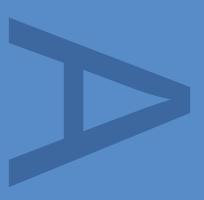
CARSHALTON WAR MEMORIAL
HOSPITAL
CARSHALTON
LONDON BOROUGH OF
SUTTON



ASSESSMENT OF AN ARCHAEOLOGICAL EXCAVATION





CST 12 APRIL 2013

PRE-CONSTRUCT ARCHAEOLOGY

CARSHALTON WAR MEMORIAL HOSPITAL CARSHALTON LONDON BOROUGH OF SUTTON

EXCAVATION

Quality Control

Pre-Construct Archaeology Limited			K2947
	Name & Title	Signature	Date
Text Prepared by:	Dougie Killock		April 2013
Graphics Prepared by:	Jennifer Simonson		April 2013
Graphics Checked by:	Josephine Brown	y Jasalles	April 2013
Project Manager Sign-off:	Jon Butler	prontler	April 2013

Revision No.	Date	Checked	Approved
. "			

Pre-Construct Archaeology Ltd Unit 54 Brockley Cross Business Centre 96 Endwell Road London SE4 2PD

An Archaeological Excavation at Carshalton War Memorial Hospital, London Borough of Sutton SM5 3BY

Site Code: CST 12

Central National Grid Reference: TQ 2793 6396

Written and researched by Douglas Killock Pre-Construct Archaeology Limited, April 2013

Project Manager: Tim Bradley MIfA Post-excavation Manager: Jon Butler MIfA

Commissioning Client: CgMs Consulting on behalf of Weston Homes

Contractor: Pre-Construct Archaeology Limited

Unit 54 Brockley Cross Business Centre

96 Endwell Road

Brockley London SE4 2PD

Tel: 020 7732 3925

Fax: 020 7732 7896

Email: tbradley@pre-construct.com Website: www.pre-construct.com

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1 Abstract

- 1.1 This report presents the results of an archaeological excavation conducted by Pre-Construct Archaeology Ltd at the War Memorial Hospital, Carshalton, London Borough of Sutton, London SM5 3BY (Fig. 1). The area excavated covered a plot of land which was located immediately to the east of the main hospital building and had been partially covered by a wing which projected from it. This area will be impacted by the construction of a car park which will serve the new residential development. The War Memorial Hospital complex had previously been somewhat larger and included the area to the north known as Ashcombe House which was developed as a separate project in 2008. The boundary created between these two plots forms the site boundary to the south, to the west the site is bounded by the gardens of nearby houses which face onto Salisbury Road and there is also a residential development to the north, the site is bounded to the east by The Park. The southern part of the site had been redeveloped between 2009 and 2012. The excavation, including the machine stripping that preceded it, was undertaken from the 23rd of November to the 14th of December 2012.
- 1.2 The archaeological potential of the former War Memorial Hospital at Carshalton was well known. It had first been demonstrated by an evaluation carried out by Pre-Construct Archaeology in 2008 on the southern part of the site which was then known as Ashcombe House (site code ASW 08)1. Subsequent excavation of a small area measuring 14m by 7m showed that a dense cluster of pits dating to the Middle Iron Age and early Romano-British periods extended across the southeastern part of the site. Some of the pits were of a considerable size and depth and were consistent with similar features found in these periods which have traditionally been interpreted as grain storage silos. Although the size of the excavation area was quite limited it appeared likely that a farmstead or small settlement had been located close to the site which is located on a flat chalk hilltop that overlooks the upper Wandle valley to the north². Analogous sites were known at Ewell which lies to the west of Carshalton and Keston and Farningham to the east. Excavations carried out at the former Queen Mary Hospital, Carshalton by Wessex Archaeology in 2008 and 2010 have demonstrated that a settlement of some size existed there in the Late Iron Age to early Roman period. This had been preceded by a substantial settlement dating to the Late Bronze Age/ Early Iron Age³. Recent excavations have clearly demonstrated that the chalk ridge which runs roughly east-west through this area and defines the southern limit of the London Basin

¹ Killock, D 2008 *An Archaeological Evaluation At Ashcombe House, Carshalton War Memorial Hospital Carshalton, SM5 3BY* Unpublished PCA report

² Killock, D 2012 *An Iron Age and early Romano-British farmstead at the War Memorial Hospital, Carshalton* London Archaeologist Vol 13 No 4

³ Hunnisett, C 2011 Orchard Hill, Carshalton London Borough of Sutton Post-excavation Assessment Report Unpublished Wessex Archaeology report

appeared to be an attractive location for prehistoric farmers. Although the later phases of occupation span the very late Iron Age and early Roman periods the systems of farming being adopted, as characterised by the use of grain storage pits, appeared to be very similar to those practised in the Middle Iron Age.

- 1.3 Following the excavation undertaken by PCA in 2008 further evaluation work was carried out by Archaeology South-East in 2009. The trial trenches were concentrated in the area to the north of the hospital but also covered an area to the east in the vicinity of a substantial wing which projected south-eastwards from the main building. No archaeological features were recorded in the trenches located to the north but pits dating to the Middle Iron Age and early Roman periods were found in the trenches located to the east of the hospital. One of the pits contained a group of human longbones that had been arranged together whilst another contained a horse's skull, possible indications that these features not only had a practical function but had been adopted for ritual deposition when being backfilled. Although the pit containing the human remains was extremely shallow two of the remaining pits were recorded as being 0.70-0.75m deep⁴. These features were very similar in size, form and date to those found in the Ashcombe House excavations in 2008. The latter were located c. 25m to the south of the trial trenches excavated in 2009.
- 1.4 The open area excavation conducted in the winter of 2012 comprised a single irregularly shaped trench measuring 372.13m² (Fig. 2). The area excavated covered the location of a new car park which will serve the residential development and included the locations of evaluation Trenches 1 and 2 which had unearthed evidence of pits dating to the Middle Iron Age and Roman periods. The excavated area also encompassed most of the location of the eastern wing of the hospital which had been demolished immediately prior to the excavation commencing.
- 1.5 A dense array of pits was evident in the eastern half of the trench, the majority of which dated to the Middle Iron Age though some were excavated in the decades before and after the Roman invasion of Britain. Some of the pits were notably deep and steep sided and fit neatly into a category which is well catalogued for the Iron Age and early Roman periods; these features are traditionally interpreted as grain storage silos. A notable difference between the pits recorded at Ashcombe House in 2008 and those seen in 2012 was the presence of complete animal burials which had been placed in these pits when they were being deliberately backfilled. Three complete animals were recorded: a calf close to the base of a large pit, an elderly dog that had been placed in the base of a shallow pit and a sheep which had been buried near the top of a pit in what appeared to be a 'closure' ritual carried out when the feature was being filled in. Apart from these examples of complete animals being interred there were notable occurrences either of significant

⁴ Dawkes, G 2009 *An Archaeological Evaluation at Carshalton War Memorial Hospital, The Park, Carshalton, Sutton* Unpublished Archaeology South-East report

large elements such as skulls being placed in pits or large collections of animal bone being placed together, one pit contained the remains of seven lambs six of which were probably neonates. Most of the pits which contained the animal burials or significantly assemblages of animal bone dated to the Middle Iron Age, though the sheep burial was found in a Roman pit.

- 1.6 It appeared that the site may have been abandoned after the Middle Iron Age phase of occupation though this is not entirely certain. If occupation continued it was certainly on a greatly reduced scale. However, it was clear that if the settlement had been deserted it was re-occupied in the very Late Iron Age and that a community was present in the years from around 50 BC to AD 50 and this phase of occupation continued up until c. AD 100. The later phase of occupation was still characterised by ritual deposition though in this case pottery seems to have largely taken the place of animal remains. The Roman features were by no means identical but compared to the earlier pits they were very steep sided and deeper than they were wide, giving them very definitely the appearance of being shafts.
- 1.7 Nearly all of the pits lay to the east of a series of linear features that may represent the bases of what were once larger ditches, though as seen they were rather insubstantial gullies. Whether the principal function of the pits was to store grain or they formed a recognised place for rituals to be practiced there seems little doubt that the area in which these activities took place was quite strictly defined. Though much of the western area of the trench had been impacted by previous construction and demolition work the pits recorded were substantial features that would have survived these impacts if they had been present further to the west.
- 1.8 The results of the fieldwork carried out at the War Memorial Hospital site, including Ashcombe House, combined with the evidence gathered from Orchard Hill demonstrate that a thriving Late Iron Age community existed on the northern periphery of the downland in the Carshalton area. These agricultural settlements continued to be occupied and apparently prospered for around half a century after the Roman arrival in Britain and then disappeared. At present it is unclear what replaced them.

2 Introduction

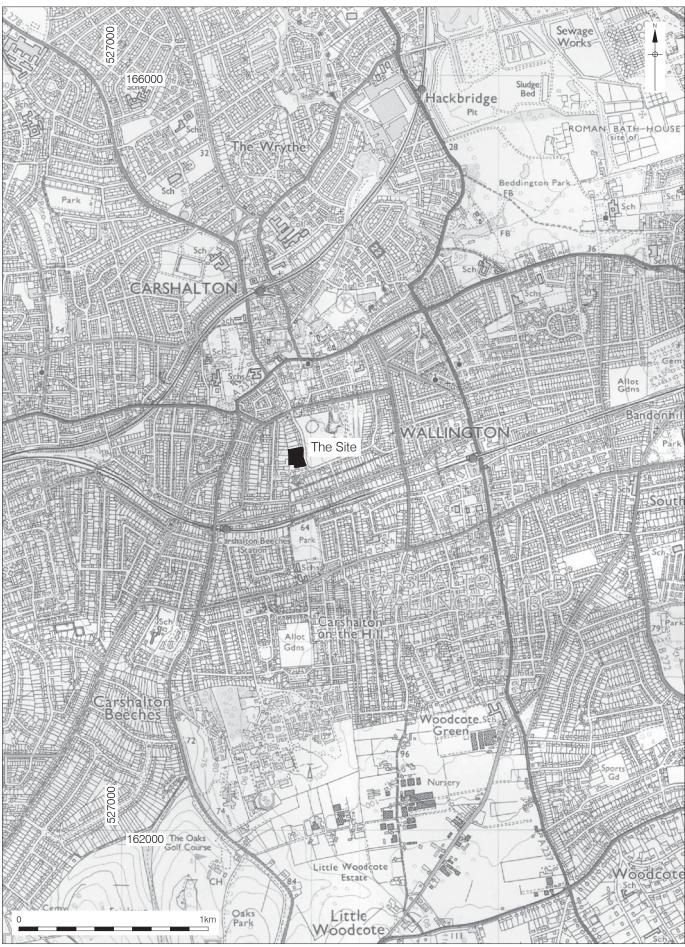
- 2.1 An archaeological excavation was undertaken by Pre-Construct Archaeology Ltd at the War Memorial Hospital, Carshalton, London Borough of Sutton, SM5 3BY (Fig. 1). Initial site preparation, which essentially consisted of the demolition of the eastern wing of the old hospital and the removal of the concrete foundations below it, was monitored by an intermittent watching brief that lasted from the 2nd to the 14th of November 2012. The machine clearance of modern topsoil and the overburden that had resulted from the demolition work was conducted from the 23rd to 26th of November 2012. Excavation began on the 26th of November and concluded on the 14th of December 2012.
- 2.2 The former War Memorial Hospital at Carshalton had ceased to be functional some years ago, it was closed in 2007. The grounds and the associated outbuildings have been split into diverse areas and two phases of redevelopment had already taken place prior to the partial demolition work which was carried out on the main body of the hospital in 2012. The southern part of the former War Memorial Hospital grounds contained a building which had previously been a nurse's home, Ashcombe House. The standing building was demolished and the site redeveloped from 2008 onward. An archaeological evaluation and small excavation preceded the construction work carried out on the site. The results of the archaeological fieldwork demonstrated that a farmstead or small settlement had existed on the site in the Middle Iron Age and Late Iron Age/Early Roman periods⁵.
- 2.3 Evaluation work was carried out by Archaeology South-East in 2009 on the main hospital site. The trenches were concentrated in the area to the north of the hospital but also covered an area to the east. No archaeological features were recorded in the trenches located to the north but pits dating to the Middle Iron Age and early Roman periods were recorded in the trenches located to the east of the hospital. These features were very similar in size, form and date to those found in the Ashcombe House excavations in 2008 which were located c. 25m to the south of the trial trenches excavated in 2009⁶. Following the evaluation conducted in 2009 the northern area of the former hospital plot was redeveloped but the core building remained untouched until 2012.
- 2.4 Demolition work was conducted on the main hospital building, principally to remove wings which were themselves later additions, immediately prior to the archaeological excavation which was undertaken in 2012. The historic core of the War Memorial Hospital is to be retained and converted into two-storey apartments with up to five bedrooms.

⁵ Killock, D 2012 An Iron Age and early Romano-British farmstead at the War Memorial Hospital, Carshalton *London Archaeologist* Vol 13 No 4

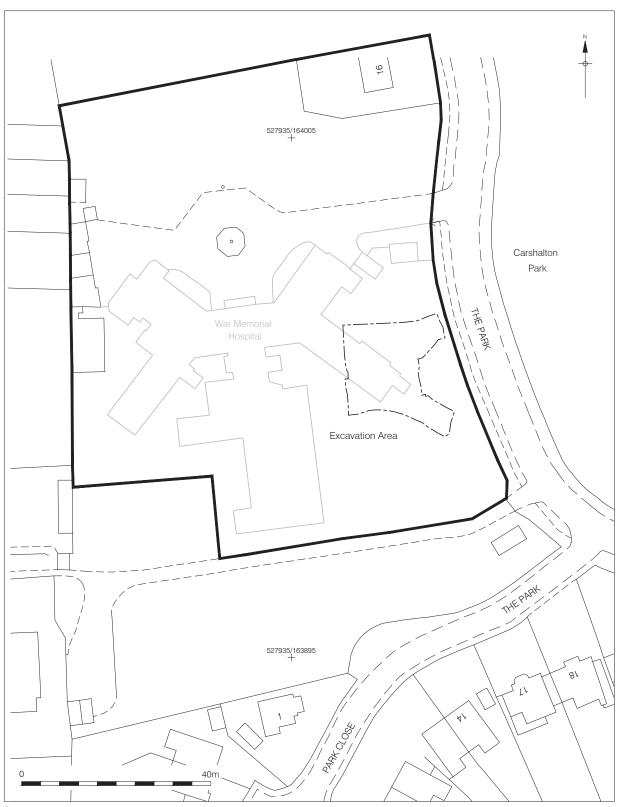
⁶ Dawkes, G 2009 *An Archaeological Evaluation at Carshalton War Memorial Hospital, The Park, Carshalton, Sutton* Unpublished Archaeology South-East report

- 2.5 The southern boundary was created when Ashcombe House was redeveloped in 2008; to the west the site is bounded by the gardens of nearby houses which face onto Salisbury Road and there is also a residential development to the north, the site is bounded to the east by The Park. The footprint of the site measures 7753.73m² in total.
- 2.6 The central National Grid Reference for the area excavated is TQ 2793 6396.
- 2.7 The site was given the unique Museum of London site code CST 12. The evaluation work previously carried out by Archaeology South-East used the site code CJW 09.
- 2.8 The property had previously been the subject of an archaeological Desk Based Assessment⁷ which was written in 2008.
- 2.9 The project was monitored by Diane Abrams of GLAAS, English Heritage on behalf of the London Borough of Sutton and Lorraine Mayo of CgMs Consulting on behalf of the client, Weston Homes; Tim Bradley was project manager for Pre-Construct Archaeology Limited and the post-excavation project was managed by Jon Butler. The excavation was supervised by the author.

⁷ Darton, L 2008 *Archaeological Desk Based Assessment Land at Carshalton War Memorial Hospital The Park Carshalton* Unpublished CgMS Consulting report



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3 Planning Background

3.1 National Guidance

- 3.1.1 The Departments of Communities and Local Government (DCLG) issued a series of planning guidelines, the National Planning Policy Framework, in March 2012. This document superseded the previous guidance contained in Planning Policy Statement 5. The policies regarding archaeology set out in the NPPF are contained in Section 12 Conserving and enhancing the historic environment. These state:
 - 126. Local planning authorities should set out in their Local Plan a positive strategy for the conservation and enjoyment of the historic environment⁸, including heritage assets most at risk through neglect, decay or other threats. In doing so, they should recognise that heritage assets are an irreplaceable resource and conserve them in a manner appropriate to their significance. In developing this strategy, local planning authorities should take into account:
- the desirability of sustaining and enhancing the significance of heritage assets and putting them
 to viable uses consistent with their conservation;
- the wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring;
- the desirability of new development making a positive contribution to local character and distinctiveness; and
- opportunities to draw on the contribution made by the historic environment to the character of a place.
 - 127. When considering the designation of conservation areas, local planning authorities should ensure that an area justifies such status because of its special architectural or historic interest, and that the concept of conservation is not devalued through the designation of areas that lack special interest.
 - 128. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.
 - 129. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.

⁸ The principles and policies set out in this section apply to the heritage-related consent regimes for which local planning authorities are responsible under the Planning (Listed Buildings and Conservation Areas) Act 1990, as well as to plan-making and decision-taking.

- 130. Where there is evidence of deliberate neglect of or damage to a heritage asset the deteriorated state of the heritage asset should not be taken into account in any decision.
- 131. In determining planning applications, local planning authorities should take account of:
- the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
- the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and
- the desirability of new development making a positive contribution to local character and distinctiveness.
 - 132. When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification. Substantial harm to or loss of a grade II listed building, park or garden should be exceptional. Substantial harm to or loss of designated heritage assets of the highest significance, notably scheduled monuments, protected wreck sites, battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional.
 - 133. Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:
- the nature of the heritage asset prevents all reasonable uses of the site; and
- no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and
- conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; and
- the harm or loss is outweighed by the benefit of bringing the site back into use.
 - 134. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.
 - 135. The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.
 - 136. Local planning authorities should not permit loss of the whole or part of a heritage asset without taking all reasonable steps to ensure the new development will proceed after the loss has occurred.
 - 137. Local planning authorities should look for opportunities for new development within Conservation Areas and World Heritage Sites and within the setting of heritage assets to enhance or better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to or better reveal the significance of the asset should be treated favourably.
 - 138. Not all elements of a World Heritage Site or Conservation Area will necessarily contribute to its significance. Loss of a building (or other element) which makes a positive contribution to the significance of the Conservation Area or World Heritage Site should be treated either as substantial harm under paragraph 133 or less than substantial harm under paragraph 134, as appropriate, taking into account the relative significance of the element affected and its contribution to the significance of the Conservation Area or World Heritage Site as a whole.

- 139. Non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to scheduled monuments, should be considered subject to the policies for designated heritage assets.
- 140. Local planning authorities should assess whether the benefits of a proposal for enabling development, which would otherwise conflict with planning policies but which would secure the future conservation of a heritage asset, outweigh the disbenefits of departing from those policies.
- 141. Local planning authorities should make information about the significance of the historic environment gathered as part of plan-making or development management publicly accessible. They should also require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible ⁹. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.
- 3.1.2 The provisions set out in the new guidelines superseded the policy framework set out in previous government guidance namely Planning Policy Statement 5 (PPS 5) 'Planning for the Historic Environment'. Planning Policy Statement 5 had itself replaced Planning Policy Guidance Note 16, PPG 16, which was issued in November 1990 by the Department of the Environment.
- 3.1.3 Although PPG 16 has been superseded the Unitary Development Plans of most local authorities, including the London Borough of Sutton's, still contain sections dealing with archaeology that are based on the provisions set out in PPG 16. The key points in PPG16 can be summarised as follows:
- 3.1.4 Archaeological remains should be seen as a finite and non-renewable resource, and in many cases highly fragile and vulnerable to damage and destruction. Appropriate management is therefore essential to ensure that they survive in good condition. In particular, care must be taken to ensure that archaeological remains are not needlessly and thoughtlessly destroyed. They can contain irreplaceable information about our past and the potential for an increase in future knowledge. They are part of our sense of national identity and are valuable both for their own sake and for their role in education, leisure and tourism.
- 3.1.5 Where nationally important archaeological remains, whether scheduled or not, and their settings, are affected by a proposed development there should be a presumption in their physical preservation.
- 3.1.6 If physical preservation in situ is not feasible, an archaeological excavation for the purposes of 'preservation by record' may be an acceptable alternative. From an archaeological point of view, this should be as a second best option. Agreements should also provide for subsequent publication of the results of any excavation programme.

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⁹ Copies of evidence should be deposited with the relevant Historic Environment Record, and any archives with a local museum or other public depository

- 3.1.7 The key to informed and reasonable planning decisions is for consideration to be given early, before formal planning applications are made, to the question of whether archaeological remains are known to exist on a site where development is planned and the implications for the development proposal.
- 3.1.8 Planning authorities, when they propose to allow development which is damaging to archaeological remains, must ensure that the developer has satisfactorily provided for excavation and recording, either through voluntary agreement with archaeologists or, in the absence of agreement, by imposing an appropriate condition on the planning permission.

3.2 Regional Guidance: The London Plan

3.2.1 The over-arching strategies and policies for the whole of the Greater London area are contained within the Greater London Authority's London Plan (July 2011) which includes the following statement relating to archaeology:

Policy 7.8

Heritage assets and archaeology

Strategic

A London's heritage assets and historic environment, including listed buildings, registered historic parks and gardens and other natural and historic landscapes, conservation areas, World Heritage Sites, registered battlefields, scheduled monuments, archaeological remains and memorials should be identified, so that the desirability of sustaining and enhancing their significance and of utilising their positive role in place shaping can be taken into account.

B Development should incorporate measures that identify, record, interpret, protect and, where appropriate, present the site's archaeology.

Planning decisions

C Development should identify, value, conserve, restore, re-use and incorporate heritage assets, where appropriate.

D Development affecting heritage assets and their settings should conserve their significance, by being sympathetic to their form, scale, materials and architectural detail.

E New development should make provision for the protection of archaeological resources, landscapes and significant memorials. The physical assets should, where possible, be made available to the public on-site. Where the archaeological asset or memorial cannot be preserved

or managed on-site, provision must be made for the investigation, understanding, recording, dissemination and archiving of that asset.

