Iron Age and Medieval Remains at Site 6 Zone F, Beaulieu Chelmsford

Post-Excavation Assessment



February 2016

Client: Countryside Zest (Beaulieu Park) LLP

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Iron Age and Medieval Remains at Site 6, Beaulieu, Chelmsford

Post-excavation Assessment and Updated Project Design

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Date of Works: October 2015

Client Name: Countryside Zest (Beaulieu Park) LLP

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Summary

An archaeological excavation was carried out at Site 6 in Zone F, Beaulieu near Chelmsford. The fieldwork took place between the 2nd and the 27th October 2015. A total area of 0.11ha was excavated in a field within the proposed development area.

The earliest feature on site was a circular gully, probably an Early Iron Age enclosure, discovered in the south-western corner of excavation. The main area of excavation was concentrated around a Late Iron Age settlement comprising a north-west to south-east boundary ditch and a roundhouse later replaced by another enclosure. The latest phase of activity on site was a medieval L-shaped enclosure encompassing several small pits and postholes in the centre of excavation, and a crop processing pit and cobbled access to a pond in the south-eastern corner of excavation.





1 Introduction

1.1 Project Background

- 1.1.1 Between the 2nd and the 27th October 2015 Oxford Archaeology East carried out an archaeological excavation at Site 6, Zone F, Beaulieu, Chelmsford (TL 7202 1013) (see Fig. 1) in advance of construction of a new neighbourhood planned for North-East Chelmsford, known as Beaulieu.
- 1.1.2 Zone F is an addition to the main Beaulieu development which has been granted outline planning permission by Chelmsford City Council (ref: 09/01314/EIA). The parcel of land known as Zone F is the subject of a separate planning application which will be submitted at the end of April 2016, but will form part of the wider Beaulieu development.
- 1.1.3 Site 6 was first identified by geophysical survey in 2008 and was included in the 2009 Environmental Statement as containing potentially significant archaeological remains. This was confirmed by trial trench evaluation in September 2016.
- 1.1.4 The overall development at Beaulieu will take the form of up to 3,600 new homes and up to 62,300m² of mixed use development including new schools, leisure and community facilities, employment areas, new highways and associated ancillary development, including full details in respect of roundabout access from Essex Regiment Way and a priority junction from White Hart Lane.
- 1.1.5 These archaeological excavations were undertaken to mitigate construction impacts of an area of residential housing with associated access and infrastructure.
- 1.1.6 This work was carried out in accordance with the Beaulieu Archaeological Investigation and Mitigation Strategy (URS 2013a), and an Archaeological Method Statement prepared by Oxford Archaeology East (Mortimer 2014).
- 1.1.7 This excavation is part of an ongoing archaeological project, across a phased development. The time-scale for this development is dependant on many factors and so cannot be accurately determined at the present time. The work presented in this Post-Excavation Assessment will eventually be incorporated into wider Analysis and Publication Reports.
- 1.1.8 This assessment has been conducted in accordance with the principles identified in English Heritage's guidance documents *Management of Research Projects in the Historic Environment*, specifically *The MoRPHE Project Manager's Guide* (2006) and *PPN3 Archaeological Excavation* (2008).

1.2 Geology and Topography

- 1.2.1 Zone F is located on the western boundary of the Beaulieu development, approximately 4km to the north-east of Chelmsford (centred on TL 7202 1013; Fig. 1), and is bounded to the west by Essex Regiment Way. The Site encompasses an area of high ground surrounded on three sides by river valleys. To the west and south is the River Chelmer, and to the east is Boreham Brook. North of the Site the ground rises towards the village of Terling. From the southern part of the Site there are views south towards the Chelmer Valley and Danbury Hill.
- 1.2.2 The superficial geology consists of boulder clay of the Lowestoft Till formation underlain by London Clays. To the south of the area lay a mixture of head deposits and sand and gravels (British Geological Survey).



1.3 Archaeological and Historical Background Neolithic

1.3.1 Essex has some of the earliest surviving evidence of settlement, mainly concentrated to the north-east along the River Crouch at Lawford and Lemarsh (Hedges, 1984). Evidence for possible domestic settlement within the vicinity of Beaulieu was recorded at Court Road, 1km to the north-west, in the form of several pits with Neolithic pottery within their fills (SMR 6142).

Bronze Age

- 1.3.2 Settlement continued to be concentrated along the river valleys of the Chelmer and Crouch, however during the Bronze Age the landscape was enclosed by field systems for the first time, such as those found at Great Wakering (Kemble, 2001). These enclosed field systems would have continued in use through into the early Iron Age. It has been suggested that these Bronze Age field systems form the basis for the modern landscape in the Chelmer Valley (Drury & Rodwell, 1980).
- 1.3.3 Several crop-marks have been recorded by aerial photography to the south of Belstead Hall and interpreted as part of a Bronze Age settlement (SMR 16888), with further domestic dwellings excavated at Springfield Lyons, 2.5km to the south-west. Further occupation sites are attested to by the recovery of artefacts, such as at New Hall School, to the south-east and Pratt's Farm, to the north.

Iron Age

- 1.3.4 The settlement pattern during the Iron Age would have been of nucleated settlements within a larger farming landscape. Evidence of this, within the vicinity of the development area, was seen to the south of Belstead Hall (SMR 17438). This comprised a large enclosure with associated pits and smaller ditches (Drury, 1978).
- 1.3.5 The later Iron Age witnessed an expansion of settlement onto the heavier clay soils and continued occupation of the estuaries. These estuarine sites are seen to become more complex in nature over time, with higher population density and sustained occupation, such as has been found at Little Waltham (Drury 1980).
- 1.3.6 By the end of the Iron Age sites such as Gosbecks oppida show that portions of the population were highly structured and of high status. These sites would have relied on farming communities scattered around the environs to supply agricultural commodities. (Crummy 1997).

Roman

- 1.3.7 During the Roman period a *mansio* (an imperial post station or inn) was established 5km to the west of Beaulieu at Moulsham Street. Around this a small market town developed with the surrounding area forming an agricultural hinterland.
- 1.3.8 During the Roman period a small market town would have grown up around the Mansio, located 5km to the south-west at Moulsham Street. The area surrounding this would have formed an agricultural hinterland to supply produce to the town.
- 1.3.9 This agricultural landscape would have comprised of large farms and villa complexes, such as those at Great Holts Farm and Bulls Lodge Dairy. Smaller domestic sites would also have formed part of the landscape. Evidence for these as well as for associated pottery making has been recorded during evaluation work at Greater Beaulieu.



Anglo-Saxon

- 1.3.10 In the immediate post-Roman period, the Roman town at Chelmsford was abandoned and much of the surrounding landscape reverted to rough pasture or woodland (Hunter, 2003). No known remains of Anglo-Saxon date are recorded within the application site although this is more likely to reflect the relatively poor archaeological visibility of Anglo-Saxon settlement sites rather than a lack of activity during the period.
- 1.3.11 Two records dating to the Anglo-Saxon period are held by the EHER; both of which are documentary records for Late Saxon manors, Belestedam (Belstead Hall) is recorded in the Domesday survey of AD 1086 (Reaney, 1933).

Medieval

- 1.3.12 The medieval town of Chelmsford was founded at the end of the 12th century, by the Bishop of London, to the north of the earlier Roman settlement at Moulsham. Throughout the medieval period the site was located within the rural hinterland of Chelmsford in a landscape populated by scattered farmsteads and manors.
- 1.3.13 To the south-east lay the manor of New Hall on the site of the current New Hall School. It is first mentioned by name (as 'Nova Aula') in documents dating to AD1301 when the site formed part of the lands owned by the Canons of Waltham Abbey and was used as the summer residence of the Abbott. It was later transferred to the Regular Canons under Henry II (Burgess & Rance, 1988).
- 1.3.14 The first deer park surrounding New Hall was created during the medieval period with the manor at its centre (Tuckwell, 2006). Under Henry VII, New Hall was granted to Thomas Boteler, Earl of Ormond, who received a licence to crenellate (fortify) it in AD1481 (E41/420) and who, in all likelihood, rebuilt or remodelled the original medieval hall in the latest architectural style. The new structure came to the attention of Henry VIII who visited New Hall in 1510 and 1515, shortly before Ormond's death. Subsequently, the property passed to Thomas' daughter and thus into the Boleyn family through her husband Sir Thomas Boleyn, from whom Henry VIII acquired the hall in 1516, changing its name to the 'Palace of Beaulieu'. Shortly after 1518 he rebuilt the Ormond's medieval hall on a quadrangular plan with gatehouse in the south range, great hall in the east and chapel in the west ranges. Mary Tudor took residency at New Hall intermittently between 1532 and her ascendancy to the crown in 1553.
- 1.3.15 Evidence for a further moated manor occupied throughout the medieval period is recorded at Belstead. By 1325 it was called Belestede, in 1354 it was recorded as Belestede Hall and by 1504 it was known as Belested Hall Farm. The name is thought to derive from 'the site of the bell house' (Reaney, 1933).
- 1.3.16 Analysis of aerial photographs and geophysical survey identified a number of features which, when investigated by trial trench evaluation, were found to comprise a possible enclosure ditch or moat. A cobbled surface (possibly representing a house platform or yard surface), pit and several further ditches were recorded within the enclosure. Pottery recovered from the features suggests an occupation date of the 12-13th century (ECC FAU 2009). These remains have been interpreted as a medieval farmstead or manor, possibly the precursor to the later manorial site at Belstead Hall c.160m to the north-east of Site 7 in Zone A of Beaulieu.

Post-Medieval

1.3.17 The development of New Hall and its deer park dominated the landscape of the application site and the surrounding area until the park contracted in size and the fields were enclosed for agriculture in the early 18th century. As the deer park was reduced in



- size the former medieval manors or lodges developed into farms, creating an essentially agricultural landscape.
- 1.3.18 Since the medieval period, New Hall had been set within the largest deer park in Essex; once totalling some 1,500 acres. The EHER show that the enclosed area actually comprised four separate parks surrounding New Hall and its gardens. The application site is located within the New or Little Park situated to the south and west of New Hall. The remaining parks were known as the Great or Old Park located to the north of New Hall, the Red Deer Park to the east of New Hall and the Dukes Park (located further east beyond the study area; EHER 47226).

Previous Archaeological Investigations

Geophysical Surveys

1.3.19 Geophysical magnetic susceptibility and detailed magnetometer surveys were carried out to evaluate the potential for important archaeological remains that may be buried within the Site. The magnetic susceptibility survey provided a rapid assessment of likely areas for previous settlement and industrial activity. The survey identified six areas of high potential, ten areas of medium potential and seven areas of low potential (Scott Wilson 2008). The magnetic susceptibility survey was followed by a detailed magnetometer survey of c.50% of the Beaulieu scheme. This survey provided a greater level of detail and identified individual features such as pits and ditches, field boundaries, buildings and structures, kilns or hearths and buried iron objects. The detailed magnetometer survey identified ten areas of high archaeological potential; six of medium potential and 19 of low potential (Scott Wilson 2008).

Trial Trench Evaluation (2008)

- 1.3.20 A limited programme of targeted trial trench evaluation was undertaken between June and August 2008. The purpose of the trial trenching was to confirm the presence/absence and significance of archaeological remains at eight sites identified by an assessment of the combined results of the desk-based studies and non-intrusive surveys (Scott Wilson 2007).
- 1.3.21 The trial trenching confirmed the presence of archaeological remains dating from the late prehistoric to post-medieval periods. This included a Late Iron Age and Early Romano-British settlement (Site 8); an Iron Age ditch (Site 5); medieval rural settlement possibly indicative of a precursor to Belstead Hall (Site 7); a possible medieval/early post-medieval warrener's lodge associated with the former deer park (Site 10); early post-medieval moated enclosure (Site 11); Tudor fishpond and associated earthwork damn (Site 2); a brick making site comprising two scove or clamp kilns of possible Tudor date (Site 3) and evidence for associated quarrying activity (Site 4).

