Archaeology South-East

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ARCHAEOLOGICAL EXCAVATION

BRAYS LANE
ROCHFORD
ESSEX

POST-EXCAVATION ASSESSMENT AND UPDATED PROJECT DESIGN REPORT

ASE Project No: E2613
Site Code: RFBL12

ASE Report No: 2014093

May 2014

ARCHAEOLOGICAL EVALUATION AND EXCAVATION

BRAYS LANE
ROCHFORD
ESSEX

NGR: TQ 87156 92278

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Abstract

This report presents the results of the archaeological investigation carried out on land south of Brays Lane, Rochford between September and November 2012. The fieldwork was commissioned by Bellway Homes Ltd in advance of the construction of a housing estate.

Initial trial trenching evaluation of the development area established the presence of significant archaeological remains of Roman date, particularly within its western half. The subsequent investigation of two open excavation areas exposed a complex of ditches, pits and other Roman period features spanning a mid 1st to late 4th century date range.

These remains define two broad phases of Roman period landscape development, the majority of the boundary ditches defining an earlier Roman enclosure system and its later Roman replacement. This enclosed landscape was probably predominantly agricultural in its nature, perhaps pastoral fields as suggested by a funnel-like entrance into one of the enclosures. No convincing structural remains, such as a dwelling, that demonstrate contemporary occupation of the site have been identified. However, the presence of rubbish pits and cultural material presumably also deposited as rubbish in the ditches is indicative of settlement activity nearby – perhaps a farmstead associated with this field system. Some insights into the nature of this occupation activity can be discerned from the artefacts and environmental remains retrieved.

As an example of Roman landscape development, this site is of local significance within the county – particularly as no other Roman remains have been previously found in this vicinity of Rochford District. As such, it is proposed that a short publication article presenting an overview of the results of this archaeological work is prepared for inclusion in the county journal Essex Archaeology and History.

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1.0 INTRODUCTION

1.1 Site Location

1.1.1 The site is located in Rochford District, in south-east Essex, c.5km north of Southend on Sea (Fig.1). Brays Lane itself runs eastwards from Ashingdon village, roughly along the border between Rochford and Ashingdon parishes.

1.1.2 The development area was located on the south side of Brays Lane bordered by farm buildings along its eastern edge, King Edmund's School to the south and residential development to the west (NGR TQ 87156 92278).

1.2 Topography and Geology

1.2.1 The development area was a 5.5ha square encompassing two fields belonging to the former Great Brays Farm. The site slopes southwards, dropping from c.14.5m AOD to 12.5m AOD. Prior to the archaeological evaluation and excavation, the site was an agricultural land and most recently was used as a pasture.

1.2.2 The superficial geology of the site as mapped by the British Geological Survey comprises undifferentiated 'River Terrace deposits'. Underlying these superficial deposits is London Clay, which outcrops in the north-west corner of the site (www.bgs.ac.uk). The overlying topsoil is on average 0.5m thick.

1.2.3 As evidenced by aerial photographic coverage of the general vicinity, the surface geology includes regularly-spaced natural (?periglacial) channels with a prevailing NE-SW alignment that produce a rectilinear pattern.

1.3 Scope of the Project

1.3.1 An outline planning application (11/00315/OUT) for the construction of a new housing estate and associated infrastructure was submitted to Rochford District Council on 25/05/2011. Following the discussion between the Local Planning Authority and the applicant it was agreed that only the land to the south of Brays Lane would be developed in the proposed scheme.

1.3.2 An archaeological desk-based assessment, carried out in March 2012, established that the site lay within an area of undetermined archaeological potential and that significant remains could be present.

1.3.3 The Essex County Council Historic Environment team (ECC HE, now ECC Place Services), which provides specialist archaeological advice to Rochford District Council, recommended that a programme of archaeological works should be carried out prior to development. The recommendation was based upon the guidance contained in the National Planning Policy Framework (DCLG 2012).

1.3.4 The outline planning permission (11/00315/OUT), for the construction of up to 100 residential dwellings, new access/bus turning facility and reserve land for the King Edmund School, associated infrastructure and landscaping, was granted on 7/06/2012 subject to conditions. Condition 6 stated that:

No development or preliminary ground works of any kind shall take place until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation that

has been submitted by the applicant and approved by the Local Planning Authority.

Reason: To allow proper investigation and recording of the site which is of archaeological importance.

1.3.5 The archaeological evaluation of the western field of the development area was carried out between 23/04/2012 and 30/05/2012. This identified the presence of significant below-ground archaeological remains.

1.3.6 At the request of the developer, and with the agreement of the ECC HE team, fieldwork proceeded with only summary reporting to the open area excavation of the northern half of the western field. This was carried out during the period 13/08/2012 to 27/11/2012.

1.3.7 The evaluation of the eastern field, followed by the excavation of that part identified to contain archaeological remains, was carried out between 19/09/2012 and 31/10/2012, simultaneously with the excavation of the western field.

1.3.8 All work was undertaken in accordance with the brief issued by the ECC HE team and with the written scheme of investigation produced by ECC FAU and approved by the HE team.

1.3.9 Since the completion of the fieldwork, ECC FAU has ceased to exist, becoming part of Archaeology South-East (ASE), the contracting division of the Centre for Applied Archaeology (CAA), Institute of Archaeology (IoA), University College London (UCL), in May 2013. The post-excavation work has been completed by ASE.

1.4 Archaeological methodology

1.4.1 The evaluation trenches were designed to evenly cover both fields, providing a 5% sample of the development area. Trenches 1-15 were located in the western field, while trenches 16-24 were located in the eastern field. Due to the presence of a sewer run, no trenches were cut in the easternmost part of the eastern field.

1.4.2 All trenches measured 40m long by 1.8m wide, with the exception of trenches 17 and 19 that had to be halved in length due to the presence of temporary fencing.

1.4.3 The excavation area located in the northern half of the western field was roughly square in shape and covered 0.92ha, while that in the eastern field was located in its centre, rectangular in shape and covered an area of 0.16ha. The positions and extents of both were specified by the ECC HE officer with reference to the perceived significance and density of remains exposed within the evaluation trenches.

1.4.4 The cutting of the evaluation trenches and stripping of the two excavation areas was undertaken using a mechanical excavator fitted with a wide, toothless ditching bucket and working under the constant supervision of an archaeologist.

1.4.5 Machine excavation was carried out to the surface of natural geology whereupon archaeological features were exposed. Care was taken not to machine off seemingly homogenous layers that might have been the upper parts of archaeological features. The resultant surfaces were cleaned as necessary and a pre-excavation plan prepared using Global Positioning System (GPS) planning technology in combination with Total Station surveying. Site planning was regularly updated as necessary and augmented with hand drawings.

1.4.6 Following the cleaning and planning of the excavation area the sampling of archaeological remains was undertaken as per the written scheme of investigation. Where appropriate, the ECC HE monitoring officer was consulted regarding excavation strategy.

1.4.7 All excavated deposits and features were recorded according to current professional standards using standard ECC FAU context recording methodology. A written record was created using trench and context recording sheets.

1.4.8 Plans and section drawings were created by hand, at appropriate scales, and located in relation to the national grid.

1.4.9 A full digital photographic record of all features was maintained.

1.4.10 All finds recovered from excavated deposits were collected and retained for processing, analysis and reporting.

1.4.11 The trenches, excavation areas and spoil were metal detected for artefact recovery.

1.4.12 Bulk soil samples were collected from suitable excavated contexts, including dated/datable buried soils, well-sealed slowly silted features, and sealed features containing evident carbonised remains, water-logged or cess deposits.

1.4.13 All context, finds and environmental samples, from the evaluation and the excavation phase were recorded under a single site code RFBL12.

1.4.14 The archaeological work was carried out in accordance with the Institute for Archaeologists' standards, Code of Conduct and by-laws (IfA 2008 and 2010) and the ALGAO *Standards for Field Archaeology in the East of England* (Gurney 2003). Both the ECC FAU and Archaeology South-East was/is a registered archaeological organisation with the Institute for Archaeologists.

1.5 Organisation of the Report

1.5.1 This post-excavation assessment (PXA) and updated project design (UPD) has been prepared in accordance with the guidelines laid out in Management of Research Projects in the Historic Environment (MoRPHE), Project Planning Notes 3 (PPN3): Archaeological Excavation (English Heritage 2008).

1.5.2 The results from both the evaluation and excavation phases of the two halves of the site are described and assessed together in this single report.

1.5.3 The report seeks to quantify and summarise the fieldwork results; place them within their local archaeological and historical setting; specify their significance and potential, including any capacity to address the original research aims, listing any new research criteria; and to lay out what further analysis work is required to enable their final dissemination, and what form the latter should take.

1.5.4 Supporting appendices and figure illustrations are presented at the rear of the report.

2.0 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

2.1 The following archaeological background utilises the Essex Historic Environment Record (EHER), held at County Hall, Chelmsford, and the desk-based assessment previously undertaken for the site (ECC FAU 2012). Only the most pertinent information is presented here.

2.2 There are no designated monuments or records of known archaeological remains within the site area, and very few in the near vicinity. This absence of archaeological remains is likely to at least partially reflect the limited archaeological investigations which have taken place in the area to date. However, the NMP Cropmark Project has included this area but maps no features in the site. EHER references within 1km of the site largely comprise elements of the historic town centre of Rochford, which lies to the south, and Ashingdon to the north (EHER 19959).

2.3 The remains of past agricultural land-use are recorded to the north of Ashingdon church where traces of medieval ridge and furrow and a ditch system have been identified (EHER 13482). To the west of this lies an oval field bank which has now been levelled (EHER 13477). Post-medieval archaeological sites, located to the south of the site, include the Golden Cross Brickfields (EHER 15471) and the Rochford Union Workhouse (EHER 15383).

2.4 There are a number of extant Type FW3/22 World War II pillboxes in the vicinity of the site; EHER 20758-9, 20698-20700). This reflects the strategic importance of defending two key sites, the Canewdon Radar Station and Southend Airport (then known as Rochford Airfield).

2.5 The site lies within Historic Environment Character Area (HECA 13) as identified and described by the Rochford Historic Environment Characterisation (HEC) project. This area is characterised by its landscape of dispersed and polyfocal settlements, church/hall complexes and historic farms. The medieval church/hall complex of Ashingdon Hall/St Andrews Church (EHER 34914 & 13610) lies less than a 1km to the north of the site while a number of halls, moated sites and farms including Apton Hall, Little Stambridge Hall, Moated site of Rectory Hall and Doggetts Farm lie immediately to the east. The zone is also noted for the many archaeological sites of a multi-period date that are present and for the potential for archaeological survival due to lack of development. Whilst there was limited archaeological knowledge within the limits of the site, the area had been identified as being sensitive to change.

2.6 The 1st to 4th edition OS mapping (1876 to 1936-47) depicts the site within a single field which extends further east in the area of the modern farm buildings. No farm complex is present alongside to its east at this time and the surrounding area is not developed. The farm and all residential properties in this vicinity are clearly post-WW2 developments, as is the division of the field into east and west fields.

3.0 ORIGINAL RESEARCH AIMS & OBJECTIVES

3.1 Research Aims

3.1.1 The general aim of the investigation was to determine the presence or absence of archaeological deposits within the site and to establish their character, location, extent, date, quality and significance.

3.2 Objectives

3.2.1 Given the undetermined archaeological potential of the area, no specific objectives were identified prior to the fieldwork.

4.0 ARCHAEOLOGICAL RESULTS

4.1 Summary

4.1.1 As recorded and investigated, a moderate density and complexity of remains was encountered across the site (Figs.2 and 3). The initial evaluation of the western field established the presence of Roman period remains across the area, with a distinct decrease in density southwards; trench 1 containing 16 identified features while trenches 13 and 14 were blank and trench 15 containing only a single ditch. The majority of remains comprised ditches, gullies and pits, most of which were shallow and encountered at the top of the undisturbed natural deposit (Fig.6 and 7).

4.1.2 The subsequent western excavation area was therefore positioned to extend across the northern half of the field, encompassing trenches 1-10. The evaluation trenching of the eastern field demonstrated the eastward continuation of a similar range, date and density of features, the latter decreasing to the south, but also seemingly to the northeast. Consequently, a smaller excavation area was determined that was centred upon trench 20.

4.1.3 Approximately 0.5m of homogenous topsoil was removed to expose the top of surviving remains, which overlay or were cut into the natural deposit. The majority of the linear features were initially readily visible on the machined surface of the open excavation areas and investigated in two or more segments. The remainder were either very short or visible only in one of the trenches and excavated in single segments. Most of the discrete features such as pits were irregular in shape, shallow and not very well defined – their fills often being similar to the natural deposit. General feature legibility was compromised by wet weather, resulting in the saturation of the clay-rich soils, washing-out, and repeated flooding of parts of the excavation areas – particularly in the southeast (Figs.8 and 9). The working of the wet site turned the exposed surface into an obscuring layer of slurry. The consequences of this are illustrated by the relatively low recorded density of identified features within the open area excavations as compared to that within the evaluation trenches. It is highly likely that a proportion of the small/shallow discrete

features present on the site, and particularly those with fills of similar colour to the natural deposit, went undiscerned and un-investigated. Conversely, it is also noted that a significant proportion of the recorded 'features' in the evaluation trenches were demonstrated during open area excavation, where more widely exposed, to in fact be of natural non-archaeological origin. It was found that the machined surface contained a proliferation of linear channel-like and discrete amorphous shallow undulations filled with a homogenous brown silt. Where excavated, these often merged with one another, had indistinct edges and contained no artefactual remains. These were not generally formally recorded once established to be of natural origin.

4.1.4 A limited range of features was encountered, mostly comprising ditches, gullies and pits. Some amorphous cuts were recorded that probably constituted natural features such as tree holes. No obvious structural remains, such as hearths, surfaces or building fragments were present, though a group of six cremation burials were identified and excavated. As mentioned above, feature density was moderate and complexity was low, with relatively little intercutting of either linear ditch or discrete features. Most features were shallow, few contained complex fill sequences and only a single enclosure boundary shows clear indications of cleaning and/or recutting.

4.1.5 Other than truncation by post-medieval and modern arable cultivation, little disturbance of the remains had taken place. The absence of any post-Roman features clearly aided relatively good survival, though the shallow nature of almost all recorded remains is noted and it is likely that some smaller features were probably removed by ploughing or else obscured by poor ground conditions at the time of excavation (see 4.1.2 above).

4.1.6 The combined evaluation and excavation work recorded the surviving remains of 43 linear ditches or gullies, 104 pits, six cremation burials, two water collection pits, 14 likely tree holes and two layers. Only a single feature is of prehistoric date, the remainder being exclusively Roman or else undated. Further descriptive detail on the individual cut features and layers recorded, including dimensions, is presented in Appendix 1.

4.1.7 The following description of the recorded remains is presented in broad chronological order:

- Prehistoric (Late Bronze Age)
- Earlier Roman (mid 1st to mid 2nd century)
- Later Roman (mid 2nd to late 4th century)
- Undated

4.1.8 The dating of the remains is primarily based upon that of diagnostic artefactual material recovered from them, but also upon stratigraphic relationship where present. Preliminary feature grouping has been applied to aid clarity and brevity of the following site descriptive text (4.2-4.6) with excavated segments of the same ditch, or similar features occupying an enclosure brought together under a collective group number (G1, G2, etc.). A list of all defined Groups is provided as Appendix 2. Additionally, a degree of landscape order is also imposed on the Roman period remains with the definition of the basic land-use components, i.e. enclosures, trackways, etc., identified as 'open areas' (OA).

4.1.9 Supporting finds information is mentioned where pertinent, and is presented in greater detail in section 5. The Roman ceramic periods defined in 5.4.7 have not been imposed upon site phasing, as they do not necessarily reflect the true nature and longevity of the identified phases of landscape activity. Additionally, the detail of recovered environmental evidence is presented in section 6.

4.1.10 The content of the primary site archive currently held at the offices of Archaeology South-East and will be deposited with the Southend Museum in due course. The site archive is quantified in table 1, below.

Type	Description	Quantity
Context sheets	Individual context sheets	565
Section sheets	A1 Multi-context permatrace sheets 1:10	23
Plans	Multi-context DWG plans A1 permatrace sheets 1:20	33
Photos	Digital images	215
Enviro sample sheets	Individual sample sheets	14
Context register	Context register sheets	18
Enviro sample register	Environmental sample register sheets	1
Photographic register	Photograph register sheets	1
Drawing register	Section register sheets Plan register sheets	8 5
Small finds register	Small finds register sheets	1

Table 1: Site archive quantification table

4.2 Phase 1: Prehistoric

4.2.1 Only a single prehistoric feature has been identified. Pit [498] was situated in the northern part of the western field excavation area, immediately to the south of evaluation trench 1 (Fig.4). Measuring 1.95m long by 0.92m wide and 0.33m deep, this feature was oval in shape, with gradually sloping sides and a flat base. Several sherds of Middle Bronze Age (c.1500-1150 BC) pottery, thought to derive from a single vessel, were recovered from soil sample <5> collected from its single light orange-grey silty clay fill [499]. This fill was very similar to the natural deposit, other than containing an irregular charcoal lens (Fig.10).

4.2.2 The only other indication of prehistoric activity is the presence of residual material in later features and deposits. A single worked flint was collected from the fill of ditch [094].

4.3 Phase 2: Earlier Roman

4.3.1 The remains of a number of relatively narrow ditches represent parts of a rectilinear enclosure system set out on a NNW-SSE / ENE-WSW alignment (Fig.4). Ditches G1, G3, G10, together with a postulated NNW-SSE aligned boundary hinted by G59 (ditch seg. [103]), underlying and largely removed by later recut enclosure ditch G8/G60, seem to form major axes within this system. Shorter and intermittent ditches G13, G14, G15, G20 and G42 appear to mark subdivisions within more major enclosures. In total, parts of some six or seven distinct land entities – hereafter termed 'open areas' (or prefixed OA) – can be discerned or else inferred (Fig.3, OA1-7). Each of these open areas is described below, including the discrete features of likely contemporary date that occupy them.

The function(s) of the various land units comprising this enclosure system is/are not readily apparent. Features of identifiably earlier Roman date which occupy their interiors, and so likely to be contemporary, are sparse and uninformative.

4.3.2 OA1

Of the open areas defined within the excavated area, OA1 is the greatest in extent. Bounded on three sides by ditches G1 [segs. 05, 111, 41, 772], G3 [segs. 35, 37, 723, 576] and G10 [segs. 120, 438, 440, 574, 590], all relatively narrow and under 0.5m deep, this enclosure measures c.50m x 60m+. Its western extent lies beyond the limit of excavation. A squared terminal (seg. [772]) is evident at the east end of ditch G1 and may suggest an access point at this southeast corner of the enclosure.

OA1 contains adjacent pits [599] and [608] in a vaguely central position (G54). Roughly circular pit [599] measured 2.3m long by 2.2m wide and 0.6m deep (Fig.12). It contained three fills, [600], [601] and [602], which together produced over 3.5kg of mid 1st-early 2nd century pottery, fragments of brick and tile, a few pieces of animal bone and slag. The middle charcoal-rich fill [601] contained the majority of these recovered artefacts, together with a fragment of decorated bracelet (RF<1>). Smaller and shallower pit [608] lay immediately to the north of [599]. Its single fill contained a small quantity of mid 1st to early 2nd century pottery.

Further southwest, three broadly similar elongated pits or short gullies [61, 77 and 81] were found in Trench 5 (G3). Although not regularly spaced or of uniform depth, all were seemingly parallel. Only [62], the fill of pit [61], contained Early Roman pottery. Pit [122], recorded in the Trench 6 section, contained mid 1st-2nd/3rd century pottery and oyster shell in its charcoal-rich fill.

A further quantity of undated features in this part of the site (G40 and G51) could be contemporary.

4.3.3 OA2

OA2, to the east, is defined by ditches G3, G13, G14, G15 and possibly G42, though no southern boundary is evident – it possibly having been removed/replaced by the later G16 ditch. As recorded, this enclosure measures c.40m x 35m+ in extent, but may have originally been more-or-less square. The intermittent nature and variable depth (though generally shallow and narrow) of its northern and eastern boundaries suggests that these are internal divisions within a larger enclosure which extends beyond the limits of excavation. Certainly, where excavated in segments [365] and [380], the G15 ditch was appreciably more substantial (Fig.13), at 0.76m to 1.04m deep, than enclosure perimeter ditch G3. As such, adjacent entities OA4 and OA5 (see below) could be viewed as parts of further subdivisions of the same larger overall enclosure. It is conjectured that a point of access, into OA4, was originally located at the northwest corner of OA2 and subsequently blocked by the insertion of a short length of irregular ditch G45 ([471, 555, 558]).

Only irregular, possibly rectangular, pit [399] is identified to occupy the enclosure interior (G63). Some 2.1m long and 1.4m wide, this 0.15m deep pit contained only a small quantity of Early Roman pottery in its fill [400].

4.3.4 OA3

Only the southeastern part of OA3 was exposed within the excavation area, where defined by ditches G10 and the northern end of G3. Short ditch G20, running parallel to G3, could represent a narrow sub-enclosure, such as a pen, occupying its southeast corner.

Despite only a small part being investigated, a relatively large number of discrete features occupied its interior. As previously mentioned, ditch/gully G20 ran parallel with the eastern enclosure boundary, some 5m distant. This 7m-long feature, where investigated in segments [480] and [560], was 0.45m wide and 0.25m deep (Fig.14). It is possible that it was associated with similarly proportioned gully G2, recorded in Trench 1, that ran westwards away from the northern end of G20 and then curved northwards beyond the excavation limit. Excavated in segments [007] and [019], the G2 gully is undated, but nominally assigned to this phase of land-use on the grounds of its likely association with G20.

Pits [001], [003] and [013] lay to the west of the G2 gully (Group 31). All were relatively large, though shallow, with mid-grey silty clay fills that contained small quantities of earlier Roman pottery. Two isolated smaller pits [464] and [466] were located toward the southern enclosure boundary. The fill of [464] contained possible 1st century Roman pottery but also part of a baked clay object – possibly a cylindrical loomweight or pedestal. Containing patches and flecks of charcoal, an environmental soil sample was collected from this fill ([465] <4>). Oval pit [466] contained only a single sherd of early Roman pottery in its single fill [467]. A further quantity of undated pits (G32) could be contemporary.

4.3.5 OA4

OA4, bounded by ditch G3 and intermittent (?)subdivision G13/G14, extends northwards beyond the limit of excavation. As such, only the southwestern part of the enclosure was investigated.

No discrete features of identifiably earlier Roman date were found within the OA4 interior. However, some or all of the G34 undated pits [42, 44, 46, 371, 543] could in fact be contemporary with this period of land use.

4.3.6 OA5

OA5 is a somewhat notional land entity east of OA4, their boundary marked by G15/G42. Only a small part of its western side lies within the excavation. Trenches 16-19 are presumed to be located within its interior as no ditches of either similar alignment or date were identified within them.

A single pit (G33), recorded in Trench 16, is of early Roman date. Oval pit [433] was 0.6m deep and contained three fills [434-6] (Fig.15). Primary fill [434] was a light brown silty clay, overlain by a near-black silty clay [435] that contained pottery and a large fragment of slag. Final fill [436] was a finds-free mid grey silty clay.

A further quantity of undated features in this northeastern part of the site (G43) could be contemporary.

4.3.7 OA6

OA6 is construed to be an enclosed area of land south of the G1 ditch. Its posited eastern edge is suggested by a fragment of NNW-SSE aligned ditch [103] truncated and probably wholly overlain/replaced by later ditches

G8/G60. The southern extent of this enclosure is not evident in Trenches 11-14.
No Early Roman features have been identified to occupy its interior, though a quantity of miscellaneous undated pits (G38) and ditches (G39) could be contemporary.