LDF preparation

F Boroughs should, in LDF policies, seek to maintain and enhance the contribution of built, landscaped and buried heritage to London's environmental quality, cultural identity and economy as part of managing London's ability to accommodate change and regeneration.

G Boroughs, in consultation with English Heritage, Natural England and other relevant statutory organisations, should include appropriate policies in their LDFs for identifying, protecting, enhancing and improving access to the historic environment and heritage assets and their settings where appropriate, and to archaeological assets, memorials and historic and natural landscape character within their area.

3.3 Local Guidance: Archaeology in the Borough of Sutton

3.3.1 This study aims to satisfy the objectives of the London Borough of Sutton which fully recognises the importance of the buried heritage for which they are the custodians. The Unitary Development Plan of April 2003 contains the following policies relating to archaeology:

ARCHAEOLOGICAL SAFEGUARDS

6.212 In some parts of the Borough extensive archaeological remains have been discovered. A considerable number of sites have been investigated by the Museum of London in the past decade, and several further sites have been identified for investigation in the immediate future. Archaeological remains constitute the principal surviving evidence of the Borough's past, and the Council considers that the preservation of these remains is a legitimate objective against which the needs of development should be balanced and assessed. Statutory safeguards exist for the protection of monuments of national importance under the provisions of the Ancient Monuments and Archaeological Areas Act 1979. There are currently 6 Ancient Monuments Scheduled under this Act in the Borough. In addition, 21 Archaeological Priority Areas (APAs) have been identified by the Greater London Archaeological Advisory Service (GLAAS, English Heritage). Figure 6.3 shows the location of APAs within the Borough and a brief description of each Area is set out in 134 Appendix 2, Schedule 2.2. Archaeological Priority Areas contain concentrations of ancient remains, and therefore within these Areas, the Council's archaeological policies will be strictly applied.

6.213 It must be stressed that the APAs shown in Figure 6.3 do not contain all the ancient remains in the Borough, and therefore it may be necessary for developers to undertake initial archaeological investigation outside these Areas, depending on the archaeological potential and the nature of the development scheme. Developers are advised that English Heritage maintains the Sites and Monuments Records for London, and the Museum of London also maintains information on archaeological finds and extractions and may be consulted.

6.214 The Council will have special regard to the Beddington Roman Villa APA, which includes the Scheduled Ancient Monument of the Beddington Roman Villa and where several years of archaeological excavation have revealed evidence of the late Iron Age and Roman period. Adjoining this Area is the Wandle Gravels APA which has received planning permission for gravel extraction and subsequent restoration. Unlike other forms

of development, mineral extraction may only be carried out where mineral reserves are located. Therefore, in these APAs, prior to commencement of any approved gravel extraction works, the Council will seek to ensure that there is proper archaeological field evaluation with the subsequent excavation and recording of the archaeological remains discovered.

Archaeological Field Evaluations

6.215 PPG15 advises that the desirability of preserving ancient remains and their settings is a material consideration when determining a planning application. Therefore, in accordance with Policy G/BE3 and in order to prevent the destruction of remains prior to archaeological excavation and recording:

Policy BE40 - Archaeological Field Evaluations

BEFORE DEVELOPMENT PROPOSALS ARE CONSIDERED WITHIN ARCHAEOLOGICAL PRIORITY AREAS (AS SHOWN ON THE PROPOSALS MAP AND AS SET OUT IN APPENDIX 2, SCHEDULE 2.2) THE COUNCIL MAY REQUIRE A PRELIMINARY ARCHAEOLOGICAL FIELD EVALUATION TO BE UNDERTAKEN, IN ACCORDANCE WITH A WRITTEN SCHEME OF INVESTIGATION TO BE APPROVED IN ADVANCE BY THE COUNCIL. WHERE THERE ARE REASONABLE GROUNDS TO BELIEVE THAT ARCHAEOLOGICAL REMAINS OUTSIDE ARCHAEOLOGICAL PRIORITY AREAS MAY BE UNDER THREAT, THE COUNCIL WILL, WHERE APPROPRIATE, REQUIRE AN ARCHAEOLOGICAL FIELD EVALUATION TO BE UNDERTAKEN ON SITES OVER 0.4 HECTARES (1 ACRE), PRIOR TO DEVELOPMENT.

Reasoned Justification of Policy BE40

6.216 PPG16 advises that, where there is evidence of important archaeological remains, it is reasonable for the Council to request the prospective developer to arrange for an archaeological field evaluation. This form of evaluation is normally rapid and inexpensive, involving a ground survey and small scale trial trenching. The results of such assessments should accompany the planning application in order to enable a reasonable and informed planning decision to be made. It is considered important that this is done as early as possible in the planning process when there is still flexibility in the decision to progress with development and at a stage when alterations can be made to a scheme to ensure protection of ancient remains.

6.217 APAs are not a definitive statement of the extent of the Borough's archaeological legacy. PPG16 advises developers to consult English Heritage more generally on non-scheduled sites. Therefore, the Council will require similar information and safeguards for development proposals outside designated APAs on the basis of specialist advice as to whether an area may contain archaeological remains. Further advice on the archaeological significance of a particular site/area, or details of the information required to support an application, can be obtained from GLAAS.

6.218 Policy BE40 will not be applied to small development proposals such as minor extensions or single domestic dwellings. However, in cases where larger development proposals lie within APAs, the Council will expect developers to have evaluated the archaeological potential of the site and set out a programme of action to protect ancient remains before planning permission is granted.

Preservation of Remains

6.219 In accordance with Policy G/BE3:

Policy BE41 - Preservation of Remains

THE COUNCIL WILL SEEK TO ENSURE THAT THE MOST IMPORTANT ARCHAEOLOGICAL REMAINS AND THEIR SETTINGS ARE PERMANENTLY PRESERVED (PREFERABLY FOR PUBLIC ACCESS AND DISPLAY) AND, WHERE APPROPRIATE, ARE GIVEN STATUTORY PROTECTION.

Reasoned Justification of Policy BE41

6.220 The Council considers that preservation 'in situ' is the preferred heritage option and negotiation between the developer and a recognised archaeological organization regarding design of foundations, land use and management can often be successful in achieving this end.

Provision is made in the Ancient Monuments and Archaeological Areas Act 1979 for statutory protection of sites through designating APAs or by obtaining Scheduled Monument consent from the Secretary of State.

Agreements and Conditions

6.221 To ensure the preservation of nationally important remains and in accordance with Policy G/BE3:

Policy BE42 - Archaeological Agreements

THE COUNCIL WILL SEEK TO ENSURE, BY WAY OF AGREEMENT WITH THE DEVELOPER, THAT EXCAVATION AND RECORDING OF IMPORTANT ARCHAEOLOGICAL REMAINS AND OTHER ASSOCIATED WORKS ARE UNDERTAKEN PRIOR TO DEVELOPMENT.

Reasoned Justification of Policy BE42

6.222 PPG16 indicates that there should be a presumption in favour of the physical preservation of nationally important remains whether scheduled or not. As a result of the extensive archaeological remains, of both local and national importance, which have been discovered in the Borough, the Council is aware that there may be instances where the preservation 'in situ' of locally important remains is the preferred option. The advice of English Heritage (GLAAS) and, where appropriate, the Museum of London should be sought on the intrinsic importance of the remains and the extent to which remains can or should be preserved. Where preservation 'in situ' is not justified, PPG16 notes that it is reasonable for the planning authority to satisfy itself before granting planning permission, that the developer has made appropriate provision for excavation and recording of remains. This may be achieved through voluntary planning agreements, including Section 106 Agreements. All agreements should take account of the British Archaeologists' and Developers' Code of Practice. Model agreements have also been produced by the British Property Federation.

6.223 Such agreements could cover arrangements for the funding of archaeological work. Where the developer is a non-profit making community body and is unable to raise the funds to provide for excavation and subsequent recording without undue hardship, an application for financial assistance may be made to English Heritage. Agreements should also provide for the subsequent publication of the results of the excavation.

Policy BE43 - Investigation of Archaeological Sites

WHEN GRANTING PLANNING PERMISSION THE COUNCIL MAY IMPOSE CONDITIONS TO ENSURE THAT EXCAVATION IS UNDERTAKEN PRIOR TO COMMENCEMENT OF DEVELOPMENT. THIS WORK SHOULD BE UNDERTAKEN IN ACCORDANCE WITH A WRITTEN SCHEME OF INVESTIGATION TO BE APPROVED IN ADVANCE BY THE COUNCIL.

Reasoned Justification of Policy BE43

6.224 In the absence of an agreement to ensure archaeological work is undertaken, PPG16 states that it is reasonable for the Council to impose conditions on the planning permission to ensure work is carried out. Conditions may also be imposed to prohibit the commencement of development until a programme of archaeological work has been implemented in accordance with a written scheme of investigation agreed by the Council.

6.225 It should be noted that there may be occasions when the presence of archaeological remains only becomes apparent once development has commenced. The Secretary of State, on English Heritage's advice, may deem the archaeological remains to be of national importance and has power to schedule the remains. In that event, developers would need to seek separate Scheduled Monument consent before continuing work. It is also open to the planning authority to revoke planning permission if a voluntary agreement cannot be reached to deal with the situation.

3.4 Site Specific Background

- 3.4.1 The archaeological potential of the site had been demonstrated both by an evaluation carried out in 2009 by ASE¹⁰ and by previous excavation undertaken on the adjacent site at Ashcombe House in 2008 which formerly formed part of the War Memorial Hospital complex¹¹. Planning permission was granted (London Borough of Sutton Reference No. C2011/64809/FUL) but with conditions (Nos. 6, 7) relating to archaeology which stated:
- 3.4.2 (6) No development shall take place until the applicant has secured the implementation of a programme of archaeological work and field evaluation in accordance with a written specification and timetable to include an open-area of excavation and recording of the eastern section of the site including Trenches 1 and 2 as identified in the Archaeological Impact Assessment dated August 2011 and trenching under the sections of building to be removed, has been submitted to and approved in writing by the Local Planning Authority has been submitted to and approved by in writing. The development shall only take place in accordance with the detailed scheme pursuant to this condition. The archaeological works shall be carried out by a suitably qualified investigating body acceptable to the Local Planning Authority.

Following on from the evaluation has secured the implementation of;

- i. Any safeguarding measures, identified in the evaluation as necessary, to ensure preservation in situ of important archaeological remains and/or
- ii. Further archaeological investigation in accordance with a timetable which has previously been submitted to and approved in writing by the Local Planning Authority.
- (7) The developer shall afford access at all reasonable times to any archaeologist nominated by the Local Planning Authority or English Heritage and shall allow that person to observe the excavations and record items of interest and finds. The developer shall inform the Local Planning Authority and English Heritage of the start date of the archaeological investigations and the demolition of those sections of the building hereby approved, not less than two weeks before the commencement of such works.

¹⁰ Dawkes, G 2009 *An Archaeological Evaluation at Carshalton War Memorial Hospital, The Park, Carshalton, Sutton* Unpublished ASE report

¹¹ Killock, D 2012 An Iron Age and early Romano-British farmstead at the War Memorial Hospital, Carshalton *London Archaeologist* Vol 13 No 4

4 **Geology and Topography**

4.1 Geology

- The underlying rock formation is composed of Upper Chalk¹². The weathered surface of the chalk 4.1.1 was exposed in all of the trenches recorded during the evaluation of the adjacent Ashcombe House site by PCA is 2008 and most of the trenches excavated by ASE during the evaluation of the War Memorial Hospital site in 2009. The eastern part of the Ashcombe House site appeared to have been levelled but the surface of the chalk was still higher in this area than the western part of the site. The highest level recorded on the top of the hill to the south during the 2008 PCA evaluation was 59.23m OD; this was in an area to the south of the 2012 excavation. A plateau, probably indicative of levelling, was suggested by the levels recorded to the east of this which were c. 59.15m OD. The surface of the chalk fell to the west and to the north. Natural subsoils were recorded at 58.84m OD during the 2009 evaluation in Trench 1 and fell to the south to a lowest point of 56.25m OD in Trench 7 which was located adjacent to the southern boundary of the site¹³.
- 4.1.2 Although the British Geological Survey suggests there are no drift deposits present on the site a considerable depth of subsoil was apparent in the western half of the site during the PCA evaluation of 2008. The trial work demonstrated that the sand and silt subsoil reached a thickness of 0.55m further to the west but the area of excavation located on the top of the hill was underlain almost exclusively by chalk. This again suggested that levelling had taken place on the eastern side of the hilltop where this deposit was not extant. The subsoil was composed of a reddish brown fine sandy silt. A subsoil similar if not identical to this was exposed during the 2009 evaluation in Trenches 1 and 2 where it was described as a yellow-brown clay or yellow-brown clay and silt14. Subsequent excavation revealed a substantial depth of subsoil which capped the chalk across the entire area of the 2012 excavation. The composition of this deposit varied considerably, from yellowish brown sandy silt to a reddish brown mixture predominantly formed of silt and clay. The surface of the solid chalk undulated throughout the area investigated but it was clear from the sections exposed in the pits that the subsoil reached depths of 0.60-0.80m above the chalk.

4.2 **Topography**

Although the site lies on a chalk hilltop, the geology of the surrounding area is complex and has 4.2.1 had a considerable impact on human development in the area. The area to the north of the site is

¹² British Geological Survey Sheet 257 South London

¹³ Dawkes, G 2009 An Archaeological Evaluation at Carshalton War Memorial Hospital, The Park, Carshalton, Sutton Unpublished ASE report ¹⁴ Dawkes, G 2009

covered by London Clay and the sand, silt and gravel deposits of the Thanet, Reading, Woolwich and Blackheath beds¹⁵. These water-bearing strata supported streams flowing north from the Downs and could provide a water source for wells whereas the depth of the chalk usually precluded this. The gravel terraces of the upper Wandle valley are also located to the north and east of the subject site.

- 4.2.2 The natural slope rises from the west of the site to the east and from the north to the south. The study site is situated very close to, if not on, the highest point of the hill which slopes down to the east as it crosses Carshalton Park.
- 4.2.3 The Ordnance Survey map of the area shows that the site occupies a small but well-defined hilltop on the northern edge of the chalk escarpment. The height of the land that stretches to the east toward Croydon and west toward Sutton is fairly consistent with values of c. 50m OD being common throughout the area. The land to the south of the site rises gradually but consistently to heights of up to 140m before falling sharply into the Chipstead valley.
- 4.2.4 The hilltop on which the site is situated offers a panoramic view to the north over parks and heathlands and could be seen as a strategic point close to the upper reaches of the Wandle. The ridge of high ground that runs from Sydenham to South Norwood provides the only interruption to the view to the north-east.

¹⁵ Adkins and Needham 1985, Fig 17

5 Archaeological and Historical Background

5.1 Introduction

5.1.1 The archaeological background to the site was covered in the Desk Based Assessment prepared for the adjacent Ashcombe House in 2008, it is not proposed to reproduce all of the research contained in that document¹⁶. Some detail is given regarding the later prehistoric and Roman periods as features dating to these periods were represented on the site. Additional material which supplements the findings of the Desk Based Assessment has been added by the author.

5.2 Prehistoric

- 5.2.1 The site lies at the junction of two distinct geological areas where the chalk uplands of the Downs meet the river valley of the upper Wandle which is principally cut through sands and gravels but also passes through areas of London Clay. Both of these areas have produced a wide array of finds dating to the later prehistoric period and the Bronze Age in particular.
- 5.2.2 A relatively well documented late Bronze Age site is located at the former Queen Mary's Hospital, c. 1.5km to the south of the site. This consists of a circular enclosure defined by a ditch c. 150m in diameter. It is probable that a bank once stood adjacent to the ditch but that levelling of the hilltop has destroyed all trace of this. The monument was first investigated in 1903-04, partially excavated again in 1937 and 1939¹⁷ and more recently investigated in 1999¹⁸. The abundant finds were typical of the remains of the later prehistoric period in the area surrounding the site.
- 5.2.3 An important late Bronze Age ritual enclosure was excavated on the gravel terrace at Westcroft Road, c. 500m to the northwest of the study site¹⁹. To the east of the Westcroft Road site further evidence of Late Bronze Age or early Iron Age occupation at the base of the chalk escarpment had previously been discovered at the Beddington sewage works site, situated some 4km to the northeast of Ashcombe House, where a field system demarcated by ditches was unearthed along with pits and postholes dating this period. Many of the finds recovered from this site were comparable with those found at the Queen Mary's Hospital site. Extensive evidence of Bronze Age field systems has been also recovered from a succession of sites in the upper Wandle Valley in the area

¹⁶ Darton, L 2008 *Archaeological Desk Based Assessment Land at Carshalton War Memorial Hospital The Park Carshalton CgMs Consulting* unpublished document

¹⁷ Both of these interventions were documented in Adkins and Needham 1985

¹⁸ Groves, J and Lovell, J 2002 Excavations within and close to the Late Bronze Age enclosure at the former Queen Mary's Hospital, Carshalton, 1999 *London Archaeologist* Vol 10 No 1 13-19

¹⁹ Proctor, J 1999 Late Bronze Age/Early Iron Age placed deposits from Carshalton London Archaeologist Vol 9 No

- immediately to the north of the chalk escarpment²⁰. The War Memorial Hospital was built on the crest of this escarpment which looks out over the flat clay and gravel river valley below.
- 5.2.4 A late Bronze Age or early Iron Age ditch and three late Bronze Age pits were found at Carshalton Park House only 100m to the north of the site.
- 5.2.5 More recent excavations carried out by Wessex Archaeology in the environs of the Queen Mary Hospital site at Orchard Hill have demonstrated that not only was there considerable evidence for the occupation of the site in the Late Bronze Age/Early Iron Age period but it was also clear that a substantial settlement had existed there in the Late Iron Age and Early Roman periods. A trackway dating to the earlier period was identified. The excavation demonstrated that a large enclosure demarcated by a ditch was established, probably in the Late Iron Age, and renewed on at least two occasions. This feature was surrounded by pits some of which were extremely large and many which were characterised by placed or 'structured' deposits consisting of animal bones or complete animal burials and in three cases human neonates²¹.
- 5.2.6 Although the site at Beddington is perhaps better known for the later Roman villa complex, the same excavation produced extensive evidence of a late Iron Age settlement. Roundhouses and associated features were recorded within an enclosure ditch. The small settlement was probably in use during the 1st century BC and continued to be occupied into the 1st century AD, possibly into the early part of the Roman period²².
- 5.2.7 The results of the evaluation and excavation undertaken by PCA in 2008 on the adjacent Ashcombe House site demonstrated the presence of substantial pits dating to the Middle Age. These may have been used as grain storage silos and almost certainly indicated that a small settlement or farmstead stood close to if not on the site.

5.3 Roman

5.3.1 Although the origins of many of the sites included in this section of the document undoubtedly lay in the late Iron Age they are discussed here as they continued to be occupied after the Roman Conquest of Britain. In some cases these sites may only have been established after the invasion took place but current dating techniques cannot demonstrate whether this was the case or not. In most cases the arrival or the Roman rulers appears to have very little impact on the rural population in the decades leading up to AD 100 and their way of life appears to have continued

²⁰ Howell, I 2005 *Prehistoric landscape to Roman villa, Excavations at Beddington, Surrey, 1981-7* MoLAS Monograph Series 26 50

²¹ Hunnisett, C 2011 Orchard Hill, Carshalton London Borough of Sutton Post-excavation Assessment Report Unpublished Wessex Archaeology report

²² Howell, I 2005

largely unaltered with the exception of the acquisition of a few Roman styled goods such as pottery.

- 5.3.2 The excavation undertaken at the Ashcombe House site documented the presence of a multitude of pits dated to the Late Iron Age/Early Roman transition. The settlement that had previously been established in the Middle Iron Age was probably abandoned but was then re-established. Analogous sites dating to the decades around the conquest can be found along the edge of the chalk escarpment from east Surrey to west Kent where the dip-slope of the Downs meets the clay basin or where the chalk is bisected by the sands and gravels of the minor river valleys that lead north to the Thames. The closest parallel is perhaps found at The Looe, Ewell. This transitional Late Iron Age/early Roman site is also situated on a spur of the North Downs which lies at c. 85m OD. Among the principal features recorded there were three large storage pits of identical form and similar dimensions to those seen at Carshalton²³. Although the Ashcombe House site did not produce clear evidence of placed deposits in the backfilling of the storage pits the similarity of the topography, feature types and dating is striking.
- 5.3.3 Sites dating to the Late Iron Age and early Roman period have been located on the chalk dipslope a little to the south and east of Carshalton at Kings Wood²⁴ and Atwood School Sanderstead²⁵. A little to the south of these sites further evidence of transitional material was recorded at Warlingham²⁶. Further to the south and west another site which closely resembles the War Memorial Hospital has long been known from Hawk's Hill, Leatherhead. The storage pits recorded at the site are very similar to those seen at Carshalton²⁷. Perhaps more importantly the site has also produced material dated to the Middle Iron Age as well as later transitional finds. The initial investigations reported on by Hastings identified the grain storage area but no structures. However, more recent work by Archaeology South-East only 80m from the original excavation has revealed another group of grain storage pits and a roundhouse²⁸.
- 5.3.4 Cotton pointed out the close parallels between the Looe and sites in west Kent such as Farningham Hill and Keston and it appears from the range of finds and features found at Carshalton that the site forms part of a Late Iron Age settlement pattern on the chalk dipslope linked to a cultural grouping spanning west Kent and east Surrey up to the Mole valley²⁹. It has

²³ Cotton, J Prehistoric and Roman Settlement in Reigate Road, Ewell: fieldwork first conducted by Tom K. Walls 1945-52 *Surrey Archaeol Collect* Vol 88 1-42 fn 6

²⁴ Little, R I 1961 The excavation of a Romano-British settlement in Kings Wood, Sanderstead *Surrey Archaeol Collect* 58 35-46

²⁵ Little, R I 1964 *The Iron Age and Romano-British site, Sanderstead 1960* Surrey Archaeol Collect 61 29-38 See also Batchelor, G 1990 "Friends, Romans, School children!"-archaeology and education in Croydon *London Archaeologist* Vol 6 No 8 199-205

²⁶ Hayman, G N 1996 Discoveries of Late Iron Age and Roman date at Farleigh Court Golf Course, near Warlingham, Surrey *Surrey Archaeol Soc Bull* 299 5-10

²⁷ Hastings, F A 1965 Excavation of an Iron Age farmstead at Hawks Hill, Leatherhead *Surrey Archaeol Collect* 57 1-44 particularly Figs 3 and 4

²⁸ http://www.archaeologyse.co.uk/04-Projects/Surrey/Surrey.htm

²⁹ Hanworth, R 1987 The Iron Age in Surrey in Bird, J and Bird, D G *The Archaeology of Surrey to 1540* 139-164

also been suggested that this area looked north toward the Thames although in the case of south-east London in particular it is difficult to see how the downland sites are linked to the Thames basin as so few sites dating to the Iron Age have been found in the London boroughs that cover that area^{30.} In the case of Ashcombe House the location of the site offered particular geographical advantages as it linked the chalk upland and the resources which it offered with the gravel terraces of the upper Wandle valley.