Beaulieu Minerals Trial Trench Evaluation (2011)

1.3.22 A trial trench evaluation was undertaken in September/October 2011 to inform and support the planning application for the Beaulieu Minerals Extraction scheme. The evaluation identified a concentration of archaeological remains to the north-west of New Hall School. These remains appear to represent a rural settlement and possible metalworking activity dating from the Late Bronze Age through to the end of the Roman period. Metal detecting of the plough soil revealed several Early Roman coins and fragments of Early Roman brooches within the main area of activity.



Beaulieu Evaluation and Excavations (2013)

- 1.3.23 Archaeological trial trench evaluation of the proposed Essex Regiment Way roundabout, White Hart Lane junction and connecting access road identified four locations of significant archaeological remains (Stocks-Morgan, 2013).
- 1.3.24 Site 5, located to the north of Zone F, within the footprint of the Essex Regiments Way roundabout, identified part of a Middle Iron Age settlement surrounded by a large oval enclosure. This settlement comprised a single round-house, surviving only as the remains of an eaves-drip gully. Several small pits and postholes were found outside the roundhouse and were likely to be associated with domestic activity contemporary with the building.
- 1.3.25 In Area A1, to the east of Zone F, a single east to west aligned field boundary ditch of possibly Late Iron Age date attests to a wider agricultural landscape of field systems. A second, probably medieval, ditch was encountered on a north-west to south-east alignment (Stocks-Morgan, 2013a).
- 1.3.26 In Zone D Site 11 and Area D1 evidence of two High Medieval house platforms and their surrounding enclosures was identified. These are thought to be part of a medieval settlement associated with Belstead Manor estate (Stocks-Morgan, 2013b).
 - Beaulieu Zone A Housing Evaluation and Excavations (2014)
- 1.3.27 Four areas of significant archaeological remains were identified on land to the south of Belstead Manor (Zone A Housing) (Stocks-Morgan 2014a).
- 1.3.28 A Middle Bronze Age boundary ditch, aligned north-east to south-west, was identified in Site 7; whilst an Early Iron Age open settlement comprising of ten pits containing a large assemblage of pottery and fired clay, and a medieval, possible, retting pit and enclosures were present in the excavation area. Sparse domestic activity is suggested from the five Late Iron Age pits that were revealed in areas A3 and A4 along the side of a brook to the south of Zone A. In contrast, Area A2 revealed the presence of a Late Iron Age/Early Roman enclosure ditch and later medieval ditch.
 - Zone B and E Trench Evaluation (2014)
- 1.3.29 Four areas of significant archaeological remains were identified in Zone B and E (Stocks-Morgan 2014b).
- 1.3.30 Two small open area excavations were undertaken to the west of the area, which encountered Late Bronze Age / Early Iron Age open settlement, comprising five four-poster structures and several pits.
- 1.3.31 A large open area excavation (Site 8) was undertaken immediately west of New Hall School which identified occupation spanning a period from the Late Iron Age into the Early Roman period. These settlement remains consisted of an enclosure surrounding a roundhouse and associated occupation features. In the Early Roman period this enclosure was reconfigured, and roundhouse replaced. This phase of settlement also produced associated midden deposits and an ancillary roundhouse (Stocks-Morgan, in prep)
 - Beaulieu Mitigation evaluation and excavations 2015
- 1.3.32 A small open area excavation (Site 9) was carried out ahead of the construction of ponds and swales infrastructure works. The archaeology encountered comprised a prehistoric trackway and a Late Iron Age nucleated settlement.



1.3.33 A 14th / 15th century pit was encountered with two associated ditches during excavation of Zone G / Site 10. This pit is thought to be a retting pit, based upon its shape and the recovery of pollen/seeds from the waterlogged deposits. A later medieval ditched enclosure was also recorded. Inside the enclosure were the remains of a 16th century house, represented by the remains of two brick built fireplaces, and a possible brick built staircase. Two further brick built ancillary structures were evident, one being a cellar and the second a probable toilet block.

1.4 Acknowledgements

1.4.1 The author would like thank Iain Williamson of AECOM and Countryside Zest (Beaulieu Park) LLP who respectively commissioned and funded the archaeological work. The project was managed by Richard Mortimer, and overseen by Helen Stocks-Morgan and the illustrator was Charlotte Walton. Thanks are also extended to Patrick Lambert, Matthew Brooks, Adele Lord and Ted Levermore who helped with the fieldwork. The project was monitored by Alison Bennett and Richard Havis of Essex County Council. The machining was undertaken by Richard Pope and Joe Larkin of Danbury Plant Hire.

2 Project Scope

- 2.1.1 This assessment deals only with the excavation carried out on area within Zone F designated as Site 6, within a larger phased development. The earlier evaluation data will be incorporated into the results where relevant. Further assessments will be produced following any future work required on other parts of the development.
- 3 Original Research Aims and Objectives and Methodology

3.1 Aims

- 3.1.1 The main aim of the excavation was to preserve by record archaeological remains present within the development area and to reconstruct the history and use of the site.
- 3.1.2 The current project will be incorporated within the wider archaeological investigations at Beaulieu. The research objectives that are applicable to this specific site are detailed below.

3.2 Regional Research Objectives

3.2.1 There are a number of regional research objectives that have been identified by English Heritage (English Heritage, 1997) which provide a framework for investigation and can be applied to the evidence recovered at Site 6, Beaulieu.

Iron Age (700BC to 43 AD)

- The need to identify suitable means of dating Iron Age sites chronologically through absolute dating, regional pottery sequences and datable pottery assemblages.
- A focus on developing a greater understanding of the development of the agrarian economy; this should include development of knowledge of the increase in agricultural production through the study of the landscape such as trackways, enclosures, drove routes and fields.
- A need for site specific excavation to focus on settlement remains to understand the distribution, density and dynamics of Iron Age settlements.
- A further priority is the transition between the Bronze Age and the Iron Age in the region.



- There should be further focus on Iron Age settlement chronology and dynamics, social organisation and settlement form and function in the Early and Middle Iron Age.
- The processes of social and economic change during the Late Iron Age including the adoption of the Aylesford/ Swarling culture and the development of tribal polities.
- The Iron Age / Roman transition.

Medieval (AD 1066-1540)

- The study of medieval rural settlement diversity across East Anglia.
- The characterisation of settlement forms, function, chronology, structure and the investigation of rural settlement type and morphology.
- The understanding of agrarian regimes on the geology of the rural sites, through the use of environmental sampling.
- The characterisation and chronology of medieval field systems and understanding how the size and shape of fields can be related to agricultural regimes.
- The study of the evolution of the medieval house and farmstead and agrarian economy.
- To understand the form that farms take and the type of building present and whether functions can be attributed to them.

3.3 Local Research Objectives

- 3.3.1 A wider research objective on the site is:
 - To investigate how the Iron Age and Romano-British settlements relate to the pattern of rural settlement in the wider area notably in relation to the Site 1, 5, 7, 8 and 9, Boreham Airfield and the possible 'principia' at Bulls Lodge Farm Dairy.

3.4 Site Specific Research Objectives

- 3.4.1 A number of site specific research objectives were identified based on the results of the evaluation (URS, 2013)
 - To investigate and record evidence for Iron Age settlement activity.
 - Preserve by record the nature, extent and form of Iron Age settlement.
 - To assess the nature of medieval activity on site.

3.5 Methodology

- 3.5.1 The methodology used was carried out in accordance with the Beaulieu Archaeological Investigation and Mitigation Strategy (URS 2013a).
- 3.5.2 One excavation area was opened, targeting multi-period remains recorded during previous evaluation works (OA East Report No. 1840). These evaluation works were targeted on geophysical anomalies identified in 2008 and confirmed by the previous phase of trial trenching (Stocks-Morgan and Tsybaeva 2015).
- 3.5.3 The total area excavated was 1131 sq m.
- 3.5.4 Machine excavation was carried out by a 360° type excavator using a 2m wide flat bladed ditching bucket under constant supervision of a suitably qualified and experienced archaeologist.



- 3.5.5 Spoil, exposed surfaces and features were scanned with a metal detector. All metaldetected and hand-collected finds were retained for inspection, other than those which were obviously modern.
- 3.5.6 All archaeological features and deposits were recorded using OA East's *pro-forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and monochrome photographs were taken of all relevant features and deposits.
- 3.5.7 A total of thirteen bulk samples were taken, from deposits considered most appropriate for environmental sampling, while also considering feature type and period.
- 3.5.8 Site conditions were mostly good and dry.



4 SUMMARY OF RESULTS

4.1 Provisional Site Phasing

4.1.1 For consistency with all previous and forthcoming reports features where dating is available will be attributed to the following periods. Features that have not been identified during this phase of archaeological works, have been included to allow comparisons in later reports. Features have been placed in phases based on stratigraphic and spatial relationships, alongside the use of artefact dating.

	Early Neolithic (3500 – 2900 BC)			
Neolithic (3500 – 2000 BC)	Middle Neolithic (2900-2500 BC)			
	Later Neolithic (2500 - 2000 BC)			
	Early Bronze Age (2000 - 1500 BC)			
Bronze Age (2000 – 700 BC)	Middle Bronze Age (1500 - 1000 BC)			
	Later Bronze Age (1000 – 700 BC)			
	Early Iron Age (700 – 200 BC)			
Iron Age (700 BC – AD 43)	Middle Iron Age (200 – 50 BC)			
	Later Iron Age (50 BC – AD 43)			
Roman (AD 43 - 410)				
	Early Anglo-Saxon (AD 410 – 650)			
Saxon (AD 410 – 1066)	Middle Anglo-Saxon (AD 650 – 850)			
	Late Anglo-Saxon (AD 850 – 1066)			
	Early medieval (AD 1066 – 1200)			
Medieval (AD 1066 – 1650)	High medieval (AD 1200 – 1450)			
	Transitional (AD 1450 - 1650)			
Post-medieval (AD 1650 - 1800)				
Modern (AD 1800 – present)				

Table 1: Chronology used in this report

4.2 Early Iron Age

Animal enclosure

- 4.2.1 A small enclosure (Fig 2) with two entrance ways was identified from three curvilinear gullies situated in the south-western corner of excavation. The northern gully (5084) had steep sides, 0.55m wide, and a concave base measuring 0.37m deep. Its primary fill was a mid greyish brown silty clay (5086), 0.18m thick. It was overlain by a dark brownish grey silty clay (5085), 0.19m thick, that contained fragments of Early Iron Age pottery and cattle bone. The gully was truncated by a medieval L-shaped enclosure to the east.
- 4.2.2 The middle gully was S-shaped in plan, measuring between 0.65m and 0.43m in width. The gully (5075, 5077) had steep sides and a concave base, 0.21-0.23m deep (see Plate 3). It contained a single fill (5076, 5078) that was mid brownish grey to greyish brown silty clay with a small quantity of Early Iron Age pottery found within it.



4.2.3 The southern end of the enclosure (**5117**) was truncated by modern ploughing so its full extent was difficult to determine. It had steep sides and a concave base measuring 0.36m wide and 0.16m deep and contained a light grevish brown silty clay (5118).