4.3.8 OA7
OA7 is a further notional entity, in essence encompassing that part of the landscape immediately south of OA2 and OA5, and east of OA6. Barely possessing any tangible boundaries its actual extents and shape are unknown. This said, OA7 may have been a less-structured space, perhaps including an access route from the east to, or through, OA1 and perhaps OA6.

The OA7 interior was likely occupied by miscellaneous early Roman pits and gullies G5 ([63, 65, 67, 69, 71, 79, 363 and 739]), mostly found in Trial Trench 7 (Fig.15). Otherwise, it is possible that, as an access route, this landscape entity was largely free of features in this phase.

The presence of a cluster of six cremation burials, G56, might be an indication of the more peripheral nature of this part of the landscape. All of the small pits ([663, 664, 665, 666, 667, 673]) were circular to oval in shape and only 0.25m wide and 0.1m deep. As such, the interred deposits were severely truncated (Figs.16-20). Burials [663, 664, 665 and 667] all contained the lower parts of jars or jar/bowls. While [666] and 673] contained no ceramic vessel remains, [663 and 665] each included fragmentary remains of a second vessel, probably a plate or dish either used as a lid or a grave good. Other than a variable quantity of cremated bone (100-1190g) none contained further grave goods or identifiable pyre debris. The vessels all fit within a mid 1st – mid 2nd century AD date range, with the jar from grave [63] being more closely dated to the mid 2nd century. This cluster of burials, perhaps representing a small family cemetery, does not appear to have been enclosed.

4.4 Phase 3: Later Roman

4.4.1 Both continuity and change are evident in the layout of the later Roman landscape. General alignments are retained and some of the earlier enclosure boundaries either moved slightly or seemingly incorporated and recut. As defined by the available dating evidence in terms of pottery and intercut relationships, some nine landscape entities are identified (Fig.5, OA8-16). The ditches that define the enclosure system retain the prevailing NNW-SSE / ENE-WSW alignment but are generally more substantial than those of the earlier Roman landscape.

In this new layout, former enclosure OA1 appears to be replaced by OA8 and OA9; defined by ditches G28 to the south and G4 to the east, and separated from one another by ditches G6, G7 and G27. Similarly, OA2 is replaced by OA10 and OA11 and it is postulated that the OA14 enclosure has its origins in an earlier one too (i.e. ditch G59, above).
The symmetry between OA14 and the postulated extents of OA10/11/12 is noted, producing a funnel-shaped plan toward the southeast corner entrance of OA9.

The major addition or change to the enclosure system seems to be represented by substantial ditch G22, for which there is no apparent precursor.

4.4.2 OA8 and OA9

It is possible that much of the western part of the site is a single large enclosure by this time, bounded by ditch G28 to the south, ditch G4 to the east and extending off to the north and west beyond the limits of excavation. However, the presence of a probable sub-division marked by interrupted boundary G7/G27 and parallel ditch G6 prompts the definition of its interior as two distinct spaces, OA8 and OA9. Its boundary status is reinforced by the presence of a probable tree hole [754] at the south end of ditch G27 (Fig.5). This north-south aligned subdivision may have also functioned as a routeway between the two parts. Undated, or poorly dated, features [729] and [731] could be construed to occupy this trackway, but are probably in fact earlier (elongated pit [731] contained pottery with a mid 1st to 2nd/3rd century date). The southeast corner of OA9 is open, facilitating access southwards into OA13 and eastwards into OA15.

The interior of OA9 may contain short lengths of ditch G21, G11 and G26 that are not easily interpreted. Relatively large pit [774] is positioned at what is effectively the southeast corner of the enclosure and could be argued to deliberately located at the end of in-filled early Roman enclosure boundary ditch G1. This roughly round, shallow pit contained a single fill that included mid 2nd to 3rd/4th century pottery, a fragment of Roman brick/tile and a small quantity of slag.

Feature G52, provisionally interpreted as a waterhole, was located toward the approximate centre of the OA9 enclosure. An irregular oval/elongated shape, the cut [579/581/583] measured 14.2m long by 7.5m wide and up to 1.5m deep (Fig.21). The northeast side of the feature was quite steep, sloping at a 45º angle, while the opposite side sloped gradually. It contained a sequence of four fills, the upper two containing the majority of the finds recovered from it, including over 3.5kg of later Roman pottery, pieces of brick and tile and a fragment of quern stone. A further quantity of undated pits and gullies (G32 and G51) could be contemporary with the functioning of OA9.

G53 later Roman pits [585, 587, 606, 615, 619, 624, 629, 636, 637, 731], G57 pits [735, 737 and 774], and perhaps G55 pits [609, 611, 774] occupy the OA8 and OA9 interiors, while a further quantity of undated pits (G32) could also be contemporary.

4.4.3 OA10 and OA11

Ditches G4 and G16, define parts of the southern and western boundary of a rectilinear enclosure that extends beyond the area of excavation to the north and east. No clear eastern boundary has been identified in evaluation trenches 16-19, though there is a possible candidate amongst a number of suitably parallel ditches (i.e. ditch segments [423 and 442]). It may be that the southeast corner of the enclosure was located just off the postulated north end of ditch G22 (see 4.4.7 below).

NNW/SSE aligned ditch G4 was 60m+ long by 1.5-4.2m wide and 0.49-1.02m deep, being the deepest and the narrowest at its north end and getting

shallower and wider towards the south. Where excavated in segments [39, 52, 556, 705, 719 and 765] the cut contained two or three fills, with the exception of the two segments that were dug only at the edges of the feature and showed only one fill each (Fig.22). All segments yielded predominantly 3rd-4th century pottery.
Ditch G16 defines the south side of the enclosure and is separated from G4 by a gap of c.1.0m. In segments [413 and 368] this ditch is particularly narrow and shallow (Fig.23), with a slightly bulbous and curving western terminal in segment [750]. Large ?pit [752/763] (G30) would seem to denote the subsequent blocking of the entrance gap at southeast corner of the enclosure, though this feature is seemingly infilled in the (?late) 4th century.

Within the known interior of the overall enclosure, and apparently integral with ditch G4, less substantial WSW-ENE aligned ditch G12 effectively partitions its southern end so forming a narrow sub-enclosure identified as OA11. Some 35m long, 0.8-1.3m wide and up to 0.54m deep, excavated segments [128, 354, 390, 707] contained one or two fills with 3rd-4th century pottery and fragments of brick and tile.

A narrow, north-south, ditch G18 most likely denotes a further sub-division of the enclosure north of OA11. That part bounded by ditches G4, G12 and G18 is identified as OA10. NNW/SSE aligned ditch G18 was recorded for a distance of c.32m long, was 0.8-1.7m wide and up to 0.52m deep. Each of the segments [383, 472, 541 and 701] contained a single fill with two producing late Roman pottery and fragments of brick and tile. Ditch G18 cut through earlier ditch G15 and the northern edge of ditch G9. The south end of the G18 ditch terminates short of G12, constituting an access point into adjacent sub-enclosure OA12.

The interior of OA10 contains only later Roman pits 350, 374, 474 (G35), the latter pit cutting the G18 subdividing ditch (Figs.25 and 26). Undated pit [401] (G66) is also a possibility. Moderately deep and containing three fills, pit [350] had a charcoal-rich middle fill and included mid 3rd to early 4th century pottery. The single fills of both [374] and [474] contained similarly late pottery, fragments of Roman tile and [374] a piece of slag.
OA11 is occupied by no contemporary features.

4.4.4 OA12

OA12 is defined as the land unit east of likely subdividing ditch G18. Projecting the eastward continuations of ditches G12 and G16, it is assumed that at least Trench 17 falls within its interior. As previously mentioned, there is a possible candidate in Trenches 16 and 18 for an eastern enclosure boundary in the form of ditch G65 (segs [423/442]), which runs parallel with the G18 boundary and contains 3rd-4th century pottery in its fill.

The only Later Roman discrete features in OA12 are three pits encountered in Trench 17. G42 pits [405, 419, and 437] contained mid/late 3rd-4th century pottery and tile and a small quantity of animal bone. A further quantity of undated features in this northeastern part of the site (G43) could, however, be contemporary.

As hinted by truncating pit [474], and confirmed by curving ditch G9 which cuts across both G18 and G12, the internal divisions defining OA10, 11 and 12 were by no means permanent. Ditch G9 (segs [117, 361, 387, 395, 698])

may well simply be a curving replacement of subdividing ditch G12. It contained mid/late 2nd-mid 3rd century pottery, predominantly from segment [117], and small quantities of bone, shell, baked clay and slag.

4.4.5 OA13

OA13 in the southwest of the excavation area, bounded to the north by ditch G28 and to the east by ditch G8, is of unknown extent; its westward and southward extents not being apparent in Trenches 11-14. A point of access is located at the northeast of this enclosure. Posited ditch [94/99], recorded only where it crossed Trenches 9 and 11, may constitute a subdivision of the enclosure interior though its alignment is perhaps at odds with it. Only containing Roman tile, it is essentially undated and could equally occupy preceding OA6 (or be a southward continuation of interrupted boundary G7/G27?).

A single later Roman feature, G4 pit [87], occupies OA13, though some of the G38 undated features could also be contemporary.

4.4.6 OA14

Ditches G8 and G24, and recut G60, define the north end of a fairly expansive rectilinear enclosure extending off to the south beyond the limit of excavation and not being manifest within the trial trenches 23, 24, etc. A total east-west enclosure width of c.65m can be determined, which matches well with its mirror-image enclosure OA10/11/12 to the north.

The exposed extents of curvilinear ditch G8 and its G60 recut measured approximately 95m long, with overall width ranging from 1.2m to 3.6m and depth from 0.32m to 0.76m. Eight segments were excavated across the enclosure boundary. Despite being heavily truncated by the later recut, the original ditch cut was discerned in three of these as segments [107, 686 and 694]. All containing only a single surviving fill, artefactual material was retrieved only from [687] the fill of segment [686] – a single sherd of mid 1st - 2nd/3rd century pottery.

Ditch G24 appears to be the interrupted continuation of the enclosure's eastern boundary and was recorded for a distance of c.9m, as far as Trench 21. It was 1.3-2.0m wide and generally 0.56m deep (Fig.26). Where excavated as segments [512 and 691] 3rd-4th century pottery, and animal bone, was retrieved from the fills. Although not entirely clear, it is likely that G24 is part of the earlier phase of the Late Roman enclosure.

More substantial recut G60 was discerned as segments [105, 684, 688, 693, 715, 746, 769 and 776] overlying the G8 ditch remains (Fig.27). The fills of the recut contained pottery, animal bone, tile and occasionally shell, slag and baked clay. The pottery is of variable date range from segment to segment, from mid1st - 2nd/3rd century to late 3rd - 4th century, which may be a reflection of the ditch's re-cutting and possible earlier Roman origin (see 4.3.1).

It is conjectured that the later recut phase of the enclosure included an entrance gap at its northeast corner. The recut seems to terminate just east of excavated segment [684]. As planned, the remainder of the ditch up to the north end of G24 is noticeably narrower and contains no sign of recutting, suggesting that this is the earlier ditch remains.

Traced for a distance of c.9.0m, roughly north-south aligned ditch G29 extended southwards from the OA14 enclosure ditch, apparently integral to it.

As such, it appears to have marked an internal subdivision of the enclosure interior. Judging by the 4th century pottery retrieved from its single fill within segments [587 and 778], this subdivision was possibly associated with the recut phase of this land unit.

Due to the persistent flooding of this corner the site, few discrete features occupying its interior were identified. Only those in preceding evaluation Trenches 10 and 21 were reliably recorded. Pits [514], [516], ditch fragment [485] and layer [131] (G48 and G41) all appear to be contemporary with the enclosure. Gully [132] was undated. Further south, and arguably perhaps outside the OA14 enclosure, likely quarry pit G49 was located in Trench 24 (Fig.28). Approximately 23m wide north-south, its east and west edges did not extend as far as adjacent Trenches 14 and 25. The sides of the quarry, recorded as cut [783], sloped gently down towards the centre of the feature, to a depth in excess of c.1.3m. Two fills were recorded at its centre from which only a small quantity of late 3rd–late 4th century pottery was recovered, along with fragments of Roman brick and tile.

4.4.7 OA15

OA15 is an irregular-shaped land entity in between enclosures OA10/11/12 and OA14, extending westwards to the open corner of OA19 and eastwards to the substantial G22 boundary. Its irregular shape in plan is largely the product of the mirroring splay of the opposing boundaries of OA10/11/12 and OA14 and its apparent extension down the east side of the latter.

The G22 ditch ran on an east-west alignment. Its southern extent was not traced beyond Trench 22 and, although not exposed within the area of excavation, its northern end is predicted to have been located at, or just before, its projected intersection with the G65 ditch. Recorded for a distance of almost 60m, the ditch widened towards its north, being c.3m wide in segment [495] and 5.5m wide in [677] (Fig.29). Being on average 1.1m deep, the cut contained a relatively complex fill sequence. However, only the uppermost deposit in each segment contained finds – including 3rd-4th century pottery and small quantities of tile, bone and baked clay.

No later Roman features have been identified as occupying the OA15 interior. However, the G46 features – essentially all the undated pits and ditches recorded in Trench 20, together with pit [675] identified to cut the edge of the G22 ditch – could be contemporary.

4.4.8 OA16

OA16 is that part of the landscape east of the G22 and G65 boundaries and is therefore somewhat nominal. Only being investigated within Trenches 16, 18, 19, and 22, little can be offered as to its form or function.

Late Roman G67 pits [445 and 447] are identified to be located within OA16. G47 undated pits and ditch fragments ([493, 497, 510, 521, 538]) are all the features that could potentially occupy this part of the later Roman landscape.

4.5 Phase 4: Post-Roman

4.5.1 Very few features or deposits were recorded that can be identified to post-date the Roman period. A ceramic land drain was recorded in Trench 24 and another encountered during the excavation where it was recorded to be cut into Roman ditch [380] (Fig.12). Both were perhaps early 20th century.

4.5.2 A quantity of post-medieval peg tile is noted to have been recovered from features of Roman date. These are interpreted as being intrusive and attest to a degree of truncation and disturbance by later cultivation, as is a fragment of roof slate from the fill of ditch [111].

4.6 Unphased: general Roman and undated

4.6.1 A significant portion of the recorded remains can be assigned a general 'Roman' date range due to either the general diagnostic nature of the artefacts collected from them (predominantly pottery and brick/tile) or else stratigraphic relationship. These have been mentioned above, in general terms of their possible contemporaneity with either the earlier or later phases of Roman landscape systems.

4.6.2 Features void of both artefactual evidence and stratigraphic relationship can only be regarded as undated. However, similarity of fills to those of dated features and the general lack of complexity suggests that most of them are probably contemporary with the Roman period landscape use. Some may alternatively be of natural origin.

4.6.3 Three natural features, interpreted as likely tree holes G58, are identified. Features [033], [460] and [754] are all irregular in plan and in profile. Feature [754] is probably the clearest and largest example, its amorphous, 0.21m deep, cut being filled with a grey silty clay with small pebble inclusions (Fig.30). As noted previously, its location just off the end of probable later Roman enclosure sub-division ditch G27 suggests that its tree was a pre-existing feature of the landscape that was incorporated into his boundary. Sinuous linear feature [033], found in Trench 3, is perhaps the remains of a substantial root. [460] was a squarer feature in the northwest corner of the site. Other unnumbered anomalies might have been further natural ground disturbance.

5.0 FINDS ASSESSMENTS

5.1 Introduction

5.1.1 The finds assemblage recovered from both the evaluation and area excavation phases of fieldwork is predominantly of Roman date, and the majority of this is pottery. The remainder of the assemblage comprises a fairly limited range and quantity of artefact types, mostly being deposited in enclosure boundary ditches and pits. An exception is pottery and burnt bone from a small cluster of cremation burials.

5.1.2 All finds were washed and dried or air dried as appropriate. Finds have been quantified by count and weight and subsequently bagged by material and context. Packaging and storage policies follow IFA guidelines (2008).

5.2 Worked Flint and Unworked Burnt Flint by Karine Le Hégarat

5.2.1 A single piece of struck flint weighing 2g was recovered from fill [095] in ditch [094]. The artefact consists of a thin blade fragment (mesial part) manufactured from a honey coloured flint. It displays moderate edge damage that almost certainly results from re-deposition. The blade scar and the two parallel ridges on the dorsal surface are likely to indicate a Mesolithic or Early

Neolithic date. This piece of flint débitage represents an isolated and probably residual find and it has no potential for further study.

5.2.2 A single piece of burnt unworked flint weighing 80g was recovered from later Roman pit [437]. The piece is heavily calcined to a white to light grey colour. Burnt unworked flints are frequently associated with prehistoric activities. However, this isolated artefact could easily indicate later activities. No further work is proposed.

5.3 Prehistoric Pottery by Anna Doherty

5.3.1 The prehistoric pottery assemblage is limited to a total of 17 sherds of Middle Bronze Age pottery, weighing 122 grams, recovered from soil sample <5> collected from context [499], the fill of small pit [498]. All of the sherds appear to be from a single small vessel and probably represent approximately one quarter of the whole pot. However, no cross-fitting pieces could be identified and both base and rim and sherds are present. This suggests that the vessel was broken prior to deposition rather than having been truncated and disturbed by post-depositional processes.

5.3.2 The fabric of the vessel is a moderately coarse flint-tempered ware, with common, moderately to ill-sorted flint inclusions of 0.5-3mm in a dense laminar clay matrix. The form is a small globular vessel; although difficult to measure accurately because of the fragmentary nature of the sherds, both base and rim appear to be less than 100mm in diameter. Two of the sherds have small applied bosses, one of which is positioned directly below the rim. A sooted residue, adhering to the exterior surfaces suggests that it was used in direct heat.

5.3.3 Although the form of is fairly typical of the Deverel-Rimbury tradition, small vessels are a relatively unusual component of Middle Bronze Age assemblages. Although there is no clear evidence that the vessel was carefully placed, the absence of other pottery from this context leaves open the possibility that this could represent a structured deposit, perhaps involving the burial of a vessel deliberately broken after use.

5.4 Late Iron Age and Roman pottery by Stephen Benfield and Anna Doherty

5.4.1 In total there are 2,877 sherds of hand-collected Late Iron Age and Roman pottery with a combined weight of 35,545g. The total estimated vessel equivalent (EVE) is 24.84 and the average sherd weight is 12.4g. A small quantity of Roman pottery was also recovered from the residues of environmental samples. This was briefly scanned for diagnostic pieces but generally consisted of small bodysherds in fabrics comparable to those collected by hand from the same contexts. This material has therefore not been recorded in detail.

5.4.2 The assemblage was recovered from a total of 173 contexts. Approximately 41% of the pottery by count and 46% by weight (1,186 sherds, 16,437g) was recovered from ditches and approximately 27% by count and 24% by weight (793 sherds, 8,659g) from pits. The remainder comes from a range of other features, most notably the fill of gullies and an extensive pit or pond [579], while a small quantity (50 sherds, 1,020g) is unstratified (U/S). The largest quantities from individual features are from pit/pond [579] (fill 572; 436 sherds/ 4,393g), pit [599] (fills 600, 601, 602; 382 sherds/3,759g) and ditch [117] (fills 118, 119; 273 sherds/2,874g).

5.4.3 The pottery has been quantified by number of sherds, weight and EVE (estimated vessel equivalence). The fabrics recorded follow the Essex (Chelmsford) fabric type series (Going 1987) supplemented by the Suffolk fabric type series (unpublished) and the National Roman Fabric Reference Collection (Tomber & Dore1998). For Black surface wares (Fabric BSW) see Martin (2003). Where possible the vessel forms refer to the Essex type series (Going 1987); although reference is also made to the *Camulodunum* (Cam) Colchester type series (Hawkes & Hull 1947 & Hull 1963). For imported vessels the samian forms refer to commonly used form types following Webster (1996) and amphorae forms refer to the type series established by Dressel (Tyers 1996). The pottery is listed by fabric in Table 2 and by context in Appendix 3.

Fabric name	Fabric	No	%No	Wt(g)	%Wt	EVE	% EVE
Imported fine wares:							
Terra-nigra	TN	2	0.1	1	0.0		
South Gaulish samian	SASG	2	0.1	58	0.2		
Les Martres-de-Veyre	SAMDV	1	0.0	14	0.0	0.05	0.2
Central Gaulish samian	SACG	13	0.4	133	0.4	0.23	0.9
East Gaulish samian	SAEG	3	0.1	16	0.0	0.08	0.3
Sub total		*21*	*0.7*	*222*	*0.6*	*0.36*	*1.4*
Imported coarse wares:							
Mayen ware	54	1	0.0	22	0.1	0.12	0.5
South Spanish amphorae	55	42	1.4	1940	5.3	0.22	0.9
Unidentified amphorae	AMISC	5	0.2	94			
Sub total		*48*	*1.6*	*2056*	*5.6*	*0.34*	*1.4*
Local and regional fine wares:							
Colchester colour-coat	1	2	0.1	2	0.0	0.08	0.3
Mica dusted wares	11,12	10	0.3	21	0.1		
Fine grey wares	39	31	1.0	89	0.2		
Miscellaneous fine red wares	RF	1	0.0	1	0.0		
Sub total		*44*	*1.5*	*113*	*0.3*	*0.08*	*0.3*
Local and regional coarse wares:							
Grog-tempered wares	53	3	0.1	13	0.0		
Oxfordshire white-slipped red wares	13	3	0.1	60	0.2		
Hadham white-slipped wares	14	5	0.2	97	0.3	0.02	0.1
Misc. white or cream slipped sandy red wares	15	1	0.0	2	14.3		
Misc. fine white or cream slipped sandy red-buff wares	16	8	0.3	27	0.1		
Miscellaneous oxidised red wares	24	57	1.9	222	0.6	0.78	3.1
Brockley Hill wares	26	13	0.4	390	1.1		
Colchester buff wares	27	2	0.1	15	0.0		
Unspecified buff wares	31	17	0.6	129	0.4	0.27	1.1
Hadham grey wares	36	1	0.0	8	0.0		
Black-Burnished 1	40	8	0.3	87	0.2	0.13	0.5

Black-Burnished 2	41	10	0.3	47	0.1	0.13	0.5
Unspecified Black-Burnished 2	42	12	0.4	475	1.3	0.8	3.2
Storage jar fabrics	54	221	7.4	11346	31.2	0.97	3.9
Romanising grey ware	45	11	0.4	89	0.2	0.07	0.3
Sandy grey wares	56	1169	39.3	10780	29.6	10.57	42.4
Rettendon wares	48	65	2.2	1432	3.9	0.47	1.9
South Essex shell-tempered ware	50	12	0.4	97	0.3	0.09	0.4
Late shell-tempered ware	51	7	0.2	53	0.1	0.34	1.4
Shell-tempered (general)	SH	70	2.4	331	0.9	0.06	0.2
Shell-tempered with some grog-temper	SHG	4	0.1	21	0.1		0.0
Black surface wares	BSW	882	29.7	7170	19.7	7.97	32.0
Grey micaceous wares - black surface	GMB	2	0.1	33	0.1		
Grey micaceous wares (black surface)	GMG	2	0.1	6	0.0		
Grey micaceous wares (grey surface)	GMO	6	0.2	25	0.1		
Highgate grey ware	HGW RE	1	0.0	9	0.0	0.07	0.3
North Kent grey ware	NKG	54	1.8	200	0.5	0.76	3.1
Sub total		*2734*	*92.0*	*33164*	*91.1*	*23.5*	*94.4*
Late specialist wares:							
Nene Valley colour-coat	2	19	0.6	139	0.4		
Oxfordshire red colour-coat	3	71	2.4	486	1.3	0.48	1.9
Hadham oxidised red wares	5	35	1.2	239	0.7	0.14	0.6
Sub total		*125*	*4.2*	*860*	*2.4*	*0.62*	*2.5*
Total		***2972***	***100***	***36415***	***100***	***24.9***	***100***

Table 2. Quantity of Roman pottery by fabric types

5.4.4 Pottery condition:

Much of the pottery is quite abraded. This can be attributed to the soil conditions as the abrasion mostly affects the surfaces of sherds and is general to the assemblage. There does not appear to be any significant difference in the condition of pottery from pit or ditch contexts. This abrasion makes identification of some of the fabric types difficult and particularly affects the quantification of Black surface wares (Fabric BSW) and Sandy grey wares (Fabric 47). Where no surface remains the grey ware sherds have generally been classified as Fabric 47 with the result that, as a proportion of the assemblage, Fabric BSW is likely to be under represented. Many of the shell-tempered sherds (Fabrics 50, 51, SH & SHG) are also in poor condition and none of the original surfaces survive on the sherds of North Kent grey ware (Fabric NKG). For the fine wares, apart from samian which is generally in good condition, much or all of the surfaces are also abraded away and almost none of the original surfaces survive on the Oxfordshire red colour-coat wares (Fabric 3) and Hadham oxidised red wares (Fabric 4). As such, other sherds which may originally have been slipped or colour-coated may not have been able to be identified.