- 5.3.5 An Iron Age farmstead site was apparently excavated in Beddington Park in 1992-93 but the entire archive for the site is now lost³¹. This site would have been within walking distance of the Carshalton excavation and it is great pity that more is not known of it. However, a little further afield a farmstead dating to the transitional period existed at Beddington before the Roman villa complex was established. Some of the pottery indicated that the site was occupied in the 1st century BC as well as in the decades around the conquest. Middle Iron Age pottery may have been present but the evidence for a settlement dating to the period is slight. The finds assemblage from Beddington, as with The Looe, has also been linked to Farningham and Keston³². The Beddington villa site could probably have been seen from the hilltop where the War Memorial Hospital stood and it is perfectly feasible that the upper reaches of the Wandle were used for watering cattle belonging to the Carshalton settlement. This proximity would almost certainly have allowed direct contact between the edge of the upland and river valley.
- 5.3.6 Remains interpreted as a possible Roman villa were recorded at West Street, Carshalton³³. The early phases of the building, furnished with stone walls and a tessellated floor, has been dated to the 1st to 2nd century and rebuilding work took place in the 2nd century³⁴.
- 5.3.7 The nearest known Roman road, from London to Portslade, passes to the east through Croydon. Stane Street, the Roman road from London to Chichester, passes to the west through Ewell.

³⁰ Greenwood, P 1997 Iron Age London: some thoughts on Current Knowledge and Problems 20 years on *London Archaeologist* Vol 8 No 6 pp153-161

³¹ Howell, I 2005 *Prehistoric landscape to Roman villa, Excavations at Beddington, Surrey, 1981-7* MoLAS Monograph Series 26 p50

³² Howell, I 2005 fn 25 pp18-20

³³ Bird, J 2004 Surrey in the Roman Period in: Cotton, J Crocker, G and Graham, A Aspects of Archaeology & History In Surrey: towards a research framework for the county Fig 5.5 p70

³⁴ Source: http://www.museumoflondon.org.uk/laarc/new/siteinfo.asp?id=17295&code=WEC02

6 Archaeological Methodology

- As far as was practicable the excavation was carried out in accordance with the Written Scheme of Investigation submitted to and approved by the London Borough of Sutton before works commenced³⁵. Essentially the scheme focused on the excavation of an area destined to become a car park for the new residential development. This car park comprises an area to the east of the old hospital building and includes the footprint formerly occupied by the south-eastern wing which was demolished immediately prior to the excavation commencing.
- 6.2 The open area excavated measured a maximum of c. 22m east-west by c. 26m north-south though the shape of the trench was highly irregular (Fig. 2). This was principally because the trench respected the root systems of nearby protected trees which produced a pronounced arc on the southern limit of excavation and a semi-circular indentation along the eastern side of the trench.



Plate 1: Area of excavation facing southeast The irregular shape of the trench is abundantly apparent in this shot

³⁵ Mayo, L 2012 Written Scheme of Investigation for an Archaeological Evaluation and Excavation Land at Carshalton War Memorial Hospital, Sutton Unpublished CgMs Consulting document

- 6.3 The open area was reduced to the appropriate level using a 360° mechanical excavator. Over the eastern part of the trench the overburden which sealed the subsoils and archaeological features was composed of topsoil which in places was nearly 1m thick. To the west the impact of the demolition that had preceded the excavation was obvious and the overburden was composed of mixed topsoil and demolition debris which had been thrown back into the foundation trenches after the concrete had been removed.
- Once the quantity and complexity of the archaeological resource became apparent a strategy was devised to locate, date and sample the remains present. Animal burials within pits became apparent early in the excavation and where these were present pits were fully excavated to expose, record and recover the complete animals and any associated artefacts and ecofacts. Pits which had apparently been backfilled without animal burials being present were half sectioned to recover dating and environmental evidence. Pits which had previously been partially excavated and environmentally sampled during the evaluation were not generally sampled a second time unless they exhibited specific new aspects that required further detailed assessment.
- The excavation strategy being adopted was communicated to Diane Abrams of GLAAS, English Heritage for her approval or comment.
- The depth of topsoil encountered was considerably greater than had been expected amounting to around a metre in most areas and being considerably more in places. The southern limit of excavation was also covered by a notable depth of demolition debris than had not been cleared after the works which preceded the excavation had finished. This, combined with severe wet weather at the beginning of the excavation, would have made spoil removal from the area of excavation using wheelbarrows and staging boards both extremely arduous and hazardous. An area located in the north-west corner of the trench which had previously been impacted by a drainage system and the removal of concrete foundations which had supported the demolished wing was cleaned and checked for the possible presence of archaeological features or deposits. None were evident and a demarcated area of the trench was then used as for dumping spoil which was worked into a ramp that allowed spoil to be removed from the trench.
- 6.7 The fieldwork and reporting was carried out according to the relevant methodologies, as follows:
- Archaeological Guidance Paper 3: Standards and Practices in Archaeological Fieldwork In London (GLAAS 1998);
- Archaeological Guidance Paper 4: Archaeological Reports (GLAAS 1998);
- The Management of Research Projects in the Historic Environment (MoRPHE) (English Heritage 2006)
- 6.8 Pre-Construct Archaeology Limited is a Registered Archaeological Organisation (number 23) with the Institute of Field Archaeologists and operates within the Institute's 'Code of Practice'.

- All recording systems adopted during the investigations were fully compatible with those most widely used elsewhere in London; that is those developed out of the Department of Urban Archaeology Site Manual, now published by Museum of London Archaeology (MoLAS 1994). Individual descriptions of all archaeological and geological strata and features excavated and exposed were entered onto pro-forma recording sheets. All plans and sections of archaeological deposits were recorded on polyester based drawing film, the plans being at scale of 1:20 and the sections at 1:10. The OD heights of all principle strata were calculated and indicated on the appropriate plans and sections.
- 6.10 A photographic record of the investigations was made using colour slide, black and white film and digital formats.
- 6.11 Levels were calculated from a Temporary Bench Mark with a value of 58.21m OD. The TBM was established by transferring the value of 59.49m OD from the Bench Mark located on the southern brick pier of the entrance on The Park.
- 6.12 The complete site archive including site records, photographs and finds will be deposited at the London Archaeological Archive Research Centre, (LAARC) under the site code CST 12.

7 ARCHAEOLOGICAL SEQUENCE

7.1 Phase 1 Natural Deposits

7.1.1 One particularly notable difference between the excavation previously undertaken at Ashcombe House and that carried out in 2012 concerned the underlying geology. The earlier excavation had encountered weathered chalk immediately below the topsoil. Though the surface of the chalk was weathered and pockets of yellowish brown sand and silt were evident in places there was no appreciable capping above the chalk. The 2008 evaluation had demonstrated that the sand and silt subsoil reached a thickness of 0.55m further to the west but the area of excavation located on the top of the hill was underlain almost exclusively by chalk.



Plate 2: Pit [26] showing the depth of subsoil above solid chalk Scale 1m

A substantial depth of subsoil capped the chalk across the entire area of the 2012 excavation. The composition of this deposit varied considerably, from yellowish brown sandy silt to a reddish brown mixture predominantly formed of silt and clay. The surface of the solid chalk undulated throughout the area investigated but it was clear from the sections exposed in the pits that the subsoil reached depths of 0.60-0.80m above the chalk. Some slight terracing had taken place

when the wing which had previously extended from the hospital had been built but the impact of this, outside of the footprint of the foundation trenches, had been negligible. The hill slopes naturally from south to north and from east to west. The highest levels recorded on the surface of the subsoil were 59.02m OD in the south-east corner of the trench, 58.37m OD in the south-west, 58.68m OD in the north-west and 58.18m OD in the north-east.

7.2 Phase 2 Middle to Late Iron Age Features (Fig. 3)

- 7.2.1 The vast majority of the features placed into this phase contained pottery dated to the Middle Iron Age; for the most part this equated to ceramics dated c. 400-200 BC. Some of the fabrics recovered had clearly been produced in earlier periods but were residual finds in later assemblages. These included a single grog tempered sherd that might have been produced in the Early Bronze Age and four sherds from three features that date to the Late Bronze Age or Earliest Iron Age, c.1100-600 BC. Only one feature is included in this group which might have dated to an earlier period. This is a small pit [18] which contained four sherds of Early Iron Age pottery but these had a combined weight of only 11g, the sherd size must clearly have been very small. This feature might be a relic from an earlier phase of activity but the quantity of pottery recovered could equally have resulted from residuality.
- 7.2.2 There is little doubt that a background of earlier activity was evident, particularly dating to the Late Bronze Age and Early Iron Age periods. Given the absence of features that can be securely dated to these earlier periods it is not possible to speculate on the form any occupation or frequentation of the area may have taken. The site itself may not have been permanently occupied but recent work at Orchard Hill c. 1.5km to the south has demonstrated that a settlement existed there in the Late Bronze Age to Early Iron Age³⁶. The surrounding area clearly supported a population in this early period and the site must have been frequented for even small amounts of pottery to be deposited but more positive evidence of permanent settlement was not apparent.
- 7.2.3 A small number of features in this phase also contain pottery that has been dated to a slightly later period than the bulk of the Middle Iron Age material. However, these features did not contain the transitional very Late Iron Age/Early Roman pottery which characterised the pits in the later phase. The only exception to this was pit [36] which contained a mixed assemblage that included one later Iron Age sherd. The dating of this feature is discussed in detail below.
- 7.2.4 Essentially the Middle Iron Age phase is composed of 16 pits of various sizes. The vast majority of these were located to the east of a series of north-south aligned linear cuts that were found in the centre of the open area. 11 of these pits were concentrated in a group located in the north-west of the excavated area. A twelfth pit [37] was located only 4m from the most distant of the

³⁶ Hunnisett, C 2011 Orchard Hill, Carshalton London Borough of Sutton Post-excavation Assessment Report Unpublished Wessex Archaeology report

- group of 11 and could be included in it, especially as it contained a cattle skull which suggested that it was contemporary with the group which was characterised by the deposition of animals remains.
- True outliers to the concentration of pits evident in the north-west were pits [68], [86] and [74]. Pit 7.2.5 [68] was the only pit located to the west of the linear cuts found in the centre of the excavated area. This feature measured a maximum of 1.20m in diameter and only 0.12m deep. No pottery was recovered from the fill which only contained a few fragments of burnt flint. Pit [86] was located in the southern part of the trench; it measured a maximum of 1.40m in diameter and was 0.43m deep. The highest level recorded on the top of the cut was 58.40m OD. Only two very small sherds of Middle Iron Age pottery were recovered from the fill which contained an elevated quantity of burnt flint. Pit [74] was the most substantial of the outliers; it was located in the southeast corner of the excavated area in an area dominated by Late Iron Age/Early Roman pits. Unlike the majority of the features which surrounded it pit [74] did not contain any pottery or other artefacts dated to the later period. A small but consistent Middle Iron Age pottery assemblage was complemented by a fired clay object which might be an example of a 'Belgic brick'. The latter is possibly a piece of oven or kiln furniture. Pit [74] measured 1.30m in diameter and was 1.03m deep. This pit was located higher up the slope than either of the features described above; the top of the cut was recorded at 59.04m OD. Many of the larger pits have been interpreted as grain storage silos and this feature could have been used for this purpose.
- 7.2.6 The fragmentary base of another pit [66] was recorded adjacent to the eastern limit of excavation and only 4m south of the nearest pit [23] which could be considered to be part of the concentration located in the north-west of the excavated area. Pit [66] had been impacted by modern machine clearance/subterranean demolition of foundations and drains located in the area and had been divided into two pieces by a modern pipe trench. As recorded the feature had a diameter of 1.06m and was 0.29m deep. The fill [65] contained a small pottery assemblage of six sherds dating from the Middle to Late Iron Age, or c. 400-100 BC.
- 7.2.7 The pit containing a cattle skull [37] mentioned above was located a little to the south-west of the main group of pits. This feature had been partially truncated by a trench excavated during the removal of the foundations of the recently demolished wing of the hospital but survived well enough to be characterised and dated. The maximum diameter of the pit was 1.15m and it measured 0.43m deep, though it may originally have been somewhat deeper. The fill [36] contained a small pottery assemblage consisting of seven sherds, one of which was apparently part of a handmade vessel produced in the Late Iron Age. This sherd has been dated to after 50 BC which would normally have placed the pit which contained it in the later Phase 3. However, this single sherd could be intrusive, the remainder of the pottery assemblage dated to the Middle Iron Age. This feature had also been impacted by modern intrusions which increased the

possibility of later material being introduced to an earlier feature. The animal bone assemblage was not large but did include a near complete cattle skull which had not apparently been utilised for food or had the horn cores removed, the latter representing a non-food resource. A single animal skull placed in a pit might not be taken as evidence of ritual or 'structured' deposition but in the case of pit [37] it is distinctly possible that the presence of the cattle skull was not simply indicative of rubbish disposal. A large number of the features found in the group located to the north-west contained either complete animal skeletons or large assemblages of animal or human bones that had clearly been deposited in a manner that was indicative of ritual observance. It would appear that pit [37] formed part of this group.



Plate 3: Dog skeleton [17] Scale 0.10m, facing south

7.2.8 The near complete skeleton of a dog was found in pit [21] which was located adjacent to and extended beyond the northern limit of excavation (Plate 3 above). This individual presented some quite remarkable characteristics apart from its apparent use at death as a form of dedication to the spirits. The dog had clearly suffered serious injuries as a result of one or more incidents during its lifetime but had been cared for during and probably after its recovery. The major injury had consisted of a broken left hind leg which had healed but would have left the animal with a shortened leg and probably a serious limp (see Appendix 8). The animal clearly could not have survived during the period of its recovery without being cared for and might well have needed

looking after once the injury had healed. Whilst some aspects of what were apparently sacrificial offerings made by killing and depositing animals in pits might appear rather gruesome to modern archaeologists it appears that the dog buried in pit [21] was given considerable attention before being buried after dying in old age.

7.2.9 The pit fill [16] contained a relatively abundant pottery assemblage, by the standards of the site, consisting of 13 sherds which date to the Middle Iron Age. Pit [21] measured a maximum of 1.21m in diameter and as seen was 0.25m deep. The top of the cut was recorded at 58.42m OD. The dimensions of the pit preclude its use for grain storage, this feature simply was not deep enough to function in that way. Although there may well have been an element of ritual that connects this pit with those around it, it would appear that pit [21] was dug simply to provide a place of interment for the dog. This in itself might be notable enough in an era when keeping and caring for pet animals was a very different concept from the one many people have today. The fate of some of the animals found in pits located nearby was likely to have been rather less pleasant.



Plate 4: Calf skeleton [28] Scale 0.80m. Facing south

7.2.10 A calf around six months old had been buried in the base of pit [26] (Plate 4) which was located only 1m to the south and west of the dog burial [17]. Although the position of the calf was rather

- contorted almost all of the skeleton was present which suggested that it had not been used for the meat. However, cut marks on the forelegs suggested that the animal had been skinned before being deposited in the pit.
- 7.2.11 An area of burning was evident close to the forelimbs of the animal. An environmental sample was taken from this area which demonstrated the deposition of burnt bones from the foot of an adult sheep or goat. These bones might suggest either ritual feasting associated with the deposition of the calf or the placing of cooked animal parts in the pit. Whatever occurred this clearly was not simply a case of domestic refuse being disposed of when a convenient site became available. The fill [27] produced an assemblage of 15 pottery sherds dated to the Middle Iron Age.
- 7.2.12 Although the 'ritual' burnt area represented in the pit may not be connected to the quantity of burnt flint recovered from the feature the fill [27] produced the largest assemblage of burnt flint found in any of the features recorded during the 2012 excavation. The 36 fragments of burnt flint recovered weighed 2.149kg. The occurrence of a fragment of 'Belgic brick' and two further fragments of fired clay might also be connected to the burnt area and the elevated quantity of burnt flint found in this feature.
- 7.2.13 Not surprisingly pit [26] was a considerably larger feature than the shallow cut which held the dog [21] and may have functioned as a storage pit before being backfilled. Apart from the size of the feature it had been slightly undercut toward the base where it had been excavated into the solid chalk and had a noticeably bell-shaped profile (see Plate 2 above). The pit measured 1.20m in diameter at the top but was 1.50m across at the base and 1.02m deep. The top of the cut was recorded at 58.42m OD.
- 7.2.14 Pit [26] may once have been slightly deeper than was recorded during the 2012 excavation. It had previously been partially excavated by ASE during the evaluation undertaken in 2009; a value of 58.45m was given on the top of the feature³⁷. Although this feature had supposedly been bottomed this clearly had not been the case. The portion of the pit fill excavated by ASE contained a Neolithic flint flake, Middle Iron Age pottery and pieces of fired clay, some of them burnt daub.
- 7.2.15 The presence of the calf skeleton so close to the dog burial might be deliberate and significant. As will become apparent from the descriptions given below a remarkable array of animal remains was recovered from the pits concentrated in the north-west corner of the excavated area and though some features were relatively small and shallow even these had the potential to present significant evidence of structured deposition. Four or possibly five of the group of 12 pits might

³⁷ Dawkes, G 2009 *An Archaeological Evaluation at Carshalton War Memorial Hospital, The Park, Carshalton, Sutton* see Figure 3, Section 3 Unpublished Archaeology South-East report

- have been used for grain storage, the remaining seven pits almost certainly were too small and shallow for this purpose.
- 7.2.16 Pit [32] was located to the south and slightly to the east of the two pits which contained the complete animal burials. This feature would have been worthy of comment simply because of it's size, the pit measured 2.30m north-south by 2.00m east-west and was 1.43m deep. The fills of this feature also contained a remarkable array of animal bones which included seven lambs, six of which were neonates and parts of a calf in it's second year (Plate 5 below). The abundance of this assemblage, which came from fill [35] in the base of the pit, is all the more remarkable at this feature was one of the many that were half-sectioned and the animal bone assemblage represents only part of what was once deposited. The various fills of this feature produced an assemblage of 22 sherds of pottery all of which were dated to the Middle Iron Age. A relatively large quantity of burnt flint was also recovered; the 20 fragments found weighed 1.290kg.



Plate 5: Pit [32] with animal bone assemblage in base Scale 1m

- 7.2.17 Two considerably smaller and shallower pits, [25] and [23], were located to the north and south of the imposing pit [32]. Neither of these features contained any particularly noteworthy finds, both produced small assemblages of Middle Iron Age pottery.
- 7.2.18 A large pit [9] was located adjacent to, and extended beyond, the northern limit of excavation to the east of the pit which contained the dog skeleton [21]. As was the case with pit [26], pit [9] had

been partially excavated during the 2009 evaluation. As was also the case with pit [26] this feature had not been bottomed either. The pit measured 1.70m in diameter and was 0.72m deep; the top of the cut was recorded at 58.61m OD. The fill [8] contained a small assemblage of pottery dated to the Middle Iron Age. Although this pit was apparently unremarkable in many ways the portion of the fill excavated by ASE contained a horse's skull. When viewed in conjunction with the animal bone assemblage from the surrounding features this becomes a significant find and may be interpreted as a placed object, or evidence of structured deposition.

- 7.2.19 Another large pit of similar proportions [11] was found to the south of pit [9] adjacent to and continuing beyond the limit of excavation. As seen this feature measured a maximum of 1.60m in diameter and was 0.53m deep. The fills contained a small assemblage of animal bone, mostly cattle, and 12 sherds of pottery dated to the Middle Iron Age. 22 fragments of burnt flint weighing 900g were also recovered from the fills of this pit, one of the larger assemblages of this type found during the excavation.
- 7.2.20 Two smaller shallow pits, [2] and [4], were found between pit [9] in the north and pit [11] in the south. Neither of these features contained finds of particular note.
- 7.2.21 Two small pits were recorded to the east of the row of four pits described above. Pit [18] has been mentioned above as it contained a very small assemblage of Early Iron Age pottery. Though this material is probably residual there is a possibility that this pit was actually excavated in the earlier period. It measured 1.00m in diameter and was 0.13m deep. The top of the cut was recorded at 58.68m OD.
- 7.2.22 Pit [7] was located to the north of [18]. This feature had been partially excavated by ASE in 2009 (Trench 2 Context 2/005), it was notable for a collection of human longbones that had been collected and placed together in the pit. No new finds of human bone when the feature was revisited in 2012, a single sherd of Middle Iron Age pottery was recovered from the fill [6].
- 7.2.23 All of the pits discussed above, with the exception of pits [68] and [86], were located to the east of a group of north-south aligned linear cuts which were located in the central part of the excavation. Clearly the effects of erosion and terracing must have removed the upper parts of these features but it appears that they had once clearly defined the area in which the pits were excavated.. Although it is true that the area to the west of these linear features had been impacted by modern construction and, more severely, recent demolition the pits found to the east were deep enough to have survived later impacts but there was no evidence to suggest that a density of pits similar to that seen on the eastern half the site had even existed to the west. The linear features as seen were all very shallow and though the depth of topsoil through which they were originally cut is unknown the nearby pits penetrated 1m or more into the subsoils and chalk, compared to an average of around 0.25m for the linear cuts.