4.3 Late Iron Age

Roundhouse 5111

- 4.3.1 In the north-eastern corner of excavation was a substantial circular gully (see Plate 1). Only half of the roundhouse was within the excavation area, which was limited to the east by a large, possibly medieval field boundary. The roundhouse measures approximately 13m in diameter. No entranceway or internal/external features associated with the roundhouse were identified.
- 4.3.2 The ditch had steep, near vertical sides, ranging between 0.8m and 1.18m wide. The base was flat, between 0.5m to 0.9m deep (see Plate 2, Fig. 4, section 1789).
- 4.3.3 The ditch contained between two and three fills throughout. The primary fills were generally mid greyish brown silty clay (5134, 5116, 5127, 5099, 5124, 5119, 5131, 5106), around 0.1-0.35m thick, with small quantities of Late Iron Age pot and animal bone found among the silting at the base. This was overlain by secondary fills that came from abandonment of the roundhouse and contained large quantities of daub and fired clay and large sherds of broken pot. These fills were lighter greyish brown silty clay (5133, 5101, 5102, 5128, 5098, 5125, 4873, 5121, 5122, 5109, 5110, 5107), about 0.16-0.3m thick.

Enclosure ditch 5054

- 4.3.4 A Late Iron Age boundary ditch possibly associated with the roundhouse **5111** lay northeast to south-west across the site (Fig 2).
- 4.3.5 The north-western end of the ditch (**5054**) had gradually sloping sides, measuring a maximum of 1.7m wide and a concave base, 0.36m deep. It was a filled by a mid orangey grey sandy clay (5055), which is likely the result of natural silting and wind erosion. Large fragments of sheep and horse bone, quite unusual preservation for the clay site, were retrieved from the base. The south-eastern end of the ditch (**5073**) had steeper sloping sides, measuring 0.9m wide, and a concave base, 0.26m deep. Its fill (5074) was a light greyish brown sandy clay, also due to silting and wind erosion.
- 4.3.6 There was evidence of a re-cut of the enclosure (see Fig.4, section 1762). The earlier ditch (**5060**) had gently sloping sides with a flat base, measuring 0.7m wide and 0.32m deep. Single fill, mid greyish brown silty clay (5061), was probably the result of silting and contained sherds of Late Iron Age pot. The re-cut (**5062**) had a profile similar to ditch (**5073**) with steep sides and a concave base, 0.89m wide and 0.47m deep. It was filled initially by a dark greyish brown silty clay (5064), 0.2m thick. This was overlain by a mid greyish brown silty clay (5063), 0.27m thick, with sherds of Late Iron Age pot in it.

Enclosure ditches 4877 and 5094

4.3.7 Along the north-eastern side of excavation were two further enclosure ditches aligned approximately north to south and truncating roundhouse **5111** (see Fig.4, section 1545). The earlier ditch (**5140**, **4877**) had steep eastern and gradual western, slightly stepped sides, 3.5m in width. It had a concave base, 1.26m deep. Its primary fill was a light greyish brown slightly silty clay (5141), 0.24m thick, that contained fragments of bone, Late Iron Age pottery and daub. It probably formed as the result of natural bank erosion and silting during occupation. Its secondary fill (5139) was a mid greyish brown slightly silty clay, 0.28m thick, and contained a moderate quantity of burnt stone and charcoal.



This was overlain by a backfill of a mid orangey grey sandy clay (5138), 0.30m thick. The final fill was a mid greyish brown sandy clay (5137), 0.14m thick.

4.3.8 The later ditch (**5094**, **5129**, **5142**) was probably a re-cut of ditch **5140**. It had gradually sloping sides, 2.6m wide, with a concave base measuring 0.82m deep. It was filled by a light brownish grey sandy clay (5143, 5130). The ditch terminus (**5094**) was rounded in shape, with concave sides and base, measuring 0.7m deep. It contained a lower fill of mid greyish brown clay (5096), 0.2m thick, and upper fill of light greyish brown clay (5095), 0.15m thick. The ditch contained fragments of Late Iron Age pottery (5130, 5096) and a pair of Roman tweezers were retrieved from fill 5130.

4.4 Medieval

L-shaped enclosure

- 4.4.1 A large L-shaped enclosure situated in the centre of excavation had its long arm northwest to south-east over the Late Iron Age enclosure 1. The short arm extended northeast to south-west truncating roundhouse **5111** and enclosures 2 and 3.
- 4.4.2 The short arm (4874) had steep sides measuring 1.6m wide. The base was concave and 0.8m deep. It was filled initially by a mid yellowish brown clayey silt (4875), 0.3m thick, and contained a small quantity of 12-13th century pot. This was overlain by a mid brownish grey clayey silt (4876), 0.5m thick, with a large amount of late 13th to 14th century pottery.
- 4.4.3 The long arm (**4861**) had a shallower profile with gradually sloping sides, 1.22m wide and a concave base, 0.42m deep. Primary fill (4863) was a light greyish brown sandy clay, 0.32m deep. Several sherds of 14th century pot were retrieved from it. This was overlain by a mid greyish brown sandy clay (4862), 0.10m deep. The ditch terminated to the south in slot **5114**, with the terminus being rounded with slightly stepped sides and a concave base.

Pits

- 4.4.4 A group of 4 intercutting pits and two possible postholes were found inside the medieval enclosure in the middle of excavation.
- 4.4.5 The pits (**5087**, **5050**, **5056**, **5058**) were sub-circular in plan ranging from 0.58m to 1.68m in diameter. They had gently sloping sides and flat bases, between 0.07m and 0.12m deep. The fills were a dark orangey brown silty clay (5051, 5057, 5059) except for **5087** that had a mid greyish brown silty clay (5088) and contained a fragment of medieval roof tile. Sherds of 12-13th century pottery were retrieved from pits **5056** and **5058**, suggesting the group was contemporary to the L-shaped enclosure.
- 4.4.6 Postholes **5065** and **5067** were sub-circular in plan with steep sides and flat bases, measuring 0.32-0.24m in width and 0.14-0.12m in depth. They contained a single fill of mid orangey brown silty clay (5066, 5068). Sherds of 12-13th century pottery were retrieved from posthole **5065**.

Water access and crop processing pit

4.4.7 A small fragment of late medieval cobbled surface 5093 was discovered in the south eastern corner of excavation (see Plate 4). The surface was badly damaged by ploughing and tree roots but left best preserved near the limit of excavation. It consisted of medium to small rounded stones and occasional small tile fragments including a reused fragment of Roman roof tile. The surface finds contained animal bone fragments and sherds of 14-15th century pot. The cobbled surface was likely used for water access to a pond or a ditch, the remains of which can still be seen east of excavation.



4.4.8 North west of the cobbled surface was sub-rectangular pit **5080**, around 2m wide and 2.6m long. The pit had steep sides and a flat base, on average 0.2m deep. It was filled by a mid brownish grey sandy clay (5081) and contained large quantities of charcoal, daub and mid-late 13th century pot. On its north eastern side it was truncated by a circular posthole (**5082**), 0.6m in diameter. The posthole had steep sides and a concave base, 0.22m deep. It was filled with a mid greyish brown sandy clay (5083).

4.5 Undated

- 4.5.1 Four pits (**4870**, **4879**, **5052**, **5089**) were found in a wide arc around roundhouse **5111**. They had gently sloping sides and concave bases, between 0.05 and 0.10m deep. Their diameter varied between 0.35m to 0.38m with the largest pit (**5052**) measuring 0.55m in diameter. They contained mid to dark greyish brown sandy clay with occasional charcoal flecks (4880, 4871, 5090, 5053). No dating evidence was retrieved from them but they were grouped together due to similar profiles and fills.
- 5 FACTUAL DATA AND ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL

5.1 Stratigraphic and Structural Data

The Excavation Record

5.1.1 All hand written records have been collated and checked for internal consistency, and the site records have been transcribed onto an MS Access Database. Contexts will be ascribed to a phase dependant on the evidence found within them. The site plans and all relevant sections have been digitised in AutoCAD, finds will be drawn by hand. The quantification list of excavation records have been recorded in Table 2.

Туре	Quantity
Context numbers	94
Plans	24
Sections	35
Black and white films	0
Digital photographs	189

Table 2: Quantification of excavation records

5.2 Documentary Research

5.2.1 Research into the documentary and cartographic evidence will be undertaken where appropriate to place the site into its wider context.

5.3 Artefact Summaries

Metalwork

5.3.1 One copper alloy and several iron objects were retrieved from this excavation. A pair of Roman tweezers were found in ditch **5129** and three nails were recovered from the medieval L-shaped enclosure.

Non building stone

5.3.2 Fragments of a heavily worked lava quern stone were found in the fill of medieval pit **5058**.

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Pottery

5.3.3 A total of 4.625kg of pottery sherds were recovered from the excavation. The majority of the assemblage is attributed to the Late Iron Age with 16 sherds of mainly residual Early Iron Age pottery. The rest of the assemblage is dated to the high medieval period.

Ceramic building material

5.3.4 Several small fragments of medieval roof tiles were retrieved from pits **5087**, **5056** and cobbled surface 5093. A re-used fragment of Roman tile was also found in the cobbled surface.

Fired Clay

5.3.5 A total of 8.372kg of daub and fired clay was recovered from the roundhouse **5111**, enclosure ditches, pit **5080** and cobbled surface 5093. The finds were mainly fragments of oven structure and furniture. A possible pottery kiln has been identified in the roundhouse, based on the presence of two distinct clay fabrics within its structure and the large quantity of pottery sherds. Pit **5080** was most likely a crop processing structure.

5.4 Environmental Summaries

Faunal Remains

5.4.1 A total of 153 assessable specimens were recovered from the excavation, only 65 of which were possible to identify to species. The material came from Late Iron Age enclosures and roundhouse **5111**. A small quantity of bone was associated with a medieval cobbled surface (5093). The bone showed good overall preservation with minimal surface modifications and weathering, though a high degree of fragmentation. The prevalence of cattle bone is typical for a domestic assemblage though the high number of horse bones may be worth further investigation.

Environmental Remains

5.4.2 Thirteen bulk samples were taken from features within the excavation. Charred plant remains are scarce and those present were recovered from features in the middle of the site; from roundhouse 5111, medieval enclosure ditch 4874 and two adjacent, undated pits (5050 and 5058) within the medieval enclosure. Such small quantities of grain cannot be considered as significant and may not even be contemporary with the deposits sampled.



6 DISCUSSION AND CONCLUSIONS

6.1 Early Iron Age

- 6.1.1 Several residual sherds found on site, as well as in the curvilinear enclosure **5084**, show potential for Early Iron Age activity on site which can be combined with the evidence from Site 7 and Zones B and E in Beaulieu.
- 6.1.2 There is no sign of continuity of occupation into the Late Iron Age.

6.2 Late Iron Age

- 6.2.1 The roundhouse (**5111**) is rather unusual in its preservation. The depth of the gully can be explained by its location near a large medieval boundary ditch, still visible today, which protected this edge of the excavation area from ploughing. The gully was possibly dug deliberately to catch the water from the eaves and prevent decay of the daub walls due to waterlogging (Evans, 1997).
- 6.2.2 Even though no internal structures were found within the roundhouse, there was likely an oven or kiln along the western wall. The oven was destroyed and deposited in the gully when the roundhouse was abandoned (see Poole, later in this report). Large quantities of broken pottery sherds, as well the complex structure of the oven, imply that it could have been a pottery kiln. It is possible the roundhouse was part of an industrial structure within the settlement.
- 6.2.3 The roundhouse was later replaced by enclosure 2, which was open long enough for slope erosion and silting to accumulate at the bottom. Later, it was re-cut by enclosure 3 from which a pair of Roman tweezers were retrieved. This evidence for a pottery kiln and the presence of imported goods indicates that the site was relatively significant.