5.4.5 Pottery assemblage

Imported wares

There are both fine and coarse ware imports. Together these make up approximately 2% by count and 6% by weight of the assemblage, the larger representation by weight being due the presence of imported amphora sherds.

The fine wares consist mostly of samian. There are sherds from South, Central and East Gaulish potteries (Fabrics SASG, SAMDV, SACG & SAEG), imported during the period of the mid1st-mid 3rd century, with 2nd century Central Gaulish samian (Fabric SACG) accounting for the majority. Among the assemblage are sherds from two decorated bowls of form Dr 37, both from Central Gaul. One of these. From fill [647], which can be dated as Antonine, is represented by several joining sherds forming much of the decorative scheme and appears to be in the style of *Cinnamus* whose production is dated *c.*135/145-170 (Webster 1996, 84). This bowl features an apparently repeating pattern of (following May 1930 – see below) a figure of Vulcan, a candelabrum and a roundel containing a figure of a lion and a panther (which has an unusually elaborate tail). An apparently identical decorated bowl (both *ovolo* & layout of the decorative scheme) presumably from the same mould, has previously been published from Colchester (May 1930, plate XXVI no. 190). There is also a sherd from a bowl with a similar decorative scheme from Chelmsford which is attributed to the style of *Cinnamus* (Rodwell 1987, fig 46 no. 32); although the beading of the panel dividing the figure identified as Vulcan from the candelabrum motif is absent on that sherd. It should also be noted that there is a small diamond shaped motif above the roundel containing the lion and panther on the Chelmsford sherd which is absent on the portion of the decorative scheme surviving from the Colchester bowl, while this area of the decoration is missing on the portion of the bowl surviving here. A bowl from *Verulamium* (cited by Rodwell) has a similar decorative scheme except that the roundel contains a figure of a stag (Hartley 1972, fig 97, no. 122). The *Verulamium* bowl is attributed to the style of *Cinnamus* and is stamped by *Cintusmus* on the rim. Identified plain samian forms are Dr 18/31 (Fabric SAMDV) and Dr 33 & Curle 15 (Fabric SAEG). There are also two small (joining) sherds which appear to be *terra nigra* (Fabric TN) imported from north Gaul and current from the late 1st century BC to mid-late 1st century AD.

The imported coarse wares are dominated by sherds from Spanish (Baetican) amphorae (Fabric 55). Most of the sherds appear to be from Dressel 20 amphorae (used primarily to transport olive oil) dating to the mid 1st-earl/mid 3rd century and which are the most common amphora type recovered in Britain. Bodysherds in a fine red fabric with rare large mica flecks were also recorded. These have some similarities to amphora fabrics from Eastern Mediterranean or Aegean sources, although in the absence of any form traits these cannot be identified with any confidence. Both the early and late Baetican fabrics (Tomber & Dore 84-85) appear to be present. These are recorded in the quantification listing as Fabrics 55 & 55b (Table 2). This demonstrates that more than one of these vessels is represented. A single rim from one of these amphorae [context 642] is of a form that can be broadly dated as late 1st-2nd century. There is also a sherd of late Roman Mayen ware from the Rhineland (Fabric 54; Fulford & Bird 1975, Fabric 1) which can be dated to the mid-late 4th or early 5th century [conext 379]. This is from the rim of a lid seated jar (Fulford & Bird 1975, fig 1, no.3).

Local and regional fine wares (mid 1st-3rd century)
There is only a small quantity of early-mid Roman fine wares recorded. These account for just 1.5% by count and less than 1% by weight of the assemblage. Only one colour-coated sherd is identified for this period. This comes from the from the Colchester potteries (Fabric 1) and is of 2nd-3rd century date. There are sherds from a single pot [context 118] which the surface appearance suggests may have been mica dusted (Fabrics 11/12). There is also a quantity of fine grey ware sherds (Fabric 39), including a globular beaker decorated with rouletting (H3) of mid 1st-early 2nd century date and fine red ware sherds (Fabric RF).

Possibly more significant in terms of quantity are several everted rim beakers (form H6) in a fine grey fabric which indicates a North Kent origin (Fabric NKG). However, these are quite abraded exactly the same fabric type is shared by some coarse ware vessel forms. As such a distinct or separate 'fine ware' group has not been distinguished and the pots in this fabric are discussed below with the coarse wares. Difficulty in distinguishing separate fine and coarse ware groups has also been noted for North Kent grey wares at Ebbsfleet (Biddulph *et al* 2011, 51). If the sherds identified from beakers were included here (28 sherds, weight 106 g) they would increase the local and regional fine wares to 3.4% by count and 0.9% by weight of the assemblage. A single sherd from a decorated bowl (Fabric BSW), which is possibly residual in [579] (fill 613) could also be considered as a fine ware vessel. Although not closely identified this vessel could be related to London-Essex stamped ware (Going 1987, Fabric 19).

Local and regional coarse wares
In terms of quantity, the largest fabric groups among the assemblage are Sandy grey wares (Fabric 47), Black surface wares (Fabric BSW) and Storage jar fabrics (Fabric 44). Together these make up approximately 80% of all of the Roman pottery, both by count and by weight; although Sandy grey wares and Black surface wares are much more significant by count (approximately 70% of all sherds) indicating that vessels in these two fabrics account for most of the pottery used on the site. It can be noted that most of the Black burnished ware (BB2) type vessels recorded are in Sandy grey ware or Black surface ware and of the BB2 type bowls with bead rim (forms B2 & B4) almost all have the half round rim beading with a plain (undecorated) body. These traits are considered to represent the late form of these bowls and are typical of many of the bowls of this type produced at small kiln sites in Essex. This has been noted by Going (1987, 8) who suggests that much of the production of these vessels in Essex dates to the late 2nd and 3rd century rather than earlier.

Shell-tempered fabrics (Fabrics 50, 51, SH & SHG) are also significant with a combined total of 101 sherds (470g). The broad category of shell-tempered ware (Fabric SH) was adopted for many of the body sherds as these were not able to be closely defined within existing fabric categories as either early Roman (Fabric 50) or late Roman (Fabric 51) shell-tempered wares. While sherds from shell-tempered late Roman jars (form G27) and a late Roman bowl (form B5) are present, only one rim from an early shell tempered jar (form G5) was recorded. None of these coarse wares have been sourced to a particular kiln site, although all of the vessels in these fabrics are most likely to be local or regional (South Essex or North Kent) products. It is also noted

that medieval shell-tempered wares appear to be present on the site, which as abraded body sherds are difficult to separate from Roman.

A small proportion of the coarse ware fabrics were able either to be sourced, or a likely production source could be suggested. The most significant of these in quantity is Rettendon ware (Fabric 48). Rettendon ware (Rettendon-type ware) is a coarse fabric with inclusions of flint-temper which in known to have been produced at several sites in Essex in the period of the late 3rd-mid 4th century. The quantity of flint inclusions in the sherds here is generally sparse-moderate with quartz inclusions being generally more common in the fabric. Also Rochford lies on the edge of the main distribution of this pottery as recorded by Going (1987, fig 43). This raises the possibility that some may represent coarse sandy grey ware with rare (incidental) inclusions of flint. As such this fabric may be unreliable for dating if it is the only late dated pottery from a context. However, these sherds form a generally homogeneous group and most if not all can probably be identified as Rettendon ware. The most local known production site to Rochford is Rettendon itself. A small, but significant quantity of pottery comes from the Brockley Hill (*Verulamium* region) potteries in Hertfordshire (Fabric 26) which can be dated to the mid-late 1st-mid 2nd century. This fabric includes the only mortarium identified among the assemblage that can be certainly dated to the early-mid Roman period [contexts 614, 653]. There are also a few sherds of BB1 from Dorset (Fabric 40). These sherds are from bowl/dish forms, one of which can be dated to the period of the mid 2nd-3rd century. No jars of form G9, which is a common form in this fabric, were recognised among the assemblage.

There are a number of sherds in a distinctive, relatively fine grey ware which has a dark grey fabric core and light grey margins (Fabric NKG), although none of the original sherd surfaces remain. These are probably from a source in North Kent. They include sherds from two or more beakers (form H6), dating to the late 1st-2nd or early 3rd century [context 601] and other sherds from a carinated bowl [context 601]. Some of the beakers may originally have had panel dots on the body surfaces, but no trace of any dots remains. These may possibly have been abraded off; although these beakers might have been plain and one retains traces of a surface decorated with rouletting. There are sherds in this same fabric from a bowl/dish of form B2, with a triangular (pointed) bead rim [context 639]. This is the earlier of the rim types associated with this bowl form and it probably dates to the early-mid 2nd-late 2nd century. Also in this fabric are sherds from a flanged bowl of form B6 dating to the late 3rd-4th century [context 572]. The date range of these vessels suggests that this source in North Kent was supplying pottery to the site over the period of the 2nd-late 3rd/4th century.

Fabric	Code	Forms recorded
Oxfordshire white-slipped red wares	13	D6
Hadham white-slipped wares	14	D6
Miscellaneous oxidised red wares	21	B1
Brockley Hill wares	26	(mortarium)
Unspecified buff wares	31	D5
Black-Burnished 1	40	B1, B4
Black-Burnished 2	41	B3
Storage jar fabrics	44	G44, G45 (Cam 273)

Fabric	Code	Forms recorded
Romanising grey ware	45	C2
Sandy grey wares	47	B1, B2, B4, B6, C16?, E2, E6, G5.4, G6, G9, G17, G19, G21, G24, G27,G29, G36, G42, H6, H26
Rettendon wares	48	G23, G24
South Essex shell-tempered ware	50	G5
Late shell-tempered ware	51	B5, G27
Black surface wares	BSW	B1, B3, B4, B6, B7, E2, E6, G5, G9, G9.2, G19, G20, G24, G36, H24
North Kent grey ware	NKG	B2, B6, H6

Table 3. Local and regional coarse wares vessel forms, recorded by fabric

A few other sherds are probably from potteries at Oxford (Fabric 13), Hadham (Fabrics 14 & 36) and Colchester (Fabric 27) and one sherd with a faint, cream surface wash is possibly from the Highgate kilns (Fabric HGW RE) although this is not certain. However, it can be noted that cream-slipped wares were also produced in the relatively local kilns at Palmers's School, Greys (Rodwell 1983, 25-26).
The majority of vessel forms indentified in coarse ware fabrics are from jars or bowls. All of the form types recorded are listed by fabric in Table 3.

It can be noted that there appears to be a significant low incidence of sherds in buff wares which might have come from flagons indicating a low use or near absence of these vessels among the assemblage, although one unstratified (u/s) handle sherd (Fabric 21) is probably from a flagon.

Late specialist wares

The fabrics grouped together here represent the specialist products of major late Roman (mid/late 3rd-4th century) potteries. Together these account for approximately 4% by count and 2.4% by weight of the assemblage. The sources of the pottery are Oxford, Hadham and the Nene Valley. The majority of this pottery is red colour-coated wares from Oxford (Fabric 3). This fabric can be dated to the late 3rd- 4th century, but most, if not all probably dates to the late 4th century and possibly the early 5th century following the dating at the more significant Roman settlements at Chelmsford and Colchester (Going 1897, 3; Symonds & Wade 1999, 304). The forms recorded are C8.1 (flanged bowl), C25 (bowl), D5 (mortarium) & B10 (dish). Red oxidised wares from Hadham (Fabric 4), dating to the late 3rd-4th century, are also moderately well represented in this group of fabrics. Forms recorded are C8 & C8.1 (flanged bowl). Nene Valley colour-coat wares (Fabric 2), dating to the mid/late 3rd-4th century, are less prominent.

5.4.6 Pottery from cremation burials:
Parts of six vessels were recovered from four of a total of six cremation burials located close together on the east side of the site [663, 664, 665, 667]. All of the pots are quite broken-up, with abraded surfaces and sherd edges.. No diagnostic sherds or significant parts of vessels remained sufficient to warrant illustration.

A jar or Jar/bowl is associated with each of the burials; presumably the remains of pottery urns containing the cremated bone. Only the lower parts

(sherds from the base and body wall) are present and there are no rims indicating that the upper parts of these pots have been truncated after burial. Sherds from a second pottery vessel were recovered from two cremation burials [663 and 665]. These second vessels are a plate/bowl with footring and a flat base dish/bowl form. Again, only base and body wall sherds are present. These pots may have been deposited in the graves as a separate vessel, although these types of pots (plates, dishes, bowls) were sometimes placed as lids (usually inverted) over the top of the cremation urn. If they had been placed on the top of urns (these having been truncated) this might possibly explain the absence of their rim sherds. However, the absence of rim sherds for these two pots might also indicate that they represent accidental incorporations with the burial deposits, although this appears unlikely for pot [669.2].

Almost all of the vessels are in Black surface ware (Fabric BSW) with one plate/bowl in an unsourced fine grey ware (Fabric 39). The most closely dated of the pots come from cremation burial [663]. One is a jar with comb-stab decoration on the shoulder (pot 669.1) which can be dated to the mid 1st-early/mid 2nd century. The other is a dish or bowl with a chamfered base (pot 669.2) which is probably a Black-burnished ware style pot which can be broadly dated to the early/mid 2nd century-3rd/4th century. This suggests this cremation burial probably dates to the period of the mid 2nd century or soon after. The other pots are not so closely dated individually, although the fabric of the jar from burial [667] suggests a mid 1st-early 2nd century date. Overall the common used of jars in Fabric BSW indicates a probable early-mid Roman date rather than later and the burials can be dated to the period of the mid 1st-2nd century with one, burial [663], closely dated to the early-mid 2nd century or later.

5.4.7 Discussion:

The pottery is the first significant Roman period assemblage from Rochford; previous finds, while not uncommon, being small scale (ECC 1999). As such, aspects of the assemblage are significant in helping to understand the nature and development of settlement in Rochford during the Late Iron Age and Roman period and to assist in providing an overview which can be developed by any future archaeological work.

Overall, the potential date range of the pottery recovered spans the late 1st century BC/early 1st century AD to the late 4th or early 5th century, although there appears to be little evidence of for significant activity on the site prior to the early Roman period and possibly not before the mid-late 1st century.

In terms of dating, much of the more closely dated of the pottery can be divided between four broad Periods:

- Late Iron Age-early Roman (late 1st century BC-mid 1st century AD)
- Early Roman (mid 1st century- early/mid 2nd century),
- Mid Roman (early/mid 2nd century-mid/late 3rd century)
- Late Roman (mid/late 3rd century-4th century).

The late Roman period can be further divided to include latest Roman (mid/late 4th-early 5th century).

To some extent these periods overlap with one another and the date ranges of some of the more closely dated pottery also overlaps between them. However, they are useful in broadly dividing the assemblage in terms of a chronological based discussion.

The Late Iron Age-early Roman period is the most difficult period to approach through the pottery assemblage. This is because the pottery which can be closely dated to this period consists of just a few sherds. There is a small quantity of grog-tempered sherds (Fabric 53) which can be dated as Late Iron Age (LIA) but which remains current into the early Roman period, and a small (broken) sherd identified as *terra-nigra* (Fabric TN). Both of these fabrics types are probably not current after the Claudio-Neronian or early Flavian period. Some of the shell-tempered pottery (Fabric 50) could also date to the LIA, but the quantity of 1st century shell tempered wares may be relatively small, with just one early jar form being recorded (form G5), and none need necessarily date earlier than the mid-late 1st century AD. This small quantity of pottery does not indicate any intensive LIA activity and could represent either residual sherds from agricultural use of the area, or belong to an early Roman (post-conquest) settlement of the mid-late 1st century.

The quantity of early Roman pottery recorded clearly indicates settlement on or close to the site. While the number of contexts with pottery which can be closely dated to this period is limited, pottery more broadly dated to the mid1st-2nd century or mid 1st-2nd/3rd century was recovered from a larger number contexts. This pottery need not necessarily date later than the 1st-early/mid 2nd century, although most of these contexts produced only a few sherds and are not closely dated. Only four features with pottery dated to the mid 1st-early 2nd century produced more than ten sherds, these are ditch [073] (fill 074), pit [399] (400) & pit [608] (607), while the largest quantity of pottery dated to the early Roman period from one feature was recovered from pit [599] (fills 600, 601 and 602) and a few sherds from this feature (601) could date later in the 2nd century. Pottery dating to this period probably includes some of the vessels accompanying a small number of urned cremation burials grouped on the east of the area (see above), although pottery from one of these burials can be dated to mid 2nd century or later. The early Roman pottery include of jars of form G17 (Cam 218) & G19, samian from South Gaul (Fabric SASG) and Les Martres-de-Veyre (Fabric MDV), and pottery from the *Verulamium* region (Brockley Hill) (Fabric 26) which is most common at Chelmsford in contexts dated to the late 1st-early 2nd century (Going 1987, 6-7). A number of other vessels probably date to the early Roman period, notably storage jars of form G44 (Cam 273), but have a broader date range into the 2nd century.

While pottery which can be closely dated the mid Roman period appears more common among the assemblage in relation to that of the early Roman period this may be influenced by the fact that some vessels which appear at this time (notable some forms of beaker, dishes and bowls) are more easily closely dated than many of the jars and jars/bowl rims which appear to make up much of the early Roman pottery. However, the number of contexts with pottery which can be closely dated to the mid Roman period is again limited, but pottery from a larger number of contexts is more broadly dated as 2nd-3rd/4th or 2nd-4th century and this need not necessarily date later than the mid Roman period. The quantity of pottery associated with any of the closely dated contexts groups is generally less than twenty sherds, the largest group coming from ditch [413] (fill 416), although larger quantities are associated with more broadly dated contexts. Also, at least one of the urned cremation burials, [663] probably dates to this period. The pottery which can be closely dated to the mid Roman period includes imports of Central and East Gaulish

samian (Fabrics SAMDV, SACG & SAEG), including much of a Central Gaulish Dr 37 decorated bowl of Antonine date. There are also jars and dishes or bowls in Black burnished ware forms, primarily in Black surface wares (Fabric BSW) or Greywares (Fabric 47), and vessels in a distinctive greyware fabric probably from North Kent (Fabric NKG) which includes a several everted rim beakers (form H6) which are quite abraded and any original decoration, for the most part, no longer survives.

Pottery which can be closely dated to the late Roman period is well represented from a large number of contexts and there is a significant quantity from one feature - an extensive pit/pond [579] (fills 572, 580, 613, 614 and 634). The late Roman pottery includes sherds from a number of vessels which are products of major late regional potteries. These are (in order of importance based on quantity) Oxford (Fabric 3), Hadham (Fabric 4) and the Nene Valley (Fabric 2). There are also sherds from shell-tempered vessels (Fabric 51) which can be identified as late Roman jar and a bowl forms and other vessels in coarseware fabrics (Fabric 47 & Fabric BSW) which can be dated to the latest Roman period, notably the flanged bowl form B6. Some of this pottery can be closely dated to the very late (latest) Roman period. Oxford red colour-coated wares, while broadly dated to the 4th century, are not common in deposits in Chelmsford or Colchester until the late 4th century and this late date appears common for much of Essex (Going 1987, 3; Symonds & Wade 1999, 304). There is also an imported Mayen ware jar (Fabric 54). Although some Mayen ware in Britain is from contexts dated to the early-mid 4th century (Fulford & Bird 1975, 178-79) most is of late 4th or possibly early 5th century date and no examples are recorded from contexts at Colchester dated earlier than the late 4th century (Symonds & Wade 1999, 463).

The assemblage is dominated throughout the Roman period by jar, jar/bowl, bowl and bowl/dish forms. Other vessels are present, notably beakers, but specialist vessels, such as mortaria are not well represented and there are proportionally very few flagons. Imports are present in small numbers, including decorated samian bowls (Dr 37) dating to the 2nd century (mid Roman period). There are also sherds from at least two olive oil amphorae (Dressel 20). The apparent importance of jar and jar/bowl forms (although numbers of dishes and bowls are also present) and low incidence of specialist vessels is typical of many relatively low status rural sites in Roman Britain. This is considered to reflect a traditional (indigenous) approach to food preparation and serving in contrast to assemblages where specialist vessels, serving vessels and table wares are more in evidence (Evans 2001; Biddulph *et al* 2011, 148-149).

The graffiti marking of pottery vessels does not appear to be common among the assemblage and it is unlikely than any well scored graffiti would have been removed by the abrasion common to the surfaces of many of the sherds. Recorded graffiti consists of an ‘X’ scored post-firing into the wall of a jar or jar/bowl (151) (Fabric 47) and a group of three cuts made into the lip (580) of a jar/bowl rim (Fabric 47). There are also some possible graffiti scratches on another sherd (601) (Fabric NKG) but these appear more abstract and may be later damage.

The nature of the assemblage and the preponderance of unsourced coarse wares suggest that most of the pottery was obtained from relatively local kilns;

certainly until the late Roman period of the mid/late 3rd-4th century when products of major regional potteries from part of most late Roman site assemblages. The more common forms of coarse ware pottery vessels recovered from the site certainly feature among the products known to have been produced among relatively local kilns which include Mucking, Gun Hill (Orsett), Palmer's School (Greys) and Buckenham's Field (Billericay) (Jones 1973; Drury & Rodwell 1973; Rodwell 1983; Tester 2010). Rodwell has previously suggested that Mucking, Gun Hill and Palmer's School can be seen as a dispersed but related 'North Thames bank' group of kilns (1983, 34). Pottery from North Kent, across the Thames estuary, should possibly also be considered to be essentially a local source which appears to have added finely made breakers to the local products available in the 2nd century.

Products of the larger, regional potteries (apart possibly from North Kent) appear to be much less significant than local kilns. There is some pottery from the *Verulamium* region (Brockley Hill) potteries in the early Roman period. However, the Colchester potteries, which were a significant source of supply to sites in the north of the county and further afield in the early/mid 2nd-early/mid 3rd century, are not well represented. There is just a single sherd of colour-coated ware and possibly a few sherd in buff fabrics attributed to this source; although some of the small quantity of Black burnished ware (BB2) (as opposed to Black burnished ware style pots in Black surface wares or sandy grey wares) is possibly from Colchester. A small number of vessels in cream slipped oxidised fabrics and one possibly mica dusted vessel are also likely to have come from other, regional potteries, possibly Colchester or Hadham. Colchester and Hadham products have been identified as a small, but significant part of assemblages from Billericay (Medlycott *et al* 2010) and may possibly be underrepresented as identified sources here due to the surface abrasion of sherds.