- 7.2.24 The most extensive of the linear features was cut [44] which measured 6.10m north-south by 0.75m east-west and was 0.24m deep. This feature had been truncated by the later Romano-British gully [42] which led to two fill numbers being allocated. Fill [43] contained two small sherds of residual pottery dated to the Late Bronze Age or Early Iron Age, c. 1100-600 BC whilst fill [45] contained a single large sherd of Middle Iron Age pottery. The dating evidence recovered from the feature itself is perhaps slight but there seems little doubt that the gully or ditch was respected as a boundary when the pits located to the east were excavated in the Middle Iron Age.
- 7.2.25 This gully had been truncated to the south by trenches excavated for the demolition of the concrete foundations that had once supported the hospital wing that stood in this area. The area which had been impacted in this way continued for another 9m to the south of the point at which the truncation occurred and the small remaining area to the south of this which fell within the excavated area had been terraced. Traces of this very shallow feature were therefore very unlikely to have survived further south than the point at which it was truncated. The gully had also been impacted to the north by a modern cut feature.
- 7.2.26 Traces of two smaller gullies were evident to the south of the demolition trench which had impacted [44]. Cut [88] was a small fragment of a feature that had clearly once continued further to the north. It contained no dating evidence and could conceivably be a southern continuation of the Phase 3 gully [44]. Gully [84] was found immediately to the east of [88] and although it was clearly not part of [44] it did follow the same alignment. No dateable artefacts were recovered from this feature.
- 7.2.27 An enigmatic linear feature [93] was excavated to the west of the two smaller features described above. This cut was considerably narrower at the southern end than it was to the north, it also became deeper to the north. The feature measured 4.22m north-south by 1.07m east-west and it was 0.22m deep. No pottery was recovered from the fill [92].
- 7.2.28 A fragment of what appeared to be a shallow linear feature [62] was evident adjacent to the southern limit of excavation. A mass of modern root disturbance and the variations in the natural subsoils made excavation in this area very difficult. However, it appeared that feature had been truncated to the north and the portion of the feature which fell within the trench was probably the northern terminus of a cut which got larger as it extended further to the south. As seen the shallow gully measured 1.43m north-south by 1.28m east-west and was 0.16m deep. The top of the cut, which may have been truncated by modern landscaping, was recorded at 58.23m OD. The fill of this feature [61] contained three sherds of Middle Iron Age pottery.
- 7.2.29 A small posthole [64] was found immediately to the north of gully [62]. The fill contained a prismatic blade which is most likely of Mesolithic date and therefore a residual find.

7.3 Phase 3 Transitional Late Iron Age/Early Roman Features (Fig. 4)

- 7.3.1 As discussed at the beginning of Section 7.2 the majority of the features which have been placed in the Middle Iron Age phase contained ceramics dated to c. 400-200 BC. A few contained later material but it appeared that the settlement which must be located in the vicinity of the site was probably abandoned or decreased markedly in size in the Late Iron Age before being reestablished in the century preceding the Roman invasion of Britain. The continuity of pottery forms and fabrics is such that some of the ceramics produced in the very late Iron Age are indistinguishable from those made after the Roman conquest. Rural settlements did not suddenly appear or disappear with the invasion either. It appears that the settlement at Carshalton was reestablished at some point after 50 BC, as were many others in south-east England, and continued to be occupied up until around AD 100.
- 7.3.2 Six pits were dated to this period though one of these lacked any dating evidence and was placed in this phase simply because of its physical proximity to features which were undoubtedly of Roman date. The pits in this phase were less concentrated than those dated to the Middle Iron Age but they were all located to the east of the linear cuts which demarcated the earlier pits. The Phase 3 pits were also located to the south of a linear feature recorded as cuts [47] and [42] which was orientated south-east to north-west then curved back toward the south (Fig. 4). Although the full extent of this feature was not seen, probably due to the effects of modern truncation, it might have formed an enclosure which had an entrance in the north-west corner. A substantial pit [49] was located in the east end of the entrance. The western part of the gully contained a small pottery assemblage consisting of five sherds all dated to the Middle Iron Age. However, these are considered to be residual as the eastern section of the gully contained two sherds of Roman pottery dated AD 50-100. The gully was up to 0.60m wide and 0.20m deep, it extended over a distance of c. 9.50m from the north-west to south-east before exiting the limit of excavation to the east.
- 7.3.3 As described above pit [49] was located within the gap that separated the two sections of the gully [42] and [47], immediately to the west of [47]. Despite their proximity no relationship was recorded between the two features. Although this might seem unlikely given just how close these features were to each other the presence of pottery dated to the early Roman period in the lower fill of the pit [60] is more important when considering the dating of this feature. It is almost certain that these features did once have a relationship; they would have had to have been vertically sided above the point at which they were found not to have intersected which is most unlikely. However, the upper fill of the pit [48] did not contain any dateable artefacts, the two sherds of Romano-British pottery dated AD 50-150 were recovered from the lower fill [60], which also contained three sherds of Iron Age pottery. The Roman pottery recovered from the pit was therefore found within a fill which had never been disturbed by the gully.

- 7.3.4 Pit [49] appeared to be unremarkable apart from the position in which it was found which was a little curious if this was indeed an entrance to an enclosure. Pits located in and around entrances to Iron Age and indeed Bronze Age enclosures a well documented but many of them are notable because of the objects placed in them. Concentrations of animal bone or metalwork are well documented phenomena around entrances to Iron Age enclosures, either in the termini of the ditches themselves or separate pits. Pit [49] appeared to present none of these notable qualities; it contained small quantities of animal bone, a few sherds of pottery and a small amount of burnt flint. However, there is a possibility that the remains of a neonate lamb which had been placed in the upper fill [48] might be a significant act of deposition, especially when considered in the light of the lamb remains recorded in the earlier pits [27] and especially [32]. The pit measured a maximum of 1.37m in diameter, was 0.66m deep and very steep sided; it might have been used as a storage pit. The top of the cut was recorded at 58.34m OD.
- 7.3.5 A feature of similar size, pit [31], was located to the south and east of pit [49] and just to the south of the gully [47]. Pit [31] was one of the best examples of structured deposition recorded at the site and appeared to represent a very definite closure ceremony for the feature concerned. A complete sheep had been placed in the top of the pit (Plate 6 below). Obviously a certain depth of topsoil must have existed above the level at which the pit was recorded but it is almost certain that the portion of the pit which had been backfilled was considerably deeper than the upper level which was backfilled above the sheep burial. The size of the animal was notable for those not well versed in the development of domesticated livestock. Although the sheep was around a year old it was considerably smaller than the dog buried in the earlier Middle Iron Age pit [21].
- 7.3.6 The deposition of the complete sheep was the culmination of what appeared to be a very deliberate backfilling ritual. No concentration of animal bones were recorded from the basal fill [39] but a fragmentary cattle skull was recovered from fill [34] and there were concentrations of sheep or goat fragments in both of the fills, [33] and [29], which were found above and below the sheep skeleton [30]. Fill [34] contained a notable quantity of burnt bones and an odd bias in the parts that had been selected as at least six animals must have had elements of their bodies placed in this fill and six right forelimbs were present while only two derived from the left side.
- 7.3.7 The upper fill [29] contained a larger quantity of sheep or goat bones many of which were burnt; these were evident around the complete skeleton as were areas of burnt material deposited in the fill. Many of the bones in the upper fill were from adult individuals but young lambs were also well represented. These collections might suggest ritual feasting or the placement of cooked meats into the pit.
- 7.3.8 Pit [31] measured a maximum of 1.36m in diameter and was 0.92m deep and very steep or vertically sided. This feature had all of the attributes of a grain storage pit and might very well have been used originally for this purpose. Only the upper fill [29] contained dateable artefacts

which consisted of two sherds of pottery dated AD 50-150 and two residual Middle Iron Age sherds.



Plate 6: Sheep skeleton [30]

- 7.3.9 A considerably larger pit [91] was located c. 5m to the south of pit [31]. This feature was quite possibly a notable example of structured deposition but in this case the animal carcasses or parts had been replaced in large part by the deposition of pottery. The upper fill [89] contained large parts of a single vessel. This had been placed in the lower part of the fill which occupied a distinct upper chamber within the pit. This part of the feature was much wider than the lower chamber and in effect formed a separate shallow upper area of the pit (see Plate 7 below, the semi-complete vessel was recovered from the void visible in the section).
- 7.3.10 The lower chamber of the feature, fill [90], contained what may have been the majority of a fragmentary cattle skull but also contained a considerable quantity of pottery which derived from at least three vessels one of which was semi-complete. This group of finds may have been placed in this area of the pit in a deliberate act rather than being mere rubbish disposal. Although the overall assemblage from this pit dates from the Late Iron Age or where given specific dates 50 BC to AD 50 one of the vessels in the lower chamber was dated AD 0-50 which clearly places it in a period at the very end off the Iron Age or possibly immediately after the conquest. A small

- rectangular copper alloy plate was also recovered from the primary fill [90]. With the exception of two iron nails this was the only metal object found on site.
- 7.3.11 Overall pit [91] measured 1.76m wide by 0.92m deep; the top of the cut was recorded at 58.52m OD. The feature had been truncated to the south by a modern pipe trench which had been recorded by ASE as an early Roman ditch³⁸.



Plate 7: Pit [91] showing lower and upper chambers Scale 1.00m

- 7.3.12 A group of three pits, [70], [82] and [75] lay to the south-east of pit [91]. Pit [70] was a relatively small undated feature that extended beyond the southern limit of excavation. The pit measured 1.02m in diameter and was 0.46m deep with steep sides; the top of the cut was recorded at 58.82m OD. Pit [70] did not contain any dateable artefacts and might have been excavated in the Middle Iron Age.
- 7.3.13 Pit [82] had been partially excavated during the evaluation carried out in 2009 by ASE. The fill excavated in 2009 contained pottery dated AD 70-100 and a bone handle with the remains of an iron tang in it, this object may be a knife handle. Due to the difficulties of separating soil that had been backfilled for three years and original fill, and the constraints of space, once the presumed

³⁸ Dawkes, G 2009 *An Archaeological Evaluation at Carshalton War Memorial Hospital, The Park, Carshalton, Sutton* p17 and Figure 3, Section 1 Unpublished Archaeology South-East report

backfill had been removed a fill number [80] was allocated to the upper fill of the pit. This contained a number of pieces of modern building material which clearly derived from the 2009 backfilling but also produced two sherds of pottery dated AD 70-100. The lower fill [81] was a revelation as it contained the largest pottery assemblage recovered from either the 2012 or 2008 excavations. This consisted of 89 sherds of pottery dated AD 30-100. An unusual fired clay object, fragments of daub and lime mortar were also recovered from the fill.



Plate 8: Pit/shaft [82] Scale 1.00m

- 7.3.14 The pit was very restricted in diameter presenting some questions regarding the tools that had been used to excavate it originally. The sides were vertical and the feature measured 1.04m in diameter by 1.19m deep and had been cut into the solid natural chalk through the mixed subsoils and degraded chalk that characterised this area of the site (Plate 8). The shape of this feature, which was deeper than it was wide, was very reminiscent of the Roman shafts recorded at Ashcombe House in 2008. The top of the cut was recorded at 58.87m OD.
- 7.3.15 The most deeply cut feature recorded in the 2012 excavation was shaft [75] which measured 1.61m deep thought it was only 1.20m wide (Plate 9). The base of this feature, as was the case with the nearby pit/shaft [82], had been cut into solid chalk bedrock. One of the reasons that shafts of this form may have existed and been so successful is because chalk gives off carbon dioxide when acidic rainwater runs through or over it. This process might have aided the

preservation of grain stored in such a shaft as it would help drive out the oxygen that spoils the product. Some of the grain formed a crust around the margins of the pit. Signs of burning within these features have often been interpreted as evidence of the cleansing of a pit by lighting a fire to remove or neutralise spoiled material from its margins. The fills of shaft [75] may present evidence for both grain storage and cleansing by fire. The environmental sample taken from one of the lower fills of the pit [78] contained a high frequency of both cereal seeds and charcoal. It also contained seven sherds of pottery dated AD 70-100. The lowest fill produced a single sherd dated AD 50-100 whilst the top fill [71] held the largest assemblage from this feature of ten sherds dated AD 50-150. A date of AD 70-100 seems most probably for the backfilling of this feature.



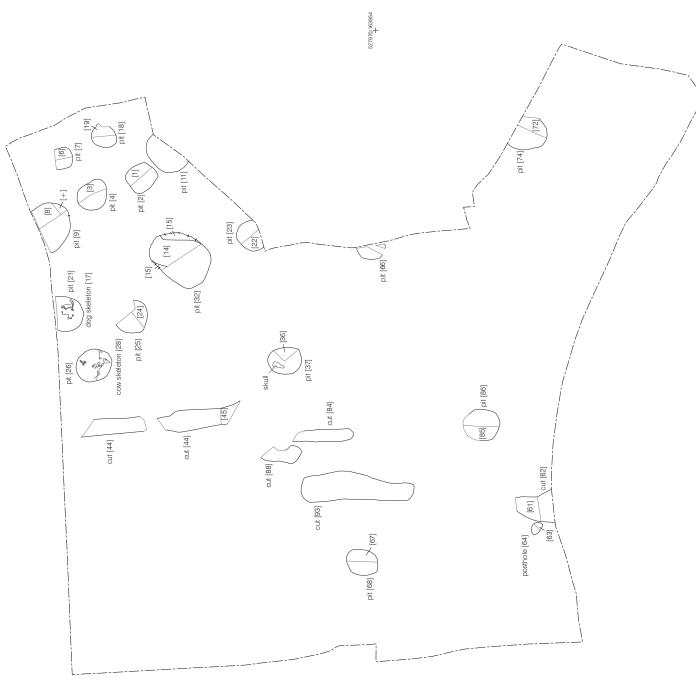
Plate 9: Shaft [75] Scale 1.00m

7.3.16 Another fill, [77], of shaft [75] did not contain any pottery but did produce a considerable quantity of wall render/plaster with a flat but unsmoothed finish. Rounded impressions on the reverse show that this finish had been applied to a masonry wall or structure. This is an important discovery as it demonstrates the probable presence of a Roman stone building in the near vicinity and in a sense this building material is representative of the changes to the rural economy which led to the abandonment of settlements such as that found at the War Memorial Hospital around AD 100.

7.3.17 The animal bone assemblage recovered from shaft [75] was notable for the concentration of sheep/goat bones, particularly those found in fills [79] and [76]. Many of the bones were from head and foot parts which might be indicative of butcher's waste being deposited rather than structured deposition. A small collection of rodent bones were also found in the upper fill [71], these presumably represented more pitfall victims similar to those recovered from the massive Middle Iron Age pit [32].

7.4 Phase 4 Modern Features

7.4.1 A small number of amorphous features, [51]–[59], were excavated and recorded in the south-west corner of the site (not illustrated). Many of these shallow features were poorly defined as they cut into each other and had been impacted by modern landscaping and the roots from numerous small trees and shrubs which had grown alongside the hospital wing which had formerly stood in this area. No dating material was kept from any of these features but these shallow cuts were undoubtedly modern planting holes and service trenches. They are not shown on a phase plan as they have nothing to contribute to a discussion of the archaeological development of the site.



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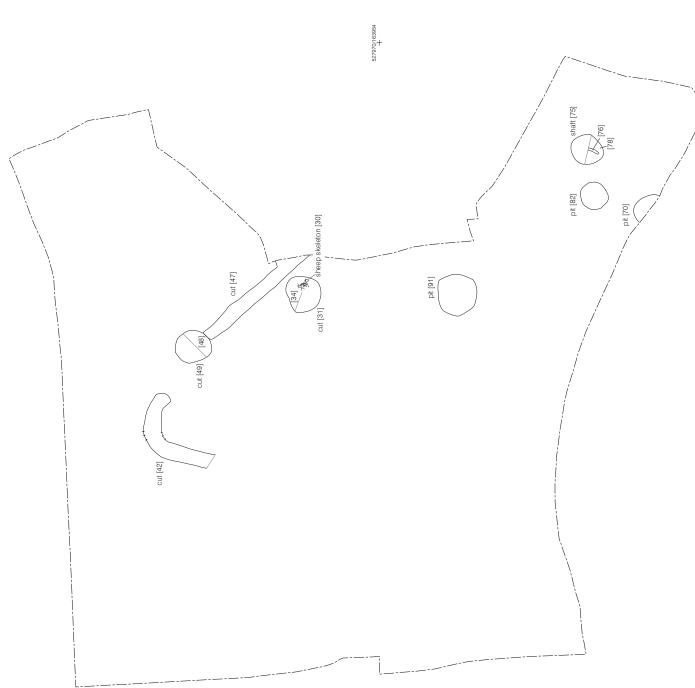


Figure 4 Phase 3: Transitional Very Late Iron Age/Early Roman 1:100 at A3

8 Conclusions

- 8.1 The results of the excavation demonstrated a considerably more pronounced Middle Iron Age presence than the previous work carried out at Ashcombe House. 16 of the 22 pits recorded dated to this period and the remains found in them were far more substantial than anything previously recorded on the site. The principal point of interest in the finds assemblage consisted of the animal bones many of which derived either from complete carcasses that had been interred in pits or notable selected parts of the animal such as the skull. The pottery assemblage recovered from the Middle Iron Age phase in 2012 was also nearly three times larger than that recorded in 2012.
- 8.2 Another noticeable difference between the two excavations was seen in the density of the pitting; the earlier excavations were notable for intercutting features whilst none of the pits seen in 2012 cut into an earlier feature.
- 8.3 The distribution of the pits recorded in the 2012 excavation was also very well defined; virtually all of the Middle Iron Age pits were located to the east of a series of north-south aligned linear cuts that may once have been reasonably substantial ditches with associated banks. This appeared to be a contrast to the 2008 excavation but this was possibly more apparent than real as the area of excavation available in 2008 was limited and the pits extended beyond the edge of excavation in all directions. The area of pitting at Ashcombe House may have been defined by ditches but these were never apparent within the trench.
- 8.4 A Middle Iron Age settlement must have been located nearby but no evidence for structures was found in the area excavated.
- 8.5 The evidence for structured deposition within the Middle Iron Age phase documented in 2012 was abundant. The cattle and horse skulls might be seen as butchery waste in different contexts but when found in an area with complete animal burials in some pits and multiple neonates buried in another their probable significance to the people who interred them becomes clearer. This contrasts sharply with the excavation at Ashcombe House where a single sheep's skull was found in a pit. The skull had not, as has been reported elsewhere, been placed in the base of the pit and the lower jaw was missing, which might be more indicative of waste rather than a 'placed' deposit. A definitive answer can never be given to the possible interpretations relating to the deposition of the sheep's skull, what can be stated is that this potentially structured deposit was the only example noted in the 33 pits excavated in 2008.
- 8.6 Fewer features dating to the very late Iron Age or Early Roman period were recorded in 2012 compared to the preponderance evident in the remains recorded in 2008. The pits which formed part of the later phase were invariably steep-sided and in two cases deeper than they were wide

giving the impression of a true shaft or silo. These were similar in form to pits [42] and [84] recorded at Ashcombe House. The pottery assemblage recovered from shaft [82] in 2012 was the largest from any feature excavated at Carshalton War Memorial Hospital. However, the overall assemblage recorded in 2012 consisted of 160 sherds which compared with 329 collected in 2008.

- 8.7 The sheep skeleton and associated animal bone assemblage found in pit [31] demonstrated that the tradition of structured deposition evident in the Middle Iron Age phase carried on or was revived in the transitional Late Iron Age/Early Roman period. Far fewer examples of animal carcasses or parts being deposited were evident in the later phase but there were also far fewer features dating to period.
- 8.8 Although the distribution of the pits which dated to the later phase was quite widespread they did appear to have respected the earlier boundary ditches that passed north-south through the centre of the trench. They were also apparently located within an area that could have been demarcated as an enclosure by a series of shallow linear cuts, though the evidence for this is perhaps a little ephemeral.
- Although no clear evidence was found for occupation of the site in any period preceding the Middle Iron Age a small quantity of earlier ceramics provides some evidence of earlier settlement in the area. Four sherds of pottery were recovered that date to the Late Bronze Age or very Early Iron Age; these fragments came from three different features and were considered to be residual as was an Early Bronze Age sherd. Six sherds of Early Iron Age pottery were also found, four of which represented the only pottery found in pit [18]. This might suggest that this was an Early Iron Age feature but the sherds were very small and could easily be residual in a later feature.
- 8.10 The presence of ceramics that dated to these earlier periods is however a departure from the evidence collected in 2008. The site must have been frequented in these periods for the pottery to have been deposited (unless it was imported in soil introduced from elsewhere, which seems highly unlikely). The excavations undertaken at the former Queen Mary Hospital site c.1.5km to the south of the War Memorial Hospital have amply demonstrated that the surrounding area was settled in the Late Bronze Age and Early Iron Age periods and it may be that the site was visited or occupied temporarily rather than being permanently occupied.

9 Research Questions

9.1 Original Research Questions

- 9.1.1 The general objectives posed in the Written Scheme of Investigation were³⁹:
- The objective of the archaeological excavation and evaluation is to identify, excavate, record and analyse any significant archaeological remains that will be disturbed by the proposed development. The physical archaeological remains will be replaced by a detailed record and a better understanding of the past activities that have taken place on the site, thereby contributing to an increased knowledge of Carshalton's past and providing a resource for future research and education.
- 9.1.2 The following specific research questions were posed in the Written Scheme of Investigation:
- To further define the nature, extent, character and chronology of the Iron Age and Roman occupation on the site as identified during the evaluation and an earlier phase of excavation at Ashcombe House immediately south of the site.
- To further determine the date, extent, nature and duration of habitation of the site.

In many ways the impressions gained of the archaeological landscape of the site remained unaltered from those gained during the earlier phases of work. The most noticeable difference was the importance that had been placed on structured deposition in the area excavated in 2012. Although this had been hinted at when the 2009 evaluation unearthed human longbones and the horses skull from adjacent pits the frequency with which evidence of ritual was unearthed during the open area excavation was a surprise.