6.3 Medieval

6.3.1 After a long break in activity the site was re-occupied during the later medieval period. The south-eastern corner of the site was enclosed to separate the activity happening there from the rest of the area. The evidence from pit **5080** suggests it was used for crop processing, possibly as an oven. A small quantity of grain has been found deposited within the L-shaped enclosure and the pit group within it. Though the amount of grain is not significant on its own, the presence of a possible corn drying kiln (**5080**) and a fragment of quern stone in pit **5058**, suggest that the enclosed area is likely to be part of a grain production area next to the fields where it was grown.

6.4 Significance

- 6.4.1 The site can contribute towards our understanding of the distribution, density and dynamics of Iron Age settlements both locally and on a regional scale.
- 6.4.2 A pottery kiln found in the roundhouse can contribute towards our knowledge of pottery production, sequences and datable pottery assemblages on local and regional levels.
- 6.4.3 The evidence from the medieval enclosure associated with corn processing can help understand the agrarian regime and economy of the medieval landscape.
- 7 REPORT WRITING, ARCHIVING AND PUBLICATION

7.1 Storage and Curation

7.1.1 Excavated material and records will be deposited with, and curated by, Essex County Council in appropriate county stores under the Site Code and county HER code



- SPBP15. A digital archive will be deposited with OA Library/ADS. ECC requires transfer of ownership prior to deposition. During analysis and report preparation, OA East will hold all material and reserves the right to send material for specialist analysis.
- 7.1.2 The archive will be prepared in accordance with current OA East guidelines, which are based on current national guidelines

7.2 Publication

7.2.1 The results from all phases of the project will form a site of regional significance, therefore publication in the East Anglian Archaeology monograph series appears appropriate. However, given the location of the site, the Oxford Archaeology monograph series is a viable alternative. Once the publication outlet is confirmed (following discussions with relevant parties), a preliminary synopsis will be prepared.

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APPENDIX A. CONTEXT SUMMARY WITH PROVISIONAL PHASING AND TRENCH DESCRIPTION

Context	Cut	Same as	Breadth (m)	Depth (m)	Category	Туре	Phase
5050			0.58	0.07	cut	pit	
5051	5050		0.58	0.09	fill	pit	
5052			0.55	0.1	cut	pit	
5053	5052		0.55	0.1	fill	pit	
5054			1.7	0.36	cut	ditch	Late Iron Age
5055	5054		1.7	0.36	fill	ditch	Late Iron Age
5056			0.9	0.1	cut	pit	medieval
5057	5056		0.9	0.1	fill	pit	medieval
5058			1.68	0.12	cut	pit	medieval
5059	5058		1.68	0.12	fill	pit	medieval
5060			0.7	0.32	cut	ditch	Late Iron Age
5061	5060		0.88	0.47	fill	ditch	Late Iron Age
5062			0.89	0.47	cut	ditch	Late Iron Age
5063	5060		0.89	0.27	fill	ditch	Late Iron Age
5064	5062		0.3	0.2	fill	ditch	Late Iron Age
5065			0.32	0.14	cut	post hole	medieval
5066	5065		0.32	0.14	fill	post hole	medieval
5067			0.24	0.12	cut	post hole	
5068	5067		0.24	0.12	fill	post hole	
5069		5060, 5054	0.94	0.21	cut	ditch	Late Iron Age
5070	5069	5061	0.94	0.21	fill	ditch	Late Iron Age
5071			1.4	0.38	cut	ditch	medieval
5072	5071		0.31	0.28	fill	ditch	medieval
5073			0.9	0.26	cut	ditch	Late Iron Age
5074	5073		0.9	0.26	fill	ditch	Late Iron Age
5075		5077	0.65	0.21	cut	ditch	Early Iron Age
5076	5075		0.65	0.21	fill	ditch	Early Iron Age
5077		5075	0.43	0.223	cut	ditch	Early Iron Age
5078	5077		0.43	0.23	fill	ditch	Early Iron Age
5079	5071		0.18	0.9	fill	ditch	medieval
5080			2	0.26	cut	pit	medieval
5081	5080		0.2	0.26	fill	pit	medieval
5082			0.6	0.22	cut	pit	
5083	5082		0.6	0.22	fill	pit	
5084			0.55	0.37	cut	ring ditch	Early Iron Age
5085	5084		0.55	0.19	fill	ring ditch	Early Iron Age



5086	5084		0.3	0.18	fill	ring ditch	Early Iron Age
5087			0.75	0.08	cut	pit	medieval
5088	5087		0.75	0.08	fill	pit	medieval
5089			0.38	0.08	cut	post hole	
5090	5089		0.38	0.08	fill	post hole	
5091			0.21	0.07	cut	post hole	
5092	5091		0.21	0.07	fill	post hole	
5093			1.5	0.05	layer	cobbled surface	medieval
5094			3.8	0.35	cut	ditch	Late Iron Age
5095	5094		3.8	0.15	fill	ditch	Late Iron Age
5096	5094		3.8	0.2	fill	ditch	Late Iron Age
5097		5100	1.1	0.53	cut	ring ditch	Late Iron Age
5098	5097		1.1	0.17	fill	ring ditch	Late Iron Age
5099	5097		0.8	0.35	fill	ring ditch	Late Iron Age
5100		5097	0.45	0.8	cut	ring ditch	Late Iron Age
5101	5100		0.6	0.18	fill	ring ditch	Late Iron Age
5102	5100		0.7	0.27	fill	ring ditch	Late Iron Age
5103			2	0.14	cut	ditch	Late Iron Age
5104	5103		2	0.14	fill	ditch	Late Iron Age
5105	1		0.8	0.34	cut	ring ditch	Late Iron Age
5106	5105	5109		0.16	fill	ring ditch	Late Iron Age
5107	5105	5110		0.2	fill	ring ditch	Late Iron Age
5108			0.8	0.4	cut	ring ditch	Late Iron Age
5109	5108	5106		0.2	fill	ring ditch	Late Iron Age
5110	5108	5107		0.2	fill	ring ditch	Late Iron Age
5111			15	0.7	structure	roundhouse	Late Iron Age
5112			0.88	0.36	cut	ditch	Late Iron Age
5113	5112		0.88	0.36	fill	ditch	Late Iron Age
5114			2.7	0.48	cut	ditch	medieval
5115	5114		2.7	0.48	fill	ditch	medieval
5116	5100		0.44	0.35	fill	ring ditch	Late Iron Age
5117	1		0.36	0.16	cut	gully	Early Iron Age
5118	5117		0.36	0.16	fill	gully	Early Iron Age
5119	4872		0.5	0.29	fill	ring ditch	Late Iron Age
5120	1	5108			cut	ring ditch	Late Iron Age
5121	5120	5109			fill	ring ditch	Late Iron Age
_	+	5440			fill	ring ditch	Late Iron Age
5122	5120	5110				19	Late non rigo
	5120	4872			cut	ring ditch	Late Iron Age



5125	5123	5119			fill	ring ditch	Late Iron Age
5126		5097			cut	ring gully	Late Iron Age
5127	5126	5099			fill	ring ditch	Late Iron Age
5128	5126	5098			fill	ring ditch	Late Iron Age
5129		5094	2.8	0.48	cut	ditch	Late Iron Age
5130	5129			0.3	fill	ditch	Late Iron Age
5131	5120		0.25	0.1	fill	ring ditch	Late Iron Age
5132			1.18	0.91	cut	ring ditch	Late Iron Age
5133	5132		1.18		fill	ring ditch	Late Iron Age
5134	5132			0.7	fill	ring ditch	Late Iron Age
5135	5129			0.24	fill	ditch	Late Iron Age
5136	4877			0.12	fill	ditch	Late Iron Age
5137	5140			0.14	fill	ditch	Late Iron Age
5138	5140			0.3	fill	ditch	Late Iron Age
5139	5140			0.28	fill	ditch	Late Iron Age
5140			3.5	1.26	cut	ditch	Late Iron Age
5141	5140			0.24	fill	ditch	Late Iron Age
5142				0.82	cut	ditch	Late Iron Age
5143	5142			0.82	fill	ditch	Late Iron Age
/	×	`					

Trench 469									
General d	lescription	l		Orientation	E-W				
_			Avg. depth	(m)	0.6				
	ntained thro a natural of		Width (m)		1.8				
overlying (a riatarar or	orange e	iay.		Length (m)		30		
Contexts					·				
context no	type	Width (m)	Depth (m)	comment	finds	date			
4861	Cut	1.22	0.32	Ditch	-	medieval			
4862	Fill	1.22	0.10	Ditch	pot	med	lieval		
4863	Fill	1.22	0.22	Ditch	pot	med	lieval		
4864	Cut	0.68	0.2	Ditch	-	Late Ir	on Age		
4865	Fill	0.68	0.2	Ditch	-	Late Ir	on Age		
4866	Cut	0.8	-	Ditch, not excavated	-		-		
4867	Fill	0.8	-	Ditch, not excavated	-	-			
4299	Layer	-	0.3	Topsoil	-	-			
4300	Layer	-	0.3	Subsoil	-		-		



Trench 47	0						
	escription				Orientation		N-S
			Avg. depth	(m)	0.45		
	ntained one		Width (m)	· /	1.8		
and subso	il overlying	a naturai	Length (m)		30		
Contexts					3. ()		
context no	type	Width (m)	Depth (m)	comment	finds	da	ate
4969	Cut	0.77	0.18	Ditch	-	Late In	on Age
4970	Fill	0.77	0.18	Ditch	-	Late I	on Age
4971	Cut	0.28	0.16	Post hole	-		-
4972	Fill	0.28	0.16	Post hole	-		-
4299	Layer	-	0.28	Topsoil	-		-
4300	Layer	-	0.16	Subsoil	-		-
Trench 54	8						
General d	escription				Orientation		NW-SE
_					Avg. depth	(m)	0.5
				ee ditches. Consists of orange clay.	Width (m)		1.8
topoon and	. Jubson 01	onymig a	. Idiai di	orango day.	Length (m)		30
Contexts							
context no	type	Width (m)	Depth (m)	comment	finds	da	ate
4870	Cut	0.35	0.09	Post Hole	-		-
4871	Fill	0.35	0.09	Post Hole	-		-
4872	Cut	0.7	0.5	Ditch	-	Late I	on Age
4873	Fill	0.7	0.5	Ditch	pot, bone	Late I	on Age
4874	Cut	1.6	0.8	Ditch	-	med	lieval
4875	Fill	1.6	0.3	Ditch	pot	med	lieval
4876	Fill	0.48	0.5	Ditch	pot	med	lieval
4877	Cut	1.02	0.3	Ditch,	-	Late I	on Age
4878	Fill	1.02	0.3	Ditch	pot	Late I	on Age
4879	Cut	0.3	0.09	Post hole	-		-
4880	Fill	0.3	0.09	Post hole	-		-
4299	Layer	-	0.33	Topsoil	-		-
4300	Layer		0.15	Subsoil			



APPENDIX B. FINDS REPORTS

B.1 Metalwork

- B.1.1 One copper alloy object was retrieved from the excavation. A pair of Roman tweezers, 0.002g in weight and 350mm in length, were found in the upper fill (5130) of ditch 5129. The tweezers are complete but one arm is broken off near the loop and is slightly twisted. There is a decoration in the form of scorched line along the edge on the outside of the tweezers. The tweezers would have originally been kept on a ring.
- B.1.2 One iron artefact, possibly a nail, 570mm in length, and one iron fragment of a nail, 230mm long, were found in the upper fill (4786) of medieval ditch **4874**. A single iron nail, 570mm long was retrieved from medieval ditch **4877**.

B.2 Non Building Stone

B.2.1 Fragments of heavily worked lava quern stone were retrieved from pit **5058**. The quern stone, 0.388g in weight, has a polished surface at the bottom and uneven sides though one of its sides shows evidence of ribbed surface. The quern stone is sub-rectangular, 900mm in length, 750mm in width and 500mm in height.