Local supply probably continued to make up the greater proportion of the pottery in the late Roman period, including late Roman shell-tempered pottery (Fabric 51) which is probably underrepresented in the quantification as at least two late Roman jars and a late Roman bowl are present in this fabric. However, as is common for many sites, products from large regionally important potteries are significant among the late Roman assemblage. Of the late regional potteries represented - Hadham (east Hertfordshire), the Nene Valley (Cambridgeshire) and Oxford - in terms of quantity the Oxford potteries appear to be the most important. This may reflect the position of the site close to the Thames corridor and it can be noted that Oxford red colour-coated ware is the most significant of the late Roman fine wares at Northfleet in north Kent (Biddulph 2011, 142). However, this importance probably also reflects the site chronology. Oxford red colour-coated products may not have reached the site in any quantity prior to the late 4th century while late Hadham and Nene Valley wares may have been present from the 3rd century onwards. Hadham oxidised wares are recorded from Northfleet from contexts dated to the early-mid 3rd century, although most comes from 4th century contexts after *c.*AD 325 (Biddulph 2011, 142). The quantity of Oxford wares indicates significant activity in the late 4th-early 5th century and an imported Mayen ware jar can probably also be dated to this period. It can be noted that pottery groups (often large groups) containing the latest dated Roman pottery and with low levels of earlier Roman pottery, were recovered from deposits associated with Saxon occupation at Northfleet (Biddulph 2011, 146). At the

time of writing it is not clear if there is any Saxon activity or occupation on or around the site.

5.5 Ceramic Building Material by Luke Barber

5.5.1 The excavations recovered 231 pieces of ceramic building material, weighing 14,926g, from 68 individually numbered contexts. Most deposits produced under 10 pieces of brick and tile, with the largest two context groups consisting of just 41 and 17 pieces (contexts [151] 296g and [562] 314g) respectively. However, as can be seen from the combined weights of these assemblages these higher totals are due to heavy fragmentation rather than a significant group of tile.

Fragmentation is very variable within the assemblage: although there are a number of large pieces present (i.e. 400-800g each), the majority are much smaller. No complete length or width dimensions are present. Most pieces show slight/moderate signs of abrasion suggesting a certain amount or re-use or reworking. However, some pieces are quite fresh suggesting reworking did not occur in all cases.

The vast majority of the assemblage is of Roman date, being recovered from a number of contexts spanning the 1st to 4th centuries. However, there is also a small quantity of post-medieval material, often intrusive into Roman deposits. The two assemblages are considered separately here.

5.5.2 Romano-British assemblage:
The vast majority of the assemblage is of the Roman period (206 pieces weighing 14,262g). Even when these pieces are too small to be certain of form they are in definite Roman fabrics, though a few pieces are too small to be absolutely certain of this. Six Roman fabrics were identified and these are summarised in Table 4.

Fabric	Description	Comments
RB1	Rare/sparse fine sand with sparse white calcareous inclusions to 0.5mm	A well fired. Almost silty fabric
RB2	Silty slightly micaceous matrix with rare fine sand and common red iron oxide and white marl pellets to 2mm	
RB3	Silty fabric with rare quartz inclusions to 0.25mm, sparse red iron oxide pellets to 3mm and moderate black organic streaks and voids to 4mm	A notably soapy feel
RB4	Common to moderate fine/medium quartz sand with moderate white calcareous (chalk) inclusions to 5mm (most to 1mm) and rare/sparse dull purple iron oxide inclusions	A well fired fabric usually
RB5	Moderate fine sand, with some tiles occasionally having very rare inclusions of iron oxide or flint to 4mm	Generally a very clean uniform fabric and the dominant one on site
RB6	Moderate to abundant medium/coarse sand throughout fabric with some black streaking from organic inclusions	

Table 4: Roman Ceramic Building Material fabrics

Chronologically these six fabrics are widely mixed and it is clear that much material has either been re-used/reworked or some of the fabrics were long-lived. The situation is not helped by the undiagnostic nature of the pottery in many contexts only allowing wide date brackets to be allocated. However, both RB5 and RB6 were found in association with ditch [449], dated to the 1st

century suggesting both these fabrics to have an early start date. Likewise there is an RB1 fragment from context [147], dated to the mid 1st to 2nd centuries, though RB2, RB3 and RB4 first appear in later 2nd to 3rd century contexts. The RB5 and 6 fabrics in these later contexts could represent a continuation of production or the re-use of earlier materials. Larger more tightly dated assemblages would be needed to confirm any chronological progression of these fabrics.

A range of typical Roman ceramic building material forms are present within the assemblage and the quantities of these, by fabric, are shown in Table 5.

The brick fragments all fit within a 30 to 41mm thickness range, with perhaps a slight concentration around 32 to 34mm. Two examples exhibit finger impressed lines – a RB1 example from context [147] has a single diagonal finger line, while a RB5 example from gully [376], fill [377], has a single zig-zag finger line down the tile's edge.

Fabric/ Form	Brick	Tegula	Imbrex	Box Flue	Misc. (not diagnostic)	Totals
RB1	2/1154g	1/28g	-	-	-	3 / 1182g
RB2	1/84g	8/930g	1/138g	-	2/74g	12 / 1226g
RB3	-	-	-	-	17/692g	17 / 692g
RB4	-	3/1120g	-	-	3/130g	6 / 1250g
RB5	8/1432g	89/6806g	3/140g	1/332g	57/1094g	158 / 9804g
RB6	-	-	1/10g	-	9/98g	10 / 108g
Totals	*11/2670g*	*101/8884g*	*5/288g*	*1/332g*	*88/2088g*	*206 / 14,262g*

Table 5: Roman CBM forms by fabric

Tegula tile fragments are the most common type at the site and at least 13 examples of flanges are present though a number do not have their full profiles surviving. The complete flanges are mainly of a tapering (x3) or squared profile (x5) but at least one low example (35mm) with a slightly hollowed top is present (RB5 from ditch [677], not dated closely) as well as one with rounded top (RB5 from pit/pond [579] dated to the 4th century). Flange heights range between 35 and 57mm (from the base of the tiles) and there is no patterning between fabrics. Indeed RB5 tiles have a full range of flange heights. One tile has the lower cutaway surviving (an RB5 example from tree bowl [624]. Thicknesses from definite tegulae range widely between 16 and 29mm and there are sometimes notable ranges on individual tiles (e.g. a RB5 example from [147] ranging from 17 to 21mm thick). A single tile has a 'batch' or 'signature' mark. This is of the typical single shallow semicircular finger line type (a RB4 example from ditch [681]). There is also an unstratified fragment from Trench 8 with a dog paw print.

The fragments of imbrex tile range greatly in thickness from 14 to 17mm, with a single RB5 example from gully [393] showing this full range depending on where the tile is measured. The single box flue tile fragment (RB5) measures between 18 and 21mm thick and was recovered from ditch [684], fill [685], dated to the mid 2nd to mid 3rd centuries. Although the fragment has no combing, part of the corner return is present. Although pieces undiagnostic of form make up 42.7% of the overall assemblage by fragment count, they only

constitute 14.6% by weight. As such the form ratios are probably quite representative for the site as a whole.

5.5.3 Post-Roman:
The assemblage includes 25 pieces (664g) from peg tiles of post-medieval date. These pieces, usually with moderate signs of abrasion, were recovered from nine individually numbered contexts, many of which are dated by pottery to the Roman period (eg pond [783], fill [524]B; ditch [707], fill [708]; pit [731], fill [732] and ditch [733], fill [734]). Considering the small quantities involved and the abraded nature of the peg tile it is quite likely that most pieces have been intruded into earlier deposits during post-Roman cultivation. Three fabrics were identified: two clearly of later post-medieval date, with the last being of earlier type though in isolation, not closely datable. The fabrics are summarised in Table 6.

Fabric	Description	Comments
PM1	Sparse very fine quartz sand with a few voids to 3mm (possibly from burnt out calcareous inclusions)	Quite well made and fired. Probably C18th to mid 19th (14/370g)
PM2	Sparse very fine quartz sand with sparse to common iron oxide flecks and pellets to 3mm	Quite well made and fired. Probably C18th to mid 19th (6/202g)
PM3	Common/moderate medium/coarse quartz sand with common purple iron oxide inclusions to 2mm	Quite well made and medium fired. Probably C15/16th to 17th (5/92g)

Table 6: Post-Roman Ceramic Building Material fabrics

The assemblage is too small to provide any meaningful overviews. However, tile thickness ranges from 11 to 14mm (e.g. within PM1 there is this full range, though all PM3 tiles are 12mm thick). The only peg holes consist of circular types noted on PM1 and PM3 types. Interestingly PM3 types were only recovered from contexts [307], [314] and [353].

5.6 Fired Clay by Trista Clifford

5.6.1 A small assemblage of 121 fragments of fired clay weighing 3694g was recovered. The assemblage was assessed by eye for form and function and for fabric type using a x20 magnification microscope. A series of four fabrics was observed. Table 7 shows an overview of the assemblage by phase and fabric. Mean fragment weight (MFW) is 30.5g, indicating a fairly well preserved assemblage, although abrasion is apparent on most pieces

	Phase			
	II	**III**	**Unphased**	**Total**
Fabric 1	22/1724g			22/1724g
Fabric 2		5/70g	4/16g	9/86g
Fabric 3			5/24g	5/24g
Fabric 4	80/1468g	5/392g		85/1854g
Total	*102/3192g*	*10/42g*	*9/40g*	*121/3694g*

Table 7. Overview of the fired clay assemblage (count/ weight)

5.6.2 Very few pieces appear completely un-utilized; most at least have one flat or smoothed face. Phase 2 pit fills [434] and [465] produced several fragments

of possible cylindrical loom weight or pedestal. Another probable pedestal fragment came from ditch fill [104] together with a possible oven plate.
Phase 3 ditch fill [494] contained fragments with single or intersecting wattle impressions which probably derive from structural daub.
Possible briquetage came from undated features [151] and [712].

5.7 Geological Material by Luke Barber

5.7.1 The excavations recovered 34 pieces of stone, weighing 7874g, from 18 individually numbered contexts. The material has been fully listed by context and stone type on geological material forms during this assessment with the data being entered into an excel database. The assemblage is characterized in Table 8.

Stone type/context date	Undated (prob. RB)	General RB	1st-2nd cent	2nd–3rd cent	3rd– 4th cent	Totals
No. of contexts	*7*	*1*	*1*	*5*	*4*	***18***
Flint	1/324g	-	-	-	1/112g	**2/436g**
Chert	8/1056g	-	-	-	-	**8/1056g**
Coarse Tertiary sandstone	-	-	-	-	1/1682g	**1/1682g**
Fine Tertiary sandstone	1/334g	-	-	-	-	**1/334g**
Fine grey sandstone (?Thanet Beds)	-	-	-	1/164g	-	**1/164g**
Millstone Grit	1/644g	-	-	1/340g	2/658g	**4/1642g**
German Lava	4/218g	3/22g	-	7/1722g	2/562g	**16/2524g**
Welsh slate	-	-	1/36g	-	-	**1/36g**
Totals	*15/2576g*	*3/22g*	*1/36g*	*9/2226g*	*6/3014g*	*34/7874g*

Table 8: Geological material by period (no. of pieces by weight in grams)

5.7.2 A good proportion of the stone occurs naturally on, or relatively close to, the site. Certainly the flint (cobbles), chert (probably from the Lower Greensand Beds) and Tertiary sandstones (possibly Thanet Beds) may well have come from fluvial reworking of solid geological strata in and around the Thames estuary. The emphasis would appear to be from the south, with most of these stone types being common along the north Kent coast.

The non-local stone constitutes 61.8% of the assemblage by count (53.4% by weight). This group is totally dominated by fragments of rotary quern. Just two quernstone types are represented, Millstone Grit from Derbyshire and Mayen lava from the Rhineland (though the latter was probably redistributed from London). Both types are apparent from the 2nd century onward, but some of the undated contexts could be earlier. The only other non-local stone type consists of a piece of 19th- century Welsh roofing slate, apparently intrusive in ditch [111], fill [116].

The Millstone Grit quern fragments (4/1642g) are from stones measuring between 35 and 50mm thick (contexts [118], [420] and [598]). Unfortunately all fragments are too small to discern if upper or lower stones are present but all show traces of deeply cut grooving on their grinding faces with various degrees of wear. The lava querns range from 21 to 42mm thick, with many pieces also exhibiting tooled grooving on all faces including the edges. As with the Millstone Grit examples there is a range of wear on the grinding faces. However, at least three of the lava fragments are from upper stones

(ditch [649], fill [647], gully [642], fill [651] and ditch [760], fill [762]). Of these three, two have measurable diameters of c.360mm and c.400mm (contexts [647] and [762] respectively).

The two fine Tertiary sandstone pieces are both notably worn but slightly irregular in form. Although they could have been used as whetstones there are no conclusive wear patterns on them and all smoothing may have been the result of fluvial action (contexts [653] and [755]).

5.8 Metallurgical Remains by Luke Barber

5.8.1 The excavations produced 198 pieces of slag, weighing 10,734g, from 38 individually numbered contexts. Of this total 6g was recovered from a single environmental residue (context [404]) though this material consisted solely of magnetised burnt clay. The whole assemblage has been fully listed for the archive on pro forma during this assessment with the data being input into an excel database. Key samples have been retained for long-term curation.

5.8.2 The assemblage appears to all be of Roman date, and was recovered from deposits spanning the mid/late 1st to 4th centuries. Contexts not containing ceramic dating produced similar types of slag to those confirmed as Roman and as such are assumed to be of a general Roman date. There are no notable concentrations of metallurgical waste – by far the largest single group consisting of 38 pieces (2096g) from mid 1st to mid 2nd century ditch [111] (fill [114]). The overall assemblage is tabulated in Table 9 and it can be seen from this that there is nothing to indicate anything other than low levels of iron smithing at the site.

Type	Count	Weight	Comments
Hearth Lining	9	142g	All with a red/orange silty clay (Contexts [64, 515, 572, 766, 775] spanning the mid 1st to 4th cent)
Fuel Ash slag	47	297g	Probably from smithing (Contexts [6, 38, 40, 66, 72, 114, 118, 634, 740, 753, 768, 775] spanning the mid 1st to 4th cent)
Smithing slag	131	8113g	Includes x3 forge bottom fragments (Contexts [5, 6, 64, 70, 72, 106, 114, 151, 379, 479, 572, 601, 614, 623, 626, 646, 651, 662, 751, 753, 762] spanning the mid 1st to 4th cent)
Iron slag (undiagnostic of process)	9	1880g	Probably smithing (Contexts [U/S], [416], [630] spanning mid 2nd to 3rd cent)
Iron concretions and burnt granules	2+	296g	Probably not associated with metalworking but natural concretions and general heating (Contexts [404, 434, 700])

Table 9: Breakdown of slag assemblage

5.8.3 By far the largest group of material consists of grey to orange brown aerated smithing slag, often containing charcoal fragments. Most pieces are amorphous but there are three fragments from plano-convex forge bottoms. Two of these were recovered from ditch [111], fill [114], dated to the mid/late 1st to early 2nd century. Although incomplete, they would have measured 70 and 72mm in diameter and 25 and 35mm thick respectively. The other forge

bottom consists of a complete oval example from gully [642], fill [651], dated to the mid 3rd to 4th centuries. This example measures 100 x 75mm by 35mm thick (342g).

5.8.4 The fuel ash slag (a lightweight non-metallic slag that can be formed by a number of high temperature processes), hearth lining and undiagnostic iron slag are also highly likely to be the result of smithing considering the total absence of smelting waste. The complete absence of hammerscale is either the result of the low numbers of samples taken or the excavation being some way from the actual metalworking area. Although smithing was clearly taking place in the mid 1st to 2nd centuries, the degree to which the slag from 3rd- to 4th- century deposits is residual is uncertain. However, there is no reason why low levels of smithing would not have continued at the site throughout the whole Roman period.

5.9 Registered Finds by Trista Clifford

5.9.1 Registered finds are washed, air dried or cleaned by a conservator as appropriate to the material requirements. Objects have been packed appropriately in line with IFA guidelines. All objects were assigned a unique registered find number (RF<00>) and recorded on the basis of material, object type and date (shown in Table 10). All metal registered finds have been x-rayed to aid identification. Metalwork is boxed in airtight Stewart tubs with silica gel.

The finds are in poor condition; in particular the iron objects are fragmentary and highly corroded, hampering satisfactory identification.

RF	Cxt	Phase	Group	Object	Material	Wt (g)
1	601	II	54	BRAC	COPP	4
2	635	IV	53	BRAC	COPP	<2
3	716	II/IV	8	UNK	IRON	288
4	418	I	43	COIN	COPP	14
5	375	IV	35	STFT	IRON	58
6	450	II?	44	UNK	IRON	14
7	116	II	1	UNK	IRON	8
8	653	IV	11	UNK	IRON	8
9	651	IV	26	UNK	IRON	18

Table 10. Registered Finds assemblage

5.9.2 Objects of personal adornment:

Bracelet or armlet fragments were recovered from two separate contexts. RF<1> from Phase II pit fill is a small, folded fragment from a copper alloy armilla, a type of armlet with military associations (Crummy 2005). This is an example of Group C, decorated with three symmetric bands of knurled cable decoration. A 1st century date is probable.

Three fragments from an oval sectioned, ?undecorated copper alloy bracelet/ armlet, RF<2>, came from Phase IV pit fill [635]. Bracelets of this type are a fairly common late Roman find, particularly from grave deposits. Similar examples were recovered from Colchester (Crummy 1983, Fig. 42)

Both objects exhibit active corrosion and require conservation.

5.9.3 Coins:
A single coin, RF<4>, came from Phase I pit fill [418]. The coin is extremely corroded and virtually none of the original surface remains. The coin is probably a dupondius or as which could have been minted between 43-260AD.

5.9.4 Structural fittings:
An iron double spiked loop, RF<5>, came from Phase IV pit fill [375]. These objects were used to attach drop handles or within larger structures for various purposes.

5.9.5 Objects of uncertain function :
A number of objects remain unidentified at present. RF<3> consists of three conjoining fragments from a strap or possibly a blade which tapers in width from 38mm to 11mm. RFs<6-9> are all small fragments of probable knife or tool blades. Further investigation may enable closer identification of these objects.

5.10 Animal Bone by Gemma Ayton

5.10.1 The assemblage contains 771 fragments of animal bone from 68 contexts including ditch, pit and gully fills. Finds spot dates and stratigraphic evidence suggests that these features date to the Roman period. The assemblage is in a poor condition and the majority of the bone is small, poorly preserved and unidentifiable.

5.10.2 The assemblage has been recorded onto an Excel spreadsheet in accordance with zoning system outlined by Serjeantson (1996). Due to the poor condition of the assemblage, all 'non-recordable' fragments (those which comprise of less than 50% of one zone) have also been quantified. Wherever possible the fragments have been identified to species and the skeletal element represented. Elements that could not be confidently identified to species, such as long-bone and vertebrae fragments, have been recorded according to their size and categorised as large, medium or small mammal.
In order to distinguish between the bones and teeth of sheep and goats a number of criteria were used including those outlined by Boessneck (1969), Boessneck *et al* (1964), Halstead *et al* (2002), Hillson (1995), Kratochvil (1969), Payne (1969, 1985), Prummel and Frisch (1986) and Schmmid (1972). Red and fallow deer bones and antler were identified with reference to Lister (1997) and Hillson (1996).
The state of fusion has been noted and each fragment has then been studied for signs of butchery, burning, gnawing and pathology.

5.10.3 The assemblage contains 270 identifiable fragments of bone and teeth the majority of which are in a poor, degraded condition. Cattle dominate the assemblage followed by sheep and horse (Table 1). The majority of the assemblage is comprised of fragments of tooth enamel which survives comparatively well in the archaeological record. The relative absence of bones is due to taphonomic factors rather than selective butchery techniques. This limited range of elements tells us little about the local husbandry techniques. The assemblage does not contain any recordable mandibles or measurable bones. Just one specimen displayed evidence of butchery; a small chop mark was noted on the distal articulation of a caprine femur.

Species	NISP	MNI
Cattle	176	4
Sheep	4	1
Sheep/Goat	4	1
Horse	45	1
Large Mammal	39	
Medium Mammal	2	

Table 11. Animal bone NISP (Number of Identified Specimens) and MNI (Minimum Number of Individual) counts

5.11 Shell by Trista Clifford

5.11.1 A total of 373 fragments of marine shell weighing just over 4.5kg were recovered from 16 separate contexts. Table 12 shows an overview of the assemblage by species and phase.

	Phase			
Species	II	III	Unphased	Total
Ostrea edulis	28/154	322/4174	17/208	367/4536
Mytilus edulis		1/<2		1/<2
Venerupis sp		2/18		2/18
Cerastoderma edule			3/4	3/4
Total	*28/154*	*325/4194*	*20/212*	*373/4558*

Table 12. Quantification of marine mollusc assemblage by count & weight (g)

5.11.2 Edible oyster predominates with only small amounts of three other species present. The following stratified contexts, all Phase 3, contained high minimum numbers of individuals (MNI): ditch fill [415] (MNI 62), pit fill [567] (MNI 45) and pit fill [514] (MNI 25). Parasitic infestation was apparent in a number of contexts, indicative of overcrowding.

5.12 Human Bone by Don Walker (MoLA)

5.12.1 Burnt bone was recovered from Roman cremation burials at Brays Lane. Six contexts ([668] <9>, [669] <10>, [670] <11>, [671] <12>), [672] <13> and [674] <14>) have been assessed. The material was assessed according to the guidelines of McKinley (2000; 2004). The total weight of each sample of burnt bone was measured in grams; fragmentation determined by noting the largest fragment size and the average (mean) size of fragments within each context or sample. The colour of the bone fragments was described, with an approximate percentage for each colour present. The potential for obtaining age and/or sex estimates was also examined and where possible an estimate made using those methods outlined above. To aid in the determination of the osteological potential of each deposit, an approximate percentage of fragments identifiable to skeletal element, as a proportion of the total number of fragments was recorded.

5.12.2 *Preservation and total weight*

The burnt bone was collected from single samples from six cremation burials, all of which had been truncated. Approximately 10% of bone from context [669] had weathered surfaces, probably the result of exposure following truncation. The remainder contained well preserved burnt bone. Three

contexts (50%) comprised 100-500g of burnt bone, two comprised 500-1000g and just one contained more than 1kg of burnt bone, an amount suggestive of a near complete individual McKinley (1989). The colour of all the samples was consistent with oxidisation due to burning at a high temperature (McKinley 2000, 405).

5.12.3 *Minimum number of individuals*
There was no evidence of repeated elements within any sample, suggesting that there was a single individual in each context. Therefore, there were a minimum number of six individuals (MNI) represented at this site.

