11_03_10\69943_master.dwg	

Late Iron Age/early Romano-British features

Figure 5

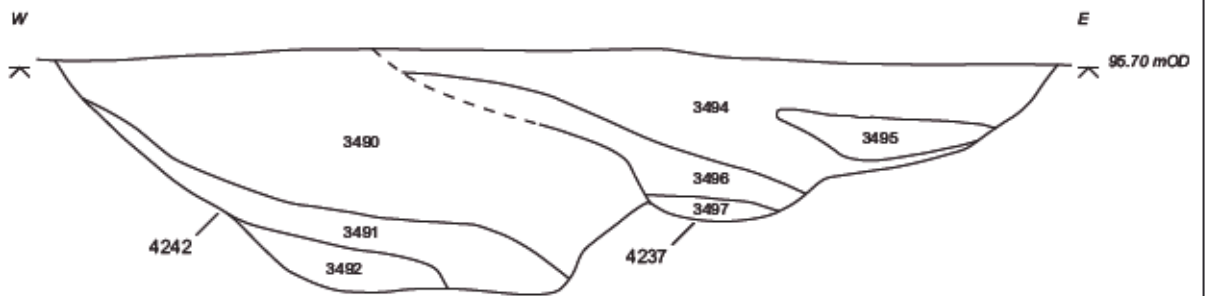
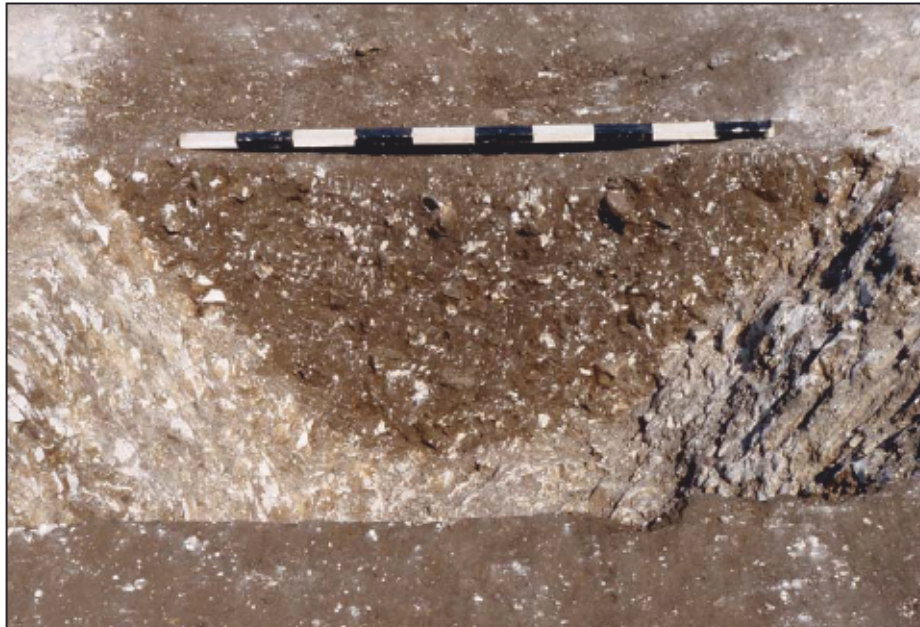
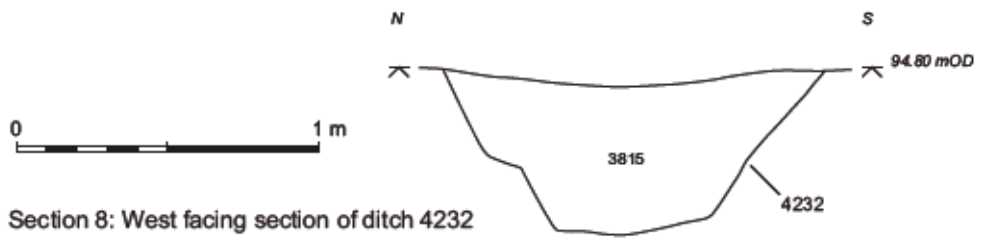


This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date:	14/03/11	Revision Number:	0
Scale:	1:400 @ A3	Illustrator:	RG
Path:	Y:\Projects\69943\Drawing Office\Report Figs\assessment\11_03_10\69943_master.dwg		