B.3 Prehistoric Pottery

By Alice Lyons

Introduction

B.3.1 A total of 490 sherds, weighing 3846g, were collected from 22 excavated contexts, primarily from within ditches and ring-ditches (see table 3). The pottery represents a minimum of 52 fragmentary vessels, none of which were complete or buried *in situ*. Indeed, the sherds are small and poorly preserved with an average sherd weight of only c. 8g.

Feature Type	Sherd count	Weight (g)	Weight (%)
Ditch	230	2026	52.68
Ring Ditch	243	1782	46.33
Unassigned	16	33	0.86
Pit	1	5	0.13
Total	490	3846	100.00

Table 3. Late Iron Age pot: quantity and weight of pottery by feature type

Methodology

- B.3.2 The assemblage was analysed in accordance with the guidelines for analysis and publication laid down by the Prehistoric Ceramic Research Group (PCRG 2010). The total assemblage was studied and a full catalogue was prepared (Appendix 1). A sample of the sherds were examined at x10 magnification and were divided into fabric groups defined on the basis of inclusion types. Fabric codes were prefixed by a letter code representing the main inclusion present (F representing flint, G grog and Q quartz). Vessel form was recorded; R representing rim sherds, B base sherds, D decorated sherds and U undecorated body sherds. The sherds were counted and weighed to the nearest whole gram. Decoration and abrasion were also noted.
- B.3.3 The pottery and archive are curated by OAE.



The pottery

Early Iron Age/ early prehistoric

B.3.4 A small number of 16 sherds, weighing 41g, of a coarse flint-gritted fabric were recovered from seven excavated features comprising ring-ditches **5084**, **5097**, **5105** and ditches **5054**, **5075**, **5094** and **5129**. The pottery is severely abraded, with an average sherd weight of only 2.5g. Due to its poor condition it is difficult to date but is probably Early Iron Age and survived within this assemblage as a residual component.

Late Iron Age

- B.3.5 The largest part of the assemblage (c. 99% by weight) dates between the late 1st century BC and the early 1st century AD. The most common fabrics are grog tempered wares used to make coarse ware jars. This material is consistent with off-site production at regional centres within eastern Britain and where their manufacture was influenced by Gaulish design. Two main traditions have been recorded: grey wares tempered with fine grog, often with burnished surfaces following the Terra Nigra style and grey wares tempered with fine grog but with oxidised surfaces in the Terra Rubra style (Thompson 1982, 22 & Biddulph et al 2015, Fabric GROG).
- B.3.6 Although fragment size is small and no compete vessels were recorded some rim and diagnostic body pieces did survive. In these cases, rims could be seen to be of a basic 'S' shape, with several of the vessels having rippled shoulders (Thompson 1982, typology B2; Biddulph et al 2015, typology EF156-169). Rippled shouldered jars are thought to have a start date in the late 1st century BC and continue in use into the early/mid-1st century AD when they were replaced by the wide spread use of cordoned jars (Thompson 1982, typology B3).
- B.3.7 Small amounts of undiagnostic guartz tempered jar fragments were also found.

Fabric	Main inclusion	Abbreviation	I .	Weight (g)	Weight (%)
Grey ware tempered with fine grog	G	GW(GROG)	204	1558	40.95
Grey ware tempered with fine grog and produced with oxidised surfaces	G	GW(FINE GROG)(OX SURFACES)	102	1091	28.67
Red ware tempered with common grog	G	REDW(GROG)	65	700	18.40
An oxidised fabric, tempered with common grog	G	OW(GROG)	51	217	5.70
Grey ware tempered with common grog and flint	G	GW(GROG & FLINT)	37	176	4.63
Sandy grey ware	Q	SGW	7	21	0.55
Sandy grey ware, tempered with common flint	Q	SGW(FLINT)	4	19	0.49
Sandy grey ware manufactured with oxidised surfaces		SGW(OX SURFACES)	3	12	0.32
A coarse ware tempered with common flint	Q	SCW(FLINT)	1	11	0.29
Total			474	3805	100.00

Table 4: Late Iron Age: pottery fabrics, listed in descending order of weight (%)

Summary

B.3.8 The majority of this ceramic assemblage are the abraded fragments of late Iron Age grog tempered coarse ware jars (some with distinctive rippled shoulders) known to have been in use between the late 1st century BC and the early 1st century AD. A smaller quantity of flint tempered sherds are probably Early Iron Age in date (800-400BC). The pottery was retrieved from the remains of a Late Iron Age settlement, with much of the assemblage excavated from structural ring-ditches, also boundary ditches.



Potential for further study

B.3.9 This assessment has demonstrated that the pottery assemblage is typical of the area during the late Iron Age with similar, although larger better preserved, ceramic groups recorded at Heybridge (Biddulph *et al*) and Stansted (Going 2004). This pottery, therefore, adds to the growing corpus of Iron Age and Late Iron Age pottery recovered within the vicinity. Its analysis has the potential to contribute the project research aims, particularly to our understanding of the development of ceramic forms (the ceramic sequence) and the pattern of pottery supply within the locality.

The pottery catalogue

KEY: B = base, Beak = beaker, C=century, D = decorated body sherd, E=early, Flag= flagon, L=late M=mid, Mort= mortaria, R = rim, SJAR = storage jar, U=undecorated body sherd.

For full fabric names see RB Pot Table 5.

Context	Cut	Feature	Fabric	Desc	Form	Sherd Count	Weight (g)	Date
4873	4872	Ditch	GW(FINE GROG)(OX SURFACES)	UB	JAR	8	184	C1BC-ADE/MC1
4873	4872	Ditch	GW(GROG)	RUB	JAR	21	260	30BC-AD50
4873	4872	Ditch	GW(GROG)(OX SURFACES)	RU	JAR	3	8	E/MC1
4873	4872	Ditch	SGW(Q)	RU	JAR	2	6	C1BC-ADE/MC1
4878	4877	Ditch	GW(GROG)	U	JAR/SJAR	6	75	E/MC1
4878	4877	Ditch	SGW(FLINT)	U	JAR/BOWL	3	10	C1BC-ADE/MC1
4878	4877	Ditch	SGW(OX SURFACES)	U	SJAR	1	6	C1BC-ADE/MC1
5055	5054	Ditch	GW(GROG)	U	JAR/BOWL	3	6	E/MC1
5055	5054	Ditch	FLINT GRITTED	U	JAR	2	1	800-400BC
5061	5060	Ditch	GW(GROG)	RU	JAR	4	5	E/MC1
5063	5062	Ditch	OW(GROG)	U	SJAR	1	31	C1
5063	5062	Ditch	GW(GROG)	RUD	JAR	3	18	E/MC1
5074	5073	Ditch	SGW	В	JAR	1	2	MC1-E/MC2
5076	5075	Ditch	FLINT GRITTED	U	JAR	4	6	800-400BC
5081	5080	Pit	SGW(Q)(OXSURFACES)	U	SJAR	1	5	C1
5085	5084	Ring Ditch	FLINT GRITTED	U	JAR	2	4	800-400BC
5096	5094	Ditch	SGW(SANDW)	U	JAR	1	3	MC1-E/MC2
5096	5094	Ditch	FLINT GRITTED	U	JAR	3	4	800-400BC
5096	5094	Ditch	GW(GROG)(OX SURFACES)	U	JAR	4	29	E/MC1
5096	5094	Ditch	SGW	U	JAR	2	6	E/MC1
5098	5097	Ring Ditch	GW(GROG)(OX SURFACES)	UD	SJAR	4	52	C1BC-ADC1
5098	5097	Ring Ditch	GW(GROG)	U	BOWL	3	16	E/MC1
5098	5097	Ring Ditch	SGW	U	JAR	1	4	E/MC1
5098	5097	Ring Ditch	SGW(FLINT)(OX SURFACES)	U	SJAR	1	9	C1BC-ADC1
5098	5097	Ring Ditch	FLINT GRITTED	U	JAR	2	10	800-400BC
5101	5100	Ring Ditch	GW(GROG)	RU	JAR/BOWL	17	149	E/MC1
5104	5103	Ditch	SOW(GROG)	RUD	BOWL	23	85	E/MC1
5104	5103	Ditch	GW(GROG)	RU	BOWL	19	143	E/MC1
5104	5103	Ditch	OW(GROG)	UB	SJAR	5	41	E/MC1
5106	5105	Ring Ditch	GW(GROG & FLINT)	RUD	JAR	37	176	E/MC1
5106	5105	Ring Ditch	REDW(GROG) (REDUCED SURFACES)	U	SJAR	52	524	M/LC1
5106	5105	Ring Ditch	SOW(GROG)	RUD	BOWL	17	38	E/MC1
	5105		SOW(GROG)	RUD	BOWL	4		E/MC1
	5105	Ring Ditch	GW(GROG)	RUD	BOWL	41		E/MC1
	5105		FLINT GRITTED	U	JAR	1		800-400BC



Context	Cut	Feature	Fabric	Desc	Form	Sherd Count	Weight (g)	Date
5107	5105	Ring Ditch	REDW(GROG) (REDUCED SURFACES)	U	SJAR	4	81	M/LC1
5107	5105	Ring Ditch	SCW(FLINT)	U	SJAR	1	11	C1
5107	5105	Ring Ditch	REDW(GROG) (OXIDISED SURFACES)	U	SJAR	4	81	M/LC1
5107	5105	Ring Ditch	OW(GROG)	R	JAR	1	7	E/MC1
5107	5105	Ring Ditch	GW(GROG)(OX SURFACES)	U	JAR	1	9	E/MC1
5110	5108	Ring Ditch	GW(GROG)	В	JAR	1	25	MC1BC-ADMC1
5122	5120	Ring Ditch	GW(GROG)	U	JAR/BOWL	6	18	E/MC1
5122	5120	Ring Ditch	SGW(Q)(OX SURFACES)	U	JAR/BEAK	1	1	E/MC1
5124	5123	Ring Ditch	GW(GROG)	RUB	JAR	36	290	30BC-AD50
5130	5129	Ditch	GW(GROG)(OX SURFACES)	UD	SJAR	65	749	C1BC-ADC1
5130	5129	Ditch	FLINT GRITTED	U	JAR	2	10	800-400BC
5130	5129	Ditch	GW(GROG)	RUB	JAR	40	212	C1BC-ADEC1
5134	5132	Ring Ditch	GW(GROG)(OX SURFACES)	UD	JAR	6	41	C1BC-ADE/MC1
5141	5140	Ditch	GW(GROG)	RU	SJAR	4	126	E/MC1

Table 5: Catalogue of prehistoric pottery

B.4 Medieval Pottery

By Helen Walker

Context	Pottery: fabric and diagnostic sherds	Wt (g)	Spot-date
9999	Post-medieval red earthenware: glazed sherd	3	Late 16th to 19th C
4863	Hedingham coarseware: flat base (2 frags daub)	35	14th C
4875	Shell-tempered ware; medieval coarseware	18	12th to 13th C
4876	Prehistoric pot: small sherd; Mill Green fineware: slip-coated, green-glazed and combed sherds; Mill Green coarseware: H2 rim, H1/E5 rim; Hedingham coarseware; medieval coarseware: H1 rim; (frags of daub & tile)	149	later 13th to 14th C
5057	Medieval coarseware; Hedingham coarseware: joining sherds from large vessel showing a vertical thumbed applied strip from either a large cooking-pot or storage jar, abraded	168	later 12th to mid/late 13th C
5059	Shell-tempered ware; early medieval ware; medieval coarseware: borderline early medieval ware; (1 frag daub, 1 frag unidentifiable)	29	12th to 13th C
5066	Medieval coarseware: borderline early medieval ware	12	12th to 13th C
5072	Mill Green fineware: slip-coated sherds with remains of greenish glaze; Mill Green coarseware: E5 cooking-pot rims; Hedingham coarseware; medieval coarseware	136	late 13th to 14th C
5081	Mill Green coarseware: H2 and H1 cooking-pot rims; medieval coarseware	114	mid-13th C or later
5093	Mill Green ware, slightly sandy version of fabric, includes slip-painted unglazed sherds, which may be late med; medieval coarseware: H3 cooking-pot rim	125	14th to 15th C

Table 6: Catalogue of medieval pottery

Potential for further study

B.4.1 This assemblage holds no potential for further study.