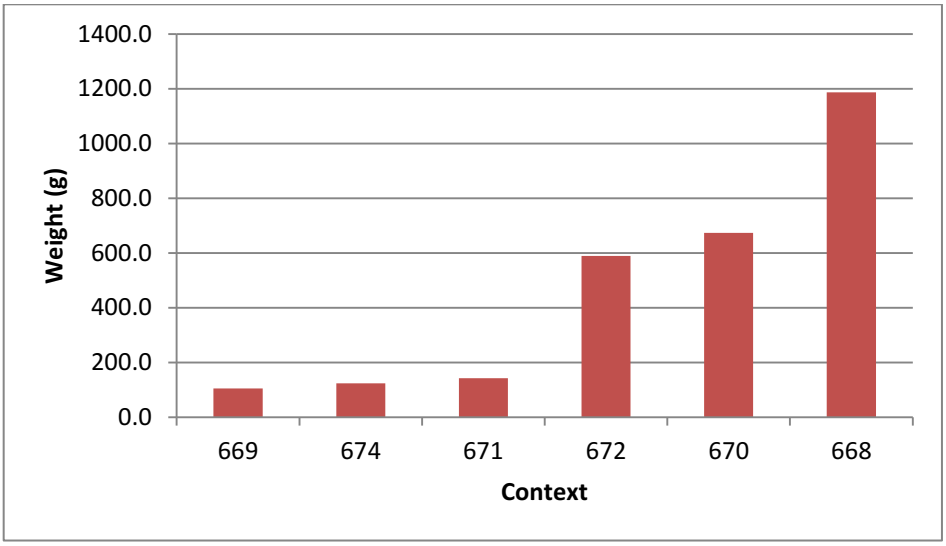

Table 13. Total weight of cremated bone, by context

5.12.4 *Fragmentation and identifiable bone*
In each sample, an estimate was made of the percentage of burnt bone which was identifiable to body area. Only one, [668], contained more than 50% of identifiable bone, reflecting the degree of fragmentation within the samples. Context [668] was also the most completely preserved, probably reflecting a relatively low level of truncation.

5.12.5 *Pyre goods and debris*
There was no evidence of artefacts or pyre debris within the samples, though these are likely to have been removed during processing. Any information from such evidence will be integrated into the report at full analysis.

5.12.6 *Demography*
The human remains appear to represent adult individuals. There is little potential for establishing their biological sex.

5.12.7 *Palaeopathology*
There were no indications of disease in the assemblage.

6.0 ENVIRONMENTAL ASSESSMENT by Karine Le Hégarat

6.1 Introduction

6.1.1 Fourteen bulk soil samples were collected to establish evidence for environmental remains such as charcoal, charred macroplant remains, bones

and shells, and to maximise the recovery of small artefact remains. The samples came from a variety of features such as pits, including six cremation pits and ditches. The majority of the examined deposits contained ceramic material indicating a Roman date. A sample came from a MBA pit and two samples were extracted from pits which are currently undated. This assessment aims to ascertain the potential of the samples in providing information regarding the agricultural economy, the local environment, fuel use as well as the ceremonial activities.

6.2 Methodology

6.2.1 Samples from six cremation pits ([667] (<09>, [663] <10>, [664] <11>, [665] <12>, [666] <13> and [673] <14>) were processed by the ECC FAU in a flotation tank and the residues and flots were retained on 500 and 300µm meshes and air dried. The remaining eight samples were processed by Archaeology South-East (ASE) in a flotation tank and the residues and flots were retained on 500 and 250µm meshes and air dried. Residues from the six cremation pits were originally sorted by ECC FAU for pottery and burnt bone fragments and fractions <4mm in size were submitted to ASE for sorting (Appendix 4). The remaining residues were passed through graded sieves (8, 4 and 2mm) and each fraction sorted for environmental and artefact remains (Appendix 5). The 14 dry flots together with the material extracted from the residues were assessed by ASE. Flots were scanned under a stereozoom microscope at x7-45 magnifications and an overview of their contents recorded (Appendix 6). Identifications have been provided for macrobotancial remains present through reference to modern comparative material and reference manuals (Cappers *et al.* 2006; Jacomet 2006; NIAB 2004). Nomenclature used follows Stace (1997).

6.3 Results

6.3.1 Overall, sampling produced small flots, with only five flots measuring over 70ml. Fine rootlets were abundant in the majority of samples. The high presence of uncharred vegetation hints that these deposits may contain modern intrusive material. The concentration of charred macroplant remains was low with only one sample producing more substantial material (sample <01> from pit [371]). Charred wood fragments occurred more frequently with samples <01> and <05> producing moderate to large assemblages. Several samples have provided small to moderate assemblages of burnt and unburnt bones as well as some artefact remains which have been introduced in the relevant specialist reports. The results have been divided into different phases of occupation through reference to available provisional dating from the artefact assemblage.

6.3.2 *Middle Bronze Age*

Sample <05> taken from pit [498] (single fill [499]) contained a large quantity of charred wood fragments including pieces >15mm in size. On the whole the pieces were well preserved. No other biological remains were present in this sample, but the residue produced a small assemblage of pottery sherds (see Doherty).

6.3.3 *Roman*

A total of 11 samples <03, 04, 06, 07, 08, 09, 10, 11, 12, 13 and 14> extracted from nine features provisionally dated to the Roman period were examined. Charred crop remains were recorded in two samples. Very low concentration of material (only 5 items) was present in the residue from

sample <07> taken from the NE quadrant of pit fill [601], the secondary fill of pit [599]. The assemblage comprised charred grains of barley (*Hordeum* sp.) and grains which were too poorly preserved to be identified. Charred macroplant remains were better represented in the flot from sample <03> from ditch [413] (25 to 35 items). The assemblage consisted of charred grains of wheat (*Triticum* sp.) and unidentified grains (Cerealia). A single grass caryopsis (Poaceae) was present and a moderate quantity of chaff was recorded. Although the majority of the chaff components consisted of unidentified glume bases (*Triticum* sp.), occasional glumes of spelt (*T. spelta*) were noted.

Charcoal was present in all the examined samples. Overall, the deposits contained small assemblages of charred wood fragments which were primarily small sized (<2mm in size) although occasional larger pieces were also observed (samples <04, 06 and 07>). The majority of these fragments were relatively well preserved; nonetheless, pieces from sample <04> from pit [464] displayed particles adhering to their surface. As the deposit was recorded as wet, it is likely that fluctuations in ground water level resulted in sediment percolation and poor preservation of these fragments.

Large amounts of burnt bones were present in the six samples extracted from the six cremation pits (<09> [667], <10> [663], <11> [664], <12> [665], <13> [666] and <14> [673]). Smaller assemblages of burnt and unburnt bones were found in samples <06 and 07> from pit [599] (secondary fill [601]) and in sample <03> from ditch [413]. The latter sample produced a large quantity of marine shells.

With the exception of sample <13> (cremation pit [666]), all the samples produced varying quantities of pottery. In addition, samples <04 and 07> contained small amounts of burnt clay, and while a bead was present in sample <07>, copper alloy was found in sample <06>. A relatively large amount of fire-cracked flint (1210g) and a few burnt stones were present in sample <04> from pit [464].

6.3.4 Currently undated

Two samples were taken from deposits which are currently undated; sample <01> came from pit [371] fill [372] and sample <02> originated from pit [401] fill [404]. Both samples contained charred macroplant remains. While charred crop remains (grains and chaff) were well represented in sample <01> (180 to 250 items) they were less numerous in sample <02> (15 to 25 items). The assemblage comprised charred grains of barley (*Hordeum* sp.) and wheat (*Triticum* sp.) as well as some indeterminate charred grains (Cerealia) and some chaff including principally glume bases but also a single spikelet fork, a single rachis fragment and a twisted awn fragment. Chaff out-numbered the charred caryopses. Glumes of spelt (*Triticum spelta*) were evident amongst the unidentified emmer / spelt (*Triticum dicoccum* / *spelta*) glume bases. Charred weed seeds were particularly abundant in sample <01> including goosefoot (*Chenopodium* sp.), sheep's sorel (*Rumex acetosella*), knotgrass / dock (*Polygonum* / *Rumex* sp.), wild radish (*Raphanus raphanistrum*), possible crane's-bill (cf. *Geranium* sp.), vetch / vetchling / tare (*Vicia* / *Lathyrus* sp.) and some grass (Poaceae) caryopses.

Charcoal was present in both samples, but while sample <02> comprised only infrequent small pieces <4mm and flecks, sample <01> produced a moderate

assemblage. It contained fragments >15mm in size and on the whole these were moderately well preserved. No other biological remains were present in these samples. The residues produced infrequent FCF and magnetised material.

7.0 SIGNIFICANCE AND POTENTIAL OF THE INDIVIDUAL DATASETS

7.1 Stratigraphy

7.1.1 The presence of only a single identifiable prehistoric feature and only a minimal background of residual artefacts indicates that there is negligible potential for further analysis in order to further the understanding and interpretation of land use at this time.

The presence of Roman remains, apparently attesting to land use spanning almost the entire period, is of local importance. This is the first substantive Roman site to be found in this western vicinity of Rochford and, as such, is of some significance. At least two phases of landscape enclosure are apparent with its various entities containing pits, though no features of structural or more definitively occupational nature. It appears that these remains primarily relate to agricultural practice, the funnelling nature of some elements of the enclosure layout being suggestive of animal management. The boundary ditches and pits that comprise the majority of the excavated features collectively contain a significant and fairly diverse assemblage of cultural material that is suggestive of disposal from a nearby consumption site, presumably of relatively low wealth and status. The presence of the small cremation cemetery on the eastern edge of this fragment of enclosed landscape further suggests that a settlement, perhaps a farmstead, is located in the surrounding vicinity. Comprising only six poorly preserved burials, these are of limited potential for further study and have little scope to add to the wider understanding of Roman burial practice in Essex and beyond.

7.1.2 The lack of later activity and therefore later disturbance, truncation and contamination (excepting post-medieval ploughing) has facilitated reasonable survival and clarity of the major landscape elements, though the recovery of the full record of features present is doubtful. The initial trial trench evaluation generally exposed more discrete features as well as boundary ditches than the open area excavation. Indeed, further parts of features found in trial trenches could not necessarily be traced beyond. Poor weather conditions, including flooding of parts of the site, clearly adversely affected feature legibility and it is likely that an unknown quantity of smaller and poorly defined features were overlooked during excavation. This said, it has previously been noted that the trenching evaluation misidentified a quantity of natural silt filled channels and hollows in the surface of the natural as archaeological features (section 4.1.3). The density of real archaeological remains was consequently established to be lower on excavation than previously extrapolated from the evaluation. On balance, it is considered unlikely that any major features, or groups of features constituting remains of tangible structures, were obscured, lost or otherwise overlooked. If initially present, they would at least have been observed during the machine strip and recorded on the pre-excavation plan. However, it must be conceded that perhaps some apparently natural features were not further investigated due to adverse site conditions. The standing water in the south of the excavation areas is the one clear case where poor weather and ground conditions prevented adequate excavation over a significant part of the site. Here, the only indications of the presence of

features occupying the interior of the OA14 enclosure derive from the evaluation trenching. Despite this, it is unlikely that this enclosure contained anything more significant than any of the others. Neither the trenches within its recorded extents, nor those across the remainder of the southern part of the evaluated development area encountered high or complex feature densities, obvious structural remains or discernible concentrations of artefacts indicative of occupation.

7.1.3 The relative simplicity of apparent landscape development, restricted to only two major phases of enclosure layout, compounded by a lack of precise dating evidence for the majority of the Roman remains imposes and limitations upon the further analysis of the stratigraphic data. While the broad layout and development of the Roman enclosure systems is understood, their functioning is unclear and is not particularly aided by the finds and environmental evidence either. Many of the features that potentially occupy the enclosure interiors are wholly undated or vaguely Roman and most lack any meaningful spatial patterning. The presence of nearby contemporary occupation activity, perhaps the farmstead to which this field system belongs, can at best only be inferred.

7.1.4 It is recommended that, while the presence and form of this locally important Roman site are worthwhile publishing, such dissemination should be reasonably overview. The interpretation of the function of this enclosed landscape is likely to be limited, as is its meaningful placement within the understood wider Roman landscape of southeast Essex and the county as a whole.

7.1.5 Further Work for publication:
After completion of the specialist analysis, reporting and documentary research, an integrated phase-driven narrative of the site sequence will be prepared. This will draw on specialist information in order to fully address the revised research aims. Tasks to include:

- Documentary research and review of previous work (0.5 day)
- Review/refinement of dating, phasing and land use (0.5 day)
- Production of Introduction text; to include summary of all previous findings in vicinity, topography, geology, excavation methodology, etc. (0.5 days).
- Creation of a concise integrated site narrative, by period, that references pertinent specialist information (3 days).
- Selection of relevant phase and distribution plan figures, photographs and finds illustrations and liaison with illustrator during production (0.5 days).
- Writing of discussion and concluding text that will include land use interpretation, place the site within its wider context, identify parallels, etc. (1 day).
- Compilation of bibliography, write acknowledgements, tidy whole text (0.5 days).
- Carry out edit amendments (internal and EAH editor's) (1.5 days).

7.2 Prehistoric Pottery

7.2.1 The Bronze Age sherds from a single vessel recovered from pit [498] are of interest because of the unusually small vessel size. Given that quite a number of broken sherds from a single vessel were recovered from a single context

which contained no other pottery, it is possible that this represents a deliberate deposit. The assemblage is therefore assessed to be of local significance. As the pottery assemblage comes from a single feature it would probably be more appropriate to integrate a short note on the pottery into the published stratigraphic text rather than producing a separate specialist report. This would require some brief research on similar depositional practices and on parallels for small Deverel-Rimbury vessels.

7.2.2 Further Work for publication:

- Research parallels for small Deverel-Rimbury vessels and for other possible examples of structured deposition (0.25 days)
- Prepare note for integration into stratigraphic text (0.25 days)
- Preparation of one illustration to accompany the prehistoric pottery text (0.25 days)

7.3 Late Iron Age & Roman pottery

7.3.1 The assemblage, although much abraded, is of some importance. This is because it is a significant quantity of Roman pottery, spanning the whole of the Roman period but with an emphasis on the late 1st/2nd-4th/early 5th century, from an area in which small quantities of Roman finds have previously been recovered but which were not sufficient to contribute toward a more refined understanding of the nature of Roman settlement in the area (ECC 1999). The late Roman pottery is also of potential significance, not only in relation to the quantity recovered but also in relation to any possible early Anglo-Saxon occupation in the area.

7.3.2 Further Work for publication:

- The pottery has been fully quantified and identified forms of pots recorded such that no further quantification work is considered to be necessary (0 days)
- Samian specialist work – inc. rubbing, identification and comment on the decorated samian bowl from [649] (fill 647) (0.5 days)
- Revision of the assessment report for publication to be undertaken to include the illustrations and any other significant points following the context dating and site phasing, especially in relation to the late Roman pottery any possible Saxon occupation which emerges in relation to the site and the assemblage (1 day)
- Final selection, description and numbering would need to be undertaken for any illustrated sherds, including checking over illustrations (1 day)
- All sherds which could possibly be illustrated were noted during the quantification and any illustration would be selected from these. None of the pottery from the cremation burials merit illustration. It is proposed that consideration should be given to illustrating pottery from the larger groups from some features, i.e. pit [599], pit/pond feature [579], supplemented by some individual pieces. Illustration should include where possible the Fabric NKG beakers, some of the late Roman pottery, notably the Oxford wares and the Mayen ware jar rim. Some temporary assembly of some vessels would probably be necessary (0.5 day)

7.4 Ceramic Building Material

7.4.1 The Roman ceramic building material assemblage from the site is not large and is composed of a fairly typical range of fabrics and forms for the period. There are not enough closely dated deposits that produced notable groups of

brick and tile to allow reliable refinement of fabric dating and indeed the degree of residuality or re-use is impossible to gauge. The post-Roman assemblage is small and relates to an insignificant phase of land-use. As such, no further analysis work is proposed for the ceramic building material beyond that undertaken for this assessment. The factual text of this assessment can either be edited to form a concise summary report for publication, or used in conjunction with the excel archive to add observations into the main site narrative, but with no separate published report. No pieces are proposed for illustration.

7.4.2 Further Work for publication:

- Integration of comments into the main site narrative or else editing current assessment to provide publication text (0.5 days)

7.5 Fired Clay

7.5.1 The fired clay assemblage is small but has some significance as it possibly derives from salt working activity. This material therefore holds potential for further analysis and for comparison to other Roman salt-working sites in the area.

7.5.2 Further work for publication:
Further work should include refining fabrics and further research into a number of objects together with production of a short report comparing the current assemblage with other Roman salt working sites in the county.

- Production of short report (0.5 day)

7.6 Geological Material

7.6.1 Although the assemblage of geological material is quite small it contains a high proportion of worked pieces. These predominantly relate to the processing of cereals and as such indirectly shed light on one aspects of the site's economy. The presence of just two types of quernstone also indicates a reliance on well-established and proven sources of stone. A little further analysis has the potential to set the current assemblage of quernstones in a wider context of usage in the Thames estuary. Further stratigraphic analysis may also allow better dating by grouping of some associated contexts. However, the assemblage is considered too small and not closely dated enough by ceramics to warrant detailed analysis of distribution patterns, both spatially and chronologically. The unworked stone is all of types that would be locally available and as they do not appear to have been utilised for any specific purpose this material is not considered to hold any potential for further analysis.

7.6.2 Further Work for publication:
An overview of the assemblage and its potential sources/uses has already been given in this assessment and no separate specialist report is proposed for the final publication. Observations on the assemblage can be drawn from the assessment text and archive for inclusion in the site narrative and general discussion. However, it is proposed to undertake a little further research on other Roman sites in the area to compare/contrast the sources and nature of the quernstones. The information from this work will be fed into the querns section of the Recorded finds report. No pieces are considered essential for illustration in the final report. However, a couple of quern fragments have enough surface detail to make illustration for the narrative text section possible if desired.

- Checking a selection of published Roman sites in London/Thames estuary area to set the current quern assemblage in a wider context and producing a summary text on main comparative findings for inclusion in report (0.5 day)

7.7 Metallurgical Remains

7.7.1 The slag assemblage represents low-level/domestic smithing activity in the general area probably spanning the 1st to 4th centuries. Smithing waste is to be found on most Roman rural sites in small quantities and its presence here is not particularly unexpected. The assemblage is too small to warrant any further analysis and no further work is proposed. However, the presence of smithing should be noted in the site narrative and/or discussion of the site's economy in the published report.

7.8 Registered Finds

7.8.1 The assemblage is of limited significance in terms of dating and activity. The armilla fragment in particular may indicate a military influence during the 1st century AD; the other armlet fragment possibly indicates activity during the latter half of the Roman period. However the remaining objects are unfortunately in too poor condition to add much information to the site narrative and therefore there is only limited potential for further work.

7.8.2 Further work for publication:
Most finds require further conservation. Local parallels for the armilla should be sought. It may be possible for some of the unidentified iron objects to be identified following further investigation. A short report and catalogue is proposed for publication. Up to five objects are suitable for illustration.

- Conservation (fee)
- Further investigation and parallels research of the iron objects (0.5 day)
- Production of a short report and catalogue (0.5 days)

7.9 Animal bone

7.9.1 Due to the small size and poor preservation of the bone assemblage, it holds no potential for further analysis.

7.10 Shell

7.10.1 The assemblage provides evidence for use of oyster as a food resource, possibly a managed resource, as well as being an indicator of the site's access to estuarine/coastal resources. Three contexts provide well stratified groups which may be subject to brief further analysis.

7.10.2 Further work for publication:
Brief statistical analysis together with comparison to other nearby sites and production of a short report are proposed for publication (to be carried out by D. Dunkin)

- Recording, analysis and reporting (0.5 days)

7.11 Human Bone

7.11.1 The analysis of cremated human remains from Roman burial grounds can provide valuable information, even when the sample size is relatively small. This will add to the corpus of Roman cremations from south-east Essex.
There is potential of obtaining further information from the burnt bone. While the material itself is relatively well preserved, there is variation in the completeness of the skeleton within each sample. This will allow study as to

whether there was preferential collection of certain elements or body areas. It will also provide insights into the funerary processes practiced at the burial ground. This incorporates both pyre technology and burial methodology. Although there is little potential for establishing biological sex for the burials, some demographic information may be recovered with regard to the age structure of the sample.

7.11.2 Further work for publication:
All the basic recording has been done. Information on stratigraphic sequence, pyre debris or artefacts should be incorporated into the final report. This will allow for the interpretation of Roman funerary activity at the site, as well as inter-site comparison, both at a regional and national level.

- Produce succinct cremated bone report, to include:
- Clarify the amount of truncation of vessels/burials relating to bone present.
- Expand on which samples were deposited in urns/ceramic vessels.
- Format hard data into a table to show any evidence of preferential collection of certain elements or body area.
- Discuss pyre technology.
- Consider how this assemblage adds to knowledge of Roman burial practice in south-east Essex.
  (0.5 days for all tasks)

7.12 Environmental Remains

7.12.1 This assessment has confirmed the presence of environmental remains including small quantities of charred macroplants (except for sample <01>), small to large assemblages of charcoal and varying quantities of bones and shells. In addition small amounts of pottery, fired clay as well as some FCF, a bead, some magnetised material and some copper alloy were recovered.

7.12.2 *Charred macroplants remains - evidence for agricutural economy*
Although charcoal was recorded in varying quantities in the majority of the samples, charred macroplants were only found in three samples: sample <03> from ditch [413] which contained pottery indicative of the Roman period and samples <01> pit [371] and <02> pit [401] which are currently undated. While sample <01> produced a significant assemblage of charred crop remains (grains and chaff), these were less numerous in the other two samples. Overall the three assemblages are relatively consistent with chaff dominating over grains. Grains of wheat (*Triticum* sp.) and barley (*Hordeum* sp.) were evident. Although the grains of wheat were not identified beyond the genus level, the presence of glume bases and spikelet forks suggests that hulled wheat (either spelt or emmer) was represented amongst them. Moderately well preserved glumes of spelt (*Triticum spelta*) were identified in samples <01> (currently undated) and <03> (provisionally dated to the Roman period). Spelt is usually the best represented hulled wheat in macroplant assemblages from the Iron Age and Roman periods. Emmer (not positively identified in the current assemblage) is also occasionally found alongside spelt (and barley) in Essex (Carruthers 2008; Parks 2012).
The assemblages of charred macroplant remains are characteristic of domestic waste. The material represents secondary deposits, and it is more likely to indicate waste from more than one episode of burning. Sample <01> contained a rich assemblage of chaff and charred weed seeds. These are typical waste from crop cleaning. They are commonly found on Iron Age and

Romano-British sites where routine processing of spikelets of hulled wheat took place on a regular basis (Hillman 1981, 1984). Charred grains were also common in this sample; they may have become charred accidentally while in storage or they may have been burnt because they were infected and inedible. Excavation at North Shoebury, approximately 7km south-east of Rochford, has also produced rich mixed assemblages of charred crop remains (Murphy 1995). Samples <02 and 03> contained less remains and are more typical of random discards of burnt debris including cereal processing waste and food preparation debris; this material could have worked its way into the open features.

The samples from Brays Lane in Rochford have the potential to examine the range of crop cultivated as well as agricultural practices. Nonetheless, this potential is limited because only one sample was sufficient rich for further analysis and this sample come from a deposit which currently undated.

7.12.3 Charred macroplant remains - evidence for ritual activities

It was hoped that samples from six cremation pits would provide evidence for macroplants associated with the burials. Plants may represent offerings or they may have been used as tinder for the pyres with the debris incorporated in the cremation pits at a later stage. Unfortunately no charred macroplants were present in the samples. Charred wood fragments were also very scarce suggesting either that no charred plant remains from the pyre were deliberately incorporated in these funerary contexts or that no charred plant remains survived. No identifications have been provided for the uncommon charred wood fragments because the small assemblage has little potential to examine fuel use associated with the funerary contexts.

7.12.4 Charcoal

Wood charcoal fragments were recovered in varying quantities from all the sampled features; however, with the exception of two pits (undated pit [371] <01> and MBA pit [498] <05>), the assemblages are too small to explore questions regarding to fuel use and / or wood resource management. Wood charcoal fragments in pits [371] and [498] are not within their primary contexts. Pit [371] produced a mixed assemblage of charred macroplant remains suggesting several disposals of domestic waste, and likewise the charcoal is likely to represent amalgams of re-deposited fuel. As such the assemblage provides limited potential to examine fuel use or acquisition, woody vegetation in the vicinity of the site and woodland management in detail. Nonetheless, charcoal fragments from pit [371] may be suitable for dating along with some charred macroplant remains if this is considered of value for understanding the feature.