Phasing of Late Iron Age/early Romano-British enclosures (with extrapolation)

Figure 6




	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.		
	Date:	17/03/11	Revision Number: 0
	Scale:	1:25 @ A4	Illustrator: RG
	Path:	Y:\Projects\69943\Drawing_Office\Report figs\Heritage_Statement\11_902_17\69943_A4_L7.ai	



Plate 4: Dog burials ABG 61 and ABG 62 in pit 3341

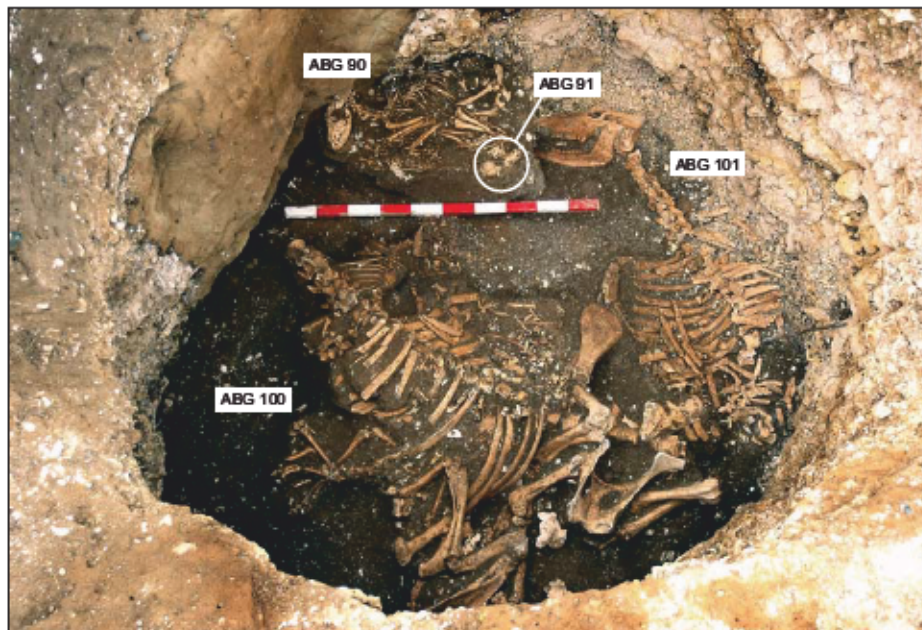
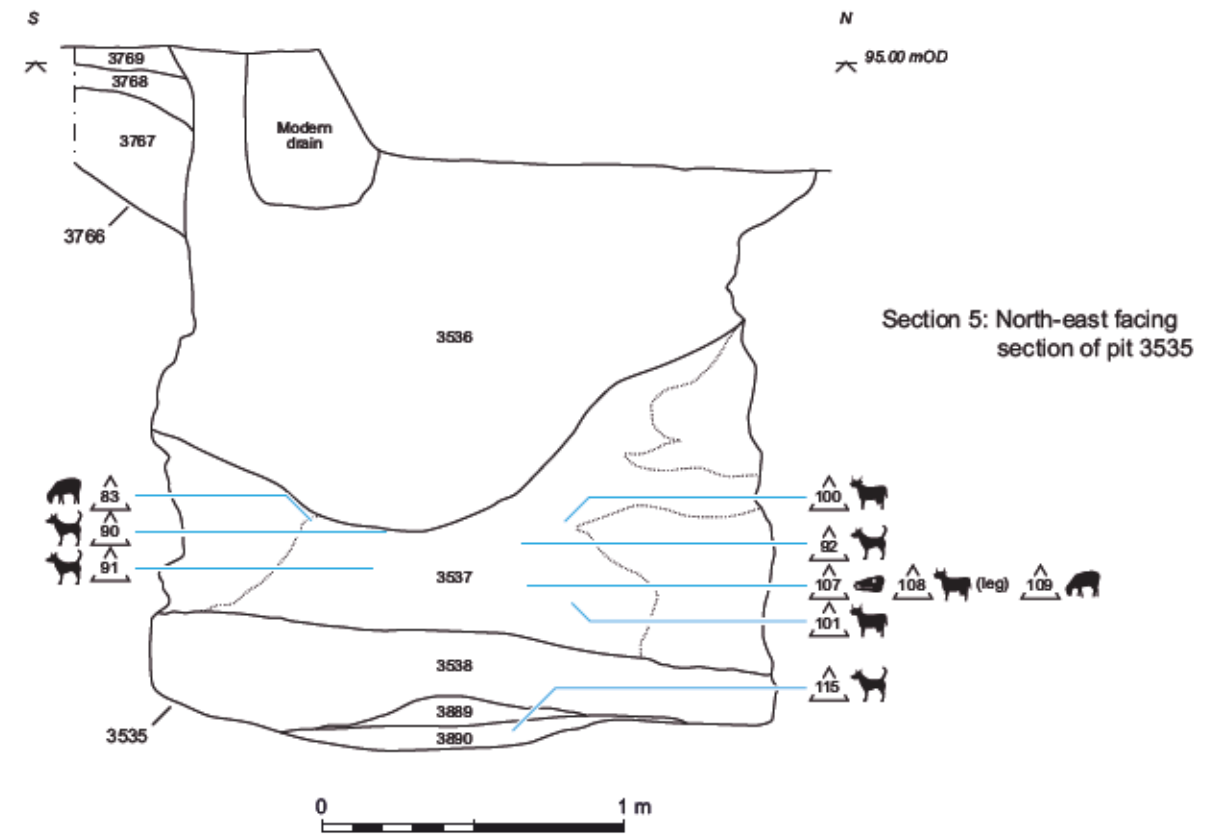