B.5 Ceramic Building Material

By Rob Atkins

- B.5.1 A couple of roof tile fragments, 0.090g, came from the cobbled surface layer (5093). The larger fragment is part of a medieval roof tile while the small fragment is Roman, probably intrusive or re-used as part of the cobbling surface.
- B.5.2 A fragment of roof tile, 0.105g, was retrieved from pit **5087**. It is a fragment of a two peg ram roof tile with only one circular peg visible, dating to AD1200-1500.
- B.5.3 A small ceramic fragment, 0.004g, from pit **5056** is undatable, possibly brick fragment.

B.6 Daub and fired clay

By Cynthia Poole

Introduction and Methodology

- B.6.1 A modest, but well preserved, assemblage of fired clay amounting to 442 fragments (8372g) was recovered predominantly from ditches, a pit and cobbled surface. The assemblage is summarised and quantified in table 7. The majority of this material was structural in form deriving from ovens or hearths. The assemblage cannot be dated on intrinsic features (other than between the Neolithic to medieval periods when fired clay was utilised) apart from a few diagnostic pieces, but is reliant for phasing on associated dateable finds. The major group was found in a ring ditch of late Iron Age date and smaller quantities in Late Iron Age and medieval features.
- B.6.2 The fired clay was all recovered by hand excavation. The assemblage has been fully recorded on an Excel spreadsheet, which includes quantity by count and weight, form/function, fabric, dimensions, condition, organic or other impressions and a general description.

Fabrics and Resources

B.6.3 Two major fabrics and one minor were identified:

Chalk: sandy clay containing plentiful quartz sand and moderate densities of small chalk grit and occasional flint grit

Silty micaceous: fine silty micaceous clay, generally smooth and hard fired, few or no inclusions.

Sandy: coarse poorly sorted quartz sand

B.6.4 The sandy and sandy chalk fabrics probably derive from boulder clay on which the site is located, whilst the micaceous fabric is clearly from a different geological source, possibly estuarine in origin or from the London Clay. Clay sources for fired clay are normally relatively local to the site.

Form and Function

B.6.5 The fired clay has been identified as overwhelmingly structural elements from an ovens or kilns (408, 7541g; 92.3%nos / 90% wt) with a small proportion of portable oven furniture (30, 823g; 6.8% nos / 9.8% by wt) (Table 7). No small objects such as spindle whorls occurred. In contrast to other areas of the Beaulieu development, where the identification of fired clay could be very subjective based on few surviving characteristics (e.g. Poole report 1674), this assemblage contained a substantial quantity of diagnostic material. A small quantity of the material was identified simply as oven structure having only a single moulded surface. The largest group was found in the pit or possible SFB **5080**; this consisted of thin pieces 10-15mm thick, which have



probably sheared from a thicker clay structure which was not fully fired throughout its thickness. This group is most likely to originate from a crop processing structure: it is possible the large quantities of carbonised plant material associated with it may provide further evidence of function.

- B.6.6 The bulk of the assemblage, which was found in the Late Iron Age ring ditch, was identified as oven or kiln wall supported on a wattle framework. These groups were well preserved and appear to have been dumped rapidly following demolition. The structure was made in two distinct fabrics of chalk tempered and micaceous clay, which appear to have been used in combination based on a couple of fragments of the micaceous fabric which had a skim of the chalk fabric over the surface. It is probable that the two fabrics represent separate elements of the structure such as lower and upper chamber of a kiln. The wattle impressions indicate relatively small wattles were used in the structure ranging in diameter from 6-26mm with 88% of horizontal rods between 8 and 15mm. The sails tended to be larger with the greatest number between 15 and 19mm diameter. The size of the impressions suggests stems of as little as one or two years growth were used.
- B.6.7 A small quantity of portable oven furniture was identified all found in the Late Iron Age ring ditch except for one triangular perforated brick from ditch 5140. These included three partial triangular perforated bricks and two irregular hand moulded props or supports: one was a small hourglass shaped prop with a curved recess where another object had been pressed into it and the other was roughly triangular shaped with a V notch cut or pressed into one edge. Both of these were made to fulfil an immediate need to support or stabilise an object, rather than representing a regularly produced form such as the triangular bricks, which occur commonly on Iron Age sites of all periods throughout the country. Whilst traditionally interpreted as loomweights, the evidence is mounting that the triangular bricks were used as oven, kiln and hearth furniture (Poole 1995, Poole 2015).

Potential and Recommendations

- B.6.8 The fired clay forms a well preserved group of material with potential to provide evidence of activities undertaken on the site during the Iron Age and Medieval periods. The Iron Age material from the ring ditch is of particular interest on account of the use of two distinctive clay fabrics in a single structure, which may relate to different elements of the structure.
- B.6.9 The general character and intensity of firing of the wall structure suggests this could derive from a more complex structure than a domestic oven such as a pottery kiln. Significant quantities of pottery found in association with this material may provide further evidence to support such a hypothesis. Analysis of any charred plant remains associated will also be relevant in understanding the function.
- B.6.10 A further consideration in relation to this fired clay is its distribution within the ditch: it was apparent that every group from separate interventions consisted of both clay fabrics suggesting the possibility of deliberate deposition of both elements of the structure along the length of the ditch. The pattern of deposition of the pottery may also be relevant in consideration of such activity. Should the remainder of this feature and its interior become available for excavation it is of paramount importance that it should be fully excavated to recover the full assemblage of material and its distribution and any internal evidence for structures or activity.
- B.6.11 A selection of the structural fired clay and portable furniture should be illustrated.



Phase	se Feature Context		Form	Description	Nos	Wt (g)
Late Iron Age	CS Ring ditch		Sub-total	306	7221	
		4873	Oven str	wattle supported wall	35	520
		5098	Oven furn	TPB?	4	52
		5098	Oven str	wattle supported wall	7	233
		5101	Oven str	wattle supported wall	27	646
		5106	Oven str	wattle supported wall	7	171
		5107	Oven furn	ТРВ	3	156
		5107	Oven str	wattle supported wall	9	49
		5109	Oven str	wattle supported wall	58	1032
		5110	Oven furn	pedestal	13	35
		5121	Oven furn	prop	3	185
		5121	Oven str	wattle supported wall	25	1320
		5122	Oven str	wattle supported wall	103	2260
		5124	Oven str	wattle supported wall	4	280
		5131	Oven misc	indet	2	5
		5131	Oven str	wattle supported wall	2	32
		5133	Oven str	wattle supported wall	4	245
	IA enclosure	IA enclosure		Sub-total		
		5061	Indet	Indet	4	8
	N-S boundary ditch		Sub-total	14	627	
		5130	Oven str	wall/lining	4	7
		5141	Oven furn	pedestal	7	395
		5141	Oven str	wall edge	1	197
		5104	Oven str	wall/lining	1	24
		5096	Oven str	wall/lining	1	4
/ledieval	Rectangular enclosure		Sub-total	2	5	
		5072	Oven misc	indet	2	5
			Sub-total		116	511
	SFB 5080	5081	Oven str	wall/lining	113	500
	Cobbled surface	5093	Oven str	wall/lining	3	11
	Total	442	8372			

Table 7: Catalogue of fired clay



APPENDIX C. ENVIRONMENTAL REPORTS

C.1 Faunal remains

By Vida Rajkovača

Introduction and Methodology

C.1.1 The excavations resulted in the recovery of a small assemblage totalling 153 assessable specimens, only 65 of which were possible to identify to species (42.5% of the assemblage). The material came from Late Iron Age ditches, ring ditches, a roundhouse, and Romano-British ditch (5129). A small quantity of bone was associated with a medieval cobbled surface (5093). The bone showed a good overall preservation with minimal surface modifications and weathering, though a high degree of fragmentation.

Methods

Identification, quantification and ageing

C.1.2 The zooarchaeological investigation followed the system implemented by Bournemouth University with all identifiable elements recorded (NISP: Number of Identifiable Specimens) and diagnostic zoning (amended from Dobney & Reilly 1988) used to calculate MNE (Minimum Number of Elements) from which MNI (Minimum Number of Individuals) was derived. Identification of the assemblage was undertaken with the aid of Schmid (1972), and reference material from the Cambridge University Archaeological Unit. Taphonomic criteria including indications of butchery, pathology, gnawing activity and surface modifications as a result of weathering were also recorded when evident.

Occurrence of species

C.1.3 The majority of bone came from the Late Iron Age contexts (Table 8). The sub-set is dominated by the remains of horse, though eleven of the NISP=27 for horse were loose teeth. Cow was clearly the prevalent meat species, followed by ovicapra and pig. A single fragment of mandible, possibly dog or fox came from (5131). A single Romano-British context produced a significant proportion of the assemblage (NISP=29, or 18.9%).

Taxon	Middle Iron Age	Late Iron Age] - 3 -	Romano- British	Medieval	1	Total NISP
Cow	7	7		10		1	25
Sheep/goat	3	1		2		2	8
Pig	2			2			4
Horse	21	4				2	27
Dog/ fox	1						1
Sub-total to species	34	12		14		5	65
Cattle-sized	41	4	3	10	1	1	60
Sheep-sized	15			2	2		19
Mammal n.f.i.	6			3			9
Total	96	16	3	29	3	6	153

Table 8. Number of Identified Specimens for all species from all contexts – breakdown by phase; the abbreviation n.f.i. denotes that the specimen could not be further identified

C.1.4 Cattle were represented by a limited range of skeletal elements: loose teeth and distal limb portions, such as metapodials. Though an ulna, radius and a pelvis fragment were

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recorded, and that this is based on small numbers, it is possible that the meat was exported from site. Skeletal element count for horse showed an almost equal representation of all body parts. As for ovicapra and pig, even though these were identified based on a small number of elements, loose teeth fragments also predominated.

- C.1.5 Tables 8, 9, 10 and 11 offer a breakdown of all identified elements by context. Contexts associated with the Late Iron Age ring ditches generated more bone than other contexts, and a structure (**5111**) contained only four sheep-sized limb bone fragments.
- C.1.6 Three specimens were recorded with cut marks: a cow astragalus, a horse ulna and an unidentifiable cattle-sized element. The astragalus showed marks consistent with skinning, and a horse ulna was probably cut in preparation for disarticulation.
- C.1.7 The general prevalence of cattle is typical of the majority of domestic assemblages from the region. The important cattle and cattle-sized component is also typical for the Romano-British contexts (e.g. King 1999). The overall good level of preservation suggests that more economic data would be available from a larger assemblage. Though this is based on a small numbers, the high horse count may be worth exploring further, especially given their rise in importance during the Iron Age.