The wood charcoal assemblage recovered from MBA pit [498] is of particular interest because it presents the opportunity to examine a moderate assemblage associated with a pottery assemblage. Again, the wood charcoal in this feature is likely to represent re-deposited material. It may derive from domestic fuel; but given the association with the MBA pottery, it is possible that wood was selected specifically for less routine domestic activities. It could have been charred during a single burning event and deliberately placed in the feature. The assemblage of charcoal from pit [498] has the potential to characterise the vegetation from which wood was sourced and to examine fuel selection and fuel use.

7.12.5 Further Work for publication:
With the exception of sample <01> from pit [371], charred macrobotanical remains were poorly represented. Pit [371] is currently undated, and no further analytical work is recommended for the assemblage. Nonetheless, cereal grains may be used to contribute material suitable for radiocarbon dating and given that archaeobotanical information for Rochford is limited a short note should be prepared for publication.
Further analysis is also recommended for charcoal assemblages from pit [498] <05>.

Charred macroplant remains
- Preparing a short note for publication (0.5 day)

Charcoal
- Obtain taxonomic identifications for up to 100 fragments (0.25 day)
- Literature search for comparable assemblages and production of charcoal analysis report with reference to the ceramic report (0.25 day)

8.0 PUBLICATION PROJECT

8.1 Revised research agenda: Aims and Objectives

8.1.1 This section specifies research aims (RA's) that the site archive has the potential to address, as identified in the assessment process by the stratigraphic, finds and environmental specialists. These are broken down into more specific research objectives (RO's), as appropriate.

RA1*: to understand the origins, development and function of the Roman land use.*
- **RO1**: to define and interpret the sequence of phasing of the enclosure systems and the features within them
- **RO2**: to identify and explore the function of the enclosure system and its individual land use entities
- **RO3**: to determine the various activities undertaken and to infer the economy, wealth, importance and status of the site

RA2*: to place and understand this land use in the context of the wider Roman period landscape.*
- **RO4**: Is there an associated settlement, such as a farmstead? What can be inferred about its nature?
- **RO5**: How does this site fit into, and expand knowledge of, Roman land use and settlement in southeast Essex?

8.2 Preliminary Publication Synopsis

8.2.1 It is proposed that the report on the results of the excavation is published as a short article in a future volume of the county journal *Essex Archaeology and History*.

8.2.2 The article would present a concise descriptive account of the results of the fieldwork investigation and seek to briefly address site-specific research questions identified in this post-excavation assessment (8.1) and would be presented within a chronological framework.

8.2.3 It is envisaged that this report would present a summary chronological narrative of the site sequence, attempt to address the identified research aims and objectives, and would pursue the following suggested structure:

- Introduction
- Natural geology, topography and environment
- Prehistoric remains
- Early Roman land use
- Later Roman land use
- Specialist reports (finds and environmental; most collective and summary)
- Discussion – to place tis site in context of Roman period land use in southeast Essex
- Conclusions
- Acknowledgements
- Bibliography

8.2.4 The publication article will reflect the assessed significance and potential of the various components of the project dataset (see 7.0), but also the overall significance of the site to the increased understanding of the Roman settlement and exploitation of southeast Essex. It is judged at the value of this fragment of enclosed rural landscape is limited and, as such, that the site merits only a summary level of publication reporting that identifies, places and appreciates its presence. Consequently, the production of a short and concise article is advocated.

8.2.5 A provisional page count, for text, figures and tables/plates, is presented as Appendix 7.

8.3 Publication Tasks and Programming

8.3.1 The various further analytical and reporting tasks required to bring the project results to publication have been identified above in Section 7, and are summarised in Appendix 8 which includes proposed time allocation. A publication programme will be submitted to the ECC Place Services monitoring officer on acceptance of this assessment and proposal.

8.3.2 It is envisaged that the completed publication draft will be submitted to the *Essex Archaeology and History* editor within 12 months of ECC Place Services acceptance of this assessment and proposal.

8.3.3 The deposition of the collated site and research archive at Southend Museum will be undertaken on completion and submission of the publication report.

8.4 Publication resourcing

8.4.1 The cost of the further publication work, based on the tasks identified and quantified in section 7 and Appendix 8, is provided to the client separately.

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BIBLIOGRAPHY

Biddulph, E., Seager Smith, R. and Schuster, J. 2011. *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*

Biddulph, E. 2011. 'The pottery from Northfleet' in Biddulph, E., Seager Smith, R., & Schuster, J., *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*, 134-157

Boessneck, J., Muller, H.H. and Teichart, M. 1964.'Osteologische Unterscheidungmerkmale zwischen Schaf (Ovis aries Linne) und Ziege (Capra hircus Linne). Kuhn-Archiv 78, 5-129

Boessneck, J. 1969. 'Osteological differences between sheep (Ovis aries Linne) and goat (Capra hircus Linne)', in Brothwell, D.R and Higgs, E.S (eds) *Science in Archaeology: A Comprehensive Survey of Progress and Research*. London: Thames and Hudson, 331-358

Cappers, R.T.J., Bekker, R.M. and Jans, J.E.A. 2006. *Digital Seed Atlas of the Netherlands.* Groningen Archaeological Series 4. Netherlands: Barkhuis

Carruthers, W. 2008. 'Chapter 34: Charred, mineralized and waterlogged plant remains'. In N. Cooke, F. Brown and C. Phillpotts (eds). *From hunter gatherers to huntsmen. A history of the Stansted Landscape.* (Oxford, Framework Archaeology Monograph 2)

Cheer, P. 1998. 'Romano-British pottery', in Carter, G., *Excavations at the Orsett 'Cock' enclosure, Essex*, 1976, E. Anglian Archaeol. 86, 93-101

Drury, P. and Rodwell, W. 1973. 'Excavations at Gun Hill, West Tilbury' in *Essex Archaeol. Hist.* 5 (3rd series), 48-112

ECC 1999, *Rochford, Historic town project assessment report, February 1999*, ECC Planning, Archaeology Section (unpublished)

Evans, J. 2001. 'Material approaches to the identification of different Romano-British site types' in James, S., and Millett, M., (eds). *Britons and Romans: advancing an archaeological agenda,* CBA Res. Rep. 125, 26-35

Fulford, M. and Bird, J. 1975. 'Imported pottery from Germany in Late Roman Britain' in *Britannia*, Volume 6, 171-181

Going, C. 1987. *The mansio and other sites in the south-eastern sector Caesaromagus: the Roman pottery,* CBA Res. Rep. 62

Halstead, P., Collins, P. and Isaakidou, V. 2002. 'Sorting Sheep from Goats: Morphological distinctions between the mandibles and mandibular teeth of adult Ovis and Capra'. *Journal of Archaeological Science* 29, 545-553

Hartley, B., 1972. 'The samian ware' in Frere, S., *Verulamium excavations, Volume 1*, RRCSAL 28, 216-262

Hawkes, C. and Hull, M. 1947. *Camulodunum,* RRCSAL 14

Hillman, G. 1981. 'Reconstructing crop husbandry practices from charred remains of crops'. In Mercer R. (ed) *Farming practice in British prehistory*. Edinburgh University Press, 123-62

Hillman, G. 1984. 'Interpretation of archaeological plant remains: The application of ethnographic models from Turkey'. In W. van Zeist and W.A. Casparie (eds) *Plants and Ancient Man: studies in palaeoethnobotany*,Rotterdam. Balkema, 1-41.

Hillson, S. 1995. *Mammal Bones and Teeth: An Introductory Guide to Methods of Identification*. London: Institute of Archaeology, University of London

Hull, M. 1963. *The Roman potters' kilns of Colchester*, Report of the Research Committee of the Society of Antiquaries, London, 21

Jacomet, S. 2006. 'Identification of cereal remains from archaeological sites'. 2nd ed. *Archaeobotany laboratory, IPAS, Basel University,* Unpublished manuscript.

Jones, M. 1973. 'The Romano-British pottery kilns at Mucking' in *Essex Archaeol. Hist*. 5 (3rd series), 13-47

Kratochvil, Z. 1969. 'Species criteria on the distal section of the tibia in *Ovis ammon* F. *aries* L. and *Capra aegagrus* F. hircus L.' *Acta Veterinaria* 38, 483-490

Martin, T. 2003. 'Roman pottery' in Germany, M., *Excavations at Great Holts Farm, Boreham, Essex, 1992-94*, E. Anglian Archaeol. 105, 96-155

May, T. 1930. *Catalogue of the Roman pottery in the Colchester and Essex Museum*

McKinley, J. 1989. Cremations: expectations, Methodologies and Realities. In C Roberts, F Lee and J Bintliff (eds.) *Burial Archaeology: current research, methods and development,* BAR British Series 211, 65-76

McKinley, J. 2000. The analysis of cremated bone, In M. Cox and S. Mays (eds.), *Human Osteology in Archaeology and Forensic Science*, London, 403-422

McKinley J.I. 2004. 'Compiling a skeletal inventory: cremated human bone' In Brickley, M. and McKinley, J.I. (eds) *Guidelines to the Standards for Recording Human Remains* (BABAO/IFA), 8-12

Medlycott, M., Weller, S. and Benians, P. 2010, Roman Billericay: excavations by the Billericay Archaeological and Historical society 1970-77*, Essex Archaeol. Hist* 1 (4th series), 51-108

Murphy, P. 1995. Botanical evidence. In J.J. Wymer and N.R. Brown (eds) *Excavations at North Shoebury: Settlement and Economy in South East Essex 1500BC - AD1500.* East Anglian Archaeology 75, Essex County Council. Chelmsford. Essex County Council, 146-151.

NIAB 2004. *Seed Identification Handbook*: Agriculture, Horticulture and Weeds. 2nd ed. NIAB, Cambridge.

Parks, K. 2012. *Iron Age and Roman Arable Practice in the East of England*, PhD. Thesis. Leicester University, UK. [Online]. Available from: http://hdl.handle.net/2381/27951 [accessed 26 July 2013].

Payne, S. 1969. 'A metrical distinction between sheep and goat metacarpals', *in* Ucko, P and Dimbleby, G (eds) *The Domestication and Exploitation of Plants and Animals.* London: Duckworth, 295-305

Payne, S. 1985. 'Morphological distinctions between mandibular teeth of young sheep, *Ovis*, and goats, *Capra*'. *Journal of Archaeological Science* 12, 139-147

Rodwell, W. 1983. 'The excavation of a Romano-British pottery kiln at Plamer's School, Grays, Essex', in *EAH*, Volume 15, 11-35

Rodwell, W. 1987. 'The samian ware' in Going, C., *The mansio and other sites in the south-eastern sector Caesaromagus: the Roman pottery,* CBA Res. Rep. 62, 92-98

Schmmid, E. 1972. *Atlas of Animal Bones for pre-historians, archaeologists and quaternary geologists*. Amsterdam: Elsevier Publishing Company.

Stace, C. 1997. *New Flora of the British Isles.* Cambridge: Cambridge University Press.

Symonds, R. and Wade, S. 1999, *Roman pottery from excavations in Colchester, 1971-86*, Colchester Archaeological report (CAR) 10

Tester, C. 2010. 'Finds reports from Noak Hill and Buckenham's Field' in Medlycott, M., Weller, S., and Benians, P., 'Roman Billericay: excavations by the Billericay Archaeological and Historical society 1970-77'*, Essex Archaeol. Hist.* 1 (4th series), 90-95

Tomber, R. and Dore, J. 1998. *The national Roman pottery fabric reference collection*, MoLAS Monograph 2

Webster, P. 1996. R*oman samian pottery in Britain*, Practical handbook in archaeology 13

Appendix 1: Feature List

Context	Type	Filled by	Description	Area	Period
1	Pit	2	Oval, 2.4m x 0.8m x 0.2m deep	TR 1	ER
3	Pit	4	Circular, 1.5m x 1.3m+ X 0.2m deep	TR 1	ER
5	Ditch	6	Linear, 51m x 1.3m x 0.22m deep	TR 6	ER
7	Gully	8	Curvilinear, 9.5m+ x 0.5m x 0.09m deep	TR 1	Undated
9	Pit	10	Oval, 0.8m x 0.7m x 0.2m deep	TR 1	Undated
11	Pit	12	Circular, 1m x 0.64m x 0.2m deep	TR 1	Undated
13	Pit	14	Circular, 1.6m+ x 0.86m x 0.3m deep	TR 1	ER
15	Pit	16	Oval, 0.84m x 0.55m x 0.22m deep	TR 1	Undated
17	Pit	18	Oval, 1.2m+ x 1.1m x 0.3m deep	TR 1	Rom
19	Gully	20	Linear, 9.5m+ x 0.53m x 0.09m deep.	TR 1	Undated
21	Pit	22	Circular, 0.9m x 0.39m+ x 0.13m deep	TR 1	Undated
23	Pit	24	Elongated, 0.7m 0.38m x 0.11m deep	TR 1	Undated
25	Pit	26	Kidney-shaped, 0.65m x 0.42m x 0.14m deep	TR 1	Undated
27	Pit	28	Oval, 0.48m x 0.45m x 0.06m deep	TR 1	Undated
29	Pit	30	Sub-rectang, 0.9m x 0.8m x 0.17m deep	TR 1	Undated
31	Pit	32	Circular, 0.53m x 0.43m x 0.1m deep	TR 1	Undated
33	Tree throw	34	Irregular, 0.92m x 0.4m x 0.1m deep	TR 3	Undated
35	Ditch	36	Linear, 58m x 0.64m x 0.26m deep	TR 3	ER
37	Ditch	38	Linear, 58m x 0.6m x 0.3m deep.	TR 1	ER
39	Ditch	40, 41	Linear, 60.2m+ x 2.2m x 0.4m deep.	TR 3	LR
42	Pit	43	Sub-rectang, 0.43m+ x 0.6m x 0.2m deep	TR 1	Undated
44	Pit	45	Sub-circular, 0.35m x 0.3m x 0.1m deep	TR 1	Undated
46	Pit	47	Sub-rectang, 1.1m+ x 0.8m x 0.25m deep	TR 1	Undated
48	Ditch	49	Linear, 1.53m+ x 0.84m x 0.11m deep	TR 12	Undated
50	Pit	51	Irregular, 1.2m x 0.86m x 0.18m deep	TR 12	Undated
52	Ditch	53, 54	Linear, 60.2m + x 1.86m x 1.02m deep.	TR 1	LR
55	Pit	56	Oval, 0.92m x 0.7m x 0.5m deep	TR 12	Undated
61	Ditch	62	Linear, 0.69m+ x 0.6m x 0.2m deep	TR 5	ER
63	Pit	64	Irregular, 1.5m x 0.6m x 0.27m deep	TR 7	ER?
65	Ditch	66	Linear, 1.3m+ x 0.8m x 0.12m deep	TR 7	ER?
67	Pit	68	Oval, 1.7m x 0.42m+ x 0.22m deep	TR 7	ER?
69	Ditch	69	Curvilinear, 2m+ x 0.95m x 0.29m deep	TR 7	ER?
71	Pit	72	Irregular, 0.88m x 0.6m x 0.25m deep	TR 7	ER
73	Ditch	74	Linear, 20m x 0.82m x 0.4m deep	TR 5	LR
75	Pit	76	Linear, 2m+ x 0.76m 0.3m deep	TR 5	ER
77	Pit	78	Sub-circular, 1.9m x 0.9m x 0.62m deep	TR 5	ER
79	Pit	80	Sub-circular, 0.3m+ x 0.2m x 0.1m deep	TR 7	Undated
81	Gully	82	Linear, 1.2m+ x 0.62m x 0.2m deep	TR 5	ER
83	Pit	84	Oval, 1.06m+ x 0.96m x 0.3m deep	TR 5	LR
85	Ditch	86	Linear, 1.8m+ x 0.7m x 0.35m deep	TR 15	Undated
87	Pit	88, 89	Oval, 1.56m x 0.54m+ 0.37m deep	TR 11	
90	Pit	91	Sub-circular, 1m x 0.8m x 0.17m deep	TR 11	Undated
92	Post-hole	93	Circular, 0.23m+ x 0.4m x 0.0.5m deep	TR 11	Undated
94	Ditch	95	Linear, 1.8m+ x 1.47m x 0.29m deep	TR 11	Undated
96	Layer	-	Grey-brown firm silty clay	TR 11	Undated
97	Pit	98	Circular, 0.79m+ x 0.9m x 0.11m deep	TR 9	Undated
99	Gully	100	Linear, 1.8m+ x 0.54m x 0.18m deep	TR 9	Undated
101	Pit	101	Sub-circular, 0.67m x 0.35m+ x 0.15m deep	TR 8	Undated
103	Ditch	104	Linear, 2.1m+ x 0.6m x 0.17m deep	TR 9	ER
105	Ditch	106	Linear, 2.1m+ x 1.9m x 0.32m deep	TR 9	LR
107	Gully	108	Linear, 2.1m x 0.45m x 0.11m deep	TR 9	LR
109	Ditch	110	Linear, 0.72m+ x 0.46m x 0.66m deep	TR 9	Undated

111	Ditch	112,114,116	Linear, 51m x 1.8m x 0.6m deep	TR 8	ER
117	Ditch	118,119	Linear, 36.5m+ 1.2m x 0.43m deep	TR 4	LR
120	Ditch	121	Linear, 39m+ x 1.1m x 0.3m deep	TR 2	ER
122	Pit	123	Possibly circular, 0.78m x 0.18m deep	TR 6	ER
124	Gully	125	Linear, 7.2m x 0.64m x 0.23m deep	TR 6	LR
126	Pit	127	Possibly circular, 0.6m 0.2m deep	TR 6	Undated
128	Ditch	129,130	Linear, 24.8m+ x 0.6m x 0.5m deep	TR 4	LR
131	Layer	-	Mid brownish grey firm silty clay, 7m x 1.8m+	TR 10	LR
132	Gully	133	Linear, 3.7m+ x 0.6m x 0. 19m deep	TR 10	Undated
340	Ditch	341	Linear, 21m x 0.95m x 0.18m deep	EX	ER
342	Ditch	343	Linear, 21m x 1.5m x 0.32m deep	EX	ER
344	Ditch	345	Linear, 6.1m x 0.78m x 0.09m	EX	ER
346	Ditch	347	Linear, 6.1m x 0.95m x 0.26m	EX	ER
348	Ditch	349	Linear, 21m x 1.08m x 0.13m deep	EX	ER
350	Pit	358-360	Oval, 1.48m x 1.1m x 0.47m deep	EX	LR
351	Finds	-	Sherds of pottery from pit 350	EX	LR
352	Ditch	353	Linear, 4.8m x 0.52m+ x 0.25m deep	EX	Undated
354	Ditch	355	Linear, 24.8m x 0.84m x 0.54m deep	EX	LR
356	Gully	357	Curvy-linear, 1.4m x 0.42m x 0.14m deep	EX	Undated
361	Ditch	362	Linear, 36.5m x 1.8m x 0.52m deep	EX	LR
363	Pit	364	Oval, 0.87m x 0.52m x 0.1m deep	EX	ER
365	Ditch	366, 367	Linear, 14.3m x 0.76m x 0.76m deep	EX	ER
368	Ditch	369, 370	Linear, 34m x 1.28m x 0.33m deep	EX	LR
371	Pit	372, 373	Oval, 1.37m x 1.18m x 0.3m deep	EX	Undated
374	Pit	375	Oval, 1.4m x 1.1m x 0.27m deep	EX	LR
376	Gully	377	Linear, 2.8m x 0.76m x 0.27m deep	EX	LR
378	Gully	379	Linear, 2.8m x 0.66m x 0.16m deep	EX	LR
380	Ditch	381, 382	Linear, 14.3m x 1.9m x 1.04m deep	EX	ER
383	Ditch	384	Linear, 32m x 1.72m x 0.4m deep	EX	LR
387	Ditch	388, 389	Linear, 24.8m x 1.3m x 0.3m deep	EX	LR
390	Ditch	391, 392	Linear, 36.5m x 1.1m x 0.28m deep	EX	LR
393	Gully	394	Linear, 6.3m x 0.76m x 0.23m deep	EX	Rom
395	Ditch	396	Linear, 36.5m x 1.2m x 0.86m deep	EX	LR
397	Gully	398	Linear, 6.3m x 0.9m x 0.25m deep	EX	Undated
399	Pit	400	Rectangular, 2.1m x 1.74m x 0.15m deep	EX	ER
401	Pit	402-404	Circular, 1.1m x 1.1m x 0.18m deep	EX	Undated
405	Pit	406	Circular, 1m+ x 0.86m x 0.24m deep	TR 17	LR
407	Gully	408	Linear, 1m+ x 0.4m x 0.14m deep	TR 17	Rom
409	Tree throw	410	Circular, 2m x 0.86m+ x 0.22m deep	TR 17	Undated
411	Pit	412	Oval, 1.4m x 1m+ x 0.13m deep	TR 17	Undated
413	Ditch	414-416	Linear, 34m x 1.85m x 0.45m deep	EX	LR
417	Pit	418	Elongated, 1.4m x 1.2m+ x 0.46m deep	TR 17	Rom
419	Pit	420, 457	Oval, 1.04m x 0.84m x 0.14m deep	TR 17	LR
421	Ditch	429	Linear, 1.8m+ x 2m x 0.6m deep	TR 18	Rom
423	Ditch	424, 425	Linear, 1.8m+ x 2.7m x 0.3m deep	TR 18	LR
426	Pit	427	Oval, 1.2m+ x 0.57m+ x 0.35m deep	TR 17	Undated
430	Ditch	431	Linear, 1.8m+ x 1.35m x 0.18m deep	TR 18	Undated
433	Pit	434-436	Oval, 1.15m+ x 1.45m+ x 0.6m	TR 16	ER
437	Pit	428, 432	Oval, 1.2m+ x 1.37m x 0.3m deep	TR 17	LR
438	Ditch	439, 477	Linear, 39m x 1.02m x 0.23m deep	EX	ER
440	Ditch	441	Linear, 39m x 0.98m x 0.22m deep	EX	ER
442	Ditch	443, 444	Linear, 1.8m+ x 3m x 0.65m deep	TR 16	LR
445	Ditch	446	Linear, 1.8m+ x 0.7m+ x 0.48m deep	TR 16	LR
447	Ditch	448	Linear, 1.8m+ x 0.7m+ x 0.51m deep	TR 16	LR
449	Ditch	450	Linear, 1.8m+ x 2.1m+ x 0.49m deep	TR 16	ER?
451	Gully	452, 453	Linear, 1.8m+ x 1.35m+ x 0.47m deep	TR 16	Rom