Plate 5: ABG 90, ABG 91, ABG 100 and ABG 101 in pit 3535

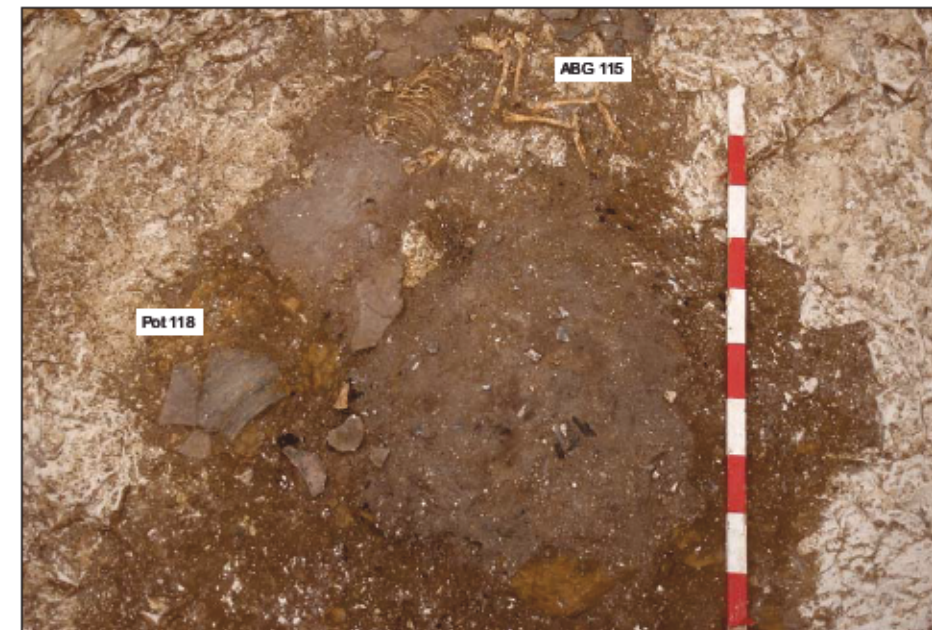
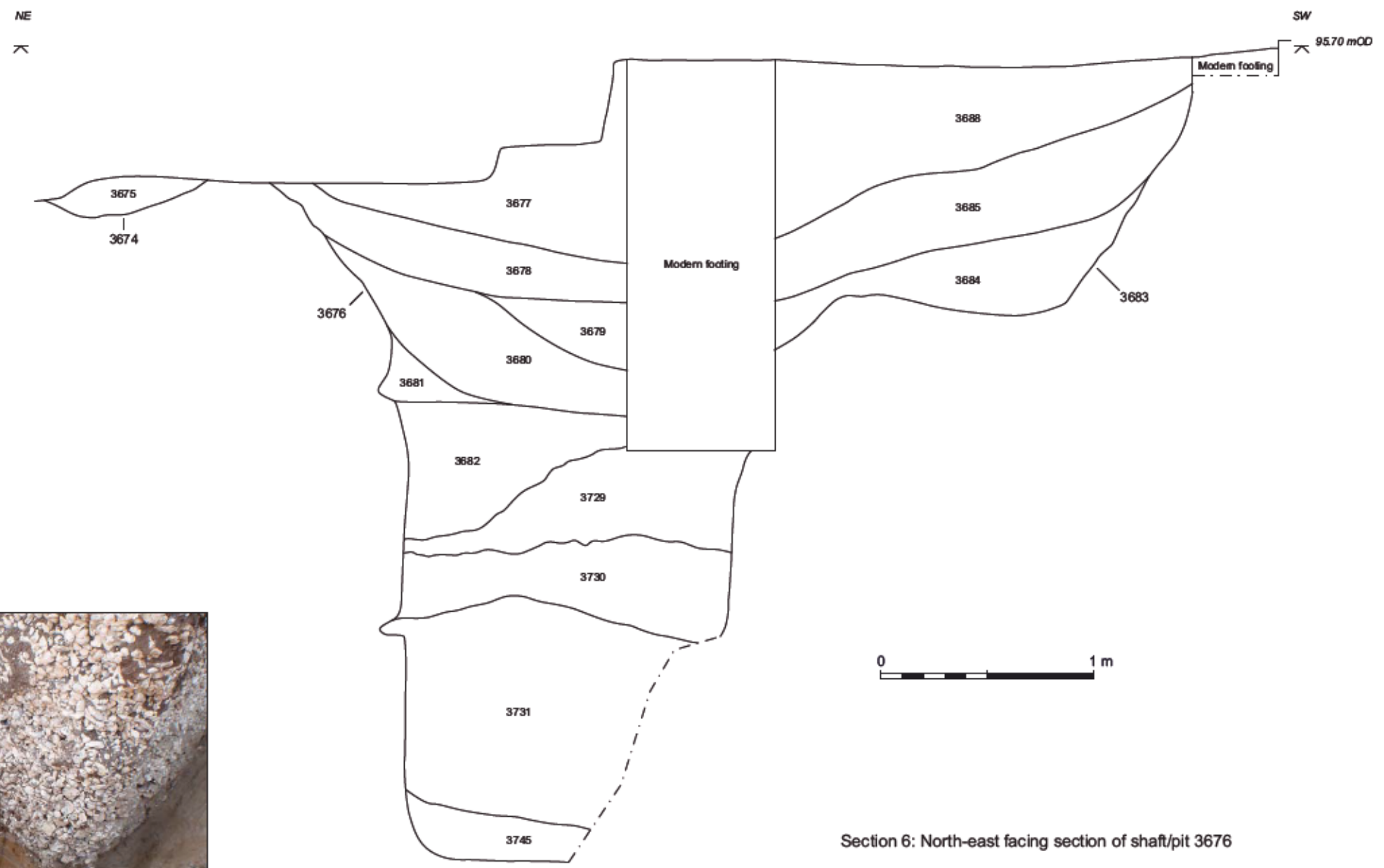


Plate 6: ABG 115 and pot 118 with possible animal cremation related deposit 3889 at the base of pit 3535



Section 6: North-east facing section of shaft/pit 3676



Plate 7: Shaft/pit 3676

Date:	17/03/11	Revision Number:	0
Scale:	Sections @ 1:25	Illustrator:	RG
Path:	Y:\Projects\69943\Drawing_Office\Report figs\Heritage_Statement\11_902_17\69943_A3_L5.ai		

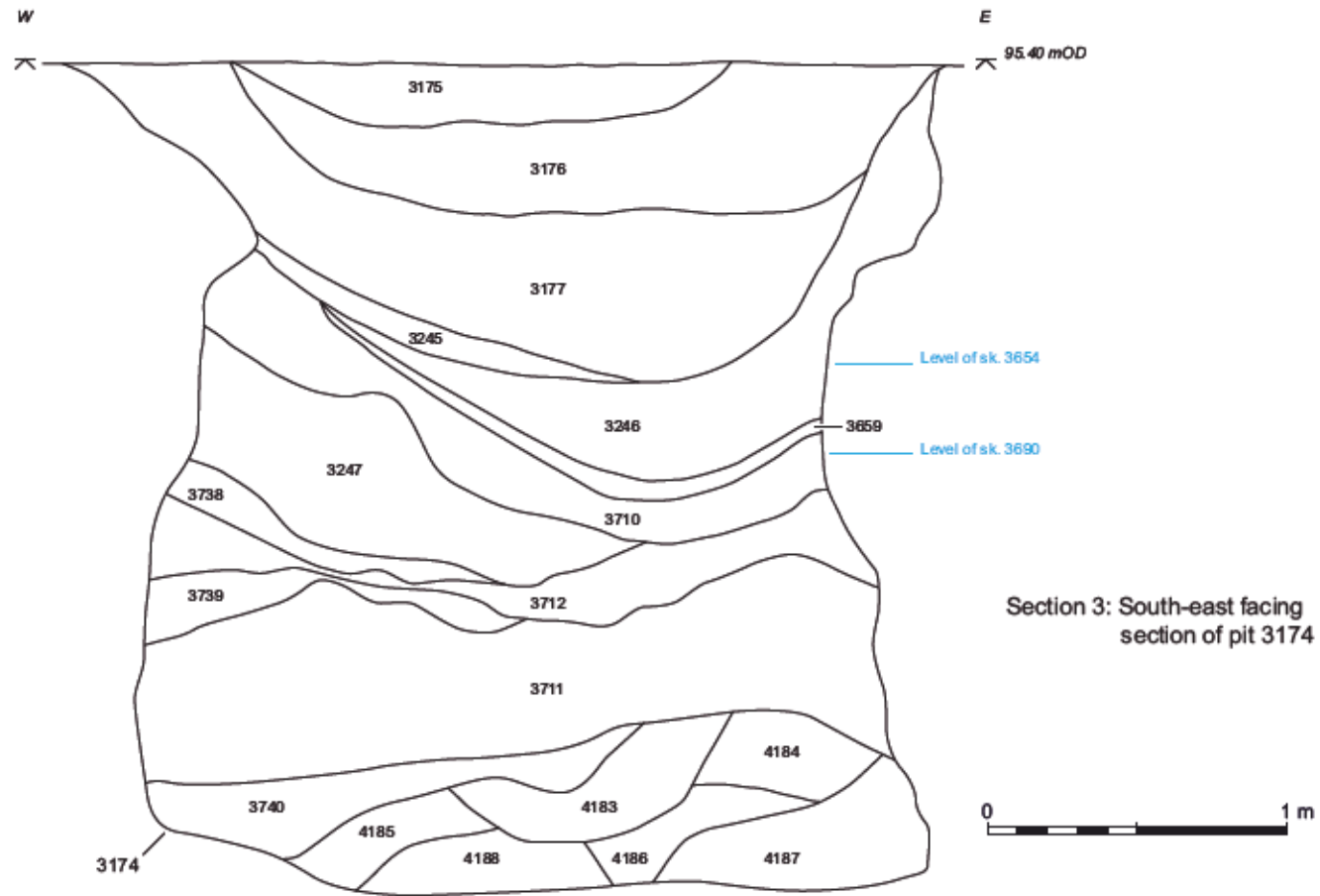


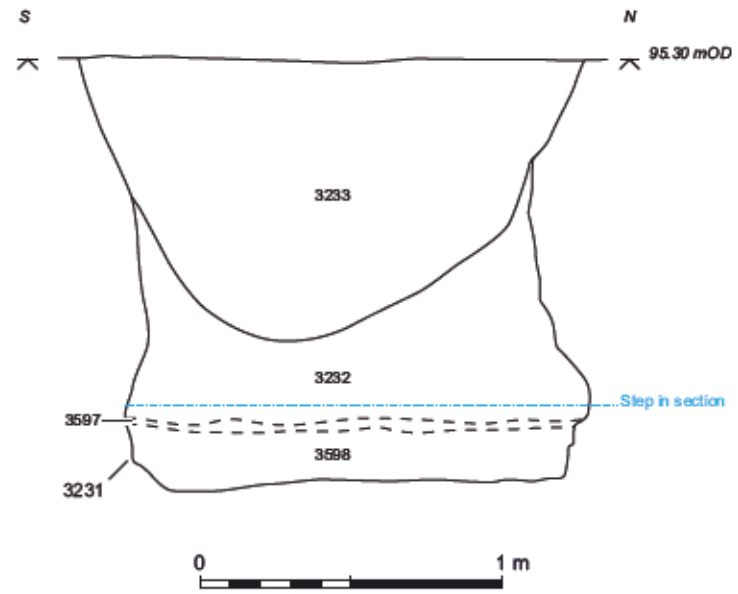
Plate 8: Layer containing evidence of sheep/goat butchery in pit 3174



Plate 9: Neonate skeleton 3654 in pit 3174



Plate 10: Post excavation view of pit 3174