Although large areas of the site remain unexplored the distribution of the features excavated in 2012 suggested that the focus of the settlement lay to the east or south of the open areas excavated so far. The features exposed during 2012 clearly continued to the north of the excavated area but nothing was unearthed in the northern evaluation trenches in 2009. However, the evaluation trenches were located in an area to the west whilst the archaeological features were concentrated to the east so even if the features seen in 2012 had continued to the northern site boundary they would never have been found during the trial work.

The dates during which the site was occupied were those originally identified in 2008, that is the Middle Iron Age and the transitional Late Iron Age/Early Roman period. The earlier period was far more strongly represented than it had been in 2008. Although some evidence was available for what might be termed generic Late Iron Age occupation, i.e. frequentation of the site before the

³⁹ Mayo, L 2012 Written Scheme of Investigation for an Archaeological Evaluation and Excavation Land at Carshalton War Memorial Hospital, Sutton Unpublished CgMs Consulting document

transitional period, the body of evidence was drastically reduced for this period when compared to either of the principal periods of occupation.

• The probable prehistoric settlement evidence at the site can help to define regional settlement patterns, where possible a settlement plan should be identified (Research Framework for London Archaeology, Museum of London, 2002, p.25).

When taken to publication the site will be placed into the regional context. To a large extent this had already been done when the Ashcombe House excavation was published in 2012. However, the recently reported excavation undertaken by Wessex Archaeology at Orchard Hill has cast new light on the local settlement pattern and the results from the War Memorial Hospital should be compared with the nearby excavation at the old Queen Mary's site and any other new evidence that has come to light since the original publication was prepared.

- To ascertain whether specific agricultural, industrial or ritual activities can be determined from the observed evidence.
- The later prehistoric faunal assemblage may help to elucidate the balance between pastoral and arable economies and patterns of subsistence, and contribute to understanding and clarifying the mechanisms that prompted agricultural intensification (Research Framework for London Archaeology, Museum of London, 2002, p.25).

Ritual activities were the principal area represented in the 2012 excavation. These have been described and discussed in detail in Section 7 and 8 above. The deposition of complete animal carcasses and selected parts in many of the excavated pits demonstrated how important these rites must have been. However, the concentration of these deposits in the area excavated in 2012 and their absence in the area recorded in 2008 might suggest that a demarcated area set aside for such rituals could have existed. The presence of a large quantity of lamb bones, particularly very young animals, could also be indicative of the seasonal nature of the rites being performed. Confirmation of one presumed agricultural practice, that of storing grain in pits/shafts, might be inferred from the environmental sample taken from shaft [75].

 To further determine the presence of possible structure deposits on the site as evidenced by the deposition of a containing structured deposits of placed human long bones and an inverted horse skull in Middle Iron Age pits.

Structured deposition is effectively another phrase for ritual activity, the evidence for this has been discussed above.

- To determine whether buried soils or occupation horizons are preserved on the site.
 - No buried soil horizons were identified during any of the phases of fieldwork undertaken since 2008.
- To ascertain if there is evidence for the continuity of settlement, occupation and land use from the Iron Age through to the early Roman period and to place the evidence from this site in its wider landscape context.
- To further clarify the presence of early Roman occupation on the site and determine how this
 occupation compares with other elements in the local landscape and whether there is any
 evidence for Roman agricultural activity indicating a renewed phase of agricultural intensification
 in the wider early Roman landscape (Research Framework for London Archaeology, Museum of
 London, 2002, p.27).

The chronology of the site and the placement of the settlement in the wider landscape have been discussed above.

- To define the nature of the zooarchaeological and palaeoenvironmental context of the Iron Age and Roman activity, together with any earlier and/or later activity.
- The well stratified Middle Iron Age ceramic material could help to further refine and date the local ceramic sequence (Research Framework for London Archaeology, Museum of London, 2002, p.25), in parallel with radiocarbon dating of suitable residues on the material recovered

Further specific research questions regarding the nature of the Roman occupation of the site, the zooarchaeological and palaeoenvironmental context and the potential for pot dating may be addressed at the publication stage if enough evidence was recovered from the excavation to render this viable.

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11 IMPORTANCE OF THE RESULTS, FURTHER WORK AND PUBLICATION OUTLINE

11.1 Importance of the Results

11.1.1 As with the Ashcombe House excavation the site has provided important evidence of Middle Iron Age to Early Roman activity. The site has in some ways provided similar results to the previous excavation with the presence of possible grain storage pits and the assemblages of pottery, animal bone and loomweights suggesting that a settlement was located close to the area of excavation. A larger number of Middle Iron Age pits were recorded on the present excavation and the most notable difference was the high preponderance of apparently ritually placed animal remains within the pits, an occurrence also encountered recently on a site at Orchard Hill, Carshalton excavated by Wessex Archaeology⁴⁰. This ritual activity in the Carshalton area is of regional importance.

11.2 Further Work

- 11.2.1 The results of the present site should be compared with those from the site at Ashcombe House. Though much of the background remains unchanged from the time of the Ashcombe House excavation the results of the excavations undertaken by Wessex Archaeology at Orchard Hill have altered or greatly clarified out understanding of the sequence of occupation at that site. This has given far greater detail to the development of local settlement and the results from the War Memorial Hospital should be compared to those from Orchard Hill.
- 11.2.2 The finds from both the evaluation and the excavation should be united into a single assemblage for full assessment so that all of the elements from individual features can be studied together.
- 11.2.3 Refitting and illustration of the pottery should be undertaken as recommended in the specialist reports contained in this document. Any suitable artefacts of either flint or fired clay should be treated in the same manner.
- 11.2.4 The evidence of structured deposition, particularly in the form of complete animal burials, was a notable departure from the results of the excavation seen at Ashcombe House. Once again the recent work at Orchard Hill has provided a local example for similar rites but other parallels should be sought in the local and regional context. If possible the types of animal burials and collections of animal bone (articulated or associated animal bone groups, ABGs) should be compared and contrasted to published examples from sites of similar periods.

⁴⁰ Hunnisett, C 2011 Orchard Hill, Carshalton London Borough of Sutton Post-excavation Assessment Report Unpublished Wessex Archaeology report

11.3 Publication Outline

11.3.1 As the results of the previous excavation on the site in 2008 were discussed in depth and were placed in their regional context⁴¹, it is proposed that the results of the present excavation be published as a short note in *Surrey Archaeological Collections* with the ritual aspects of the site being focused upon. The report will be a synthetic text with finds information integrated into the main archaeological sequence. The report will contain a brief background to the excavation and attempt to place the ritual components in its regional context. It will be fully illustrated with site and trench locations, phase plans, site photos and finds illustrations where appropriate.

⁴¹ Killock, D 2012 An Iron Age and early Romano-British farmstead at the War Memorial Hospital, Carshalton *London Archaeologist* Vol 13 No 4

12 BIBLIOGRAPHY

- Adkins, L. and Needham, S., 1985. New Research on a Late Bronze Age Enclosure at Queen Mary's Hospital, Carshalton, *Surrey Archaeological Collections* 76, 11-50.
- Batchelor, G., 1990. "Friends, Romans, School children!"-archaeology and education in Croydon, *London Archaeologist* Vol 6 No 8, 199-205.
- Bird, J., 2004. Surrey in the Roman Period, in: Cotton, J Crocker, G and Graham, A. (eds.), Aspects of Archaeology & History In Surrey: towards a research framework for the county, Fig 5.5, 70.
- Bird, J. and Bird, D. G., 1987. The Archaeology of Surrey to 1540.
- Cotton, J 2001. Prehistoric and Roman Settlement in Reigate Road, Ewell: fieldwork first conducted by Tom K. Walls 1945-52, *Surrey Archaeological Collections* 88, 1-42.
- Cotton, J., Crocker, G. and Graham, A., 2004. Aspects of Archaeology & History In Surrey: towards a research framework for the county
- Darton, L., 2008. Archaeological Desk Based Assessment Land at Carshalton War Memorial Hospital The Park Carshalton, CgMs Consulting unpublished document.
- Dawkes, G., 2009. An Archaeological Evaluation at Carshalton War Memorial Hospital, The Park, Carshalton, Sutton, Unpublished Archaeology South-East report.
- Greenwood, P., 1997. Iron Age London: some thoughts on Current Knowledge and Problems 20 years on, *London Archaeologist* Vol. 8 No. 6, 153-161.
- Groves, J. and Lovell, J., 2002. Excavations within and close to the Late Bronze Age enclosure at the former Queen Mary's Hospital, Carshalton, 1999, *London Archaeologist* Vol. 10 No. 1, 13-19.
- Hanworth, R., 1987. The Iron Age in Surrey, in J. Bird and D. G. Bird *The Archaeology of Surrey to 1540,* 139-164.
- Hastings, F. A., 1965. Excavation of an Iron Age farmstead at Hawks Hill, Leatherhead, *Surrey Archaeological Collections* 57, 1-44 particularly figs. 3 and 4,
- Hayman, G. N., 1996. Discoveries of Late Iron Age and Roman date at Farleigh Court Golf Course, near Warlingham, Surrey, Surrey Archaeological Society Bulletin 299, 5-10.
- Howell, I. (ed), 2005. *Prehistoric Landscape to Roman villa: Excavations at Beddington, Surrey 1981-7*, Museum of London Archaeology Service Monograph 26.
- Hunnisett, C., 2011. Orchard Hill, Carshalton London Borough of Sutton Post-excavation Assessment Report, Unpublished Wessex Archaeology report.

- Killock, D., 2008. An Archaeological Evaluation At Ashcombe House, Carshalton War Memorial Hospital, Carshalton SM5 3BY, PCA unpublished report.
- Killock, D., 2012. An Iron Age and early Romano-British farmstead at the War Memorial Hospital, Carshalton, *London Archaeologist* Vol. 13 No. 4, 102-108.
- Little, R. I., 1961. The excavation of a Romano-British settlement in Kings Wood, Sanderstead, *Surrey Archaeological Collections* 58, 35-46.
- Little, R. I., 1964. The Iron Age and Romano-British site, Sanderstead 1960, *Surrey Archaeological Collections* 61, 29-38.
- Mayo, L., 2012. Written Scheme of Investigation for an Archaeological Evaluation and Excavation Land at Carshalton War Memorial Hospital, Sutton, Unpublished CgMs Consulting document.
- Proctor, J., 1999. Late Bronze Age/Early Iron Age placed deposits from Carshalton, *London Archaeologist* Vol. 9 No. 2, 54-59.

Internet resources:

http://www.archaeologyse.co.uk/04-Projects/Surrey/Surrey.htm

http://www.museumoflondon.org.uk/laarc/new/siteinfo.asp?id=17295&code=WEC02

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APPENDIX 1: CONTEXT INDEX

Site Code	Context No.	Fill Numbers	Trench	Туре	Description	Dimensions (m)	Date	Phase
CST12	1	-	115/215	Fill	Fill of [2]	-	MIA	2
CST12	2	1	115/215	Cut	Pit	1.08 x 1.10x 0.18 deep	MIA	2
CST12	3	-	115/215 115/220	Fill	Fill of [4]	-	MIA	2
CST12	4	3	115/215 115/220	Cut	Pit	1.20 x 1.08 x 0.33 deep	MIA	2
CST12	5	-	-	Layer	Natural yellow sandy clay	-	Natural	1
CST12	6	-	115/220	Fill	Fill of pit [7]. This material is possibly modern as pit [7] was previously half-sectioned by ASE as pit 2/005. Contained human longbones as found by ASE	-	MIA	2
CST12	7	6	115/220	Cut	Shallow pit, contained human remains when excavated by ASE	>0.61 x 1.00m x 0.10	MIA	2
CST12	8	-	110/220 115/220	Fill	Fill of [9]	-	MIA	2
CST12	9	8, 20	110/220 115/220	Cut	Pit, partially excavated by ASE as 2/007. Contained a horse skull (found by ASE)	1.70 x 1.70 x 0.72 deep	MIA	2
CST12	10	-	115/215	Fill	Upper fill of [11]	-	MIA	2
CST12	11	10, 12, 13	115/215	Cut	Pit	>0.93 x 1.60 x 0.53 deep	MIA	2
CST12	12	-	115/215	Fill	Middle fill of [11]	-	MIA	2
CST12	13	-	115/215	Fill	Lower fill of [11]	-	MIA	2
CST12	14	-	110/215	Fill	Upper fill of [32]	-	MIA	2
CST12	15	-	110/215	Fill	Secondary fill of [32]	-	MIA	2
CST12	16	-	110/220	Cut	Fill of pit [21]	-	MIA	2
CST12	17	-	110/220	Skeleton	Dog skeleton in pit [21]	-	MIA	2
CST12	18	19	115/215	Cut	Half-sectioned, small shallow pit	0.90 x 1.00 x 0.13 deep	MIA	2
CST12	19	-	115/215	Fill	Fill of [18]	-	MIA	2
CST12	20	-	110/220 115/220	Fill	Slumping in pit [9]	-	MIA	2
CST12		16, 17	110/220		Pit	>0.98 x 1.21 x 0.25 deep	MIA	2
CST12	22	-	110/210	Fill	Fill of [23]	-	MIA	2
CST12	23	22	110/210	Cut	Pit	0.90 x 1.10m x 0.20 deep	MIA	2
CST12	24	-	110/215 110/220	Fill	Fill of [25]	-	MIA	2
CST12	25	24	110/215 110/220	Cut	Pit	1.30 x 1.30 x 0.26 deep	MIA	2
CST12	26	27, 28	105/215 105/220	Cut	Pit. Previously partially excavated by ASE as pit 2/009 x 0.20 deep x 1.35 x 1.20 x 1.00 deep		MIA	2
CST12	27	-	105/215 105/220	Fill	Fill of [26]	-	MIA	2
CST12	28	-	105/215	Skeleton	Cow skeleton	-	MIA	2

		1	105/220					
CST12	29	-	110/210	Fill	Upper fill of pit [31]	_	Roman?	3
CST12	30	-	110/210	Skeleton	Sheep/lamb? skeleton in pit [31]	-	Roman?	3
CST12	31	29, 30, 33, 34, 39	110/210	Cut	Pit	1.30 x 1.36 x 0.92 deep	Roman?	3
CST12	32	14, 15, 35, 38, 40	110/215	Cut	Pit	2.30 x 2.00 x 1.43 deep	MIA	2
CST12	33	-	110/210	Fill	Fill of [31]	-	Roman?	3
CST12	34	-	110/210	Fill	Chalk fill of [31]	-	Roman?	3
CST12	35	-	110/215	Fill	Primary fill of [32]	-	MIA	2
CST12	36	-	105/210	Fill	Fill of [37]	-	MIA	2
CST12	37	36	105/210	Cut	Pit	1.15 x 1.15 x 0.43 deep	MIA	2
CST12	38	-	110/215	Fill	Fill of [32]	-	MIA	2
CST12	39	-	110/210	Fill	Fill of [31]	-	Roman?	3
CST12	40	-	110/215	Fill	Chalk fill of [32]	-	MIA	2
CST12	41	-	105/215	Fill	Fill of linear cut [42]	-	?	3
CST12	42	41	105/215	Cut	Curved linear cut	-	?	3
CST12	43	-	105/220	Fill	Fill of linear cut [44]	-	?	2
CST12	44	43, 45	105/220	Cut	Linear cut	-	?	2
CST12	45	-	105/220	Fill	Fill of linear cut [44]	-	?	2
CST12	46	-	110/210 110/215	Fill	Fill of linear cut [47]	-	?	3
CST12	47	46	110/210 110/215	Cut	Linear cut	-	?	3
CST12	48	-	105/215 110/215	Fill	Fill of [49]	-	Roman?	3
CST12	49	48, 60	105/215 110/215	Cut	Pit	1.37 x 1.22 x 0.66 deep	Roman?	3
CST12	50	-	95/205	Fill	Fill of [51]	-	Modern?	4
CST12	51	50	95/205	Cut	Linear cut	_	Modern?	4
CST12	52	-	95/205	Fill	Fill of [53]	-	Modern?	4
CST12	53	52	95/205	Cut	Linear cut	-	Modern?	4
CST12	54	-	95/205	Fill	Fill of [55]	-	Modern?	4
CST12	55	54	95/205	Cut	Linear cut	-	Modern?	4
CST12	56	-	95/205	Fill	Fill of [57]	-	Modern?	4
CST12	57	56	95/205	Cut	Tree Throw	-	Modern?	4
CST12	58	-	95/205	Fill	Fill of [59]	-	Modern?	4
CST12	59	58	95/205	Cut	Shallow circular cut	-	Modern?	4
CST12	60	_	110/200	Fill	Primary fill of pit [49]	-	Roman?	3
CST12	61	-	100/200	Fill	Fill of [62]	-	MIA?	2
CST12	62	62	100/200	Cut	Shallow linear cut	-	MIA?	2
CST12	63	_	100/200	Fill	Fill of [64]	-	MIA?	2
CST12	64	63	100/200	Posthole	Possible posthole	-	MIA?	2
CST12	65	-	110/205	Fill	Fill of [66]	-	MIA	2
CST12	66	65	110/205	Cut	Pit	1.06 x >0.54 x 0.29 deep	MIA	2
CST12	67	-	100/210	Fill	Fill of [68]	- '	MIA?	2
CST12	68	67		Cut	Pit	0.98 x 1.20 x 0.12 deep	MIA?	2
CST12	69	-	110/195 115/195	Fill	Fill of [70]	-	Roman?	3
CST12	70	69	110/195 115/195	Cut	Pit	1.02 x >0.65 x 0.46	Roman?	3
CST12	71	-	115/200	Fill	Fill of [75]	-	Roman	3
CST12	72	-	115/200	Fill	Fill of [74]	-	MIA	2
CST12	73	-	115/200	Fill	Fill of [74]	-	MIA	2
		1			1 1 1	1		1

CST12	74	72, 73	115/200	Cut	Pit	1.30 x 1.30	MIA	2
						x 1.03 deep		
CST12	75	71, 76,	115/200	Cut	Shaft	1.20 x 1.10	Roman	3
		77, 78,				x 1.61 deep		
		79						
CST12	76	-	115/200	Fill	Fill of [75]	-	Roman	3
CST12	77	-	115/200	Fill	Plaster rich fill of [75]	-	Roman	3
CST12	78	-	115/200	Fill	Fill of [75]	-	Roman	3
CST12	79	-	115/200	Fill	Primary fill of [75]	-	Roman	3
CST12	80	-	115/200	Fill	Upper fill of [82]	-	Roman	3
CST12	81	-	115/200	Fill	Primary fill of [82]	-	Roman	3
CST12	82	80, 81	115/200	Cut	Shaft. Previously	1.04 x 1.04	Roman	3
					partially excavated, but	x 1.20 deep		
					not bottomed, by ASE			
					as pit 1/006			
CST12	83	-	105/210	Fill	Fill of linear cut [84]	i	Roman?	2
CST12	84	84	105/210	Cut	Linear cut	ı	Roman?	2
CST12	85	ı	105/205	Fill	Fill off [86]	ı	MIA?	2
CST12	86	85	105/205	Cut	Half-sectioned.	1.40 x 1.08	MIA?	2
					Partially impacted by	x 0.43 deep		
					demolition/machine			
					clearance. Very little			
					dating evidence,			
					mostly bunt flints			
CST12	87	-	105/210	Fill	Fill of [88]	-	MIA	2
CST12	88	87	105/210	Cut	Linear cut	-	MIA	2
CST12	89	-	110/205	Fill	Upper fill of [91]	-	Roman	3
CST12	90	-	110/205	Fill	Lower fill of [91]	-	Roman	3
CST12	91	89, 90	110/205	Cut	Fully excavated.	1.50 x 1.76	Roman	3
					Possible complete	x 0.92 deep		
					Roman vessels in base			
					in separate 'chamber'.			
CST12	92	-	100/205	Fill	Fill of linear cut [93]	-	MIA?	2
CST12	93	92	100/205	Cut	Linear cut	-	MIA?	2

APPENDIX 2: Late Iron Age and Romano-British Pottery Assessment

By Katie Anderson

An assemblage of Late Iron Age and Romano-British pottery totalling 160 sherds, weighing 4125g and representing 3.79 EVEs was recovered from the excavations. All of the pottery was examined and recorded in accordance with the guidelines laid out by the Study Group for Roman Pottery (Darling 1994) and using the standard terminology and codes advocated by the Museum of London Archaeology Service (Symonds 2002). Sherds were sorted within context by fabric, with unsourced wares of the same type e.g. greywares grouped together.

Assemblage Composition

The pottery broadly ranged in date from the Late Iron Age to the early Roman period, with the fabrics and forms identified suggesting a date range of 50 BC-AD 100. The assemblage comprised primarily small to medium sized sherds, as well as a small number of 'fresh' sherds which could be refitted to form partially complete vessels. The assemblage had a relatively high mean weight of 25.8g.

A limited number of vessel fabrics were present in the assemblage (see Table 1), of which SAND was the most commonly occurring, representing 50% by count and 57% by weight. SHELL fabrics accounted for a further 30% (by count). Sourced wares identified included 14 HWC sherds (180g), eight CCGW sherds (141g) two NKSH and single examples of VRW and SAMSG, the latter representing the only imported sherd in the assemblage.

Fabric	No.	Wt(g)	
CC	1	9	
CCGW	8	141	
ERSA	1	2	
GROG	4	39	
HWC	14	180	
NKSH	2	37	
SAMSG	1	15	
SAND	79	2332	
SHELL	48	1332	
VRW	1	35	
WW	1	3	
TOTAL	160	4125	

Table 1: All LIA and RB pottery by fabric

Jars were the most common vessel form, representing 74% of the total assemblage. Closed vessel forms totalled a further 17%, with beakers, bowls, cups and lids accounting for less than 2% each. Usewear

evidence was limited to the NKSH vessel which had sooting on the interior and a SHELL jar with limescale on the interior.

Contextual Analysis

Late Iron Age and Roman pottery was recovered from eleven different contexts (Table 2), representing seven different features. Ten contexts comprised small assemblages (<30 sherds), with the final context, [81] containing a medium sized assemblage (31-99 sherds). The majority of the pottery was recovered from three pits/shafts.