454	Pit	455, 456	Oval, 0.75m+ x 0.3m+ x 0.43m deep	TR 16	Rom
459	Pit	458	Elongated, 1.05m+ x 0.4m x 0.17m deep	TR 17	Undated
460	Tree throw	461	Irregular, 1.2m x 1.1m x 0.26m deep	EX	Undated
462	Pit	463	Oval, 1.52m x 1.2m x 0.12m deep	EX	Undated
464	Pit	465	Irregular, 1.2m x 0.9m x 0.3m deep	EX	ER
466	Pit	467	Oval, 1.8m x 1m x 0.16m deep	EX	ER
468	Pit	469	Rectangular, 1.46m x 1.2m x 0.14m deep	EX	Undated
471	Pit	470, 476	Elongated, 5.7m x 1.35m x 0.25m deep	EX	ER
472	Ditch	473	Linear, 32m x 1.2m x 0.52m deep	EX	LR
474	Pit	475	Circular, 2.1m x 2m x 0.35m deep	EX	LR
480	Gully	481	Linear, 4.65m x 0.49m x 0.35m deep	EX	ER
482	Ditch	483, 484	Linear, 11.2m x 2.3m x 0.35m deep	EX	LR
485	Ditch	486, 487	Linear, 1.8m+ x 1.96m x 0.2m deep	TR 21	LR
488	Pit	489	Rectang, 1.05m x 0.61m+ x 0.24m deep	TR 20	Undated
490	Pit	490	Elongated, 1.65m+ x 1.4m x 0.3m deep	TR 20	Rom
493	Pit	492	Oval, 1.9m+ x 1.1m x 0.27m deep	TR 22	Undated
495	Ditch	494,505-508	Linear, 63.6m+ x 4.3m x 0.95m deep	TR 22	LR
497	Ditch	496	Linear, 1.47m+ x 1.4m x 0.76m deep	TR 22	Undated
498	Pit	499, 500	Oval, 1.95m x 0.92m x 0.33m deep	EX	LBA
501	Ditch	502	Linear, 1.8m+ x 1.27m x 0.34m deep	TR 20	Undated
503	Ditch	504	Linear, 1.8m+ x 2.5m x 0.25m deep	TR 20	Undated
510	Ditch	509	Linear, 4.15m x 1.8m x 0.23m deep	TR 22	Undated
511	Ditch	519	Linear, 1.8m+ x 2.05m x 0.3m deep	TR 20	Undated
512	Ditch	513, 518	Linear, 12.1m+ x 2.2m x 0.58m deep	TR 21	LR
514	Pit	515	Elongated, 0.94m+ x 0.55m x 0.16m deep	TR 21	LR
516	Pit	517	Oval, 0.93m+ x 0.75m x 0.11m deep	TR 21	LR
521	Ditch	520	Linear, 4.15m x 0.7m x 0.14m deep	TR 22	Undated
522	Ditch	523	Linear, 7.6m+ x 1.7m x 0.4m deep	TR 20	Undated
525	Ditch	526	Linear, 1.8m+ x 1.84m x 0.57m deep	TR 27	Undated
527	Ditch	528	Linear, 1.1m+ x 0.36m+ x 0.37m deep	TR 27	Undated
530	Ditch	529	Linear, 1.8m+ x 0.66m x 0.18m deep	TR 23	Undated
531	Ditch	532	Linear, 1.8m+ x 1.4m x 0.24m deep	TR 25	Rom
533	Pit	534	Oval, 1.79m x 0.64m+ x 0.57m deep	TR 27	Undated
535	Ditch	536	Linear, 1.8m+ x 1.04m x 0.21m deep	TR 27	Undated
538	Pit	537	Circular, 0.8m x 0.2m+ x 0.26m deep	TR 22	Undated
541	Ditch	542	Linear, 32m x 0.85m x 0.4m deep	EX	LR
543	Pit	544	Oval, 1.58m x 0.86m x 0.14m deep	EX	Undated
545	Ditch	546	Linear, 11.2m x 1.83m x 0.3m deep	EX	LR
547	Pit	548	Irregular, 2.8m x 1.78m x 0.28m deep	EX	Undated
550	Pit	551, 554	Elongated, 3.7m x 0.86m x 0.25m deep	EX	LR
552	Pit	553	Elongated, 2.4m x 0.64m x 0.23m deep	EX	LR
555	Pit	478	Elongated, 5.7m x 2.2m x 0.25m deep	EX	ER
556	Ditch	479, 549	Linear, 60.2m x 3.02 x 0.53m deep	EX	LR
558	Gully	557	Linear, 3.1m x 0.64m x 0.27m	EX	ER
560	Gully	561	Linear, 4.65m x 0.45m x 0.25m deep	EX	ER
563	Ditch	562	Linear, 9.35 x 0.95m x 0.32m deep	EX	ER
564	Pit	565	Circular, 0.81m x 0.79m x 0.2m deep	EX	ER?
566	Pit	567	Circular, 0.62m x 0.52m x 0.17m deep	EX	ER?
568	Pit	569	Oval, 1.05m x 0.65m x 0.1m deep	EX	Rom
571	Ditch	570	Linear, 9.35m x 1.13m x 0.32m deep	EX	ER
574	Ditch	573	Linear, 5.8m x 0.8m x 0.35m deep	EX	ER
576	Ditch	575	Linear, 58m x 0.8m x 0.33m deep	EX	ER
577	Ditch	578	Linear, 3.5m+ x 0.78m x 0.11m deep	EX	Undated
579	Pit/pond	572,580,613,614, 634	Irregular/elongated,	EX	LR
581	Pit	582	Oval, 0.7m x 0.38m x 0.29m deep	EX	LR
583	Pit	584	Circular, 0.36m x 0.34m x 0.11m	EX	LR

585	Pit	586	Circular, 1.42m x 1.37m x 0.3m deep	EX	LR
587	Pit	588	Oval, 1.65m x 1.02m x 0.15m deep	EX	LR
590	Ditch	589	Linear, 5.8m x 1.2m x 0.28m deep	EX	ER
592	Ditch	591	Linear, 11.2m x 1.72m x 0.31m deep	EX	LR
594	Pit	593	Oval, 1.35m x 1.02m 0.29m deep	EX	Rom
595	Pit	596	Oval, 1.65m x 1.55m x 0.2m deep	EX	Undated
597	Pit	598	Circular, 1.68m x 1.6m x 0.22m deep	EX	Undated
599	Pit	600-602	Circular, 2.3m x 2.2m x 0.6m deep	EX	ER
606	Pit / tree hole	605	Irregular, 1.75 x 1.66 x 0.3m deep	EX	LR
608	Pit	607	Oval, 1.3m x 0.92m x 0.21m deep	EX	ER
609	Pit	610	Elongated, 2.6m x 2m x 0.34m deep	EX	LR
611	Pit	612	Elongated 2.03m x 1.03m x 0.1m deep	EX	Rom
615	Pit	616	Oval, 2.1m x 1.42m x 0.18m deep	EX	LR
617	Pit	618, 633	Oval, 2.6m x 1.12m x 0.32m deep	EX	Rom
619	Pit	620	Oval, 0.86m x 0.6m x 0.15m deep	EX	LR
622	Pit / tree hole	621	Irregular, 2m x 1.4m x 0.2m deep	EX	Undated
624	Tree hole	623	Irregular, 2.4m x 2.1m x 0.12m deep	EX	LR
625	Pit	626	Circular, 2.6m x 2m x 0.3m deep	EX	LR
627	Pit	628	Oval, 1.65m x 1.18m x 0.17m deep	EX	Undated
629	Pit	630	Circular, 1.3m x 1.2m x 0.21m deep	EX	LR
631	Pit	632	Oval, 0.74m x 0.54m x 0.13 deep	EX	Undated
636	Pit	635	Oval, 1.7m x 1.35m x 0.23m deep	EX	LR
637	Pit	638, 639	Irregular/oval, 1.3m x 0.7m x 0.29m deep	EX	LR
641	Ditch	640	Linear, 3.75m x1m x 0.15m deep	EX	Undated
642	Gully	650, 651	Linear, 3.7m x 1.18m x 0.5m deep	EX	LR
643	Gully	652,653,654	Linear, 7.2m x 1.02m x 0.52m deep	EX	LR
644	Pit	655, 656	Oval, 1.4m x 0.5m x 0.34m deep	EX	Undated
645	Pit	657, 658	Oval, 1.3m x 0.82m x 0.2m deep	EX	Undated
649	Ditch	646-648,659	Linear, 3.7m x 1m x 0.43m deep	EX	LR
660	Ditch	661, 662	Linear, 24.5m x 1.2m x 0.38m deep	EX	LR
663	Crem. pit	669	Oval, 0.42m x 0.28m	WB	ER
664	Crem. pit	670	Oval, 0.18m x 0.15m	WB	ER
665	Crem. pit	671	Circular, 0.19m x 0.19m	WB	ER
666	Crem. pit	672	Circular, 0.16m x 0.16m x 0.19m deep	WB	ER
667	Crem. pit	668	Oval, 0.22m x 0.16m	WB	ER
673	Crem. pit	674	Oval, 0.23m x 0.17m x 0.02m deep	WB	ER
675	Pit	676	Oval, 2.7m x 1.75m x 0.38m deep	WB	Undated
677	Ditch	678-680	Linear, 63.6m+ x 0.96m x 1.17m deep	WB	LR
681	Ditch	682, 683	Linear, 7.2m x 0.76m x 0.5m deep	EX	LR
684	Ditch	685	Linear, 108.5m x 1.9m x 0.72m deep	WB	LR
686	Pit	687	Circular, 0.6m+ x 0.5m x 0.35m deep	WB	LR
688	Ditch	689, 690	Linear, 108.5m x 1.3m x 0.33m	WB	LR
691	Ditch	692	Linear, 12.1m+ x 2.9m x 0.55m deep	WB	LR
693	Ditch	695, 696	Curvilinear, 108.5m x 0.93m x 0.58m deep	WB	LR
694	Pit	697	Oval, 1.1m+ x 1.09mm x 0.32m deep	WB	LR
698	Ditch	699, 700	Linear, 36.5m x 1.22m x 1.02m deep	EX	LR
701	Ditch	702	Linear, 32m x 0.76m x 0.15m+ deep	EX	LR
703	Pit	704	Oval, 0.7m x 0.5m x 0.39m deep	EX	Undated
705	Ditch	706	Linear, 60.2m x 3.95m x 0.23m deep	EX	LR
707	Ditch	708	Linear, 36.5m x 1.6m x 0.23m deep	EX	LR
709	Ditch	710, 714	Linear, 17.3m x 0.86m x 0.18m deep	EX	LR
711	Post-hole	712, 713	Oval, 0.54m x 0.43m x 0.29m deep	EX	Undated
715	Ditch	716	Linear, 108.5m x 2.35m x 0.58m deep	EX	LR
717	Ditch	718	Linear, 17.3m x 1.23m x 0.32m deep	EX	LR
719	Ditch	720-722	Linear, 60.2m x 4m x 0.49m deep	EX	LR

723	Ditch	724	Linear, 58m x 0.57m x 0.16m deep	EX	ER
725	Gully	726	Linear, 24.5 x 0.72m x 0.12m deep	EX	LR
727	Ditch	728	Linear, 17.3m x 1.18m x 0.3m deep	EX	LR
729	Pit	730	Irregular, 1.28m x 1.1m x 0.42m deep	EX	Rom
731	Pit	732	Elongated, 1.83m x 0.53m x 0.14m deep	EX	LR
733	Ditch	734	Linear, 46.1m x 0.57m x 0.4m deep	EX	LR
735	Pit	736	Irregular, 0.92m x 0.9m x 0.11m deep	EX	LR
737	Pit	738	Oval, 1.08m x 0.65m x 0.13m deep	EX	ER
739	Pit	740	Oval, 1.1m x 0.82m x 0.14m deep	EX	ER
741	Ditch	742	Linear, 51m x 0.9m x 0.3m deep	EX	ER
743	Ditch	744, 745	Linear, 24.5m x 1.2m x 0.61m deep	EX	LR
746	Ditch	747-749	Curvilinear, 108.5m x 0.95m x 0.51m deep	EX	LR
750	Ditch	751	Curvy-linear, 34m x 2.4m x 0.48m	EX	LR
752	Pit	753	Oval/irregular, 3.6m x 3.2m x 0.45m deep	EX	LR
754	Tree throw	755	Irregular, 2.8m x 2.2m x 0.21m deep	EX	Undated
756	Ditch	757	Linear, 46.1m x 2.16m x 0.36m deep	EX	LR
758	Ditch	759	Linear, 8.9m+ x 1.85m x 0.35m deep	EX	LR
760	Ditch	762	Linear, 51m x 0.78m x 0.66m deep	EX	LR
761	Ditch	780	Linear, 20m x 0.64m x 0.4m deep	EX	LR
763	Pit	764	Oval/irregular, 3.64m x 3.2m x 0.23m deep	EX	LR
765	Ditch	766	Linear, 60.2m x 3.15m x 0.27m+ deep	EX	LR
767	Ditch	768	Linear, 46.1m x 1.4m x 0.42m deep	EX	LR
769	Ditch	770, 771	Linear, 108.5m x 3.3m x 0.76m deep	EX	LR
772	Ditch	773	Linear, 51m x 2.37m x 0.2m deep	EX	ER
774	Pit	775	Rectangular, 2.5m x 2.3m x 0.19m deep	EX	LR
776	Ditch	777	Linear, 108.5m x 1.81m x 0.35m deep	EX	LR
778	Ditch	779	Linear, 8.9m x 1.8m x 0.22m deep	EX	LR
781	Ditch	782	Linear, 20m x 0.97m x 0.18m deep	EX	LR
783	Pond	524, 539, 540	22m x 1.8m+ x 1.7m+ deep	TR 24	LR

Appendix 2: Context Group List

Group	Description	Phase	Feature / segment nos
1	Enclosure ditch	2	5, 111, 741, 772
2	Gully/ditch	0	7
3	Enclosure ditch	2	35, 37, 723, 576
4	Enclosure ditch	3	39, 52, 556, 705, 719, 765
5	Misc (ER) pits/gullies in OA7	2	63, 65, 67, 69, 71, 79, 363, 739
6	Short ditch/gully parallel to G7	3	73, 760, 761, 781
7	short gully/ ditch parallel to G6	3	83, 660, 725, 743
8	Enclosure ditch	3	107, 686, 694
9	Short curvi gully/ditch	3	117, 361, 387, 395, 698
10	E-W enclosure ditch	2	120, 438, 440, 574, 590
11	short ditch/gully	3	124, 643, 681
12	Enclosure subdivision	3	128, 354, 390, 707
13	short E-W ditch	2	340, 342, 348
14	short E-W ditch	2	344, 346
15	short ditch	2	365, 380
16	Enclosure ditch	3	368, 413, 750
17	Very short gully/ditch	3	376, 378
18	N-S ditch	3	383, 472, 541, 701
19	Short gully	0	393, 397
20	short gully	2	480, 560
21	short gully/ditch	3	482, 545, 592
22	Big ditch	3	495, 677
23	Prehistoric feature	1	498
24	Enclosure ditch, with G8	3	512, 691
25	short E-W gully/ditch	2	563, 571
26	irregular ditch/gully	3	642, 649
27	Gully/ditch	3	709, 717, 727
28	E-W enclosure ditch	3	733, 756, 67
29	Subdivision of enclosure G8/G24	3	758, 778
30	?Pit / blocking of access gap	3	752, 763
31	ER pits in enclosure OA3	2	1, 3, 13, 464, 466
32	Undated pits in enclosure OA3 or OA9	0	9, 11,15, 17, 21, 23, 25, 27, 29, 31, 462, 468
33	Isolated ER pit in Tr 16 - OA5	2	433
34	Misc pits in enclosure OA4	0	42, 44, 46, 371, 543
35	Misc LR pits in enclosure OA10	3	350, 374, 474
36	Intercut ?pits in enclosure OA4	3	550, 552
37	Elongated? pits in Tr 5, OA1	2	61, 77, 81
38	Misc features in SW trenches - OA6 or OA13	0	48, 50, 55, 87, 90, 92, 96, 97, 101, 109
39	Undated ditches in SW of site - OA6	0	85, 94, 99
40	Undated features in SW of site - OA1	0	126, 641, 644, 645, 703

41	LR features in OA14	3	131, 132, 485
42	LR features in NE of site - OA12	3	405, 419, 437,
43	Undated features in NE of site - OA5 or OA12	0	407, 409, 411, 417, 421, 426, 430, 459, 451, 454
44	ER features in NE of site - OA5	2	449
45	Misc ?pits / gully under G4	2	471, 555, 558
46	all Tr 20 features - OA15	0	488, 490, 501, 503, 511, 522, 675
47	Undated features E of G22 - in OA16?	0	493, 497, 510, 521, 538
48	Pits in OA14	3	514, 516
49	?Quarry in Tr 24, S of OA14	3	783
50	All features in Tr 23, 25, 27	0	525, 527, 530, 531, 533, 535
51	Undated pits & gully in OA1/OA9	0	547, 564, 566, 568, 577, 594, 597, 617, 622, 627, 631, 711, 729
52	LR features in enclosure OA9	3	579, 581, 583
53	Misc later Roman pits in OA8/OA9	3	585, 587, 606, 615, 619, 624, 629, 636, 637, 731
54	ER pits in enclosure OA1	2	75, 122, 599, 608
55	Later pits in enclosure OA9?	3	609, 611, 625
56	Cremation burials group - OA7?	2	663, 664, 665, 666, 667, 673
57	Pits in OA9	3	735, 737, 774
58	Undated ?tree holes	0	33, 460, 754
59	Early ditch under G8	2	103
60	Recut of G8 enclosure ditch	3	105, 684, 688, 693, 715, 746, 769, 776
61	Continuation of G15 boundary?	0	352
62	Misc small gully under G12	0	356
63	Pits in OA2	2	399
64	Pits in OA13	3	87
65	LR boundary in Tr 16 & 18	3	423, 442
66	Undated features in OA2 or OA10	0	401
67	Later Rom features in OA16	3	445, 447

Appendix 3: Roman pottery quantification and context spot dates

Feature	Ctxt No	No	Wt/g	Spot date
pit 001	002	2	8	M-L1/2C
pit 003	004	18	162	M-L1/2C
ditch 005	006	34	1986	M/L1-E/M2C
pit 013	014	2	7	M1-2/3C
pit 017	018	3	20	Rom
ditch 035	036	4	79	M1-E2C
ditch 039	040	5	142	2-3/4C
ditch 052	054	9	685	L3-4C
ditch 061	062	1	8	M1-E2C
ditch 069	064	9	62	M1-2C (L3-M4C?)
pit 065 or 67	066/068	2	41	Rom
pit 065 or 67	068	5	68	M1-2C
pit 067	068	5	68	M1-2/3C
ditch 069	070	2	136	M1-2/3C
pit 071	072	3	14	Rom
ditch 073	074	20	255	M1-2C
pit 083	084	3	33	Rom
pit 087	088	1	42	L3-4C
ditch 103	104	3	24	M-L1/E2C
ditch 105	106	23	265	L3-4C
ditch 111	112	2	15	Rom
ditch 111	114	5	91	M/L1-E2C
ditch 111	116	8	72	M1-2C (2-3C?)
ditch 117	118	272	2870	M/L2-M3C
ditch 117	119	1	4	Rom
pit 122	123	18	201	Rom (M1-2/3C?)
gully 124	125	1	6	Rom
ditch 128	130	3	23	M2-4C
layer	131	5	93	4C/L4C
ditch 340	341	6	108	M2-M3C
ditch 342	343	18	42	Rom
ditch 344	345	15	74	Rom (4C?)
ditch 346	347	19	178	M1-2/2C+
ditch 348	349	2	3	M1-2/2C
finds	351	47	348	M3-E4C
ditch 354	355	8	109	Rom
ditch 361	362	6	81	2-3C (L3-M4C?)
pit 363	364	3	23	Rom (2C?)
ditch 365	366	9	126	L3-4C
ditch 365	367	11	119	M1-E2/2C
ditch 368	370	18	98	2C (L3-4C?)
pit 374	375	4	22	M2-4C (L3-M4C?)
gully 376	377	34	770	L3-4C
gully 378	379	25	197	L4/E5C
ditch 383	384	18	57	3-4C
ditch 390	392	1	6	L3-4C
gully 393	394	10	85	Rom
pit 399	400	14	350	M1-2C

Feature	Ctxt No	No	Wt/g	Spot date
pit 405	406	38	1113	L3-4C
gully 407	408	3	6	Rom
pit 411	412	14	145	Rom
ditch 413	414	1	1	Rom
ditch 413	416	46	581	M2-3C
pit 417	418	1	14	Prehist?
pit 419	420	1	22	M3-3
ditch 423	424	8	31	2-E/M3C
ditch 423	425	6	272	2-E/M3C
ditch 421	429	7	30	Rom
pit 437	432	29	639	L3-4C
pit 433	434	6	26	Rom (M1-2C?)
pit 438	439	3	47	2/3-4C
ditch 440	441	1	1	Rom
ditch 442	443	5	29	M2-4C
ditch 442	444	22	154	L3-4C
ditch 445	446	15	115	?2/3-4C
ditch 447	448	3	15	M3-4C, 4C?
ditch 449	450	4	17	Rom, 1C
gully 451	453	5	10	Rom
pit 454	456	1	4	Rom
pit 464	464 (465?)	1	3	Rom (1C?)
pit 466	467	1	130	M1-2C
pit 474	475	8	76	L3-M4C
pit 555	478	10	27	L3-4C
ditch 556	479	6	268	M1-2/3C
gully 480	481	11	114	Rom (M1-2/3C)
ditch 482	484	8	57	L3-4C
ditch 485	486	2	58	M1-2/3C
ditch 485	487	12	83	4/L4C
pit 490	491	2	7	Rom
ditch 495	494	3	8	L3-M4C
pit 498	499	17	122	MBA (c.1500-1150 BC)
ditch 512	513	11	180	L2-3/4?C
pit 514	515	2	13	L3-M4C
pond 783	524	18	164	4/L4C
ditch 531	532	5	16	Rom
pond 783	539	2	86	4/L4C
pond 783	540	3	44	L3-4C
ditch 541	542	11	76	L3-4C
pit 550	554	9	30	Rom
gully 558	557	1	17	Rom
gully 560	561	1	1	M-L1C
ditch 563	562	12	152	M1-2/3C
pit 564	565	13	33	Rom
pit 566	567	1	15	Rom (M1-2/3C?)
pit 568	569	2	11	Rom
pit/pond 579	572	32	168	4/L4C
ditch 576	575	2	6	Rom
pit/pond 579	580	182	2162	4/L4C

Feature	Ctxt No	No	Wt/g	Spot date
pit 583	584	7	174	4/L4C
pit 585	586	3	10	L3-4C
pit 587	588	20	182	M2-4C
ditch 590	589	2	26	M1-E2C?
pit 594	593	2	34	Rom
pit 599	600	126	1016	M1-2C
pit 599	601	242	2640	2C
pit 599	602	14	103	M1-E2C
pit/tree bowl 606	605	17	217	L3-4C
pit 608	607	20	75	M1-E2C
pit 609	610	5	83	M2-4C
pit 611	612	1	31	Rom
pit/pond 579	613	152	1416	L3-4C
pit/pond 579	614	56	435	L3-4C
pit 615	616	22	101	L3-M4C
pit 617	618	6	41	Rom (M-L1C?)
pit 619	620	1	2	Rom (M1-2/3C)
tree bowl 624	623	4	39	L3-4C
pit 625	626	5	55	M1-2/2C
pit 629	630	15	134	L2-L3C
pit/pond 579	634	15	221	M/L2-M3C
pit 636	635	6	58	L3-4C
pit 637	638	9	91	M2-M/L3C
ditch 649	646	2	22	M2-4C
ditch 649	647	52	550	M2-3/4C
gully 642	651	41	1037	M3-4C
gully 643	653	77	1019	M2-3/4C
pit 645	658	6	24	Rom
ditch 660	662	4	20	Rom (2-3/4C?)
ditch 677	678	24	184	Rom (M1-2C, poss. 3-4C?)
ditch 681	682	85	652	L3-4C
ditch 684	685	8	96	M2-M3C
pit 686	687	1	60	M1-2/3C
ditch 691	692	9	57	L3-4C
ditch 693	695	5	1390	Rom (M1-2/3C)
ditch 698	700	19	236	M2-M3C
ditch 705	706	4	160	4C/L4C
ditch 707	708	2	81	L3-4C
ditch 715	716	58	1552	M1-2C (L3-4C?)
ditch 717	718	9	87	L3-4C
ditch 719	720	12	58	2-4C (L3-M4?)
ditch 719	721	3	20	Rom (L3-M4?)
ditch 727	728	2	14	Rom
pit 729	730	3	3	Rom
pit 731	732	2	30	M1-2/3C
ditch 733	734	13	33	4C/L4C
ditch 733	735	9	106	M1-2/3C
pit 735	736	5	27	M2-M3C
pit 739	740	5	15	M1-2C
ditch 741	742	8	39	2C

Feature	Ctxt No	No	Wt/g	Spot date
ditch 743	745	6	140	L2/3-4C
ditch 746	747	4	49	M1-2/3C
ditch 746	748	5	29	4C/L4C
ditch746	749	6	61	M1-3C?
ditch 750	751	25	129	L2-3C
pit 752	753	9	146	M2-4C?
ditch 756	757	6	19	Rom (M1-3C?)
ditch 758	759	4	14	4/L4C
ditch 760	762	48	272	2-3/4C
pit 763	764	5	44	Rom
pit 763	764	5	18	4/L4C
ditch 765	766	28	142	L3-4C
ditch 767	768	6	17	Rom
ditch 769	770	2	54	L3-4C
ditch 769	771	14	276	2-4C (L3-M4C?)
ditch 772	773	43	463	L2-3C
pit 774	775	39	254	M2-3/4C

Appendix 4: Soil Sample Residue quantification from cremation burials
(* = 1-10, ** = 11-50, *** = 51-250, **** = >250) and weights in grams.
Presence (denoted as 'P') of pottery were recorded but not yet weighed or quantified. Presence (denoted as 'P') of burnt bones were recorded and weighed but not yet entirely quantified.