Taxon	[4873]	[4876]	[4878]
Cow	1		2
Horse	2		
Sub-total to species	3		2
Cattle-sized	3		
Sheep-sized		1	
Total	6	1	2

Table 9. Number of Identified Specimens – breakdown by context

Taxon	[5055]	[5085]	[5093]	[5096]	[5098]
Sheep/goat	1			2	
Horse	3			2	2
Sub-total to species	4			4	2
Cattle-sized		3	1	1	9
Sheep-sized			2		
Total	4	3	3	5	11

Table 10. Number of Identified Specimens – breakdown by context

Taxon	[5101]	[5104]	[5106]	[5107]	[5109]	[5110]	[5111]
Cow		5		2			
Sheep/goat			2				
Pig			1				
Horse	1	1	1	4	1	1	
Sub-total to species	1	6	4	6	1	1	
Cattle-sized	4	4	8	3	4	1	
Sheep-sized			5	1	2	2	4
Mammal n.f.i.	3			3			
Total	8	10	17	13	7	4	4

Table 11. Number of Identified Specimens – breakdown by context

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Taxon	[5121]	[5122]	[5124]	[5130]	[5131]	[5478]
Cow	1		3	10		1
Sheep/goat		1		2		
Pig		1		2		
Horse		3	6			
Dog/ fox					1	
Sub-total to species	1	5	9	14	1	1
Cattle-sized	2	4	3	10		
Sheep-sized		1		1		
Mammal n.f.i.				3		
Total	3	10	12	28	1	1

Table 12. Number of Identified Specimens – breakdown by context

Bone Preservation

7.2.1 The preservation of the animal bone assemblage is details below in table 13.

Context	Preservation	Preservation details	Context size
4873	Quite Good		
4876	Moderate		V SMALL
4878	Moderate		V SMALL
5055	Quite Good		V SMALL
5085	Quite Poor		V SMALL
5093	Moderate	PRESERVATION DIFFERENT TO THE REST, MORE WEATHERED WITH ROUNDED EDGES	V SMALL
5096	Quite Good		V SMALL
5098	Quite Good		SMALL
5101	Quite Good		V SMALL
5104	Moderate		SMALL
5106	Moderate		SMALL
5107	Moderate		SMALL
5109	Quite Good		V SMALL
5110	Moderate		V SMALL
5111	Moderate		V SMALL
5121	Moderate		V SMALL
5122	Quite Good		V SMALL
5124	Quite Good		SMALL
5130	Moderate		SMALL
5131	Quite Poor		V SMALL
5478	Quite Good		V SMALL

Table 13. preservation of faunal remains catalogue

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C.2 Environmental samples

By Rachel Fosberry

Introduction

C.2.1 Thirteen bulk samples were taken from features within the evaluated areas of Site 6, Beaulieu, Essex in order to assess the quality of preservation of plant remains and their potential to provide useful data as part of further archaeological investigations.

Methodology

C.2.2 For this initial assessment, one bucket (approximately 10L) samples were processed by water flotation (using a modified Siraff three-tank system) for the recovery of charred plant remains, dating evidence and any other artefactual evidence that might be present. The floating component (flot) of the samples was collected in a 0.3mm nylon mesh and the residue was washed through 10mm, 5mm, 2mm and a 0.5mm sieve. Both flot and residues were allowed to air dry. A magnet was dragged through each residue fraction prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds. The dried flots were subsequently sorted using a binocular microscope at magnifications up to x 60 and a complete list of the recorded remains are presented in Table 14. Identification of plant remains is with reference to the Digital Seed Atlas of the Netherlands and the authors' own reference collection. Nomenclature is according to Zohary and Hopf (2000) for cereals and Stace (1997) for other plants. Carbonized seeds and grains, by the process of burning and burial, become blackened and often distort and fragment leading to difficulty in identification. Plant remains have been identified to species where possible. The identification of cereals has been based on the characteristic morphology of the grains and chaff as described by Jacomet (2006).

Quantification

C.2.3 For the purpose of this assessment, items such as cereals and seeds have been scanned and recorded qualitatively according to the following categories

Items that cannot be easily quantified such as charcoal have been scored for abundance

+ = rare, ++ = moderate, +++ = abundant

Results

Sample No.	Context No.	Cut No.	Feature Type	% context sampled	Volume processed (L)	Flot Volume (ml)	Cereals	Weed Seeds	Charcoal	Pottery	Large mammal bones
920	4871	4870	Pit/post hole	50	6	5	0	0	+++	0	0
921	4873	4872	Ditch	~50	9	20	#	0	+	0	0
922	4876	4874	Ditch	>10	9	10	#	0	++	0	0
923	4880	4879	Post hole	50	4	1	0	0	+	0	0
960	5051	5050	pit	50	8	5	#	0	+	0	#
961	5053	5052	post hole	100	10	20	0	0	+++	0	0
962	5059	5058	pit	20	9	1	#	0	+	#	#
963	5063	5062	ditch	10	7	1	0	#	+	#	0
964	5081	5080	pit	10	9	1	0	0	+	##	0



965	8085	5084	ring ditch	20	7	1	0	#	+	0	0
966	8097	5098	ring ditch	20	7	1	0	0	0	0	#
967	5121	5120	ring ditch	20	10	5	0	0	++	#	#
968	5134	5132	ring ditch	20			0	0	0	0	0

Table 14: Environmental samples from Site 6

C.2.4 The samples taken during the evaluation of this site had indicated that preservation of plant remains was poor. The samples taken from this phase of excavation contain slightly more plant remains than the evaluation samples but preservation is still poor with only sparse remains recovered. Charred cereal grains were recovered from four samples but quantities are low (four grains maximum). A single wheat (*Triticum* sp.) grain is present in fill 4873 of ditch 4872 and a barley (*Hordeum* sp.) grain in fill 4876 of ditch 4874. Three wheat grains and one unidentified grain occur in fill 5051 of pit 5050 and a single wheat grain and an oat/grass (*Avena* sp./ Poaceae) seed is present in fill 5059 of pit 5058.

Discussion

- C.2.5 Charred plant remains are scarce and those present were recovered from features in the middle of the site; from late Iron Age ring ditch **4872**, medieval enclosure ditch **4874** and two adjacent, undated pits (within the medieval enclosure) **5050** and **5058**. Such small quantities of grain cannot be considered as significant and may not even be contemporary with the deposits sampled. Further processing of soil from these contexts may produce a larger number of grain but it is unlikely that this would produce statistically quantifiable assemblages and no further work is recommended.
- C.2.6 Pottery fragments were recovered from the residue of Sample 962, fill 5059 of pit **5058** which may help to date the feature.



APPENDIX D. BIBLIOGRAPHY

Biddulph, E, Compton, J and Martin, T S	2015	The Late Iron Age and Roman Pottery, in M. Atkinson and S.J. Preston Heybridge: A Late Iron Age and Roman Settlement, Excavations at Elms Farm 1993-5, Internet Archaeology 40. http://dx.doi.org/10.11141/ia.40.1.biddulph1
Burgess, & Rance (eds)	1988	Boreham – History, Tales and Memories of an Essex Village. (Boreham Histories Project Group)
Cappers, R.T.J., Bekker, R.M. and Jans, J.E.A.	2006	Digital Seed Atlas of the Netherlands Groningen Archaeological Studies 4, Barkhuis Publishing, Eelde, The Netherlands. www.seedatlas.nl
Crummy, P.,	1997	City of Victory: the story of Colchester - Britain's first Roman town (Colchester: Colchester Archaeological Trust)
Dobney, K., and Reilly, K.	1988	A method for recording archaeological animal bones: the use of diagnostic zones, <i>Circaea</i> 5 (2): 79-96.
Drury, P.J.,	1978	Excavations at Little Waltham, 1970-71, CBA Res. Rep. 26, London
Drury, P. J.,	1980	'The early and middle phases of the Iron Age in Essex', in Buckley, B. G., (eds), <i>The Archaeology of Essex to AD 1500</i> , CBA Research Report 34
Drury, P. J. & Rodwell, W.,	1986	'Settlement in the Later Iron Age and Roman periods', in Buckley, B. G., (eds), <i>The Archaeology of Essex to AD 1500</i> . CBA Research Report 34
English Heritage,	2006	Management of Research Projects, The MoRPHE Managers' Guide
English Heritage,	2008	Management of Research Projects, PPN3: Archaeological Excavation
Evans, C.	1997	Hydraulic communities: Iron Age Enclosure in the East Anglia Fenlands, in A. Gwilt and C. Haselgrove (eds), Reconstructing Iron Age Societies (Oxford: Oxbow), pp 216-227
Greig, J. R. A.	1991	The British Isles, pp. 299-334 in Van Zeist, W., Wasylikowa, K. and Behre, KE. (eds), <i>Progress in Old World palaeoethnobotany</i> . Rotterdam/Brookfield: Balkema.
Going, C.	2004	'Pottery' in Excavations at Stansted Airport, 1986-91. Volume 1: Prehistoric and Romano-British. East Anglian Archaeology 107, pp 139-169
Hedges,	1984	'The Neolithic in Essex', in Buckley, B. G., (eds), <i>The Archaeology of Essex to AD 1500</i> . CBA Research Report 34
House, J.,	2010	Prehistoric and Roman Remains at Beaulieu Park, Chelmsford. Oxford Arch. East Report No, 1309 (unpublished)
Hunter, J.,	2003	Field systems in Essex. (Essex Society for Archaeology and History, Colchester)
Jacomet, S.	2006	Identification of cereal remains from archaeological sites. (2 nd ed.) IPNA, Universität Basel / Published by the IPAS, Basel University.
Kemble, J.,	2001	Prehistoric and Roman Essex (Shroud: Tempus)
King, A.	1999	Diet in the Roman world: a regional inter-site comparison of the mammal bones. <i>Journal of Roman archaeology</i> , <i>12</i> , pp.168-202.
Mortimer, R.,	2014	Method Statement for Excavation. Oxford Arch. East Tender Ref No, 13149 (unpublished)
Poole, C.	1995	Loomweights versus oven bricks in Cunliffe, B., 1995 <i>Danebury: an Iron Age hillfort in Hampshire Volume 6,</i> CBA RR102, 285-6
Poole, C.	2015	Fired Clay and Briquetage: in Andrews, P, Booth, P., Fitzpatrick, AP and



		Welsh, K Digging at the Gateway: Archaeological landscapes of south Thanet The Archaeology of East Kent Access Phase II Volume 2: The Finds and Environmental Reports, Oxford Wessex Archaeology Monograph No. 8, 289-323
Prehistoric Ceramic Research Group	2010	The Study of Later Prehistoric Pottery: General Policies and Guidelines for analysis and Publication. Occasional Paper No1 and No 2. Revised 3rd edition.
Reaney, P.H.,	1933	Place names of Essex. (Cambridge)
Schmid, E.	1972	Atlas of animal bones. Amsterdam: Elsevier.
Stace, C.	1997	New Flora of the British Isles. Second edition. Cambridge University Press
Stocks-Morgan, H.	2013	Iron Age and Medieval Remains on land at Phase 1, Beaulieu, Chelmsford. Oxford Arch. East Report No, 1473 (unpublished)
Stocks-Morgan, H.	2013a	Iron Age Remains at Site 5 and Area A1, Phase 1, Beaulieu, Chelmsford. Oxford Arch. East Report No, 1541 (unpublished)
Stocks-Morgan, H.	2013b	Medieval Remains at Beaulieu (zone D) Chelmsford. Oxford Arch. East Report No, 1544 (unpublished)
Stocks-Morgan, H.	2014	Early Iron Age and Medieval Remains at Zone A Housing, Beaulieu, Chelmsford. Oxford Arch. East Report No, 1591 (unpublished)
Stocks-Morgan, H. and Tsybaeva, D.	2015	Zone F and I, Beaulieu, Chelmsford. Oxford Archaeology East report No 1840
Thompson, I.	1982	Grog-tempered 'Belgic' Pottery of South-eastern England. BAR British Series 108.
Tuckwell, T.,	2006	New Hall and its School (Kings Lynn)
URS	2013	Beaulieu Park, Chelmsford, Essex: Archaeological Investigation and Mitigation Strategy. (Unpublished Archaeological Design)
Zohary, D., Hopf, M.	2000	Domestication of Plants in the Old World – The origin and spread of cultivated plants in West Asia, Europe, and the. Nile Valley. Oxford University Press (3 rd ed.)