Section 4: North-east facing section of pit 3231



Plate 11: Horse burial ABG 70 during excavation



Plate 12: Horse burial ABG 70 at base of pit 3231

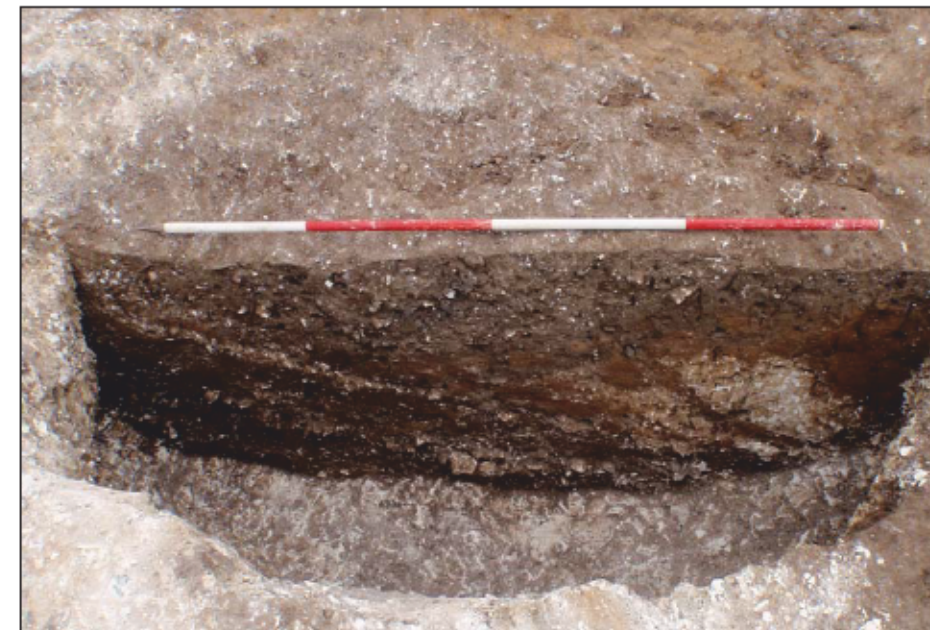
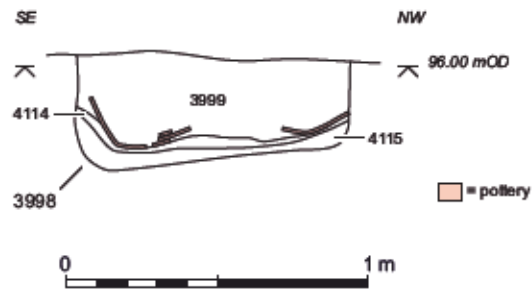


Plate 13: South-west facing section of pit 3879



Section 7: North-east facing section of pit 3998



Plate 14: Pit 3998 showing pottery vessel, Spearhead 132 and nave loop 133

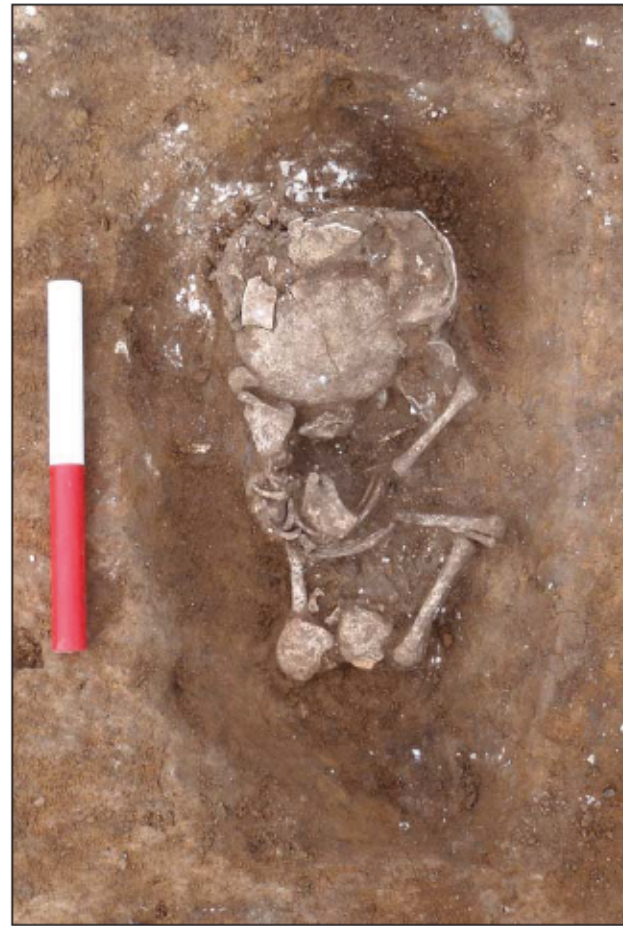


Plate 15: Neonate burial 3651

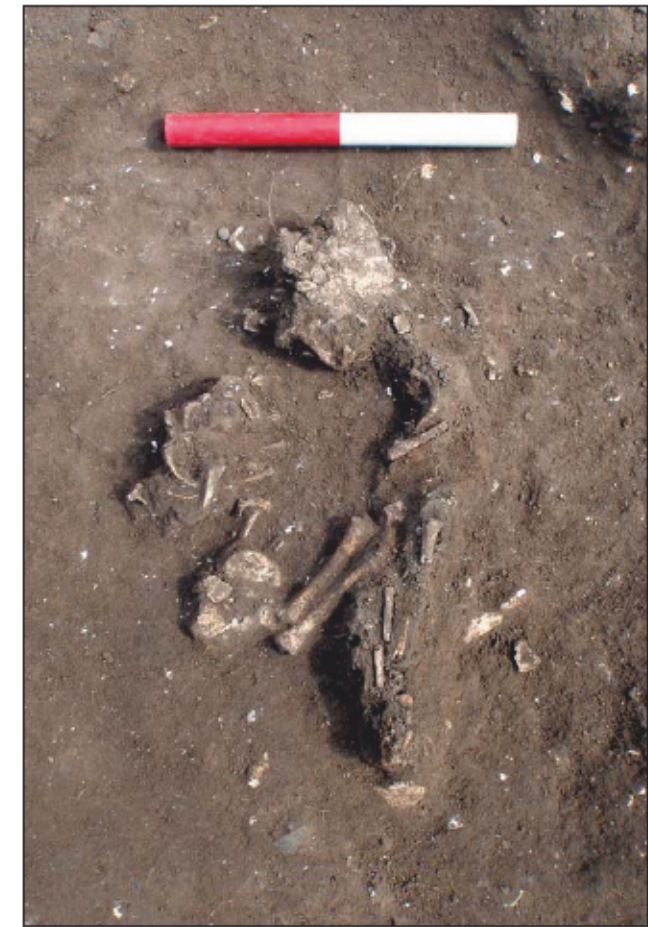


Plate 16: Neonate burial 3809



WESSEX ARCHAEOLOGY LTD.

Registered Head Office: Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB.

Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk

With regional offices in Maidstone, Sheffield and Edinburgh

For more information visit www.wessexarch.co.uk



Registered Charity No. 287786. A company with limited liability registered in England No. 1712772