Provisional date	Sample Number	Context	Parent context	Context / deposit type	Sample Volume litres	Sub-Sample Volume litres	Pottery	Weight (g)	Burnt bone	Weight (g)	Charcoal >4mm	Weight (g)	Charcoal <4mm	Weight (g)	Burnt bone 4-8mm	Weight (g)	Burnt Bone 2-4mm	Weight (g)	Other (eg ind, pot, cbm)
Roman	9	668	667	Cremation pit	?	?	P	-	P	1212	*	<2	*	<2			*	<2	
Roman	10	669	663	Cremation pit	?	?	P	-	P	106			*	<2	*	<2	**	<2	
Roman	11	670	664	Cremation pit - within damaged vessel	?	?	P	-	P	683			*	<2	*	<2	**	<2	
Roman	12	671	665	Cremation pit - within damaged vessel	?	?	P	-	P	142			*	<2	*	<2	**	<2	
Roman	13	672	666	Cremation pit	?	?			P	598			*	<2			*	<2	
Roman	14	674	673	Cremation pit	?	?	P	-	P	126			*	<2			**	<2	Pottery */ 4g

Appendix 5: Soil Residue Quantification
(excluding samples from cremation pits) (* = 1-10, ** = 11-50, *** = 51-250, **** = >250) and weights in grams

Provisional date	Sample Number	Context	Parent context	Context / deposit type	Sample Volume litres	Sub-Sample Volume litres	Charcoal >4mm	Weight (g)	Charcoal <4mm	Weight (g)	Charred botanicals (other than charcoal)	Weight (g)	Bone and Teeth	Weight (g)	Burnt bone >8mm	Weight (g)	Burnt bone 4-8mm	Weight (g)	Marine Molluscs	Weight (g)	Other (eg ind, pot, cbm)
MBA	5	499	498	Pit	10	10	***	82	****	150											Pottery **/118g
Roman	3	416	413	Ditch	10	10	*	<2					*	<2					***	122	Pottery */16g
Roman	4	465	464	Pit	10	10	**	6	***	10											B. clay **/12g - FCF ***/1210g - Pottery */18g - Burnt stones */730g
Roman	6	601	599	Pit - SW quadrant	20	20	**	4	**	2					*	<2	*	<2			Pottery **/132g - Copper alloy */6g

Provisional date	Sample Number	Context	Parent context	Context / deposit type	Sample Volume litres	Sub-Sample Volume litres	Charcoal >4mm	Weight (g)	Charcoal <4mm	Weight (g)	Charred botanicals (other than charcoal)	Weight (g)	Bone and Teeth	Weight (g)	Burnt bone >8mm	Weight (g)	Burnt bone 4-8mm	Weight (g)	Marine Molluscs	Weight (g)	Other (eg ind, pot, cbm)
Roman	7	601	599	Pit - NE quadrant	20	20	**	2	**	2	* *Hordeum* sp., Cerealia	<2	*	<2			*	<2			Pottery **/110g - B. clay */2g - Bead */<2g - FCF */40g
Roman	8	602	599	Pit	10	10	*	<2	*	<2											Pottery */4g
Undated	1	372	371	Pit	30	30	***	54	***	14	** *Raphanus raphanistrum*, Poaceae, *Triticum* sp., *Hordeum* sp., Cerealia	2									FCF */6g
Undated	2	404	401	Pit	20	20															Magnetised material **/4g

Appendix 6: Soil Sample Flots Quantification
(* = 1-10, ** = 11-50, *** = 51-250, **** = >250) and preservation (+ = poor, ++ = moderate, +++ = good)

Sample Number	Context	Weight g	Flot volume ml	Volume scanned	Uncharred %	Sediment %	Seeds uncharred	Charcoal >4mm	Charcoal <4mm	Charcoal <2mm	Crop seeds charred	Identifications	Preservation	Weed seeds charred	Identifications	Preservation	Other botanical charred	Identifications	Preservation	Burnt bone
5	499	36	75	75	3	2		**	**	****										
3	416	6	40	40	60	10	* *Chenopodium* sp.	*	*	***	*	*Triticum* sp., Cerealia	+ to ++		Poaceae	+	**	Glume bases (*Triticum dicoccum* / *spelta*, *Triticum spelta*)	++	
4	465	<2	10	10	92	2				*										
6	601	4	10	10	55	5		*	*	***										
7	601	6	25	25	60	10		*	*	***										
8	602	<2	35	35	92	4			*	**										

Sample Number	Context	Weight g	Flot volume ml	Volume scanned	Uncharred %	Sediment %	Seeds uncharred	Charcoal >4mm	Charcoal <4mm	Charcoal <2mm	Crop seeds charred	Identifications	Preservation	Weed seeds charred	Identifications	Preservation	Other botanical charred	Identifications	Preservation	Burnt bone
9	668	2	25	25	99	-	* *Rubus fruticosus* agg. / *idaeus*			*										* (2)
10	669	4	70	70	92	1		*	*	*										
11	670	6	125	125	99	1														* (1)
12	671	6	100	100	97	1		*	*											
13	672	<2	25	25	99	1			*	*										* (1)
14	674	<2	5	5	98	2														* (1)

Sample Number	Context	Weight g	Flot volume ml	Volume scanned	Uncharred %	Sediment %	Seeds uncharred	Charcoal >4mm	Charcoal <4mm	Charcoal <2mm	Crop seeds charred	Identifications	Preservation	Weed seeds charred	Identifications	Preservation	Other botanical charred	Identifications	Preservation	Burnt bone
1	372	22	140	100	30	5		**	***	***	***	*Hordeum* sp., *Triticum* sp., Cerealia	+ to ++	**	Poaceae, *Vicia* / *Lathyrus* sp., *Rumex acetosella*, *Chenopodium* sp., cf. *Geranium* sp.	+ to ++	***	Glume bases (*Triticum dicoccum* / *spelta*, *Triticum spelta*), rachis internode (*Hordeum* sp.), twisted awn frag. (Cerealia / Poaceae)	++	

Sample Number	Context	Weight g	Flot volume ml	Volume scanned	Uncharred %	Sediment %	Seeds uncharred	Charcoal >4mm	Charcoal <4mm	Charcoal <2mm	Crop seeds charred	Identifications	Preservation	Weed seeds charred	Identifications	Preservation	Other botanical charred	Identifications	Preservation	Burnt bone
2	404	2	5	5	30	35			*	**	*	*Triticum* sp., Cerealia	+ to ++				**	Glume bases (*Triticum dicoccum* / *spelta*, *Triticum spelta*), spikelet fork (*Triticum dicoccum* / *spelta*)	+ to ++	

Appendix 7: Outline publication content and page count

EAH outline / page estimates

	Text	***Figures***	***Plates / tables***
Executive summary	0.25	0	0
Introduction / background			
Location, topography natural geology, environment, planning circumstance, etc.	0.25	0.25	0
Site narrative			
Intro, methodology, truncation, etc	0.25	0.5	0
Prehistoric	0.25	0	0
Earlier Roman	1	0.5	0
Later Roman	1	0.5	0
Finds & Environmental material			
Intro/overview	0.25	0	0
Roman pottery	2	0.5	0.5
Other finds	1	0.5	0
Environmental material	0.5	0	0
Discussion & Conclusions	1	0	0
Acknowledgements	0.25	0	0
Bibliography	0.25	0	0
Totals:	8.25	2.75	0.5

Estimated total pages = 11.5

Appendix 8: Publication Task List

Task No.	*Task description*	*No. days*
	Stratigraphic Analysis & Reporting	
1	Refinement and finalisation of phasing and dating for all site features / deposits	0.5
2	Write introduction and geology/topography background texts	0.5
3	Write site narrative description, using chronological framework	3
4	Documentary research for comparison with other sites in Essex	0.5
5	Selection of figures (plans/sections) and photo plates to accompany narrative, and selection of finds for illustration	0.5
6	Write discussion and conclusion texts	1
7	Collate bibliography, acknowledgements, collate report draft	0.5
	Sub-totals	***6.5***
	Specialist Analysis & Reporting	
8	Prehistoric Pottery	0.5
9	LIA and Roman pottery	3
10	CBM	0.5
11	Fired clay	0.5
12	Geological material	0.5
13	Registered finds	1
14	Shell	0.5
15	Cremated bone	0.5
16	Misc finds (flint, slag, animal bone, etc)	0.5
17	Conservation (external service)	(cost)
18	Environmental	1
	Sub-totals	***8.5***
	Illustration	
19	Plan and section figures, plus photo images	2
20	Finds illustrations, inc. pottery, registered finds, ?querns	2
	Sub-totals	***4***
	Editing and Production	
21	Internal reading/editing of draft report	1
22	Internal alterations to text and figure illustrations	1
23	Implementing EAH editors amendments	0.5
24	Proof reading	0.5
	Sub-totals	***3.0***
	Management & Miscellaneous	
25	Project Management (general admin & co-ord throughout)	1.5
26	Expenses & consumables	(cost)
27	EAH page print cost for approx. 12 pages	(cost)
	Sub-totals	***1.5***

Appendix 9: HER Summary Sheet

ESSEX HISTORIC ENVIRONMENT RECORD / ESSEX ARCHAEOLOGY AND HISTORY SUMMARY SHEET

Site name/Address: Land South of Brays Lane, Rochford, Essex	
Parish: Rochford	***District:*** Rochford
NGR: TQ 87156 92278	***Site Code:*** RFBL12
Type of Work: Evaluation & excavation	***Site Director/Group:*** L. Miciak Archaeology South-East (formerly ECC FAU)
Date of Work: Sept-Nov 2012	***Size of Area Investigated:*** c.1.1ha of total 5.5ha development area
Location of Finds/Curating Museum: Southend Museum	***Funding source:*** Developer
Further Seasons Anticipated?: No	***Related HER No's:*** None
Final Report: EAH article?	***OASIS No:*** *129346*
Periods Represented: Late Bronze Age, Roman	

SUMMARY OF FIELDWORK RESULTS:

Archaeological investigation was carried out on land south of Brays Lane, Rochford, in advance of the construction of a housing estate. Initial trial trenching evaluation of the development area established the presence of significant archaeological remains of Roman date, particularly within its western half. The subsequent investigation of two open excavation areas exposed a complex of ditches, pits and other Roman period features spanning a mid 1st to late 4th century date range.

These remains define two broad phases of Roman period landscape development, the majority of the boundary ditches defining an earlier Roman enclosure system and its later Roman replacement. This enclosed landscape was probably predominantly agricultural in its nature, perhaps pastoral fields as suggested by a funnel-like entrance into one of the enclosures. No convincing structural remains, such as a dwelling, that demonstrate contemporary occupation of the site have been identified. However, the presence of rubbish pits and cultural material presumably also deposited as rubbish in the ditches is indicative of settlement activity nearby – perhaps a farmstead associated with this field system. Some insights into the nature of this occupation activity can be discerned from the artefacts and environmental remains retrieved.

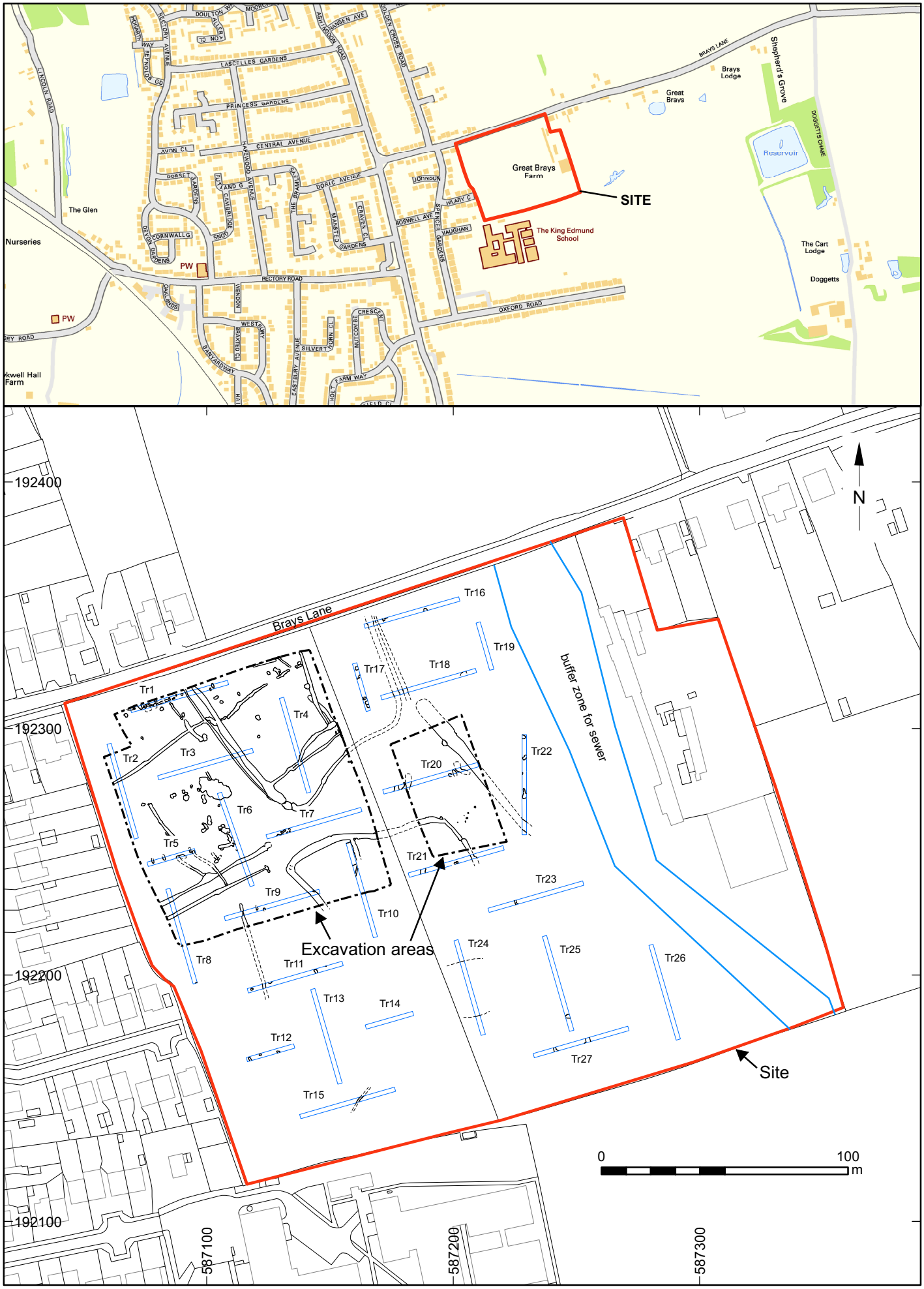
As an example of Roman landscape development, this site is of local significance within the county – particularly as no other Roman remains have been previously found in this vicinity of Rochford District.

Previous Summaries/Reports: n/a	
Author of Summary: M. Atkinson	***Date of Summary:*** 02/05/2014

Appendix 10: OASIS Summary Sheet

OASIS ID: essexcou1-129347	
Project details	
Project name	Brays Lane, Rochford, Essex
Short description of the project	Archaeological investigation was carried out on land south of Brays Lane, Rochford, in advance of the construction of a housing estate. Initial trial trenching evaluation of the development area established the presence of significant archaeological remains of Roman date, particularly within its western half. The subsequent investigation of two open excavation areas exposed a complex of ditches, pits and other Roman period features spanning a mid 1st to late 4th century date range. These remains define two broad phases of Roman period landscape development, the majority of the boundary ditches defining an earlier Roman enclosure system and its later Roman replacement. This enclosed landscape was probably predominantly agricultural in its nature, perhaps pastoral fields as suggested by a funnel-like entrance into one of the enclosures. No convincing structural remains, such as a dwelling, that demonstrate contemporary occupation of the site have been identified. However, the presence of rubbish pits and cultural material presumably also deposited as rubbish in the ditches is indicative of settlement activity nearby - perhaps a farmstead associated with this field system.
Project dates	Start: 23-04-2012 End: 28-11-2012
Previous/future work	No / No
Associated project reference codes	2549 - Contracting Unit No.
Assoc. project reference codes	11/00315/OUT - Planning Application No. RFBL12 - Sitecode
Type of project	Recording project
Site status	None
Current Land use	Vacant Land 2 - Vacant land not previously developed
Monument type	DITCH Roman PIT Roman GULLY Roman POST-HOLE Roman PIT Late Bronze Age CREMATION BURIAL Roman
Significant Finds	POTTERY Roman CBM Roman POTTERY Late Bronze Age ANIMAL BONE Roman SLAG Roman SHELL Roman METALWORK Roman WORKED STONE Roman FIRED CLAY Roman CREMATED HUMAN BONE Roman
Investigation type	""Open-area excavation"","Watching Brief""
Prompt	Direction from Local Planning Authority - PPS
Project location	
Country	England

Site location	ESSEX ROCHFORD ASHINGDON Land south of Brays Lane
Postcode	SS4 3DW
Study area	3.00 Hectares
Site coordinates	TQ 8698 9230 51.597924868 0.700023048947 51 35 52 N 000 42 00 E Point
Lat/Long Datum	Position derived from charts
Project creators	
Name of Organisation	Archaeology South-East
Project brief originator	Essex County Council Historic Environment Management Team
Project design originator	Essex County Council Field Archaeology Unit
Project director/manager	Adrian Scruby
Project supervisor	Lukasz Miciak
Type of sponsor/funding	Developer
Sponsor/funding body	Bellway Homes Ltd.
Project archives	
Physical Archive recipient	Southend Museum
Physical Contents	"Animal Bones","Ceramics","Environmental","Human Bones","Industrial","Metal","Worked stone/lithics","other"
Digital Archive recipient	Southend Museum
Digital Contents	"Animal Bones","Ceramics","Environmental","Human Bones","Industrial","Metal","Stratigraphic","Survey","Worked stone/lithics"
Digital Media available	"Images raster / digital photography","Spreadsheets","Survey","Text"
Paper Archive recipient	Southend Museum
Paper Contents	"Survey","Worked stone/lithics","other","Stratigraphic","Animal Bones","Ceramics","Environmental","Human Bones","Industrial","Metal"
Paper Media available	"Context sheet","Drawing","Miscellaneous Material","Photograph","Plan","Report","Section"
Project bibliog.	
Publication type	Grey literature (unpublished document/manuscript)
Title	Brays Lane, Rochford Essex: Post-excavation assessment report
Author(s)/Editor(s)	Miciak, L. and Atkinson, M.
Other bibliog. details	ASE report No: 2014093
Date	2014
Issuer or publisher	Archaeology South-East
Place of issue	Braintree
Entered by	Mark Atkinson (mark.atkinson@ucl.ac.uk)
Entered on	02 May 2014



© Archaeology South-East		Brays lane, Rochford	Fig. 1
Project Ref: 2613	Mar 2014	Site location	
Report Ref: 2014093	Drawn by: APL		

© Archaeology South-East		Brays Lane, Rochford	Fig. 2
Project Ref: 2613	Mar 2014	All features - west field	
Report Ref: 2014093	Drawn by: APL		

© Archaeology South-East		Brays Lane, Rochford	Fig. 3
Project Ref: 2613	Mar 2014	All features - east field	
Report Ref: 2014093	Drawn by: APL		

N

Tr16 433 G65 442 G67 447 G44 454 451 449 445

Tr19

Tr17 417 405 407 409 G42 419 459 426 437 411

Tr18 430 nat 421 423

192300

G61 388 563

675 677

Tr20 488 490 522 501 503 511

G22

497 nat 493 Tr22 538 nat 521 510 495

665 666 667 G56 664 663 673

G8 / G60 686 694 693 684

688 691

776 778 715 758 G29 131 132

G24 512 514 516 Tr21 485 G41 G48

Tr23 530

Tr10

Tr24 783 G49

Tr25 531

Tr26

192200

Tr14

0 25 m

535 533 527 525

Tr27

587200

© Archaeology South-East		Brays Lane, Rochford	Fig. 4
Project Ref: 2613	Mar 2014	Phase 1 & 2	
Report Ref: 2014093	Drawn by: APL		

N

Brays Lane

192300

192200

587100

587200

Tr1 Tr2 Tr3 Tr4 Tr5 Tr6 Tr7 Tr8 Tr9 Tr10 Tr11 Tr12 Tr13 Tr14 Tr15 Tr16 Tr17 Tr18 Tr19 Tr20 Tr21 Tr22 Tr23 Tr24 Tr25 Tr27

OA8 OA9 OA10 OA11 OA12 OA13 OA14 OA15 OA16

G4 G6 G7 G9 G11 G12 G16 G17 G18 G22 G24 G26 G27 G28 G29 G30 G35 G36 G41 G42 G48 G49 G52 G53 G55 G57 G60 G64 G65 G67

Key

Phase 3

0 50 m

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Project Ref: 2613	Mar 2014	Phase 3	
Report Ref: 2014093	Drawn by: APL		

Figure 6. Trial trenching evaluation in progress

Figure 7. Trial trench 1

Figure 8. General excavation area view

Figure 9. Excavation area flood conditions

Figure 10. Pit [498], looking southwest (0.5m scale)

Figure 11. Pit [599], looking SW (0.5m scale)

Figure 12. Ditch segment [380] cut by ditch [383], looking NW (2m scale)

Figure 13. Gully terminal [480], looking northeast (0.5m scale)

Figure 14. Pit [433] in Trench 16, looking west (0.5m scale)

Figure 15. Trench 7

Figure 16. Cremation burial [663]

Figure 17. Cremation burial [664]

Figure 18. Cremation burial [665]

Figure 19. Cremation burial [666]

Figure 20. Cremation burial [667]


Figure 21. ?Waterhole [579], looking NE (2m scale)


Figure 22. G4 ditch, segment [52], looking NW (1m scale)

Figure 23. G16 ditch seg. [413], looking SW (2m scale)

Figure 24. Pit [350], looking NW (0.5m scale)


Figure 25. Pit [474], cutting edge of ditch G18, looking NW (2m scale)

Figure 26. G24 ditch segment [512], looking south (2m scale)


Figure 27. Recut ditch G24 segment [684], looking west (2m scale)

Figure 28. Trench 24, Quarry [783] (2m scale)

Figure 29. G22 ditch segment [677], cut by pit [675], looking north

Figure 30. Tree hole [754], looking SE (2m scale)

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