Maps Consulted

British Geological Survey, 1993 Sheet 241, England and Wales 1:50,000



APPENDIX E. OASIS REPORT FORM

All fields are required unless they are not applicable.

Project De	etails										
OASIS Num	nber [oxfordar3-23661	1								
Project Nam	ne	Iron Age and me	dieval remains a	at Site 6, Bea	aulieu, (Chelmsford	l				
Project Date	es (field	work) Start	02-10-2015			Finish	27-1	0-20°	15		
Previous Wo	ork (by	OA East)	Yes			Future	Work	No)		
Project Refe	rence	Codes									
Site Code	SPBP1			Planning	д Арр.	No.		09/01	1314/EIA		
HER No.	SPBP1	5		Related	HER/	DASIS N	o. [oxfor	dar3-236611		
Type of Project/Techniques Used Prompt Food and Environmenta Please select all techniques used:				otection Act 1	1985 (FI	EPA) Part	I				
Field Obser	☐ Part Exc	Excavation [Salvage Record					
☐ Full Excavation (100%)		☐ Part Sur	vey] Sys	tematic Field Walking			
☐ Full Survey		Recorde	ed Observati	on] Sys	tematic Metal Detector S	Survey		
Geophysica	al Survey		Remote	Operated V	ehicle S	urvey] Tes	t Pit Survey		
▼ Open-Area	Excavation	on	Salvage	Excavation] Wat	Pit Survey		
List feature typ	es using	Significant F the NMR Mor with their respect	nument Type	e Thesau					ng the MDA Object "none".	type	
Monument		Period			Object				Period		
Round hous	е	Iron Ag	e -800 to 43		Tweez	ers			Roman 43 to 410		
Enclosure		Roman	43 to 410		Pottery	/			Iron Age -800 to 43		
Boundary di	tch	Iron Ag	e -800 to 43		Pottery	/			Roman 43 to 410		
Project Lo	ocatio	n									
County			S	Site Ad	dress (in	cludi	ng p	ostcode if possible)		
District Chelmsford						White Hart	Lane,				
Parish	Springf	field			CHelms CM2 67						
HER	SPBP1	5									
Study Area	0.11ha			N	National Grid Reference TL 72016 10138						



Project Originators

Project Brief Origina Project Design Origina Project Manager Supervisor Project Archives			Havis (ECC	HER)					
Project Manager Supervisor	nator	lan Willia	(LIDC						
Supervisor			imson (URS)						
<u> </u>		Richard N	Mortimer (OA East)						
Project Archives			/baeva (OA						
	S								
Physical Archive		Digital A	rchive		Paper Archi	ive			
Chelmsford museum			OA East			Chelmsford n	nuseum		
SPBP15			SPBP15			SPBP15			
Archive Contents/N	/ledia								
		Digital Contents	Paper Contents		Digital Me	dia	Paper Media		
Animal Bones]				▼ Database		Aerial Photos		
Ceramics]				X GIS				
Environmental					Geophysic	cs	Correspondence		
Glass					x Images		Diary		
Human Bones]				☐ Illustration	IS	Drawing		
Industrial					☐ Moving Im	nage	Manuscript		
Leather					Spreadsh	eets	□ Мар		
Metal					Survey		Matrices		
Stratigraphic			×		▼ Text		Microfilm		
Survey					☐ Virtual Re	ality	☐ Misc.		
Textiles]						☐ Research/Notes		
Wood]						Photos		
Worked Bone							× Plans		
Worked Stone/Lithic]						▼ Report		
None							▼ Sections		
Other							Survey		

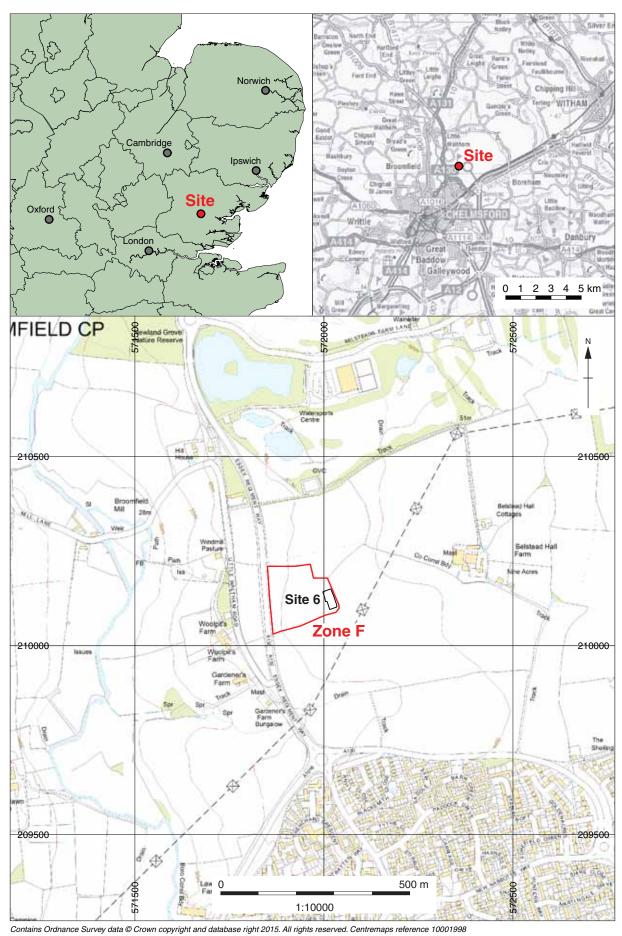


Figure 1: Site location showing excavation area (black) in development area (red)



Figure 2: Overall site plan with evaluation trenches

Report Number 1881

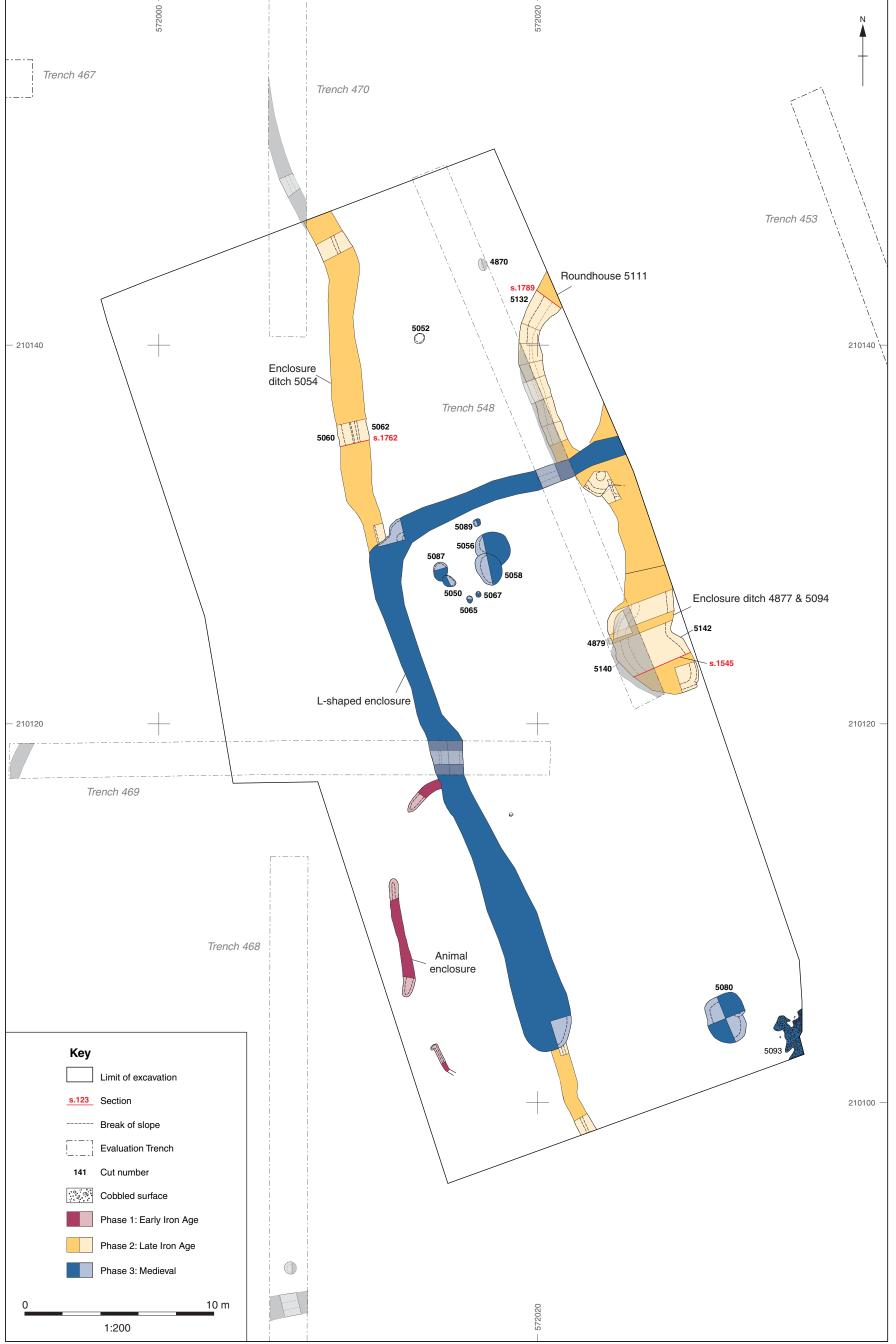


Figure 3: Phase plan

Report Number 1881

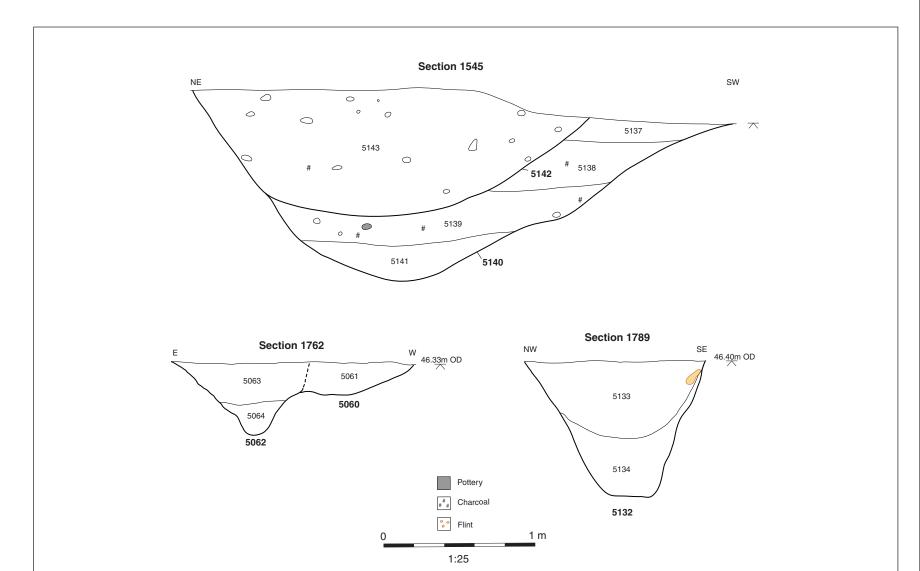


Figure 4: Selected sections









Plate 1: Roundhouse 5111, looking south-west



Plate 2: Section of the roundhouse 5111, looking north





Plate 3: Terminus of enclosure ditch 5075, looking north-east



Plate 4: Cobbled surface 5093 in south-eastern corner of excavation area



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