Context	Context Spot date	No.	Wt(g)
29	AD 50-150	2	20
36	50 BC-AD 50	1	8
46	AD 50-100	2	12
60	AD 50-150	2	32
71	AD 50-150	10	550
78	AD 70-100	7	61
79	AD 50-100	1	5
80	AD 70-100	2	14
81	AD 30-100	89	2039
89	LIA	28	477
90	50 BC-AD 50	16	907

Table 2: All LIA and RB pottery by Context

Shaft [82] contained the largest quantity of pottery (91 sherds, 2053g) from two contexts; [80] and [81]. Primary fill [81] contained 89 sherds (2039g), dating to the Late Iron Age/early Roman. This included three partially complete vessels; a SAND jar with burnished wave decoration, a further SAND jar with burnished chevrons and a cordon. There were also two sherds from a HWC poppyhead beaker and a sherd from a SAMSG Dr33 cup. Upper fill [80] contained two sherds (14g) dating AD70-100. This comprised one HWC body sherd and one ERSA body sherd. The assemblage from this feature appears to represent a dump of domestic wares.

Pit [91] comprised two fills; [89] and [90], both of which contained pottery totalling 44 sherds weighing 1384g, dating to the Late Iron Age. 28 sherds (477g) from a single, semi-complete SHELL jar with burnished band decoration were recovered from the upper fill [89]. Lower fill [90] comprised 16 sherds (907g) from three different vessels; a semi-complete SAND rippled jar (50 BC-AD 50), a SHELL beaded rim jar (AD 0-50) and a further SHELL body sherd. The presence of the two semi-complete and freshly broken vessels within this pit is of interest and suggests structured deposition of material.

Eighteen sherds weighing 616g were recovered from shaft [75], from three contexts. Fill [71] contained nine sherds from a SHELL jar and one sherd from a SAND dish, dating AD 50-150. Fill [78] contained six

sherds from a HWC vessel and a NKSH sherd, dating AD70-100. Context [79] contained a sherd from a SAND jar, which was dated AD 50-100.

Pit [37] contained one sherd from fill [36]; a GROG vessel, dating to the Late Iron Age. The remaining two sherds came from linear [47], fill [46], consisting of two small sherds (12g) dating to the early Roman period.

There were two contexts which contained a combination of prehistoric and early Roman pottery. Pit [31] contained two sherds of early Roman pottery (20g), recovered from fill [29], while two sherds of early Roman pottery were recovered from fill [60], pit [49]. It is likely that both of these features are likely to have been Roman in date, with residual earlier material occurring.

Discussion

The pottery recovered suggests occupation from the end of the Late Iron Age to the early/mid Roman period, with an apparent peak around the mid 1st century AD. The vessels comprised vessels which are typical of a domestic assemblage, most of which were locally made. The only imported vessel was a small sherd from a SAMSG Dr33 cup. The pottery recovered from pit [91] is of interest, particularly the rippled jar, and may be indicative of a structured deposit, rather than simply being domestic refuse. The pottery evidence is comparable to material recovered from previous excavations, which also show a peak in occupation during the Late Iron Age and early Roman period (Killock 2009).

Recommendations

All of the pottery has been fully analysed and recorded therefore the material does not require any further examination. The pottery should however be compared in more detail to material from the previous excavations. It is recommended that the rippled jar from context [90] is refitted and drawn, along with two partially complete jars and two lids from [81].

Bibliography

Darling, M. J., 1994. Guidelines for the Archiving of Roman Pottery. Study Group for Roman Pottery.

Killock, D., 2009. An Assessment Of An Archaeological Excavation At Ashcombe House, Carshalton War Memorial Hospital, Carshalton, London Borough Of Sutton, Unpublished PCA report.

Symonds, R., 2002. Recording Roman pottery: a description of the methodology used at Museum of London Specialist Services (MoLSS) and Museum of London Archaeology Service (MoLAS) (Unpublished document available from MoLSS).

APPENDIX 3: Later Prehistoric Pottery Assessment

By Matt Brudenell

A small assemblage of Later Prehistoric pottery was recovered from the excavations, totalling 135 sherds (970g), with a mean sherd weight of 7.2g. The pottery recovered was from 26 contexts relating to 21 features, and primarily dates to the Middle Iron Age. The material was in a stable condition, though sherds sizes were typically small (82% measuring less than 4cm in size), and the assemblage contained very few diagnostic feature sherds (rims, bases, shoulders or decorated fragments) and no partial vessel profiles.

This report provides a quantified assessment of the assemblage and recommendations for further analysis. All the pottery has been fully recorded following the recommendations laid out by the Prehistoric Ceramic Research Group (2009). After a full inspection of the material, fabric groups were devised on the basis of dominant inclusion types, their density and modal size. Sherds from all contexts were counted, weighed (to the nearest whole gram) and assigned to a fabric group. Sherd type was recorded, along with evidence for surface treatment, decoration, and the presence of soot and/or residue. Rim and base forms were described, and assigned vessel numbers. Where possible, rim and base diameters were measured, and surviving percentages noted. The quantified data is presented on an Excel data sheet held in the site archive, and partially summarised in the tables below.

Assemblage composition: fabrics, surface treatment and use-ware

A total of 17 fabrics were identified in the assemblage belonging to nine basic fabric groups (Table 1). Despite this variety, the assemblage was essentially dominated by sherds in flint and sand tempered fabrics (FQ1-3, 48.1% by weight), sandy wares (Q1-5, 23.6%) and shell wares (S1-3, 10.4%). This compares well with the Middle Iron Age material recovered from previous phases of excavation, mainly dated c. 400-200 BC (Rayner 2009). Collectively, the remaining 'minor' fabric groups in the assemblage constituted just 18% of the pottery. Of note are the four sherds (27g) in flint tempered fabric F1, which are likely to be of Late Bronze Age or Earliest Iron Age origin, c. 1100-600 BC (from linear 44, pits 11 and 26). These seem to be residual, as does the single grog tempered sherd in fabric G1 (11g), which may date to the Early Bronze Age (from pit [21]). Other residual sherds in Phase 2 Middle Iron Age features included six sherds (36g) of diagnostic Early Iron Age ceramic in fabric FQ1 (three sherds, 29g) and FQ3 (three sherds, 7g), dated c. 800-400 BC. These derived from pits [9], [11] and [18], and included fingertip impressed shoulder sherds, a fingertip decorated neck sherd, and two other angular shoulder fragments. A further 21 Middle Iron Age sherds (137g) were also identified as residual in Phase 3 Late Iron Age/Early Roman features (linear [42], shaft [75] and pits [31], [49], [91]).

Fabric type	Fabric group	No./(wt.) sherds	% of fabric (by wt.)	No./wt. sherds burnished	% of fabric burnished (by wt.)	MNV
F1	Flint	4/27	2.8	ı	-	-
FG1	Flint and grog	5/84	8.7	-	-	-
FQ1	Flint and sand	25/258	26.6	2/33	12.8	1
FQ2	Flint and sand	22/189	19.5	2/15	7.9	1
FQ3	Flint and sand	10/19	2.0	4/9	47.4	1
FQVE1	Flint and organic matter	3/17	1.8	-	-	-
FS1	Flint and shell	1/15	1.5	-	-	-
G1	Grog	1/11	1.1	-	-	-
Q1	Sand	9/36	3.7	4/18	50.0	1
Q2	Sand	7/53	5.5	3/21	39.6	-
Q3	Sand	17/67	6.9	4/30	44.8	-
Q4	Sand	5/68	7.0	5/68	100.0	-
Q5	Sand	2/5	0.5	-	-	-
S1	Shell	2/37	3.8	-	-	-
S2	Shell	16/56	5.8	1/4	7.1	1
S3	Shell	3/8	0.8	1/6	75.0	-
SQ1	Sand and shell	3/20	2.1	-	-	-
TOTAL	-	135/970	100.1	26/204	21.0	5

Table 1. Quantification of later prehistoric pottery. MNV = minimum number of vessels, calculated as the total number of different rims and bases (3 rims, 2 bases).

Flint fabrics

F1: Moderate to common coarse burnt flint (up to 3mm), poorly sorted

Flint and sand fabrics

FQ1: Moderate to common coarse burnt flint (up to 3mm), poorly sorted, and moderate quartz sand

FQ2: Moderate to common medium burnt flint (mainly <2mm), poorly sorted, and moderate quartz sand

FQ3: Moderate to common fine burnt flint (mainly <1mm), and moderate to common quartz sand

Flint and organic matter fabrics

FQVE1: Moderate to common coarse burnt flint (up to 3mm), poorly sorted; moderate quartz sand, and sparse to moderate linear voids from burnt-out organic matter

Flint and shell

FS1: Spare to coarse burnt flint (up to 3mm), poorly sorted; sparse quartz sand, and sparse medium shell (mainly 1-2mm)

Flint and clay pellet fabrics

FP1: Moderate fine burnt flint (mainly <1.mm) and moderate sub-rounded clay pellets/iron oxide (mainly <1.5mm)

Sand fabrics

Q1: Common quartz sand

Q2: Sparse to common fine sand and rare voids

Q3: Common quartz sand and rare or sparse medium burnt flint (mainly <2mm)

Q4: Moderate to common fine sand and sparse coarse grog (1-3mm)

Q5: Sparse to common fine sand and sparse calcareous flecks

Shell fabrics

S1: Moderate to common coarse and very coarse shell (up to 8mm), poorly sorted

S2: Moderate to common coarse shell (2-3mm), poorly sorted

S3: Common medium shell (mainly1-2mm), poorly sorted

Shell and sand fabrics

SQ1: Moderate to common coarse shell (2-3mm), poorly sorted, and moderate quartz sand

Grog fabrics

G1: Sparse medium to coarse grog (1-3mm)

Overall, the assemblage contained very few diagnostic feature sherds, and included just three plain vessel rims with simple flat-topped and rounded lips, and two bases with flat foots. Moreover, with exception of the two aforementioned fingertip ornamented Early Iron Age sherds, all the pottery was undecorated. Burnishing, however, was relatively common with 21% of the sherds displaying burnished surfaces (26 sherds, 204g). This form of treatment was particularly associated with the sandy wares (see Table 1).

Direct evidence for use-ware was restricted to the presence of carbonized residue on the interior surface of two sherds (15g): one, a residual Late Bronze Age or Earliest Iron Age sherd in fabric F1 (from linear [44], 6g); the other, a Middle Iron Age sherd in fabric SQ1 (from pit [32], 9g).

Contextual analysis

Table 2 (below) provides a basic quantification and summary of the pottery by feature. Overall, material was recovered from 26 contexts relating to 17 pits, three linear features and a shaft. All the feature assemblages were small yielding between one and 22 sherds apiece (8-228g).

Feature	Phase	Contexts	No./wt. (g) sherds	Ceramic Spot date	Comments
Pit 2	2	1	2/14	MIA, c. 400-200 BC	Includes one burnished rounded rim sherd.
Pit 7	2	6	1/8	MIA, c. 400-200 BC	Body sherd.
Pit 9	2	8	6/58	MIA, c. 400-200 BC	Includes one residual EIA fingertip decorated shoulder sherd, dated c. 800-400 BC.

Pit 11	2	10, 12	13/73	MIA, c. 400-200 BC	Includes a flat-lipped rim, several burnished sherds, and two residual angular shoulder sherds of Late Bronze Age and/or Early Iron Age origin, c. 1100-600 BC.
Pit 18	2	19	4/11	EIA, c. 800-400 BC	Angular shoulder sherds and a fingertip decorated neck sherds. Residual?
Pit 21	2	16	13/47	MIA, c. 400-200 BC	Includes one residual grog tempered sherds, possibly of Early Bronze Age origin.
Pit 23	2	22	3/34	MIA, c. 400-200 BC	Body sherds only.
Pit 25	2	24	6/15	MIA, c. 400-200 BC	Body sherds only.
Pit 26	2	27	15/38	MIA, c. 400-200 BC	Body sherds only, several burnished, and one residual Late Bronze Age or Earliest Iron Age sherd, c. 1100-600 BC.
Pit 31	3	29	8/24	MIA, c. 400-200 BC	All residual sherds in Phase 3 pit.
Pit 32	2	14, 15, 38	22/228	MIA, c. 400-200 BC	Includes several burnished sherds and two vessel bases.
Pit 37	2	36	7/32	MIA, c. 400-200 BC	Body sherds only, one burnished.
Linear 42	3	41	5/37	MIA, c. 400-200 BC	Body sherds only, several burnished. All residual in Phase 3 feature.
Linear 44	2	43,45	3/39	MIA, c. 400-200 BC	Includes two residual Late Bronze Age or Earliest Iron Age sherds, c. 1100-600 BC.
Pit 49	3	60	3/24	MIA, c. 400-200 BC	All residual sherds in Phase 3 pit.
Linear 62	2	61	3/9	MIA, c. 400-200 BC	Body sherds only.
Pit 66	2	65	6/113	MIA, c. 400-200 BC	Several burnished sherds and one weakly defined shoulder.
Pit 74	2	72	8/109	MIA, c. 400-200 BC	Includes one burnished flat-lipped rim.
Shaft 75	3	79	3/31	MIA, c. 400-200 BC	Body sherds only, one burnished. All residual in Phase 3 shaft.
Pit 86	2	85	2/5	MIA, c. 400-200 BC	Body sherds only.
Pit 91	3	89, 90	2/21	MIA, c. 400-200 BC	All residual sherds in Phase 3 pit.
TOTAL	1	-	135/970	-	-

Table 2. Summary and spot dating of later prehistoric pottery by feature

Discussion

Although this is a small assemblage containing few diagnostic feature sherds, the overall character of the material is broadly similar to that from previous phases of excavation (Rayner 2009), with the fabrics suggesting an earlier Middle Iron Age date for the bulk of pottery, c. 400-200 BC. However, the assemblage does include a background of the earlier material which has traits characteristic of the Late Bronze Age and/or Early Iron Age.

Recommendations

All the pottery has been fully analysed and recorded, and does not require further quantification. The material should, however, be compared more closely to that from the previous phases of excavation.

Bibliography

- PCRG, 2009. The Study of Later Prehistoric Pottery: General Policies and Guidelines for Analysis and Publication. Oxford: Prehistoric Ceramics Research Group occasional Papers 1 and 2 (third edition).
- Rayner, L., 2009. Pottery assessment. In D. Killock, *An Assessment Of An Archaeological Excavation At Ashcombe House, Carshalton War Memorial Hospital, Carshalton, London Borough Of Sutton.*Unpublished PCA report.

APPENDIX 4: Building Material And Fired Clay Assessment

By Berni Sudds

A small assemblage (114 fragments, weighing 4236g) of ceramic building material, render, daub and fired clay was recovered from site, including material of Iron Age / Early Roman, medieval and post-medieval date. The material was examined under magnification (x20), described and quantified by number and weight by context (see Table 1). The medieval and later material was recorded using the London system of classification. A fabric number is allocated to each object, specifying its composition, form, method of manufacture and approximate date range. Examples of the fabrics can be found in the archives of PCA and/or the Museum of London.

Phase	Context	Type	No	Weight (g)	Date range	Spot date
2	1	Fired clay fragment from larger curved object or structure (20mm thick). Oven lining?	1	89	Iron Age – Early Roman	Iron Age – Early Roman
2	8	Medieval peg tile, abraded (fabric 2586). Post-medieval peg tile (fabric 2276).	1	8 47	1180 – 1480 1480 – 1900	1480 – 1900
2	10	Daub (burnt?)	1	9	Bronze Age – c. AD 1800	Iron Age – Early Roman?
2	16	Fired clay fragments from an object. Flat surface, possible perforation	2	32	Iron Age – Early Roman	Iron Age – Early Roman
2	27	Fired clay object. Rectangular? Rounded arrise. Possible perforation. 'Belgic brick'? Two smaller fired clay fragments from sample <2>, also from fired clay object/s.	3	86	Late Iron Age – Early Roman	Late Iron Age – Early Roman
2	36	Very small fired clay fragment, possibly from an object.	1	1	Iron Age – Early Roman	Iron Age – Early Roman
3	71	Daub (burnt?), small abraded fragments from sample <10>	41	115	Bronze Age – c. AD 1800	Iron Age – Early Roman?
2	72	Fired clay object. Rectangular? Rounded arrise. 'Belgic brick'?	1	136	Late Iron Age – Early Roman	Late Iron Age – Early Roman
3	77	Wall render/ plaster with flat but unsmoothed finish (made from poorly mixed lime, sand and gravel). Variable thickness but up to 60mm. Deep rounded impressions to reverse from masonry wall/ structure.	19	2005	Roman +	Roman?
3	80	Medieval peg tile, small and abraded (fabric 2271). Post-medieval peg tile (fabric 2586)	1	9 78	1180 – 1480 1480 – 1900	1775 – 1900
		Local red frogged brick (50mm thick), sanded to all faces.	1	101	1775 – 1900	
3	81	Fired clay object. Fragment from an unusual object with irregular/	1	217	Late Iron Age – Early	Early Roman

		stepped burnished surfaces and a possible perforation or withy impression. The burnished surfaces have linear impressions, possibly from trimming with a tool. Heavy, dense clay body. Daub (heated/ burnt) Daub (unburnt) Daub (heated/ burnt flat surface) Mortar (lime and sand with ?chalk inclusions)	27 5 1 3	591 146 31 513	Bronze Age - c. AD 1800 Roman +	
2	92	Fired clay fragments from an object. Possible perforation	3	22	Iron Age – Early Roman	Iron Age – Early Roman

Table 1: Distribution of the ceramic building material, render/plaster, daub and fired clay.

Daub

The small assemblage of daub recovered from site, totally 75 fragments weighing 892g, is fairly homogeneous in terms of fabric, comprised of a sandy clay or brickearth containing fairly large chalk inclusions. Colour ranges from dark buff, through pink to orange-red, according to the degree of heat exposure.

Daub was utilised in the construction of clay and timber buildings and structures from the prehistoric period right up until the 18th century and is thus not a useful dating marker in isolation. Given the homogeneity of the assemblage and association with possible 'Belgic bricks' (see below) and Roman mortar, however, the material is perhaps most likely to be of Late Iron Age or Early Roman date. Aside from a single smoothed surface no diagnostic features, such as stave or withy impressions, were recorded but the presence of this material on site would attest to the presence of clay and timber structures of this date in the vicinity.

Fired clay

Fragments from two possible 'Belgic' bricks were recovered from the fills of pits [26] and [74]. These take the form of rectangular blocks or bars with a square or rectangular cross-section and fairly rounded arrises. Similar examples have been identified on other Late Iron Age to early Roman sites in the southeast of Britain where they have been associated with ovens, and even interpreted as Kiln furniture (Poole 2010, 130-1; Greenwood 1997, 159). One of these fragments has a possible piercing, parallels for which also exists (ibid.). Other fragmented clay objects are present in the assemblage, including further pierced examples. It is not clear if these are also rectangular blocks or represent other forms, perhaps triangular 'loomweights'. The later are typically Iron Age in date, most commonly associated with Middle and Late Iron Age settlements, but appear also to have remained in use into the early Roman period (Parfitt 1984; Poole 1984; 2011, 321; Foster 1986; Grimes and Close-Brooks 1993; O'Connell & Bird 1994, Greenwood 1997; Rayner 2002, 130; Sudds 2006; 2012).

Two further fragments of fired clay were recorded from pit fill [1] and shaft fill [81]. The first is a curved, uneven slab of clay that may represent some form of lining and the second is an unusually shaped dense fragment with a possible piercing and an irregular burnished surface. Although small and fragmented, taken as a whole, the fired clay assemblage tentatively indicates the presence of a an oven or kiln of Late Iron Age to Early Roman date in the vicinity.

The fabric of the rectangular blocks and lining is very similar being fairly dense with few inclusions other than sand. The examples generally have reduced grey/black cores and oxidised orange surfaces.

Wall render/ plaster

Shaft [75] (fill [77]) produced 19 fragments of lime based wall plaster, weighing just over 2kg. The plaster is made from fairly poorly combined lime, sand and gravel, is up to 60mm thick and has the impression of what appears to be rough stonework to the reverse. The material almost certainly derives from a masonry structure but is fairly crudely finished, perhaps representing external rendering, or possibly lower quality plaster. A Roman or later date is likely.

Medieval and later tile and brick

A small number of medieval and post-medieval peg tiles and a single fragment of frogged brick were also recovered. The medieval tile is small, abraded and considered to be re-deposited. The post-medieval material is also fragmented. As a whole, the medieval and later assemblage is typical in fabric and form to other assemblages identified in the greater London region and provides little more than dating evidence. This material was derived entirely from deposits that had been backfilled into partially excavated features following the evaluation conducted by ASE in 2009.

Potential

The primary interest of the small assemblage presented for analysis lies with the Late Iron Age to Early Roman fired clay objects and daub and evidence they provide for contemporary clay and timber structures and a possible oven or kiln in the locality. This material has the potential to characterise activity on site and should be compared with the material culture from other contemporary sites in the vicinity and broader region. Any further work should include finding a parallel for the unusual clay object from fill [81] and refinement in the dating of the assemblage with reference to the pottery and phasing.

Bibliography

Foster, J., 1986. Fired clay objects, in I. M. Stead and V. Rigby *Baldock: The excavation of a Roman and pre-Roman settlement, 1968-72.* Britannia Monograph Series No.7, 168.

- Greenwood, P., 1997. Iron Age London: some thoughts on *Current Knowledge and Problems* 20 years on. *London Archaeologist*, Vol. 8 No. 6, 158-9.
- Grimes, W. F. and Close-Brooks, J., 1993. The excavation of Caesar's Camp, Heathrow, Harmondsworth, Middlesex, 1944. *Proceedings of the Prehistoric Society* 59, 303-360.
- O'Connell, M. and Bird, J., 1994. The Roman temple at Wanborough, excavation 1985-1986. *Surrey Archaeological Collections* 82, 1-168.
- Parfitt, K., 1984. The small finds, in B. Philp *Excavations in the Darent Valley, Kent.* Kent Monograph Series 4, 35.
- Poole, C., 1984. Clay weights, in B. Cunliffe *Danebury: an Iron Age hillfort in Hampshire: Vol.2, The excavations 1969-78: the finds.* CBA Research Report 52, 401-6.
- Poole, C., 2010. The fired clay, in E. Biddulph, K. Brady, B. M. Ford and P. Murray Roman settlement, pottery production, and a cemetery in the Beam valley, Dagenham. Essex *Archaeology and History*, Vol.1, 129-137.
- Poole, C., 2011. Ceramic Building Material and Fired Clay, in E. Biddulph, R. Seager Smith and J. Schuster Settling the Ebbsfleet Valley: High Speed I Excavations at Springhead and Northfleet, Kent; The Late Iron Age, Roman, Saxon and Medieval Landscape Volume 2: Late Iron Age to Roman Finds Reports. Oxford Wessex Archaeology, 313-350.
- Rayner, L., 2002. The ceramics, in J. Sidell, J. Cotton, L. Rayner and L. Wheeler *The prehistory and topography of Southwark and Lambeth*. Museum of London Archaeology Service Monograph 14, 42 and 88-94.
- Sudds, B., 2006. The Clay Objects, in T. Carew, B. Bishop, F. Meddens & V. *Ridgeway Unlocking the Landscape: Archaeological Excavations at Ashford Prison, Middlesex*. PCA Monograph, Monograph 5, 68-73.
- Sudds, B., 2012. Appendix 7: Fired clay objects, in M. Beasley *An Assessment of an Archaeological Field Evaluation and Excavation at Land at Harold Wood Hospital, Gubbins Lane, Romford, London Borough of Havering.* Pre-Construct Archaeology Ltd, unpublished archive report.

APPENDIX 5: Burnt Stone Assessment

By Barry Bishop

Introduction

Excavations at the above site resulted in the recovery of just under 8.5kg of burnt stone fragments, all consisting of flint. This report quantifies the material, assesses its significance and recommends any further work required for the material to achieve its full research potential.

Quantification

Context	Feature	Phase	No.	Wt:g	Ave Wt:g	Comments
1	Pit 02	2	1	103	103	Heavily burnt flint fragment
8	Pit 09	2	1	110	110	Heavily burnt flint fragment
10	Pit 11 3F	2	3	62	21	All are heavily burnt flint fragments
12	Pit 11 2F	2	22	900	41	Variably but nearly all heavily burnt flint fragments
13	Pit 11 1F	2	1	18	18	Heavily burnt flint fragment
14	Pit 32 3F	2	20	1290	65	Variably but nearly all heavily burnt flint fragments
16	Pit 21	2	7	176	25	All are heavily burnt flint fragments
19	Pit 18	2	3	81	27	All are heavily burnt flint fragments
22	Pit 23	2	3	171	57	All are heavily burnt flint fragments
24	Pit 25	2	2	48	24	Both heavily burnt flint fragments
27	Pit 26	2	36	2149	60	Variably but nearly all heavily burnt flint fragments
36	Pit 37	2	3	127	42	All are heavily burnt flint fragments
43	Linear 44	2	4	174	44	All are heavily burnt flint fragments
45	Linear 44	2	2	68	34	Both heavily burnt flint fragments
46	Linear 47	3	1	77	77	Heavily burnt flint fragment
48	Pit 49	3	1	38	38	Heavily burnt flint fragment
61	Linear 62	2	8	320	40	All are heavily burnt flint fragments
65	Pit 66	2	3	208	69	All are heavily burnt flint fragments
67	Pit 68	2	1	46	46	Heavily burnt flint fragment
69	Pit 70	3	3	79	26	All are heavily burnt flint fragments
71	Shaft 75	3	2	77	39	Both heavily burnt flint fragments
72	Pit 74	2	7	389	56	All are heavily burnt flint fragments
73	Pit 74	2	3	418	139	All are heavily burnt flint fragments
81	Shaft 82 1F	3	2	78	39	Both heavily burnt flint fragments
85	Pit 86	2	12	560	47	Variably but nearly all heavily burnt flint fragments
87	Linear 88	2	2	97	49	Both heavily burnt flint fragments
89	Pit 91 2F	3	9	420	47	All are heavily burnt flint fragments
92	Linear 93	2	3	128	43	All are heavily burnt flint fragments

Table 1: Quantification of Burnt Stone by Context

In total 165 fragments of burnt flint weighing a total of 8,412g was recovered from 24 separate features (Table 1). Just over 90% of the assemblage derives from Phase 2 features with the remainder coming

from Phase 3. The material from both phases is similar although the average weights of the clasts from the latter phase are slightly smaller, at 42g compared to 52g. The bulk of the assemblage was recovered from pits where it had been deliberately disposed of, although some of the insubstantial linear features also contained significant quantities.

Description

The burnt stone comprises large peri-glacially shattered flint nodules. Most are large with a thick cortex and were most likely to have been obtained from superficial mass-weathered deposits surrounding the Upper Chalk. Around a third show a distinctive red iron-staining band immediately beneath the cortex, suggesting that these nodules derive from the Thanet Beds.

The flint had been heated to a variable but generally very high degree, causing it to become 'fire-crazed', change colour to a greyish white and disintegrate, although many very large fragments are present.

Discussion

The quantities recovered from the site may be regarded as high given the size of the areas excavated. Although some of the smaller amounts from individual contexts may represent residual background waste from 'domestic' hearth use, many of the contexts contain significant quantities that had been heavily and uniformly heated, which is more characteristic of deliberately burnt flint.

The material is smaller in quantity but otherwise comparable to that recovered from the adjacent excavations at Ashcombe House, and no doubt forms a continuation of similar activities (Bishop 2009; Killock 2012). Substantial quantities of burnt stone have been recorded from a number of Late Iron Age sites in southern Britain and although explanations for its presence are numerous and diverse, little detailed work has been conducted on its origins or purpose (e.g. see Bishop 2009). Given the context here of a long-lived mixed farming settlement, two potential explanations are worth highlighting. The large quantities of burnt stone retrieved from pits interpreted as grain stores has led to the suggestion that it was associated with the parching of corn, as a means of aiding its preservation (e.g. Cunliffe 1974; Cunliffe 1976; Smith 1977). An alternative explanation could see it as being associated with tanning and leathermaking, a suggestion put forward for the large quantities of burnt flint found at a number of Late Bronze Age sites in east London where other evidence for hide processing was forthcoming (e.g. Bishop 2012; MOLA in prep.).

Whatever the causes for the presence of the burnt flint, it had been deliberately deposited, principally into pits that may have formally been used to store grain, but also within the enigmatic linear features. The pits also contained other materials relating to domestic and agricultural activity, such as animal bone and pottery, and these may have been deposited in a formal or structured manner. The structuring of this

material and the methods used for its disposal may reflect wider metaphorical concerns of the agricultural community and involve ritual and ceremonial activity (e.g. Hill 1995; Brück 1999; Bradley 2003; Williams 2003). There is no reason to suppose that burnt flint, visibly transformed and fragmented, and instrumental in transformation of other materials, whether they are animal or vegetable, may also be caught up in the playing out of these concerns.

Significance and Recommendations

The quantities of burnt flint recovered both here and at the adjacent excavations at Ashcombe House indicate that activities involving the production of burnt flint were an important and enduring aspect of occupation. At present it is far from clear what the exact nature of the processes were that led to the generation of the burnt flint and how these may have related to other activities at the site. It is therefore recommended that further work is conducted: to examine the spatial distribution of the material and relate it to the specifics of the feature types and the other classes of material culture present. The results should be included in any published account of the excavations.

Bibliography

- Bishop, B.J., 2009. Assessment of the Burnt Stone, Ashcombe House, Carshalton War Memorial Hospital, London Borough of Sutton. Unpublished Report for Pre-Construct Archaeology
- Bishop, B.J., 2012. Lithics. In E. Stafford, Landscape and Prehistory of the East London Wetlands: investigations along the A13 DBFO roadscheme, Tower Hamlets, Newham and Barking and Dagenham, 2000-2003. Oxford Archaeology Monograph 17, 172-192.
- Bradley, R., 2003. A Life Less Ordinary: the ritualization of the domestic sphere in later prehistoric Europe. *Cambridge Archaeological Journal* 13 (1), 5-23.
- Brück, J., 1999. Ritual and Rationality: some problems of interpretation in European Archaeology. *European Journal of Archaeology* 2 (3), 313-344.
- Cunliffe, B., 1974. Iron Age Communities in Britain. Routledge And Keegan Paul. London.
- Cunliffe, B., 1976. *Iron Age Sites in Central Southern England*. Council For British Archaeology Research Report 16.
- Hill, J.D., 1995. Ritual and Rubbish in the Iron Age of Wessex: a study on the formation of a specific archaeological record. British Archaeological Reports (British Series) 242.

- Killock, D., 2012. An Iron Age and Early Romano-British Farmstead at the War Memorial Hospital, Carshalton. *London Archaeologist* Vol. 13 No. 4, 102-108.
- MOLA (in prep.) Later Prehistory in the Former Wetlands of East London. MoLAS Monograph Series.
- Smith, K., 1977. The Excavation of Winklebury Camp, Basingstoke, Hampshire. *Proceedings of the Prehistoric Society* 43, 31-129.
- Williams, M., 2003. Growing Metaphors. The Agricultural Cycle as Metaphor In The Later Prehistoric Period Of Britain And North-Western Europe. *Journal of Social Archaeology* 3 (2), 223-255.

APPENDIX 6: Worked Stone Assessment

By Barry Bishop

Introduction

Excavations at the above site resulted in the recovery of 24 struck flints and a large and possibly utilized although unworked cobble. This report quantifies the material, assesses its significance and recommends any further work required for the material to achieve its full research potential. All metrical information follows the conventions of Saville 1980.

Quantification

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Context	Feature	Phase	Decortication Flake	Flake	Prismatic Blade	Core	Conchoidal Chunk	Retouched	Stone Implement	Suggested Date	Comments	
8	Pit 09	2	1							Undated	Blade dimensions, bullhead bed flint	
14	Pit 32	2		1						MBA-IA	Large flake with edge damage consistent with use as a cutting implement. 74X62X14mm	
14	Pit 32	2				1				MBA-IA	Angular thermal fragment of bullhead bed flint with 3 or 4 flakes removed from a thermal scar. 52g	
14	Pit 32	2	1				1			MBA-IA		
16	Pit 21	2		1						MBA-IA	Possibly utilized for cutting along its distal end. 27X35X9mm	
22	Pit 23	2	1							MBA-IA		
27	Pit 26	2		1						MBA-IA		
27	Pit 26	2						1		MBA-IA	Retouched is a large flake with rough denticulated chipping along its distal. 68X49X17mm	
45	Linear 44	2	1				2			MBA-IA		
46	Linear 47	3						1		MBA-IA	Thick and mostly cortical flake with slightly invasive convex retouch on right margin forming a side scraper. 43X53X15mm	
63	P/hole 64	2			1					Meso/ENeo	Recorticated with wear around its converging distal consistent with use as a piercer. 47X16X4mm	
72	Pit 74	2				1				MBA-IA	Large thick flake with further broad flakes removed from ventral face. 73g	
72	Pit 74	2					1			MBA-IA		
72	Pit 74	2				1				MBA-IA	Thermally fractured and abraded nodule with a few broad flakes removed from one edge. 413g	
76	Shaft 75	3		2						MBA-IA		
76	Shaft 75	3							1		Smoothed chert/quartz cobble	
80	Shaft 83	3						1		MBA-IA	Narrow flake with fine denticulated retouch along right margin.	

								>43X28X8mm
89	Pit 91	3	1	1			MBA-IA	
92	Linear 93	2		1			MBA-IA	
92	Linear 93	2				1	MBA-IA	Thick and mostly cortical flake with steep slightly denticulated sinuous retouch on distal forming a nosed-type end-scraper. 57X50X15mm

Table L01: Quantification and Description of Struck Flint from CST10

A total of 24 struck flints were recovered from 13 separate features; mostly pits but with some also coming from a number of linear features. Three-quarters of the assemblage came from Phase 2 features, the remainder from Phase 3.

Description

Raw Materials

Most of the struck flints are made from a good knapping-quality translucent black flint with occasional opaque grey mottling. It has a rough but weathered cortex and frequent exterior thermal scars. It is typical of flint from the North Downs, its cortex indicating that it was obtained from derived surface deposits rather from within the chalk itself. Around a quarter of the pieces were made from flint with a green cortex and underlying orange band, indicative of Bullhead Bed flint found in the Thanet Sands. All of the raw materials would have been easily obtainable from local sources.

Technology and Dating

With the exception of a prismatic blade from posthole [64] which is most likely of Mesolithic date, the assemblage reflects an expedient approach to obtaining suitable edges. This essentially involves striking pieces of raw material with minimal finesse or regard to the material's flaking properties until sufficient flakes with suitable edges are procured. Such strategies are typical of later prehistoric flintworking traditions that can be dated to the later second and first millennium BC. The flakes are irregular but mostly large, thick and short and virtually all retain cortex. There is a high utilization rate, with four of the twelve flakes showing deliberate retouch and a few others bearing traces of edge damage consistent with utilization. Three of the retouched pieces have denticulated edges. Three cores are present, all of which appear opportunistically selected and expediently and minimally worked; one of these appears to a large flake from which further flakes have been struck.

Also recovered from shaft [75] was a large, elongated and rounded pebble of pink quartzite or coarse chert. There are no unequivocal signs of deliberate modification but it does have a very smooth surface and a flake chipped from one side, along with possible slight battering along the same edge. As this type of stone is not naturally present in the area's geology, the implication remains that it had been deliberately imported from elsewhere. If it does represent an imported implement its function remains uncertain. Although not highly polished it is reminiscent of 'linen smoothers' and the slight battering to one of its

sides suggests it could have been used for grinding or pounding. It measures 123mm long by a maximum of 77mm wide and 32mm thick, and weighs 422g.

Discussion

The blade from posthole [64] has convincing traces of utilization indicating its use as a piercing tool. Technologically it is characteristic of Mesolithic or Early Neolithic industries and is well-placed within the extensive spreads of Mesolithic material recovered from the Carshalton area (e.g. Turner 1966; Cotton and Hayes 1980; Bagwell *et al.* 2001; Leary *et al.* 2005).

The remainder of the struck flint is typical of later prehistoric industries. It consists of an expediently produced core and flake industry with a high retouched component dominated by denticulated pieces. Although the function of these remains uncertain, at Reading Business Park it was suggested that 'ragged' edged pieces may have been used for specialized tasks such as flax processing (Bradley and Brown 1992). There are no indications of *in-situ* knapping and the flint was most probably informally discarded or residually deposited into the features. Whilst they can only be broadly dated to the between and Middle Bronze Age and the end of the Iron Age (Herne 1991; Young and Humphrey1999; Humphrey 2003), there is no reason to assume that they are not contemporary with the Iron Age farmstead identified during the excavations. The assemblage is comparable with the Ashcombe House material which likewise consisted of crudely produced flakes and included a denticulated scraper. Although some uncertainty was expressed in the dating of that material (Bishop 2009), the addition of this assemblage further supports the contemporaneity of the flintworking with the settlement evidence.

Recommendations

The assemblage is significant in that it lends support for the continuation of flintworking, albeit in a low-key and unstructured fashion, into the Iron Age, which has been identified as a research priority (Haselgrove *et al.* 2001). It is therefore recommended that the assemblages from both this site and Ashcombe House are fully described and the report included in any published account of the excavations, preferably alongside illustrations of suitable pieces.

The possible smoothed stone remains enigmatic but limited further research is warranted to search for contemporary parallels and possible indications of function.

Bibliography

Bagwell, M., Bishop, B. and Gibson, A., 2001. Mesolithic and Late Bronze Age Activity at London Road, Beddington. *Surrey Archaeological Collections* 88, 289-307.

- Bishop, B.J., 2009. Assessment of the Lithic Material, Ashcombe House, Carshalton War Memorial Hospital, London Borough of Sutton. Unpublished Report for Pre-Construct Archaeology.
- Bradley, R. and Brown, A., 1992. Flint Artefacts. In J. Moore and D. Jennings, *Reading Business Park: a Bronze Age landscape*. Thames Valley Landscapes: The Kennet Valley 1, 89-93.
- Cotton, J. and Hayes, K., 1980. Finds from Westcroft Road, Carshalton, 1971 and 1978. In C. Orton (ed.)

 The Past-Our Future: Studies in local archaeology and history presented to Keith Pryer on the occasion of the Diamond Jubilee of the Beddington, Carshalton and Wallington Archaeological Society. Beddington, Carshalton and Wallington Archaeological Society Occasional Paper 4, 13-17.
- Haselgrove, C., Armit, I., Champion, T., Creighton, J., Gwilt, A., Hill, J.D., Hunter, F. and Woodward, A., 2001 *Understanding the Iron Age: an agenda for action*. Iron Age Research Seminar / Council of the Prehistoric Society.
- Herne, A., 1991. The Flint Assemblage. In I. Longworth, A. Herne, G. Varndell and S. Needham, Excavations at Grimes Graves Norfolk 1972 - 1976. Fascicule 3. Shaft X: Bronze Age flint, chalk and metal working. British Museum Press. Dorchester, 21-93.
- Humphrey, J., 2003. The Utilization and Technology of Flint in the British Iron Age. In J. Humphrey (ed.) Re-searching the Iron Age: selected papers from the proceedings of the Iron Age research student seminars, 1999 and 2000. Leicester Archaeology Monograph 11, 17-23.
- Leary, J., Branch, N. and Bishop, B.J., 2005. 10, 000 Years in the Life of the River Wandle: excavations at the former Vinamul site, Butter Hill, Wallington. *Surrey Archaeological Collections* 92, 1-28.
- Saville, A., 1980. On the Measurement of Struck Flakes and Flake Tools. Lithics 1, 16-20.
- Turner, D., 1966. Excavations at Orchard Hill, Carshalton. London Naturalist 45,100-104.
- Young, R. and Humphrey, J., 1999. Flint Use in England after the Bronze Age: time for a re-evaluation? *Proceedings of the Prehistoric Society* 65, 231-242.

APPENDIX 7: Metal Finds Assessment

By Märit Gaimster

Three metal finds were recovered from the excavation; they are listed in the table below. The earliest object comprised the fragment of a possible iron nail from Pit [21], a feature that contained a complete articulated dog skeleton. A near-complete iron nail was retrieved from the upper fill of Roman pit or shaft [82], while the lower fill of Roman Pit [91] produced a rectangular mount of copper-alloy sheet (sf 1). The latter feature is of particular interest as evidence of one of several possible structured deposits on site, where ceramic vessels may represent some form of votive offerings.

Recommendations

The metal finds form an integral part of the material recovered during excavation and should, if relevant, be included in any further publication of the site. This would be particularly significant for the copper-alloy mount (sf 1) that may originate from a structured deposit. This object would require x-ray to determine the presence of any inscription or decoration; the two probable iron nails should also be x-rayed for secure identification.

context	sf	description	pot date	recommendation
16		?iron nail; incomplete with twisted head	c. 400-200	x-ray
			BC	-
80		iron nail; rectangular shaft and small rectangular head; L	AD 70-100	x-ray
		105mm		
90	1	rectangular copper-alloy sheet mount; 25 x 70mm; one	50 BC-AD	x-ray
		circular hole for fixing at each end	50	

APPENDIX 8: Animal Bone Assessment

By Kevin Rielly

Introduction

This site provided a concentration of features dating from the Middle Iron Age through to the Early Roman period. These comprised two groups of pits, one at the north-eastern and the other at the south-eastern part of the site, roughly divided by a series of shallow and rather narrow linear 'gullies'. Most of the pits were in the former group, these also providing the major part of the animal bone collection with a large proportion taken from the remains of partial or complete carcasses.

The bone assemblage from this site can be compared to the previous collection taken from the adjacent and contemporary Pre-Construct Archaeology site at Ashcombe House (ASW08) (Rielly 2012). In addition, excavations were carried out at the former Queen Mary Hospital, Carshalton by Wessex Archaeology in 2008 and 2010. Notably, this site provided evidence for substantial enclosures indicating settlement activity dating to the Late Bronze Age/Early Iron Age as well as the Late Iron Age/Early Roman period (Hunnisett 2011).

The bones from the present excavation where well preserved and minimally fragmented and were collected both by hand and by the sorting of several bulk samples.

Methodology

The bone was recorded to species/taxonomic category where possible and to size class in the case of unidentifiable bones such as ribs, fragments of longbone shaft and the majority of vertebra fragments. Recording follows the established techniques whereby details of the element, species, bone portion, state of fusion, wear of the dentition, anatomical measurements and taphonomic including natural and anthropogenic modifications to the bone were registered.

Description of faunal assemblage

The site provided a grand total of 943 animal bones, 454 by hand and 489 from the samples. These have been divided into the two main occupation phases i.e. Phase 2 – Middle to Late Iron Age and Phase 3 – Late Iron Age to Early Roman (see Table 1). A proportion of the deposits could be more accurately dated, as for example to the Middle Iron Age or Early Roman periods. These will be described separately in the following text.

Recovery:	Hand collected		Sieved	
Phase:	2	3	2	3
Species				
Cattle	114(97)	42(15)	14(11)	
Equid	2	1		
Cattle-size	26	25	3	
Sheep/Goat	25(7)	109(52)	102(87)	42
Pig		3	1	
Sheep-size	9	13	59	226
Dog	85(85)		1	4
Small mammal				2
Water vole			1	
Field vole			1	
Vole			3	
Mouse			4	1
Small rodent			4	4
Frog			2	
Amphibian			15	
Total fragments	261(189)	193(67)	210(98)	279

Table 1. Species abundance by phase with number in brackets equal to sum of bones from 'associated groups' (see text).

Phase 2 - Middle to Late Iron Age

Animal bones were found in the majority of the Phase 2 pits (a total of 13 features), these providing the vast majority of the hand collected and all the sieved assemblages. The remainder was taken from linear cuts [93] with one fragment and [444] with just two fragments. There is an approximate phase division at these gullies, separating the larger north-eastern group of pits, most dated to Phase 2, from the smaller south-eastern group, mainly dated to Phase 3. Not surprisingly, most of the bones where found in the larger group with the outliers in the south-eastern pits including pits [74] and [86], these producing hand collected assemblages of six and one fragment respectively. Most of these Phase 2 pits have been dated as Middle Iron Age with the exception of pits [37] and [66] located on the border of the two pit groups, which were dated to the Late Iron Age and Middle to Late Iron Age respectively.

There is a notable predominance of cattle amongst the Phase 2 collection; however, this is largely the result of the 92 bones forming the near complete skeleton of a calf at the base of pit [26]. This was aged about 6 months as shown by the eruption of the first adult molar (ages used here and later in the text taken from Schmid 1972, 75 and 77) and while it appears that no use was made of its meat, some knife marks to the surviving first phalanges (articulating with the metacarpals i.e. the forelegs) suggest that this animal was skinned. Another skeleton was found at the base of the adjacent feature – pit [26], comprising the near complete remains (85 fragments) of an adult dog. This was probably a female due to the skull characteristics (as described by The and Trouth 1976) as well as the apparent lack of the bacculum (os penis). This animal displayed well worn teeth, suggesting an animal of advanced years, and had suffered

numerous injuries. There were signs of trauma (compressed fractures) close to the left maxillary third premolar and also at the top of the skull close to the right orbit. In addition this animal had suffered a major break close to the distal end of the left tibia/fibula with the broken ends forming a large 'overlap' callus, clearly culminating with a shortened left hindleg and most probably a marked limp. There are boney growths associated with the right distal femur and proximal tibia. These were notably absent elsewhere and may therefore relate to the undue stress on this joint while compensating for the damage related to the left hindleg. The juxtaposition of placement, completeness and non-utilisation (apart from the skin) is highly significant and clearly comparable to numerous similar examples recovered from a succession of Middle to Iron Age sites in this general area and beyond (see below).

There are further 'associated groups' of animal bones, these providing the major part of the remaining Phase 2 assemblage (see Table 1), which may offer a similar level of significance or else can be best placed within the category of general food refuse. These include a pair of cattle maxillary rows and mandibles from an adult individual from the central fill [12] of pit [11]. These were highly fragmented and could perhaps represent the remains of an entire cattle head. Both mandibles featured a vestigial third cusp on the third molar with a corresponding exaggerated posterior cusp on both maxillary third molars. Unfortunately the fragmentation does not allow any further interpretation, in particular the method of slaughter and decapitation or whether any use was made of either the horns and/or the brain. Another cattle skull, this time relatively complete although without mandibles, was found in the Late Iron Age fill [36] of pit [37]. The lack of cut marks suggest no use was made of the aforementioned attributes and the complete frontal bone shows that this animal was not slaughtered using a poleaxe. The shape of the horncores and posterior frontal region is typical of the Short Horned animals seen on Iron Age sites and extending into the Roman period (with prehistoric and Roman examples from Stone Castle and Drapers Gardens respectively in Rielly in prep a and Rielly in prep b; and see Armitage and Clutton-Brock 1976).

A large proportion of the cattle bones recovered from the samples formed part of a subadult (2nd year) individual, this taken from the basal fill [35] of pit [32]. This consisted of head and foot parts i.e. skull, mandibles, a single tarsal, a metapodial fragment and two 1st phalanges. The skull had a similar posterior shape to that described from pit [37]; however, there were no horncores. There is again a complete frontal clearly showing this animal was not poleaxed. The age is supplied by the mandible with the second molar just visible through the bone. While there were no cut marks, these bones could represent a discrete dump of butchers' waste i.e. the parts trimmed off the carcass in the initial stages of the butchery process. This same fill also provided the major part of the sheep/goat bones dated to this phase (taken from a sample), here representing the partial remains of at least 7 lambs, comprising six very young lambs, possibly neonate, and one somewhat older, up to a few weeks. While the younger individuals feature a range of parts, the older lamb is represented solely by foot bones, again perhaps indicative of butchers' waste.

The final 'associated group' comprises an adult sheep/goat metacarpus and two phalanges, all burnt, from the fill [27] of pit [26]. This leaves a small selection of mixed major domesticate bones including single equid fragments from pits [32] and [74], a pelvis and a tibia (notably in poor condition) respectively; and a small concentration of small rodents and amphibians, all recovered from the lower fill [32] of pit [35], no doubt accumulated prior to the infilling of this feature.

Phase 3 – Late Iron Age to Early Roman

The animal bones dated to this phase were almost entirely derived from just three features, namely the pit [31] in the north-eastern group with 119 hand collected and 129 sieved bones; and the shaft [75] and pit [91] in the south-eastern group, the former with 38 hand collected and 150 sieved bones and the latter with a hand collected assemblage of 26 fragments. They were all derived from pits or the two shafts [75] and [82], with the exception of one bone taken from linear cut [42]. The dating is generally Late Iron Age to Early Roman, although the aforementioned linear cut appears to be Middle Iron Age (probably residual early material within a Roman feature) and shaft [75] was dated exclusively to the Early Roman era.

There was a lesser proportion of recognisable 'associated groups' within this phase (see Table 1) with the majority of bones attributable to such groups arising from the relatively complete sheep skeleton from fill [30] in pit [31]. This was from a young individual, aged by the wear pattern on the mandibular teeth (adult second molar just worn) to about one year old. The other examples include the partial remains of a neonate sheep from the upper fill of pit [49], this providing 5 out of the 6 bones found in this feature; a cattle maxilla and a pair of mandibles, presumably the same adult individual, from the basal fill [90] of pit [91]; and the remains of another cattle head (fragmented skull and mandibles) from one of the lower fills [34] in pit [31].

While not obviously identifiable as 'associated groups', a large proportion of the other bones appear to have been deposited in a structural rather than casual manner. This is particularly shown in pit [31], where the various fills, excluding the primary deposit [39] have all provided a rich collection of animal bones. Starting with [34], with the aforementioned cattle skull, leading on to concentrations of sheep/goat fragments in fills [33] and the upper fill [29] either side of the sheep skeleton in [30]. The lower of the two sheep/goat collections feature 19 near-calcined bones largely comprising a mix of parts although with 8 radii. There is an odd bias towards bones on the right side of the carcass with for example 6 right radii, this also representing the minimum number of individuals in this collection, all probably adults. There is a larger quantity of sheep/goat bones from [29], featuring a greater mix of parts and ages, notably with a good proportion of bones from very young individuals. Similarly burnt bones are present, again from adult animals although without the side bias. Each of these collections also featured some cattle bones, while the upper fill provided a pair of dog humerii from a young puppy.

There is a similar array of bones in pit [91] where the lower fill, with the cattle skull, is overlain by another largely sheep/goat predominated collection, again with some near-calcined bones and others from young lambs. The same deposit also produced a cattle mandible from an animal aged about 6 months old. Finally, the sheep/goat collection from the fill [79] of shaft [75] is notable for the concentration of head and foot bones with 11 out of 15 hand collected sheep/goat bones from the lower fill [79] and 13 out of 17 sieved bones from the upper fill [76].

Amongst the other species represented, pig makes its first appearance at this site, with a mandible and femur from pit [91] and a skull fragment from shaft [75]. The single equid bone, a metacarpus was also found in pit [91], while a few more small rodents were recovered, in the upper fill [71] of shaft [75].

Conclusion and recommendations for further work

This moderate collection of bones is clearly well preserved and well dated and offers considerable data concerning the utilisation of animals and in particular cattle and sheep/goat between the Middle Iron Age and early Roman occupation of this area. A major component of this usage is the deliberate deposition of whole carcasses and body parts in a manner which is clearly more ritual than mundane. Such practises have been described from numerous contemporary sites throughout Southern and South-East England, as for example following the abundant evidence at Danebury (Grant 1984a) and notable compendiums (Hill 1995 and Morris 2008). The few examples from this site can be added to a growing corpus of information, here including the 90 'associated groups' identified at the assessment stage from the nearby site at Carshalton Hospital (Higbee 2011), including cattle, sheep and a single raven skeleton, all dating to the Late Iron Age/Early Roman period. The previous PCA excavation at this site also provided a comparable deposit, this being the skull of a sheep deposited at the base of a Middle Iron Age pit (Rielly 2009).

An effort was made to distinguish the 'associated groups' according to non-use (whole carcasses) and some use (body parts where presumably the rest of the carcass was utilised or disarticulated remains). Similar distinguishing features have been employed elsewhere (see Wilson 1992 and Morris 2008) to define the character of ritual usage and the obvious overlap between such activities and the more mundane deposition of utilised carcasses or parts of carcasses. It will obviously be necessary to study the presumed 'associated groups' as well as the bone spreads, particularly from the Phase 3 pits [31] and [91] and probably the concentration of young sheep from the Phase 2 pit [32] to ascertain the likely ritual or mundane aspects of these deposits.

Turning to the food use of the various species recovered at this site, it can be seen that cattle and sheep were the major meat suppliers, here following a general trend in this part of Britain in the Iron Age era (see Grant 1984). Of particular interest is the very poor representation of pig and the absence of fish.

Several Iron Age sites have produced little to no fish, as for example Danebury (Grant 1984a and 1991), irrespective of how close they are to the sea, as shown for example by a similar lack at the Iron Age/early Roman settlement at Stone Castle (Rielly in prep a). Of greater concern is the lack of pig bones, which was clearly not the case at either the earlier PCA excavation or at the much larger excavation at Carshalton Hospital.

Further work should highlight the 'ritual' as well as the food use aspects of this remarkable collection comparing the evidence with the mentioned sites in this immediate area and extrapolating were appropriate to the general patterns of animal usage described for Southern Britain during the Iron Age and early Roman occupation periods.

Bibliography

Armitage, P. L. and Clutton-Brock, J., 1976. A system for the classification and description of the horn cores of cattle from archaeological sites, *J Archaeol Science* 3, 329-48.

Grant, A., 1984a. The animal remains. In B. Cunliffe *Danebury: an Iron Age hillfort in Hampshire. Vol.2. The excavations 1969-1978: the finds.* CBA Research Report 52, 496-526.

Grant, A., 1984b. Animal husbandry in Wessex and the Thames valley. In B. Cunliffe and D. Miles (eds.) *Aspects of the Iron Age in Central Southern Britain.* Univ of Oxford: Committee of Archaeology. Monograph 2, 102-120.

Grant, A., 1991 Animal husbandry. In B. Cunliffe and C. Poole, *Danebury: an Iron Age hillfort in Hampshire, Vol 5, The excavations 1979-1988: the finds*, CBA Research Report 73, 447-486.

Higbee, L., 2011 The animal bones. In C. Hunnisett, *Orchard Hill, Carshalton, London Borough Sutton, Greater London – Post excavation assessment report*, Unpublished Wessex Archaeology report, 32-36

Hill, J. D., 1995. Ritual and Rubbish in the Iron Age of Wessex, A study on the formation of a specific archaeological record, BAR British Series 242.

Hunnisett, C., 2011. *Orchard Hill, Carshalton, London Borough Sutton, Greater London – Post excavation assessment report*, Unpublished Wessex Archaeology report.

Morris, J., 2008. Re-examining Associated Bone Groups from Southern England and Yorkshire, c.4000BC to AD1550, PhD thesis Bournemouth University.

Rielly, K., 2009. Assessment of animal bone recovered from Ashcombe House, Carshalton War memorial Hospital, Carshalton, SM5 3BY (ASW08), Unpublished PCA Report.

Rielly, K., 2012. Assessment of animal bone recovered from Ashcombe House, Carshalton War memorial Hospital, Carshalton, SM5 3BY (ASW08), Unpublished PCA Report.

Rielly, K., in prep a. The animal bones. In A. Haslam, *Excavations at Stone Castle, Waterstone Park, Kent*, PCA Monograph Series.

Rielly, K., in prep b. The animal bones. In N. Hawkins, *Excavations at Drapers' Gardens, City of London*, PCA Monograph Series.

Schmid, E., 1972. Atlas of animal bones for prehistorians, archaeologists and Quaternary geologists, Elsevier. London.

The, T. L., and Trouth, C. O., 1976. Sexual dimporphism in the basilar part of the occipital bone of the dog (*Canis familiaris*) *Acta anat.* 95, 565-71.

APPENDIX 9: Environmental Assessment

By Lisa Snape-Kennedy

Introduction

This environmental report summarises the findings from the assessment of bulk samples taken from contexts during an excavation at War Memorial Hospital, Carshalton, London Borough of Sutton (CST-12). The aim of this environmental archaeological assessment is to; provide an overview of the contents of the bulk samples, determine the potential of the samples for understanding the general environmental context of the site, and to broaden our understanding of the economy at the time of occupation.

Methodology

Twenty-three bulk samples were obtained from a number of pits, shafts, linear features and gullies. These samples were grouped into high and low priority. For this assessment, eight high-priority samples were put forward for detailed analysis. The samples were process by Pre-Construct Archaeology Ltd using the method of flotation as detailed in Kenward, Hall and Jones (1980). A 0.3µm mesh was used to capture the flot (light fraction) and 1mm mesh for the residue (heavy fraction). The residues were dried, sieved at 2 and 4mm and then sorted 'by eye' to retrieve artefacts and un-floated organic remains which were then bagged and labelled. The abundance of each class of artefacts (e.g. CBM, pottery, slag, bone) was recorded (using a *pro forma*) and entered into the database. The following ranges of abundance were used to quantify organic and inorganic remains:

- 1. = Occasional (1-10)
- 2. = Fairly frequent (11-30)
- 3. = Frequent (31-100)
- 4. = Abundant (>100)

Results

The results are presented in table 1 and 2.

An Archaeological Excavation at Carshalton War Memorial Hospital, London Borough of Sutton SM5 3BY © Pre-Construct Archaeology Limited, April 2013

		Pottery	2	1	1	_	1	1	1	1
		Burnt/struck flint	2	2	1	_	-	1	2	1
		СМВ	1	ı	1	1	2	1	1	1
		Daub	1	ı	1	1	-	1	1	1
		Fish bone	1	ı	1	1	-	1	1	1
	jed jed	L. A. bone*	4	2	4	_	I	4	-	1
	Uncharred	*anod .A.2	က	_	~	1	7	1	ı	ı
	Ď	Seeds	ı	ı	ı	1	ı	1	ı	ı
a)	_	Chaff/grain	ı	ı	ı	1	ı	1	ı	ı
Residue	Charred	spəəs	ı	ı	ı	1	ı	1	ı	ı
Res	S C	СһагсоаІ	ı	_	ı	~	ı	1	ı	ı
		Shell	1	1	4	1	4	1	~	_
		Bone	1	7	1	1	_	-	1	1
	red	Roots	ı	က	4	1	4	3	7	2
	Uncharred	booW	ı	ı	ı	1	ı	1	ı	ı
	'n	Seeds	1	1	1	1	ı	1	1	ı
	_	Chaff/grain	ı	ı	ı	1	ı	1	ı	ı
ţ	Charred	Seeds	ı	ı	ı	1	ı	1	ı	ı
Flot	ပို	СһагсоаІ	1	_	7	7	2	4	1	1
	nes	Volume of sample (setil)	19	31	16	2	24	29	21	12
	of residu	% of context sampled								
	Table 1. Rapid assessment of resid	Context type	Fill of pit [21]	Fill from pit [28]	Fill of pit [31]	Burnt area	Fill of shaft [75]	Primary fill of shaft [75]	Fill of pit [25]	Fill of pit [37]
	1. Rapid	Context number	16	27	29	27	71	79	24	36
	Table	Sample number	_	2	က	2	10	1	19	20

Table 2. Rapid assessment of flot

An Archaeological Excavation at Carshalton War Memorial Hospital, London Borough of Sutton SM5 3BY © Pre-Construct Archaeology Limited, April 2013

		1	I	1		1	1
er	Bone	-	~	1	ı	0	ı
Other	Charcoal	7	က	4	4	က	1
	Gyraulus Iaevis	1	~	~	1	1	1
sca	Pupilla muscorum	1	~	~	1	1	1
	Sinolis Silehəluq	~	~	~	2	~	1
Mollusca	Cecilioides acicula	_	4	4	2	_	1
	Preservation	Mod	Poor to mod	Poor	1	1	Mod
	sətoN	Unidentified	Chenopodium	0 0	0 0	1	0 0
	Uncharred seeds	~	~	2	~	1	_
	Preservation	Poor	Poor	1	Mod	1	1
IS	səjoN	Unidentified	Cereals Spikelet Forks	Cereals	Cereals	1	1
Seeds	Charred seeds	←	~ ~	7	4	ı	ı
	(I) əmuloV	<2	^	<2	2.5	<2	<2
	(g) thgiəW	1.698	1.813	1.989	5.673	1.835	1.563
	Context number	27	29	71	62	18	24
	Sample number	2	က	10		12	19

Results and Interpretation

All samples, except sample <1> and <12> produced flot material. Sample <2> contained a frequent amount of charcoal in the flot and residue but no seeds were present. Occasional charred and uncharred seeds were found in all samples, with sample <11> being the exception where cereal grains and charcoal was found in abundance. Pits containing abundant cereal grains have been noted in previous archaeological investigations in the area (Allot 2008). *Chenopodium* seeds were present in nearly all samples. They are common grass seeds which suggest areas of open grassland. The general preservation of seeds in the flots varied from poor to moderate, and so remained unidentified.

Mollusca remains were widespread and moderately to well preserved in all of the samples, particularly in samples <3> and <10>. They were also abundant in samples obtained from an evaluation at Ashcombe House (ASW-08) (Green and Batchelor 2008). *Cecilioides acicula* was the most dominant species in all of the samples suggesting well-drained calcareous soils. They naturally occupy unwooded habitats (Kerney 1999).

Recommendations

The five samples assessed have yielded a poorly preserved archaeobotanical assemblage mainly consisting of cereals and grass seeds. These remains suggest open areas of grassland and the consumption of cereals on site. Mollusca remains were abundant due to the calcareous soil conditions. However, a detailed environmental reconstruction of the site using mollusca would require detailed sampling from an intact stratigraphic sequence. No further work on the processed samples is required.

Bibliography

Kenward, H. K., Hall, A. R., and Jones, A, K, G., 1980. A tested set of techniques for the extraction of plant and animal macrofossils from waterlogged archaeological deposits. *Science and Archaeology* 22, 3-15.

Kerney, M.P., 1999. Atlas of the Land and Freshwater Mollusca of Britain and Ireland. Harley Books, Colchester.

APPENDIX 10: Oasis Data Entry Form

OASIS ID: preconst1-147423

Project details

Project name Carshalton War Memorial Hospital

Short description of the project

Open area excavation of a single trench which revealed a concentration of pits, some of which almost certainly served for grain storage, dating to the Middle Iron Age and transitional Late Iron Age/Early Roman periods. The pits were notable for the examples of structured deposition recorded in them. This included whole animal burials and the placing of selected body parts in the pits during backfilling. The pits were located in an area defined by linear cuts which may once have been substantial ditches but these only survived as shallow flat-bottomed gullies. The site had previously been evaluated using the site code CJW 09

Project dates Start: 23-11-2012 End: 14-12-2012

Previous/future work

Yes / No

Any associated project reference codes

CST 12 - Sitecode

Any associated project reference codes

CJW 09 - Sitecode

Type of project Recording project

Site status None

Current Land use Other 3 - Built over

Monument type PIT Middle Iron Age

Monument type PIT Late Iron Age

Monument type PIT Roman

Monument type GULLY Middle Iron Age

Monument type GULLY Roman

Significant Finds POT Late Bronze Age

Significant Finds POT Early Bronze Age

Significant Finds POT Early Iron Age

Significant Finds POT Middle Iron Age

Significant Finds POT Late Iron Age

Significant Finds **POT Roman**

Significant Finds FIRED CLAY Iron Age

Significant Finds FIRED CLAY Roman

Significant Finds RENDER/PLASTER Roman

Investigation type "Open-area excavation"

Prompt Planning condition

Project location

Country England

Site location GREATER LONDON SUTTON CARSHALTON Carshalton War Memorial

Hospital

SM5 3BY Postcode

Study area 7753.00 Square metres

Site coordinates TQ 2793 6396 51 0 51 21 35 N 000 09 44 W Point

Height OD / Depth Min: 58.00m Max: 59.00m

Project creators

Name of Organisation Pre-Construct Archaeology Ltd

Project brief originator

CgMs Consulting

Project design originator

CgMs Consulting

Project

director/manager

Tim Bradley

Project supervisor Douglas Killock

Type of sponsor/funding

Name of

Developer

body

Weston Homes

sponsor/funding

body

Project archives

Physical Archive

recipient

LAARC

Physical Archive

CST 12

Physical Contents "Animal Bones", "Ceramics", "Environmental", "Metal", "Worked stone/lithics"

Digital Archive

recipient

LAARC

Digital Archive ID **CST 12**

Digital Media available

"Images raster / digital photography", "Survey", "Text"

Paper Archive ID CST 12

Paper Media

"Context

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sheet","Drawing","Matrices","Photograph","Plan","Report","Section","Survey

","Unpublished Text"

Project bibliography 1

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PCA

PCA SOUTH

UNIT 54

BROCKLEY CROSS BUSINESS CENTRE

96 ENDWELL ROAD BROCKLEY

LONDON SE4 2PD

TEL: 020 7732 3925 / 020 7639 9091

FAX: 020 7639 9588

EMAIL:

PCA NORTH

UNIT 19A

TURSDALE BUSINESS PARK

DURHAM DH6 5PG TEL: 0191 377 1111

FAX: 0191 377 0101

EMAIL:

PCA CENTRAL

7 GRANTA TERRACE

STAPLEFORD

CAMBRIDGESHIRE CB22 5DL

TEL: 01223 845 522

FAX: 01223 845 522

EMAIL:

PCA WEST

BLOCK 4

CHILCOMB HOUSE CHILCOMB LANE

WINCHESTER

HAMPSHIRE SO23 8RB

TEL: 01962 849 549

EMAIL:

PCA MIDLANDS

17-19 KETTERING RD LITTLE BOWDEN MARKET HARBOROUGH LEICESTERSHIRE LE16 8AN

TEL: 01858 468 333

EMAIL:

