ESSEX

ARCHAEOLOGY AND HISTORY

TRANSACTIONS OF THE ESSEX SOCIETY

FOR ARCHAEOLOGY AND HISTORY

Volume 39 2008

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THE TRANSACTIONS OF
THE ESSEX SOCIETY FOR ARCHAEOLOGY AND HISTORY

VOLUME 39 (Third series)

2008

This volume marks the 150th anniversary of the first publication of the
Transactions of the Essex Archaeological Society in 1858
and is dedicated to the memory of
William Raymond Powell
1920–2008

Published by the Society at the Museum in the Castle 2009

THE ESSEX SOCIETY FOR ARCHAEOLOGY AND HISTORY

Registered charity 213218

The Society was founded in 1852 as the Essex Archaeological Society. Its objects are:

1. To promote and encourage the study of the archaeology and history of the historic county of Essex.
2. In furtherance of the above, to publish the results of such studies in its journal and to disseminate information on matters relating to archaeology and history in Essex through appropriate media.
3. To organise conferences, lectures and visits for the benefit of members of the Society and interested members of the public; to educate the wider community in the archaeological heritage of Essex; to co-operate with other bodies on matters of common interest and concern.
4. To provide library facilities for Society members and approved members of the public.

Publications
The articles in its journal range over the whole field of local history. Back numbers are available; a list and prices can be obtained on application to the Librarian. Members receive a regular Newsletter covering all aspects of the Society's activities, news of current excavations and fieldwork, and items of topical interest.

The Library
The Library is housed in the Albert Sloman Libraray at Essex University, Colchester, and is extensive. It aims to include all books on Essex history, and has many runs of publications by kindred Societies. Members may use the Library on any week day during Library opening hours (and on Saturdays in term time) on presentation of a reader's ticket, available on application to the University Librarian.
Membership
Application should be made to the Hon. Membership Secretary at 1 Robin Close, Great Bentley, Colchester CO7 8QH. The current annual rates of subscription are: full member £20; family member £22; institutional member £25; associate or student (who do not receive Essex Archaeology and History) £9.

Subscribing Societies in Essex
Billericay Archaeological and History Society; Brain Valley Archaeological Society; Chigwell School; Colchester Archaeological Group; The Friends of Historic Essex; Essex Society for Family History; Halstead and District Local History Society; Ingatestone and Fryerning Historical and Archaeological Society; Lavers History Group; Maldon Archaeological and Historical Group; Nazeing History Workshop; New Hall School, Boreham; Rochford Hundred Field Archaeology Group; Saffron Walden Historical Society; St Osyth Historical Society; Woodford and District Historical Society

Website
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ISSN 0308 3462

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Cover illustration: Funeral of Lieutenant Auriol Round, Essex Regiment, at Witham, September 1914
Photograph: Thamar MacIver

William Raymond Powell, M.A., M.Litt., F.R.Hist.S.

1920–2008

Raymond Powell was born on 5th December 1920 in Somerset, the son of Rev Macaulay Powell and Nancye Padfield. His early childhood was spent in South Africa, where his father, a Methodist minister, was a missionary. Sadly his mother died prematurely in 1927 resulting in the remarriage of his father and the return of the family to England. Ray commenced his education at Bideford, Devon and subsequently at Kingswood School in Bath. From here he went up to Merton College, Oxford with an open scholarship to read History. However, the outbreak of World War II curtailed his studies for in Spring 1940 he volunteered for the Royal Air Force training as a radar operator and eventually serving as an instructor. His service necessitated several overseas postings to West Africa, Belgium and Germany. In 1945 he was able to return to Oxford and complete his degree.

It was while catching a train from Exeter to Oxford in October 1939 that he met Avril Johnson on the station platform. This chance encounter, combined with the uncertainties of war, culminated in marriage in July 1942. Anne Alice, born in 1944, heralded the arrival of the first of four children. Nicholas (Nicky, 1948–61), Frances Avril (1951) and Edward (Ted, 1954) followed.

Ray joined the central staff of the Victoria County History (V.C.H.) in 1949 and, in 1951, on the day that Frances was born, was appointed editor of the Essex V.C.H. Thus far, only two introductory Essex V.C.H. "red" volumes had appeared (1903 and 1907) before work on the county went into abeyance. In a fascinating account published in the *Essex Journal*,[1] Powell recalls groping in the dark basement of the National Central Library which had been wrecked by wartime bombing. Here he found "thousands of slips in parish envelopes and indexed binders, along with a few letters and books, all dating from 1899–1920" some of which had been damaged by leaking water pipes. Ray's energy, determination and intellectual skills were well suited to resurrecting this project from these humble and unsatisfactory beginnings. His resultant dedication resulted in a prodigious and unequalled output over the ensuing thirty-five years. Firstly, Volume IV, devoted to the Ongar Hundred, was published in 1956. Three years later the first bibliographical volume appeared followed by Volume III which contained an account of Roman Essex together with an Index for the three volumes published from inception. A further three years elapsed before Volume V covering the Waltham Hundred and the parishes of Barking, Ilford and Dagenham from the Becontree Hundred was issued in 1966. The remainder of the Becontree Hundred formed Volume VI which appeared in 1973. Towards the end of the decade the Liberty of Havering-atte-Bower and eight parishes from the Chafford Hundred were covered in Volume VII. This was followed in 1983 with Volume VIII comprising the remaining parishes of the Chafford Hundred and the entire Harlow Hundred. Finally, prior to his retirement in 1986, he saw a Bibliography Supplement through the press in addition to commencing work on Volume IX, devoted to the Borough of Colchester. This latter volume was eventually published in 1994 under the editorship of his successor, Dr Janet Cooper. Powell recruited, fostered, encouraged and maintained an excellent editorial team throughout this lengthy and highly productive period. Special mention should be made of the assistance received from his wife Avril, who, before joining the staff of the Medieval Latin Dictionary, served as part-time assistant editor. She was jointly responsible for the index which accompanied Volume III whilst contributing the entire index for Volume V. Other formidable members were the late Miss Hilda E P Grieve, B.E.M. who served as Deputy Editor from 1966 to 1973 and Mrs Beryl Board. The latter was appointed as a part-time editorial assistant in 1969 and was Senior Assistant Editor from 1985 until her retirement in 1992. This astonishing publishing record is all the more remarkable when viewed against a background of severe financial constraints which have perpetually hindered the V.C.H.

Ray's retirement was no less productive with a plethora of articles and reviews regularly appearing. His output was not diminished following a move to Norwich where two adjacent properties were purchased – one as a residence and the other utilised as a library and repository for archives!

Ray was a highly valued and loyal supporter of the *Essex Journal* which began life in 1966 as the successor to the much-loved *Essex Review* which ceased publication in 1957. Indeed Ray, in a very quiet and determined manner, was highly influential in the appointment of Michael Beale as Editor upon the reorganisation of the *Essex Journal* in 1990. He continued to provide constant encouragement and support and it was chiefly this aspect of Ray's activities that enabled me to form a highly valued relationship. Towards the end of his life, I further had the privilege of working extremely closely with him on his four-part article focusing on R Miller Christy[2] (1861–1928), the renowned Essex Naturalist and Antiquary who was also keenly interested in the study of monumental brasses. Ray described Christy's contributions to the Essex V.C.H. as "of great and permanent value". Indeed, Christy contributed an article on birds to Volume I and in

William Raymond Powell 1920–2008

the succeeding volume a substantial section on 'Industries' under the editorship of J H Round.

John Horace Round (1856–1928), the distinguished medieval historian, contributed significantly to the V.C.H. He suffered all his life from appalling health becoming especially intolerant over matters of accuracy. Indeed, Round refused to write the history of Colchester on which he was an expert because the editor was Professor Freeman whom he had persistently and vehemently attacked. Ray was fascinated by his eminent predecessor who he considered had not been fairly treated and, in characteristic fashion, desired to set the record straight. This was comprehensively achieved with the publication of Round's definitive biography in 2001.[3]

Ray also contributed an important chapter relating to John Round of Danbury Park to the festschrift volume edited by Kenneth Neale which was published under the auspices of the Essex Archaeological and Historical Congress (Essex Congress) as a tribute to Sir William Addison in 1992. Ray's inclusion was highly symbolic for he enjoyed a close association with Addison who had been Chairman of the Essex V.C.H. for twenty-five years and whom he succeeded as President of Essex Congress in 1974.

J Horace Round had been an illustrious President of the Essex Archaeological Society (1916–21), a Society which Ray held in high esteem. He contributed regularly to our *Transactions* consistently demonstrating his breadth and depth of scholarship. Notable papers include "Essex Domesday Topography since 1903: Place Name Identifications and problems"[4]; "The medieval hospitals at East Tilbury and West Tilbury and Henry VIII's

Ray Powell, R.A.F. 1940–1945

forts"[5]; "Lionel de Bradenham and his siege of Colchester in 1350"[6]; "John Horace Round and Victorian Colchester: Culture and Politics, 1880–95"[7]; "Beyond the 'Morant canon': some early historians of Essex"[8]; "Silas Taylor of Harwich (1624–78): Naval Affairs, Espionage and Local History"[9]; "Keir Hardie in West Ham: 'A Constituency with a Past'"[10]; and "The Norman Government of Essex 1066–1154".[11] It was entirely fitting that Ray should be commissioned to prepare an account of the activities and history of the Society as part of the sesquicentennial celebrations in 2002. His valuable record, prepared with characteristic attention to detail, was published for posterity in these *Transactions*.[12]

Ray was elected as President of the Society in 1987 and became a trustee upon concluding his three-year term in office. Tangible practical support was forthcoming with service as Membership Secretary from 1990 to 1993. He was rewarded for his outstanding contribution to the Society with a Vice-Presidency in 2002.

Ray, a man devoted to his wife and family, suffered a major heart attack at the age of forty-three. In 1997, major surgery was required to repair his failing heart. That he should recover from both setbacks to celebrate his diamond wedding anniversary and live to the age of eighty-seven speaks volumes for this remarkable man. He was working to the last for at the time of his passing on 21st July 2008 he was busily preparing a joint article relating to a collection of World War I letters which had been written from the trenches by four cousins of J Horace Round. How gratifying that his final contribution should appear in the pages of this tribute issue of *Transactions* published by the Society which he loved and to which he contributed so much.

H. Martin Stuchfield

Notes

1 *Essex Journal*, vol.38, no.2 (Autumn 2003), pp.43–8.
2 *Essex Journal*, vol.40, no.2 (Autumn 2005), pp.46–54; vol.44, no.1 (Spring 2006), pp.5–11; vol.44, no.2 (Autumn 2006), pp.48–53; and vol.45, no.1 (Spring 2007), pp.23–6.
3 *John Horace Round: Historian and Gentleman of Essex*, Essex Record Office Publications no.145, 2001.
4 *Essex Archaeology and History*, 3rd Series, vol.XVI (1983–4), pp.40–7.
5 *Essex Archaeology and History*, 3rd Series, vol.XIX (1988), pp.154–8.
6 *Essex Archaeology and History*, 3rd Series, vol.XXII (1991), pp.67–75.
7 *Essex Archaeology and History*, 3rd Series, vol.XXIII (1992), pp.79–90.
8 *Essex Archaeology and History*, 3rd Series, vol.XXIV (1993), pp.157–63.
9 *Essex Archaeology and History*, 3rd Series, vol.XXV (1994), pp.174–84.
10 *Essex Archaeology and History*, 3rd Series, vol.XXXIII (2002), pp.358–72.
11 *Essex Archaeology and History*, 3rd Series, vol.XXXVI (2005), pp.110–17.
12 *Essex Archaeology and History*, 3rd Series, vol.XXXII (2001), pp.9–41.

Kenneth Hall, B.A.

1947–2008

Kenneth Hall was born on 28 May 1947 and brought up in Liverpool. Although he at one stage cherished ideas of pursuing a medical career, he chose to read History at the University of Leicester, then noted for its keen engagement with local history as a discipline. Among those teaching there were Norman Scarfe, from whom Ken developed his interest in the local history of the eastern counties, and Geoffrey Martin, later to become Keeper of the Public Records. It was these two, both keenly committed to archive-based research, together with Geoffrey's wife, Janet, an archivist by training, who were to play a key role in shaping Ken's future. He now decided to train for a Diploma in Archive Administration at the University of Wales in Bangor.

Ken's first post, which he took up in 1969, was as an assistant archivist in the then West Suffolk Record Office at Bury St Edmunds. From 1972, the illness of the then County Archivist placed Ken in the role of acting head of service, during what was to prove to be a busy period. The reorganization of local government in 1974 brought the merger of the East and West Suffolk County Councils. Ken was heavily involved in the discussions and planning for the creation of the new Suffolk Record Office and from 1974 served as Archivist in Charge of the western area, overseeing the move of the archive to the former County Library building in Bury.

It was while in Suffolk that Ken began to be involved with the affairs of the Society of Archivists, the professional body for archivists in Great Britain, acting initially as Honorary Assistant Secretary and Hon. Secretary of the Parliamentary and General Purposes Committee.

In 1976, Ken was appointed to the post of County Archivist of Durham. He served in that role for three years. The service was then constrained by limited premises but Ken produced a comprehensive development plan and was in post long enough to see the first stages implemented, with improvements and expansion to premises in Durham and increased staffing levels in both Durham and Darlington. He introduced a microfilm service and, building on work he had done in West Suffolk, focused heavily on the provision of educational services.

By the time Ken left Durham in 1979 he had taken on the onerous role of Hon. Secretary of the Society of Archivists and had co-authored a number of papers on the educational use of archives. Now he moved on to become County Archivist of Lancashire.

Lancashire was one of the biggest of local record offices and already boasted purpose-built accommodation. After a period of rapid expansion, Ken was successful in persuading the County Council to build a new storage block adjoining the existing premises to double the office's capacity. It was the first accommodation in the country built to be fully compliant with the newly adopted British Standard for archive storage and, as such, attracted widespread attention.

Ken's keen eye for areas in need of development led to a good deal of systematising of basic office procedures, creating bed-rock systems which are in many cases still in operation today. Seeing that the future lay in computerisation, he introduced the first machines to the Office. Recognising the value, in a time of constraint, of extending the base of public involvement in and support for the Record Office, he set about establishing the Friends of Lancashire Archives, still an effective body, and developing a volunteering programme which proved to be the largest of its kind in the country. Ken's restless need for new challenges was, time and again throughout his working life, the springboard for improvement and development.

During his time in Lancashire, Ken had been elected Vice-Chairman of the Society of Archivists and served as its Chairman between 1987 and 1989. It was during this period that he first became involved with the International Council on Archives. In 1989, having played an important rôle in building up the Association, he became Secretary of ICA's Section of Professional Associations, rising rapidly to become Vice-Chairman (1991) and Chairman (1993–4). The foundation of an International Institute for Archival Science in Maribor, Slovenia, in 1986, quickly won his support and active attention. Meanwhile, he was asked by UNESCO to undertake the evaluation of a pilot project in Kenya to look at national archive networking in the country. In 1991, he became Project Director of the Archival Survey for Climate History, a project he took very seriously for the part it could play in an understanding of climate change. He held this post for five years.

After fourteen years in Lancashire, Ken was ready for a further fresh set of opportunities and, in 1993 became County Archivist of Essex, where planning for the move of the Office to new premises was at an embryonic stage. Ken lost no time in seizing this opportunity and, with typical enthusiasm, set about capturing the imagination of councillors and senior officers and harnessing their support to create what was to become one of the largest and most fully equipped archives of the period. Sustaining the commitment of officers and members was a task for which Ken was singularly well equipped. The new office opened in 2000, its searchroom equipped with fifty individual computer terminals and supported by a lecture theatre, state-of-the-art conservation studio

and facilities for researchers in sound and video. Simultaneously, he secured capital funding for the full computerisation of the Office's catalogues with the development of the custom-built system which took on the name Seax. It would later go on-line and provide the platform for the delivery of an extensive programme of digitisation of documents.

As in Lancashire, Ken was eager to increase public involvement in the work of the Office. He established Access Points in Saffron Walden and Harlow, where people could make use of the resources of the Record Office more locally. Working in collaboration with the Friends of Historic Essex, he set up the Essex Archives Volunteer Scheme, which attracted more than sixty people at its initial meeting. Working along lines already tested in Lancashire, volunteers were given the opportunity to play their part in the practical life of the Record Office by flattening, listing and reboxing the huge series of original wills. It is a tribute to the worth of the scheme and the engagement it encouraged, that it is still running to this day.

Wherever possible, Ken was eager to give support to and work with county organizations. He was an ex officio member of the Council of the Essex Society for Archaeology and History during his term of office and an elected member of Council from 2006 until his death. He was also a Vice-President of the Essex Society for Family History. A fruitful relationship between the Record Office and the Society opened the way to the housing of its Research Room within the E.R.O. complex and to the staging of several joint conferences which attracted large sell-out audiences. He also enjoyed sharing his own skills by teaching a series of classes in palaeography, again put on collaboratively. These are remembered affectionately by those who attended (sometimes upward of a hundred people attended) as being peppered with Ken's usual good humour and dry wit. He proved a highly engaging – and therefore extremely successful – teacher.

Meanwhile, within the County Council, Ken led the integration of the archive service with other heritage services: the museums advisory service, the management of Cressing Temple and the creation of a fully integrated heritage education service, facilitating the sharing of skills and resources and, potentially, strengthening the profile of this element of the Council's work.

In 2003, Ken was forced to retire early. Lung cancer was diagnosed. Surgery seemed successful and Ken, as ever supported by his wife Stephanie, whom he had first met at Leicester, enjoyed some years of new activity in Great Sampford, the village they had adopted on coming to Essex. As secretary of the Sampfords Society and as a churchwarden in the village, Ken had earned the affection and respect of neighbours and friends for his skill as an organizer and for his good-humoured company. His working life had always been firmly built and dependent on a long and successful married life with Stephanie, and in these years they were able to develop their shared love of opera, their cottage and their dogs and to watch with unremitting pride and affection the developing career of their daughter Katharine.

Meanwhile he was able to continue his international work. In 2004, following the *tsunami*, he undertook an inspection of the National Archives of the Maldives. He was part of an international co-ordinating committee for the safeguarding of the heritage of Iraq and in 2006 he was appointed the ICA's first ever *chargé de mission* and was asked to represent that body on the UNESCO Memory of the World project, to which he made a substantial contribution.

Closer to home, in 2007, he took on the role of Chair of the Bethlem Art and History Collections Trust, a body which oversees the work of the Bethlem Royal Hospital Archives and Museum and which was becoming engaged with the issue of finding new premises. Ken was excited at the prospect of being able to bring his ample experience of relocating archives into play again on behalf of a project and an archive about which he quickly became passionate in his interest and support.

Sadly, however, Ken's illness returned. He died on 12 June 2008.

Early on in his career, Ken's abilities as a persuader became evident to colleagues. They were exceptional. He was an incisive contributor to committee meetings. He had excellent timing, knowing instinctively how to hold his fire and strike at the key moment, delivering his argument concisely, eloquently and often barbed with a sharp wit. And he was a much sought-after chairman and negotiator with a keen eye for the right route to a conclusion or to conciliation. Above all, as anyone will testify who came across him on one of the numerous Essex committees he sat on, he could enliven any meeting or conversation with his own very distinctive humour. As dry as a bone, straight-faced and with impeccable timing in delivery, he could leave you momentarily off-balance. Many a tense situation was relieved in this way.

Equally early, Ken realized that it was in these particular skills that his strength lay rather than with the intricacies of professional practice. He was always wise and generous enough to acknowledge his colleagues' deeper knowledge of collections and techniques and to devote himself to ensuring that the climate and conditions in which they worked were secure, comfortable and, above all, always moving forward. The record speaks for itself; in all those archives he led during his career, the combination of his persuasive powers and his determination to expand and develop led to improved services.

Ken was the fourth and last County Archivist of Essex. The title died on his departure from the post. Like all his predecessors, he took on the title with fierce pride, both in the county (and the County Council) which had invested, generously and wisely, in preserving and celebrating its past, and with a determination to maintain the position of the Essex Record Office as an exemplar to other services, both in the United Kingdom and overseas.

Victor Gray

The author is grateful to the Society of Archivists for permission to draw heavily on an obituary contributed by him to the Journal of that Society.

Ambrose James Fawn, B.Sc.

1929–2008

Ambrose James Fawn was born in Sheffield on 5 March 1929 and spent his early years in Cheltenham, where he attended the local Grammar School, before gaining a degree in Physics with subsidiary Mathematics at the University of Bristol in 1950. He served in the RAF during National Service.

The most significant part of his life, however, was spent in Essex which in 1953 became his home for the next 55 years. He had arrived to work at Bexford Limited, an I.C.I. subsidiary company, at Manningtree, where he progressed from Plant Physicist to Plant Manager for Solution Preparation, Solvent Recovery and Plant Development.

As a member of the Essex Society for Archaeology and History for many years, James Fawn attended its meetings with consistent regularity and he enjoyed participating in its various other activities, including the annual Morant Dinner. He would always greet friends and colleagues with a cheery countenance and inevitably had some interesting piece of archaeological news to impart or a subject of topical interest to discuss. He served on the Society's Council for a number of years (1994–96 and 1997–2002) and was a member of the Library Committee. He also represented the Society on the Colchester Archaeological Trust Ltd from 2002, serving as a member of that body's Council of Management.

There were many other archaeological and heritage-orientated organisations in Essex to which James Fawn gave his support and at whose meetings he was regularly to be seen. They include the Essex Archaeological and Historical Congress and the Advisory Committee for Archaeology in Essex. If there was an archaeological conference, annual symposium or seminar being held in the county, or indeed further afield, which related to his subjects of interest, he would generally be likely to attend it.

Living at Colchester he soon became aware of the town's archaeological heritage which in due course became his major interest and to which he devoted a considerable amount of time and energy. In 1961 he had joined the recently formed Colchester Archaeological Group and was immediately elected to its committee, on which he served continuously as a member until his death

James Fawn and the missing face of Longinus. Photograph reproduced by kind permission of the Colchester Archaeological Trust

in November 2008. On being offered early retirement from work in 1980, he took a course in Accountancy and enthusiastically put his newly developed skills to use as the Group's Honorary Treasurer, an office from which he only stepped down in 2006.

But it was probably fieldwork that most interested him and in which he was particularly active. He started excavating in 1961 under the guidance of Felix Erith FSA at the multi-period site, especially well known for its Bronze Age cremation cemeteries, at Ardleigh. Thereafter, he participated unstintingly, whatever the site, conditions or weather, in every project undertaken by the CAG. The work that he himself directed is mainly published in the Group's Annual Bulletin, while some of his more recent pieces of research have appeared in the Colchester Archaeologist.

James Fawn's scientific background made him a stickler for accuracy and detail, but he was invariably generous in giving all the help, advice and support that he could to others. Having taken part during the 1970s with Kay de Brisay FSA in the excavation of several of the Essex Red Hills, notably at Osea Road, Peldon and Tollesbury, he developed a special interest in ancient salt-making along the Essex coast. This resulted in the publication of 'The Red Hills of Essex' in 1990 of which James Fawn was the main joint-author. In 1996 he assisted Professor Peter Cott with the geophysical survey of the important late Iron Age and Roman site at Gosbecks – work that has been continued by others. There was always an archaeological project that he was working on.

The project, however, that no doubt gave him most personal satisfaction was the excavation in 1996 under difficult circumstances of a development site in Beverley Road, Colchester. Its special significance was that here in 1928 came to light one of the most famous Roman tombstones found in Britain which Colchester's Castle Museum prizes among its main exhibits. On it is depicted in fine detail the mounted figure of Longinus Sdapeze, a Thracian cavalryman in the Roman army, with his personal details and career inscribed beneath. But one significant feature was strikingly missing – his face. By careful excavation James Fawn found this important part, which now back in place allows the portrait of Longinus to be viewed in all its original splendour of nearly two thousand years ago.

G. Mark R. Davies

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The Rounds of Witham during the First World War and 'Cousin John Horace Round'

Thamar MacIver and the late W. Raymond Powell

INTRODUCTION

In 1914 Avenue House, Witham, had been home to Frank and Emily Round since he retired from the Colonial Office. They were both from Essex families. Frank's elder brother James, of Birch Hall and Colchester Castle, and Emily's, William Tufnell, of Langleys, Great Waltham, were local landowners. The couple were to be devastated by the war, in which three sons died (the oldest aged 22) after taking part in most of the battles of the Western Front until August 1917. A fourth son spent the last year of the war in France with the Canadian Forestry Corps. This article is based largely on family letters and papers,[1] which give a sanitized view of the war – what decent young men told their parents[2] – but still show powerfully its effect on one family.

Together the couple had six sons and a daughter. Constance (Kitty) was at home. The five oldest boys had taken up professions. Douglass was an architect and Jolliffe a clergyman. When they were 19 Auriol had followed two uncles into the Essex Regiment, while his twin brother Arthur had joined the Canadian Bank of Montreal, and in 1914 was in Merritt, 100 miles from Vancouver. J. Murray Round was with land agents Strutt & Parker in London: he had also joined the Essex Regiment in 1913, as a reservist. Harold C. Round was still at Marlborough College.

Plate 1 The younger Rounds of Witham, December 1910. Left to right (back row) Jolliffe, Douglass, the twins – probably Arthur then Auriol: (front row) Murray, Constance (Kitty), Harold. *Photograph:* Thamar MacIver

A letter of 1911 from Frank Round's sister, describing Arthur's last evening at Witham, gives a glimpse of the pre-war family: 'Douglass, Jolliffe, Uncle D[ouglass], Lucy and I went…so there was a long dinner table. Auriol was invaluable keeping everybody going…Aunt Milly sang in the evening…lastly Arthur found her the Swanee River, and the boys all joined in the chorus…'

Auriol and the Retreat from Mons

A week after war was declared, Auriol's regiment was guarding the Norfolk coast, checking car licences on roads to the coast. They crossed to France on 22/23 August. The war had not yet reached stalemate. The Germans were thrusting into France, trying to encircle the bulk of the French forces further south. As the French Fifth Army was forced back, the British Expeditionary Force, at the rear, sought to delay the German advance until reinforcements arrived. Auriol's regiment was among those reinforcements. While they travelled, the British fought their first battle at Mons. In the next (Le Cateau 26 August) the fresh troops were under fire from early morning. Auriol wrote afterwards: 'It was a pleasure to see our shells bursting where the Germans were trying to advance. [We] were in very hastily-made trenches…. We retired…We went forward to collect the wounded. On retiring the whole ground was plastered with shells…I was wounded'.

At first Auriol's wound, caused by shrapnel above the knee, seemed minor. His family later took pride in his having assisted another wounded man. 'The grandest thing I ever saw' Private Gore said. 'We found a man wounded in the leg, he could barely get along. Lt. Round put his arm round his waist and the man's arm round his neck, and helped him over two miles…' The problem then was the continuing retreat. Private Gore: 'We met again in the village where the ambulance people re-bandaged and put us in wagons…to the hospital…they began shelling the hospital…those that could, walked, the others went in wagons to the station…from the trains we were taken in trams to St. Quentin, but it was in danger so back to the station…We reached Rouen next day…[the following] day we were shifted in motor cars to the ships…'

Between 29 August and 9 September Auriol sent encouraging letters and telegrams from France and London. He saw his parents (and also King George V, on an early visit to the wounded) but he was facing an operation on his leg. He developed tetanus, and died on 5 September 1914.The family received a telegram from Buckingham Palace: 'The King and Queen deeply regret the loss you and the Army have sustained.'

Auriol's funeral, so early in the war, was a notable event. It was marked by a procession through Witham, reported in British newspapers, and even in New York. (New York Times Pictorial War Extra 24 September 1914.)

Plate 2 Funeral of Lieutenant Auriol Round, September 1914. Frank and Emily just visible on the right of the picture. *Photograph:* Thamar MacIver

The family at home and school

Life went on. Kitty had joined the Red Cross. Emily, who had made shirts and socks for Auriol and his men, presumably did the same for Murray, who requested a knitted tie. Harold, at school, was hesitating between aiming for Oxford, Sandhurst, or an immediate commission, afraid that his youth or poor eyesight might prevent him joining a frontline regiment. Of more immediate concern was the safety of Murray, who as a reservist spent some weeks training before going to France in late September.

Murray: Ypres

In France, German forces had been halted and pushed back to the Aisne. The Allies re-grouped. British troops near the Aisne were replaced by the French, and sent north to form a line between the Germans and the coast, protecting the Channel ports. There, in mid-October, those just arrived near Ypres faced attack.

Murray joined his regiment on the Aisne, but soon moved south of Ypres. 'The first day we attacked the Germans and pushed them back. My company [took] a farmhouse where they had a machine gun concealed…losing about 25 men…We went on pushing back for ten days and for the last ten days we have sat opposite their trenches…' He continued, doubtless reminding his mother of his schooldays: 'I wonder whether you would send me out once a week a cake, some chocolate and a tin of potted meat or sardines…I want a pair of pants also' (3 November). Murray spent the following months in and out of the trenches. He wrote on 2 January 1915: 'Going to the trenches is quite a sight…You put on all the clothes you can raise: 2 waistcoats, cholera belt, socks, overcoat, scarves, gloves, mittens, wristlets, kneecaps and burberry. Your servant follows with the food…your wading boots, waterproof sheet &c. The trenches are like rivers.'

In March 1915, while reaching up to barbed wire, he was wounded in both arms, presumably by a sniper. One of his men, Private May of Dunmow, told a local newspaper: 'The chief trouble in trench warfare is sniping. Every day some of our men are knocked over and carried to the little cemetery at the rear where fallen Essex soldiers are buried. The German snipers are dead shots. If a man happens to show his head above the trench he is bound to be [hit].' The bullets had passed through Murray's arms cleanly. He spent a month in Boulogne convalescing, but was back with his regiment when Spring brought renewed German assaults. The second battle of Ypres, which saw the British line pushed back, began with the first gas attack on 22 April 1915. On 3 May Murray was wounded again. He had also been gassed.

Home again: Murray and Harold

Murray's latest wound was serious. His forearm was shattered, and he was in England on light duties for a year. Meanwhile Harold had secured a place at Worcester College, Oxford. But after having been turned down twice because of his poor eyesight, he was finally passed by a special medical board, and in December 1915 he joined the Rifle Brigade.

Murray and Harold: The Somme

There had been little progress on the Western Front, despite high casualties, until shortly before Murray's return in July 1916. Early in 1916 both sides planned major offensives. The German attack, at Verdun, put such pressure on the French that the British bore the brunt of the Allied assault: The Somme. Murray missed the dreadful first days in early July, when, after ineffectual bombardment, hundreds of yards were gained at the cost of tens of thousands of lives. His account of his first action, on 28 July, is graphically spare: 'I have lost about half my company, and all the officers are casualties, but we have been lucky.' A local newspaper explained: 'The Essex battalion were sent to Delville Wood, with orders to hold it at all costs, and they fulfilled this with heavy casualties.'

Murray was later awarded the Military Cross. He had reorganized two companies and rescued six wounded men under heavy fire. He was in action again on 8–9 August, in a fruitless attack on Guillemont. This time his Colonel recommended him for the D.S.O., but without success. After this Murray had a break. He even had a week's leave in September 1916. But on 4 November he wrote: 'We have been living for two months on the edge of a volcano…'

Harold reached the Front in September 1916. 'I hope you'll send weekly parcels with cake, soap, matches and suchlike, as each officer contributes to his mess.' A week later his mother received a frightening note: 'Am taking part in a colossal push tomorrow'. His letter afterwards was upbeat: 'Some push it was…and I've killed a Hun! Got him with my revolver in one of the trenches we captured. I shouted to him to put his hands up. He probably did not understand, poor brute, however, he didn't so over he went.'

This cocky letter concealed a lot. A fellow officer wrote at the time: 'It must have been an awful trial…his first time under shell fire, and losing all his officers'; and after his death another officer wrote: 'He brought the remnants of the Battalion out of action on September 16th.' He was awarded the Military Cross. Following this devastating action (not its first) his Division was moved north.

Murray was now in a hard position. He frankly disliked both action and trench warfare. By 8 November he was in and out of the trenches, in foul weather – 'up to our eyes in mud and water' – while waiting for his next action. Meanwhile, Murray had been recommended for two decorations, and was hoping for temporary promotion to Major. 'I am at the moment commanding the Battalion as old C.O has been sent back as unfit for strenuous campaigning…we have a new one who has gone on leave', he wrote on 8 October in an amiably patronizing letter to Harold, and 'I have not written as many times as you…an elder brother's privilege!'

Murray's good nature was tried, however, when his brother's M.C. was confirmed before his own, though it

was for a later action. He wrote on 10 October 'Great, isn't it? The first Round decorated in this war. And he now commands a company.' Later he discovered that his M.C. had been confirmed: 'as the Brigadier happened to know the Army Commander.' 'Most hearty congratulations' wrote his mother, 'I am so glad, dear old boy, you who have been through this ghastly war for more that two years.' But Murray never read this: he had been killed on 13 November 1916. He had been in the last action of the Somme, the taking of Beaumont Hamel. He was reported 'missing': Harold wrote consolingly to his mother. By February 1917 the family had been convinced by reports from British prisoners of war that Murray was dead, but he remained 'missing' until Frank received a letter in July 1917 from Private Nicholls, servant to Auriol Round: 'Sir…I am giving you the particulars of the grave of Master James Murray Round…The place of burial is Serres Road. I got a nice bouquet and placed [it] upon it. Please excuse me if this letter is out of order, as my education does not permit me to write as I should like.'

The Rounds contacted Emily's brother, and the result was a letter from General Hobkirk: 'Dear Tufnell: Yesterday I motored over and took Nicholls…I cannot understand how Mrs Round did not know as the Cross bears his name…I enclose a little red flower that was growing on your nephew's grave.'Once again the family heard from Buckingham Palace: 'The second beloved son you have given in your Country's Cause…' In October 1917 they heard from a companion: 'He was killed in enemy's lines, and I was taken prisoner. We were the last two left in that position…He was shot in the head.'

Harold at Arras

Harold, stationed near Arras from September 1916, was, he emphasized, in no danger. On 25 September he wrote, after two days in lorries, of requisitioning billets and 'settling everyone in': 'You've no idea what an arduous job it is, till you come to do it.' For some months they were in and out of the trenches. (For example they were in the trenches from 22 to 27 December, then in dug-outs in a sunken road from 27 December 1916 to 1 January 1917, in again from 1 to 7 January, and from 9 January back in rest billets.) In October 1916 he wrote of 'a cushy tour': he had just shot two partridges with a borrowed rifle – 'that'll amuse Uncle James, so tell him they're the first I've ever shot ! The worst part of this underground life is the abundance of rats and mice.' He had to deal with much correspondence. One day he had letters from 14 persons whom he names, and 'about 60 Marlburians' as well. 'I usually get a dozen or so letters asking about casualties…on the 15th [September], and of course these must be answered first.'

In November 1916 he sent a 'cadge': 'Every officer…has been asked to raise £5 to get the men decent food, clothing, and comforts for Xmas. You see we are not a County Regt…we get no people of the County to provide funds…' Later he wrote: 'Our rest is over…we have not gone into the trenches but are mostly supplying working parties… Luckily our Brigadier is making efforts to avoid the rugger side going on working parties…to have practices…to take on the rest of the Division later.'

In February 1917 Harold began a five-week course, telling his mother this was partly because 'the C.O. wants to get me off the next push in March opposite Arras.' But in March the Germans withdrew to the Hindenburg line, giving them a shorter, defensive front. Harold found it 'awfully funny being able to wander across 'No Mans' Land' and look at the Boche trenches…Boche… Behaving with his usual Hunnishness polluted and poisoned wells, gassed dug-outs, mined cross-roads, bombs that explode when trodden on…I wonder whether we should have had the brains or stooped [so] low.'

The assault finally began in early April 1917: 'My Company Commander went into the show and…I was left out. Next time the positions will be reversed.' His turn soon came. He wrote on 2 May: 'I go over the top tomorrow'. Fortunately for the family that note arrived after one dated 5 May; 'I have come out all right; but we had a very bad time.'

Behind this action lay an exploit to be celebrated amidst disaster, for which he got the D.S.O. A friend told his mother: 'Harold Round has again done wonderfully well…one of the very few of his Battalion to get through. When others had withdrawn he stuck onto a position for a night and two days, without water or food and with very little ammunition. He sent back to say he couldn't hang on for much longer, and was naturally brought in then and there.'Another friend wrote after his death: 'At HQ all we knew was that the thing was a failure and the Battalion…swallowed up in No Man's Land. After 8 hours one officer and a few men, the only known survivors, returned…Next day somebody said: "Mr Round has turned up." And there he was, as cheerful as ever.' Two days later Harold celebrated his 21st birthday with a 21-year-old port provided by his father.

Arras had been intended to distract the Germans from the French 'Nivelle' offensive. Neither succeeded. Soon activity there was cut back, so that the British could concentrate on their attack at Ypres: Passchendaele. Harold's battalion moved north in July 1917.

Meanwhile, thanks to a friend on the Divisional staff, Harold enjoyed several motor trips. 'It is such a pleasure to go bowling along…each day the trees look more beautiful. The only things where we are at present are trenches, dead trees, broken wire, shell holes and ruined and desolate villages.' On a later trip 'I went down to see the old places we fought in on the Somme…Flowers, hay &c. abound on the country where we attacked on 15 September. The trenches we took are scarcely recognizable.'

In June 1917 he had twelve days home leave, when he saw two of his surviving brothers. He collected his M.C. from Buckingham Palace. Returning via London, he met J.H.Round, the distinguished historian, a distant cousin who often sent parcels to him and to Murray at the Front. (This is discussed in more detail below.)

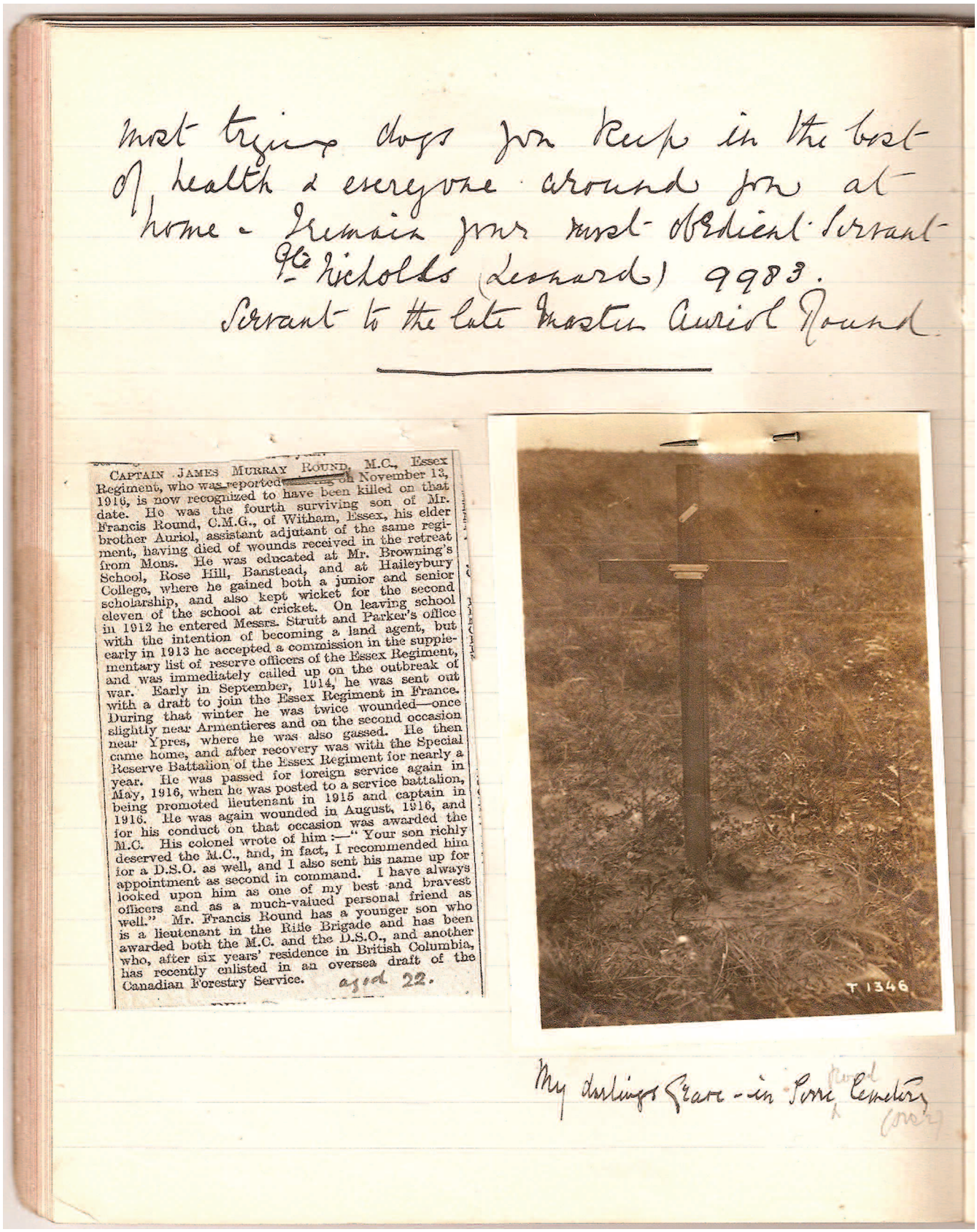

Plate 3 A page from one of Emily Round's notebooks, relating to the death of her son Murray. *Photograph:* Thamar MacIver

Harold at Passchendaele

On 3 August 1917 Harold wrote: 'We are still in camp at Bailleul, some 10 miles behind the lines…the biggest battle of the war is raging…the Germans are contesting every inch.' On 16 August he wrote that: 'All the part I am in is in a turmoil of war…guns unceasing, raids and such like.' On 22 and 23 August he sent postcards saying: 'I am well.' But he was killed on 24 August 1917. Harold's family learned that he died between 4 and 5 a.m. before Glencourse Wood ('or what was left of it'). The British had recently gained ground: the Germans counter-attacked to recover it. Harold led his men to plug a gap in the defence. He ended in a Machine Gun Section trench with two comrades. A shell killed all except one machine-gunner and one rifleman, who were wounded. Fighting was too fierce for Harold's body to be recovered. It was never found. His Colonel said that 'Everybody loved him…he was not only cool but cheerful under fire.'

One rifleman sent a curious anecdote: 'The Battalion came into trenches where we were gassed for four and a half hours. After that your son gave out orders to his junior officers then came round sat on my knee and said: "Well child we're going up the line again tonight and you and I are going to get killed"…I said "You shouldn't talk like that, sir". He said "Well it is right," and I said "No it isn't, Fritz doesn't know us yet", so of course he went away laughing.'Once again there was a letter from the Palace: 'The King trusts you may be granted strength and comfort in the further sorrow you have been called upon to bear.'

Arthur in Canada, England and France

Arthur, newly arrived in England from Canada, was able to attend Harold's memorial service. His arrival was long planned. He had joined 'some Volunteer corps in New Westminster' (his father's phrase) by November 1916. In 1917 Harold told his father 'You ask if I would speak to a Canadian private, even if he were a brother: it is too stupid to be answered!' Arthur reached England in late August 1917, and in October arrived at the Vosges mountains near Alsace. He had intended to transfer to the infantry but put it off, initially because the Foresters were going to Europe first, and later because a friend said 'You have lost three brothers, so to winter with the Forestry will do you no harm!'

Arthur's enlistment as a private clearly floored his father. The son explained carefully: 'The only transfer I really wish for is into the Canadian infantry as a private…If I can rise from the ranks well and good: but the likelihood is extremely small! Canada has grafted certain democratic ideas into my head. I want not to avail myself of anything that money or position can give me…I know you will be disappointed but I am no leader of men'.

The Foresters began in tents, building the huts, roads, and sawmill they needed. Then followed months of hard work, from 6 a.m. to 5p.m. with an hour for lunch. In December he was proud when his loading job was passed to Frenchmen, who with double the men took longer than the Canadians. In France, Arthur was some way behind the Front Line and only occasionally heard anti-aircraft fire or distant guns. His letters rarely mark the progress of the war. In April 1918 he remarked that 'The news is certainly very bad'. But he commented on trees in bud, daffodils, cuckoos, and local farming methods: 'The French farmers grow vegetables chiefly…Women, old men and boys have to do all the work. Their methods of farming seem 50 years behind the times.'

For Christmas he sent home a locally-made apron and tablecloth: 'The little tablecloth might go on the drawing room piano table and hold the various family distinctions having a War interest'.

Armistice and After

'The news of the Armistice reached us on 11 November about 9.30' wrote Arthur. 'The C.O. excused us work. In the evening I went down to one of the villages…We joined in the torchlight procession headed by a band and promenaded up and down the streets: French, Americans and Canadians all mixed up…I had a mademoiselle on one arm and a kid on my shoulder'. During the war Arthur had had occasional opportunities to explore the region, on foot or by train. When visiting the ruin of a hotel where the Kaiser had once stayed, he and a comrade were mistaken by French soldiers for German spies! After the War he was able to go farther, across the lines and as far as the Rhine.

After the Armistice Arthur remained in France for two months, packing up. He then returned to England and spent some time at Witham. On 21 March he wrote from Rhyl, before sailing back to Canada; 'I shall go back once more refreshed with the memories of a home that has always been the source of inspiration of all that has been best in my life…We are always together in thought and happy memory.' That was the last of the wartime letters transcribed by his mother.

The Round boys were commemorated by inscriptions at Birch, in Witham and Colchester, and, in Harold's case at Worcester College Oxford, and Tyne Cot. Auriol's tomb at Witham bears a cross which is also a sword. Murray's tomb in France has the curious inscription, chosen by the family: 'He that overcometh, I will be his God and he will be my Son.' A conventionally conservative family, the Rounds seem to have considered fighting for their country part of their duty as Englishmen and Christians and to have accepted the family's terrible losses with pride and deep and lasting sorrow, but without resentment.

Gifts sent to France by 'Cousin Horace' to the Round boys of Witham during their service in the First World War

John Horace Round (1854–1928) had an abiding interest in military matters (see W.R.Powell, *John Horace Round* (ERO Chelmsford 2001), 56 ('thrilled to the sound of the trumpet'); 105 (admired Maj-Gen. George Wrottesley); 144 (great Army manoeuvres of 1898).

J.Horace Round was distantly related to the Rounds of Witham, and knew Frank and Emily quite well. He was a friend of Frank's brother James Round, owner of the

Plate 4 The war memorial at Witham. © Edward Mendelblat

Birch estate, which included Colchester Castle. His letters mention Frank and Emily's courtship and marriage (Powell, *J.Horace Round*, 77**)**. Many years later J.H.Round recruited Frank to write parish histories for the *Victoria County History of Essex*.

On 4 November 1916 J.Murray Round wrote: 'Dear Cousin Horace: I received a parcel about a fortnight ago from Harrods. Were you by any chance the kind benefactor? I was away for a few days at the time, and as it is a sort of recognized thing for any parcel containing what looks like food to be opened if the owner is away, I was not certain from whom it came, but suspect your kind handiwork. As you know, it was greatly appreciated…We have been living for the last 2 months on the edge of the volcano, waiting for it to enlarge.'

'I have been rather anticipating getting made [up] to temp. Major, and going as 2nd in command of 11th Lancs. Fusiliers. But everything takes such a time to go through…Meanwhile we continue to live a life of comparative quiet, I expect you [are] having better weather at Brighton than we are, as gumboots are now in full swing. But the wetter it is, the more healthy, so the Doctor says. Your affec. Cousin, J.M.Round.'

On 13 November 1916 Murray's mother wrote to congratulate him on being awarded the M.C. 'You will be the first Round to have won it, as yours dates from 23 July, and Harold's from 15 September…I wonder how long it will take before yours is officially mentioned…till then, Cousin Horace says we should keep it quiet!'

There are no other references to J.Horace Round in Murray's letters, although it is clear from Harold's correspondence that there had been earlier gifts: these particular letters were kept because Murray died on 13 November. But there are several references in Harold's letters.On 5 September, having just joined his battalion at the front, he asked his mother to 'drop Cousin Horace a line to effect that [parcels] are appreciated as he said he would send me something from Fortnum & Mason as he was sending to Murray as soon as he heard I'd joined my battalion.'

On 20 September 1916, writing to his mother, Harold reported that he had had a letter from Cousin Horace saying that he had ordered Harrods to send him a parcel, but that this had not yet arrived.On 25 September 1916, Harold told his father 'You will remember that Cousin Horace said that Harrods were sending me out a parcel. It ought to have arrived by this time, but the Post Corporal says one parcel burst & the contents were littered on the road…he thinks it was mine! I have written and explained the fact to Cousin Horace.'

Writing on 7 October 1916, Harold told his father: 'I fear it is impossible to get ink or pen, but I hope Cousin Horace may send me out a fountain pen soon.'On 15 October 1916 Harold reported to his father that he had 'Sent Cousin Horace a letter the other day containing a little more news & you might like to see it: he says he is sending a copy to Birch! His second parcel arrived the other day, & in his last letter he sends Ads. cut out of various papers for me to select for my men: he is being awfully good.'

In the same letter he reported that 'Cousin Horace says I can't have the letters [M.C.] after my name till it's announced publicly' and wondered 'if Cousin Horace is right about the M.C., anyhow I have the ribbon up!'On 21 October Harold wrote to his Mother: 'Here I am in "rest" billets with Cousin Horace's new [fountain] pen, & provided I don't lack ink & paper, Father shall have letters legible & of longer duration than those in pencil!'

'Cousin Horace writes a lot. He has sent out 2 parcels from Harrods…a fountain pen…Now he sends advertisements re cigarettes he is going to send to my Company [and] wants to send me a good warm waistcoat; I don't know how to stop him: [in] every letter he offers to send me something else!'

On 2 November 1916 Harold wrote to his mother: 'You say you bow to Cousin Horace's opinion re M.C., but he writes & says "some idiot has gone & had it published in the Essex papers: please have this put as it should be for the Authorities are very particular that premature announcements should not be published before they make them officially themselves"…Cousin H. asks when I am coming home for my presentation: from this you will see that I do come home especially for it; and I gather from people here [that] they generally give you about 8 days leave into the bargain, and this is not in any way connected with ordinary leave to which one is entitled, when one's turn comes, after you've been in this country three months.'

Harold's next recorded letter mentioning J. Horace Round was written on 1 May 1917. 'Now we are bivouacing back in some old captured trenches & have got our mails again: including Cousin Horace's parcel from Fortnum & Mason, which provided an excellent meal or two, rather a change after Bully and Biscuit.' On 9 May 1917 Harold wrote to Round himself to thank him both for this parcel and for a wrist watch which had apparently been sent on the occasion of his 21st birthday. He also expressed satisfaction with the watch in a letter to his mother of 11 May.

It is possible that the silence about "Cousin Horace" from November l916 to May 1917 was due to the state of Round's health.In January 1917 Horace Round wrote sadly: 'My health seems to get worse even letter writing brings on the pains in my head, so that I can hardly do any work at all. This is the more maddening as I have some splendid things in my head on important papers, when I can write them.' (W.R.Powell, *John Horace Round* (2001), 185).

Such complaints, often made in his later years, did not exaggerate his chronic ill-health. In April 1915 he had an internal operation. After that he was often confined to his bedroom, with trained nurses in attendance day and night. He suffered from insomnia, aggravated by the increasing din of motor traffic. His 'solitary confinement' as he called it, brought on 'the ghastly depression of neurasthenia,' especially in the winter (Ibid.)

As he grew older, Round employed at least two domestic servants, in addition to his nurses. He took on a secretary, Miss M.Wade, in 1914, but she left in 1916 to do war work, and was not replaced. After she went Horace Round remarked that 'to take up the entire time of five & sometimes six women in attendance of me had become too unpatriotic.' (Powell, *John Horace Round*, 185).

In view of his health problems it is particularly touching that Round met Harold, apparently in London, on 18 June 1917, as he returned from his last leave. "After lunch yesterday I went to see Cousin Horace. He seemed better than I thought he would be, but said he would be quite glad to get back to Brighton," wrote Harold to his mother from Folkestone. (This is the last significant reference to Round in the correspondence.)

At Brighton Horace was cut off from most of his old friends, and while welcoming visitors, he was not always well enough to see them. But he could at least write and receive letters, and during the war this was his main interest, along with the satisfaction of knowing that he was helping his young cousins who were fighting in France.

Acknowledgements

The title of this paper rightly places Thamar MacIver as its foremost author, for the paper is based mainly on documents which she inherited from her mother who was grand-daughter of Frank Round, younger brother of James Round (d.1916), owner of Birch Hall (Essex).She still holds these documents.

Thamar MacIver first contacted me in a letter written on 19 February 2008. After further correspondence it was agreed that she and I should collaborate on this paper, which should be offered for publication to *Essex Archaeology and History*.

I am grateful to my wife Avril for checking the draft and the proofs of the paper. Her continuing help is very much appreciated.

W.Raymond Powell
July 2008

Notes

1. These include notebooks kept by Emily Round containing copies of letters by and about her sons, some original letters and telegrams, newspaper cuttings, draft obituaries and photographs, all now in the possession of Thamar MacIver, a great-granddaughter of Frank and Emily.
2. For example the boys' letters contain no reference to blood, gas or bodies. Harold once told his mother that he would like to discuss battle tactics with his father,

but "when one comes to describing the actual battlefield well perhaps the less said the better."

Bibliography

Beckett, I. *Ypres: The First Battle* (2004)
Brown, M. *The Imperial War Museum Book of the Somme* (1996)
Burrows, J.W. *Essex Units in the Great War 1914–1919: Vol II 2nd Battalion (56th)(Pompadours)* (1927)
MacDonald, L. *1914* (1987)
McCarthy, C. *The Somme: The Day by Day Account* (1993)
Nicholls, J. *Cheerful Sacrifice: Battle of Arras 1917* (1990)
Powell, W.R. *John Horace Round: Historian and Gentleman of Essex* (2001)
Steel, N. and Hart, P. *Passchendaele: The Sacrificial Ground* (2000)

The cost of publishing this article is supported by the Society's Publications and Research Fund.

Essex Archaeology and History 39 (2008), 10–56

The archaeology of the A133 Little Clacton to Weeley by-pass

Alec Wade and Richard Havis

This report details the results of six excavations and three watching briefs undertaken along the 10 km route of the A133 Little Clacton to Weeley Heath by-pass in 1993. Archaeological deposits were found dating from the Late Bronze Age to the post-medieval period, including prehistoric ditches and pits, Late Iron Age and Romano-British enclosure ditches and cremations, a medieval settlement and a medieval moated site (both with 13th-century origins) with a later brick-built Tudor hall. Evidence of other activity was also recorded consisting of spot finds of worked flint and prehistoric pottery, Romano-British features and undated structural remains near Gutteridge Hall. Finds were unremarkable, though some interesting assemblages of medieval pottery were recovered.

INTRODUCTION

The 8 km by-pass runs southwards from the A133 east of Weeley village to the west of Weeley Heath and Little Clacton, curving to the south-east to the St Johns roundabout on the outskirts of Great Clacton (Fig. 1). In addition, the Gorse Lane link, a 2 km stretch of road running eastward from the Bovills roundabout, gives access to an industrial estate east of Thorpe Road.

Before construction work began, six sites had been identified along the road line, four from the Historic Environment Record, and the other two from a programme of fieldwalking along the road line in 1990. These were as follows, from north to south (Fig. 1):

- A medieval moated site at Gutteridge Hall (WEGH)
- A Romano-British site near Gutteridge Wood (WEGW), identified from fieldwalking
- Undated field boundaries near Norwood Lodge (STONL)
- Prehistoric ring-ditches and pits near Dead Lane (LCLDL)
- A rectangular enclosure near Montana Nursery (LCLMN)
- A medieval site near Langford Lodge (STOLL), identified from fieldwalking

A brief opportunity to investigate these sites was made available prior to road construction, and excavations took place under the direction of the main author in 1993. However, all fieldwork was carried out under severe pressure of time, so most excavation would be characterised as salvage work. This was especially true of the area of the medieval moated enclosure (with later deposits) at Gutteridge Hall, where many features were incompletely excavated. As a result, much of the interpretation of the development of this site is tentative.

In addition, during construction work itself, a further three minor sites were recorded under watching brief conditions. These are all at the extreme north end of the road line (Fig. 1), namely at:

- Green Lane Farm (WEGL)
- Weeley Brook (WEWB)
- Gutteridge Farm (WEGF)

The results from each of these nine investigations are presented below, starting with the most significant site, the medieval moated enclosure at Gutteridge Hall.

Geology and topography

The underlying natural geology was mostly of orange/brown brickearth and clay. Deposits of sand and gravel were encountered in the lower areas of slope near Weeley Brook and Pickers Ditch, particularly affecting the site at Dead Lane (LCLDL 93).

THE EXCAVATIONS

Gutteridge Hall, Weeley (WEGH 93)

Excavation examined part of a medieval moated site, known from 13th-century documentary references, cropmark and fieldwalking evidence. Up to five different phases of moat layout were identified, the earliest defining the original medieval complex. The moat enclosed a timber-framed building dating to the 12th/13th century. Later phases revealed how the Hall and its surroundings expanded, causing the moat system to be enlarged. The foundation of a substantial Tudor brick and stone building was also recorded, together with later 18th and 19th-century farm buildings.

Site background

The site lay *c.* 200m south of Weeley Brook on a gentle slope between 15m and 18m OD, 1.2km south-west of Weeley village. The underlying natural geology is London Clay.

Documentary evidence

The Domesday Book shows that before the conquest the manor of Weeley (*Wileia* in the Domesday Book) was amongst the lands of Earl Godwin. In addition to the 3 hides and 38 acres of the estate, two freemen held an

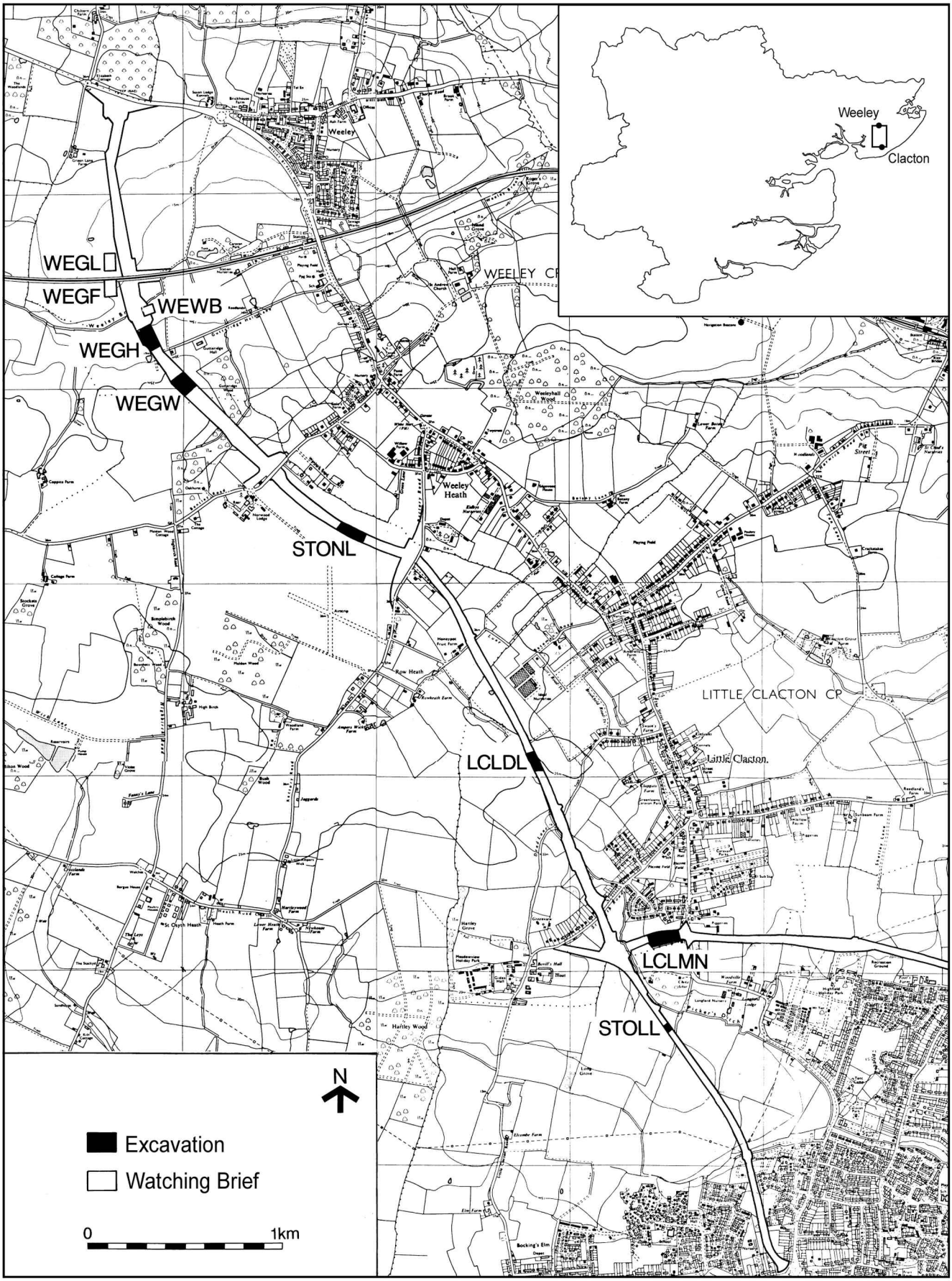

Fig. 1 Clacton to Weeley by-pass. Road line, with all fieldwork sites. © Crown copyright and/or database right. All rights reserved. Licence number 10001 4800

additional 2 hides and 45 acres. Woodland, meadow and pasture are recorded, as are 29 households whose inhabitants tended the 15 cattle, 60 pigs, 240 sheep and 5 beehives. The value of the holding was calculated at £8. After the conquest, William gave the land to Eudo Dapifer, who held the land in lordship. By 1086 the population had fallen to 24 households, the number of cattle had risen to 16, the swine had halved to 30 and only 2 beehives remained (the number of sheep had remained constant). Despite the apparent reductions in population and total livestock, the value of the holding was now over double its previous estimate at £19 and 1oz of gold.

The origin of Gutteridge Hall as an entity distinct from the manor of Weeley is unknown, but the name is first identified in a Charter of 1230 where it is given as *Crostwic*. The name appears again in 1261, this time as *Crostwyz*. Reaney (1935) describes the name as difficult to interpret but speculates that it may be related to Gothic for `gravel` or more likely (given that the underlying geology is of clay) to a personal name. Reaney gives many examples of the various names by which the estate was known, including *Crustwic* (1276), *Curstwyche* (1473), *Crusteswychehall* (1488), *Crushwicke Hall Manor* (1580) and in the 18th century *Cattridge, Custard-Hall, Custridge* and *Guttridge-hall* (1768). The present day hall (rebuilt away from the farm complex in the 1950s) is known as Gutteridge Hall.

Morant writes that in 1301; *Maud wife of Richard Batayle granted to her nephew Anfrid de Staunton 4 messuages, 200 acres of arable, 7 of meadow, 12 of pasture, 8 of wood and 2s rent, in Wylegh, Great Bentley and St. Osyth, holden of the King in Ca. by the service of 12d a year only.*

In 1343; *Margery, wife of Humfrey de Staunton, held 240 acres of arable, 6 of meadow, 4 of pasture and 18 of wood. Roger de Stonham and Mabill his wife held the same in the 32nd year of Edward III (i.e. 1358).*

A lease agreement from November 1573 details the; *Site, Manor of Crustwiche alias Crustwiche Hall with houses, outbuildings, gardens, orchards, lands in occupation of George Knightley in Weeley.*

The property was originally to be leased for twenty-one years at an annual rent of £11, but in March 1580 Edward Coke and Charles Cardinall recovered the property against George Knightly Esq:

Crustwicke, alias Crustwicke-Hall Manor, 4 messuages, 3 tofts, 2 mills, 1 dove-house, 3 gardens, 200 acres of arable, 40 of meadow, 100 of pasture and 40 of wood.

The property remained the possession of the Coke family from Holkham in Norfolk until the early 18th century. Robert Coke Esq. married the lady Anne, second daughter of Thomas Osbourne, Earl of Danby and Duke of Leeds. Following Robert's death, the estate was vested in Lady Anne who later remarried Horatio Walpole. About 1722 the estate was sold to William Field Esq. who died in 1732 and bequeathed it to his son William. He married Arabella, daughter of Earl Rivers and eventually it passed to their daughter Elizabeth, the wife of Sir Richard Lloyd Kt. of Hintlesham Hall and one of the Barons of the Exchequer. In 1768 the property belonged to their son, Richard Lloyd.

It is from this period that the earliest cartographic evidence exists. The Chapman and Andre survey of 1777 shows six large buildings forming the Gutteridge Hall complex, the southernmost one of which may be the Hall, which survived until it was demolished in the 1950s. Access to the Hall is shown both from present day Gutteridge Hall Lane (to Weeley) and from the Great Bentley road to the south, now a minor farm track.

Ownership passed to the Rowley family of Tendring Hall, Suffolk, first with Sir Richard Rowley, then John Rowley and in 1839/40 his son, Admiral Sir Joshua Rowley.

The May family became their tenants and the 1839 tithe map records the property at this time. The complex is clearly and accurately surveyed and the L-shaped moat, later identified from aerial photographs, is shown. A channel has been excavated from the eastern end of the moat (near the right angled corner) to act as an overflow and carry water towards Weeley Brook *c.* 200m to the north. Only two buildings appear to be within the area of excavation as defined in the next section of this report. A large, irregularly shaped pond is located in the field to the east of the farm buildings, on an alignment dissimilar from the moat (as it appears in this survey). The medieval barn is shown with the addition of two long, thin outbuildings at its northern end, extending east and west. The area between these buildings and the northern moat branch has been divided by a drainage ditch running east to west. The northern area, partly enclosed by the moat, is identified as an orchard.

The first edition Ordnance Survey, of 1874, shows that the complex had remained largely unchanged since the 1839 tithe survey. Possible outbuildings had been added to a barn at the southern end of the property, and another shed added to the medieval barn. A large pond has appeared near to the Hall, possibly ornamental. The plot between the orchard and the ancient barn is a garden, complete with pathways, and a curious bulge has appeared (or was surveyed for the first time) in the southern bank of the northern moat branch.

The May family purchased the estate in 1920 and the 1923 OS survey shows little change since the survey of 1874. Following damage to the house during the 1939–1945 war, the house was disposed of and the Hall was demolished in 1957.

The 1959 OS survey shows a much depleted farm complex. The two buildings which were within the archaeological area have gone, as have at least two more buildings from the western side of the site. The northern moat branch is still shown as a water feature, and the eastern branch is shown to run for 40–50m south towards Gutteridge Hall Lane. By 1972 it had been reduced to only a crop-mark. In March 1983, the 14th-century timber framed barn was destroyed by fire.

Fieldwalking

The fieldwalking survey revealed that part of the moat was still visible as it had been backfilled with darker material and survived as a slight depression. A total of twenty-nine medieval pottery sherds were collected from

the area enclosed by the moat and were dated to the late 12th to 15th centuries. A high density of post-medieval pottery, tile and building debris was noted, though not collected, which derived from the later phases of agricultural buildings on the site.

Excavation

The road route passes directly through the middle of the property as depicted on the OS 6" map of 1874. The final stripped area was *c.* 7,000 m^2 (Fig. 2). The remains of a substantial Tudor brick building (which had been heavily robbed both in antiquity and more recently) was recorded, and a sequence of clay dumping and levelling layers identified. Beneath these layers earlier phases of moat were found with associated evidence of a 12th to 13th-century timber-framed structure, possibly a kitchen.

Phase Ia (Fig. 2)

The earliest activity consisted of three truncated lengths of moat, 278, 322 and 421, forming three sides of a rectangular moated enclosure with an abrupt break in the southern arm, possibly respecting an entrance. The northern arm 322 was the largest, being 12.6m wide and 2.0m deep (Fig. 3). The southern arm, 278, was 5.56m wide, 1.04m deep, and flat bottomed. The western arm, 421, was 6.8m wide and over 1.2m deep. The area thus enclosed measures 20m north-south; east-west it measures at least 20m and possibly as much as 50m if the right-angled turn visible as a crop-mark is a vestige of the original layout. Subsequent enlargement and re-cutting of the moat system in Phase 1b has destroyed a large amount of the original features.

Eleven small, irregular features were recorded in plan within the enclosure (Fig. 2), but no excavation was possible. Two parallel lines of features, 471 to 474 and 375, 498 plus 479, may represent the northern side and 396, 397 and 481 may represent the southern side of a structure 12m wide. If these represent the outer walls of a Phase Ia structure, then it would have been equidistant between the two moat branches 278 and 322.

All Phase Ia features were sealed beneath layer 21, an internal platform added to the complex as part of Phase Ib.

Phase Ib (Fig. 4)

This is the main period of medieval activity. The moat system of Phase Ib (551) consists of moat branches 244, 351 and 417. Moat 417, the southern arm, forms an eastward extension of the Phase Ia moat, 278. Early 13th-century pottery was recovered from its fills. The deposition of layers within 244 indicates a pattern of gradual silting within the moat dating to the 13th-14th centuries.

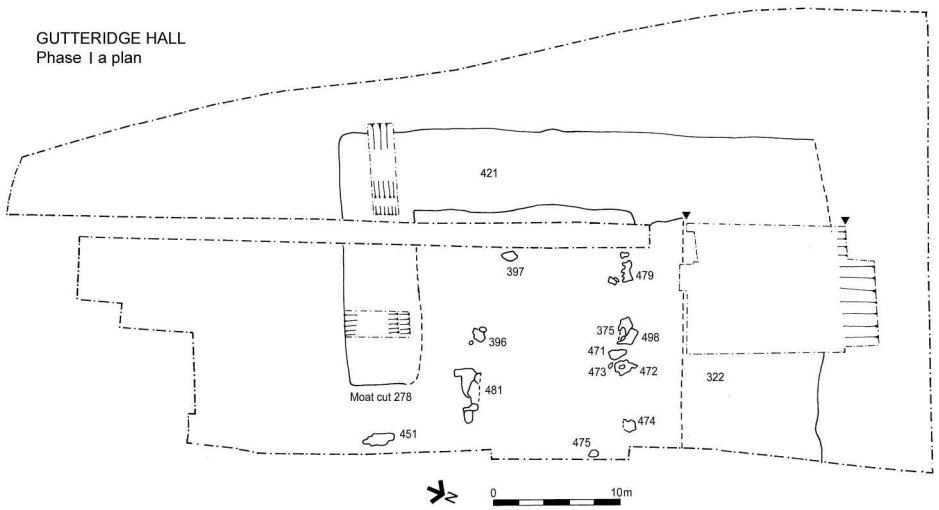

Fig. 2 Clacton to Weeley by-pass. Gutteridge Hall; plan of Phase Ia features

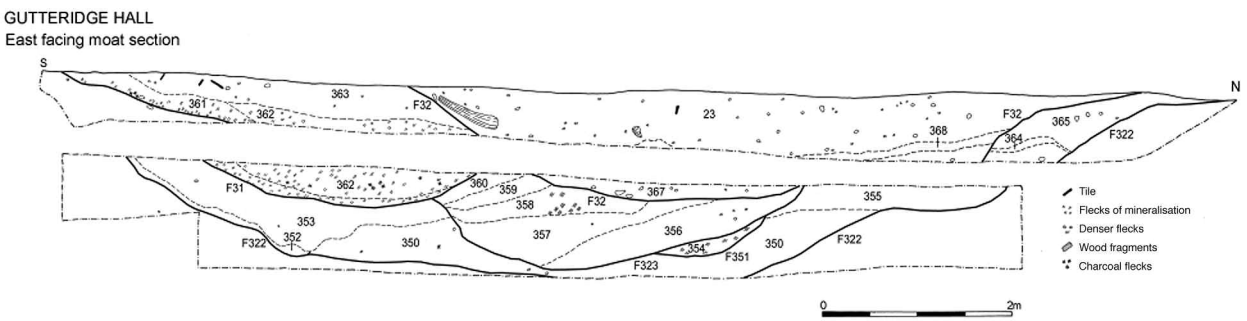

Fig. 3 Clacton to Weeley by-pass. Gutteridge Hall; section through the northern arm of the moat

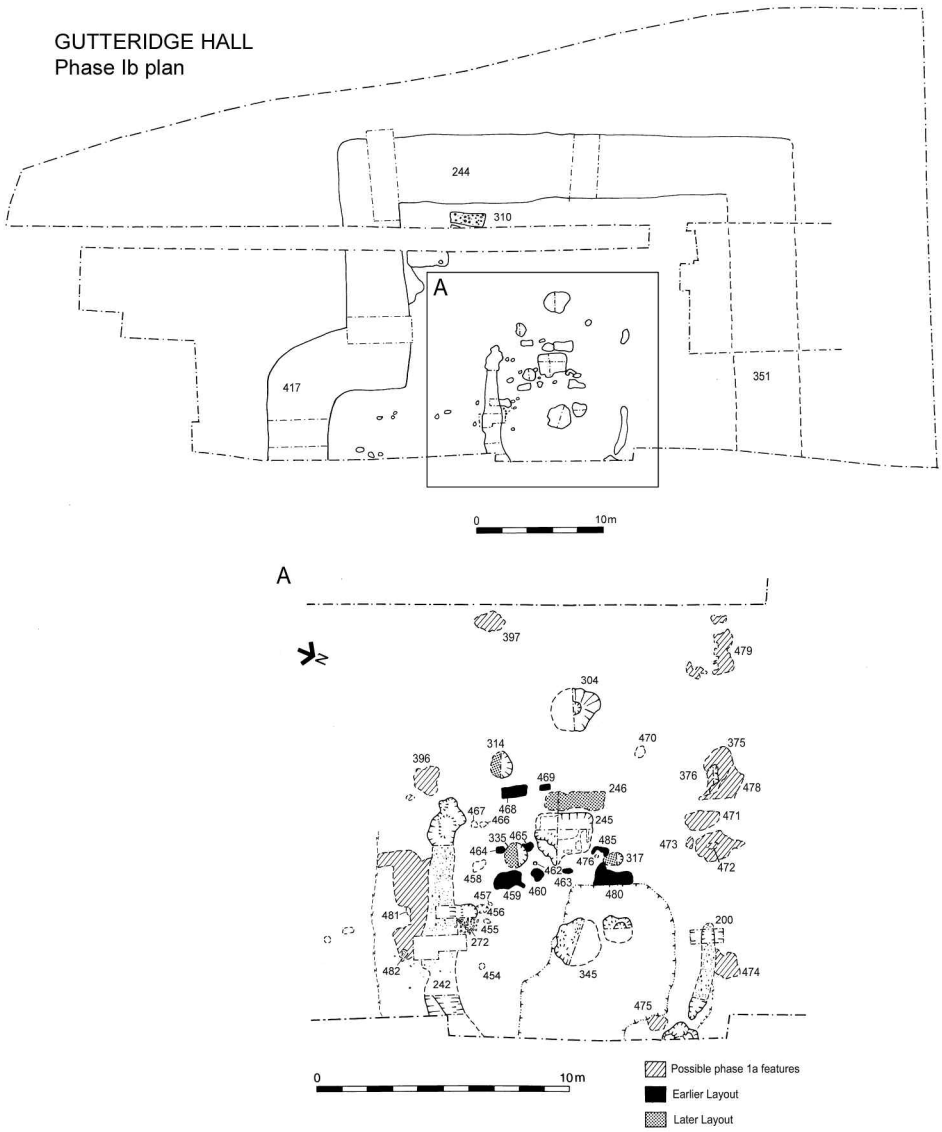

Fig. 4 Clacton to Weeley by-pass. Gutteridge Hall; upper – plan of Phase Ib features: lower – detailed plan of putative medieval building

The building platform consisted of a layer (21), which varied in thickness between 0.15m and 0.30m, extending over most of the area enclosed by the moat of this phase, and contained 13th-century pottery.

The main structural features suggest a rectangular building with a central hearth, lightly constructed walls and an eaves-drip gully down each side. The overall dimensions of the building exceed 9.5m by 6.5m. This length is based upon the distance between the centres of the two most substantial post-holes (304 and 345) which would have held the main load-bearing posts for roof support. Post-hole 304 contained sherds of Early Medieval Ware dating to the early 13th century. The base of feature 345 contained at least four sub-circular depressions suggesting that the original post arrangement was unsatisfactory and was subject to either modification or reinforcement during the building's life.

Equidistant between the two large post-holes is the largest and earliest of the two hearths (245). In plan it was sub-rectangular and measured 2.3m by 1.7m, its longest dimension perpendicular to the axis of the building. The curved base of the feature was of clay, scorched dark orangey-red in colour. Sherds of Early Medieval Ware and Medieval Coarse Ware, including a *c.*1200 cooking-pot rim, came from this layer.

Hearth 246 is *c.* 1.5m north of hearth 245 on the same orientation. It is rectangular, less than half the size of its predecessor, being 2.3m long by 0.7m wide, with some suggestion that it may have been subdivided into two smaller hearths.

Unexcavated features 459, 468 and 480 provide evidence of an insubstantial structure (perhaps a smoke hood) surrounding hearth 245. A similar pattern can be seen with features 314, 317, and 335 around hearth 246. Sherds of Early Medieval Ware and Medieval Coarse Ware were recovered dating from the 12th to 13th century.

Features 460, 462, 464, 465, 469 and 476 may represent internal sub-division of the structure. Although unexcavated they were interpreted as post or stake-holes.

Evidence of an exterior wall is provided by seven small rounded and irregular post and stake-holes on the

southern side of the building (454–458, 466–467). Together they constitute a wall 5.8m long, 3.5m from the central axis of the building.

Little remains on the northern side of the building which could be interpreted as a constructed wall except for three post-holes (375, 470, 475).

The two eaves-drip gullies (200, 242) north and south of the building may be connected with the internal modification of the building, namely the repositioning of the hearth (F246). Gully 242 is 9.5m long running parallel with the southern side of the building. There was an increase in both the width (0.47m-1.35m) and depth (0.15m-0.4m) of the gully towards the east suggesting truncation of the feature. Early Medieval Ware pottery including cooking-pot rims were recovered, dating to the 13th century.

Gully 200 was located on the northern side of the building with only 3.8m surviving. The pottery comprised mainly cooking-pots dated to the early 13th century. Cross-fits of pottery were found with gully 242 indicating the features were backfilled at the same time. Gully 201 was probably a continuation of 200, although heavily truncated.

A possible entrance is represented by a square pad of stones (272) on the southern side of the building; alternatively an entrance may be represented by two small post-holes (481–482) also on the southern side.

Feature 310 was situated on the inner edge of the western arm of the moat (244, 424) being unusual in shape with near vertical sides. A single sherd of Early Medieval Ware dating to the early 13th century was recovered. The position of the feature suggested it may represent the base of a support for a bridging structure across the moat.

Phase Ic (Fig. 5)

During this phase the western end of the moat was recut (419) and extended to the south, measuring over 50m in length before leaving the limit of excavation. It had a U-shaped profile over 4m wide and over 1m deep. The primary fill (252) contained abundant tile fragments and burnt clay with the remainder of the fills showing a pattern of gradual silting.

The northern moat was also recut (323). At its widest it was 3.9m wide, less than half the width of its Phase Ia predecessor. It was also shallower, measuring 1.8m with five fills (356–360).

Phase Id (Fig. 6)

Phase Id includes all features either stratigraphically later than the Phase 1c moat or outside the Phase Ib building platform (21). Many of these features may be contemporary with those from Phase Ib or Ic.

Feature 219 was a large oval rubbish pit cut into the upper fills of Phase Ic moat 419. Cross-fits amongst the pottery recovered from the fills of this feature indicate a rapid backfilling in the late 13th-14th century. The only other feature to be excavated from this phase was a shallow gravel-filled depression (295). The remaining features were mainly post-holes and pits varying in size from 0.2m to 3m. It is possible that some consisted of inter-cutting smaller features.

Phase II (Fig. 7)

Following the dismantling of the medieval building (Phase Ib) and the eventual backfilling of the western moat, the Phase 1 building area south of the northern moat (323) was concealed beneath a layer of clay (1) *c.* 0.25m deep, seeming to contain several layers of dump

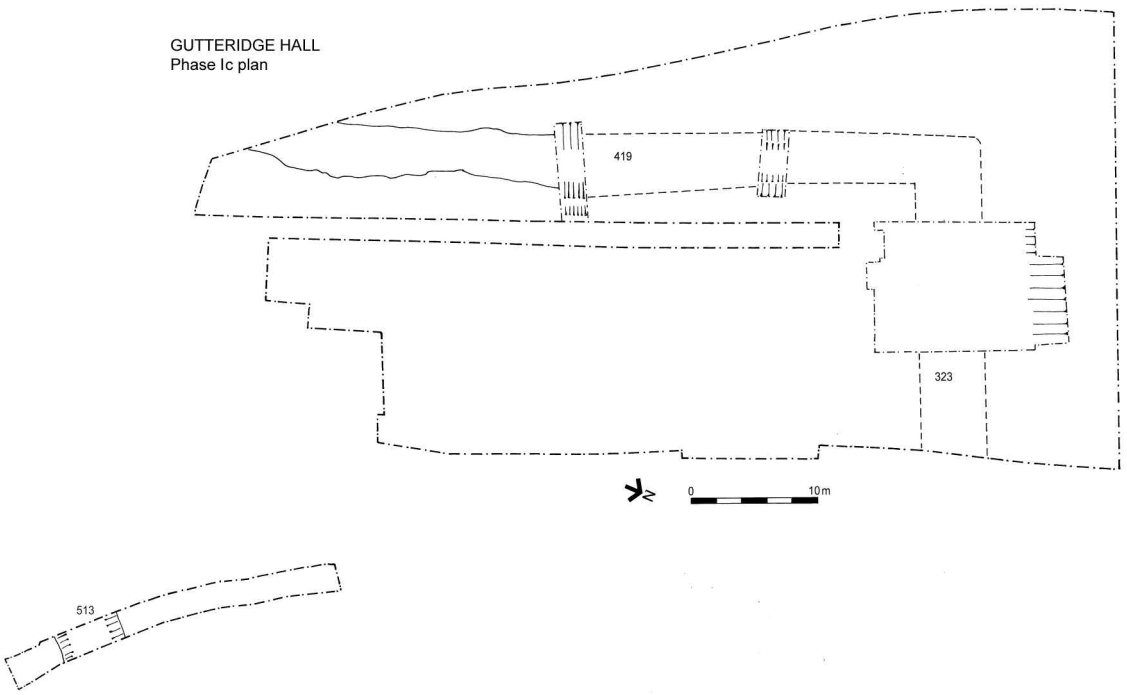

Fig. 5 Clacton to Weeley by-pass. Gutteridge Hall; plan of Phase Ic features

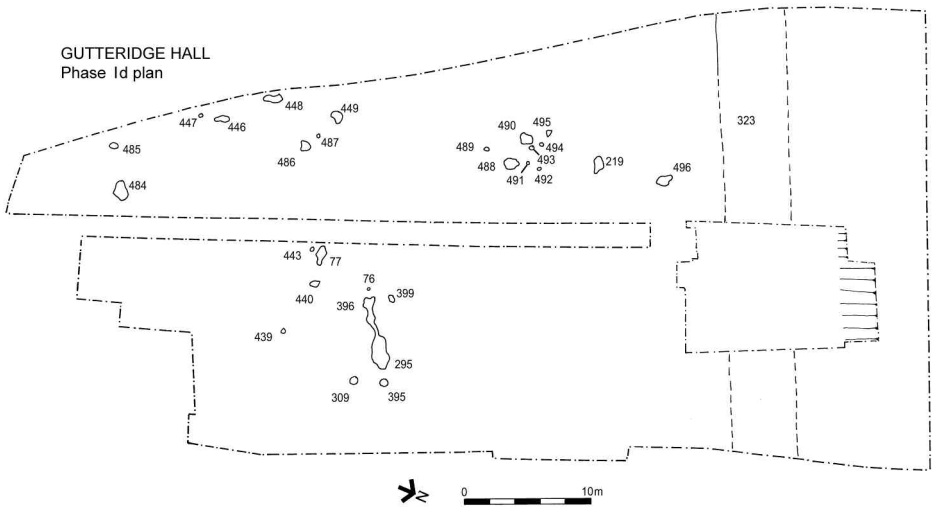

Fig. 6 Clacton to Weeley by-pass. Gutteridge Hall; plan of Phase Id features

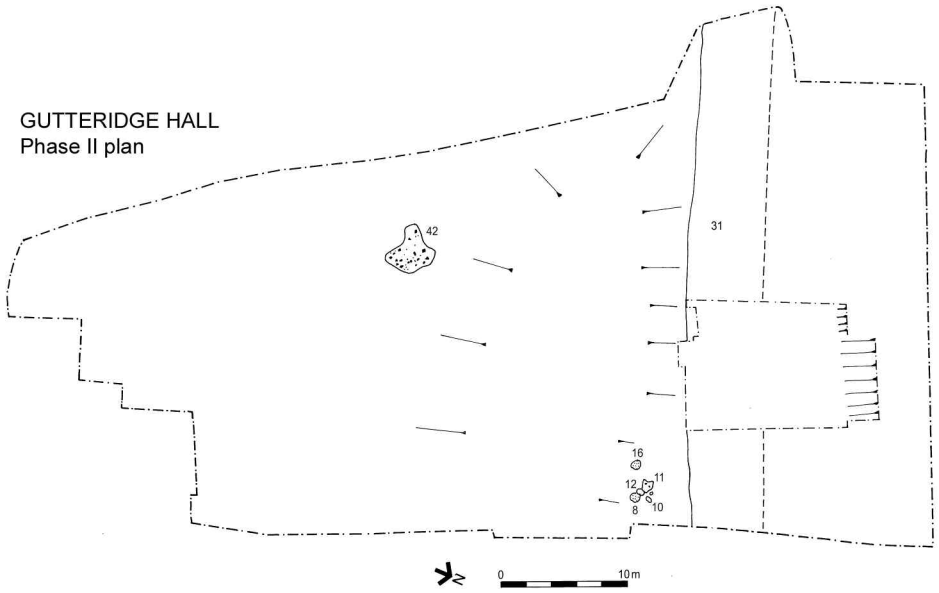

Fig. 7 Clacton to Weeley by-pass. Gutteridge Hall; plan of Phase II features

material. Tile and pottery ranging in date from the late 12th to the 13th century were found throughout layer 1.

An irregular concentration of tile fragments (42) measuring 4.2m by 4.1m was identified to the south of the earlier building; its purpose was not established.

Moat cut 323 was backfilled and recut as 31, slightly to the south of its original line. It has a U-shaped profile, 1.28m deep and 4.5m wide, though its true width was originally greater. Pottery dating from the 12th and 13th centuries was recovered from its fills.

Phase III (Fig. 8)

This is the earliest phase to which the latest moat recut (32) can be assigned, which crosses the site from east to west.

The earliest activity of Phase III is the deposition of a mixed layer of orangey brown clay (151) above layer 1 (see above). It varied in thickness between *c.* 0.13m and 0.18m.

At the southern end of the site, in the area of the Phase IV building, a group of pits and post-holes as well as a linear ditch were identified. Ditch (152) enters from the western limit of excavation and runs east for 20.8m before terminating.

Most of the other Phase III features were to the south of this ditch. Post-hole 158 is the most eastern of a line of six post-holes (the others are 171, 173, 178, 429, 444) which is 6.4m long and orientated east-west. Pottery recovered from the fill of 158 was dated to the late 15th to 16th century. Pottery dated to the 16th to 19th centuries was recovered from post-hole 171. Sixteen other post-holes or small pits were recorded in this area.

A large pit, 161 was located to the south of ditch 152`s butt end and parallel to it. Its relationship with 152 is unclear. To the west of this feature was 185, a pit with an irregular shape, measuring 1.15m across. This was cut on its eastern side by a smaller pit, 187, containing pottery dating to the late 15th to mid 16th century.

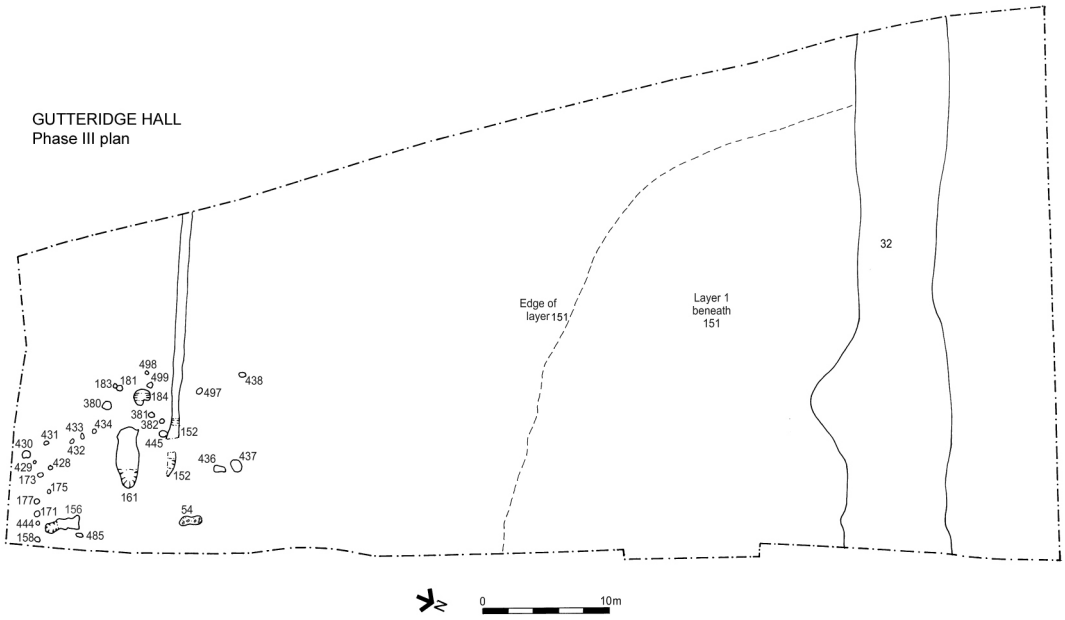

Fig. 8 Clacton to Weeley by-pass. Gutteridge Hall; plan of Phase III features

South-east of the butt end of 152 was a sub-rectangular pit (156), aligned roughly north-south. The uppermost fill contained pottery dated to the 16th century or later, some of which provided cross-fits with sherds from the fill of post-hole158.

Phase IV (Fig. 9)

The earliest activity of Phase IV was the deposition of a levelling layer (142) *c.* 0.25m thick, over the southern half of the site, sealing Phase III features. Upon this platform the remains of part of a substantial brick building with stone foundations were recorded.

The surviving ground plan of the building within the excavated area (Fig. 9) comprised two stretches of brick footing (119), forming an L shape, and two lengths of robbed wall footing (70), forming a separate L shape. To the west of 70 projected brickwork, comprising three stretches (115, 116 and 117) forming the base of a hearth and chimney. The outer two pieces (115 and 117) were L-shaped brick bases which faced towards each other symmetrically with a 1.34m gap between them at the rear and a 2.3m wide gap at the front where it opened into the building. The gap between the two pieces at the rear was partly filled by 116, a double row of bricks set on their edges forming a somewhat slender base for the back wall of the fireplace. These footings and robber trenches define a large chamber measuring 13m north to south and 10.5m east to west.

The surviving wall fabric is most intact at the north-eastern corner. The foundation consists of 0.25m of

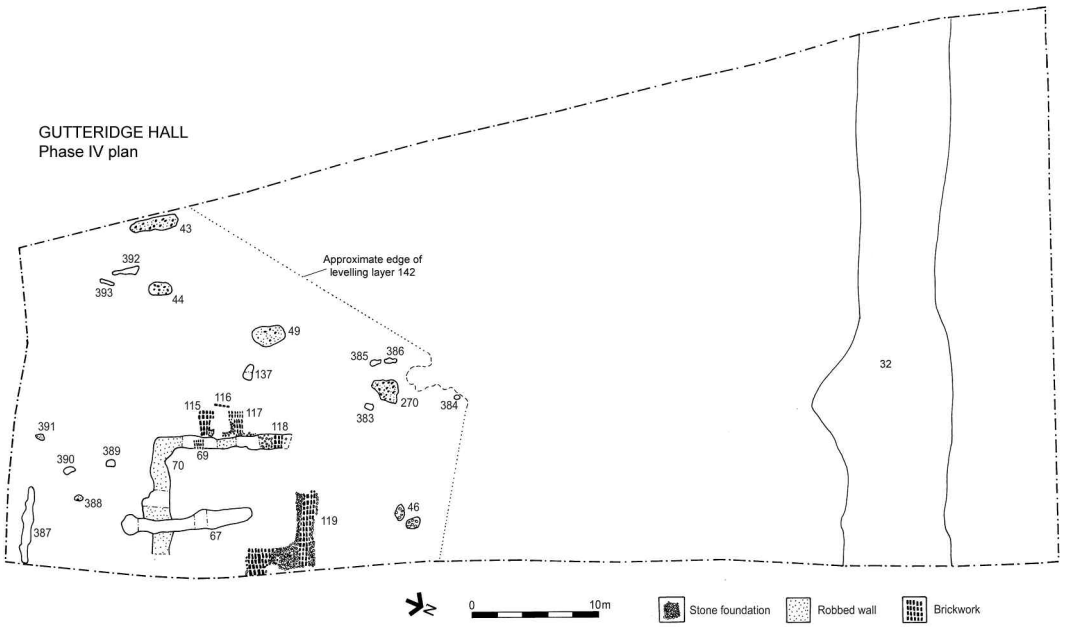

Fig. 9 Clacton to Weeley by-pass. Gutteridge Hall; plan of Phase IV features

jumbled stone fragments (many re-used) and capped with brickwork (119) which has been laid stretcher to stretcher. Crushed brick fragments fill voids in the brickwork, though these were probably derived from the destruction of the building.

Brickwork survived in only two places along the western side of the building, with 118 at the northern end of the wall, which sat upon a stone foundation (410) and a small block (69) measuring 0.8m by 0.8m which rested directly in the construction cut, without any foundation. The remainder of the walls had been robbed.

The southern wall (70) of the building was almost completely robbed. A large part of a Post-Medieval Red Earthenware bowl or pancheon was found sitting upright on the backfill near the hearth. It is possible that this represents a ritual deposit, and though unlikely, it is possible that it was disturbed by the robbing operation and subsequently reinstated. This type of vessel has a very long date range from *c.* 1560 to the 17th or 18th century. At the earliest end of this date range this vessel could be contemporary with the construction of the building or at the latest with its destruction and robbing.

Feature 67 was a linear feature orientated north-south and cut the southern wall robbing trench at a right angle. It contained four fills, the uppermost of which was a mid to dark brown clay containing oyster shell, tile, brick, charcoal fragments and mid 16th-century pottery. The purpose or function of this feature is not known and it may belong to Phase V.

Scattered around the building and cutting levelling layer 142 were sixteen other features which were mostly medium to large pits. Though not excavated, many could be seen to contain tile debris, deriving from the building's demolition.

To the south of the building and parallel to its southern wall was another linear feature (387), which may provide evidence for a less substantial structure, most of which lies beyond the southern limit of excavation.

Phase V (Fig. 10)

Phase V activity begins with the deposition of at least one layer of brown clay (407) up to 0.22m thick across the southern half of the site, sealing the features of Phase IV.

The northern extent of layer 407 is delineated by ditch 149 which crosses the site from east to west. Its fill contained flecks of tile, brick and charcoal with fragments of glass and later 18th-century pottery.

Upon this platform two buildings (one a long shed or barn, the other perhaps a dwelling) were constructed, the brickwork of which has been dated to the late 18th-19th century. The most substantial remains were associated with the more easterly of the pair (59). They consisted of a right-angled corner of solid brickwork measuring 5.5m long on each side and 0.8m wide. The foundation was two brick courses high, though parts of a third course were apparent. The bottom course was only exposed on the western building wall where it projected out an additional 0.2m (overall width 1.0m). All the brickwork was heavily mortared, particularly on the upper surface where it badly obscured the brickwork. The outside face of the brickwork was partly covered by a mix of mortar and broken brick fragments, probably the fill of the construction trench. Where it was possible to observe, the bricks in the wall were laid side by side with their heads to the outside.

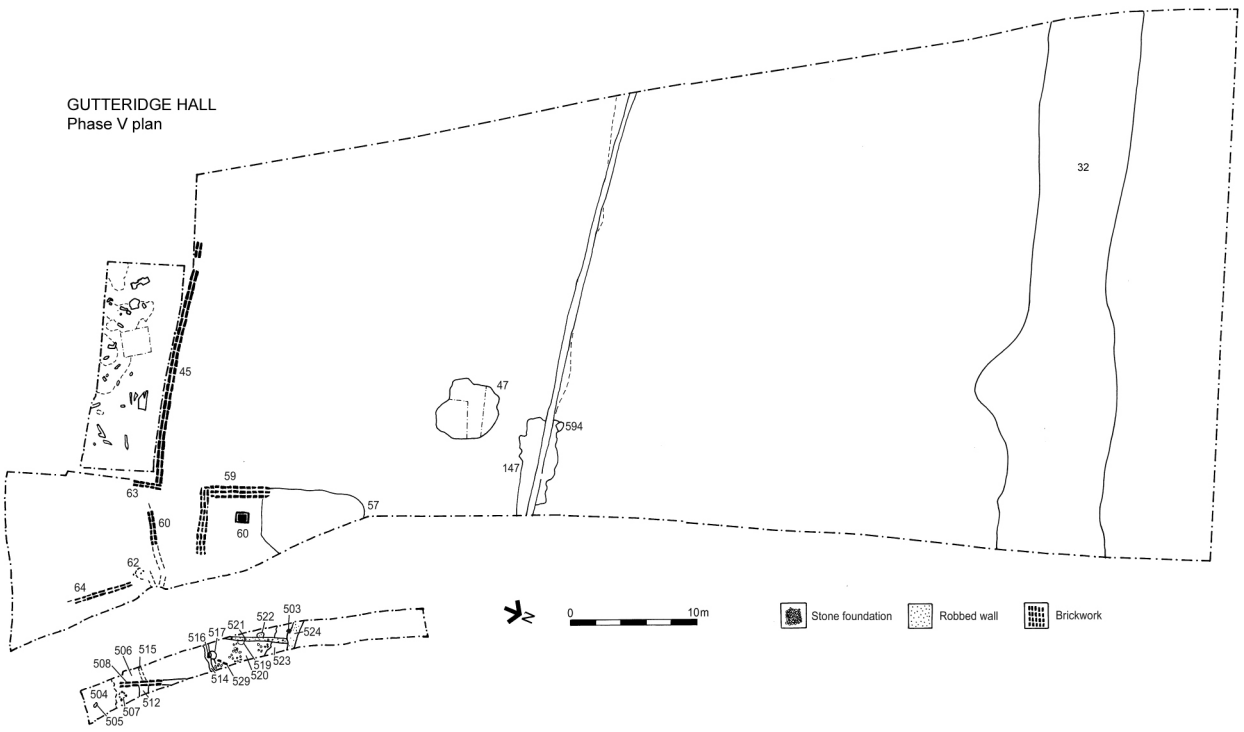

Fig. 10 Clacton to Weeley by-pass. Gutteridge Hall; plan of Phase V features

Inside the corner of the building was a square brick pad (60) measuring 0.7m by 0.76m. Four courses of bricks were visible. The square was edged by a course of bricks laid end to end and the hollow centre infilled with broken bricks and mortar. Two fragments of broken wood planking were noted `inside` the building (by the brick pad, 60). Both pieces were orientated east-west, respecting the walls of the structure, and are interpreted as the remains of an internal floor. The adjoining walls, which would have been found to the north and east of the corner (59), had both been robbed away, and only the robbing cut of the northern corner (57) was identifiable.

Two robbing cuts (47 and 57) were identified containing identical fills. Cut 57 was sub-rectangular and removed the northern half of wall foundation 59, including the north-western corner. It was not excavated though it was observed during subsequent machine stripping that the cut was of sufficient depth to disturb the already partly robbed foundations of the Phase IV early post-medieval building beneath. This discovery may have been responsible for prompting further exploration which resulted in robbing cut 47. The cut succeeded in removing the brick and stone which formed the north-western corner of the Phase IV building. Finds from the fill of the robbing cut date this intrusion as Victorian or 20th century. These include fragments of ironstone pottery with moulded decoration and flowerpot.

The second structure (45) was located at the southern end of the site with its axis orientated east to west. The alignment of this structure respects that of building 59, ditch 149 and the northern moat (probably cut 320). The remains consisted of two brickwork foundation fragments forming an L-shaped wall 20m long by 2.2m (the shorter length of wall at the eastern end) and 0.5m thick. The area enclosed by this building was full of modern debris (bricks, concrete, wooden doors, iron pipes etc.) dumped when the building was demolished. Below this were internal floor levels which had accumulated during the life of the building.

South of foundation 59 and east of building 45 were the remains of an arched brick culvert (61), which entered the excavation area from the eastern limit of excavation and separated into two arms. The larger arm ran towards building 45; the shorter branch terminated in an incomplete circular brick structure (62), probably a drain, with a diameter of 1.0m.

To the south of these features was a length of a smaller brick drain (64) orientated north-east to south-west, possibly running to join with the circular drain (62), though this relationship was lost. The smaller drain was less elaborate than the culvert and its construction consisted of a base of bricks laid side by side with bricks on edge forming the sides. It was capped by bricks laid as those of its base.

The works access road

Recording work on the works access road to the east found structural features associated with buildings from this phase. These include the remains of a possible robbed wall (524) running east to west, a rubble filled gully (521) which cuts a line of post-holes (517, 521 and 522) and a brick drain (similar to 64 in this phase) on a north to south alignment. Other features were noted but a lack of adequate resources (time and people) precluded any further investigation of what was clearly late post-medieval building debris.

Phase VI

The features recorded were recent and mainly related to the clearance of farm buildings from the southern end of the area.

The finds

The medieval pottery

H. Walker (report written 1997)

A total of 1587 sherds weighing 25.7kg was excavated. A large quantity of early to mid-13th century cooking-pots were found in association with the medieval building, and there appears to have been activity in the earlier 14th century. Fine wares comprise Hedingham Ware, Colchester Ware and Saintonge Polychrome. A small amount of post-medieval and modern pottery is also present.

Method

The pottery has been recorded using Cunningham's classifications (Cunningham 1985a, 1–16) and her fabric numbers, vessel form and rim codes are quoted in this report. The cooking-pot rim codes are described by Drury who has developed a dating framework for the evolution of these rim types (Drury 1993, 81–4) and these have been used here for dating purposes. In addition, the Post-Medieval Red Earthenware forms have been compared to those from Moulsham Street, Chelmsford (Cunningham 1985a and b). The pottery has been written up in phase order, and the fabrics present in each phase are summarised by means of tables giving sherd count and the total weight of pottery within each context (Tables 1–6). Tables for Phases Ia, V and VI were omitted because they produced only very small quantities of pottery. The terms used for the fabric descriptions follow the same system described by Orton (1978). All percentages quoted are calculated by sherd count.

The Fabrics

Fabric 12B Shell-And-Sand-Tempered ware:

(4% of total)

This is described by Drury (1993, 78). All sherds found are part of the same vessel, cooking-pot No. 6 in Phase Ib. This cooking-pot is tempered with moderate coarse rounded grey, colourless and occasionally rose or amber sands, along with a smaller amount of finely divided shell which has leached out in places. This tempering could be beach sand. A lack of throwing lines and the presence of horizontal breaks, with a very distinct break about 1cm above the basal angle, indicate the vessel was coil-built. As the vessel walls are quite even, albeit rather thick, it was probably made on a turntable.

At Rivenhall, this ware is dated ?early 11th century to second half of the 12th century (Drury 1993, 80). However, in other areas, shelly wares continue well into the 13th century. For example, at Hadleigh Castle (near Southend), groups of shell-tempered wares were found relating to the building of the phase III castle wall, which dates to the second half of the 13th century (Drewett 1975, 119–23). While at North Shoebury, also near Southend, several shell-tempered ware cooking-pots with early to mid 13th-century type rims (sub-form H2) were found (Walker 1995, e.g. nos 30–38). Near coastal sites, shelly wares may have enjoyed an extended life because of the close source of tempering agent, but 13th-century shelly ware also occurs inland, as at King John's Hunting Lodge, Writtle, near Chelmsford, where they were current in the earlier 13th century (Rahtz 1969, 106). Therefore the extreme date range for this ware is likely to be ?11th to 13th century.

Fabric 12C Sand-And-Superficial-Shell-Tempered ware: (<0.5% of total)
Described by Drury (1993, 78), dating as for Fabric 12B. Only two body sherds were found, both from Phase Ib.

Fabric 13 Early Medieval Ware: (46.5% of total)
Described by Drury (1993, 80), the main tempering agent for this ware is abundant coarse sands. It is low-fired, coil-built and typically has red-brown surfaces with a grey core. Drury dates it to the ?early 11th to *c.*1200, but excavations at Stansted show Early Medieval Wares in association with fine wares dating to the early to mid-13th century (Walker 2004), so perhaps a date of ?early 11th to earlier 13th century is more likely. Early Medieval Ware belonging to the earlier end of this date range was fired in bonfires or clamps, but Early Medieval Ware belonging to the second half of the 12th century to the earlier 13th was more likely to have been fired in proper kilns, as at Middleborough in Colchester (Cunningham 1984, 186–9).

This is by far the commonest fabric, present from Phase Ia but probably residual after Phase Ib. With one or two exceptions, all the Fabric 13 found is very similar and could be from the same source. Its colour is orange-brown with thick grey-brown cores, although reduced examples occur, while others have buff surfaces, or are fired to a bright orange with blue-grey cores. It is tempered with abundant coarse white, colourless and grey sands, sparse pale yellow and rose sands and very occasional crushed flint, chalk and carbonised material. The main form present in Fabric 13 is the cooking-pot, and rim forms comprise; thumbed beaded rims with internal thickening (rim-form C3) (No. 19), although most have squared sloping tops above an upright neck (rim-form H2) (Fig. 11, Nos 7, 8; Fig. 12, No. 21; Fig. 13, Nos 28 and 32), the rims of Nos 28 and 32 are also thumbed. In addition, one thumbed bowl rim is present (Fig. 12, No. 20). Decoration: apart from the thumbed rims, decoration comprises thumbed applied strips on cooking-pots (Nos 9 and 28) and continuously thumbed bases (Fig. 11, No. 10). In addition, one sherd shows incised wavy line decoration (in context 13). As with the Fabric 12B cooking-pot No. 6 (Fig. 11), the vessels appear to be coil-built on a turntable.

The Early Medieval Ware found here is very similar in appearance and fabric to that found at Stansted (Walker 2004). The only difference is that at Stansted, the H2 rim type is absent. These two groups, however, are unlikely to be from the same source, as coarse wares do not normally travel far, and Stansted is 58 km distant.

Fabric 13B Early Medieval Ware – later types: (13% of total)
This differs from Fabric 13 in that less sand tempering was used (frequency – moderate) and the sand is usually finer (size – medium or coarse). As most examples have red-brown surfaces and grey cores they are still classified as Early Medieval Ware, rather than grey-firing Fabric 20. It can easily be distinguished from Fabric 13 by its smoother surfaces. The colours of the sands are the same as Fabric 13; mainly white, grey and colourless with occasional pale yellow and rose coloured sands.

It is present from Phase Ib but is probably residual in later phases. Forms comprise cooking-pots, of which the H2 type rim is the most frequent (Fig. 12, No. 11; Fig. 12, No. 14), although there is also an example of rim form B4 'developed rims with pointed ends and internal thickening or beading' (Fig. 12, No. 13) and type H1 with a short upright neck and flat top (Fig. 11, No. 12). (The dating of these rim types is discussed in 'Phase Ib'.) Beaded and thumbed rims in this fabric are absent. The only other form present is the ?neck of a jug found in hearth context 25 in Phase Ib. Decoration: cooking-pot No. 14 (Fig. 12) shows a row of dimples around the neck, the significance of this is also discussed in Phase Ib. In addition, a fragment from the body of a vessel shows a row of thumb marks around the girth, but it is not possible to tell whether this is intended as decoration.

Fabric 13t Early Medieval Ware – transitional: (<0.5% of total)
This is a buff-brown to red fabric sometimes with a grey core and darker surfaces. Vessels are often thick-walled. The matrix is fine and there is a tempering of predominantly grey, white and colourless sands. Only two sherds were found, both from part of a flanged-rim bowl (Fig. 13, No. 29). The possible origins of this fabric are discussed in Phase II.

Fabric 20 Medieval Coarse Ware: (24% of total)
A mainly grey-firing sand-tempered fabric dating from the 12th to 14th centuries made at various production centres throughout the county. It can be either coil-built or wheel-thrown. The Medieval Coarse Ware found at Gutteridge Hall is tempered with moderate, medium, grey, white and colourless sands and sparse iron oxides. In common with the early medieval wares, sparse pale yellow and rose coloured sands are also present in some sherds, along with very occasional chalk flecks, crushed flint and carbonised material. The nearest known source of Medieval Coarse Ware is at the kilns at Mile End and Great Horkesley to the north of Colchester and *c.* 16 km from Gutteridge Hall. The pottery excavated from these production sites comprises misfired wasters and therefore, normally fired sherds would be difficult to identify when they occur at consumer sites (John Cotter pers. comm.). However, some of the pottery from these kilns has been published (Drury and Petchey 1975, 33–61) enabling the vessel forms to be compared.

White, colourless and grey sands with sparse iron oxides are also characteristic of Hedingham Coarse Ware products, although nearly all examples found at Gutteridge Hall lack the fine matrix typical of Hedingham Coarse Ware, and as the industry is *c.* 38km away in the north of the county, this would be a long distance for a coarse ware to be traded. It was decided therefore, not to sub-divide the Medieval Coarse Ware. There appears to be no difference in fabric between Medieval Coarse Ware found in Phase Ib and that found in Phase Ic.

At Gutteridge Hall, Medieval Coarse Ware is current in Phases Ib and Ic. Forms comprise cooking-pots; with H2 rims (Nos 3,15–17); with horizontal or everted flanged rims, sub-forms E5A/E1 (Fig. 13, Nos 23, 25, 31) and one example of a curved everted or cavetto rim (Fig. 14, No. 37). In addition, the sagging base from a cooking-pot is illustrated (Fig. 13, No. 26). Fragments from a ?curfew (Fig. 11, No. 2), jugs (Fig. 11, No. 5 and Fig. 12, No. 18) and an unidentified vessel (Fig. 13, No. 30) were also found. Decoration comprises thumbed applied strips as on ?curfew No. 2 and cooking-pot No. 25 (Fig. 13), with oblique thumbed applied strips on the body of ?cooking-pot (Fig. 13, No. 27). Jug No.18 (Fig. 12) exhibits incised decoration, and jug handle No. 5 shows thumbed and stabbed decoration.

Fabric 21 Sandy Orange Ware: (6% of total)
Described by Cunningham (1982, 359), Sandy Orange Ware includes any locally-made sand-tempered oxidised fabric with a date range of 13th to 16th centuries. For a discussion of late-medieval Sandy Orange Ware see Cunningham (1985a, 1). At Gutteridge Hall, this ware first appears in Phase Ib but is probably intrusive. Medieval forms comprise jug (No. 1) and decorated pipkin handle (No. 38). A late-medieval grooved handle from a jug or a cistern was found in Phase II, with two more late medieval jug rims and a possible cistern rim found unstratified. Only medieval examples are decorated, consisting of a sherd with a thumbed applied strip under a green glaze in Phase Ic, and a slip-painted sherd with a plain lead glaze in Phase III. Pipkin handle No.38 (Fig. 14) shows impressed decoration.

Fabric 21A Colchester Ware: (0.5% of total)
This is a variant of Sandy Orange Ware produced in the Colchester area between the late-13th and mid-16th centuries and is described by Cunningham (1982, 365–7), Drury (1993, 89–90) and Cunningham and Cotter (1988). It is distinguishable from other Sandy Orange Ware by its heavy tempering of white quartz sands. Typical surface treatments include cream slip-coating under a mottled-green glaze in the later 13th and 14th centuries, and cream slip-painted decoration, usually unglazed, in the 15th and 16th centuries. The location of the production centres is unknown but one centre may be at Great Horkesley where Medieval Coarse Ware was made. Fifteenth-century wasters have also been found at Magdalen Street, Colchester, just outside the town wall (Cunningham and Cotter 1988). At Gutteridge Hall, Colchester Ware is current in Phases Ic and III. Forms comprise a slip-coated green glazed bowl (Fig. 13, No. 24) and two similarly treated jug handles. Other sherds found are plain, without slip or glaze.

Fabric 22 Hedingham Fine Ware: (0.5% of total)
As described by Drury (1993, 86–89), it has a fine micaceous fabric, usually creamy-orange or buff in colour and normally without a reduced core. The main vessel produced is the jug, usually highly decorated and with a mottled-green glaze, although examples with a plain lead glaze are not uncommon. It was made at several production sites centred around Sible Hedingham in north Essex and has a wide distribution. Nearby find spots include Colchester, Harwich and North Shoebury. In Essex, it seems to be commonest from the later 12th to earlier 13th centuries, but excavations at Denny Abbey (Cambs) show Hedingham Fine Ware in securely stratified groups dating from the second half of the 12th century to the first half of the 14th (Coppack 1980, 223–47).

At Gutteridge Hall only body sherds of Hedingham Fine Ware were found, all appear to be from jugs. One fragment in Phase Ib shows possible Rouen-style decoration and has been illustrated (Fig. 11, No.4). Two further sherds are residual in later phases including one showing a vertical applied strip, a typical method of Hedingham Ware decoration. A sherd was found in unphased ?hearth, context 502.

Fabric 27 Saintonge Polychrome: (<0.5% of total)
Saintonge Polychrome comes from south-west France where quality jugs were produced for export to Britain in association with the Gascon wine trade. It has been found on many coastal sites and ports in England and Wales but polychrome jugs are less common at North-Sea ports (Jennings 1981, 34). The fabric is hard and smooth varying in colour from white to pale buff or pale pink and often contains mica and sparse red iron oxide inclusions. The polychrome jugs are decorated with large, fairly simple but exuberant motifs outlined in manganese brown and coloured-in with copper-green and less often yellow or iron-red, under a clear glaze. Trade in Saintonge Polychrome has been discussed by Dunning (1968, 45–7) who gives it the narrow date band of *c.*1280 – *c.*1310 for importation into Britain. Subsequent studies bear this out (Platt and Coleman-Smith 1975, 26; Hurst *et al.* 1986, 83; Allan 1983, 200). One exception however, is London, where Saintonge Polychrome is still present in the mid-14th century (Vince 1985, 59). Another complication in dating this ware is that such attractive and unusual vessels may have been curated, and retained for a long period of time before finally being discarded. It seems safe to conclude however that the bulk of Saintonge Polychrome dates to *c.*1300. At Gutteridge Hall, one sherd was found in Phase Ic (Fig. 13, No. 22) with two similar sherds in Phase II.

Fabric 40 Post-Medieval Red Earthenware (PMRE): (3.5% of total)
This is described by Cunningham (1985a, 1–2) and is a very common component of post-medieval assemblages dating from the 16th to 18th centuries, and persists into the 19th. It was made at several centres in the county including Harlow, Loughton and Stock. Probably the nearest source of 18th century PMRE is at Thorpe le Soken, 4.5 km east of Gutteridge Hall, where a Thomas Glide was making 'good quality leaded earthenware' from 1750–7 (Cotter 2000, 368–9). PMRE is only present in small quantities; it first occurs in Phase Ib where it is intrusive and is current from Phase III. Forms comprise fragments from glazed tygs or mugs, two small bowls (Fig. 13, Nos 33–34), a large bowl or pancheon (Fig. 14, No. 35) and a jug handle. Two storage jar rims were found unstratified.

Fabric 45C Raeren Stoneware: (<0.5% of total)
A German stoneware, described by Hurst *et al.* (1986, 194–208) and imported from the later 15th to 17th centuries. Raeren Stoneware occurs in Phases III and IV, where forms comprise fragments from squat, bulbous drinking jugs of the late 15th to mid-16th century.

Fabric 45D Frechen Stoneware: (<0.5% of total)
A German stoneware, described by Hurst *et al.* (1986, 214–221) and imported from the mid-16th to late 17th centuries. This was only found stratified in Phase IV and includes the base of a jug. The rim of a 17th-century bellarmine was found in unstratified context WB2 501.

Fabric 45F Westerwald Stoneware: (<0.1% of total)
Described by Hurst *et al.* (1986, 221–5), this is a distinctive grey stoneware decorated with cobalt-blue, and imported from the early 17th and into the 18th centuries. Only one sherd was recovered, the rim of a jug found unstratified.

Fabric 46A English Tin-Glazed Earthenware: (<0.5% of total)
Tin-glazed earthenware has a buff earthenware body covered with a tin-opacified lead glaze which is normally off-white or pale blue. Designs are painted on in blue and other colours while the glaze is still wet. English Tin-Glazed Earthenware was manufactured principally in the 17th and 18th centuries. Here it occurred only in Phase IV, forms comprise a shallow dish (Fig. 14, No. 36).

Fabric 46A/C Anglo/Netherlands Tin-Glazed Earthenware: (<0.1% of total)
It can be difficult to distinguish some English Tin-Glazed Earthenwares from Netherlands products and such sherds have been designated as Fabric 46A/C and generally date to the 17th century. Here, only one sherd was found, it has a speckled manganese glaze and was intrusive in Phase Ib.

Fabric 48A Chinese Porcelain: (<0.1% of total)
This was imported mainly from the 17th to the end of the 18th century. Here, only one sherd was found, part of a red-painted saucer in Phase IV.

Fabric 48C Creamware: (<0.5% of total)
This is a lead-glazed cream-coloured earthenware, manufactured from the mid-18th to early 19th century by Wedgwood and others. Creamware was found in Phase IV, and finds include a plain tea-plate.

Fabric 48D Ironstone: (<0.5% of total)
This is a robust, chunky fabric first manufactured in 1805 and patented by C.J. Mason in 1813. Two decorated sherds were found in Phase V and are described in the text.

Fabric 51B Modern flowerpots: (<0.5% of total)
Two sherds were found in Phase V.

Pottery from Phase Ia
Only one context, 342, the primary fill of moat branch 278 produced pottery. It comprises two joining sherds of Early Medieval Ware (Fabric 13) showing a thumbed, applied strip (wt 31g). Sherds from the same vessel occur in Phase Ib context 296, a later fill of the same moat branch.

Pottery from Phase Ib (Figs 11 and 12)
A total of 1045 sherds weighing 14.8kg came from Phase Ib features, summarised in Table 1.

Pottery from the moat

Layer 21, possibly the moat platform, which lay below all other moat features, produced sherds of Early Medieval Ware including fragments from a Fabric 13B base showing internal sooting. Fragments from the same vessel occur in ditch/gully fill 13, and it may therefore be intrusive here. Context 296, a fill of moat branch 278 contained an Early Medieval Ware sagging base sherd and a fragment showing a thumbed applied strip, again, sherds from the same vessel occur in ditch/gully fill 13.

Context 279, unstratified finds from moat branch 278, produced Early Medieval Wares and Medieval Coarse Ware. Forms comprise a Fabric 13 cooking-pot rim of the same shape as No. 7 in context 13. Also noteworthy is a fragment from the body of a Fabric 13B vessel showing a row of lightly impressed thumb marks around the girth; these may be for decoration but are rather faint.

Contexts 256 and 241, fills of moat cut 244, were cut by Phase Ic pit 219 and this is reflected in their fills. Part of a Sandy Orange Ware jug was found in fill 256 (No.1), which cross-fits with sherds from fill 249 in pit 219. Also in fill 256 is a possible curfew fragment in Medieval

Fill No.	Feature/ Context	Relationship and cross-fits	Fabric									Wt (g)
			12B	12C	13	13B	20	21	22	40	46A/C	
21	?moat platform	below all moat features, same in 13	-	-	2	20	-	-	-	-	-	232
296	moat br. 278	above 342, same in 13	-	-	5	-	-	-	-	-	-	156
279	moat br. 278	U/S finds from seg. 279, same in 13	-	-	9	7	20	-	-	-	-	408
256	moat br. 244	below 241, fits 249 Ph.Ic	-	-	-	-	8	63	-	-	-	611
241	moat br. 244	cut by pit 219, same in 249 Ph.Ic	-	-	-	-	1	-	4	-	-	68
301	moat br. 244	above 241	-	-	1	1	2	-	-	-	-	96
24	habitation layer	part of med. building, fits 13	-	-	1	-	-	-	-	-	-	17
13	linear f. 200	assoc. med. bld. sealed by 1	40	2	359	62	158	-	-	-	-	9831 R
202	linear f. 201	assoc. med. bld., fits 13	18	-	29	3	4	-	-	-	-	895
2	feature	below 19, same in 13	-	-	-	15	-	-	-	-	-	116
19	linear f. 242/263	assoc. med. bld. sealed by 1, fits 13	1	-	123	11	22	-	-	2	1	1878
305	pit/P-H 304	part of med. building	-	-	5	-	-	-	-	-	-	33
25	hearth 245	part of med. building, same in 13	-	-	8	6	5	-	-	-	-	119
336	post-hole 335	part of med. bld. below 337	-	-	3	-	-	-	-	-	-	30
337	post-hole 335	part of med. bld. below 338	-	-	3	1	1	-	-	-	-	43
338	post-hole 335	part of med. building, same in 19	-	-	3	-	4	-	-	-	-	53
284	post-hole 280	part of med. building	-	-	11	-	-	-	-	-	-	203
312	cut 310	assoc. med. bld. sealed by 1	-	-	1	-	-	-	-	-	-	4

Abbreviations used in table: seg.= segment; br.= branch; med.= medieval; f.= feature; same in 13 = same vessel occurs in context 13; fits 249 = cross-fits with context 249; Ph.= phase; P-H = post-hole; bld.= building; R = Roman pottery present

Table 1 Quantification of pottery from Phase Ib by feature, fabric and sherd count

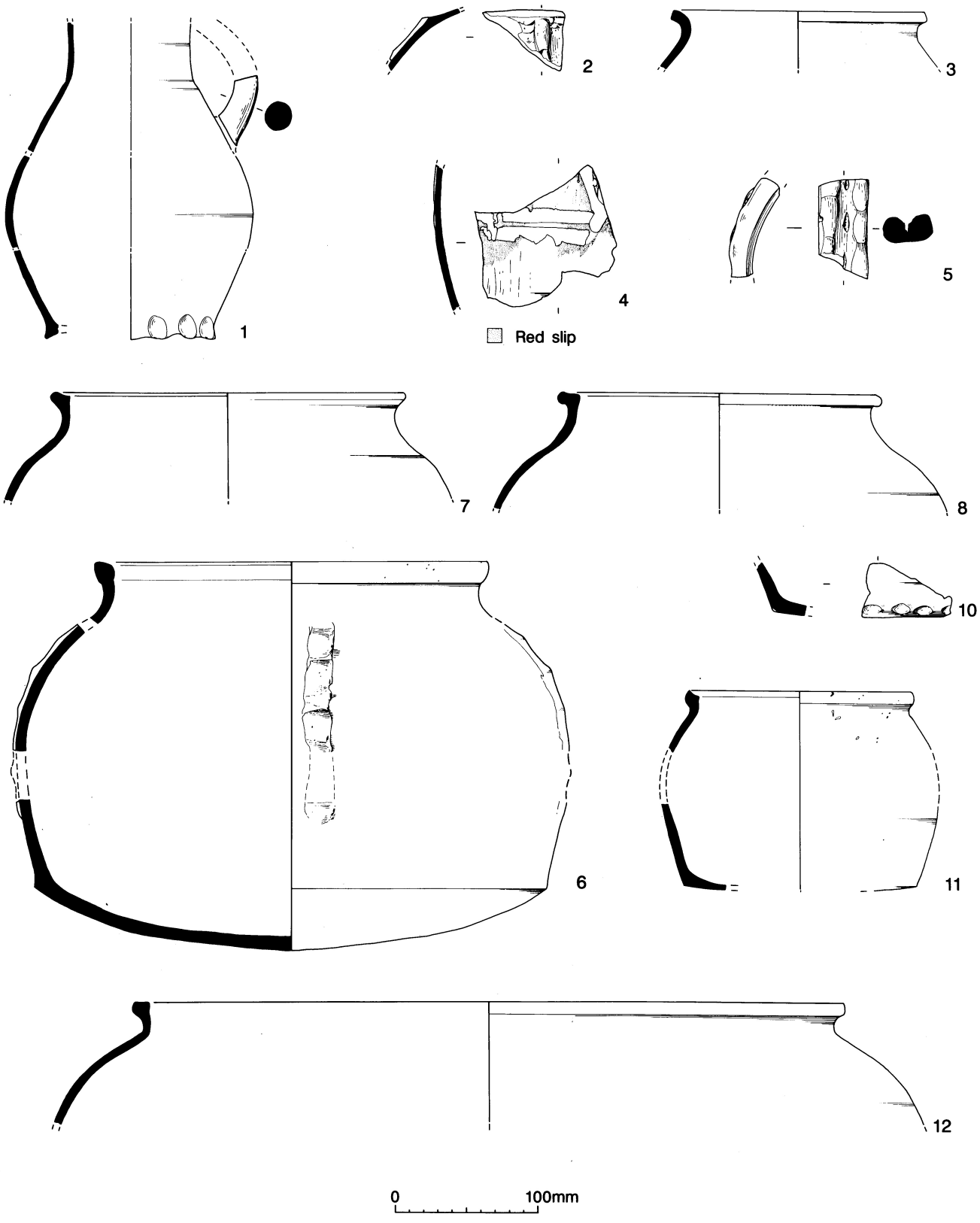

Fig. 11 Clacton to Weeley by-pass. Gutteridge Hall; medieval pottery

Coarse Ware (No. 2) and a Medieval Coarse Ware cooking-pot rim (Fig. 11, No. 3). Curfews resemble upturned bowls with handles on the bases, and were placed over the hearth at night to prevent flames escaping whilst keeping the hearth alight till morning. As in this case, they are commonly decorated with vertical and horizontal applied strips. Cooking-pot rim No. 3 is transitional between a cavetto rim and a squared rim with a sloping top. Both rim types are present at Mile End (cf. Drury and Petchey 1975, fig. 5 and fig. 6.22).

Context 241, the upper fill of moat branch 244, produced a sherd of Medieval Coarse Ware from the same vessel in context 249, a fill of Phase Ic pit 219, along with a fragment of Hedingham Fine Ware (Fig. 11, No. 4). This is the largest example of Hedingham Fine Ware found at Gutteridge Hall and is decorated with red slip-coating and applied strips, probably in imitation of Rouen White Ware jugs from northern France. This type of decoration is fairly common on Hedingham Ware (e.g. Walker 1988, fig.11.84) but is unlikely to be a direct copy of the

French ware. It is much more likely to be a copy of a London-type ware Rouen-style jug, manufactured during the early to mid-13th century (Pearce *et al.* 1985, 19). The tendency for Hedingham products to imitate London-type ware products has already been noted (Drury 1993, 86).

Stratified above, moat branch fill 301 produced sherds of Fabrics 13, 13B and Medieval Coarse Ware and cannot be demonstrated to be later than the preceding fills. Of interest is a Medieval Coarse Ware jug handle decorated with thumbing and stabbing (Fig. 11, No. 5). This has no parallel amongst the published Mile End material, although a variety of decorated jug handles were made there (Drury and Petchey 1975, fig.4.11–15).

1 Body of jug: Sandy Orange Ware; brittle fabric with reduced internal surface; partial plain splash glaze; thumbed base. Fill 256 (moat branch 244) and fill 249 (pit 219)
2 Possible curfew fragment: Medieval Coarse Ware; pale grey fabric with reddish margins; abraded; horizontal and vertical thumbed applied strips. Fill 256 (moat branch 244)
3 Cooking-pot rim: Medieval Coarse Ware; thick grey core, grey surfaces and darker grey margins; external surface ?fire-cracked; sooted under rim. Fill 256 (moat branch 244)
4 Fragment of jug: Hedingham Fine Ware; smooth creamy orange fabric with a reduced core in places; patches of red slip-coating over which strips of pale clay have been applied; one of the horizontal strips has a serrated edge indicating it was pressed on using a pallet knife; an applied slip pellet is also present; partial plain lead glaze; probably an example of Rouen-style decoration. Fill 241 (moat branch 244)
5 Jug handle: Medieval Coarse Ware; pale grey fabric with dull orange margins; abraded; thumbed along the edges and deeply stabbed along the centre. Fill 301 (moat cut 244)

Pottery from the medieval building and associated features

Habitation layer 24 is stratigraphically the earliest in this group, but contained only a single sherd of Fabric 13, which joined a sherd in context 13, the fill of ditch/gully 200. By far the greatest amount of pottery from this phase was excavated from context 13 which shows many cross-fits between other features belonging to the medieval building and therefore merits it own sub-heading.

Fill 13 (ditch/gully 200)

A total of 621 sherds weighing nearly 10kg was excavated. No fine wares are present and the group consists of various early medieval and Medieval Coarse Wares, mainly cooking-pots. Sherd size averages 16g and several nearly complete or semi-complete profiles are present. The total eves is 263% and all the rim forms present have been illustrated:

6 Cooking-pot: Shell-And-Sand-Tempered ware (Fabric 12B); mainly light grey but with patches of darker grey and red-brown on the external surface; thumbed applied strips; quite heavily sooted around shoulder. Fill 13 (building slot/gully 200), fill 202 (ditch/gully 201) fill 19 (gully 242/263)
7 Cooking-pot: Early Medieval Ware (Fabric 13); thick brown core and red-brown surfaces; no evidence of use. Fill 13 (building slot/gully 200)
8 Cooking-pot: Early Medieval Ware (Fabric 13); brown core, red-brown external surface and buff internal surface; traces of fire-blackening on shoulder. Fill 13 (building slot/gully 200)
9 Cooking-pot: Early Medieval Ware (Fabric 13); yellowy grey but with mottled red-brown, brown-grey and dark grey external surface; vertical thumbed applied strips; patches of fire-blackening and sooting externally. Fill 202 (ditch/gully 201), fill 13 (building slot/gully 200) and layer 1
10 Continuously thumbed base: Early Medieval Ware (Fabric 13); brown core, pale brown internal surface and red-brown external surface; deposit of sooting and fire-blackening on the underside of the base ending in a distinct line about 5mm above the basal angle. Fill 13 (building slot/gully 200)
11 Small cooking-pot: Fabric 13B; grey core, brown margins, brown internal surface and brown-grey external surface; smooth texture; horizontal drag marks near base indicate knife-trimming; patches of fire-blackening externally. Fill 13 (building slot/gully 200)
12 Cooking-pot: Fabric 13B; brown-grey core; red-brown margins and surfaces; fire-blackening on body. Fill 13 (building slot/gully 200)
13 Cooking-pot: Fabric 13B; pale brown-grey core, brown-orange margins and pale brown-orange surfaces; no evidence of use. Fill 13 (building slot/gully 200) and layer 1
14 Cooking-pot: Fabric 13B; thick pale grey core and bright creamy orange surfaces; slight indentations below the neck made with thumb or finger; no traces of use. Fill 13 (building slot/gully 200)
15 Cooking-pot: Medieval Coarse Ware; thick grey-brown core, buff margins and surfaces; no traces of use. Fill 13 (building slot/gully 200)
16 Cooking-pot: Medieval Coarse Ware; uniform pale grey, brittle, abraded fabric; horizontal break lines near base indicate coil-building; patches of fire-blackening externally. Fill 13 (building slot/gully 200) and fill 19 (gully 242/263)
17 Cooking-pot: Medieval Coarse Ware; estimated 70% complete; grey to buff surface colour with an elliptical patch of pale grey probably due to firing conditions; buff cores or margins in places; hard; sooting on one side of cooking-pot only, extending from about 2cm above the basal angle up to the shoulder; 'runs' through the sooting suggest that a liquid has flowed down the side and removed the soot; patch of sooting on the underside of the base; internal horizontal striations on the inside of the shoulder; coil-built. Fill 13 (building slot/gully 200) and layer 1
18 Jug rim: Medieval Coarse Ware; pale grey core and surfaces; orange margins; crudely executed slashed decoration on rim and neck; beginnings of a spout. Fill 13 (building slot/ gully 200)

Not illustrated: a sherd of Fabric 13 showing a horizontal incised wavy line, and a substantial part of the base from a Roman pottery vessel.

Fill 202 (ditch/gully 201) and fill 19 (ditch/gully 242/263)

These two contexts also produced fairly large groups of pottery. Linear feature 201, which contained 202, is thought to be a continuation of Feature 200 and the large numbers of cross-fits between their two fills (contexts 13 and 202), seven in all, would seem to confirm this. Cross-fits were also noted between fill 202 and fill 19, and between context 123 in Phase IV. Forms in fill 202 comprise the rim from cooking-pot (No. 9), an Early Medieval Ware, (Fabric 13), cooking-pot with a thumbed rim, beaded rim (No.19) and a bowl in the same fabric, also with a thumbed rim (Fig. 12, No. 20).

Pottery similar to that from fill 13 was found in context 19, the fill of another linear feature on the other side of the medieval building. Four cross-fits were noted between context 19 and context 13. There are also cross-fits between moat fill context 338 in this phase, between layer 1 in Phase II and context 123 in Phase IV. Forms found in fill 19 comprise a sherd from shelly cooking-pot No. 6 (Fig 11); an Early Medieval Ware cooking-pot rim (of Fabric 13) similar to No. 7 (Fig. 11); Medieval Coarse Ware cooking-pot rims similar to Nos 15 and 17 (Fig. 12); sherds from Medieval Coarse Ware cooking-pot No. 16; a thumbed, beaded Early Medieval Ware cooking-pot rim similar to No. 19 (Fig. 12) in fill 202, and an almost complete Early Medieval ware small cooking-pot (Fig. 12, No. 21).

Three intrusive sherds were present in fill 19, two sherds of PMRE and a sherd of Anglo/Netherlands tin-glazed earthenware with a speckled manganese glaze, perhaps dating to the 17th century.

Pottery from the remaining medieval building features

A number of features contained small amounts of pottery comprising Early Medieval Wares (Fabrics 13 and 13B) and Medieval Coarse Ware. All three fills of post-hole 335 contained pottery (Table 1). Medieval Coarse Ware and Fabric 13B were not present in the lowest fill (336) but this is not enough evidence to suggest that the fills were deposited at different times.

Forms present in these remaining features comprise two examples of Early Medieval Ware cooking-pot fragments with rims similar to No. 7. These were found in context 336, the lowest fill of post-hole 335, and

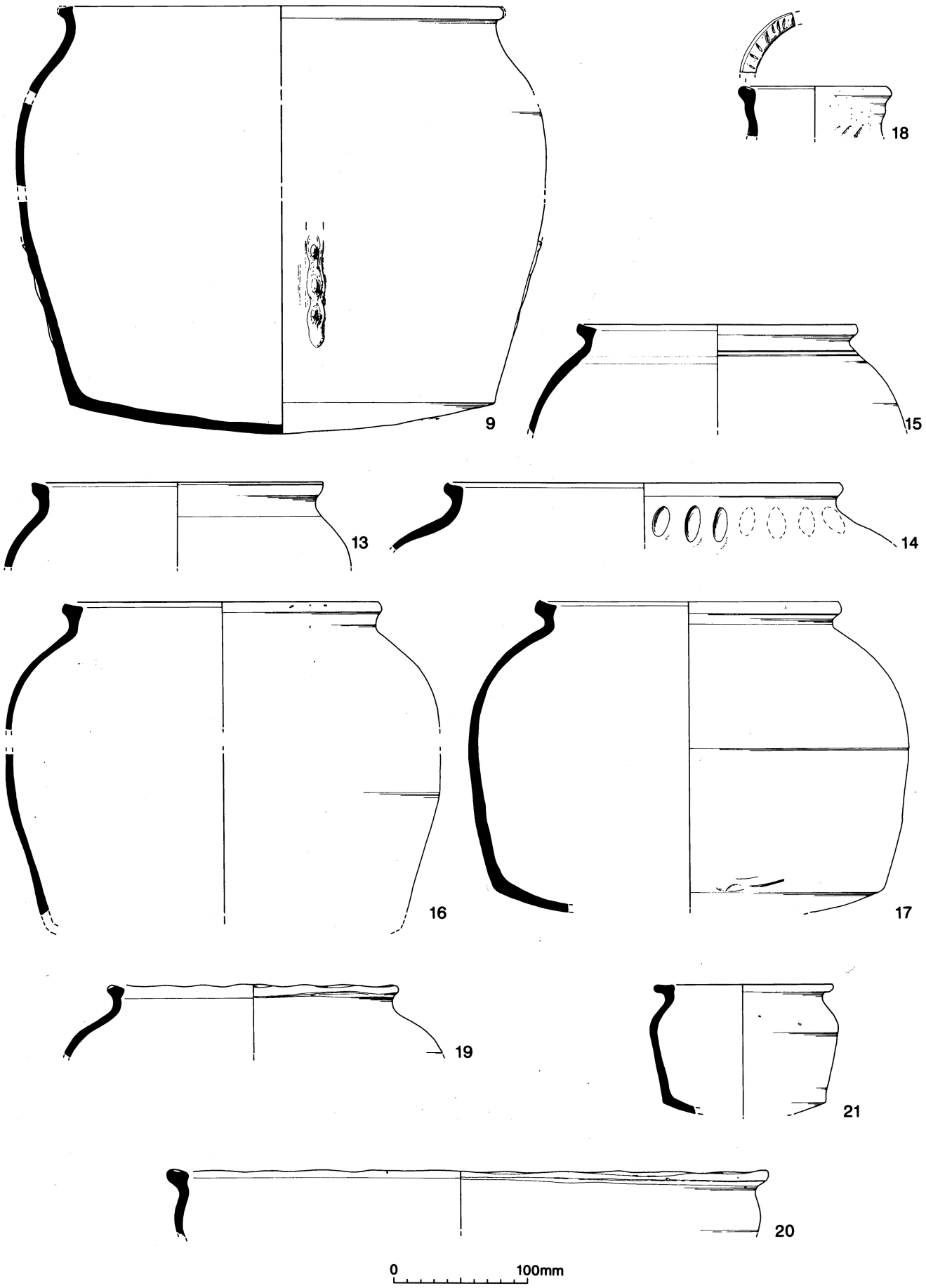

Fig. 12 Clacton to Weeley by-pass. Gutteridge Hall; medieval pottery

in adjacent hearth 245 (fill 25). They may be from the same vessel but did not join. Also found in the fill of the hearth was the neck of an Early Medieval Ware jug (Fabric 13B).

Catalogue of pottery from phase Ib other than from context 13

19 Cooking-pot rim: Early Medieval Ware (Fabric 13); thick brown-grey core, dull red-brown surfaces; thumbing on outside edge of rim; fire-blackened on shoulder and under rim. Fill 202 (ditch/gully 201)

20 Bowl rim: Early Medieval Ware (Fabric 13); thick red-brown core and patchy grey-brown surfaces; thumbed rim; no evidence of use. Fill 202 (ditch/gully 201)

21 Small cooking-pot: Early Medieval Ware (Fabric 13); pale grey with darker grey margins; pimply texture; sparse chalk inclusions towards the base; lumpy coil-built appearance; drag marks of surface inclusions at the base indicate knife-trimming; smoothed around neck using a thumb or finger; no traces of use. Fill 19 (gully 242/263)

Discussion of pottery from phase Ib

If the finds from fills 256 and 241 are discounted because they are contaminated with material from Phase Ic, and the clearly intrusive sherds from context 19 are also discounted, then phase Ib has a very limited range of fabrics. The shell-tempered wares (Fabrics 12B and 12C) occur only in contexts 13, 202 and 19, and of these, Fabric 12C is represented by only two sherds (a sagging base and the shoulder of a cooking-pot). The large numbers of Fabric 12B sherds all belong to cooking-pot No. 6 and therefore represent only one vessel. Fabric 13 is the most common fabric, followed by Medieval Coarse Ware and then Fabric 13B. No other fabrics are present.

The most complete vessels are those in Medieval Coarse Ware (e.g. Nos 16 and 17); this could mean that they were the latest vessels to be deposited, or they survived because they are of a more durable fabric. The former explanation is most likely as features that are stratigraphically earlier, i.e. habitation layer 24, feature 2 below context 19, and context 336, the lowest fill of post-hole 335, did not contain Medieval Coarse Ware.

The large numbers of cross-fits between features belonging to the medieval building indicate that the features were open at the same time and therefore contemporary. As there are also cross-fits between the moat fills and the medieval building features, this indicates that the moat fills are contemporary with the medieval building. As pottery was abundant in building slots/gullies 200, 201 and 242/263 it would suggest that these features were eaves-drip gullies, rather than building slots, and that rubbish had been thrown in to them.

The fact that the coarse wares occur in quantity indicates the building was a service area. The term cooking-pot is something of a misnomer because they were probably used as general purpose vessels, for storage and food preparation etc., and are almost always the commonest form on any medieval site. However, as several of the cooking-pots show signs of fire-blackening or sooting, consistent with being placed in or near a wood fire, it is probable they were used for cooking, perhaps on hearth 245. The cooking-pots present in Phase Ib, excluding those from contaminated moat fills 241 and 256, vary between 200 and 280mm in diameter, with two much smaller cooking-pot rims Nos 11 and 21 having diameters of 160mm and 130mm respectively. There is not enough data to show whether there is any relationship between rim-form and diameter, or between fabric type and diameter, although Medieval Coarse Ware cooking-pots have the narrowest range of 200 to 240mm diameter. About half the cooking-pots show signs of heating.

Decoration of cooking-pots is rather limited; applied strips occur only on two of the larger cooking-pots (Nos 6 and 9) and were probably used for strengthening the vessel as much as for decoration. The dimpling above the shoulder of cooking-pot No.14 (Fig. 12) is more unusual, but is commonly found in Suffolk and is present on Hedingham Coarse Ware cooking-pots (Hurst 1966, 92). This vessel however is not a Hedingham product.

The continuously thumbed base (No. 10) may be from a bowl, as such treatment is found on Early Medieval Ware bowls from Stansted (Walker 2004, 43). Only one bowl rim was found (Fig. 12, No. 20), as it has a fairly large diameter, of 460mm, it may be a mixing bowl. Large bowls were also used in dairying.

Three coarse ware jug fragments were found, one in an Early Medieval Ware (Fabric 13B) and two in Medieval Coarse Ware (Fig. 11, No. 5 and Fig. 12, No. 18). As these are coarse wares they would not have been used at table but would have been used for kitchen purposes such as storage and carrying of liquids, fetching water from the well for example.

This phase is difficult to date because there are only coarse wares. Typologically the earliest rim is the thumbed, beaded rim in linear ditch/gully 201 (No. 19), which is generally a 12th-century type, while cooking-pot No. 6 (Fig 11) has a B2 type rim and cooking-pot No. 13 (Fig. 12) has a B4 type rim, both datable to *c.*1200 (Drury 1993, 81). Nearly all the other cooking-pots possess squared rims with sloping tops (sub-form H2), a type generally datable to the early to mid 13th century (Drury 1993, 81), and there is one example of an H1 type rim (Fig. 11, No.12) which were produced throughout the 13th century (Drury 1993, 81). This gives a likely overall date range of the first half of the 13th century. One further piece of dating evidence comes from context 241, the fill of moat branch 244, although this fill was contaminated, it does not follow that all the material is intrusive and the Hedingham Fine Ware Rouen-style jug fragment (Fig. 11, No. 4) fits in well with the dating of the coarse wares. The curfew fragment from contaminated fill 256 (Fig. 11, No. 2) would also be consistent with a hearth environment and may actually belong to Phase Ib. In addition, the Sandy Orange Ware jug (Fig. 11, No. 1) has a rather primitive glaze and could easily be 13th century, although it is odd that none of these types occur elsewhere in Phase Ib.

Pottery from Phase Ic (Fig. 13, 22–27)

This small phase produced eighty-seven sherds weighing 2108g, all of which came from the fills of pit 219. Medieval Coarse Ware is dominant; Early Medieval Ware is still present although probably residual.

The primary fill of pit 219 (context 250) produced three joining sherds of Medieval Coarse Ware and a sherd of imported Saintonge Polychrome, which is illustrated (Fig. 13, No. 22) but is too fragmented to determine the design. As the sherd of Saintonge ware is from the primary fill, it is unlikely to be residual (Crummy and Terry, 1979, 53–5) and thus provides a *terminus post quem* of *c.*1300 or later for this phase and a *terminus ante quem* of *c.*1300 or earlier for Phase Ib (see fabrics section for dating). It is found on coastal sites but because of high transport costs and probably the lack of a distribution network, is rare inland. Where it does occur inland it is generally taken as an indicator of high status, for example at King John's Hunting Lodge, Writtle (Dunning 1969, 107–9).

Succeeding fill 249 produced sherds from Sandy Orange Ware jug No. 1 (illustrated in Phase Ib but could belong to this phase). This is

			Fabric					Wt (g)
Fill No	**Feature/Context**	**Relationship and cross-fits**	**13**	**20**	**21**	**21A**	**27**	
250	pit 219	above 301 in Phase Ib	-	3	-	-	1	74
249	pit 219	above 250, fits 241 and 256 in Phase Ib	-	23	8	-	-	557
221	pit 219	above 249	2	-	1	-	-	33
240	pit 219	= 273, above 221, fits 249	-	9	-	1	-	770
220	pit 219	above 273, same vessel in 240 and 249	3	32	3	1	-	674

Table 2 Quantification of pottery from Phase Ic by feature, fabric and sherd count

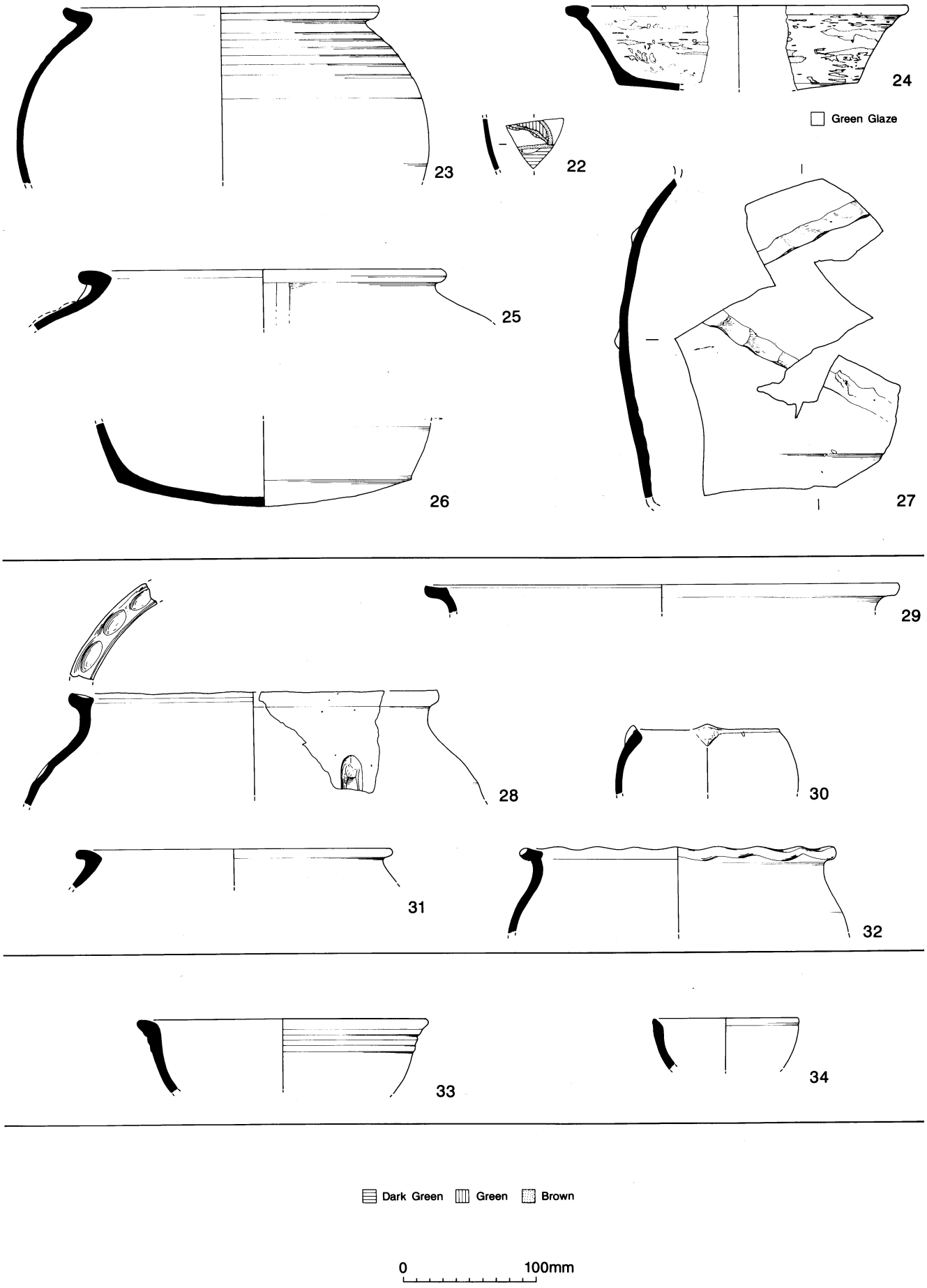

Fig. 13 Clacton to Weeley by-pass. Gutteridge Hall; medieval pottery (22–32). PMRE 33 and 34

accompanied by sherds of Medieval Coarse Ware including cooking-pot No. 23 (Fig. 13). The rilling on the shoulder of No. 23 is indicative of wheel-throwing, unlike the cooking-pots from Phase Ib which appear to be coil-built. It has a flanged everted rim (sub-form E1) which does not fit into Drury's typology of rim types, but probably relates to form E5, the horizontal flanged rim, datable to the late 13th to 14th centuries (Drury 1993, 81–2).

Nothing diagnostic occurred in fill 221. Fill 240 however, produced a Colchester ware bowl (Fig. 13, No. 24) and fragments from Medieval Coarse Ware cooking-pots (Fig. 13, part of No. 23 and Nos 25, 26). The Colchester Ware bowl is slip-coated and green-glazed rather in the manner of Mill Green Ware, a product the Colchester Ware potters were known to have imitated (Drury 1993, 89–90). Bowls in Colchester Ware were made from the 14th century (Cunningham and Cotter 1988, 2), and given its similarity to Mill Green Ware, a date in the first half of the 14th century is indicated. Its small size and pleasing appearance would suggest that it is a table ware. Cooking-pot No. 25 (Fig. 13) from this fill possesses a late 13th to 14th-century type horizontal flanged rim (rim-form E5) although this vessel still has a thumbed applied strip and uneven colouration more typical of 12th to 13th century Medieval Coarse Ware. Number 26 shows the sagging base from a cooking-pot (Fig. 13).

The upper fill of pit 219 (context 220) produced a second sherd of Colchester Ware, the lower handle attachment of a jug, covered in a cream slip-coating under a partial mottled green glaze. The handle is oval in section. Sherds of Sandy Orange Ware are also present including an example decorated with an applied strip under a green glaze. Medieval Coarse Ware comprises part of cooking-pot No. 25 (Fig. 13), a second cooking-pot rim similar in shape to No. 25, and the body of a cooking-pot or storage jar decorated with oblique thumbed applied strips (Fig. 13, No. 27). Oblique strips are found on Saxo-Norman Thetford-type Ware storage jars and are found on Medieval Coarse Ware storage vessels in Suffolk (Hurst 1966, 92), although the storage jar does not seem to be a very common form in Essex. The mixture of fine wares and coarse wares found in this pit suggest the pottery derives from both service and living areas.

Catalogue of pottery from phase Ic

22 Body sherd: Saintonge Polychrome; decoration outlined in brown, with areas of green and pale green glaze. Fill 250 (pit 219)
23 Cooking-pot: Medieval Coarse Ware; grey core and surfaces, buff margins; rilled below the neck; wheel-thrown; no traces of use. Fill 249 (pit 219)
24 Bowl: Colchester Ware, dark orange fabric, grey core; all over but patchy cream slip-coating covered by mottled copper-green glaze on the outside, which appears apple-green over the slip-coating and dark olive-green where the slip-coating has missed; much less copper has been added to the internal glaze giving a mustard-yellow colour over the slip-coated areas with only occasional patches of green; the underside of the base is also slip-coated and green-glazed. Fill 240 (pit 219)
25 Cooking-pot: Medieval Coarse Ware; dark grey fabric with brown patches; abraded; thumbed applied strip; no evidence of use. Fill 240 and 249 (pit 219)
26 Complete profile of base, probably from a cooking-pot; Medieval Coarse Ware; thick reddish core, buff internal surface, grey external surface; probably not wheel-thrown; horizontal drag marks where the base has been knife-trimmed; no evidence of use. Fill 240 (pit 219)
27 Body of cooking-pot showing oblique thumbed, applied strips: Medieval Coarse Ware; thick dull red core, brown-grey surfaces; internal surfaces show corrugations near base, probably coil-built. Fill 220 (pit 219)

Discussion of pottery from Phase Ic

Cross-fits between the various pit fills indicate the fills were deposited at the same time or underwent later disturbance. The presence of Saintonge Polychrome and the slip-coated and green-glazed Colchester Ware bowl give a date of earlier 14th century, although the Saintonge Polychrome may have been much prized and curated for a long time. The flanged rim cooking-pot No. 23 (Fig. 13) also fits in with this date, although some of the other coarse wares could be earlier. The mixture of coarse and fine wares deposited in pit 219 suggests that the pottery comes from service and living areas.

The Pottery from Phase II (Fig. 13, 28–32)

A total of 227 sherds weighing 2557g was excavated. Most is from context 1, a layer of clay sealing the medieval features to the south of the main moat branch. The assemblage is very similar to that in contexts 13/19/202 in Phase Ib, comprising mainly Early Medieval Wares with smaller amounts of Medieval Coarse Ware. There are several cross-fits between layer 1 and contexts 13 and 19, with a total of five cross-fits between context 13. One sherd of Shell-And-Sand-Tempered Ware is present and is part of cooking-pot No. 6 in context 13. Fragments from a total of eight different Fabric 13 cooking-pot rims are present; two have beaded rims (too fragmented to draw or parallel), the rest have developed rims (rim-form H2). A total of four of these are similar to No. 7 in context 13 and one is similar to No. 8. One H2 rim is thumbed, this does not occur in Phase Ib but probably derives from there and has been illustrated (No. 28). It is interesting because it appears to be transitional between the early medieval thumbed rim tradition of the 12th century and the 13th-century developed rim. It also possesses a vertical thumbed applied strip on the body. Three Fabric 13B cooking-pots are present and all are of sub-form H2, but are too fragmented to draw or parallel.

A bowl rim of large diameter in Fabric 13t is present (No. 29) and is the only instance of this ware to be found on site. It was first identified at Stansted in north-west Essex, where it was thought it might be a product of the Hedingham kilns. Comparable bowls in this ware occur at Stansted (Walker 2004, fig.271.87–9). However, on comparison with the actual sherds, it was noted that the Stansted fabric was slightly coarser. A Hedingham Ware origin is unlikely for this ware because of the distance (see under 'Fabric 20' in fabric section) but a Colchester Ware origin is a possibility as a comparable bowl with a matching description was found at Mile End (Drury and Petchey 1975, fig. 6.31). Some of the bowls in this ware at Stansted are perforated, and may have been used in dairying, for example to separate the curds form the whey, so perhaps this vessel had a similar function.

			Fabric							Wt (g)
Fill No	Feature/Context	Relationship and cross-fits	12B	13	13B	13t	20	21	27	
1	layer	seals Phase Ib and Ic, fits 13 and 19	1	82	49	2	27	-	-	1667
3	layer	same as 1, same in 13	-	1	1	-	1	-	-	31
6	layer	same as 1, fits 13 and 202	-	29	2	-	1	-	-	460
203	layer	same as 1	-	-	-	-	3	3	2	196
7	pit/post-hole 8	cuts 1, same in 1 and 13	-	-	4	-	2	-	-	77
9	pit/post-hole 10	cuts 1	-	2	-	-	1	-	-	36
11	layer	cuts 1	-	-	1	-	-	-	-	14
16	feature	cuts 1/203, same vessel in 13	-	1	4	-	8	-	-	76

Table 3 Quantification of pottery from Phase II by feature fabric and sherd count

Finally there are two Medieval Coarse Ware forms; an unidentified vessel showing traces of glaze (No. 30) and a cooking-pot rim (No. 31). The rim of No. 31 seems to be midway between the 13th-century H2 type and the late 13th to 14th-century H3/E5A type and therefore may belong to Phase Ib or a later phase.

Contexts 3 and 6, the equivalents of layer 1, produced a similar range of wares to that in layer 1, albeit in smaller quantities, and again there are cross-fits between Phase Ib features (namely contexts 13 and 202). Forms comprise two Fabric 13 cooking-pots, one similar to No. 7 in context 13, and another thumbed developed rim (No.32). This differs from No. 28 in that it is thumbed at the edge of the rim rather than the centre.

Layer 203 is also the same as layer 1, but contained a different assemblage which includes two further sherds of Saintonge Polychrome. These are too fragmented to merit illustration, but show a horizontal brown line within a band of copper green under a plain lead glaze. They could be from the same vessel as No. 22, but differ because they are green-glazed internally. Also in this context were sherds of Medieval Coarse Ware and fragments from an abraded Sandy Orange Ware jug handle. This has a central groove running its length which is characteristic of late-medieval East Anglian redwares and dates anytime between the 14th and 16th centuries (for an example of this type of handle see Drury 1993, fig.44.164.)

A number of features cutting layer 1 contained pottery, namely small pits/post-holes 8 and 10 (fills 7 and 9 respectively), layer 11 and feature 16. All produced Early Medieval Ware (Fabrics 13 and 13B) and Medieval Coarse Ware derived from Phase Ib. One form is present, part of cooking-pot No. 13 in post-hole 8.

Catalogue of pottery from phase II

28 Cooking-pot rim: Early Medieval Ware (Fabric 13); thick grey-brown core, dull orange surfaces; thumbed rim and thumbed applied strip on body; no traces of use. Layer 1

29 Bowl rim: Fabric 13t; indistinct grey-brown core, red-brown margins and smooth dark red-grey surfaces. Layer 1

30 Rim of unidentified vessel: Medieval Coarse Ware; very abraded; grey with patches of red-brown on the surfaces; traces of pale green glaze. Layer 1

31 Cooking-pot rim: Medieval Coarse Ware; thick orange-brown core; metallic-grey surfaces; no evidence of use. Layer 1

32 Cooking-pot rim: Early Medieval Ware (Fabric 13); thick brown-grey core; red-brown surfaces; thumbed rim; no evidence of use. Layer 6

Discussion of pottery from Phase II

Most, if not all the pottery is residual, with the majority deriving from Phase Ib; the Saintonge Polychrome sherds may come from Phase Ic. Only the Sandy Orange Ware grooved jug handle may be later.

The Pottery from Phase III (Fig. 13, 33–34)

A total of 59 sherds weighing 808g was excavated from Phase III.

Pottery from the moat

Here pottery comprises sherds of Early Medieval Ware (Fabrics 13, 13B), Medieval Coarse Ware, Sandy Orange Ware and Colchester Ware. Some pottery appears to derive from Phase Ib, while other sherds probably belong to Phase Ic. There is no evidence to suggest that the fills of the moat were deposited at different times.

The lower handle attachment from a Colchester Ware jug was found in moat fill 371. Like the jug handle from Phase Ic pit 219, it is slip-coated and partially green-glazed, probably in imitation of Mill Green Ware. The strap handle is broad and so must have come from a fairly large vessel; it also shows four finger impressions on the inside of the vessel where the potter secured the handle to the pot. A single slip-coated, but unglazed, body sherd of Colchester Ware was found in fill 4 and may be from the same vessel as the jug handle. Featured sherds of Sandy Orange Ware from the moat fills comprise a slip-painted body sherd with a plain lead glaze in fill 14, and an oddly shaped, curved sherd with a plain internal glaze in context 300, the fill of moat cut 298 (too fragmented to draw or parallel).

Several coarse ware cooking-pot rims are present in the moat fills: two Fabric 13B H2–type rims were found in fills 4 and 14, the example from fill 4 is comparable to No. 17 in Phase Ib. One type H2 rim in Medieval Coarse Ware was found in fill 4 and there are two examples of the later horizontal flanged rims (sub-form E5A); one from fill 14 is comparable to No. 25 in Phase Ic, the second is a small fragment from fill 371.

Box section 15, through moat fills 14, 16, 22, and 23 produced more medieval pottery including a sherd of Hedingham Fine Ware, showing an applied strip under a mottled green glaze. It is probably from a rounded strip jug of the later 12th to earlier 13th century, as found at Rivenhall (cf. Drury 1993, fig.43.125). Roman and prehistoric pottery was also excavated from box section 15.

Pottery from the features

Quite a different assemblage was excavated from the various pits and post-holes cutting through layer 151. Several cross-fits between the features indicate that they were open at the same time.

Pottery from context 157, the fill of pit 156 includes an unglazed, unslipped, sherd of Colchester Ware. It is finely tempered and is probably quite late, belonging to the 15th or 16th centuries (John Cotter pers. comm.). All the remaining pottery in pit 156 is PMRE, forms comprising fragments from tygs or mugs and two small glazed bowls (Nos 33 and 34).

Context 159, the fill of post-hole 158, contained another sherd of late Colchester Ware from the same vessel as that found in context 157. Also present are single sherds of Medieval Coarse Ware, late-medieval Sandy Orange Ware, internally glazed PMRE and Raeren Stoneware.

Fill No	Feature/ Context	Relationship and cross-fits	Fabric 13	13B	20	21	21A	22	40	45C	Wt (g)
14	moat cut 31	fits 4	7	5	1	2	-	-	-	-	209
371	moat cut 31	above 14	-	-	3	-	1	-	-	-	179
4	moat cut 31	above 371, 302	1	1	1	-	1	-	-	-	76
22	moat cut 31	= 4	-	-	1	-	-	-	-	-	7
300	moat cut 298	= 4	-	1	2	1	-	-	-	-	42
15	box section	through moat fills	5	4	2	-	-	1	-	-	147 R,P
157	pit 156	same vessel in 159	-	-	-	-	1	-	9	-	88
159	post-hole 158		-	-	1	1	1	-	1	1	46
172	post-hole 171	same vessel in 157, 159	-	-	-	-	-	-	1	-	1
178	post-hole 177	same vessel in 157	-	-	-	-	-	-	2	-	8
188	pit 187	cuts natural	-	-	-	-	-	-	-	1	5

R = Roman pottery; P = Prehistoric pottery

Table 4 Quantification of pottery from phase III by feature, fabric and sherd count

Contexts 172 (the fill of post-hole 171) and 178 (the fill of post-hole 177) produced small quantities of PMRE from the same vessels as found in contexts 157 and 159. A second sherd of Raeren Stoneware was excavated from context 188 (the fill of pit 187), comprising the frilled base from a squat, bulbous drinking jug.

Catalogue of pottery from phase III

33 Bowl rim: PMRE; all over internal plain lead glaze extending about 4cm down from the rim on the external surface. Fill 157 (pit 156)
34 Bowl rim: PMRE; all over internal lead glaze, partially glazed externally. Fill 157 (pit 156)

Discussion of pottery from Phase III

The pottery from the moat is not contemporary with that from the other features. The latest pottery from the features is the PMRE and the Raeren Stoneware. No closely datable PMRE forms are present, so that the best dating is provided by the Raeren Stoneware frilled jug base; these drinking jugs were imported in vast quantities from the German Rhineland during the late-15th to mid-16th centuries and are a common find on sites of this date, from royal palace to peasant house (Hurst *et al.* 1986, 194). The sherd of Colchester Ware also fits in with this date. The small quantity of pottery suggests there may not have been much activity on site at this time, although there is always the possibility that domestic rubbish was discarded elsewhere. The two bowls are too small to be mixing bowls or pancheons (dairy bowls) and were probably used at the table.

Pottery from Phase IV (Fig. 14, 35–36)

A total of sixty-three sherds weighing 3375g was excavated and is summarised in Table 5.

Most of the weight is accounted for by a large PMRE bowl or pancheon (No. 35) from context 71 (the fill of trench 70), which is the robber trench for the Tudor building wall. This vessel corresponds to Cunningham's vessel form B5A, flat-based bowls with wide mouths and narrow bases. At Moulsham Street in Chelmsford, this type of bowl first occurs in the period *c.*1560–90 and is common elsewhere in the county in the 16th century (Cunningham 1985b, 69). However, there is no reason why this bowl could not be later, perhaps 17th or even 18th century, especially in view of its good quality lustrous glaze. Pancheons were used primarily as milk pans in which milk was left to separate in order to make butter and other dairy products (Cunningham 1985a, 4). The bowl is about half complete and was found near the Tudor fireplace, sitting upright on top of some of the backfill, as if deliberately placed there. This raises the possibility that the bowl was ritually deposited as post-medieval ritual burials in, or beneath walls are known (Merrifield 1987, 119). The bowl is incomplete but this could be due to disturbance by later robbing. On balance, ritual deposition seems unlikely, especially as ritual vessels are usually hollow wares rather than flatwares. The only other pottery from this context is a single sherd of glazed PMRE from another vessel, with a second sherd of PMRE from equivalent context 126.

Very little pottery was excavated from pit 144, which cuts Tudor wall robbing 71. Context 112, the lower fill of the pit produced only a single sherd of residual Hedingham Fine Ware; it has a buff fabric and shows splashes of plain lead glaze. The succeeding fill, 110, produced single sherds of glazed PMRE and Tin-Glazed Earthenware. The latter has an off-white, all over tin glaze of egg-shell thickness and is undecorated. It is English and probably 18th century. The upper fill, context 111, produced only a single sherd of unglazed PMRE.

Sherds of Raeren and Frechen Stoneware were found in context 68, the fill of ditch 67. They include the base of a Frechen jug or bellarmine, exhibiting a pale salt glaze. The base is flat with a rounded foot and two small cordons above. This treatment seems common to all Frechen Stoneware jugs except for the later bellarmines belonging to the mid to late-17th century, which have plain bases (cf. Hurst *et al.* 1986, pl.44). The sherd of Raeren Stoneware found probably belongs to a squat bulbous drinking jug of the late-15th to mid-16th century. Also found in context 68 are sherds of late-medieval Sandy Orange Ware and PMRE. All the PMRE is unglazed except for one sherd which shows splashes of internal glaze. There is only one featured example; a jug handle, thumbed at the base and comparable to a jug from a late 16th-century pit at Moulsham Street, Chelmsford (Cunningham 1985b, fig.45.34). This group would seem to suggest a date between the mid 16th to earlier 17th centuries. Context 123, the equivalent of ditch fill 68, produced sherds of late medieval Sandy Orange Ware, and a sherd of Medieval Coarse Ware from the same vessel as No. 16 from Phase Ib.

Context 129 consists of unstratified finds from a section across the Tudor building. Finds comprise residual medieval sherds and 18th-century pottery including an English Tin-Glazed Earthenware dish rim (Fig. 14, No. 36). A Chinese porcelain saucer showing the remnants of red-painted decoration, and a plain Creamware tea-plate measuring 6¼ inches in diameter were also found. The decoration on the tin-glazed plate is unusual as a pattern has been incised through the blue-painting, a technique known as sgraffito. A similar method of decoration, although with a different design, occurs on a Lambeth Delft Ware plate dated 1748 (Garner and Archer 1972, pl.92a). The Creamware plate is probably contemporary as it has the, buttery colour of early Creamware produced in the mid-18th century; later Creamware is much whiter.

Catalogue of pottery from Phase IV

35 Large bowl: PMRE; uniform red fabric; all over lustrous, plain lead glaze which is much thinner on the external surface; pouring lip. Fill 71 (robbing trench 70)
36 Dish rim: English Tin-glazed Earthenware; all over very pale sky-blue tin-glaze of egg-shell thickness; darker blue-painted decoration with a band of dark blue-painting around the rim, through which a pattern has been incised showing the pale blue of the tin-glaze beneath. Box section 129

Discussion of pottery from Phase IV

The latest pottery is mid-18th century. It occurs only in small quantities which is unusual for 18th-century pottery and suggests there was little activity on site during this phase.

Pottery from Phase V (Fig. 14, 37)

Only one context from this phase produced pottery; context 100, the fill of robbing cut 47, which produced four sherds weighing 255g. The pottery comprises two sherds of modern flowerpot and two sherds from a relief-moulded vessel showing a foliage design. It has an ironstone body and an all over turquoise glaze. The technique of relief-moulding was developed in the 1820s (Henrywood 1992, 19) and stylistically this vessel would appear to be Victorian.

Pottery from Phase VI (Fig. 14, 37)

Again, only one context from this phase produced pottery, the fill of plough mark/vehicle track 106, which produced a Medieval Coarse Ware cooking-pot rim (Fig. 14, No. 37) (comprising two sherds weighing 18g).

37 Cooking-pot with cavetto rim: Medieval Coarse Ware; pimply texture; grey with red-brown margins; tempered with white, colourless and grey sand; incised horizontal lines below neck. Fill of plough mark/vehicle track 106

This vessel is clearly residual but is of interest because it is paralleled by a rim from Mile End (Drury and Petchey 1975, fig.5.21). To the author's knowledge the cavetto rim does not occur in Hedingham Coarse Ware and this is the best evidence yet that at least some of the Medieval Coarse Ware found at Gutteridge Hall originates from the Mile End kilns. This rim type belongs to the first half of the 13th century (Drury 1993, 82–4).

Unphased and unstratified pottery (Fig. 14, 38)

A total of ninety-eight sherds weighing 1730g was excavated from various unphased and unstratified contexts (Table 6). Only groups or sherds of intrinsic interest are discussed.

Several contexts contained pottery that could belong to Phase Ib (contexts 5, 502 and U/S). Context 502 was the fill of a possible hearth, it produced a sherd of buff Hedingham Fine Ware showing splashes of plain lead glaze, a fragment of Medieval Coarse Ware cooking-pot rim

Fill No.	Feature/ Context	Relationship and cross-fits	Fabric 13	20	21	22	40	45C	45D	46A	48A	48C	Wt (g)
71	trench 70	robbing of Tudor bld	-	-	-	-	23	-	-	-	-	-	2770
126	same as 71		-	-	-	-	1	-	-	-	-	-	3
112	pit 144	cuts Tudor wall robbing 71	-	-	-	1	-	-	-	-	-	-	12
110	pit 144	above 112, cuts 71	-	-	-	-	1	-	-	1	-	-	4
111	pit 144	above 110	-	-	-	-	1	-	-	-	-	-	5
68	ditch 67		-	-	2	-	8	1	2	-	-	-	280
123	same as 68	same vessel in 13 and 19	-	1	2	-	-	-	-	-	-	-	68
129	box section	across Tudor wall robbing	1	8	1	-	-	-	-	5	1	3	233

Table 5 Quantification of pottery from phase IV by feature, fabric and sherd count

Fill No.	Feature/ Context	Relationship and cross-fits	Fabric 13	13B	20	21	21A	22	40	45D	45F	Wt (g)
5	located by digger driver		2	1	-	-	-	-	-	-	-	31
18	unlocated feature		-	-	-	-	1	-	-	-	-	7
125	?		-	-	-	-	-	-	1	-	-	3
WB2 501	U/S E. of site – access rd		-	-	-	1	-	-	4	4	-	472
WB2 502	fill of ?hearth	Unstratified	37	8	25	4	-	-	3	-	1	1163

Table 6 Quantification of pottery from unphased and unstratified contexts by feature, fabric and sherd count

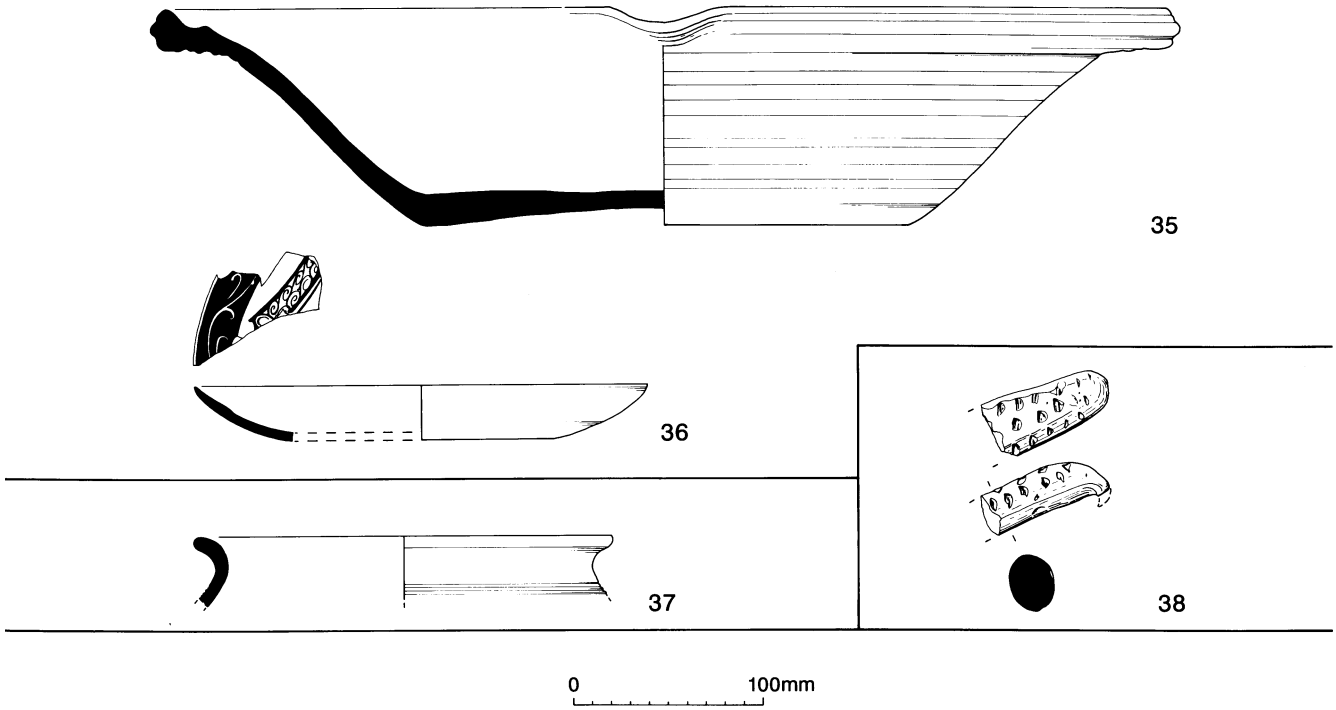

Fig. 14 Clacton to Weeley by-pass. Gutteridge Hall; post-medieval pottery (35 and 36). Medieval Coarse Ware rim (37) and medieval pipkin handle (38)

of sub-form H2, and sherds of Fabric 13B. It could therefore easily be contemporary with hearth 245 in Phase Ib.

Pottery deriving from Phases Ib and Ic was found unstratified and includes Fabric 13 cooking-pot rims, as No. 7, and part of vessel No. 27 (Fig. 13), the cooking-pot (or storage jar) with oblique thumbed applied strips, in Phase Ic. Of intrinsic interest is a Sandy Orange Ware decorated pipkin handle (No. 38). Pipkins are usually a late-medieval or post-medieval form but the coarse fabric and primitive glaze on this example suggest a 13th-century date. Unstratified late medieval and post-medieval pottery of interest comprises a Sandy Orange Ware jug rim, a grooved Sandy Orange Ware handle probably from a cistern, and the rims from two PMRE storage jars. One storage jar has a thumbed cordon below the rim (cf. Cunningham 1985a, fig.7.39), characteristic of pottery from Stock (Cunningham 1985b, 70). One sherd of Westerwald Stoneware was found unstratified, the only example of this ware from Gutteridge Hall. It is from an undecorated jug.

Finally context 501 produced the rim of a Frechen Stoneware bellarmine showing the typical mottled 'tiger ware' glaze and a tail at the base of the handle. Most of the facemask is missing, but the narrowness of the neck indicates a 17th-century date.

38 Pipkin handle: Sandy Orange Ware; thick grey core showing large red oxides; orange surfaces; impressed decoration made with some kind of cloven tool; partial plain lead glaze over upper surface. Unstratified

Discussion of pottery from all phases

Phase Ib, with its large quantity of 13th-century coarse ware, was the only phase to produce a substantial amount of pottery. As has already been established, the pottery cross-fits show that the building features were open at the same time and were therefore contemporary. As the bulk of the pottery was found in gully 200/201 and most of the cross-fits originate from here, it is possible that when the site went out of use, most of the pottery was dumped here and when the structures were dismantled and the site levelled, some of this pottery found its way into the various post-holes, pits and other features belonging to the medieval building. If this is the case then the pottery would have been dumped in one episode.

Phase Ic can be quite closely dated to the earlier 14th century which, if Phase Ib has been correctly dated, means there is a gap of at least 50 years between these phases. It is difficult to assess the significance of the small amount of Saintonge Polychrome found in Phase Ic (and Phase II). As has already been mentioned, the occurrence of Saintonge Ware inland can be taken as an indicator of high status, but Gutteridge Hall hardly qualifies as inland as it is only 7.5km from the nearest coast at Clacton-on-Sea and is not far from the ports of Colchester and Harwich. The Saintonge Polychrome could have therefore, easily have found its way this far inland, and even broken vessels may have had a certain novelty value. In the case of Gutteridge Hall then, Saintonge Ware should not be used to indicate high status. The presence of Colchester Ware is not unexpected as Colchester is only 15km distant and this ware may have served as the local alternative to Mill Green Ware.

As only one feature containing pottery was found in Phase Ic, then activity on this site during the 14th century may have been fairly limited. This also seems to be the case for subsequent phases with most of the pottery from Phase II deriving from Phase Ib. No late 14th to 15th century pottery was found, but this is often the case, especially on rural sites and is probably a result of a decline in the pottery industry after the Black Death. Phase III produced only a small amount of late 15th to 16th century pottery, which is unusual because during the 16th century there was a great increase in pottery manufacture and on sites of this date pottery is usually found in large quantities. However, the presence of a Tudor building on site provides somewhat conclusive proof that the site was occupied at this time. Small quantities of 16th to 18th-century pottery were found in Phase IV and even here most of the 18th-century pottery was found in a poorly stratified box section. Some 17th-century pottery was also found unstratified. The Victorian era is represented by a total of four sherds. Because of the dearth of pottery little can be said about function or status of the site in the post-medieval period; certainly there are no unusual wares or specialised forms, and what pottery there is probably represents domestic rubbish typical of any post-medieval site.

Few conclusions can be drawn about the source of the Medieval Coarse Wares. It is however, interesting that the Early Medieval Wares (Fabrics 13 and 13B) and the Medieval Coarse Ware have similar tempering which could mean they come from the same area, although the geology of Essex is not particularly varied, and the same clays and sands may outcrop in different places. As has already been argued, a Hedingham origin for the Medieval Coarse Ware is unlikely. A single

source for the Early Medieval Ware found at Stansted and at Gutteridge Hall can be precluded in spite of their similarities because coarse wares were not normally traded over long distances, because of high transport costs in relation to the value of the product. It has been noted however that there is an extended distribution of Hedingham Fine Ware and Colchester Ware correlating to the position of the A120 (Cotter 2000, 90, 177). This was the Roman road of Stane Street stretching from St Albans in the west to Colchester in the east, and was still in use in medieval times. Both Stansted and Sible Hedingham are situated near this road so such a distribution remains a possibility. Political considerations may also be a factor, and distribution of pottery may be affected by who owns the land.

Macrobotanical and other remains
by V. Fryer and P. Murphy
Samples from the 12th to 13th-century moats (296 in Phase Ia and 354 in Ib) were assessed. The samples were processed using bulk flotation, with a 500 micron collecting mesh. The dried flots were scanned under a binocular microscope at low power and the macrobotanical and other remains noted. Preservation was by waterlogging unless otherwise stated. Clearly, small macrofossils (<500 microns) were not retrieved, and drying the flots has probably resulted in loss of delicate structures.

Both assemblages contained macrofossils of wetland/aquatic species, ruderals and trees/shrubs. These included *Alisma plantago-aquatica* (water plantain), *Betula* sp. (birch), *Carex* sp. (sedge), *Cirsium* sp. (thistle), *Daucus/Torilis* type (wild carrot/hedge parsley type, *Galeopsis tetrahit* (common hemp-nettle), *Lemna* sp. (duckweed), *Lycopus europaeus* (gipsy-wort), *Nuphar Lutea* (yellow water-lily), indeterminate grasses, *Potentilla* sp. (cinquefoil), *P. anserina* (silverweed), *Quercus* sp. (oak-acorn bases), *Rananculus* sp. (buttercup), *R. acris/repens/bulbosus* (meadow/creeping/bulbous buttercup), *R.* subg. *Batrachium* (water crowfoot), *R. sceleratus* (celery-leaved crowfoot), *Rubus* sect. *Glandulosus* (bramble), *Rumex* sp. (dock), *Sonchus* sp. (sow-thistle), *Urtica dioica* (stinging nettles) and *Viola* sp. (wild pansy). Other plant macrofossils included charcoal, indeterminate buds/bud scales, leaf fragments, leaf galls, moss, testa/periderm fragments, thorns, twigs and root, rhizome or stem fragments. Other material included insects and Cladoceran ephippia.

The assemblages appear to reflect a water-filled moat with weed and scrub-covered sides and some tree cover.

Tile
by P. Ryan
The tile was examined in numerical order of context. No differences in the fabric of the tile were observed until context 68 where it became apparent that there were two fabrics – Fabric 1, sandier, containing more quartzite grains, and Fabric 2 which has little sand in it. As the work progressed it was noted that the Fabric 1 fragments tended to show more evidence of abrasion, particularly in contexts 110, 123 and 125. The largest fragments were, in general very flat. From context 202 to 371 only Fabric 1 occurred and there was little sign of abrasion.

It has been observed on other sites that the medieval tiles often contain more coarse sand and that they tend to be flatter than later tiles which are usually cambered. There was no evidence of any nibbed tiles, which date to before the mid 13th century. At Cressing, large pegtiles are thought to date to the second half of the 13th century, however only standard sized pegtiles, 270mmx165mmx13mm, were found on the Danbury tile-kiln site, dated *c.*1275 to 1325. Although the Fabric 1 fragments from Gutteridge Hall may be from medieval tiles it is not possible to date them more closely as no fragments with either complete length or breadth were recovered.

Brick
by P. Ryan
Five types of brick were identified amongst the building materials.

Medieval great bricks or floor tiles
Some fragments were too small and had no diagnostic features surviving, a number of fragments of medieval brick/floor tile similar to the tile like "great bricks" of Coggeshall Abbey were found in contexts 206, 220, 221, 240, 249 and 300. The chief difference between the Coggeshall bricks and the Gutteridge Hall bricks is in the fabric. Whilst the appearance of the fracture is similar, the Gutteridge Hall fragments contain a greater quantity of large rounded quartzite "grains". Orange to sienna in colour, some with reduced cores, most of the fragments from the excavation have knife-trimmed, very slightly undercut edges suggesting they may be floor tiles rather than bricks, although little trace of wear was noticed. Thickness varies from 25mm to 35mm. The Coggeshall bricks have been dated from *c.*1160 to *c.*1220. Recently a few medieval bricks have been observed in the walling of Elmstead church, also in the Tendring Hundred. Flemish-type bricks, often white or yellow in colour and with proportions of 4:2:1 began to make an appearance towards the end of the thirteenth century in this country. A date in the second half of the 12th century or first half of the 13th century is suggested for these bricks.

Tudor bricks
Tudor bricks, 245x115x65mm, orange in colour with rounded paler patches and streaks and some pebble and flint inclusions, irregular in general shape with irregular rounded arises, striated and slightly grass-marked upper surfaces and occasional sunken margins, creased faces and rough bases, were found in contexts 117, 118 and 119. Fragments with similar colouration and fabric occurred in 68, 103 and 113.

Late 18th/early 19th century
A brick sample from context 120 dates to the late 18th or 19th century. It is orange with very small pebble inclusions, 220x105x65mm, is regular in form and has regular slightly rounded arrises. The upper surface is striated, and the faces and base are fairly smooth.

19th century
Whilst the dimensions of the sample from context 121 are more like those of some late 17th or early 18th century bricks, 215x110x50mm, the neatness and quality of the brick suggests a 19th-century date. It is very regular and has sharp and slightly rounded regular arrises, the upper surface is striated, the faces very slightly creased with a diagonal pressure mark and the base is fairly smooth. Bricks of similar size and description occur in parts of Ardleigh Church which was rebuilt in 1885.

Suffolk White-type flooring bricks
A sample of Suffolk White-type flooring bricks were included in the assemblage of building material. There were no complete lengths but the bricks were 125mm wide and 35mm thick but all were in a worn condition. The fabric was white/cream in colour and dense. The bricks had slightly creased faces and slightly rough wrinkled bases; 19th century.

Animal Bone
by Alec Wade
The excavation produced 321 pieces of animal bone weighing 2.259 kg. Of this, seventy-two pieces weighing 1.448 kg could be identified to species level (22% of the assemblage by number of pieces and 64% by weight). The bone derived mainly from medieval and Tudor contexts with the remaining material being undated. Ten pieces of animal bone had been dog gnawed (5 medieval, 3 Tudor and 2 unphased). Eight pieces of butchered bone were also noted (2 medieval, 4 Tudor and 2 unphased).

The medieval phases produced most of the animal bone and the greatest diversity of species, which included cow, horse, pig and sheep or goat. Wild species were also present, including red deer.

The Tudor phase (IV) produced a similar list of species, though with the absence of horse. Given the small size of the assemblage this is not significant.

Miscellaneous Finds
by H. Major

Copper alloy (Fig. 15)

1. A foot from a vessel or furniture in the shape of a lion's paw, in fairly poor condition. Vessel feet are rare medieval finds, and are

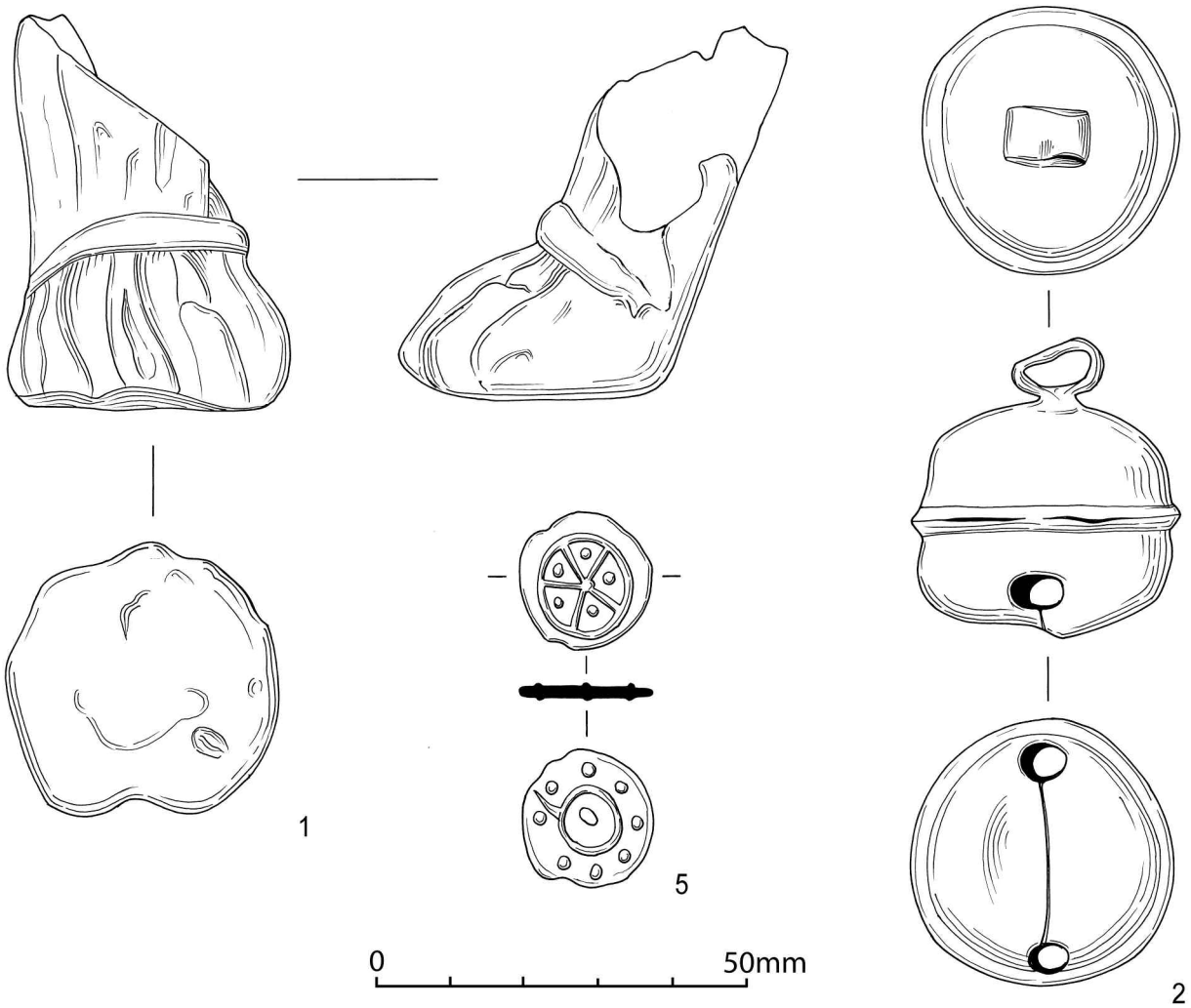

Fig. 15 Clacton to Weeley by-pass. Gutteridge Hall; copper alloy (1–4) and lead (5)

generally plain; e.g. the pieces from Norwich (Margeson 1993, 90–94) and Winchester (Biddle 1990, 947–959), none of which have elaborate feet. It seems more likely that this object is Roman. Animal feet were commonly used on Roman furniture (Richter 1966, 103); this small example may have come from an article such as a folding stool. Layer 1, late C12-early C13

2. Sheet rumbler bell; the pea may be present. Diam. 36mm. SF8 Context 157, Pit 156, C16 or later
3. (Not illustrated) Wire loop, of standard late medieval type (see, e.g., Caple 1985, nos. 82–83). Diam. 12mm. SF4 Context 123, F67, late C13-C16
4. (Not illustrated) Dress-maker's pin. The head is obscured, but is probably wound wire with little deformation. L. 39mm. SF7 Context157, Pit 156, C16 or later

Lead (Fig. 15, No. 5)

Token, abstract design. Side 1: Central ring-and-dot, surrounded by pellets. Side 2: Circle, with central pellet with five radiating lines, and pellet in each segment. SF11. Context 188, Pit 187, late C15–mid C16

Iron

Selected iron objects were X-rayed at Colchester Museum by A-M Bojko. The unillustrated material includes an unstratified key, probably post-medieval, five bar fragments, a probable nail shaft and two U-shaped staples. There were fifteen nails from the site; all those from medieval contexts had square shafts and flat heads, either round, oval, square or rectangular.

6. (Not illustrated) Knife with plain bolster and broken tang. Blade damaged. L.126mm. Context 68, feature 67, Phase IV
7. (Not illustrated) Knife blade, tang missing. Straight back, slightly curved edge. L. 98mm. SF12, context 189, F70 (robbing), Phase IV
8. (Not illustrated) Strap fragment, with rounded terminal, and two perforations. L. 68mm, W. 30mm. Another very similar strap end came from an unstratified context. SF1, context 114, F413 (construction cut)
9. (Not illustrated) Purse frame bar. The bar itself has a circular section, with a single perforation on each side of a rounded central knob. The perforations are through slight projections, which may be flattened; the X-rays do not show this, and the object is probably in too poor a condition to be cleanable. The central knob has a vertical perforation for the missing suspension loop. The ends of the bar are constricted, with an iron cap or band round each end (the X-ray is unclear whether the end of the bar is covered) to retain the iron purse frame, a small part of which has survived at each end. L. 141mm, diam. *c.* 12mm. SF3, context 123, F67, late C13-C16.

The type of purse of which this was part was most fashionable *c.* 1475–1550 (Ward-Perkins 1940, 160). Purse bars are more usually made of copper alloy. This example is of type A (Ward-Perkins, 162–67), but does not fit neatly into any of the London subtypes, differing from them in having only one suspension hole either side, and in the holes being integral with the bar; the London types have their perforations through separate copper-alloy fittings attached to the bar. It is close in style to an iron purse bar from Colchester (Crummy 1988, 21) although the latter appears to lack suspension holes.

Discussion

The excavated area comprised part of a medieval and post-medieval moated complex occupied from the 12th to the 20th century. Excavation identified six phases, with the first phase sub-divided into four sub-phases. The earliest occupation consisted of a timber building probably formed from wooden uprights inside a moated enclosure (Phase 1a).

In Phase 1b, the moated enclosure was adjusted with the southern arm being extended to the east. A dogleg was incorporated into this extension, the reason for which is not immediately apparent. In general, the later recuts of the moat system were narrower and shallower than their Phase Ia predecessors. Phase Ib is the main period of medieval activity. The moat layout (550) and possible structural features described in Phase Ia were in part sealed beneath layer 21 which forms a platform for a timber-framed building occupying the site of the Phase Ia building.

This building had a simple basic plan consisting of two major roof supports (304, 305), 8.5m apart, which form the structure's longitudinal axis with a large hearth (245) located centrally between them. Post-holes located around the hearth indicate the existence of a possible smoke hood or similar device. A row of stake and post-holes parallel to the buildings axis and 3.5m to its south is evidence of an outer wall, possibly of interwoven hurdle construction. Only scant evidence of this is apparent on the northern side of the building where in general the survival of features was poor. Two eaves-drip gullies, one to the north (200) and the other to the south (242), contained considerable quantities of medieval pottery. An alternative interpretation for these features when compared to other medieval buildings in the county is that they represent foundation slots on the outside of the building. A similar structure at Stansted was interpreted as a kitchen with this interpretation supported by environmental data.

Phases 1c and 1d comprised alterations to the moat, and features either cutting the moat or those which could not be attributed a definite phase although clearly of Phase 1 date.

Phase II comprised a levelling phase in the late 13th century over the area of the Phase 1b building. This may have been designed to flatten and level the ground which had an existing derelict structure on it. The recutting of the moat indicates occupation continuing during this phase, although the nature of this occupation is unknown. As the later occupation is largely situated in the southern part of the excavated area, it is possible that the focus of occupation was moving around within the moated complex.

In the 14th century, a large timber-framed thatched barn was constructed, to the west of the excavated area. This survived until 1983 when it was destroyed by fire. The construction of this barn indicates that there had probably been a significant phase of building during the 14th century and it may have been at this stage that the northern area of the moat was abandoned.

Phase III dated to the 15th and/or 16th century with evidence comprising the recutting of the moat and further levelling of the site. This indicates that the site was still in use with the occupation probably outside the excavated area.

The earliest activity of Phase IV was the deposition of at least one levelling layer (142) over the southern half of the site. A substantial (Tudor) brick building with rubble foundations was constructed on the platform. Only the western end of the structure was within the limit of excavation and there had been substantial robbing of the foundations. The remains identified comprised a large room with a brick fireplace on the western side. The brick walls were laid on a rubble foundation.

Phase V comprised a further phase of levelling sealing the Tudor building, with a large barn and possible replacement dwelling constructed during the late 18th-19th century. The first edition OS 25–inch map shows a substantial semi-moated complex. Two arms of the moat surround what could be an orchard. The main house is located just to the south of the eastern moat arm with two large buildings, one to the south of the house, the second located 18 m to the south-west. It is possible that a walled garden lay to the north of this barn with a series of paths laid out on the map. Some of the walls identified in Phase V are likely to have formed the southern wall of a possible walled garden on the map. Further buildings and a large pond are shown on the map to the south of the main building.

Phase VI comprised the modern clearance and levelling of the site.

Gutteridge Wood, Weeley (WEGW 93)

Excavation of an area based on the fieldwalking survey found features dating to the Early and Middle Iron Age and five Romano-British cremations with associated features.

Site background

The site was situated at the top of a slope at 19.4m OD to the west of Gutteridge Wood. The underlying geology is clay (Fig. 1)

Fieldwalking results

The fieldwalking survey recovered two sherds of prehistoric pottery, forty-five struck flints including two scrapers, eleven fragments of tile and forty sherds of Roman pottery. A quantity of burnt flint was also noted. Further investigation of this area produced another ten prehistoric sherds, twenty-seven struck flints, an early Neolithic arrowhead and forty-four sherds of Romano-British pottery.

Excavation results

Due to the method of topsoil stripping (front-bladed bulldozers) visibility of archaeological features was severely limited. Traces of cut features beneath the subsoil were apparent in the north-eastern (area A), south-eastern (area B) and south-western (area C) corners of the site where the stripping was deepest. These areas were further stripped and cleaned by hand and the

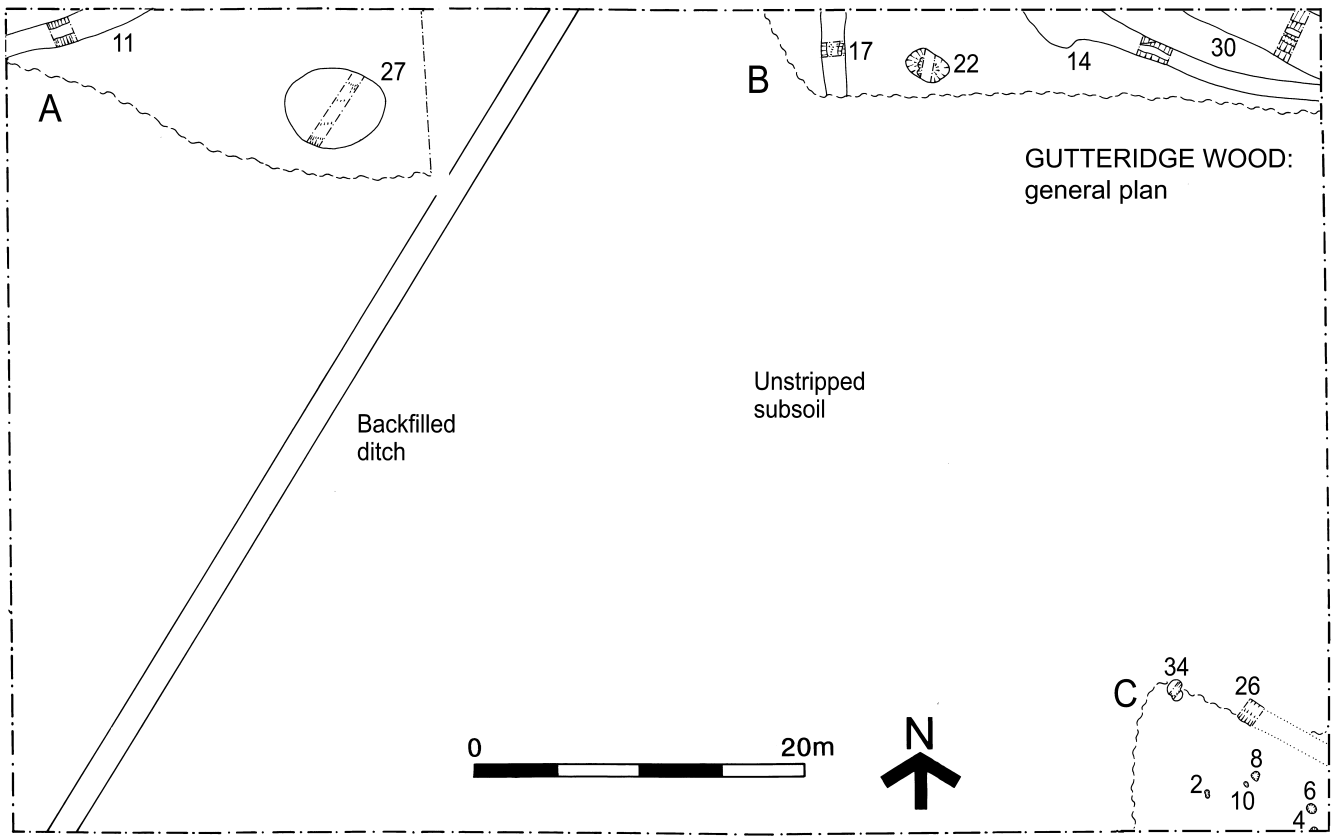

Fig. 16 Clacton to Weeley by-pass. Gutteridge Wood; general plan of features

features recorded. Less than 10% of the site area was thus explored (Fig. 16).

Prehistoric ditches and pits (Fig. 16)
All of the prehistoric material recovered was from area B. Of the four features located here, two (ditch 17 and pit 22) produced prehistoric pottery. Ditch cut 30 contained both Early and Middle Iron Age pottery together with Romano-British sherds of 1st to mid 2nd-century date, the latter mainly from its upper fills. All the other features containing prehistoric material were located south of this ditch.

Early Romano-British cremations and ditches (Fig.16)
In area A, ditch 11 had a single recut 36, and contained a single sherd of early Roman pottery recovered from the primary cut. In area B ditch 30 contained four fills, the earliest of which (33) contained pottery dated to the early/mid 2nd century (AD).Two cremations from a group of five (2, 4, 6, 8, 10) in area C contained pottery dated to the late 1st and early 2nd century AD. The other three, though individually lacking in dating evidence, are associated by virtue of their close proximity. All of the cremations were badly damaged by modern ploughing with only the base and lower body sherds of the vessel surviving.

Undated ditches and pits (Fig.16)
Feature 27 in area A was a large rounded pit with an uneven bottom and gently sloping sides. It produced burnt flint and tile.

Four features remain undated. In area B a narrow ditch (14) was located just to the south-west of the Romano-British ditch 30. Ditch 14 had two fills, both containing burnt flint.

In area C, feature 34 was a pit north-east of the Romano-British cremation group in the north-west corner of the site. Feature 26 (also in area C) was a ditch or gully orientated north-northeast to south-southwest, parallel to the large Romano-British ditch 30 in area B, perhaps providing an eastern boundary for the cremation group.

Finds

The Late Iron Age and Romano-British pottery
by T.S Martin

The excavation yielded 123 sherds (885 grams) of Late Iron Age and Roman pottery from seven contexts. Much of the pottery comprised abraded undiagnostic body sherds making close dating impossible. Overall, the pottery appears to fall within a mid 1st to early/mid 2nd-century AD date range. None of the contexts produced later pottery apart from the cremation 8 which contained a medieval sherd of a size which suggests it is likely to be intrusive.

The cremated human bone
by C. Duhig
The heaviest of the cremations, nos 4, 6 and 10 are at the lower end of the range of weights for archaeological cremations (200 to 2000g; Mckinley 1989), even given

that weights are increased slightly by adherent soil; even F5 is less than half the average weight, approximately 800g. This supports the archaeological suggestion that less than 40% of each feature had survived.

Almost all the bone is white, showing that burning had been thorough, and most of the few blue-grey areas are within long bone shafts where they would have been protected from the fire by the dense cortex. In each case bones from all the main areas of the skeleton – skull, spine, thorax and limbs – had been deposited; cremations 3 and 5 also contain fragments from the pelvis and 2 and 3 contain one or more fragments of tubular hand/foot bones. Despite the few larger pieces, most fragments in each cremation are less than 5mm at maximum dimension.

There are no teeth or epiphyseal areas to assist with age estimation but size suggests that all five individuals were adult, or at least in late adolescence. The open skull sutures of cremations 3 and 5 indicated that these two individuals were not of advanced age. No pathological changes were found.

Details of individual cremations are included in the archive.

Discussion

Interpretation was hampered by the methods used to strip the site. Small quantities of prehistoric finds were found in all areas, assuming features containing burnt flint are of prehistoric origin. The presence of the cremations as well as the Roman ditches and pits, are indicative of a Roman settlement or farmstead close to the site.

Norwood Lodge, St Osyth (STONL 93)

An excavation (110 by 30m) in the vicinity of linear cropmarks, 500m east of Norwood Lodge in St Osyth (Fig. 1), located only features relating to post-medieval woodland clearance.

Dead Lane, Little Clacton (LCLDL 93)

Rectilinear ditches and large oval pits containing burnt and worked flint together with fragments of prehistoric and Romano-British pottery were found. Some of the earlier features may have been associated with two nearby ring ditches known from cropmark evidence.

Site background (Fig. 1)

This site was located to the west of a cropmark complex consisting of two ring ditches and associated linear features. The site was situated on formerly arable land between 22m and 23m OD, 0.6km to the west of Little Clacton village.

The fieldwalking survey recovered worked flint including thirty-five struck flakes and three flint blades and a single sherd of prehistoric pottery.

Excavation

An area measuring 100m by 20m was stripped. The natural geology consisted of mixed areas of sand and gravel cut by a scatter of archaeological features concentrated in the middle of the area, comprising ditches, gullies and pits. Three different phases of activity were represented, the Middle Iron Age, the Late Iron Age/Early Romano-British period and early 2nd century AD and later.

Most features were undatable due to a lack of finds. Burnt flint was present in the top fills of many features suggesting that they are prehistoric in origin.

Undated prehistoric features (Fig. 17)

Over thirty features could not be dated by artefactual evidence. Only a single feature of this group produced pottery of prehistoric date, and that was not closely datable. The features consisted of oval and round pits or post-holes, a short linear feature (163) and a large circular feature with a diameter of nearly 8m (F166). A high proportion of these features contained burnt flint in their upper fills indicating a likely prehistoric origin.

The Middle Iron Age ditch (Fig. 17)

A single, irregular shaped ditch (22), at the western end of the site, produced Middle Iron Age pottery. The ditch divided at its eastern end. Finds from this feature included flint (both struck and burnt) and pottery some of which was Middle Iron Age date.

Late Iron Age/Romano-British pits and dtches (Fig. 17)

Six features can be attributed to this phase comprising three linear ditches (63, 65, 61/69) and a group of three pits (27, 48, 119). The ditches are possibly an early phase of land division from that visible in the 2nd century phase of occupation. All three of the pits within the area defined by the ditches contained early to mid first-century AD pottery.

Early 2nd century AD and later ditch system (Fig. 17)

The features of this phase consist of three ditches, probably representing the remains of land division during the second century and later. Only ditch 43 provided dating evidence of the 2nd to early 3rd century AD. The other two features are associated by their similar character and spatial relationship to this ditch.

All finds reports for this site remain in the archive.

Discussion

The excavation at Dead Lane was undertaken due to the proximity of two probable prehistoric ring ditches identified from aerial photographic evidence. Several features were identified, but most were not datable.

Dating evidence was obtained from a series of Roman linear features which are clearly part of a land division process within this area. The limited width of the excavated area makes it difficult to define the extent of the land divisions. However, aerial photographic evidence indicates linear features extending to the east of the site over the full width of the field, suggesting that these ditches are part of a much larger division of the landscape during the Roman period.

Although the majority of the features were undated, their proximity to the ring ditches would suggest they are likely to be prehistoric. The cropmark evidence indicates

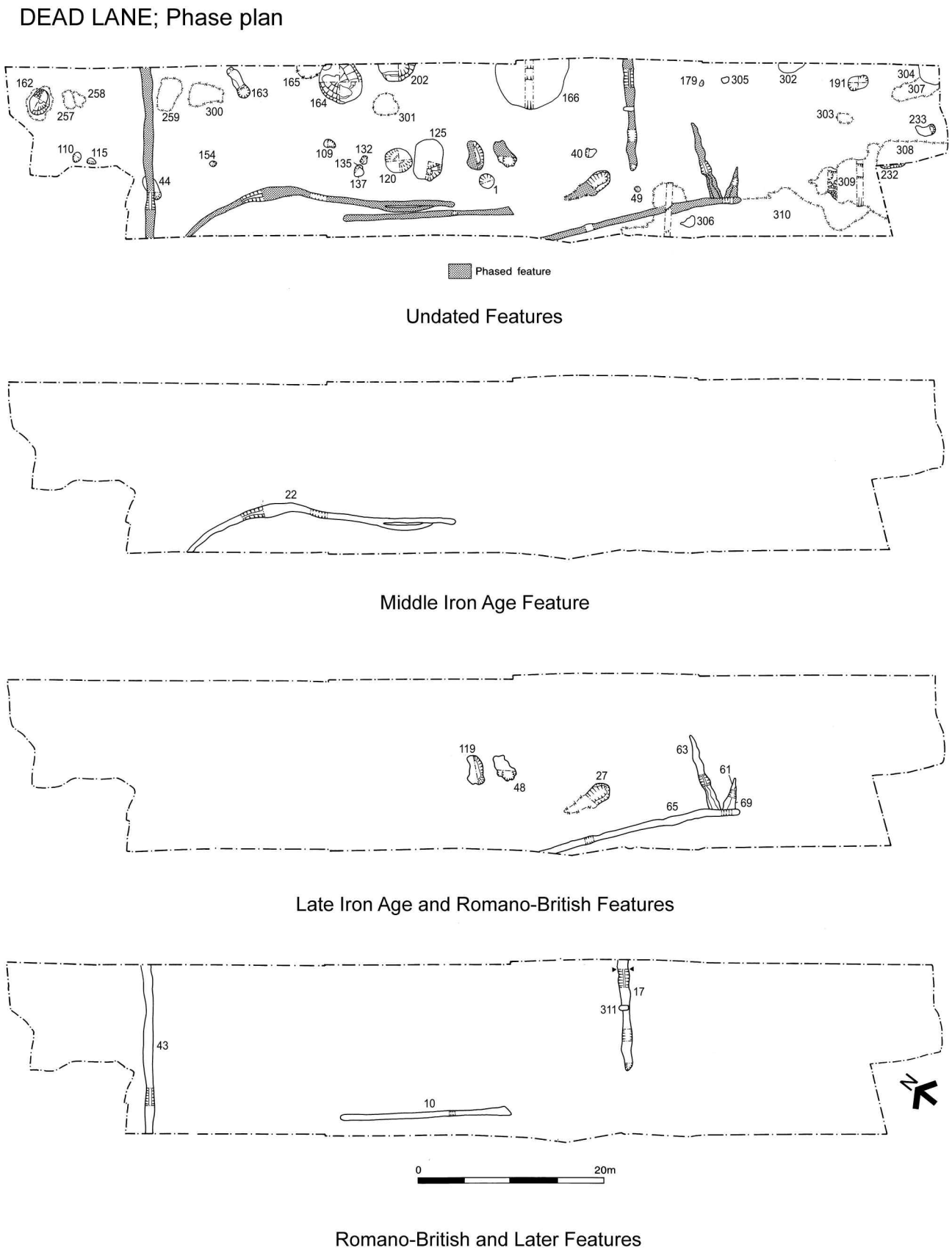

Fig. 17 Clacton to Weeley by-pass. Dead Lane; phase plans

features on both sides of the new road, however, with a higher percentage on the eastern side.

Montana Nursery, Little Clacton (LCLMN 93)

This excavation located part of the southern end of a prehistoric enclosure previously known from cropmark evidence. Other deposits included evidence of an enclosure of Roman date and two large medieval or post-medieval quarries.

Excavation

The site was located to the south of Little Clacton village on the top of a slope at 21m OD overlooking Pickers Ditch to the west (Fig. 1); an area of 62 x 22m was stripped.

Prehistoric ditches and a pit (Fig. 18)

The earliest datable feature was pit 57 which contained pottery of Late Bronze Age or Early Iron Age date. This feature was cut by a Romano-British feature, pit 60.

At the western end of the excavated area, four ditches (76, 80, 82, 84) were identified, with only 76 producing undiagnostic pottery of a prehistoric date. Of the three others, feature 82 is stratigraphically earlier than 76, and the other two (80 and 84) are associated by character. In the north-eastern corner, two short lengths of ditch or gully (22, 74) terminated within the excavated area. The ditches at the western end of the site are probably small enclosures, forming part of a larger area of occupation to the north of the excavation.

Romano-British ditches (Fig.18)

This phase is characterised by a sequence of ditches of early Roman date. The most substantial is ditch 35 in the north-eastern quarter of the site with a right-angled turn at its western end. It was traced for 17.5m, oriented east-west, with a second ditch running north, forming the south-western corner of a probable enclosure. The range of pottery indicates a broad 'early Roman' date.

Two possible ditches (16, 17) were both located inside the enclosed area formed by ditch 35. Part of a grog-tempered Late Iron Age/Early Roman jar was recovered from 17. The primary fill of this feature produced a high-shouldered neckless jar rim of early to mid 1st-century AD date. Material from the upper fill suggests that the feature was finally backfilled by the end of the 1st century or early in the 2nd century at the latest.

The enclosure ditch, 35 cut two ditches, 42 and 78. Ditch 42 was truncated on its northern side by 35 and may represent an earlier recut. Pottery from this feature included part of a grog-tempered ware jar datable to the 2nd half of the 1st century AD. Ditch 78 was truncated at its western end by the northern side of enclosure 35. Ditch 78 runs west-southwest for 8.0m before being truncated by later quarry features.

Ditch 56, on the western side of the quarry ran at right angles to ditch 78 and was possibly related forming a rectilinear pattern of land division. Three other features belong to this phase, a pit (8), a post-hole (62) and part of a possible surface layer (65).

Other Roman features

Ground work by Anglian Water *c.* 20m to the west of the main excavation area (Fig. 1, the site location plan) uncovered three pits (206, 208, 210), two post-holes (201 and 205) and a truncated layer (212) all of Roman date. Five sherds of pottery recovered from 201 were dated to the early Roman period with two sandy grey ware sherds being 'spalled'. Pit 206 contained an abundance of charcoal fragments and over 300 sherds of pottery. A number of 'spalled' and 'popped' sherds were noted, characteristics suggestive of kiln waste.

Pit 210 was dumbbell-shaped with a flat bottom and steep sides. Its fill was a dark grey silty clay containing frequent stone inclusions with a band of charcoal 0.34m wide running across the bottom of the cut. This was dated to the end of the 4th century AD making this the latest feature of the Roman period recorded by the watching brief.

Medieval or later quarries (Fig. 18)

Almost a third of the site was lost to two very large quarries (86, 66). Feature 66 was 19.4m wide at the southern limit of excavation and tapered to 8m wide at the northern baulk with the top fill containing medieval pottery. Feature 86 was *c.* 15m by 10m. A range of finds including medieval, Roman and prehistoric pottery were recovered.

The Finds

The Late Iron Age and Romano-British pottery

T.S. Martin

The excavation yielded 576 sherds (2,739 g) of Late Iron Age and Roman pottery from thirty-one contexts. Although much of the pottery consisted of undiagnostic body-sherds, there was sufficient dateable material to suggest a mid 1st to early/mid 2nd-century AD date range for the main period of occupation. Only three features with Late Iron Age and Roman sherds contained later pottery; pit 210 provided the only evidence of late Roman activity, and ditch 35 and the quarry 86 both contained medieval pottery. The pottery was classified according to the Going type-series (Going 1987).

Discussion

On the basis of the ceramic evidence, occupation at the Montana Nursery site belongs principally to the period between the mid 1st century and the early/mid 2nd century AD. The pottery reaching the site is made up of locally produced coarse wares, with small amounts of Colchester Buff Ware being the only widely traded fabric reaching the site; imported fine wares are totally absent suggesting a relatively low economic status. The earliest pottery reaching the site comprises a variety of grog-tempered wares (Going fabric 53) which are datable to the early to mid/late 1st century. By the later 1st century these are beginning to be replaced by finely grogged

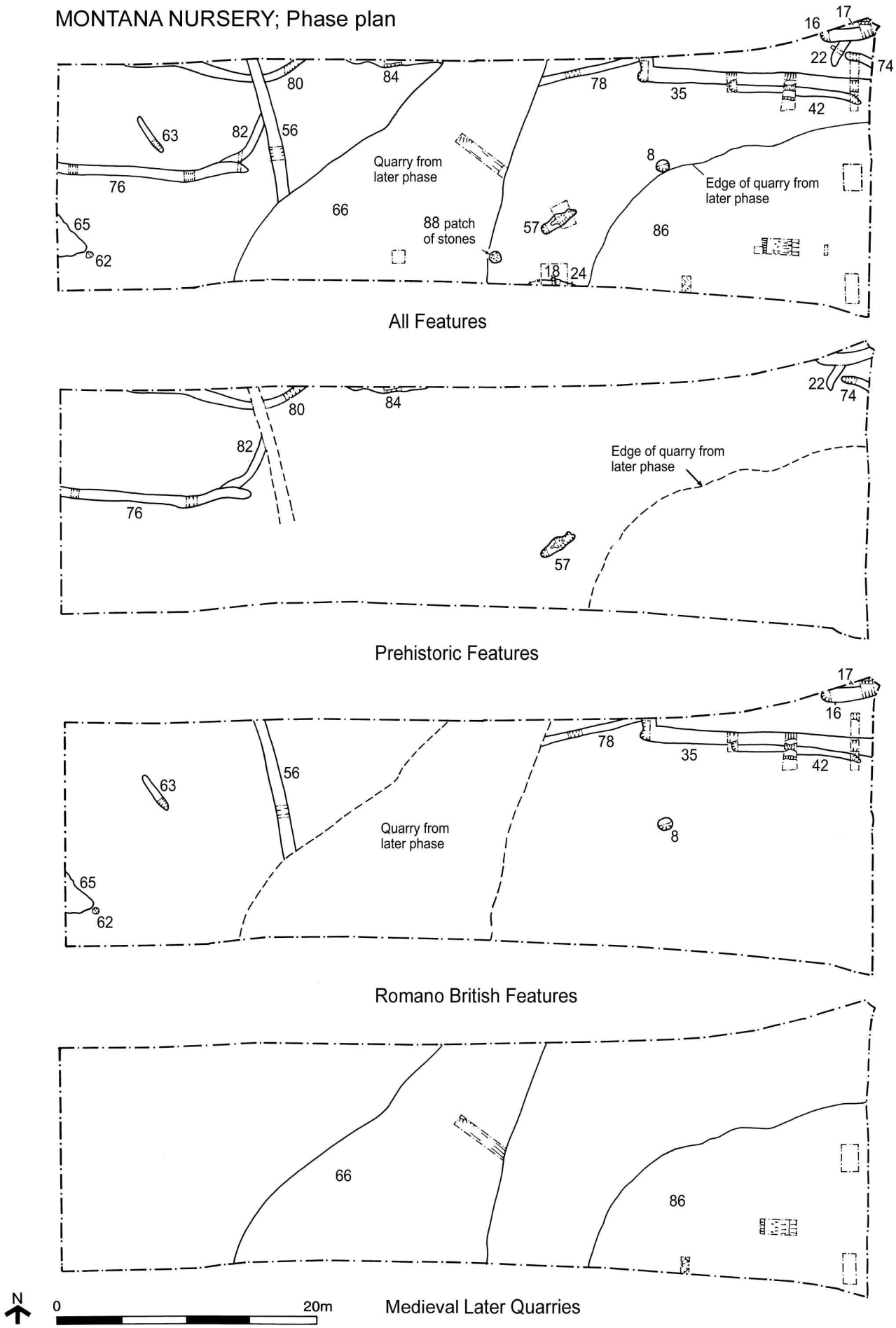

Fig. 18 Clacton to Weeley by-pass. Montana Nursery; phase plans

black surfaced Romanising wares (Going fabrics 34 and 45) as well as fully Romanised grey wares (Going fabrics 39 and 47).

Tentative evidence for on-site pottery production comes from a number of 'spalled' and 'popped' sherds recovered from pits 201 and 206, which are strongly reminiscent of kiln waste. It seems possible that the fill of pit 206, which produced the largest group of pottery from the site, represents the remains of a kiln dump. The variety of fabrics being manufactured appears to be typical of the pottery being consumed on site, i.e. Going`s fabrics 34, 45 and 47, in the later 1st to early 2nd century AD. Although the range of forms produced is less clear, it almost certainly includes the G19 necked jar.

Evidence for industrial activity as well as the lack of obvious structural evidence suggests that the excavated area lies on the settlement periphery. This is also supported by the relatively low quantities of pottery recovered when the size of the excavated area is taken into account. There seems to have been a major change in the nature of occupation about the middle of the 2nd century, as represented by the cessation in the accumulation of discarded pottery from this time until the later 4th century. This suggests either abandonment or settlement shift. It is not until the end of the Roman period that pottery again appears in the archaeological record. A single pit (210) provided the only evidence for activity in this period. By contrast with the earlier period, the pottery supply included fabrics from further afield, such as Hadham in Hertfordshire and the South Midlands (Going fabric 51). The amount of pottery from this feature, however, is not large suggesting that in this period too, the excavated area lay some distance from the settlement nucleus.

The medieval pottery

by Helen Walker (report written 1995)

A very small amount of medieval pottery was found; eleven sherds weighing 193g. The pottery has been recorded using Cunningham's typology (Cunningham 1985, 1–16) and the pottery present in each context is summarised on Table 7.

Fabric 9 Thetford-type Ware
Fabric 13 Early Medieval Ware
Fabric 20 Medieval Coarse Ware
Fabric 21 Sandy Orange Ware
Fabric 21A Colchester Ware

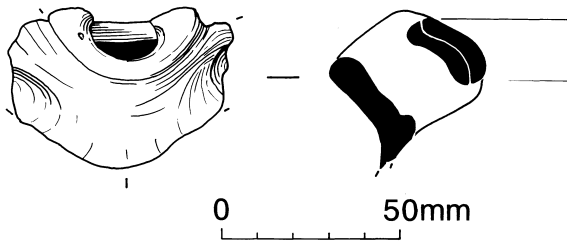

Fig. 19 Clacton to Weeley by-pass. Montana Nursery; spout from spouted pitcher

The pottery is similar to that found at Gutteridge Hall and Langford Lodge (WEGH 93 and STOLL 94). A couple of sherds were intrusive in Late Iron Age and Roman contexts, but most belong to the medieval or later phase. Most of the sherds are small and abraded; the only featured sherds comprise an Early Medieval Ware beaded rim, perhaps from a cooking-pot, datable to the 12th century, and the lower handle attachment from a Sandy Orange Ware jug. The latest pottery was excavated from large pit 66 and comprises a plain sherd of Colchester Ware dating from the later 13th to 14th century. There is not enough pottery to indicate occupation of this site during the medieval period.

Found unstratified was a Sandy Orange Ware rim fragment from a bowl or cooking-pot, and of particular interest is a U-shaped spout from a Thetford-type Ware spouted pitcher (Fig. 19). Thetford-type Ware is described by Hurst (1976, 314–20), and is a well-fired, wheel-thrown, micaceous grey ware produced at several sites in East Anglia during the Saxo-Norman period. It was made from the later 9th to early 12th centuries and was commonest in the 10th and 11th centuries. The spouted jar is a relatively common form and is found, for example, at Norwich where it seems to appear later than other forms (Jennings 1981, 14, fig.6.133–4). Thetford-type Ware is not very common in central Essex and this may be evidence of the influence of an East Anglian tradition in this part of the county.

Fig. 19 Spout from spouted pitcher: Thetford-type Ware; smooth, fine, pale grey fabric with ill-defined brownish core in places; abraded. *Unstratified finds no. 5*

Phase	Fill/Context	Feature	Relationship	Fabric					Wt (g)
				9	13	20	21	21A	
I	79	ditch/gully cut 78	below 48	-	1	-	-	-	7
II	34	ditch cut 35	only fill	-	-	1	-	-	7
III	27	large cut 86	-	-	1	-	-	-	5
III	31	box section through 27	-	-	-	1	1	-	37
III	48	V. large pit 66	-	-	1	-	1	1	77
-	5	unstrat. finds no.	-	2	-	-	-	-	53
-	6	unstrat. finds no.	-	-	-	-	1	-	7

Table 7 Quantification of medieval pottery by feature, fabric and sherd count.

Baked clay

by Hilary Major

A total of 3054g of baked clay was recovered, including fragments which may derive from structural daub, and identifiable pieces from two kinds of Iron Age artefact, all from early Roman or later contexts. There are several fragments of blocks and slabs, of the type generally called 'Belgic Bricks' (from features 16, 35, 66 and 86), a term coined by Wheeler (Wheeler and Wheeler 1936, 178) in the belief that these were building bricks. There is, however, no evidence for such a use – indeed, no good indication of purpose at all. Complete objects are variable in shape and size, including rectangular bars (which the examples from this site are likely to be), square and triangular blocks. It has been suggested that Belgic Bricks are associated with Late Iron Age pottery production, and the presence of later 1st century/early 2nd-century pottery on the site which may have been made nearby may help to support this hypothesis. This material is, however, likely to be later in date than the Belgic Bricks.

There are also several fragments from triangular loomweights, from features 16, 35 and 86. The type and its distribution across Essex is discussed in Major (1982). None of the examples from this site is complete enough to warrant illustration.

Discussion

A group of archaeological features were excavated ranging in date from the late Iron Age through to the medieval period. The original reason for excavation of this area was the presence of an enclosure identified from cropmark evidence. Archaeological features probably related to the cropmark were located on the northern side of excavation. The Roman features comprise a series of ditches possibly representing an enclosure of first century date. The finds from the early Roman features also include Late Iron Age material including triangular loom weights. Both these finds and the features of the Roman period indicate the presence of a settlement continuing from the Late Iron Age into the Roman period in the immediate vicinity of the excavated area. This is further supported by the presence of possible pottery wasters suggesting pottery production in the immediate area.

Later occupation comprises two large quarries, both dated to the medieval period.

Langford Lodge, St Osyth (STOLL 94)

Site background

The site was situated to the south-east of T-Grove Wood on a slight slope between 12.98m and 14.56m OD (Fig. 1). At the bottom of the slope (*c.*100m away) ran a small stream known as Pickers Ditch. This feature runs from Weeley to Little Clacton and forms a land boundary of some antiquity.

Fieldwalking

The fieldwalking survey recovered sixty-nine sherds of medieval pottery of 13th to early 14th-century date. Intensive fieldwalking further defined the site area and produced another 91 sherds though little building material was found.

Excavation

An area of *c.* 900m^2 was stripped corresponding to the spread of medieval pottery located by fieldwalking. The dominant feature was a large ditch with multiple recuts which bisected the site from south to north, heading down the slope towards Pickers Ditch. Halfway along the eastern side of this ditch was a large oval spread of material containing stone, pottery and tile. Other pits and post-holes were observed to the east of the ditch, and the features increased in density towards the north-eastern limit of excavation. A second group of features, consisting of three post-holes and an associated linear slot, was located towards the southern end of the ditch. To the extreme west of the site was a third group of features, characterised by the pale colour of their upper fills and their irregular shapes. These features were identified as prehistoric and represent the earliest activity found on site (Phase I). The other deposits were medieval in origin and can be attributed to three phases of activity, identified as 12th-13th century (Phase II), 13th century (Phase III) and 13th to 14th century (Phase IV). Additionally, the 13th to14th-century deposits were broken into two sub-phases (IVi and IVii) representing minor changes in ditch alignments.

Phase I prehistoric activity (Fig. 20)

Six irregular features in the western corner if the site were excavated, several producing worked flint. Only pit 18 had well defined edges.

Phase II, 12th-13th century (Fig. 20)

The earliest phase of medieval activity comprises a boundary ditch and scatter of pits and post-holes. The ditch (109) runs from the north-eastern edge of the site and runs north up the slope before terminating. This phase of the ditch was only visible in section. Pottery dated to 12th to earlier 13th century was recovered from the fill. The other features of this phase were post-holes (34, 43 and 45) and small pits (37, 49 and 72), all to the north and east of the ditch.

Phase III, 13th century (Fig. 20)

The line of ditch 109 (Phase II) was recut and extended beyond its terminus to the south, and extended beyond the limit of excavation. Only the eastern edge of the cut survives, as the western edge is truncated by a Phase IV recut. The full width of the ditch is estimated at 1.6m to 1.7m. Halfway along the ditch on the eastern side was a large, shallow, oval cut (132) which contains the same primary fills suggesting they are of similar date.

Possible structural features were cut into the bottom of 132, including a slot (133) set perpendicular to ditch 25, and two possible post-holes (164 and 166) located near the centre-line of the ditch. This whole structure group may be evidence for a wooden bridge across the ditch.

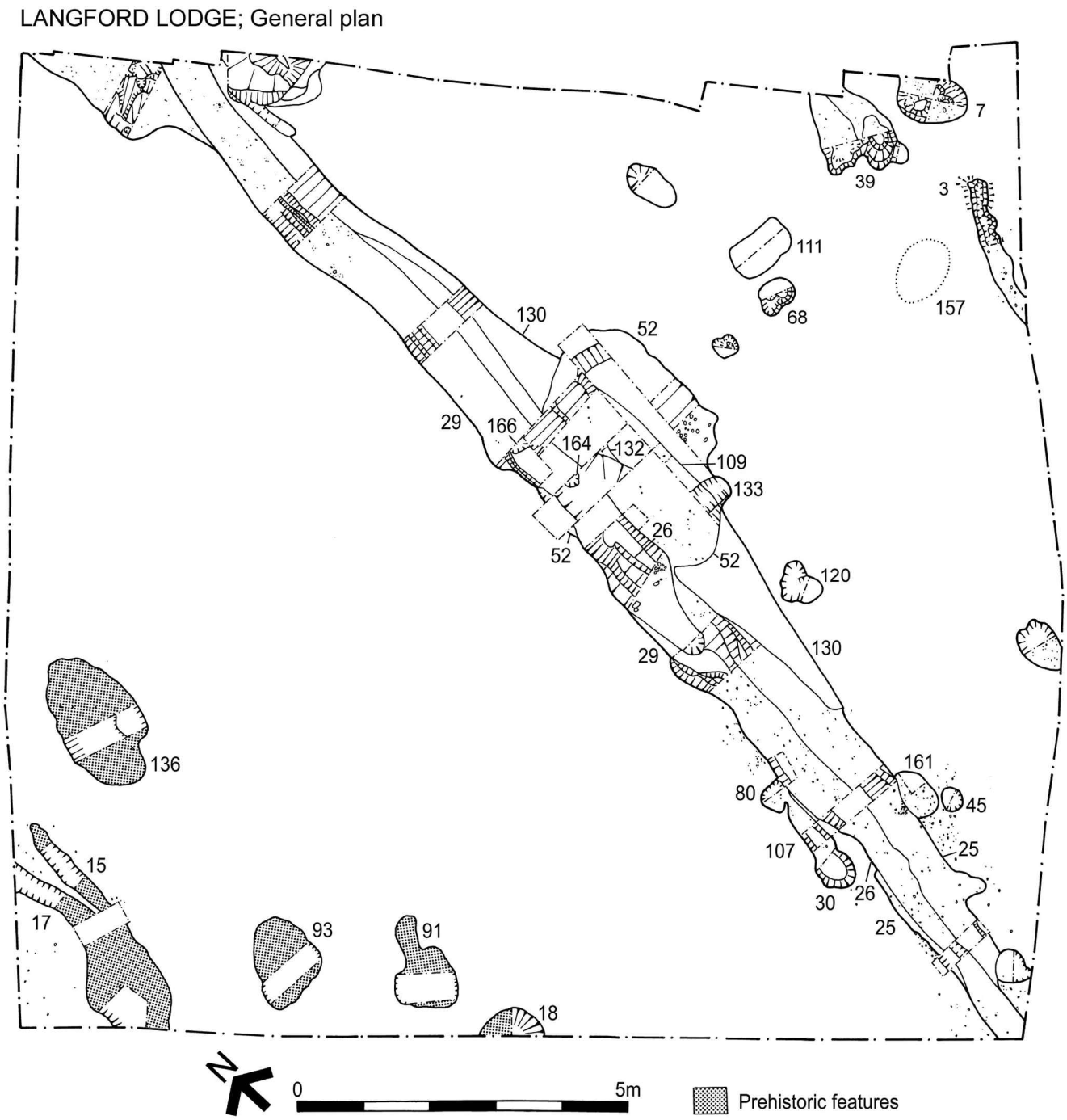

Fig. 20 Clacton to Weeley by-pass. Langford Lodge; general plan of features

At the northern end of ditch 25, a bulge to the west (98) may indicate either a realignment of the ditch or the existence of a separate feature, though their relationship is obscured by a later ditch recut (Phase IV). This feature may have been a quarry pit for clay extraction.

The remaining features of this phase are all located in the eastern corner of the site and consist of a linear pit with a possible post-setting (39), an oval feature with multiple post-settings (7), and a crooked gully (3), roughly parallel to the main ditch before leaving the south-eastern limit of excavation.

Phase IV (Fig. 20)

Ditch 25 (Phase III) was backfilled and the possible bridge structure dismantled. The line of ditch 25 was recut in this phase by ditch 26. Ditch 26 runs unbroken across the site from south to north. The ditch profile varied considerably along its length.

At the extreme northern end of the ditch on its eastern side was a large irregular shaped pit (22) possibly representing a quarry pit.

A group of three post-holes and a slot (30, 80, 161 and 107) were located at the southern end of ditch 26. These post-holes formed three corners of a square which straddled the ditch with slot 107 making the western side. Post-hole 161 cut the upper fill of the Phase III ditch

recut, 25. Their arrangement suggests they were three surviving corners of a four-post wooden structure, most probably a foot-bridge somewhat smaller than that of Phase III.

Four other features can be attributed to this phase, one (post-hole 24) to the south of the feature group described above and the other three to the north (68, 111 and 120). Post-hole 68 is located to the east of ditch 26, and is adjacent to 111. A small truncated post-hole (F114) was located at its western end.

Layer 157 was an oval spread of mid grey-brown clay loam approximately 3m long by 2.5m wide, though it may have been truncated by machine stripping. It contained 13th-14th century pottery.

The Finds

Medieval pottery

by Helen Walker

Introduction

A modest amount of pottery, 1111 sherds, weighing nearly 10.5 kg, was excavated; the phased pottery dates from the earlier 13th to 14th centuries. Medieval Coarse Ware is by far the commonest ware; fine wares include Colchester Ware with smaller amounts of Hedingham Ware. Cooking-pots are the main form, and jugs in both fine and coarse wares are also common. For the method used and an explanation of the cooking-pot rim codes, refer to the Gutteridge Hall medieval pottery report. Preliminary examination of the cooking-pots showed that they are unusually small, and for this reason, the range of rim diameter sizes has been noted in the fabrics section.

Fabrics (Only those fabrics not present at Gutteridge Hall are described in detail here)

Fabric 13 Early Medieval Ware: (7% of total)
Early Medieval Ware occurs in all phases and is commonest in Phase III. Forms comprise two beaded cooking-pot rims of diameter 220mm and a pipkin-type handle (No.7, Fig. 21).

Fabric 13B Early Medieval Ware – later types: (10% of total)
This occurs in Phases III to IV. Forms comprise two H2–type cooking-pot rims of around 190mm in diameter (No.11, Fig. 21), and one semi-complete cooking-pot with a D2–type rim of 160 mm diameter (No. 22, Fig. 21). The only example of decoration is a sherd exhibiting an incised horizontal line.

Fabric 20 Medieval Coarse Ware: (51% of total)
As with Gutteridge Hall, the nearest known source of production was at Mile End/Great Horkesley near Colchester. Medieval Coarse Ware accounts for over half the pottery total. It is present in all phases and most frequent in Phase IV. Cooking-pots are the commonest form and there are examples of the following rim-types B2; D2; H2 (Nos 2, 15, Fig. 21); H1 (No. 10, Fig. 21); E5A; E1 (No.16, Fig. 21); and E6 (No. 20, Fig. 21). These cooking-pots tend to be fairly small varying between 140 and 240mm in diameter, with the majority possessing diameters of 200mm or less. There is only one larger cooking-pot rim measuring 290mm. There is not enough data to determine whether there is any relationship between rim size and rim form or whether there is any change in cooking-pot size through time. In addition to the cooking-pots, there are the remains of a storage jar or large cooking-pot (No. 1, Fig. 21). Jug fragments are also relatively common and appear in a variety of shapes, several are illustrated (Nos 3, 6, 19 and 24, Fig. 21). Other forms comprise pipkin handles (No. 8, Fig. 21), the bunghole from a cistern (No. 25, Fig. 21), a horizontal flanged bowl rim and the rim of a bowl or curfew (No. 18, Fig. 21). Examples of decoration are quite common, ?storage jar No.1 shows intersecting diagonal thumbed applied strips, while jug No. 3 (Fig. 21) shows stabbed combing. Several body sherds exhibit thumbed applied strips and there are examples of combed decoration and incised horizontal lines (e.g. No.17, Fig. 21).

Fabric 21 Sandy Orange Ware: (12% of the total)
This occurs in Phases III to IV. Forms comprise jug rims, three are inturned (No. 4, Fig. 21) and one has a simple thickened rim. In addition, a late medieval flanged everted rim from small glazed bowl or jar was found unstratified. Decoration comprises cream slip-painting sometimes accompanied by a plain lead glaze, or cream slip-coating often beneath a mottled-green glaze. Some sherds may actually be Colchester Ware (see below) but are not classified as such because they are untypical in some way.

Fabric 21A Colchester Ware: (11% of the total)
This ware occurs in Phases III to IV and is most frequent in Phase IV. Forms comprise jug rims, three are inturned (No.14, Fig. 21) and one has a plain rim with a slight internal bevel (No. 23, Fig. 21). The bottom half of a Colchester Ware jug with a continuously thumbed base is shown (No. 21, Fig. 21). As with Sandy Orange Ware, there are two styles of decoration, cream slip-painting, sometimes beneath a plain lead glaze, or cream slip-coating under a mottled-green glaze. A few of the slip-coated sherds also show combed decoration (e.g. No. 14, Fig. 21). As well as jugs there are two cooking-pots, one with an H2 rim (No. 9, Fig. 21) and one with a beaded rim (No. 26, Fig. 21) with diameters of 240 and 150mm respectively.

Fabric 22 Hedingham Fine Ware: (5.5% of total)
This first appears in Phase II and is present throughout the sequence. All sherds appear to be from jugs, although only three jug rims were found, and of these two are unstratified. The rims are of the same type and are comparable to those found at Rivenhall. In addition, there is one small rod handle found in Phase IV probably from a small jug. Decorated sherds are common and there are three main styles of decoration; vertical applied

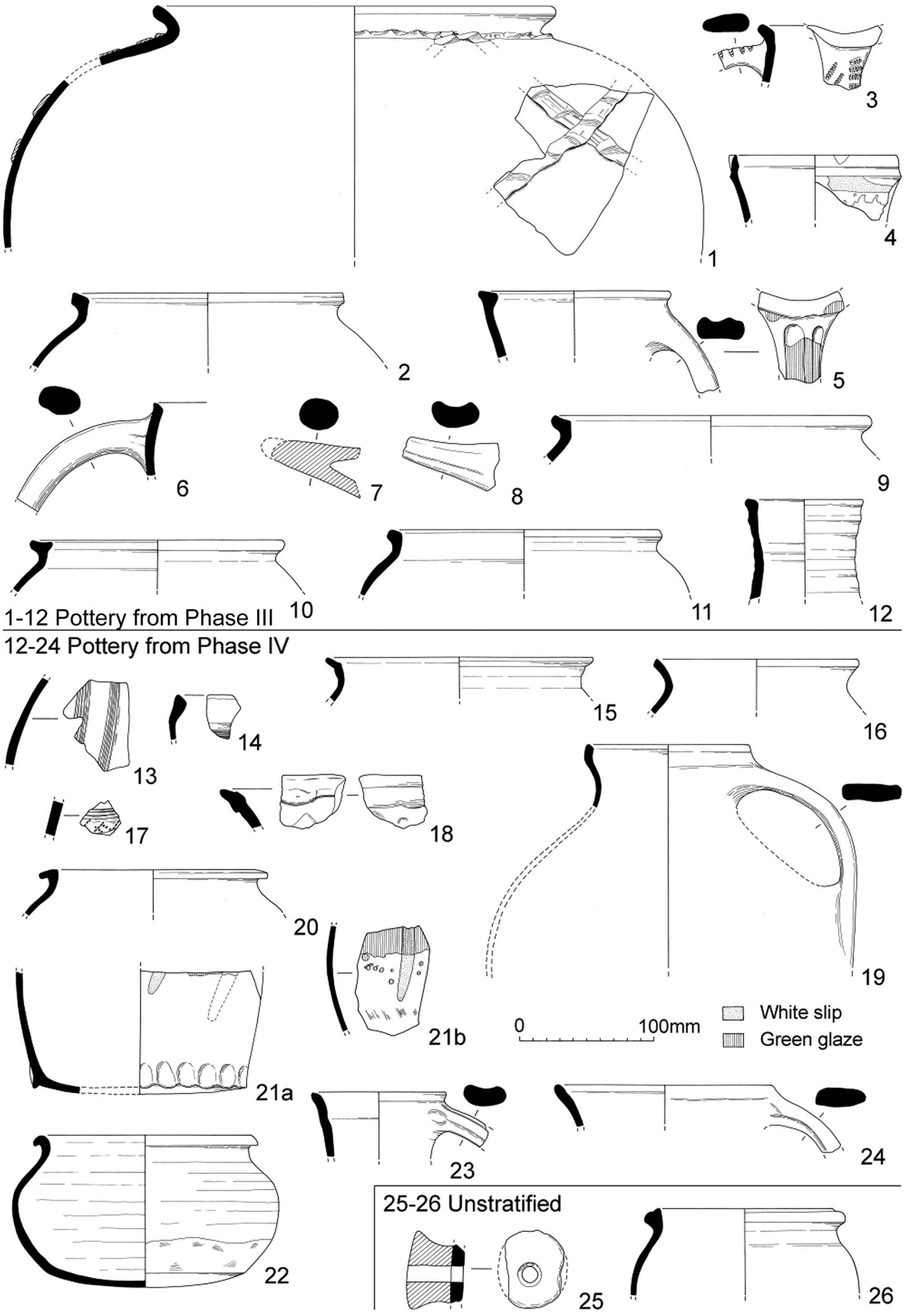

Fig. 21 Clacton to Weeley by-pass. Langford Lodge; medieval pottery

strips, vertical combed decoration (No.13, Fig. 21), and sherds coated with red slip sometimes overlain by applied strips, and in one instance, applied pellets. The latter are probably examples of Rouen-style decoration. One sherd is decorated with a pinched applied strip. One of the jug rims found unstratified shows a typical twisted rod handle with thumbing at either side of upper handle attachment (cf. Drury 1993, fig.43.127). The second unstratified jug rim shows the remains of ring-and-dot stamps. Bases are either sagging or continuously thumbed.

Fabric 35 Mill Green Fine Ware: (<0.1% of total)
Only one sherd is present, from Phase IV (and was absent altogether at Gutteridge Hall). This is a red-firing fine ware made near Ingatestone, in central Essex, during the mid-13th to mid-14th centuries. For a full description of Mill Green Ware, see Pearce *et al.* (1982), Meddens and Redknap (1992, 11–43), and also Walker (1995, 114) for its dating in Essex.

Fabric 40 Post-Medieval Red Earthenware:
(0.5% of the total)
All examples of this ware are unstratified except for a fragment from the base of a vessel in Phase III, but this is almost certainly intrusive. The only vessel form is an everted jar rim with a Dutch-type vertical looped handle and partial internal glaze, datable to the 15th/16th century.

Fabric 98B Unidentified reduced fine ware:
(0.5% of total)
This occurred only in Phase III and all sherds belong to the same vessel, jug No. 12 (fig. 21). It resembles Medieval Coarse Ware but without added sand-tempering.

Fabric 98C Buff-surfaced-grey-sandy fabric:
(2% of total)
This is similar to Sandy Orange Ware, but instead of an orange colour, sherds are pale grey with buff surfaces. It occurs in Phases III to IV and forms comprise two jug rims including No. 5 (Fig. 21). There are also examples of thumbed jug bases, and rilled jug necks. Several sherds have a green glaze and one small sherd shows cream slip-coating under a mottled-green glaze.

Pottery from Phase II (Table 8)

Medieval pottery first appears in Phase II (apart from an intrusive sherd in Prehistoric Phase I). A small amount of pottery, ten sherds weighing 57g was found. One small sherd of Hedingham Fine Ware was excavated from boundary ditch 160 (fill 156). It has a pale, abraded, fabric and shows an applied strip under a mottled-green glaze. It is most likely from a rounded strip jug (cf. Drury 1993, fig.43.125) and probably dates from the later 12th to earlier 13th century.

The remainder of the pottery came from a few widely-spaced pits and post-holes to the east of the medieval boundary ditch. This pottery comprises a mixture of Early Medieval Ware with some Medieval Coarse Ware sherds, suggesting a date of 12th to earlier 13th century. Apart from a couple of sagging base sherds, no forms are present.

Feature	Fill	Fabrics			Wt
		13	20	22	(g)
?pit cut 37	38	2	-	-	16
?truncated pit cut 49	50	1	2	-	17
post-hole/pit cut 72	73	1	-	-	12
post-hole cut 45	46	3	-	-	10
ditch cut 160	156	-	-	1	2

Table 8 Quantification of pottery from Phase II by feature, fabric and sherd count

Discussion of pottery from Phase II
This phase can be dated by the pottery to the later 12th to earlier 13th century. The dearth of pottery suggests there was little activity on site during this phase.

Pottery from Phase III (Table 9) (Fig. 21, 1–12)

A total of 353 sherds weighing 3.7kg was excavated from Phase III, which represents the main period of activity. Fine wares comprise Hedingham Ware, Sandy Orange Ware and Colchester Ware. There is also an example of unidentified reduced fine ware, which occurred only in this phase, and buff-surfaced-grey-sandy fabric. Medieval Coarse Ware is the commonest ware and there are also smaller amounts of Early Medieval Wares (Fabrics 13 and 13B). Pottery belonging to this phase was found in the central region of the boundary ditch, in features adjacent to the boundary ditch, in ?pit 98 at the northern end of the boundary ditch, and from a group of features in the eastern corner.

Group of features in eastern corner (features 3, 7 and 39)
Finds from the upper fill of pit /post-hole setting 39 (context 40) include a green-glazed Hedingham Ware rod handle and an abraded sherd of Colchester Ware showing traces of slip-painting under a partial lead glaze. Coarse wares include part of vessel No. 1:

1 Rim of storage jar or large cooking-pot: Medieval Coarse Ware; abraded buff-grey surfaces and grey core; rim slightly distorted; thumbed, applied cordon and intersecting oblique thumbed applied strips; no evidence of use; cavetto rim, form D2, datable to the first half of the 13th century; parts of this vessel also found in shallow cut 65 and ditch recut 59 in Phase IV, *c.* 5.5 to 8 metres distant; remains of a similar vessel was found at Gutteridge Hall, where it is discussed more fully (Fig. 13, 27). *Fill 40 (pit/post-hole setting 39) Phase III; fill 52 and 67 (shallow cut 65) Phase III and IV; and fill 125 (recut ditch 59) Phase IV*

Both fills of pit cut 7 (contexts 8 and 9) produced small amounts of pottery. The only fine ware is an abraded Sandy Orange Ware sherd showing a partial cream slip-

Feature	Fill	Relationship	Fabrics									Wt (g)
			13	13B	20	21	21A	22	40	98B	98C	
pit/post-hole	41	below 40	-	-	2	1	-	-	-	-	-	40
setting 39	40	top fill	5	-	23	-	1	7	-	-	-	326
pit 7	9	primary fill	1	-	2	1	-	-	-	-	-	51
	8	above 9	-	1	6	-	-	-	-	-	-	93
	6	cleaning above 8	-	3	3	-	-	-	-	-	-	87
gully 3	5	-	1	-	2	-	1	-	-	-	-	5
shallow cut 65	52	below 67 in Phase IV	13	10	78	6	7	4	2	-	4	1706
shallow cut / depression 132	133	-	-	-	1	3	1	-	-	2	-	18
ditch recut 134	64	primary fill	-	-	-	4	4	-	-	-	-	71
	58	primary fill	-	-	4	-	-	-	-	-	5	41
	63	above 64	-	-	-	7	-	-	-	-	-	15
	57	above 58	1	2	5	14	-	-	-	-	9	268
ditch recut 135	123	primary fill	2	22	8	-	-	-	-	-	-	463
= 134	122	above 123	4	7	24	-	-	3	-	5	-	370
	128	-	1	1	-	-	-	-	-	-	-	6
	126	-	1	-	2	1	-	-	-	-	-	22
?pit 98	105	upper fill	5	-	13	3	1	4	-	-	-	81

Table 9 Quantification of pottery from Phase III by feature, fabric and sherd count

coating. Coarse ware forms comprise an H2–type cooking-pot rim (No. 2, Fig. 21) and decorated jug handle (No. 3, Fig. 21). Nothing diagnostic was excavated from gully 3.

2 Cooking-pot rim: Medieval Coarse Ware; pale grey except for oxidised external margin; patch of abrasion on external surface; no evidence of use. *Fill 8 (pit cut 7)*

3 Jug rim: Medieval Coarse Ware; pale grey; tempered with white sands which show clearly on the surface; asymmetric stabbed combed decoration on handle, perhaps made with the end of a comb, a type of decoration that also occurs on Hedingham coarse Ware and as far afield as Oxfordshire (Mellor 1994, fig.44.6). *Context 6 (cleaning of pit cut 7)*

Pottery from features adjacent to the medieval ditch (the primary fills of features 65 and 132)
Context 52, the primary fill of shallow cut 65, produced a large group of pottery but as there are several cross-fits between this context and Phase IV contexts, the feature must be disturbed. (The cross-fits are as follows: between fill 52 and fill 67, the upper fill of shallow cut 65, this is above fill 52 and at the bottom of Phase IV; between fill 52 and fills 118 and 119 of ditch recut 117 in Phase IV.) Forms in fill 52, comprise:

Jugs

4 Jug rim with pulled spout: Sandy Orange Ware; dull red fabric with brighter orange margins and a grey core where vessel walls are at their thickest; abraded cream slip-painting and partial plain lead glaze; occasional beads of lead from the glaze adhering to surface, indicating the glaze was applied by dusting (Pearce *et al.* 1985, 4). *Fill 52 (shallow cut 65)*

Not drawn
Jug rim and handle: Sandy Orange Ware; slightly inturned rim with internal bevel; ribbed handle, oval in section; abraded; pale green glaze. *Fill 52 (shallow cut 65)*

Not drawn
A fragment of Colchester Ware jug showing vertical slip-painted stripes under a dark green glaze. *Fill 52 (shallow cut 65)*

Not drawn
A very abraded sherd of Hedingham Fine Ware from a jug with a pale green glaze and applied strip. *Fill 52 (shallow cut 65)*

5 Jug rim: buff-surfaced-grey-sandy fabric; apparent olive-green glaze on handle, with occasional splashes of glaze around the rim; abraded; downward angle of the handle indicates the jug is of a long thin shape, i.e. conical, pear-shaped or baluster, rather than a short, fat shape, i.e. squat or rounded. *Fill 52 (shallow cut 65)*

6 Jug rim and handle: Medieval Coarse Ware; grey core, dark red margins and red-grey surfaces; fairly coarse fabric. *Fill 52 (shallow cut 65)*

Pipkins

7 Pipkin or skillet handle: Early Medieval Ware; handle hollowed at attachment end using either a tool or a digit, perhaps as a method of securing the handle to the vessel, or to enable more even firing, as this is the thickest part of the handle; fire-blackened on underside. *Fill 52 (shallow cut 65)*

8 Pipkin or skillet handle: Medieval Coarse Ware; grey with buff-red surfaces; grooved upper surface; fire-blackened and sooted on underside. *Fill 52 (shallow cut 65)*

Cooking-pots
Not drawn
Two beaded Early Medieval Ware cooking-pot rims; a Fabric 13B rim, similar to No.11; six Medieval Coarse Ware cooking-pot rims of types B2, H2, H1 and E5A, all comparable to those found at Rivenhall.
9 Cooking-pot rim: Colchester Ware; orange surfaces and reduced core; no signs of use. *Fill 52 (shallow cut 65) and fill 118 (ditch recut 117) Phase IV*

Other
Part of the rim of storage jar/cooking-pot No. 1 and a sherd from a Medieval Coarse Ware bowl with a horizontal flanged rim (too fragmented to draw).

The latest pottery found in primary fill 52 is part of a Post-Medieval Red Earthenware sagging base from the same vessel as found in unstratified context 1, and is therefore most likely to be intrusive. In contrast, context 133, the primary fill of shallow cut/depression 132 which lay adjacent to fill 52, produced only a few body sherds including a sherd from reduced fine ware jug No. 12 (Fig. 21) from ditch cut 135.

Pottery from the boundary ditch recuts (recuts 134 and 135)
There are some internal cross fits within the fills of each ditch recut and some external cross-fits with the later Phase IV features. The cross-fits are as follows:

Internal fits between:
primary fill 64 and top fill 57
primary fill 58 and top fill 57
primary fill 123 and top fill 122

External fits between:
fill 57 and fill 60 of ditch recut 59 in Phase IV
fill 123 and fill 125 of ditch recut 59 in Phase IV
fill 122 and fill 125 of ditch recut 59 in Phase IV

Excavated from the primary fills of ditch cut 134 (fills 58 and 64) were a few undiagnostic sherds of Sandy Orange Ware, Colchester Ware and Medieval Coarse Ware. Of interest from fill 58, and cross-fitting with upper fill 57, are abraded sherds from a jug in buff-surfaced-grey-sandy fabric, perhaps from the same vessel as jug No. 5, Fig. 21. Also in upper fill 57, is a cooking-pot with an H1 rim (No. 10, Fig. 21) and sherds from a Sandy Orange Ware jug, with a simple thickened rim. Its fabric is red, rather than orange. Upper fill 63, produced only undecorated Sandy Orange Ware sherds.

10 Cooking-pot rim: Medieval Coarse Ware; uniform grey fabric; no signs of use; horizontal breakline around shoulder. *Fill 57 (ditch cut 134) and fill 60 (Phase IV ditch recut 59)*

Relatively large amounts of pottery were excavated from fills 123 and 122 of ditch recut 135. Lower fill 123 produced only coarse ware cooking-pots including an example of an H2 rim (No. 11, Fig. 21):

11 Cooking-pot rim; Fabric 13B; creamy buff orange; ill-defined grey core where vessel walls are at their thickest; smooth surface; pellets of darker coloured clay which are harder than the rest of the fabric and protrude through the surface; fire-blackened at the shoulder. *Fill 123 (ditch recut 135)*
Not drawn
Base and sides of cooking-pot: Fabric 13B; perhaps from the same vessel as No. 11; fire-blackened on sides and on underside of base; spalling of base near basal angle. *Fill 123 (ditch recut 135)*

Coarse ware forms in succeeding fill 122 comprise, a Medieval Coarse Ware thickened, everted jug rim in the same fabric as jug No. 6 and a Medieval Coarse Ware H2–type cooking-pot rim, similar in size and shape to No. 2 (Fig. 21). Fine wares in fill 122 comprise fragments from jugs:-

12 Jug rim: unidentified reduced fine ware; uniform grey with a fine sandy matrix but no larger added sand grains; brittle feel; splashes of apparent green glaze around rim; examples of undecorated, rilled, upright necks such as this are found on London-type ware baluster jugs in the North French style (cf. Pearce *et al.* 1985, fig.33.104) which are datable to the early to mid-13th century. *Fill 122 (ditch recut 135) with body sherds in fill 133 (shallow cut depression 132)*
Not drawn
Sherd of very abraded Hedingham Ware, showing the remains of applied strips and pellets, in a clay paler than that used for the body of the pot, traces of pale green glaze can also be seen. This is probably an example of Rouen-style decoration, dating from the early to mid-13th century. *Fill 122 (ditch recut 135)*

Very little pottery was excavated from the two remaining fills of ditch recut 135, fills 126 and 128, (see Table 9). Nothing diagnostic was found.

Pottery from ?Pit 98
This feature occurred at the northern end of the site and was associated with the boundary ditch. Pottery was found only in the upper fill, context 105, which produced sherds of Hedingham Fine Ware, including one pale green-glazed sherd with an applied strip overlying a thin red slip-coating. This may be an example of early to mid-13th century Rouen-style decoration. A larger fragment of Hedingham Ware showing this decorative technique was found at Gutteridge Hall (Fig. 11, 4). Undecorated body sherds of Sandy Orange Ware and Colchester Ware are also present, along with a fragment of thickened, everted jug rim in Medieval Coarse Ware (too fragmented to illustrate). The pottery provides no evidence as to the relationship between this feature and the boundary ditch, but the fact that pottery was only present in the top fill and the average sherd size is very small, only 3g, indicates that all the pottery is likely to be residual.

Discussion of Phase III

The presence of Colchester Ware and the H1 and E5A cooking-pot rims would indicate a later-13th to 14th century date for this phase, but as there is contamination from later features, there is always the possibility that these sherds are intrusive. When looking at pottery from the primary fills, i.e. the fills least likely to be contaminated (excluding primary fill 52 which clearly is contaminated), none of the later cooking-pot rims are present and there is little Colchester Ware. Small sherds of Colchester Ware are present in primary fills 5 and 133, but fill 64 was the only primary fill to produce a large fragment of this ware. The dating of this phase is therefore uncertain. Earlier pottery such as the Rouen-style Hedingham Ware and the B2 and H2 cooking-pot rims, dating to the early to mid-13th century are present and could be either current or residual.

Horizontal cross-fits such as those between vessel No. 1 in pit /post-hole setting 39 and in features beside, or within, the boundary ditch (i.e. the top fill of cut 65, ditch recut 59) would normally indicate the features were open at the same time, but as these features belong to the succeeding phase, it shows that the fills in the later phase are disturbed.

Pottery from Phase IV (Table 10) (Fig. 21, 13–24)

A total of 635 sherds weighing 5.6kg was excavated from this phase, which is about 51% more, by weight, than found in Phase III, even though the main period of activity took place in Phase III. The only new ware found here, not present in the earlier phases, comprises a single sherd of Mill Green Fine Ware. As would be expected, the proportion of Early Medieval Ware fabrics have declined in this phase (apart from the cooking-pot in ditch recut 117 (see below)), and Medieval Coarse Ware is even more dominant. The amount of Sandy Orange Ware and Hedingham Fine Ware have remained fairly constant percentage wise, but the amount of Colchester Ware has increased from 4% of the total in Phase III to 15% of the total in this phase. Less buff-surfaced grey sandy fabric is present. Much of the pottery was found in the central section of the boundary ditch, in the upper fill of shallow cut 65 adjacent to the boundary ditch, and from a pit at the northern end of the boundary ditch. The

Feature	Fill	Relationship	Fabrics								Wt
			13	13B	20	21	21A	22	35	98C	(g)
shallow cut 65	67	above 52 in Phase III	2	14	70	7	16	14	-	-	962
	99	cleaning above 67	-	-	11	-	-	1	-	5	207
ditch recut 151	96	top fill	-	-	2	-	-	-	-	-	17
	97	= 96	-	-	-	2	-	-	-	-	29
ditch recut 26	29	S end of ditch	-	-	-	2	-	-	-	-	2
ditch recut 159	110	= 26, N. of 29	-	-	3	2	-	-	-	-	18
ditch recut 88	89	= 26, N. of 110	-	-	1	-	-	-	-	-	9
ditch recut 59	62	primary fill	-	-	2	-	1	-	-	-	34
= 26	61	above 62	-	-	11	-	-	-	-	1	92
north of 89	60	above 61	3	-	6	6	2	2	-	-	198
	125	secondary fill	5	8	28	7	6	4	-	-	414
	129	above 125	1	3	55	13	15	3	-	-	713
ditch recut 66	48	= 26, only fill	-	1	42	-	6	2	1	1	788
ditch recut 145	146	= 26, only fill	-	-	6	-	2	-	-	-	48
post-hole 80	79	part of small	-	-	3	-	-	-	-	-	6
	81	bridge	-	-	-	3	-	-	-	-	4
?beam slot 107	108		1	-	1	-	-	-	-	-	28
post-hole 30	32		-	-	1	-	-	-	-	-	4
pit cut 22, at	33	primary fill	-	-	3	-	10	-	-	-	217
North end of	13	above 33	1	-	3	-	4	1	-	-	81
boundary ditch	23	above 13	-	-	-	7	2	-	-	-	86
ditch recut 117	119	primary fill	-	35	13	-	2	3	-	1	525
	118	above 119	4	7	37	2	6	3	-	-	530
	147	above 118	-	-	-	-	1	-	-	-	5
ditch recut 150	95	only fill	-	1	4	1	-	-	-	-	23
ditch recut 53	54	upper fill	3	-	10	7	-	1	-	-	95
pit 21	12	only fill	1	-	4	3	7	-	-	-	247
oblong pit 111	-	E. of boundary	-	-	4	-	-	-	-	-	19
post-hole 68	70	ditch	-	-	-	-	1	-	-	-	1
	69	above fill 70	2	-	4	1	-	-	-	-	14
post-hole/ small pit 120	121	E. of boundary ditch	-	-	4	-	2	-	-	-	19
layer	157	no relationships	-	-	12	4	10	-	-	-	182

Table 10 Quantification of pottery from Phase IV by feature, fabric and sherd count

distribution of the pottery is therefore similar to that in Phase III.

Pottery from the upper fills of shallow cut 65 and ditch recut 151

These features are considered first as they represent the upper fills of features that were originally cut in Phase III. Context 67, the upper fill of shallow cut 65, produced a relatively large amount of pottery with several cross-fits between the fills of ditch recut 59 (fills 125 and 129).

Fine wares of interest in fill 67 comprise fragments from jugs:

13 Body sherd from jug: Hedingham Fine Ware; uniform bright orange fabric; all over external mottled green glaze; lines of combed decoration made with 6–pronged comb; external abraded patch. Such decoration on Hedingham Ware occurs at Rivenhall and other sites (Drury 1993, fig.43.143), and may be a copy of Mill Green combed decoration (cf. Pearce *et al.* 1982, fig.3.1), giving a date range of mid-13th to mid-14th century for this sherd. *Fill 67 (shallow cut 65)*

Not drawn

A sherd of green-glazed Hedingham Ware showing pinched applied strips. *Fill 67 (shallow cut 65)*

14 Jug rim: Colchester Ware; orange fabric with grey core where vessel walls are at their thickest and grey 'skin' on surfaces indicating a late stage reduction during firing; cream slip-coating on internal and external surfaces; horizontal combing through slip and external mottled-green glaze in imitation of Mill Green Ware. *Fill 67 (shallow cut 65)*

Not drawn

Several other Colchester Ware sherds that appear to be Mill Green copies, including a slip-coated, green-glazed rod handle from a jug. *Fill 67 (shallow cut 65)*

Not drawn

A Sandy Orange Ware very abraded inturned jug rim, and a slip-painted and glazed sherd. *Fill 67 (shallow cut 65)*

Coarse wares from fill 67 comprise mainly Medieval Coarse Ware with a few sherds of Early Medieval Ware (Fabrics 13 and 13B). Cooking-pot rims are the only form present, and there are examples of B2 and H2–type rims (No.15, Fig. 21). There are also examples of everted flanged cooking-pot rims in Medieval Coarse Ware, sub-form E1 (No. 16, Fig. 21). This rim form does not fit into Drury's typology but is probably related to form E5, belonging to the late-13th to 14th centuries. Part of the rim of storage jar/large cooking-pot No. 1 (Fig. 21) is also present, and a decorated Medieval Coarse Ware sherd is illustrated (No. 17, Fig. 21).

15 Cooking-pot rim: Medieval Coarse Ware; uniform hard grey fabric; no traces of use. *Fill 67 and cleaning context 99 of shallow cut 65*

16 Cooking-pot rim: Medieval Coarse Ware; buff-brown surfaces and salmon-pink core; sparse flint inclusions up to 6mm across; fire-blackening around internal and external surfaces of rim; abraded. *Fill 67 (shallow cut 65)*

17 Body sherd: Medieval Coarse Ware; dark grey surfaces, oxidised margins and thick grey-brown core; relatively large amount of carbonised organic material; decorated with incised horizontal lines and stabbed combing. *Fill 67 (shallow cut 65)*

In contrast, very little pottery was excavated from the upper fills of ditch recut 151, fills 96 and 97 (Table 10) and nothing diagnostic was found.

Pottery from the boundary ditch recuts (recuts 26, 159, 88, 59, 66 and 145)

The ditch recuts were examined in geographical order, going from south to north. Little pottery was found in recuts 26, 159 and 88, comprising small abraded sherds of Medieval Coarse Ware and Sandy Orange Ware (see Table 10). The Sandy Orange Ware sherds in recut 159 show traces of Mill Green-style cream slip-coating.

A relatively large group of pottery was excavated from ditch recut 59, which contained several fills. However, the only primary fill to contain pottery, fill 62, produced very little, comprising a Colchester Ware sherd, exhibiting slip-painted horizontal and vertical lines, and a Medieval Coarse Ware sagging base which cross-fits with a sherd in secondary fill 125. Nothing diagnostic was excavated from succeeding fill 61. Most of the pottery in this section of ditch cut 59 came from top fill 60, and as has already been noted above, there are cross-fits between context 60 and ditch recut fill 57 in Phase III, so much of this could be residual. Fine ware sherds of interest comprise a Hedingham Ware jug rim with a rather decomposed green glaze; its rim-form is quite typical of Hedingham Ware and comparable examples are found at Rivenhall (cf. Drury 1993, fig.43.127). A second Hedingham Ware sherd shows a coating of red slip overlain by an applied strip and is probably another example of Rouen-style decoration. Sherds of Sandy Orange Ware and Colchester Ware are present, including a Sandy Orange Ware Mill Green copy. The only coarse ware form is part of cooking-pot No.10 (Fig. 21) from Phase III ditch cut 134.

Larger amounts of pottery were excavated from fills 125 and 129 of ditch recut 59. There are internal cross-fits between these two fills and external cross-fits with earlier Phase III features. In spite of the fact that fill 125 produced quite a large group of pottery, there is little of interest and the pottery is very similar to that found in fill 67, with which there are several cross-fits. The only featured sherds consist of a Sandy Orange Ware jug handle and a small, slip-painted sherd of Colchester Ware. Coarse ware forms, all in Medieval Coarse Ware, comprise cooking-pots with D2 and H1 rims, a jug handle, and a possible bowl/curfew rim (No.18, Fig. 21):

18 ?Bowl rim: Medieval Coarse Ware; thick grey core; buff margins; brown-grey surfaces; applied thumbed

strip around inside edge of rim; traces of fire-blackening outside; could be a curfew (fire cover) but there is no sooting on the inside surface. *Fill 125 (ditch recut 59)*

Pottery of interest from upper fill 129 of ditch recut 59 comprises examples of a Hedingham Ware sagging base and a thumbed base showing continuous thumbing at an oblique angle. Several of the Colchester Ware and Sandy Orange Ware sherds are decorated with cream slip-painting under a plain lead glaze, or show Mill Green-style cream slip-coating under a mottled green glaze. Medieval Coarse Ware forms comprise a fragment of inturned jug rim and two cooking-pot rims of types B2 and H2.

The fill of ditch recut 66 (context 48), produced another large group of pottery. The only sherd of Mill Green Ware to be found on site occurred here; a small body sherd, showing cream slip-coating under a mottled green glaze. Other fine wares include a green-glazed sherd of buff-surfaced-grey-sandy fabric and unfeatured sherds of Hedingham Fine Ware. Colchester Ware examples include a slip-painted, green-glazed sherd and more importantly, a cistern-type handle with a thumb-made groove running along the centre, and showing the remains of slip-painting. This is a late medieval form, current from the 14th to 16th century. As with all ditch recut fills, Medieval Coarse Ware is the most abundant fabric in ditch recut 66, and a number of featured sherds are present in this ware:-

19 Inturned jug rim and handle: Medieval Coarse Ware; abraded; uniform pale grey fabric; tempered with white and colourless sands; two indentations in internal surface at point of lower handle attachment; its shape suggests the handle is from a squat or rounded jug. *Fill 48 (ditch recut 66)*

Not drawn
A second Medieval Coarse Ware jug with an inturned rim, and the upper handle attachment of a third jug. *Fill 48 (ditch recut 66)*

20 Cooking-pot rim: Medieval Coarse Ware; dark surfaces but thick brown-red core; no traces of use; possesses a down-turned flanged rim, rim-form E6, this does not occur in Drury's typology but is probably related to rim-form H1. *Fill 48 (ditch recut 66) and unstratified context 1*

Not drawn
Medieval Coarse Ware cooking-pot rims of sub-forms B2 and E5A. *Fill 48 (ditch recut 66)*

Not drawn
A Medieval Coarse Ware pipkin or skillet handle, which is very similar to No. 8 in Phase III, having a grooved upper surface and fire-blackening and sooting on the underside. *Fill 48 (ditch recut 66)*

In contrast, the fill of ditch recut 145 (context 146) produced very little pottery (see Table 10). One sherd of Colchester Ware present shows Mill Green-style combing through a cream slip-coating, and sherds from this vessel also occurred in the top fill of Phase IV ditch recut 117 (context 147) stratified above.

Pottery from features belonging to the small bridge (post-holes 30, 80 and ?beam-slot 107)
These features lay on the western edge of the boundary ditch and were adjacent to ditch recuts 88 and 59. They produced only small abraded sherds of Early Medieval Ware, Medieval Coarse Ware, and Sandy Orange Ware (Table 10). Given the scarcity, and the small sherd size (averaging only 1.3g in fill 81), it would seem likely that all the pottery from these features is residual.

Pottery from pit 22
This large pit at the northern end of the boundary ditch was cut by pit 21. It produced a rather a modest group of pottery, but the sherd size in primary fill 33 is quite large, averaging 17g, and indicates low residuality. The bottom half of a Colchester Ware slip-painted jug was found in this fill (No. 21), along with a few miscellaneous body sherds of Medieval Coarse Ware. Less pottery, with a smaller sherd size was found in the secondary and top fills, averaging around 9g, but finds do include further sherds of jug No. 21 (Fig. 21). Also of interest in secondary fill 13, is a sherd of Hedingham Fine Ware showing combed decoration which is similar to, but not from the same vessel as No.13. While upper fill 23, produced a Sandy Orange Ware sagging jug base. Very little coarse ware was found in these features.

21a Base and sides of jug: Colchester Ware; grey core, orange margins and reduced surfaces; white slip-painting; remains of apparent olive-green glaze; drag marks probably produced by knife-trimming. *Fills 33, 13, 23 (pit 22)*

21b Body sherd from same vessel as No. 21a, showing slip-painting and drag marks. *Fill 33 (pit 22)*

Pottery stratified above pit 22
This pottery, unlike that from Phase III and other features in Phase IV, was distributed mainly in the northern half of the boundary ditch. Most of the pottery came from ditch recut 117, situated near to ditch recut 145. The most interesting find from its primary fill, 119, is a semi-complete Fabric 13B cooking-pot (No. 22, Fig. 21), the only semi-complete vessel to be found on this site. Its presence is anomalous, as its fabric and cavetto rim (rim-form D2) suggest a date in the first half of the 13th century, somewhat earlier than the rest of the pottery from this phase. Because of its completeness and the fact that it was found in the primary fill, the cooking-pot is unlikely to be residual; therefore, it is either a very long-lived form or there has been a mistake during excavation. Otherwise, the pottery from fill 119 is similar to that found elsewhere in this phase, fine wares including a sherd of Hedingham Ware showing combed decoration, a sherd of Mill Green-style slip-coated and green-glazed Colchester Ware, and a sherd of a buff surfaced grey sandy fabric from jug No. 5. Coarse wares include

further sherds of Fabric 13B, and a small fragment of Medieval Coarse Ware B2–type cooking-pot rim.

A similar quantity of pottery and range of fabrics was excavated from secondary fill 118 of ditch recut 117. Finds include a Colchester Ware jug rim and handle (No. 23, Fig. 21) and part of Colchester Ware cooking-pot rim (No. 9, Fig. 21) first found in Phase III. There is also an abraded sherd of Rouen-style Hedingham Ware. Coarse ware forms comprise further sherds from cooking-pot No. 22 (Fig. 21), a Medieval Coarse Ware jug rim (No. 24, Fig. 21) and three Medieval Coarse Ware cooking-pot rims of sub-forms B2, H2 and H1. The upper fill of ditch cut 117 (context 147) contained a single sherd of Colchester Ware from the same vessel found in adjacent ditch recut fill 146.

22 Cooking-pot: Fabric 13B; about 50% complete; red margins, grey core, smooth, mottled-grey/brown surfaces; knife-trimmed above basal angle; fire-blackened on area of knife-trimming; underside of base shows only slight fire-blackening and no spalling. *Fills 119, 118 (ditch recut 117)*
23 Jug rim: Colchester Ware; orange fabric with thick grey core; traces of slip-coating externally and on inside of rim; splashes of plain lead glaze; thumbed 'ears' at the side of the handle attachment; abraded. *Fill 118 (ditch recut 117)*
24 Jug rim: Medieval Coarse Ware; grey core, red-buff margins and pale grey, slightly abraded surfaces. *Fill 118 (ditch recut 117)*

The fill of ditch recut 150 (fill 95) to the north of recut 117, produced a crumb of Sandy Orange Ware and a few coarse ware body sherds (Fabrics 13B and 20). Slightly more pottery was excavated from the upper fill of ditch recut 53 (context 54), to the north of recut 150, where sherds of interest comprise a Hedingham Ware rod handle, probably from a small jug and two decorated Medieval Coarse Ware sherds. The decoration is too abraded to merit illustration, but one sherd shows incised horizontal bands, with a line of incised oblique strokes in the intervening gaps, the second decorated sherd exhibits straight horizontal and diagonal lines of combing.

Pottery was also excavated from pit 21 which cut pit 22, and as might be expected, there is a cross-fit between them (between fills 12 and 13). Colchester Ware is commonest and includes rilled necks from two jugs, a body sherd showing slip-painted vertical stripes under an apparent dark green glaze, and a continuously thumbed jug base. Unfeatured sherds of Early Medieval Ware and Medieval Coarse Ware are also present.

Pottery from the remaining features in Phase IV (features 68, 111, 120 and layer 157)
Small amounts of pottery were excavated from a few scattered pits and post-holes to the east of the boundary ditch and is similar to the pottery found within the boundary ditch. As no diagnostic sherds are present, the pottery is not described further.

Layer 157 which floats in the stratigraphic sequence, but can be assigned to this phase, produced relatively large amounts of Colchester Ware. Finds in this ware include a thumbed jug base, slip-painted sherds, an inturned jug rim, sherds of which also occur in unstratified context 4, and a sherd showing Mill Green style combing under a mottled-green glaze. Also present are unfeatured sherds of Sandy Orange Ware and a Medieval Coarse Ware H1–type cooking-pot rim.

Discussion of pottery from Phase IV
This phase is characterised by Mill Green copies in Hedingham and Colchester Ware, and one sherd of Mill Green Ware itself, which gives a mid 13th to mid 14th-century date. Possibly the latest sherd is the late medieval-type Sandy Orange Ware jug handle in ditch recut 66. This was given a date range of 14th to 16th century, but in the absence of any other late medieval pottery, a 14th-century date is most likely. An E5A-type cooking-pot rim datable to the late-13th to 14th century is also present in ditch recut 66. Much pottery however, such as the Rouen-style Hedingham Ware, the B2 and H2 cooking-pot rims, and decorated Medieval Coarse Ware sherd No.17 is residual earlier 13th-century material. A late 13th to 14th-century date is most likely for this phase.

Unstratified pottery (Fig. 21, 25–26)

A further 1.1kg of pottery was found unstratified and is tabulated in the archive. Apart from a few sherds of late medieval Sandy Orange Ware and Post-Medieval Red Earthenware, most of the pottery is the same as that found in the stratified medieval sequence. Two sherds of intrinsic interest are illustrated and other material of interest is described in the fabrics section.

25 Bunghole from a cistern: Medieval Coarse Ware; abraded grey fabric with sparse carbonised inclusions. Early bunghole cisterns are unusual and did not become common until the 15th/16th century when they were produced in Sandy Orange Ware or Post-Medieval Red Earthenware. *Unstratified context 1*
26 Jar rim: Colchester Ware, orange but with darker external surface; abraded. *Surface find context 4*

Discussion of pottery from all phases

All pottery from the medieval phases occurs within the boundary ditch or to the east of the boundary ditch, indicating there was no medieval settlement west of the boundary ditch.

The pottery is of little use in dating the phases because it is all quite close in date. There is also the problem of contamination from intercutting features. The long distance horizontal cross-fits between features 39, 65, and 59 may be due to levelling of the site after it went into disuse or by the action of repeated ploughing.

Little can be said about the function of the site; the small size of the cooking-pots is unusual; as noted earlier, most have rim sizes of 200mm or less, while the average size of Essex cooking-pots encountered by the author is *c.* 260mm. Few cooking-pots show fire-blackening,

suggesting a use other than cooking. The relatively high proportion of jugs, in both fine and coarse wares, may also be significant.

Colchester Ware seems to have been the local alternative to Mill Green Ware and the absence of Mill Green Ware (bar one sherd) may be due in part to the geographical isolation of this part of Essex, although Mill Green Ware does occur elsewhere on the Essex coast, at Harwich and North Shoebury (Walker 1990 and Walker 1995). The presence of Hedingham Ware is not unexpected as it also occurs at North Shoebury and Harwich, and was found at Gutteridge Hall. The storage jar with the oblique thumbed applied strips suggests an East Anglian influence.

Miscellaneous Finds

by H. Major

The miscellaneous medieval finds are few, but include types of find which one would not expect to find on a non-settlement site. They include a good example of a decorated annular brooch, part of a pair of scissors (a rare find for a site of this date), fragments of medieval quern and fragments of worked building stone. The types of finds suggest that there is a settlement site in the immediate vicinity.

Copper alloy (Fig. 22)

1. Complete annular brooch, cracked. External diam. 48mm. Ring, circular in section with four moulded knops, walked scorper decoration, and three flat flowers on the top, possibly applied. The fourth flower is the end of the pin, folded over. This brooch is not directly paralleled in Egan and Pritchard 1991. Context 67 SF1. Phase IV, C13-C14.
2. (Not illustrated) Pin fragment with plain, small knob head and faceted shaft with pentagonal section. Head diam. 4mm, surviving L. 9mm. Context 122 SF2 Phase III, C13.

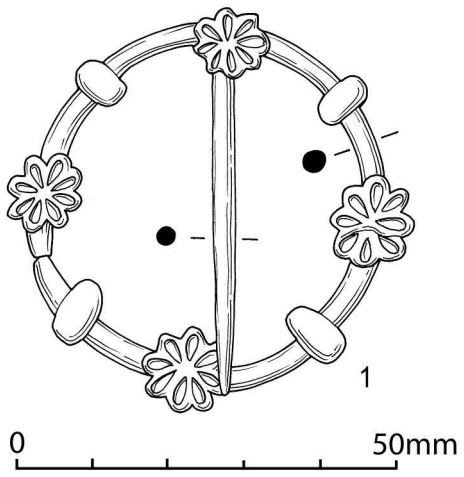

Fig. 22 Clacton to Weeley by-pass. Langford Lodge; annular copper-alloy brooch

Iron

Two iron objects were X-rayed at Colchester Museum. The other ironwork from the site comprised eight nails, one bar fragment, and an irregular block.

1. (Not illustrated) Small fragment from a strip with a notch out of one side, and probable moulding along this edge. This is probably part of a buckle, similar in shape to Egan and Pritchard 1991, 102, no. 473. The latter buckle is somewhat smaller, and made of lead-tin, and has a probable early 15th-century date. Context 6, cleaning layer.
2. (Not illustrated) Fragments from a pair of scissors, comprising the top of the blades and part of the handle. There is a copper-alloy washer on the pivot, the head of which is probably missing. The blades have D-shaped sections. Context 67, feature 65 Phase IV, C13-C14.

Scissors were rare in the middle ages, shears of varying sizes being used in their stead. The presence of a copper-alloy washer on the pivot, sometimes decorative, appears fairly standard (cf. Cowgill *et al.* 1987, 114). There is no real evidence that scissors were associated with a particular usage (de Neergaard 1987, 60).

3. (Not illustrated) Horseshoe toe with a small right-angled calkin. It is broken across the first perforation, and is probably wavy-edged. This is likely to be of London type 2 (Clark 1995, 95–6), a type which continues through the 13th century, but is likely to be residual in 14th-century contexts. Context 119, ditch recut 117 Phase IV, C13-C14.

Stone

Niedermendig Lava Querns

Lava quern fragments came from six Phase III-IV contexts. Most were small, but the fragments from contexts 52 and 67 (both F65) were more substantial. Context 67 contained an upper stone fragment, with a slightly concave, pecked grinding surface. The 'edge' is virtually straight, and roughly finished, and I think it likely that this stone has been cut down, perhaps for use as building material. The concavity of the grinding surface suggests that this was a pot quern upper with a wedge-shaped profile, 18–35mm thick. One of the fragments from 52 joins this piece from 67, and it is likely that the two other fragments from this context are also from the same quern.

Other Stone Objects

Two joining pieces of greensand from context 67 (F65) have a sculpted surface, now rather eroded, and may have derived from a small basin. Alternatively they could be building stone.

Building Stone

There were several fragments of worked building stone from the site, coming from two Phase IV contexts, 67 (feature 65) and 129 (ditch recut 59). Context 67

contained three pieces, probably Kentish rag, from the edges of blocks, and 129 contained a small fragment of hard limestone with a ribbed surface.

Discussion

A single prehistoric pit was identified; however, no other evidence of this date was recovered.

The earliest phase of medieval activity (Phase II), dating to the 12th-13th century, comprised a ditch (109) which enters the site from the north-eastern limit of excavation and runs north up the slope before terminating. It is possible that this terminal of the ditch originally implied a causeway through the ditch.

In Phase III, dating to the 13th century, the line of ditch 109 was recut (25) and extended beyond the limit of excavation. Halfway along the ditch on the eastern side, a large, shallow, oval cut (132) was interpreted as a bridge structure, possibly replacing an earlier causeway. Structural features were cut into the bottom of 132. On the eastern side of the site several features (3, 7, 39) may represent structural features associated with a settlement. The presence of a possible settlement to the east of the excavated area may be the reason why so much pottery was found in the ditch.

During Phase VI the main ditch was re-cut, with the possible bridge dismantled. At the southern end of the excavation a sequence of post-holes (30, 80, 107, and 160) were excavated which were interpreted as a replacement bridge structure.

The quantities of finds from the ditch suggest that there is a settlement or farm in close proximity to the excavated area. This theory is supported by the presence of a means to cross the ditch being constructed in each phase. As with many other sites in Essex, the area seems to have been abandoned in the later 13th century.

THE WATCHING BRIEFS

Green Lane Farm, Weeley (WEGL 93)

A watching brief on a borrow pit immediately north of the moated site at Gutteridge Hall (Fig. 1) identified only two archaeological features, both undated. However, the presence of unstratified Late Iron Age and Roman pottery indicates some local activity.

Weeley Brook, Weeley (WEWB 93)

Monitoring of topsoil stripping along the route detected a dense spread of burnt flint in association with cut features (Fig. 1); these deposits extended across at least half the width of the road area. Subsequent rescue excavation concentrated on the best preserved group of features in an area *c.* 15m by 12m, which was cleaned and planned.

The features

At least thirty features consisting of stake-holes, post-holes, irregular shaped pits and gullies were identified. Most fills contained small fragments of burnt flint and charcoal. A single fire pit, 10m to the south of the other features contained a band of almost pure charcoal 0.02m thick; scorching around its base indicated that the burning occurred *in situ*.

The earliest feature, stratigraphically, of the main group was gully 20, oriented east-west. It was cut on its southern side by five post-holes (9, 12, 13, 14, and 15), although these may be related to the gully, forming part of a wall line. Other post-holes (5, 18, 24, 25, 26) to the north and south of this line and a variety of smaller post or stake-holes (stake-hole group 8, 10, 19, 23, 26 and 27) were identified.

Cutting ditch/gully 20 on its northern side was a large irregular pit (17), with a compact, hard surface. Cutting pit 17 was an irregular linear feature (21) with a further irregular linear feature to the west (22). Other irregular shaped features comprised 6, 7, and 28 however, the lack of excavation means these could not be interpreted.

Some of the features are likely to be of a structural nature, especially the gully and its potentially associated post-holes.

Discusssion

Little excavation was undertaken on these features and those that were excavated produced no dating material. The fieldwalking produced small quantities of medieval pottery and Gutteridge Hall moated site is nearby. However, other similar sites in Essex with little dating evidence, but with finds comprising mainly burnt flint and charcoal have been identified as being of prehistoric, probably Bronze Age date.

The number of post-holes and probably associated gullies would indicate a structural nature. Whether this is part of a building or windbreak is impossible to ascertain from the area excavated. The fire-pit to the south may indicate all of these features are part of a larger settlement.

Gutteridge Farm, Weeley (WEGF 93)

Topsoil stripping north-west of Gutteridge Hall Farm (Fig. 1) revealed no features of archaeological interest. Three backfilled drainage ditches and an area of disturbance (all 19th/20th century in date) were however located and recorded.

OVERALL DISCUSSION

The Clacton-Weeley bypass provided the opportunity to investigate a linear cross-section of landscape orientated roughly north-south through part of Tendring District. Although undertaken in 1993, two years after the publication of PPG 16, the fieldwork was severely restricted by resources, with the result that on some sites limited and partial results were all that could be achieved. Prehistoric activity is widespread in the area, with the well drained soils being attractive to settlement; this is demonstrated by a wealth of cropmarks indicating prehistoric and Roman field systems, enclosures, trackways and burial sites. Excavations at Dead Lane (LCLDL 93), to the west of two large ring-ditches, identified many undated features likely to be either associated with these ring-ditches or possibly the excavated Middle Iron Age ditch. The presence of the

ring-ditches, Middle Iron Age ditch and Later Iron Age pits indicate the area was occupied, probably continuously, from the Late Bronze Age. Earlier Bronze Age activity may be indicated by the features containing burnt flint at Weeley Brook (WEWB 93). The presence of features whose only finds comprise burnt flint and charcoal have been dated on other sites throughout Essex to the Early to Middle Bronze Age.

Roman occupation was identified on three of the excavated sites, mainly associated with agricultural production. A single group of early Roman cremations were found on Gutteridge Wood (WEGW93), indicating a settlement nearby. At Montana Nursery (LCLMN93), Roman ditches formed a probable enclosure and the finds from these and other associated features indicate settlement or industrial production in the near vicinity. Evidence of land divisions at Dead Lane (LCLDC 93) can be seen extending over several adjacent fields from cropmark evidence. Land division in the second century AD indicates a significant re-ordering of the landscape at this time.

The medieval landscape of the Tendring plateau is one of scattered settlements, hamlets and individual farms set within a variety of field types. Moated sites, as at Gutteridge Hall (WEGH 93), are a characteristic medieval site type for Essex, with *c.* 900 sites recorded in the county. They are, however, sparser on the Tendring plateau with only nineteen sites recorded. The majority appear to have been built between 1275 and 1350, with a revival in the late medieval and early Tudor period (Hunter 1999).

Only a limited portion of the Gutteridge Hall complex was excavated, but was sufficient to establish that there had been several phases of moat initially enclosing a 12th to 13th-century structure with a hearth. It is not known whether this represents the dwelling house or a separate kitchen. Excavations at Stansted Airport (Havis and Brooks 2004) found evidence of a medieval site (Roundwood) containing a hall, kitchen and barn, with the kitchen being similar to that excavated at Gutteridge Hall. Both the Hall and moat at Gutteridge Hall were systematically enlarged over the centuries, with a new brick built building being constructed in the Tudor period to the south of the original medieval building. It is known that there was a 14th-century thatched barn on the site and it can be assumed from comparison with other moated sites that originally there would have been a wider range of agricultural buildings.

The pattern of fields around Gutteridge Hall shown on the first edition OS map is likely to have originated in the medieval period or earlier. Excavations at Langford Lodge (STOLL 94) found evidence of a medieval ditch containing several phases of development including features suggestive of a crossing point. The first edition OS shows a linear ditched trackway (green lane) running southwards from Little Clacton and terminating in the fields to the south of the new A133. A gap appears in the trees lining the trackway at approximately the position of the suggested crossing point identified from the excavation.

Acknowledgements

The archaeological work was commissioned by ECC Highways with thanks extended to Mike Goodman and Kevin Mobbs for their help and support. The project was supervised by Alec Wade who also completed the archive report. Stuart Foreman and Joanna Ecclestone were assistant site supervisors at Gutteridge Hall. This report was prepared for publication by Richard Havis.

Thanks are extended to Mr D J Brown (for kindly providing most of the documentary information for Gutteridge Hall), Raphael Isserlin, Maria Medlycott, and Caroline Ingle for their support throughout the production of the archive. Finds specialists included N. Brown, J. Cotter, C. Duhig, V. Fryer, K. Horsley, H. Major, T. S. Martin, P. Murphy, P. Ryan, and H. Walker. The illustrations were prepared by Iain Bell, the late Stuart McNeil and Nick Nethercoat. Thanks are extended to Mr Jarvis of Bovills Hall Farm for kindly allowing access through his land to the excavation at Langford Lodge.

Bibliography

Astill, G. and Grant, A. (ed.) 1988 *The Countryside of Medieval England*

Allan, J. 1983 'The importance of pottery to southern England *c.* 1200–1500', in Davey, P. and Hodges, R. (eds), *Ceramics and Trade,* Sheffield: University Press

Biddle, M. 1990 *Object and economy in Medieval Winchester,* Oxford

Brown, D.J. 1981 *A History of Weeley Church and Village 1881–1981*

Brown, N. 1988 'A Late Bronze Age Enclosure at Lofts Farm,' *Proc. Prehist. Soc.*, **54**, 249–302

Brown, N. 1991 'Prehistoric Pottery' in Bedwin, O. 'Asheldham Camp – an Early Iron Age Hill Fort,' *Essex Archaeol. Hist.*, **22**, 13–37

Buckley, D.G. (ed.) 1980 *Archaeology in Essex to AD 1500*, CBA Res. Rep. **34**

Clark, J. 1995 'Horseshoes', 75–123 in Clark, J. (ed) *The Medieval horse and its equipment Medieval finds from excavations in London,* **5**

Coppack, G. 1980 'Medieval and post-medieval pottery', in Christie, P.M. and Coad, J.G., 'Excavations at Denny Abbey', *Archaeol. J.* 137, 223–47

Cotter, J. 2000 *The post-Roman pottery from excavations in Colchester 1971–85*, Colchester Archaeol. Rep. **7**

Cowgill, J., de Neergaard, M. and Griffiths, N. 1987 *Knives and Scabbards Medieval finds from excavations in London,* **1,** Boydell Press

Crummy, N. 1988 *The post-Roman small finds from excavations in Colchester 1971–85,* Colchester Archaeol. Rep. **5**

Crummy, P. and Terry, R. 1979 'Seriation problems in urban archaeology', in Millet, M. (ed.). *Pottery and the Archaeologist,* Institute of Archaeology, University of London, Occasional Publication No. 4

Cunningham, C.M. 1982 'The medieval and post-medieval pottery', in Drury, P.J., 'Aspects of the origin and development of Colchester Castle', *Antiq. J.*, 139, 358–80

Cunningham, C.M. 1984 'Summary of the pottery produced in the kilns' in Crummy, P. *Excavations at Lion Walk, Balkerne Lane, and Middleborough, Colchester, Essex*, Colchester Archaeol. Rep. 3, 186–9

Cunningham, C.M. 1985a 'A typology for post-Roman pottery in Essex', in Cunningham, C. M. and Drury, P. J., *Post-medieval sites and their pottery: Moulsham Street, Chelmsford*, Chelmsford Archaeol. Trust Rep. 5, CBA Res. Rep. **54**, 1–16

Cunningham, C.M. 1985b 'The pottery', in Cunningham, C. M. and Drury, P. J., *Post-medieval sites and their pottery: Moulsham Street, Chelmsford*, Chelmsford Archaeol. Trust Rep.5, CBA Res. Rep.**54**, 63–78

Cunningham, C.M. and Cotter, J. 1988 'An outline of the development of Colchester Ware', Unpublished paper given at Passmore Edwards, North Woolwich Old Station Museum 4.6.88

Darling, M.J. 1984 *Roman Pottery from the Upper Defences*, The Archaeology of Lincoln, Vol. XVI-2. Lincoln

Davis S.J.M. 1987 *The Archaeology of Animal Bones,* Batsford

de Neergaard, M. 1987 'The use of knives, shears, scissors and scabbards' 51–61 in Cowgill *et al.*

Drewett, P.L. 1975 'Excavations at Hadleigh Castle, Essex', *J. Brit. Archaeol. Assoc.* 3rd series, 38, 90–154

Drury, P.J. 1978 *Excavations at Little Waltham 1970–1,* CBA Res. Rep. **26**

Drury, P.J. 1993 'The later Saxon, medieval and post-medieval pottery', in Rodwell, W.J. and Rodwell, K.A., *Rivenhall: Investigations of a villa, church and village, 1950–1977*, Chelmsford Archaeol. Trust Rep. 4.2. CBA Res. Rep. **80**, 78–95

Drury, P.J. and Petchey, M.R. 1975 'Medieval potteries at Mile End and Great Horkesley, Essex', *Essex Archaeol. Hist.* **7**, 33–60

Dunning, G.C. 1968 'The trade in medieval pottery around the North Sea', in Renaud, J.G.N. (Ed.) *Rotterdam Papers: a Contribution to Medieval Archaeology* (Rotterdam), 35–38

Dunning, G.C. 1969 'Polychrome Ware', in Rahtz, P.A., *Excavations at King John's Hunting Lodge, Writtle, Essex, 1955–57*, Soc. Medieval Archaeol. Monograph **3**, 91–111

Egan, G. and Pritchard, F. 1991 *Dress Accessories,* London

Garner, F.H. and Archer, M. 1972 *English Delftware,* London: Faber and Faber

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

Havis, R. and Brooks, H. 2004 *Excavations at Stansted Airport 1985–91,* E. Anglian Archaeol. 107

Henrywood, R.K. 1992 *Jugs,* Shire Album 287

Hunter, J. 1999 *The Essex Landscape: a study of its form and history,* Chelmsford: Essex County Council

Hurst, J.G. 1966 'Waterbeach: the medieval pottery', in Cra'ster, M.D., 'Waterbeach Abbey', *Proc. Cambridge Antiq. Soc.* **59**, 89–93

Hurst, J.G. 1976 'The pottery', in Wilson, D.M. (ed.) *The Archaeology of Anglo-Saxon England,* London: Methuen, 283–348

Hurst, J.G., Neal, D.S. and Beuningen, H.J. 1986 *Pottery Produced and Traded in North-West Europe 1350 – 1650,* Rotterdam Papers VI

Jennings, S. 1981 *Eighteen centuries of pottery from Norwich,* E. Anglian Archaeol. **13**

Luff, R.M. 1994 *Animal Remains in Archaeology*. Shire Archaeology

Hurst, J.G. 1976 'The pottery', in Wilson, D.M. (ed.) *The Archaeology of Anglo-Saxon England,* London: Methuen, 283–348

MacGregor, A. 1985 *Bone Antler Ivory and Horn,* Croom Helm

Major, H. 1982 'Iron Age triangular loomweights', in Priddy, D. (ed) 'Work of the Essex County Council Archaeology Section 1981', *Essex Archaeol. Hist.* **14**, 117–22

Margeson, S. 1993 *Norwich Households: The medieval and post-medieval finds from Norwich Survey excavations 1971–8*, East Anglian Archaeol. **58**

McKinley, J.I. 1989 'Cremations: expectations, methodologies and realities', in C.A. Roberts, F. Lee and J. Bintliff (eds), *Burial archaeology. Current research, methods and developments,* BAR British Series **211**, 65–76

Meddens, F.M. and Redknap, M. 1992 'A group of kiln waste from Hardings Farm, Mill Green, Essex,' *Medieval Ceramics*, 11–43

Mellor, M. 1994 'A synthesis of middle and late Saxon, medieval and early post-medieval pottery in the Oxford region', *Oxoniensia*, **14**, 17–217

Merrifield, R. 1987 *The Archaeology of Ritual and Magic,* London: Batsford

Orton, C.R. 1978 *Pottery archives: Users Handbook,* Dept. of Urban Archaeology, Publication 1

Oswald, A. 1975 *Clay pipes for the Archaeologist,* BAR **14**

Pearce, J.E., Vince, A.J. and White, R., 1982 'A dated type-series of London medieval pottery part one: Mill Green Ware', *Trans London Middlesex Archaeol. Soc.*, **33**, 266–98

Pearce, J.E., Vince, A.G. and Jenner, M.A. 1985 *A Dated Type Series of London Medieval Pottery Part 2: London-type Ware,* Trans. London Middlesex Archaeol. Soc. special paper no. **6**

Platt, C. and Coleman-Smith, R. 1975 *Excavations in Medieval Southampton 1953–1969*, **2** Leicester: University Press

Rackham, J. 1994 *Animal Bones*, British Museum Press

Rahtz, P.A. 1969 *Excavations at King's John hunting lodge, Writtle, Essex 1955–57*, Soc. Med. Archaeol. Monograph 3

RCHME 1922 *An Inventory of the Historic Monuments in Essex, Vol III*

Reaney, P.H. 1935 *Placenames of Essex*

Richter, G.M.A. 1966 *The furniture of the Greeks, Etruscans and Romans,* London

Rumble, A. (ed.) 1983 *Domesday Book*: *Vol. 32*, *Essex,* Chichester: Phillimore

Schmid, E. 1972 *Atlas of Animal Bones/Knochenatlas*, Elsevier_

Vince, A.G. 1985 'The Saxon and medieval pottery of London: a review', *Medieval Archaeol.*, **29**, 25–93

Ward Perkins, J.B. 1940 *Medieval Catalogue,* London Museum

Walker, H. 1988 'The pottery', in Sellers, E., Ryan, P.M. and Walker, H., 'Maiden's Tye: a moated site at High Easter', *Essex Archaeol. Hist.*, **19**, 180–91

Walker, H. 1990 'The medieval and later pottery', in Andrews, D.D. *et al.* 'Harwich; its archaeological potential as revealed in excavations at George Street and Church Street', *Essex Archaeol. Hist.* **21,** 72–86

Walker, H., 1995 'The medieval and post-medieval pottery', in Wymer, J.J. and Brown, N.R., *North Shoebury: Settlement and Economy in south-east Essex 1500BC – AD1500,* E. Anglian Archaeol. **75**, 102–24

Walker, H. 1996 'The medieval pottery', in Medlycott, M., 'Medieval and post-medieval remains from Thaxted: excavations at the rear of 23 Town Street, 1992', *Essex Archaeol. Hist.* **27**, 332–5

Walker, H. 2004 'The medieval and post-medieval pottery', in Brooks, H. and Havis, R., *Excavations at Stansted Airport*, E. Anglian Archaeol. 107

Ward-Perkins, J.B. 1940 *Medieval catalogue*, London Museum

Wheeler, R.E.M. and Wheeler, T.V 1936 *Verulamium,* Res. Rep. Soc. Ant. Lond. XI.

The Society is extremely grateful to Essex County Council for a generous grant towards the cost of publishing this article.

Essex Archaeology and History 39 (2008), 57–123

A Late Bronze Age to Early Iron Age enclosure and an early Anglo-Saxon cremation cemetery at the Chalet Site, Hall Road, Heybridge, Essex

Andrew A. S. Newton

With contributions from Andrew Peachey, Peter Thompson, Carina Phillips, Nina Crummy and Ruth Pelling.

INTRODUCTION

During October and November 2006, Archaeological Solutions Ltd (AS) carried out an archaeological excavation at the Chalet Site, Hall Road, Heybridge, Essex (NGR TL 8600 0740; Fig. 1). The project was commissioned by Redrow Homes Ltd in advance of proposals for residential redevelopment of the site following the identification of the archaeological potential of the site through the production of a desk-based assessment (Vaughan and Grassam 2005) and a trial trench evaluation (McConnell *et al.* 2006).

The excavation revealed four distinct phases of archaeological activity. The earliest of these phases dated to the late Neolithic and comprised three small pits. The second phase of activity was of late Bronze Age/early Iron Age date. The dominant aspect of this phase of activity was a system of ditches which appeared to form the south-eastern corner of a square or rectangular enclosure. Three cremations of this date were present in close proximity to the ditch system. Following this, no dateable activity occurred until the early Anglo-Saxon period. This activity comprised a cremation cemetery, with associated features, containing sixty-six cremation burials, with a further seven undated cremation burials, which may have been of late Bronze Age/early Iron Age or Anglo-Saxon date, also present. The last identifiable phase of archaeological activity was dated to the post-medieval period and comprised a pair of parallel ditches traversing the excavated area from east to west.

THE BACKGROUND

The geographical, geological and topographical setting

The Chalet Site lies within the settlement of Heybridge, 1.5km north-east of Maldon, Essex; the two settlements are separated by the river Chelmer. Heybridge straddles a bend in the Chelmer and Blackwater Navigation (Fig. 1). The Chelmer is tidal at this point, flowing into the Blackwater Estuary around Northey Island. Heybridge comprises areas of housing and industrial estates centred on St. Andrew's Church.

Heybridge lies in an area of coarse and fine loamy permeable soils that are variously affected by groundwater, primarily overlying terrace gravels of the river Blackwater (Soil Survey of England and Wales 1983). The area was subject to extensive post-medieval and modern gravel extraction, which was quarried for both road and general construction purposes.

The site itself is situated immediately to the south of Heybridge, 0.75km from St. Andrew's Church. It encompasses 0.28ha, bounded to the north by Heybridge Hall, to the south-east by flooded gravel workings and to the west by the tidal marsh and Heybridge Creek off the river Chelmer. It is generally flat, sloping from 2.93m AOD in the north-east to 2.66m AOD in the south. Prior to development, the site comprised a chalet park. Each plot consisted of a rectangular timber chalet built on a dwarf brick wall over a concrete foundation slab.

The archaeological and historical background

The Neolithic

The late Neolithic period is well represented in the Heybridge area. Artefacts of this date, in context, have been recorded at Lofts Farm (Essex Historic Environment Record (EHER) 7892, 7879), Elms Farm (EHER 17444) and at Goldhanger Creek (EHER 13630), amongst other locations.

Excavations in 1972 at Crescent Road, approximately 1km north-west of Heybridge Hall, revealed residual struck flints and flakes from various industries, some Mesolithic, but generally Neolithic in date (EHER 7791). Another area of this site yielded residual late Neolithic beaker and bowl potsherds and struck flints. These lithic artefacts included an oblique arrowhead and a fragment of an amphibolite hornblende-gneiss axehead (HER 7792). A Neolithic pit with pottery and flint was recorded during an excavation in 1985, at Heybridge Basin, 1.2km east of the Chalet Site (EHER 8017).

The evidence recorded in the area suggests that there was sustained activity on the gravel terraces of the Blackwater estuary (O'Connor 2007, 13). Indeed, some of the best evidence for early Neolithic settlement in eastern England comes from the Blackwater Estuary due to what is now the intertidal zone in this area having been dry land during the Neolithic. A particularly large area of preserved land surface at the Stumble, has produced evidence for settlement in the form of structural features, pits and large quantities of flintwork and pottery (Essex CC Historic Environment Branch 2008, 16).

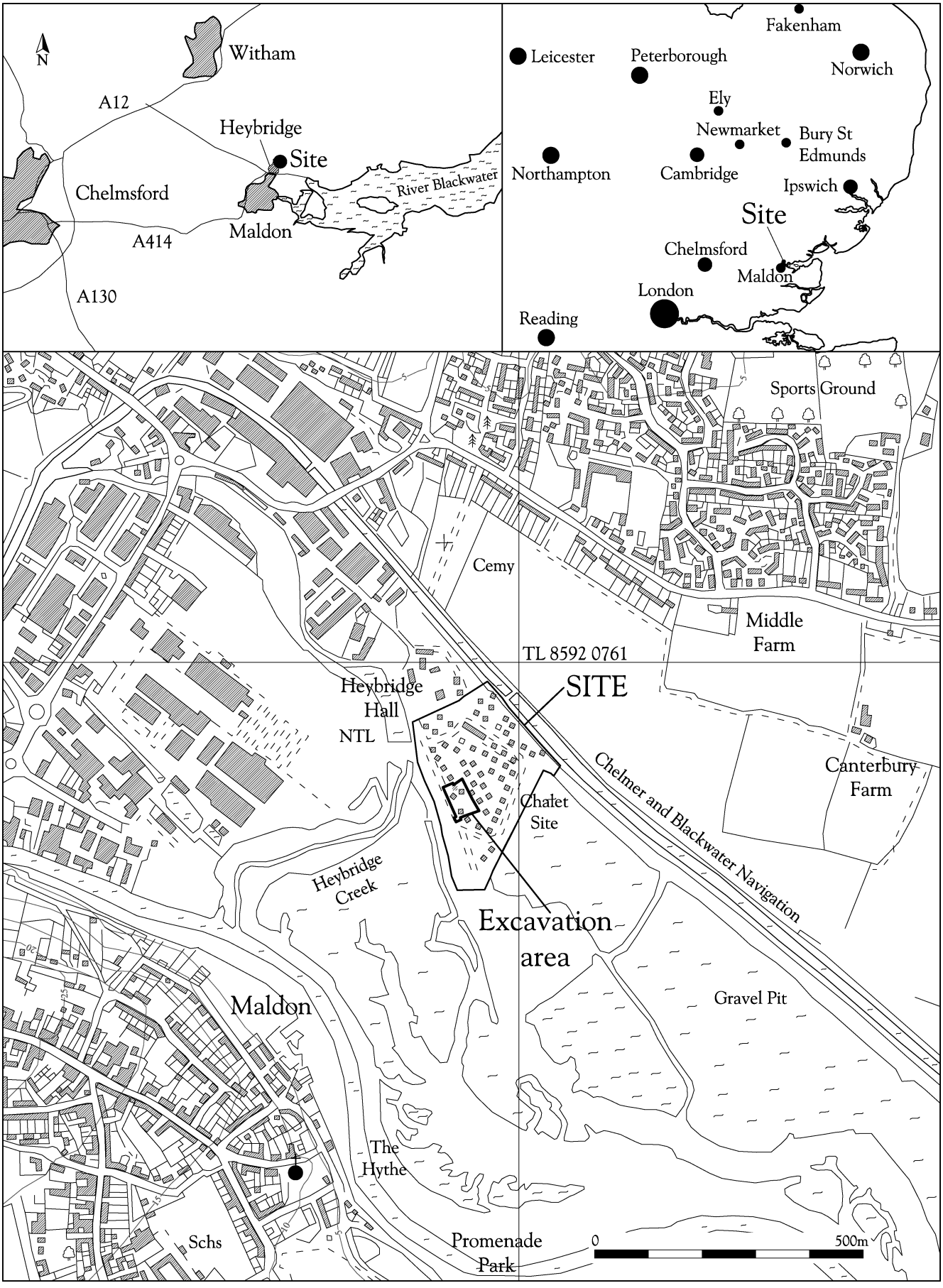

Fig.1 Site location plan. © Crown copyright and/or database right. All rights reserved. Licence number 10001 4800

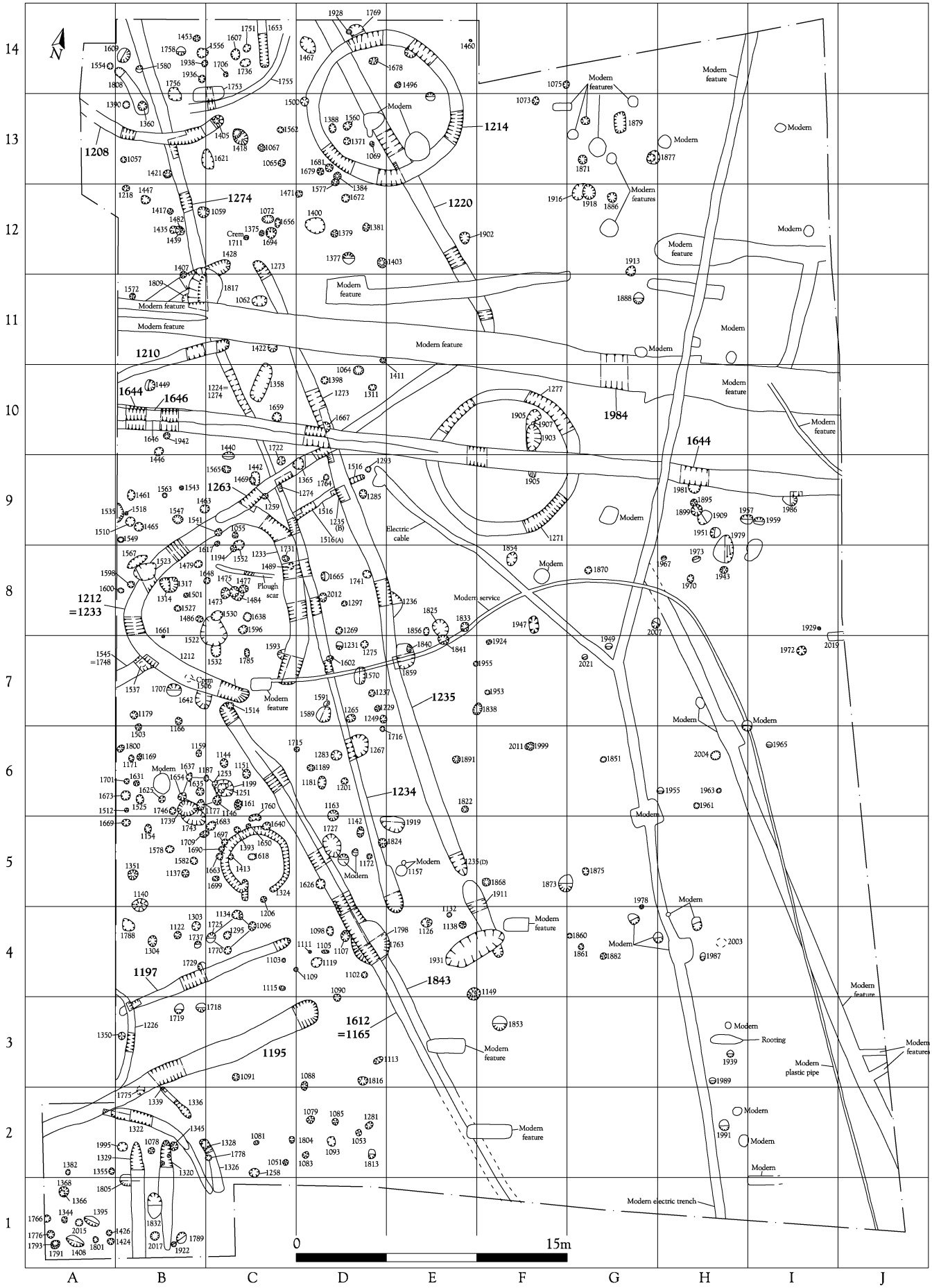

Fig. 2 All features plan

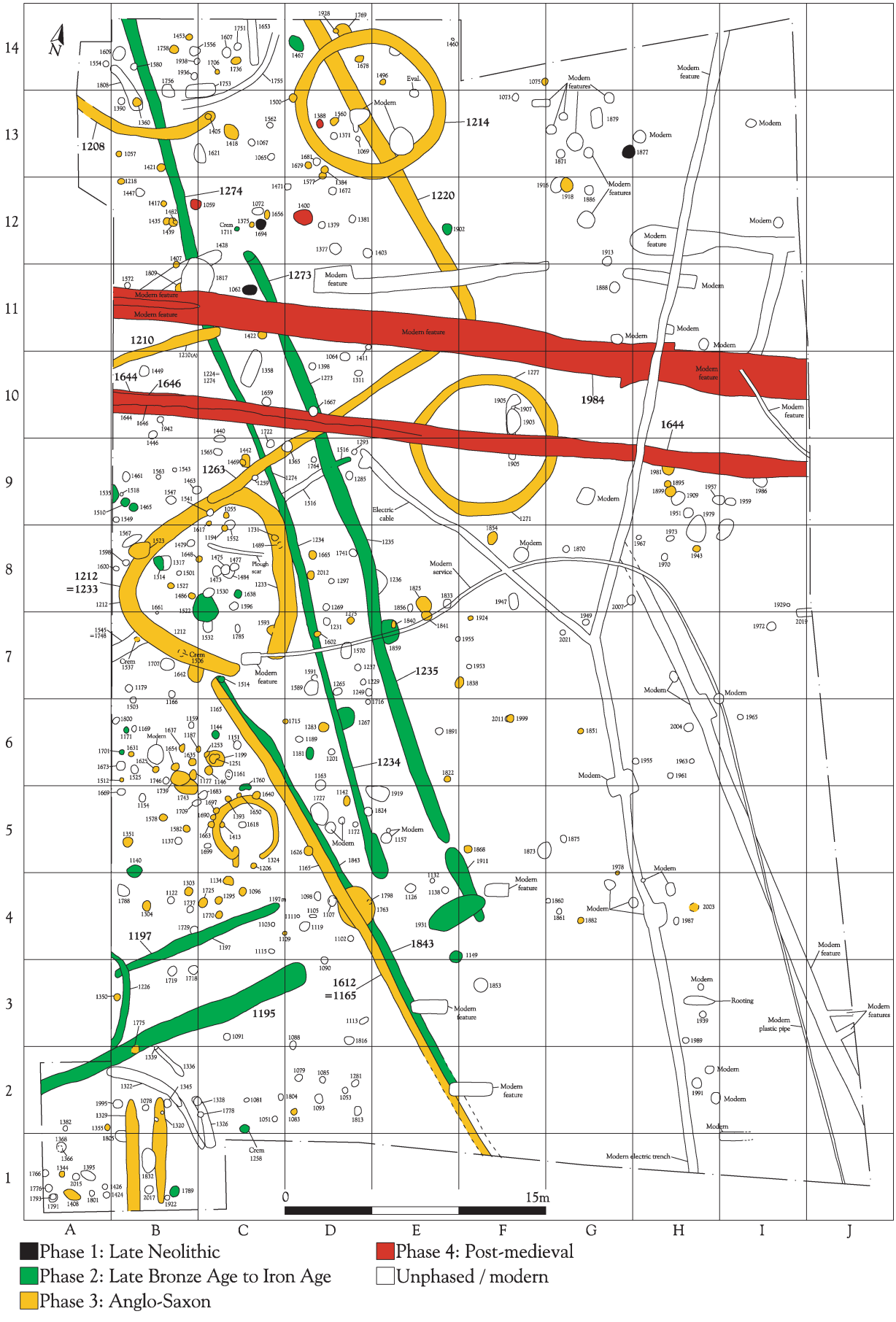

Fig. 3 Multi-phase plan

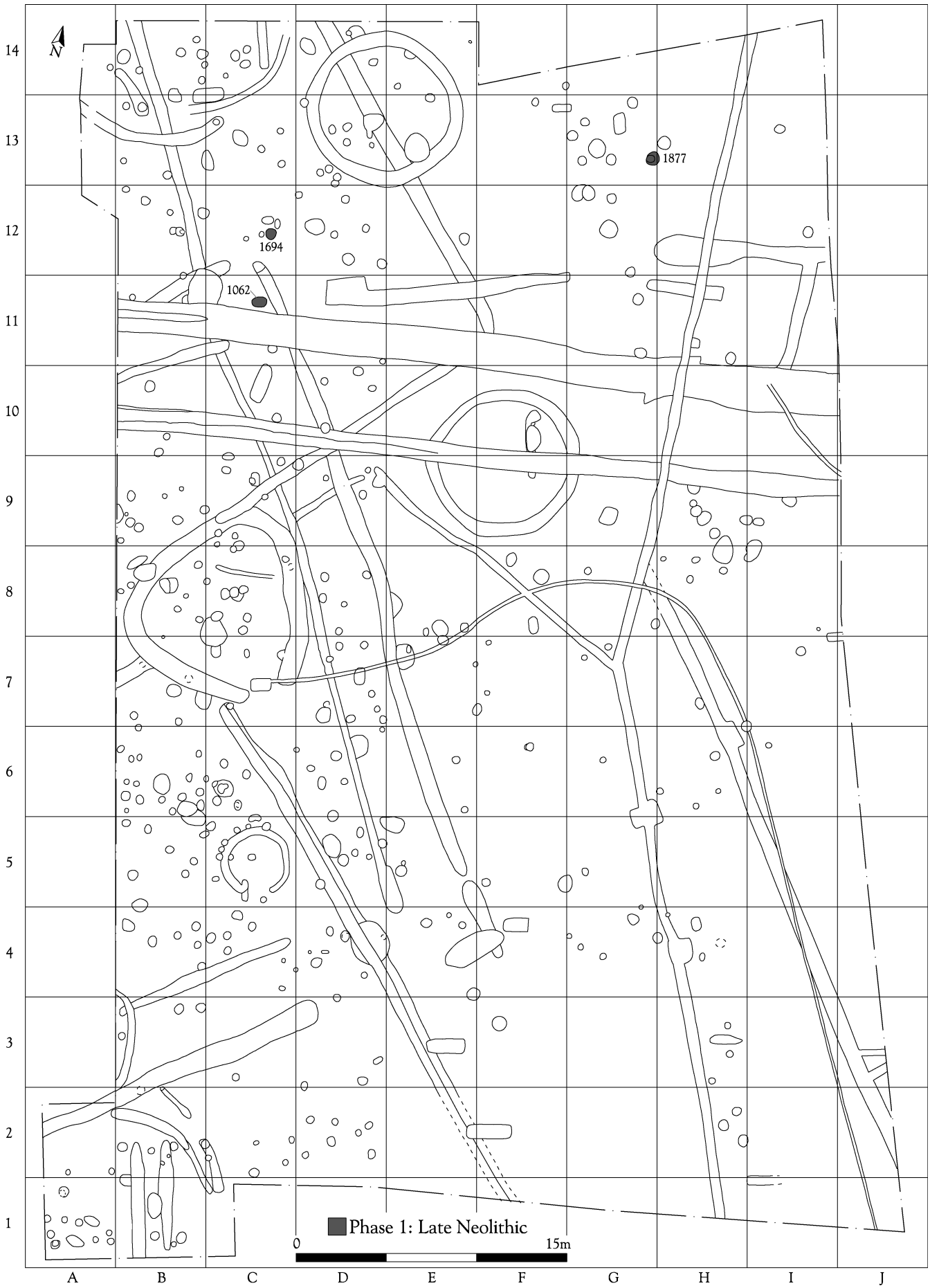

Fig. 4 Phase 1: Late Neolithic plan

The late Bronze Age to early Iron Age

By the late Bronze Age, a fully agricultural economy had become established; there are a number of known settlement sites of this period in the Maldon area. A concentration of sites to the east of Heybridge has produced evidence of permanent settlement within a managed landscape.

Slough House Farm, which has yielded multi-period evidence, displayed considerable activity in the late Bronze Age following an apparent hiatus in the middle Bronze Age. Various features were recorded, including a ring-gully and several pits, two of which contained hearth debris. A large pit, measuring over 15m in diameter, contained well-preserved organic material, including tree branches and leaf mould (Wallis and Waughman 1998). The late Bronze Age period is the first for which definite evidence of settlement has been identified. The largest area in which settlement was recognised at this site was probably continuous with the contemporary settlement evidence that was recorded at the adjacent Rook Hall site. The late Bronze Age settlement activity at Slough House Farm was unenclosed, unlike the double ditched settlement at Loft's Farm in Great Totham (Brown 1988; Wallis 1998, 55).

The northern-most of two trial trenches excavated at the former Maldon Youth Hostel in 1973 revealed sherds of hand-made flint-gritted pottery, probably late Bronze Age to early Iron Age in date. The second trench excavated at this site revealed a complex of intersecting post-holes and shallow depressions that contained pottery very similar to that recovered from the northern trench (EHER 7768).

At 39–45 Crescent Road, evidence of late Bronze Age activity comprised a cremation vessel and pottery of this date, in several features, which is considered to be residual (Roy 2003, 8). It has been suggested that the 1972 excavation at Crescent Road revealed the edge of a Bronze Age site. The finds included perforated clay slabs, possibly used in salt production (Wickenden 1986). Small-scale evidence of this period has also been recorded at Chappel Farm in Little Totham to the east of Heybridge, where four pits were found to contain late Bronze Age pottery and a high quantity of worked flint (Robertson 2003, 6).

In 1985, at Heybridge Basin, 1.2km east of the Chalet Site, a large number of features were revealed cut into the gravel surfaces (EHER 8016). They represented an unenclosed settlement, displaying internal divisions, that was of late Bronze Age date (10th-8th century BC).

Two concentrations of Bronze Age activity have also been discovered at Elms Farm (EHER 174444), located *c.* 1.5km to the north-west of the Chalet Site (Atkinson and Preston 2001). Excavation here identified a number of Bronze Age pits, which contained pottery and flint, and three disturbed cremations (Gilman 1994, 250; Gilman and Bennett 1995, 250). At Loft's Farm, Great Totham, *c.* 2km to the north of the Chalet Site, a sub-rectangular enclosure measuring 30m × 40m, defined by double ditches 0.3m–0.4m deep and 1m apart, was dated to the late Bronze Age. The enclosure had an entrance on its eastern side and internal features included pits and at least one roundhouse. A well was found to contain large quantities of early Iron Age Darmsden-Linton style pottery in the upper fills (Priddy 1984/5, 128). Several wells recorded at the late Bronze Age settlement sites to the north of the Blackwater were identified as having been deliberately sealed in the early Iron Age with deposits including very large quantities of pottery (Essex CC Historic Environment Branch 2008, 18). The southern part of the enclosure contained a number of structures, with a long rectangular building identified in the south-east corner. A number of late Bronze Age features were recorded outside of the enclosure indicating that occupation was not restricted to the enclosed area (Brown 1996, 32). The evidence that has been recorded in this part of Essex indicates a landscape of farms, set within a pattern of fields and woods, existed in the late Bronze Age.

Early Iron Age activity, consisting of post-holes and a small quantity of pottery, has been found off Crescent Road (EHER 7794), demonstrating continued occupation of this site following on from the Bronze Age settlement activity that was noted here. Early Iron Age activity was recorded at a site between Highlands Drive and London Road (EHER 8028). A series of intercutting pits, interpreted as the remains of buildings yielded Darmsden-Linton pottery, worked flint, animal bone and some small metal artefacts. Ditches recorded at this site were also dated as early Iron Age. Further evidence, from the Heybridge area, of activity possibly contemporary with Phase 2 activity recorded at the Chalet Site comes from the known presentation of 'three British Urns' to the Essex Archaeological Society by Mr E. H. Bentall, which were presumably found on his land at 'the Towers'. The Essex HER entry for these artefacts lists them as Iron Age in date but the entry suggests that there is some possibility that they were in fact Bronze Age. Quarrying at Loft's Farm has revealed an early Iron Age burial within a barrow, and occupation evidence within a rectangular enclosure (Priddy 1984/5, 128–9).

The early Anglo-Saxon period

Because of its proximity to the 'Saxon homelands' and the presence of the navigable river Blackwater, which extends some distance inland, it is unsurprising that evidence of early Anglo-Saxon occupation has been recorded in the Maldon District. Numerous sites in the area have produced finds of the 5th and 6th centuries AD. The sites to the north-east of Heybridge that yielded so much evidence of for prehistoric and Roman occupation display continued domestic occupation in the early Anglo-Saxon period with evidence that this area had become a centre for metalworking (Hunter 1999, 67).

Early Saxon settlement in Heybridge has been recorded in areas of Roman occupation by Drury and Wickenden (1982) and Atkinson and Preston (1998). Within the area of the Romano-British small town, grubenhäuser and other buildings have been recorded. The associated Saxon pottery suggests that the settlement belongs to the first half of the 5th century AD,

and evidence for the contemporary use of Romano-British pottery was identified. Close to this location, a cemetery containing both late Roman and Saxon burials has been recorded. Work at the Elms Farm site recorded further early Anglo-Saxon features in close proximity to features of late Roman date. Some late Roman features yielded small quantities of early Saxon pottery from their upper fills. At the southern edge of the site an SFB lay in close proximity to a reused Roman well. Ephemeral but definite traces of a small rectangular sleeper-beam-built structure were recorded overlying the junction of two Roman roads and two further SFBs and a Roman wood-lined ditch containing 5th to 6th-century pottery were recorded at the northern periphery of the site (Atkinson and Preston 1998, 101–102). A long line of very large post-holes was recorded running down the northern half of the Roman town. This has been considered to represent a major Saxon land boundary (EHER 847082). None of this early Saxon activity was recorded in the main area of the original Roman town; it was all located further up the gravel terracing, away from the rivers Chelmer and Blackwater. The rising water-table is understood to have made the low-lying areas around Elms Farm uninhabitable and therefore possibly precipitating this shift on to the higher ground in the early Saxon period (O'Connor 2007, 16). The 5th to 6th-century Saxon occupation of these areas of Heybridge is considered to have been only short term (Wallis and Waughman 1998).

While the Saxon settlement is thought to have been short-lived (within the first half of the 5th century), three ditches of middle Saxon date were also revealed, indicating that Anglo-Saxon activity continued in the area (EHER7797). In addition, a number of residual early/mid-late Saxon pottery sherds have been discovered within pits located close to the Chalet Site (EHER18083).

A small number of Anglo-Saxon finds have been discovered within the vicinity of the Chalet Site. A Saxon urn was found *c.* 0.5km north of Heybridge Hall, at some point prior to 1873 (EHER7815). It was recorded with a collection of Bronze Age and late Iron Age material (EHER7814–6). Another small urn was found in 1903, *c.* 500m north-west of the site (EHER7830). Again, its original context is unknown.

The post-medieval period

Heybridge Hall, located immediately to the north-west of the Chalet Site, is known to have been built by the 14th century and was subject to adaptations in the 15th and 16th centuries. Excavations undertaken immediately to the north of Heybridge Hall have identified 12th to 14th-century timber buildings and pits, the latter of which contained coarse domestic pottery, brick, tile and bone. It is possible that this material represents earlier phases of manorial activity.

Maldon continued to grow throughout the post-medieval period and the establishment of the Chelmer and Blackwater Navigation and the railway would have further strengthened communication links for trade. Heybridge has expanded rapidly in the last two centuries, especially in relation to the construction of industrial zones to the south and residential zones to the north-east and west. Late post-medieval and early modern cartographic evidence indicates that the site was undeveloped, presumably agricultural land, until some time after the Second World War, when it was utilised as a chalet park. This appears to have involved little alteration, except for the construction of an access route, which ran to the west of Heybridge Hall and east of Heybridge Creek.

THE EXCAVATION

The excavation of October and November 2006 followed a twenty-five trench evaluation of the development site (McConnell *et al.* 2006). One trench revealed a density of archaeological features. Trench 24 contained eight pits or post-holes, three ditches and two modern services. Five features contained pottery dated to 1000 – 200 BC. The features were considered to represent a small area of Bronze Age/Iron Age activity on the western side of the site, close to the eastern bank of Heybridge Creek. Undated features were also recorded in four other trenches.

The excavation centred on the area in which Trench 24, where the prehistoric archaeology was identified during the trial trench evaluation, and Trench 16 were located. Topsoil and undifferentiated overburden was removed using a 360° tracked excavator fitted with a toothless ditching bucket under the supervision of an experienced archaeologist. The overburden was stockpiled as a bund around the site and the exposed natural gravels were examined for archaeological features and finds.

THE ARCHAEOLOGY

The excavation revealed 370 archaeological features (Fig. 2). Based on artefactual evidence and stratigraphic and spatial relationships between features the archaeology was divided in to four broadly dated phases of activity (see Table 1 and Fig. 3). One hundred and sixty seven features recorded at the site contained no dateable finds and had no revealing stratigraphic or spatial relationships; these features remain unphased.

Phase 1: the late Neolithic

The earliest dateable archaeological features comprised three small pits (Figs. 4 and 5). Pits F1062 (Grid Square

Phase	Date
1	Late Neolithic c.*3300BC to 2100BC*
2	Late Bronze Age to early Iron Age c. *1300BC to 400BC*
3	Early Anglo-Saxon c. *450–700AD*
4	Post-medieval to modern c. *1500AD to present*

Table 1 Phasing summary

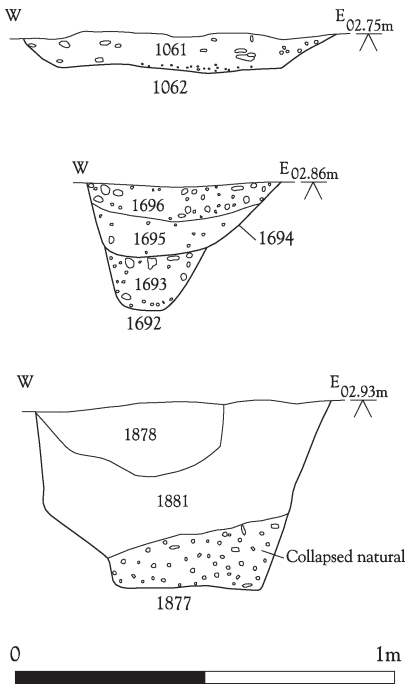

Fig. 5 Phase 1 sections

C11) and F1694 (Grid Square C12) lay at a distance of *c.* 4m from one another, close to the terminus of Phase 2 (late Bronze Age/early Iron Age) Ditch F1235. Pit F1877 (Grid Square G13), the third late Neolithic feature, was located *c.* 23m to the east-north-east of Pits F1062 and F1694.

All three of these pits contained Neolithic pottery (F1062, F1694 and F1877) and were located towards the northern end of the excavated area. It is possible that evidence of related or contemporary activity exists beyond the limits of excavation. Pit F1694 cut undated Post-hole F1692 and is, therefore, clearly more recent than this feature indicating that earlier activity or further activity of the same date occurred at the site.

Phase 2: Late Bronze Age to early Iron Age

Thirty-two features containing pottery of late Bronze Age to early Iron Age date were recorded (Fig. 6). They were assigned, along with features displaying stratigraphic or spatial relationships suggesting that they were contemporary, to Phase 2 of activity recorded at the Chalet Site. These features comprised a series of five ditches, a possible curvilinear ditch and 28 pits and post-holes. Amongst the pits assigned to Phase 2 were three that contained cremation burials.

The ditch system

The dominating aspect of late Bronze Age/early Iron Age activity was two pairs of ditches; F1195 and F1197, aligned west-south-west to east-north-east; and F1274=F1224=F1234 and F1273=F1235, aligned west-north-west to east-south-east.

Ditch F1197 (Grid Squares B3, B4, C5) measured in excess of 10m. In profile it displayed moderately steeply sloping sides meeting at a narrow concave base (Fig. 7). In plan it was seen to taper, being wider at is east-north-eastern end than towards its west-south-western extent. Ditch F1195 (Grid Squares A2 – D3) lay *c.* 4m to the south of Ditch F1197 and ran parallel to it. It was slightly wider and deeper than F1197 and displayed a slightly different profile in section (Fig. 7). Whereas Ditch F1197 contained a single silty sand fill, Ditch F1195 was found to contain a variety of fills and displayed a slightly different stratigraphic sequence in each of the segments that were excavated in it. This would suggest that F1195 became filled-in gradually, possibly over a long period. All of this evidence combines to suggest that the two ditches, despite their parallel alignment, were not immediately contemporary with one another

Ditch F1274=F1224=F1234 (Grid Squares E4 – B14; Figs. 6 and 7) was the western-most of the west-north-west to east-south-east aligned ditches. Despite the recovery of early Anglo-Saxon pottery from L1223 (the only fill of the part of this ditch assigned the context number F1224), the presence of Iron Age pottery in L1243, L1603 and L1846 (all fills of F1234), indicate that the feature was of this earlier date. It is considered that this Anglo-Saxon pottery in F1224 represents a cremation urn deposited, perhaps deliberately, into the late Bronze Age/early Iron Age ditch and destroyed through plough action making any cut associated with it indistinct from the ditch itself and spreading the parts of the vessel through the fill of the earlier feature.

Ditch F1235=F1273 (Grid Squares E5 – C12; Figs. 6 & 7) ran parallel to Ditch F1274=F1224=F1234, lying at a distance of between 2.50 and 3.25m to the east. The southern terminus of Ditch F1235=F1273 lay approximately parallel to that of Ditch F1274= F1224=F1234. Ditch F1235=F1273, however, was far shorter, measuring *c.* 36m in length; it did not run the full length of the neighbouring ditch, which extended beyond the limits of the excavated area. Ditch F1235= F1273 was slightly wider than Ditch F1274=F1224= F1234, measuring between 0.80 to 0.90m in width, though its depth was similar, varying between 0.27 and 0.50m.

The locations of these ditches, in relation to one another and to Ditches F1195 and F1197, suggest that they formed part of a system of land division or enclosure. However, the inner and outer ditches may not have been cut at exactly the same time, as the differences in profile between ditches F1195 and F1197 may indicate. It is possible that these four ditches represent portions of the southern and eastern boundaries of an enclosure, the majority of which lay to the immediate west of the excavated area. Superficially, at least, this would appear to have been a double-ditched enclosure.

The positioning of elongated Pit F1911 (Grid Squares E4 – F5) suggested that it may have been an extension of Ditch F1235=F1273. If this suggestion is correct it may be seen to have formed part of the boundary. It was located *c.* 0.30m to the south of Ditch F1235 and followed the same alignment. It contained no finds but its spatial relationship with Ditch F1235 is

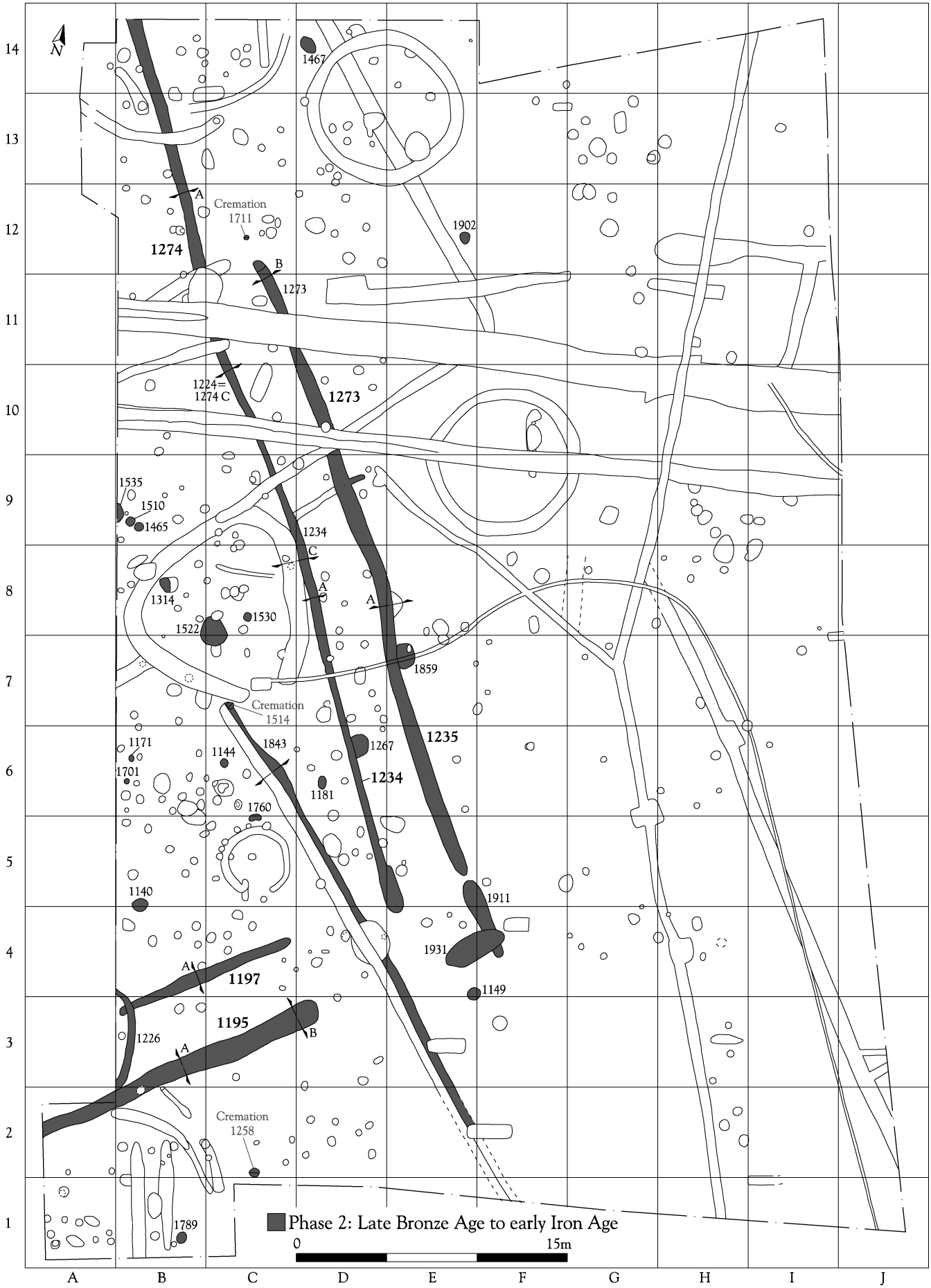

Fig. 6 Phase 2: Late Bronze Age to early Iron Age plan

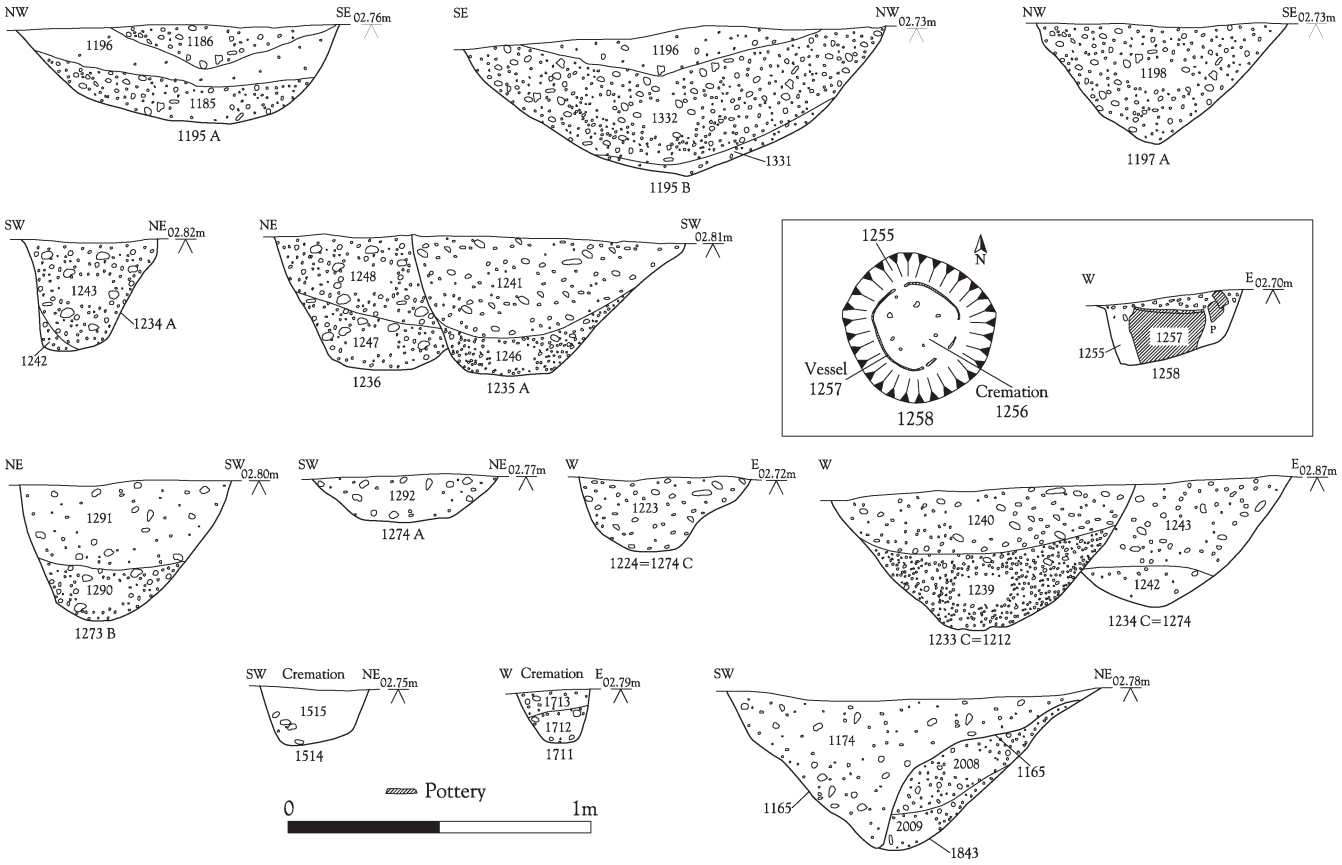

Fig. 7 Phase 2 sections

considered sufficient evidence to suggest that it was a continuation of this ditch and therefore contemporary.

Just as F1911 appeared to be a continuation of Ditch F1235=F1273, so elongated Pit F1931 (Grid Squares E4, F4) may be considered to be a continuation of Ditch F1195. F1931 appeared to follow the same alignment as F1195 and was only slightly wider than the ditch, which increased in width as it travelled from west-south-west to east-north-east. If, as their alignments suggest, F1911 was contemporary with Ditch F1235=F1273 and F1931 was contemporary with Ditch F1195 then the two ditches cannot have been contemporary with one another as F1931 was clearly stratigraphically later than F1911. This may provide further evidence that the Phase 2 ditch system represents phases of remodelling of the boundaries, rather than a single double-ditched enclosure.

The number of other Iron Age features (pits, postholes etc.) recorded in the area to the north of Ditches F1195 and F1197 and to the west of Ditches F1235=F1273 and F1274=F1224=F1234 is approximately equal to the number recorded to the south and east of these ditches. Those features to the north and west of the ditches, however, were more densely concentrated than those to the south and east are. This concentration of activity may support the suggestion that the area to the north and west of the two sets of ditches was the interior of a deliberately demarcated plot of land. Alternatively, as the ditches extend beyond the limits of the excavated area and their courses are, therefore, impossible to trace it is conceivable that this apparent concentration of pits and post-holes represents features clustered on the outer side of a division beyond which certain activity was prohibited or controlled in someway.

The Phase 2 cremations

Three Iron Age cremation deposits, C1256 (in Pit F1258; Grid Square C2; Fig. 7), C1515 (in Pit F1514; Grid Square C7) and C1713 (in Pit FF1711; Grid Square C12) were found. None lay further than *c.* 6m from the possible Iron Age boundary ditches. All of these cremations appear to have been deposited within cremation urns but those associated with C1515 and C1713 appear to have been substantially destroyed, possibly through much later plough action. Only 38g and 3g of pottery were found, respectively, with these two cremations. This contrasts starkly with the 707g of pottery that was present within F1258 (the pit within which C1256 was located) a large proportion of which was accounted for by the presence of the cremation vessel (for description see Thompson, this report). Although all three of these cremations have been regarded as urned cremations throughout analysis of the site, these low quantities may suggest that the pottery recorded with Cremations C1515 and C1713 was not representative of cremation vessels but in fact represents pottery incorporated into the cremation deposits in some other way. While cremations of the Aylesford/Swarling tradition are often found with grave goods representing

food and tableware (Taylor 2001, 68) it is highly unlikely that Cremations C1515 and C1713 belong to this tradition as they are too early and, furthermore, lack any evidence for grave goods beyond the presence of these sherds of pottery. It is possible that pottery sherds became incorporated unintentionally in to the backfills of the features in to which these cremations were deposited.

Analysis of the cremated bone from each of these cremation deposits (see Phillips, this report) has indicated that the individuals represented in Cremations C1256 and C1515 were adults. Beyond this, due in part to the nature of cremated bone, no other data suitable for use in the elucidation of demographic patterns was obtainable. Fragments of the skull, mandible, vertebrae, ribs, humerus, tibia and a hand phalanx were recognisable within C1256 while fragments of skull, vertebrae, ribs, humerus, and femur and a metacarpal and tarsal were identified in C1515. It was not possible to suggest an age range for the individual represented in Cremation C1713 (see Phillips, this report). This is due to the small amount of bone that was present within the cremation deposit. The limited quantity of bone present lends further weight to the suggestion that this cremation may have been disturbed by plough action.

None of the features into which these cremation deposits were placed displayed any stratigraphic relationships with any other features that may help elucidate their chronology within Phase 2 activity. Indeed, of the three, only F1514 (C1515) had any relationship with any other feature. F1514 cut the north-western terminus of Ditch F1843. This Ditch is tentatively assigned to Phase 2 on the basis that it was cut by F1514 and lay in close proximity to the other Phase 2 Ditches, running through the gap that is postulated as the entrance to the enclosure.

Other Phase 2 features

Ditch F1843

Ditch F1843 (20.00+ × 1.35 × 0.53m; Grid Squares F1 – C7) ran on a north-west to south-east alignment through the entranceway of the possible double-ditched enclosure.

No finds were recovered from either of the fills of F1843 and the assignment of the ditch to Phase 2 is only tentative. It was clearly earlier than the Iron Age Cremation Pit F1514 (containing C1515) which cut its northern terminus. The ditch was also cut by Phase 3 (Anglo-Saxon) Ditch F1165, which appears to have been a deliberate re-cut of F1843 (see Fig. 7), and Phase 3 Pit F1763. The stratigraphic evidence, therefore, indicates that F1843 was of Phase 2 date or earlier.

The position of this feature, running through what would appear to be the entrance to the possible enclosure, has been considered to suggest that it was of the same date as these ditches (Pole 2007, 23). The stratigraphic evidence is insufficient to determine if Ditch F1843 was directly contemporary with the ditches forming the enclosure or if it was created either before or after them.

Ditch F1226 and its relationship with Ditches F1195 and F1197

Ditch F1226 (Grid Squares B3, B4) was a curvilinear ditch measuring in excess of 5m in length, 0.51m wide and 0.30m deep. It was clearly later than Ditch F1197 as it cut the possible enclosure ditch close to its western terminus. It also appeared to cut Ditch F1195. This would indicate that F1226 represents later activity in Phase 2 after the ditches forming the possible enclosure had become filled in.

The function of Ditch F1226 is difficult to determine. The stratigraphic evidence demonstrates that there are no other features that can be confirmed as contemporary with it. Furthermore, it extended beyond the limits of the excavated area and so its full form and extent were indeterminable. Given its curvilinear form it is possible that F1226 formed a ring-ditch. The projected diameter of this ring-ditch would be *c.* 6m. This would make it comparable in size to Iron Age structures such as Roundhouses 5 and 6 recorded at Black Horse Farm, Sawtry, Cambridgeshire, which have been interpreted as ancillary structures associated with a larger roundhouse (Newton 2008), and similar roundhouses at Wardy Hill, also in Cambridgeshire, which have been termed 'minor buildings' (Evans 2003, 39). Such 'minor buildings' may display some evidence of domestic occupation but in both of these examples appeared to be subordinate to a larger roundhouse structure. However, the possibility that F1226 represented a roundhouse is a matter of conjecture as insufficient evidence exists to support the theory. F1226 could equally have formed part of a small enclosure or have been associated with the similar but undated curvilinear ditches to the south of Ditch F1195.

Phase 2 features within the enclosure

Numerous pits and post-holes of Phase 2 date were recorded within the area defined by the double ditches. None of these displayed any convincing structural configuration and, with the exception of the presence of late Bronze Age/early Iron Age pottery within their fills, were mostly unremarkable. A small number of features within this group contained notable finds.

Pits F1535 and F1144 yielded fragments of copper alloy. Posthole F1465 (Grid Square B9) and Circular Pit F1140 (Grid Squares B4, B5) were both found to contain fragments of curved and perforated fired clay slabs. Similar slabs were recovered amongst residual late Bronze Age/early Iron Age material at Crescent Road in Heybridge and were considered to be associated with salt production (Wickenden 1986). Pit F1522 (Grid Squares B8, B7, C8, C7) was large, in comparison to other Phase 2 features. It contained a quite large quantity of late Bronze Age/early Iron Age pottery (2913g), many sherds of which appeared to have been carefully placed in a standing or vertical position within the backfill.

Phase 2 features located outside of the enclosure

In addition to the cremations that were recorded outside of the possible enclosure, eight other features (Pit F1467, Post-hole F1069, Post-hole F1471, Post-hole F1967,

Posthole F1970, Pit F1859, Pit F1149, Posthole F1789) lay outside of the area defined by the two pairs of ditches. None of these lay in convincingly close proximity to the cremations to suggest that they were directly related to them. No structural relationships existed between any of these features and indeed, with the exception of the Postholes F1967 and F1970, they were isolated from other features of the same phase.

Phase 3: Anglo-Saxon

Introduction

Sixty-six cremations of early Anglo-Saxon date were recorded across the site (Figs 8 and 10). The cremations were distributed both inside and outside of the possible Phase 2 enclosure and were associated with a series of Anglo-Saxon ring/circular enclosure ditches and straight, linear ditches.

Only evidence of funerary activity was recorded. The Phase 3 features clearly represent a cremation cemetery site. No features indicative of habitation or domestic activity were identified, although some features of Phase 3 date may have had a function not directly associated with a cemetery function.

The early Anglo-Saxon features were dominated by an arrangement of ring-ditches and circular/sub-circular enclosure ditches seemingly linked by very straight linear ditches. These features appear to form the focus of the site around which the cremation burials were arranged. The stratigraphic relationships between these features indicate that, despite all being of early Anglo-Saxon date, they were not all completely contemporary with one another. The way in which these features were arranged does, however, suggest that they were deliberately placed in relation to one another, even when one appears to have been filled in before the creation of another. It is a regularly observed feature of Anglo-Saxon burial that there was, apparently, little problem identifying earlier graves, either to avoid disturbing a previous burial or to locate a grave in which to place another family member (Taylor 2001, 144). It seems possible that a similar understanding existed of previous landscape features that, in this case, possibly represented funerary monuments.

These Anglo-Saxon features lay in close proximity to the features forming the Phase 2 late Bronze Age to early Iron Age possible enclosure, overlapping with Ditches F1235=F1273 and F1274=F1224=F1234 the north-north-west to south-south-east aligned pair of Phase 2 ditches. The early Anglo-Saxon cremations, which were mostly clustered around the Phase 3 ditches, were therefore also clustered around the features forming the Phase 2 enclosure.

Ditches F1165=F1612, F1263 and F1220

Ditch F1165=F1612 (Grid Squares C7 – F1) ran from a location (in Grid Square C7) 0.50m to the south of Sub-circular Enclosure Ditch F1233=F1212=F1222 in a south-easterly direction and extended beyond the limits of the excavated area. It measured in excess of 30m in length, its width varied between 0.8m and 1.35m and its depth varied between 0.47m and 0.63m. It had steeply sloping sides, though these varied slightly in angle and shape along its length, and a narrow but concave base (Fig. 9). It contained numerous fills and slightly differing stratigraphic sequences were recorded in each of the excavated segments.

The pottery recovered from Ditch F1165=F1612 clearly placed it within Phase 3. It also cut Phase 3 Pit F1763, in to the backfill of which Cremation Pit F1798 was cut. Ditch F1165=F1612, however, followed exactly the same line as Phase 2 Ditch F1843, cutting the western edge of this feature. The northern termini of both of these ditches were located immediately adjacent to one another. This may suggest that the Anglo-Saxon period occupants/utilisers of the site saw particular significance in Ditch F1843 and sought to emphasise or re-establish it. The reuse of earlier sites as locations for Anglo-Saxon burial grounds is regularly noted and may have been carried out due to a perceived link between these earlier sites and the supernatural; the recutting of Ditch F1843 by F1165=F1612 may have had particular significance with regard to this concept. There may also be particular significance between Ditch F1165=F1612 and Sub-circular Enclosure Ditch F1233=F1212=F1222. Ditch F1165=F1612 lead from the sub-circular enclosure ditch to the south-east but this is not the only ditch that appeared to communicate with this feature.

Ditch F1263 (Grid Squares C9, D9, D10, E10) cut the north-eastern quadrant of Ditch F1233=F1212 =F1222 and lead away towards the north-east. After a distance of *c.* 16m it may have turned towards the north-west as Ditch F1220, though this is impossible to prove as the relationship between Ditches F1263 and F1220 was obscured by post-medieval (Phase 4) Ditch F1984. Ditch F1220, which was aligned north-west to south-east, extended beyond the limits of excavation. It was cut by Phase 3 Ring-Ditch F1214 (Fig. 9). It was possible to assign Ditch F1263 to Phase 3 due to the presence of a fragment of a glass bead, belonging to Guido's Group 6xiv, which are known to date to the early Anglo-Saxon period (see Crummy, this report), recovered from its dark brown silty sand fill.

These straight ditches, forming a striking zigzag pattern, clearly link two features (Sub-circular Enclosure Ditch F1233=F1212=F1222 and Ring-Ditch F1214) which were the focus for clusters of cremations and may have linked them to similar features beyond the limit of the excavated area. The locations of other foci of cremations may also have been influenced by or related to Ditches F1165=F1612, F1263 and F1220. For example, three possible examples of funerary architecture and a particular group of cremations all lay close-by to the west of Ditch F1165=F1612. This may indicate that the ditch represented some kind of boundary on one side of which it was appropriate for cremations to be interred but on the other side of which it was not; cremations were recorded to the east of Ditch F1165=F1612 but not in such great concentrations and mostly further to the north. Ditch F1165=F1612 was clearly an important part of the Phase 3 site; its

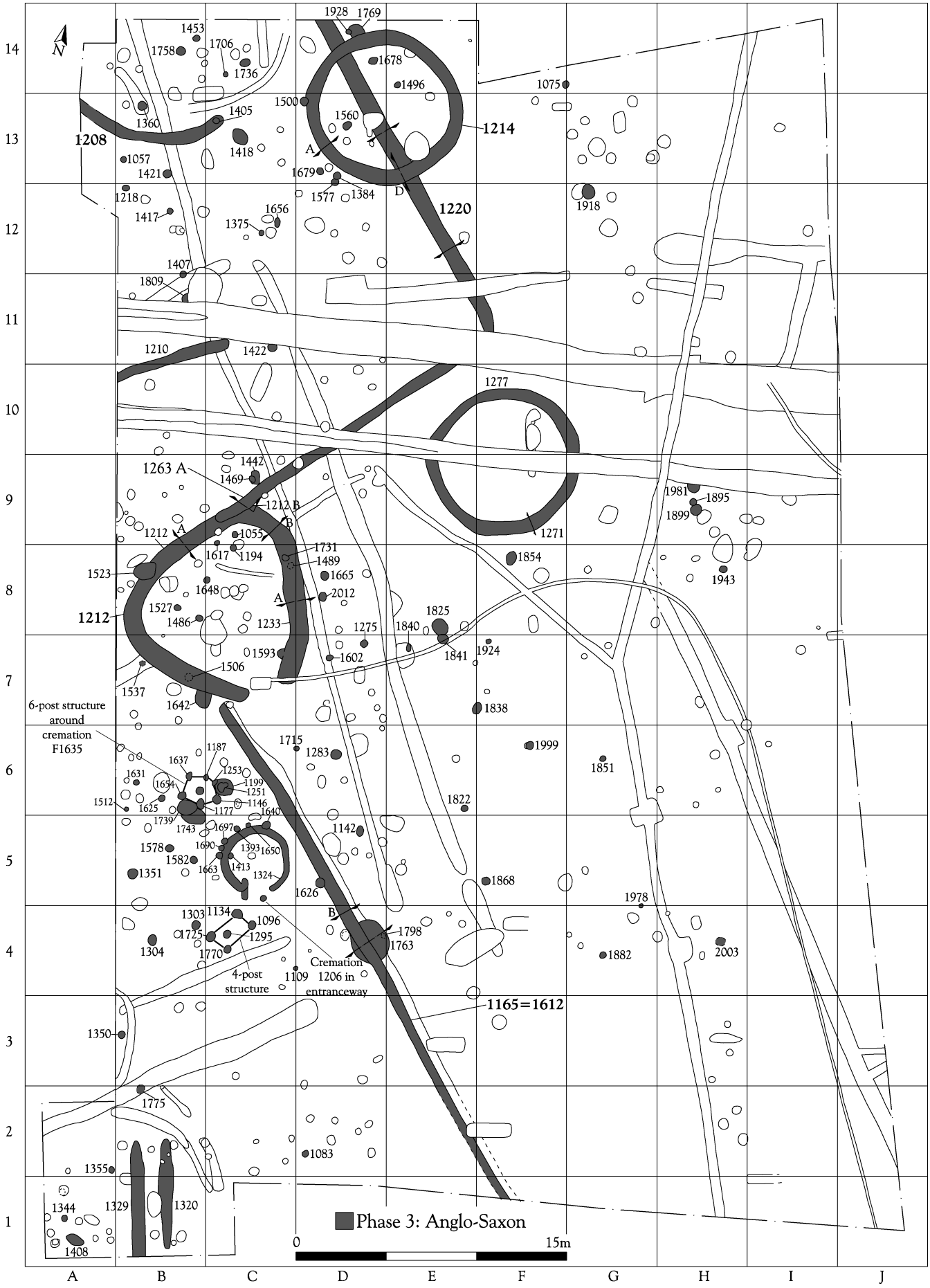

Fig. 8 Phase 3: Anglo-Saxon plan

relationship with Phase 2 Ditch F1843 may be significant in the siting of the Anglo-Saxon cremation cemetery at this location and it clearly formed part of a linked set of features around which the Anglo-Saxon cremations were deposited.

Sub-circular Enclosure Ditch F1233=F1212=F1222 and associated cremations and features

Sub-circular Enclosure Ditch F1233=F1212=F1222 lay immediately to the west of the Phase 2 Enclosure Ditch F1274=F1224=F1234, slightly cutting its western side. It enclosed an area with a diameter of 10.00 to 11.00m. Its overall circumference was approximately 33.00m. The ditch varied in width from 0.90m in the west to 1.20m in the south-east. It was generally between 0.37m and 0.50m deep (see Fig. 9). Differing sequences of fills were recorded in each of the nine segments that were excavated in this feature. This suggests that the ditch filled-in gradually over time rather than being deliberately backfilled.

Five cremations (C1054, C1192, C1615, C1493 and C1594), and a possible sixth cremation (C1649), were recorded within the area enclosed by Ditch F1233=F1212=F1222 (see Fig 10).

Cremations C1054, C1192 (both Fig. 11) and C1615, in Cremation Pits F1055 (Grid Square C9), F1194 (Grid Square C8) and F1617 (Grid Square C9) respectively, formed a cluster of three cremations at the northern end of the area enclosed by Ditch F1233= F1212=F1222. These were all urned cremations with the individuals represented in C1054 and C1192 appearing to be adults (see Phillips, this report). No surviving bone was present within Cremation C1615. Cremation C1493 (Fig. 11), interred in Pit F1486 (Grid Square B8), was also an urned cremation containing bone that was recognised as being adult-sized. It lay within the south-western quadrant of the area enclosed by Ditch F1233=F1212=F1222.

Pit F1593 (Grid Square C7) was cut on its eastern side by Sub-circular Enclosure Ditch F1233=F1212= F1222 (see Fig. 10). Its mid orange brown sandy silt fill was found to contain cremated human bone (C1594). The presence of early Anglo-Saxon pottery (131g) suggested that this was originally an urned cremation but had suffered severe disturbance, either through ploughing or when it was cut by the sub-circular enclosure ditch. Analysis of the cremated remains indicated that they were those of an adult sized individual.

Located in Grid Squares B8 and C8 was possible Cremation C1649 (Pit F1648). This deposit of dark grey silty sand was found to contain pottery (3g) and cremated bone (1g) and was suggested to be a cremation, located in the subsoil, which had been destroyed through ploughing. As it was not possible to confirm that this was truly a cremation deposit it was not analysed as such during post-excavation analysis of the cremations from the site. Located *c.* 2m to the south-west of Cremation Pit F1648 and *c.* 1m to the north-west of Cremation Pit F1486 lay Posthole F1527 (Grid Square B8). Pottery

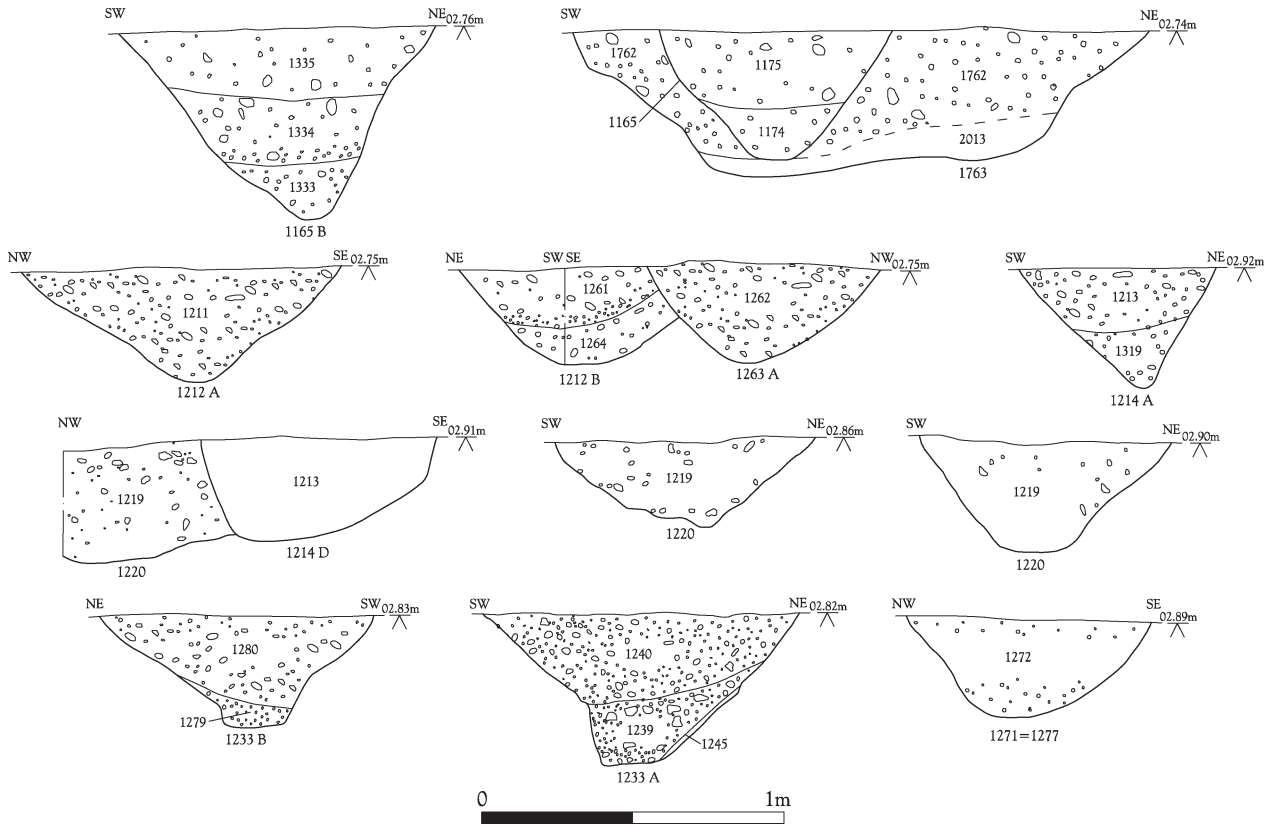

Fig. 9 Phase 3 sections

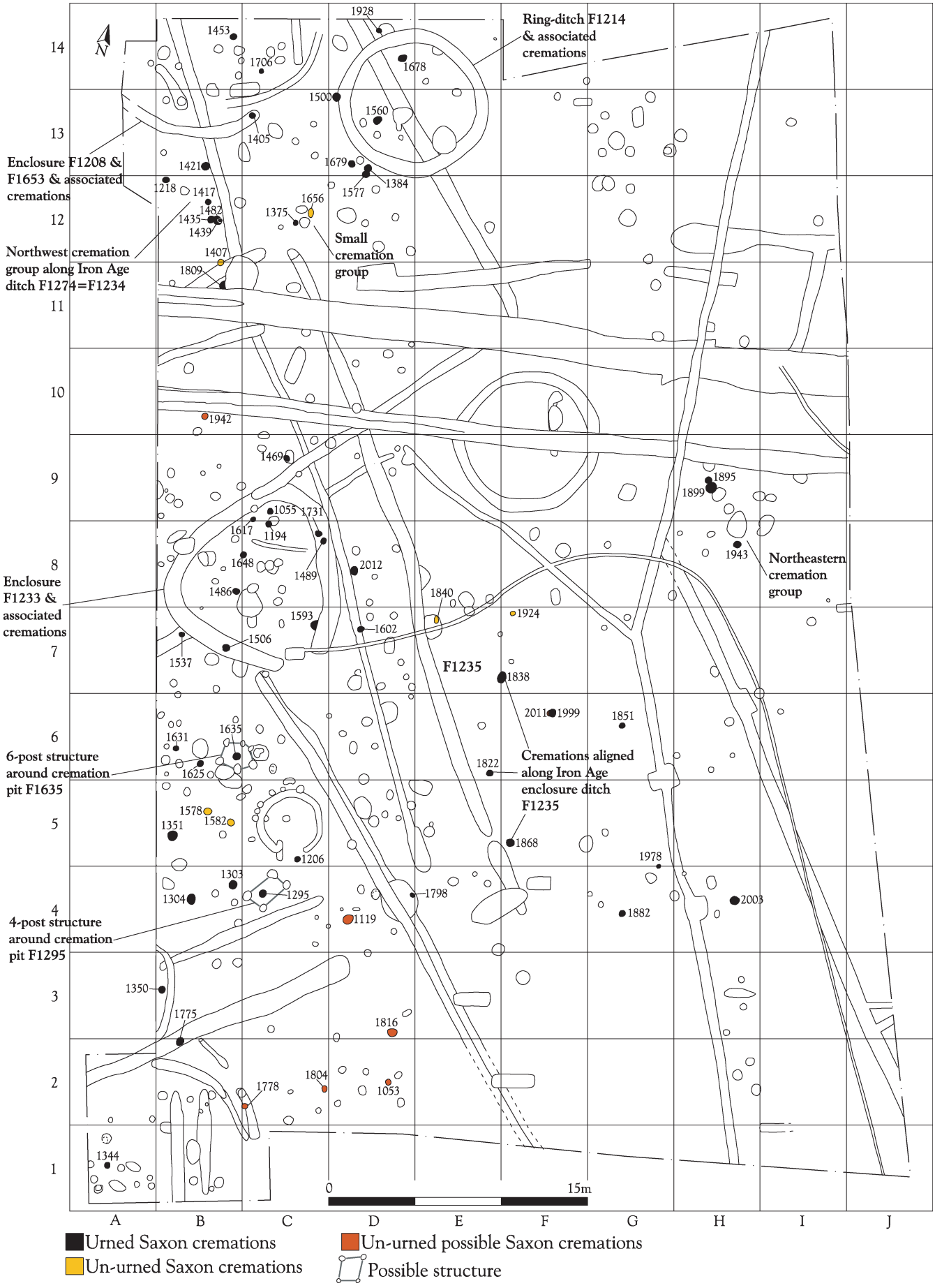

Fig. 10 Phase 3 and possible Phase 3 Cremations

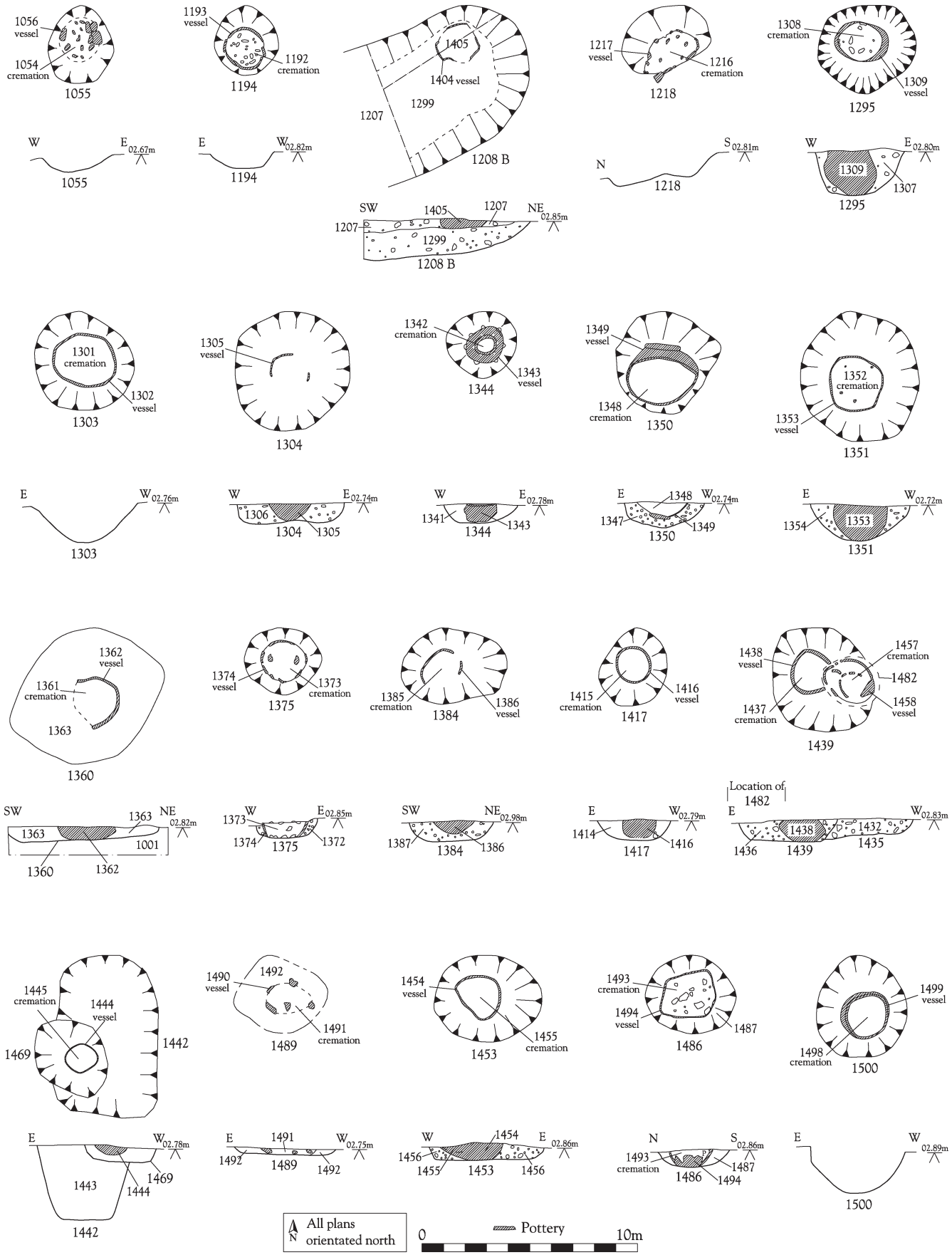

Fig. 11 Plans of cremation burials C1054 to C1498 in numerical order of cremation pit context

recovered from this feature indicated it was of early Anglo-Saxon date and its presence in this location may suggest that it held some kind of marker post.

Three further cremations, C1491 (Fig. 11), C1733 and C1509 (both Fig. 12), were deposited in Pits F1489 (Grid Square C8), F1731 (Grid Square C8) and F1506 (Grid Square B7) all of which were cut into the backfill of Ditch F1233=F1212=F1222. Cremation C1491 was located on the eastern side of the circumference of Ditch F1233=F1212=F1222. It was identified as an urned cremation but no bone survived. Immediately to the north-west lay Cremation C1733. It was not possible to identify the age of the individual represented in this urned cremation but it was recorded that a fragment of animal bone was incorporated with the remains. Cremation C1509 was deposited in Pit F1506, which cut the Enclosure Ditch within its south-western quadrant. The human remains within this urned cremation were recognised as those of an adult.

As the features containing these three cremations were cut into the fill deposits of sub-circular Enclosure Ditch F1233=F1212=F1222 they clearly post-date this feature. There are no clear stratigraphic relationships between these cremations and those that lay within the area enclosed by Ditch F1233=F1212=F1222 (with the exception of Cremation Pit F1593 which was cut by the large sub-circular ditch). Therefore, it is not possible to be certain about the chronology of deposition of the cremations associated with Ditch F1233=F1212=F1222. It seems reasonable to assume, however, that those in the area enclosed by Ditch F1233=F1212=F1222 were broadly contemporary with this feature, while Cremation C1594 was clearly earlier and those cut into its upper fills were later.

Four cremations (C1539 (Pit F1537), C1605 (Pit F1602), C1688 (Pit F2012) and C1445 (Pit 1469) (see Figs 11 and 12)) located outside of the Enclosure Ditch F1233=F1212=F1222, are considered to be part of the group associated with this feature as they all lay in sufficiently close proximity to suggest that a deliberate association with the enclosure ditch was intended by their depositors.

Further features, in addition to those containing cremation deposits, were recorded in association with Enclosure Ditch F1233=F1212=F1222. These included Posthole F1665, which lay to the east. The feature was assigned to Phase 3 on the basis of the single sherd of early Anglo-Saxon pottery (2g) recovered from it. It was considered during initial analysis of the site (Pole 2007) that this feature, and undated Post-hole F1297, held posts marking the location of Cremation C1688. Some Anglo-Saxon cremation graves are known to have wooden post-built structures associated with them (Lucy 2000, 118). These, however, are mostly four-post structures. Inhumation graves of this period have been recorded with single-post markers (Lucy 2000, 102). While it is possible that single posts were used to mark the sites of cremation deposits at the Chalet Site in many cases the spatial relationship between cremation deposits and postholes, given the density of features, especially in the area to the south of Ditch F1233= F1212=F1222, is not sufficient to state categorically that these post-hole features represent markers. Post-hole F1715 (Grid Squares C6, D6) lay *c.* 4m south-east of the south-east facing entrance to the area enclosed by Ditch F1233=F1212=F1222. That this feature lay in direct alignment with the entrance to the area defined by the sub-circular enclosure ditch may indicate that they were in some way related.

Although the stratigraphic relationship shows that Ditch F1233=F1212=F1222 was clearly earlier than Ditch F1263, it appears to have been deliberately incorporated in to the zigzagged line of straight ditches either side of which the cremation burials were distributed. That cremations were deliberately deposited in to the backfill of Ditch F1233=F1212=F1222 may indicate that its location was known (or remembered) for some time after it had become filled in. It is possible to suggest that circular features associated with cremations were deliberately incorporated into this arrangement of straight ditches at various points in its lifespan; Ring-Ditch F1214 was cut, following Ditch F1220 having become filled in, in such a position that the earlier feature ran down its approximate centre.

Ring-Ditch F1214 and its associated features and cremations

Ring-Ditch F1214 (Grid Squares D13, E13, D14, E14) was circular in plan with no break in its circumference. It had an external diameter of *c.* 8.75m and varied in width from 0.65m, at the south-west of its circumference, to 0.90m, at the north-east. It also varied in depth, ranging from 0.36m to 0.51m (Fig. 9).

Ring-Ditch F1214 cut the slightly earlier Phase 3 Ditch F1220 (Grid Squares D14-F11), which ran diagonally through the approximate centre of the ring-ditch. F1220 was aligned north-west to south-east, following the same angle of alignment as Ditch F1165 to the south. Towards the very south of its extent it appeared to begin to turn towards the south-west, appearing to communicate with Ditch F1263. Indeed, these two features may have been the same ditch; the point at which they met was, however, obscured by Phase 4 Ditch F1984.

Within the area enclosed by Ring-Ditch F1214 lay Cremations C1676 and C1558 (in Cremation Pits F1678 (Grid Square D14) and F1560 (Grid Square D13), respectively). Both cremations were interred in urns (Fig. 12). The level of tooth development visible in C1676 allowed it to be identified as an adult. C1558 displayed surviving elements that allowed recognition of the fact that its pelvis was unfused. The individual was recorded as a sub-adult; the size of the surviving pelvic elements suggests that it was in later childhood.

Sub-circular Posthole F1496 (Grid Square E14) was the third, and final, Phase 3 feature to lie within the area enclosed by Ring-Ditch F1214. The feature was found to contain early Anglo-Saxon pottery. Its location suggests that it may have held a post that, in conjunction with the ring-ditch, formed part of the funerary monument in to which Cremations C1676 and C1558 were placed.

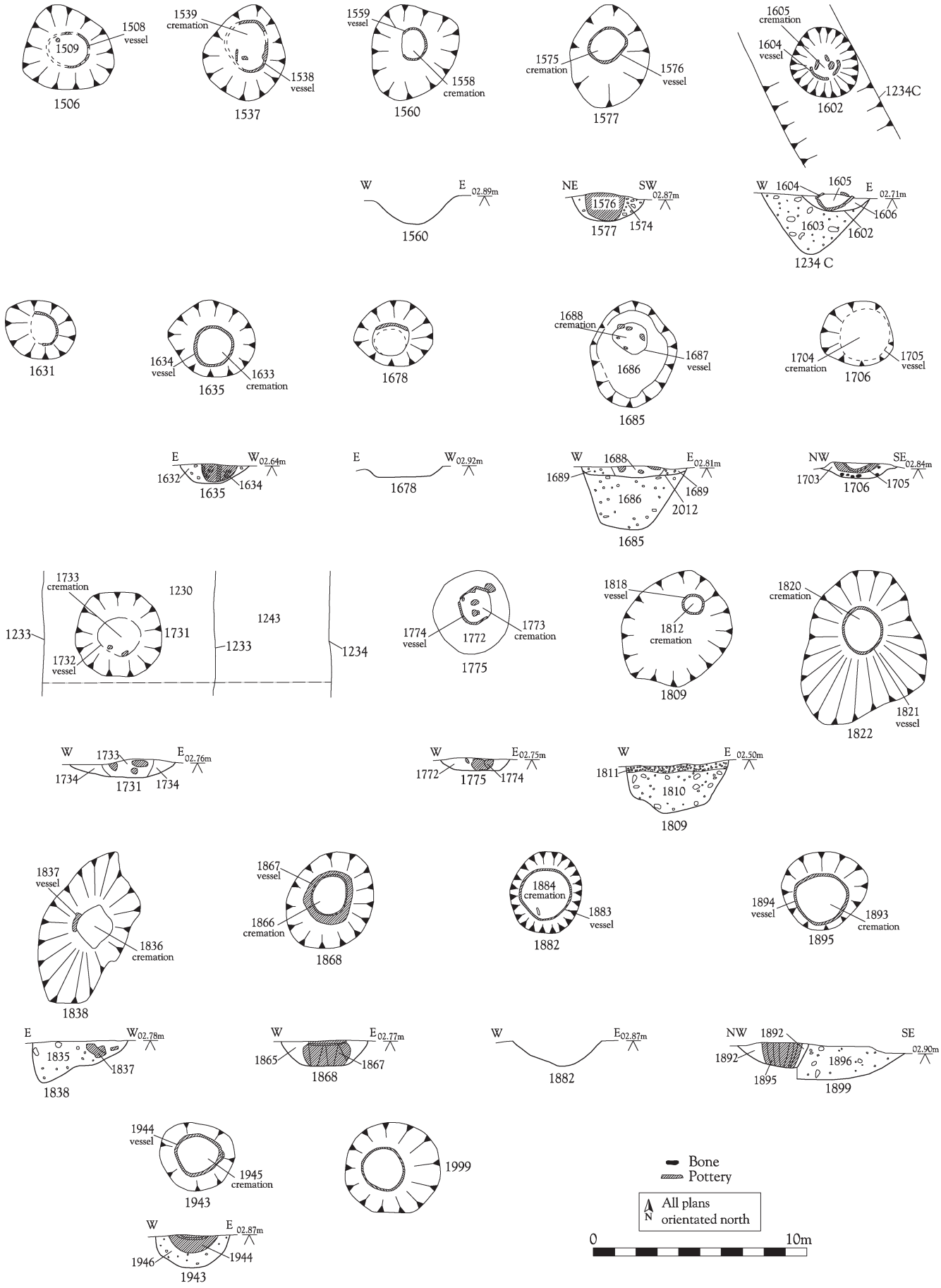

Fig. 12 Plans of cremation burials C1509 to C1945 in numerical order of cremation pit context

Cremation C1498 was contained within a substantially complete urn. It was deposited in Pit F1500 (Fig. 11), which was cut in to the backfill of Ring-Ditch F1214. The cremation, therefore, clearly postdates the ring-ditch but the choice of this site for its deposition would appear to indicate that the status of the ring-ditch as a funerary monument remained relevant to the individuals responsible for the interment of C1498. Analysis of C1498 determined that the individual represented in this deposit was an adult. It was possible to identify the glabella and nuchal crest and assessment of these skeletal elements indicate that the individual was, in all likelihood, male. It was also possible to identify the ante-mortem loss of teeth and subsequent reabsorbtion of the tooth sockets. The vessel that this cremation was deposited in was the only cremation vessel from the site that was completely reconstructable. It displayed pre-firing suspension holes and had clearly been originally made for some other function before being re-used to contain Cremation C1498 (see Thompson, this report).

Cremation C1926 was deposited in Cremation Pit F1928. This pit cut the western edge of Pit F1769, which was also cut by Ring-Ditch F1214. This set of stratigraphic relationships does not assist in determining whether C1926 was contemporary with F1214, or if it was like C1498 and deposited in this location due to the presence of the earlier, now back filled, funerary monument. C1926 was an urned cremation. Phillips (this report) identified part of an unfused proximal femur that allowed the cremation to be identified as that of a sub-adult.

Cremations C1385, C1575 and C1680 were deposited in Pits F1384 (Fig. 11), F1577 (Fig. 12) and F1679 to the south-west of Ring-Ditch F1214. The two urned burials were identified from surviving skeletal elements as being adult sized individuals. C1680 was an un-urned cremation containing the remains of a sub-adult sized individual. No other artefacts were recovered from the deposit and the Cremation Pit F1679 shared no stratigraphic relationships with any other features. It is essentially undated but, due to its appearance as part of a group cremations (with C1385 and C1575), and the similarity in size of F1679 to the pits in which C1385 and C1575 were interred, it is tentatively considered to be Anglo-Saxon in date.

Anglo-Saxon cremations and related features located to the west of Ditches F1165=F1612, F1263 and F1220

Penannular Ditch F1324 and associated cremations and features

Penannular Ditch F1324 (Grid Square C5) was located close to the gap in the Phase 2 ditches that is considered to be the entranceway. The ditch measured 3.75m in diameter and had a circumference of 11.75m, with a gap of 1.20m forming an entrance to the south. It varied widely in width but was of a fairly constant depth. A series of six post-holes and a pit were arranged around the northern and western outer edge of the ditch. These post-holes (F1663, F1690, F1697, F1650, F1640, F1413) all appeared to have been cut into the outer edge of the ditch while it remained open. They all had backfills very similar to that of Ditch F1324 suggesting that they may have been backfilled at the same time. This raises questions regarding the function of these postholes; if they were cut into the edge of Ditch F1324 while it remained open they would not have been structurally capable of supporting posts.

Only a single cremation was recorded in conjunction with Penannular Ditch F1324. This was Cremation C1204. It was deposited in Pit F1206 (Grid Square C5) between the two facing termini of the penannular ditch. Cremation C1204 had been heavily disturbed by ploughing; the cremation vessel had been completely shattered, although a substantial amount of it was recovered (2225g) and no bone survived within the material that was recovered from its interior.

The positioning of Cremation C1204 within the entrance to the area enclosed by Ditch F1324 suggests that the ditch, and the associated postholes, formed some kind of marker, or funerary architecture constructed to denote the presence of the cremation burial. This may suggest that C1204 contained the remains of a significant individual.

The Four-Post Structure

Further examples of funerary architecture, in addition to the possible structure represented by Penannular Ditch F1324, were recorded at the site. One of these was a possible structure, represented by four post-holes, surrounding Cremation Pit F1295 (Grid Square C4).

Cremation Pit F1295 contained Cremation C1308 (Fig. 11). This was an urned burial of an adult individual. The identification of a nuchal crest from fragments of the skull indicate that this individual was probably male. The Cremation lay within an area measuring *c.* 1.80m × 1.10m and defined by four postholes (F1134, F1096, F1770, and F1725; Fig. 8) with similar profiles and fills arranged in a rectangular formation.

Similar four-post wooden structures associated with Anglo-Saxon cremation burials have been identified at other sites in southern England. It has been suggested that such structures may have supported pitched roofs and had wooden planking or wattle and daub walls. Such structures are often viewed as having been built specifically to house the cremation deposits of one particular family. Similar structures are known from continental Europe but some of these have been identified as cremation pyre supports, rather than cremation houses (Lucy 2000, 118–119). Williams (2005, 263) suggests that grave goods, especially weapons, may have been displayed on the outside of such 'gravehouses'.

During excavation, the possibility of a second four-post structure to the east of that discussed above was postulated. This comprised four undated post-holes (F1119, F1107, F1102 and F1090), the north-western posthole of which (F1119) was later backfilled with Cremation Deposit C1118. It seems unlikely, due to the irregular formation of these features in relation to one another and the variations in their dimensions, that these

features represented the same kind of structure as that formed by Post-holes F1134, F1096, F1770, and F1725.

The Six-Post Structure

A similar formation of post-holes to that found in conjunction with Cremation C1308 was recorded surrounding Cremation C1633. This group consisted of six post-holes, suggesting a more elaborate structure (see Figs 8 and 10).

Cremation C1633 was deposited in Pit F1635 (Grid Square B6; Fig. 12). Analysis of the human remains recovered from this cremation indicates that they were those of a sub-adult, remains were deposited in a cremation vessel decorated with incised lines and displaying a rounded base. The pit was surrounded by a ring of six post-holes in an irregular hexagonal formation.

The structure that these postholes represent may or may not have been a variation on the same theme as the four-post structure identified surrounding Cremation Pit F1295. It may have taken the form of a series of single postholes surrounding the site of the cremation burial. If it had been a walled structure, like the four-post structures identified at other sites, and suggested for that surrounding Cremation Pit F1295, it would have been a much more complicated structure, especially in terms of the roof construction. The more complex nature of a six-post structure may imply greater status for the individual represented in the cremation.

The north-west cremation group

Six urned cremations (C1420, C1415, C1433, C1437, C1457 and C1216) and one un-urned cremation (C1406) were identified within a loose cluster of pits (F1421, F1417, F1435, F1439 (Fig. 11), F1482, F1218 (Fig. 11) and F1407 respectively) in the north-western part of the site (Fig 8; Grid Squares B11, B12 and B13). An additional urned cremation (C1430) was found at the interface of the subsoil/natural gravel above Cremation C1433; the cut for this cremation had been entirely ploughed out.

The group was aligned broadly north-north-west to south-south-east, following the line of the Phase 2 Ditch F1274=F1224=F1234. The only exception to this was Pit F1218 which lay a little further to the west. It is a well attested phenomenon of Anglo-Saxon cremations that they are arranged following the line of an earlier ditch (Lucy 2000, 128).

Of these cremations, four, C1420, C1415, C1437 and C1406 (see Fig. 11), contained adult sized remains. No bone had survived within Cremation C1433. Remains recovered from C1216 were identified as being infant or child sized and those from C1457 were sub-adult sized. It was not possible to obtain sufficient information from the surviving 2g of bone from Cremation C1430 to estimate its age. Insufficient evidence survived from these cremations to identify their gender. As Cremation C1406 was un-urned, and no other artefacts were present within it, it is technically undated. It is included here as it appeared to form part of this group. However, it remains possible that it was not Anglo-Saxon and was placed in proximity to this group of cremations coincidentally.

The deposition of the cremation vessel containing Cremation C1457, caused partial truncation of the vessel within which Cremation C1437 was buried. Cremation C1457 was evidently deposited in to a pit which cut Cremation Pit F1439 (containing C1437). The cut of this pit (Fig. 11), which has been assigned the Feature number F1482, was not identifiable during excavation, even though it clearly caused heavy truncation to the earlier cremation.

The south-western cremation group

A loose group of seven cremations were recorded in the area to the west of Penannular Ditch F1324 and the six-post structure surrounding Cremation Pit F1635 (See Figs 10 and 11). These cremations, C1629, C1623, C1579, C1584, C1301, C1305 and C1352 were deposited within Pits F1631 (Grid Square B6; Fig. 12), F1625 (Grid Square B6), F1578 (Grid Square B5), F1582 (Grid Square B5), F1303 (Grid Square B4; Fig. 11), F1304 (Grid Square B4; Fig. 11) and F1351 (Grid Square B5; Fig. 11) respectively. All of these were urned cremations although the vessel belonging to Cremation C1579 had been destroyed, most probably by the later ploughing that affected much of the site. Cremations C1301 and C1305 were positively identified as being the cremated remains of adults. A double flanged lead plug was recovered from Cremation C1301. This plug was of a type used from the Roman period to the medieval and may have been used to mend a hole in the cremation vessel or in another item, possibly a wooden bowl, within the cremation deposit. Cremations C1629, C1579 and C1584 all contained skeletal elements that were recognised as adult sized. There were no surviving elements amongst the human remains from Cremations C1623 and C1352 that could be used to determine the age of these individuals.

Apparently Isolated Anglo-Saxon Cremations to the west of Ditches F1165=F1612, F1263 and F1220

Several other cremations were recorded within the area defined by the Phase 2 double ditches that did not appear to belong to any coherent groups of cremation features; they are therefore described as isolated. It is possible that some of these will have formed groups with cremations that may still exist beyond the limits of the excavated area. Others would appear to have been deliberately deposited in relative isolation from other cremations.

Pit F1763 (Grid Squares D4, E4) cut the Phase 2 Ditch F1843 and was later cut by Anglo-Saxon (Phase 3) Ditch F1165, which appeared to be a recut of the much earlier Phase 2 ditch (Fig. 11). Into the backfill of Pit F1763 Phase 3 Cremation C1796 was later inserted. This cremation was severely damaged and no distinct cut for it was visible; it is however, unlikely that it was deposited into Pit F1763 as it was backfilled and so a hypothetical cut was assigned a context number. No bone survived from this urned cremation.

Pit F1775 (Grid Square B2) was cut in to Phase 2 Ditch F1195 (Fig. 12). It contained Cremation C1773.

This was an urned cremation containing the remains of an adult. Like many of the other cremations, this had suffered plough damaged.

Cremation C1361 (Fig. 11) was located in Pit F1360 (Grid Square B13) and was the most northerly of the cremations recorded within the area enclosed by the Phase 2 ditches. Pit F1360 was cut into the top of undated elongated Pit/Gully F1808 (Fig. 11). The cremation deposit contained sufficient surviving skeletal elements to identify the individual represented here as adult sized.

Pit F1809 (Grid Square B11) contained Cremation C1818 (Fig. 12). It was located to the north of Phase 4 Ditch F1984 and was partially cut by this feature. It was also partially truncated on its eastern side by undated Pit F1817. Analysis of the cremated remains revealed no elements from which age could be identified; only a very small quantity of human bone (0.6g) was recovered from the cremated material.

Cremation Cut F1350 (Grid Square B3), which contained Cremation C1348 (Fig. 11), lay between Phase 2 Ditches F1195 and F1197 and to the west of Phase 2 Curvilinear Ditch F1226. Analysis of the cremated remains indicated that they were those of a sub-adult sized individual.

The last of these apparently isolated cremations within the Phase 2 enclosure was C1342 (Fig. 11). This was contained within Cremation Pit F1344 (Grid Square A1). Cremation C1342 comprised the remains of an adult sized individual contained within V1343, a bossed and stamped cremation vessel (see Thompson, this report).

Cremations in close proximity to sub-circular Enclosure Ditch F1233=F1212=F1222

Cremation C1539 was identified deposited within the backfill of undated Ditch F1545=F1748. No cut feature into which it could have been deposited was discernible but it is presumed that such a feature must have existed; this was given the hypothetical feature number F1537. The cremation was located immediately to the south-west of Ditch F1233=F1212=F1222. This was an urned cremation containing the remains of an adult (Fig. 11).

Pit F1469 (Grid Square C9) lay *c.* 1.5m to the north of Ditch F1233=F1212=F1222. It contained urned Cremation C1445, which comprised the remains of an adult (Fig. 11). 427g of pottery assumed to represent the cremation urn survived in this deposit.

Anglo-Saxon cremations and related features located to the east of Ditches F1165=F1612, F1263 and F1220

Ditch F1208 and associated cremation burials and other activity

Curvilinear Ditch F1208 (Grid Squares A13, B13, C13) ran from beyond the western limit of excavation for a distance of 6m, cutting Phase 2 Enclosure Ditch F1274=F1224=F1234, and terminated in Grid Square C13.

Within the terminal end of Ditch F1208 lay Cremation Vessel V1404. This contained Cremation C1405, analysis of which indicated that it represented the remains of an adult. No separate cut to contain the cremation vessel was observed (Fig. 11). This may indicate that Vessel V1404 was deposited directly in to Ditch F1208. This, in turn, would indicate that Ditch F1208 was deliberately backfilled with deposit L1207 (a dark brown silty sand with occasional gravel and small-medium rounded stones), rather than being allowed to silt up naturally.

At a distance of *c.* 3.60m to the north-east of the terminus of Ditch F1208 lay the southern terminus of undated Ditch F1653 (Grid Square C14). This extended in a straight line to the north and appeared to carry on beyond the northern limit of the excavated area. During excavation it was suggested that this feature was the return of Curvilinear Ditch F1208 and that the two features formed an enclosure similar to that formed by Sub-circular Enclosure Ditch F1233=F1212=F1222. Although this is a possibility, the dissimilarities in dimensions and appearances, both in plan and in section, between the two features would appear to suggest otherwise.

Within the area between Ditches F1208 and F1653 lay two cremations. Cremation C1704 was deposited in Cremation Pit F1706 (Grid Square C14; Fig. 12). The cremated remains included elements that were identified as adult sized. The cremation vessel in which this cremation was deposited had been heavily truncated through plough action. Only the base of it survived within the burial environment. Cremation C1455 was also shown to contain the remains of an adult sized individual (see Phillips, this report). It was deposited in Cremation Pit F1453 (Grid Square B14). Like the Cremation C1704, the cremation vessel that originally would have held C1455 was heavily truncated. Vessel V1454 had clearly suffered the effects of both plough action and bioturbation.

To the north-east of Cremation Pit F1706 lay Pit/Posthole F1736 (Grid Square C14). This feature was large for a posthole, measuring 0.76 × 0.70 × 0.48m, however, it had near-vertical sides and a pointed base and a void, representing a possible post-pipe, was visible in section during excavation. Pit F1758 (Grid Square B14) lay to the south-west of Cremation Pit F1453.

Cremations in close proximity to sub-circular Enclosure Ditch F1233=F1212=F1222

Cremation C1605 was contained within Pit F1602 (Grid Square D7). It was located to the south-east of sub-circular Enclosure Ditch F1233=F1212=F1222 and cut the eastern edge of the Phase 2 Ditch F1274=F1224 =F1234. Although this was another urned cremation it was unlike other cremations found in association with Ditch F1233=F1212=F1222 as the human remains that it contained were identified as being those of a sub-adult. Approximately 4m to the north of C1605, and *c.* 1m from the edge of Ditch F1233=F1212=F1222, lay Pit F2012 (Grid Square D8) which was cut in to the top of

pit F1685 and contained Cremation C1688 (Fig. 12). Phillips (this report) has identified the remains of both an adult and a child within this cremation deposit. It is possible that this represents the dual urned burial of an adult and child although the possibility of contamination of material from another cremation, possibly as a result of plough damage cannot be completely disregarded.

Ring-Ditch F1271=F1277

Ring-Ditch F1271=F1277 lay 12.6m to the south-east of Ring-Ditch F1214. It had a maximum diameter of 8.50m (and a minimum of 8.00m); its external circumference was approximately 26.00m (Figs 8 and 9). Like that of Ring-Ditch F1214, there was no break in the circumference.

No finds were recovered from Ring-Ditch F1271= F1277 but it is tentatively assigned to Phase 3 on the basis of its striking similarity to Ring-Ditch F1214. The two features were so similar in form and dimensions that it seems most likely that they were intended as pair, one as a copy of the other or one as the (more or less immediate) replacement of the first. The Phase 3 Ditch F1220, which was cut by, and ran through the approximate centre of, Ring-Ditch F1214, would have passed through the eastern part of Ring-Ditch F1271=F1277 had it continued on the same north-west to south-east line.

No cremations were associated with Ring-Ditch F1271=F1277 though three undated features (F1903, F1905 and F1907) lay within the area it enclosed. No stratigraphic relationship existed between these features and the ring-ditch making their chronological relationship with each other impossible to determine. Despite not having any cremations located within it, Ring-Ditch F1271=F1277 would appear to belong to the same set of features as Linear Ditch F1165=F1612, Sub-circular Enclosure Ditch F1233=F1212=F1222, Linear Ditches F1263 and F1220 and Ring Ditch F1214, all of which appear to have exerted some degree of influence over the siting of cremation burials. These features were, however, all connected to one another, despite not all being immediately contemporary. Ring Ditch F1271=F1277 was not connected to this set of features. This, and its lack of associated cremations, seems to set it aside from the rest of these major features, despite its similarities to Ring-Ditch F1214.

Located *c.* 0.7m to the south of Ring-Ditch F1271=F1277 was sub-circular Pit/Post-hole F1854 (Grid Square F8). F1854 was dated to Phase 3 due to the early Anglo-Saxon pottery within its fill. The position of this feature in relation to Ring-Ditch F1271=F1277 suggests that the two may have been related.

Cremations to the east of Phase 2 Enclosure Ditch F1273=F1235

Ten urned cremations were located in the area to the east of Phase 2 Enclosure Ditch F1273=F1235 and to the south of Phase 3 Ring-Ditch F1271=F1277. These cremations are considered to form a dispersed group, covering this area.

Pit F2003 (Grid Square H4) was the most south-easterly of the pits associated with this group of cremations. It contained Cremation C2001, which was contained within a round-based vessel that had suffered heavy damage. Analysis of the contents indicated that it contained the remains of an adult sized individual. Approximately 6m to the west-south-west of Pit F2003 lay Cremation Pit F1882 (Grid Square G4). This contained Cremation C1884, that of an adult (Fig. 12). From amongst the cremated human remains a fragment of iron, possibly part of a nail, was recovered. The cremation vessel in which C1884 was deposited was burnished and displayed bossing and stamp decoration.

Pit F1978 (Grid Squares G4, G5) contained 6 sherds of early Anglo-Saxon pottery (86g) that are considered to represent the remains of a possible cremation vessel (V1977). No bone survived within this feature but it is considered to represent all that remains of Cremation C1976. The fragmentary nature of the possible cremation vessel and the lack of surviving cremated bone is considered to be the result of severe truncation by the later ploughing of the site that disturbed so many of the archaeological features.

Cremation C1866 (Fig. 12) was contained in Cremation Pit F1868 (Grid Square F5). The cremation vessel was identified as a biconical urn and displayed decoration comprising dots and an incised pendant triangle. The cremated remains were identified as adult and skull fragments displayed significant closure of the saggital suture.

Cremation Pit F1822 (Grid Square E6; Fig. 12) lay to the north-west of Cremation C1866. It contained Cremation C1820, which was identified as the remains of an adult. These remains demonstrated some interesting non-metric traits (see Phillips, this report); the occipo-mastoid sutures remained open and a mastoid foramen was present on the suture. The urn in which these remain were interred was a round-based vessel.

Cremation C1849 comprised the remains of an adult sized individual contained within a splayed-based vessel and deposited in Cremation Pit F1851 (Grid Square G6). However, this pit is only conjectured; the cremation vessel itself was found lying at the interface of the overlying subsoil and the natural sand.

Cremation C1997 lay within Cremation Pit F1999 (Grid Square F6; Fig. 12). It comprised the urned remains of a sub-adult sized individual. Very little of the cremated material and the cremation vessel survived. Cremation Pit F1997 truncated the earlier un-urned, and therefore technically undated, Cremation C2010 (deposited in Pit F2011). Cremation Pit F1838 (Grid Squares E7, F7) was located *c.* 3.75m to the north-west of Cremation Pit F1997. Pit F1838 (Fig. 12) contained the remains (C1836) of a sub-adult sized individual that, based on the surviving dentition, was at least two years of age. The cremation vessel in which C1836 was deposited was burnished, displayed line and dot decoration, was bossed and stamped and had a ring base. When excavated, it was found lying at an angle of forty-five degrees on its eastern side; this was possible a result of

plough disturbance. Approximately 4m to the north of F1838 lay F1924 (Grid Square F7), the cremation pit containing Cremation C1923. C1923 represented the remains of an adult sized individual. The cremation vessel was substantially destroyed but enough survived for its incised line decoration to be recognised.

To the west of F1924 lay Cremation C1839, within Cremation Pit F1840 (Grid Square E7). This cremation deposit contained the remains of an adult sized individual though it was noted that its occipo-mastoid and lambdoidal sutures were unfused. The cremation vessel that originally contained this cremation was badly damaged; sherds of vessel were found in association with the cremated bone.

Eastern Cremation group

A small group of cremations were located in the eastern part of the site (Figs 8 and 10). With the exception of C2001 (F2003) these were the most easterly located cremations at the site.

Cremation C1893 (Fig. 12) was identified as that of an adult sized individual. A sheep/goat astragulus was also identified amongst the cremated bone. Bond (1996, 76–79), states that many Anglo-Saxon cremations are found to contain animal bone and that this would appear to represent some kind of ritual act. This cremation was deposited in Cremation Pit F1895 (Grid Square H9; Fig, 12), which lay *c.* 7m to the east of Ring-Ditch F1271= F1277, in an incised, bossed and stamped vessel (V1894). Cremation Pit F1895 slightly truncated Cremation Cut F1899 (Grid Square H9; see Fig. 12), which lay to the immediate south. F1899 contained Cremation C1897, which comprised the remains of an adult sized individual. C1897 was deposited in a bossed and stamped vessel that also displayed line and dot decoration.

Cremation C1945, the third in this group of cremations, was located in Cremation Pit F1945 (Grid Square H8), which lay slightly to the south of the other two cremations (Figs 10 and 12). The cremated remains were those of a sub-adult individual, probably of less than four years of age. Cremation Vessel V1944, which contained these remains, was bossed and stamped and displayed incised lines.

Anglo-Saxon cremations in proximity to Phase 2 cremation

Two cremations, dated to Phase 3, were recorded in close proximity to the Phase 2 Cremation C1713, interred in Pit F1711 and close to the northern end of Phase 2 Ditch F1273=F1235 (Figs. 8 & 10). Although the presence of the Phase 2 enclosure may have been a factor in the choice of this site as an Anglo-Saxon cemetery site, it is not possible to state if these Phase 3 cremations were deliberately placed in proximity to the earlier C1713. This would imply that the Anglo-Saxon period population were capable of identifying Iron Age cremation burials without causing substantial disturbance to them. As Taylor (2001, 160) states, it can be difficult identifying reuse of Iron Age cemetery sites due to the "anonymous nature" of the earlier burials.

Cremation C1658 was contained within Pit F1656 (Grid Square C12). This was an apparently un-urned cremation but it was found to contain a small iron staple. This staple was of a type often used to repair wooden vessels, which suggests that the cremation was originally deposited in a wooden vessel rather than a ceramic one. Staples of this type have been found in several Anglo-Saxon burials in the eastern region (see Crummy, this report) allowing this cremation to be dated to Phase 3 of activity at the Chalet site. The human remains recovered from the cremation were probably those of a young adult. To the south-west of Cremation Pit F1656 lay Pit F1375 (Grid Square C12; Fig. 11), within which was interred Cremation C1373. Only small fragments of the burnished cremation vessel (V1374) were recovered from this deposit. It had clearly suffered plough damage.

Cremation in the south-west of the site

Cremation C1342 was located in the south-western corner of the excavated area. This was contained within Cremation Pit F1344 (Grid Square A1). Cremation C1342 (Fig. 11) comprised the remains of an adult sized individual contained within V1343, a bossed and stamped cremation vessel (see Thompson, this report). Other features of a similar date lay in close proximity and it is possible that this feature formed part of a group of cremation deposits, the majority of which were located beyond the limits of the excavation area.

The un-urned cremations

Nine of the cremations recorded at the site were identified as being un-urned (Fig. 10). The cremated human remains would have been deposited possibly directly in to the cremation pit or would have been held within some kind of organic container, possibly made of wood or leather, which would not have survived in the burial environment. Due to the absence of ceramic urns or any other kind of dateable artefactual evidence, it is impossible to date many of these cremations. Where further artefactual evidence has been recovered (the Anglo-Saxon iron staple in C1658) or where the un-urned cremation has been recognised to be a coherent part of a group including dateable features or cremations (C1406, C1680) it has been possible to assign these cremations to Phase 3.

The presence of cremations dateable to the Iron Age at the Chalet Site means that it is not possible to assume that any undated cremations are contemporary with Phase 3. However, as the majority of cremations at the site are Anglo-Saxon and as it has been possible to assign an Anglo-Saxon date to the three dateable un-urned cremations it seems statistically probable that the remaining un-urned cremations are also of this date.

Four undated cremations lay in the area surrounding Phase 2 (late Bronze Age to early Iron Age) Cremation C1258, though they also lay close to Phase 3 Pit F1083. Cremation Pit F1053 (Grid Square D2) lay *c.* 3.5m to the north-east of Pit F1083 and *c.* 6m north-east of Phase 2 Cremation C1258. F1053 contained Cremation

C1052, which was identified as being the remains of an adult sized individual. Cremation Pit F1804 (Grid Square C2) contained Cremation C1803, which was identified from full development of the tooth roots to be an adult.

Cremation Pit F1778 (Cremation C1779) was located in Grid Square D2. No bone survived within this cremation but the character of deposit C1779 was sufficiently similar to other cremation deposits for it to be identified as such. Cremation C1815, located in Pit F1816 (Grid Square D3) was the furthest of this group of un-urned cremations from Phase 2 Cremation C1258 and Phase 3 Pit F1083. It was not possible to determine the age or sex of the individual represented in these cremated remains.

Un-urned Cremation C1118 was located within Pit F1119 (Grid Square D4). This lay close to the north-eastern termini of Phase 2 Ditches F1195 and F1197 and to the west of Phase 3 Ditch F1165 and Pit F1763. This cremation lay in equal proximity to features of both Phase 2 and Phase 3 date and could, therefore, conceivably be contemporary with either of these sets of features. Analysis of the cremated material revealed it to be the remains of an adult.

Cremation Pit F1942 (Grid Square B10) lay immediately to the south of Phase 4 Ditch F1984. It was located at least 4m from any features of Phase 2 or 3 date, though other undated features lay in closer proximity. It contained adult Cremation C1941.

Cremation Pit F2011 (Grid Square F6) was heavily truncated by Cremation Pit F1999. No surviving bone was present when cremated material from Cremation C2010 was analysed. This may be because much of this material appeared to have been redeposited as backfill in Cremation Pit F1999 thus causing mixing of material from C1998 with that of C2010. Taylor (2001, 144) states that it is regularly observed of Anglo-Saxon burial that there was, apparently, little problem in identifying earlier graves, either to avoid disturbing a previous burial or to locate a grave in which to place another family member. This suggests that Cremation C1998 was deliberately deposited in the same location as C2010, causing deliberate disturbance to it, or that C2010 was considerably earlier than C1998 and possibly of Phase 2 date.

The remaining Phase 3 features

Across the site, a number of other features, containing artefactual evidence or displaying stratigraphic relationships to indicate that they were of Phase 3 date, were recorded.

These features mainly comprised isolated postholes, which displayed no obvious structural configurations, and pits of indeterminable function. It is possible that those postholes that lay in the vicinity of cremation deposits may have held marker posts, but the distances between features of these types was often too great for any relationship to be positively identified.

Three ditches of uncertain function were also recorded. The first of these, Ditch F1210 (Grid Squares B10 – C11), entered the site from the west, extended for 6.20m in a north-easterly direction and terminated immediately to the south of Phase 4 Ditch F1984. It cut Phase 2 Ditch F1234=F1274. It did not communicate with the complex of features comprising F1214, F1233=F1212=F1222, F1165, F1263 and F1220, but, could conceivably have represented some kind of internal boundary in the layout of the cemetery site. A pair of ditches of uncertain function were recorded in the south-west of the site. Ditch F1320 extended for a length of 6.6m, on a north to south alignment, from Grid Square B1 to Grid Square B2. It clearly formed one of a pair of features with the similar and adjacent Ditch F1329 (Grid Squares B1, B2) which lay *c.* 1m to the west. Ditch F1329 was very similar in form, dimensions and fill to the neighbouring feature and, due to this, is assigned to the same phase despite yielding no dateable artefacts. Unlike F1320, Ditch F1329 extended beyond the southern limit of the excavated area.

Phase 4: Post-medieval

Introduction

Following the last use of the site as a cremation cemetery in the early Anglo-Saxon period it appears to have seen little further activity until the post-medieval period. During this time, it is possible that the site may have been used as agricultural land and it is possible that this was the cause of the plough damage suffered by the Phase 3 Cremations and other features.

Six features were assigned to Phase 4 on the basis of finds of post-medieval date present within their fills and stratigraphic relationships (Fig. 13). These features comprised three isolated pits, a pair of ditches and a recut of the southern-most of this pair of ditches. All of these features were located within the northern three-quarters of the excavated area.

The Phase 4 Pits

Pit F1388 (Grid Square D13; Figs 13 and 14) was located within the south-western quadrant of the area enclosed by Phase 3 Ring-Ditch F1214. The feature was dated to Phase 4 due to the presence of a small quantity of post-medieval peg tile within its fill. To the south-west of Pit F1388, at a distance of *c.* 8.75m, lay sub-circular Pit F1059 (Grid Squares B12, C12; Figs 13 & 14). It lay *c.* 5m to the north of Phase 4 Ditch F1984. Post-medieval peg tile was also recovered from this feature.

No evidence to suggest an obvious function for these features was apparent. They may have been excavated as rubbish pits in to which small quantities of organic material, which have not survived to any extent in the burial environment, were deposited. Their location, away from any kind of domestic occupation, would perhaps negate this suggestion. It is perhaps more likely that they represent coincidental activity occurring during the construction of the two extensive linear features close by to the south.

The Phase 4 ditches

Two ditches traversed the site running broadly east to

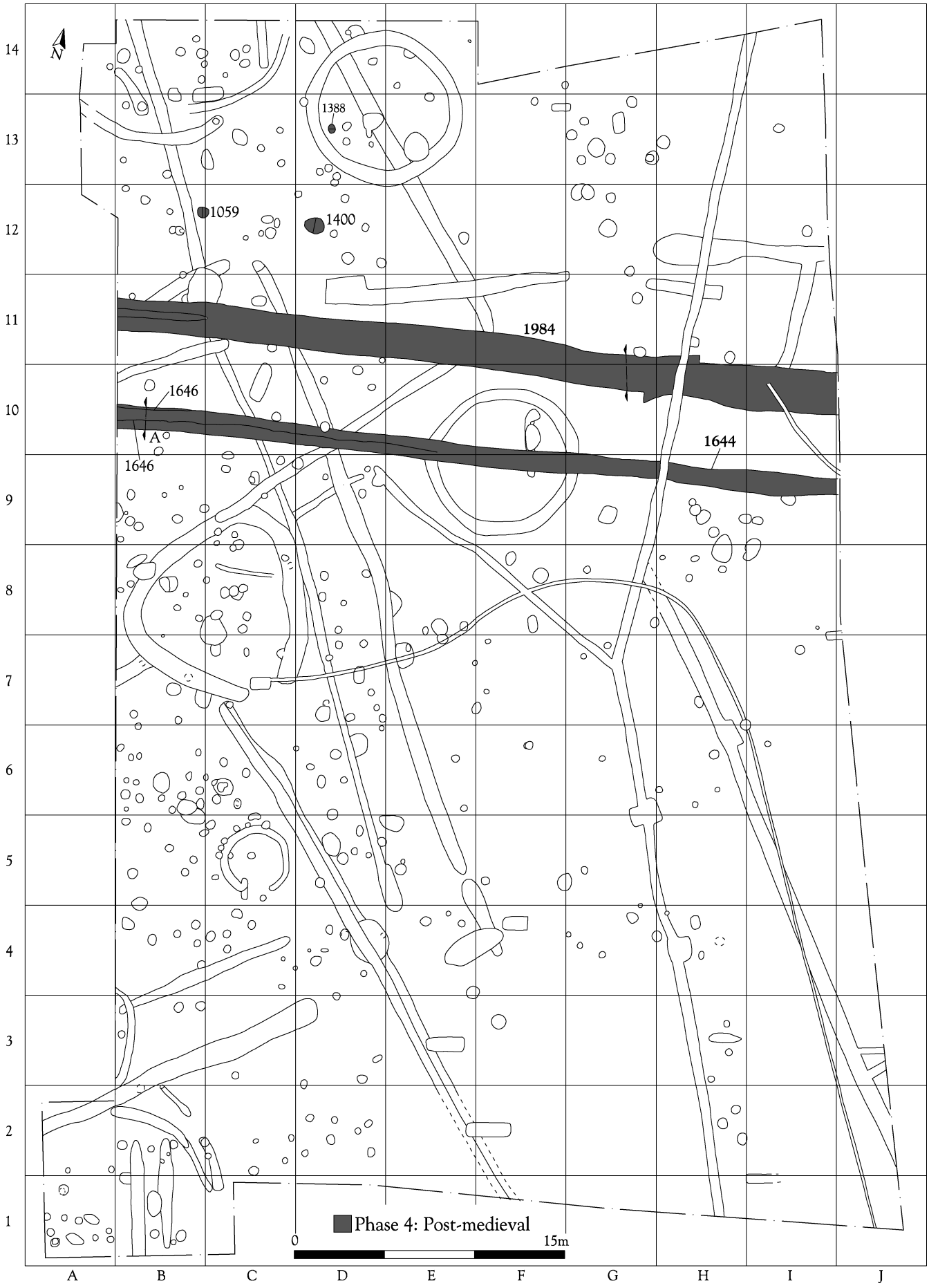

Fig. 13 Phase 4: Post-medieval plan

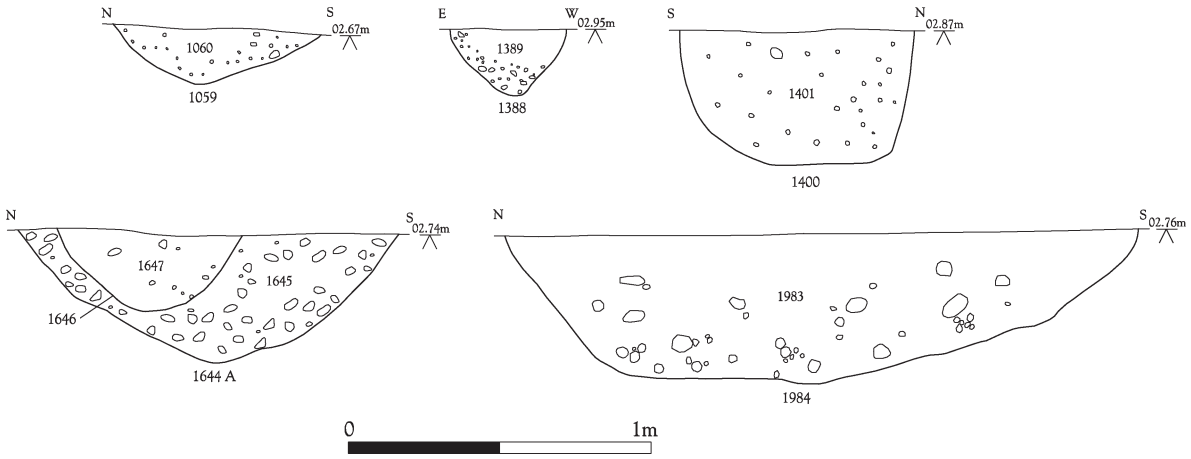

Fig. 14 Phase 4 sections

west and parallel with one another. These were both identified as being of Phase 4 date.

The northern-most of the two ditches was Ditch F1984 (Grid Squares B11– I10; Figs 13 and 14). It measured in excess of 40m and was 2.10m in width at its widest point with a maximum depth of 0.50m. It cut all features with which it shared stratigraphic relationships, with the exception of a modern pipe trench. Brick and tile of post-medieval date were recovered from this feature.

At a distance varying between 3.5 and 4m to the south of Ditch F1984, lay Ditch F1644 (Grid Squares B10 – I9; Figs 13 & 14). It ran parallel to F1984 and was slightly narrower and slightly shallower. Like Ditch F1984, post-medieval CBM was recovered from Ditch F1644. Recut F1646 was present towards the western extent of Ditch F1644 within Grid Squares B10, C10, D10, E10 (Figs 13 & 14). A single sherd of Iron Age pottery (4g) was recovered from F1646, this, however, must be residual given the stratigraphic relationship F1646 had with the securely dated F1644.

None of the historical cartographic evidence consulted during work on this project indicated any features within the site that may correlate to Ditches F1984, F1644 and F1646 (see Vaughan and Grassam 2005). The ditches may represent field or plot boundaries though their proximity to one another may suggest otherwise, unless the gap between them represented some kind of thoroughfare, in which case it may be expected to have shown up as a hollow-way, which it certainly did not. The alignment of these features indicates that they may have led to the Heybridge Creek, which runs past the site to the west, thus they may have been cut to facilitate drainage on the site. Indeed, Vaughan and Grassam (2005, 11) note that the historical cartographic evidence for the site indicates that part of the site encompassed marshy ground in the late 18th century, although by the 19th century it appears to have been improved, perhaps through drainage. The natural slope of the site, which drops from 2.93m AOD in the north-east to 2.66m AOD in the south, may have implications regarding the effectiveness of these features as land drains as they cut across the site from east to west.

Significant undated features

Introduction

Those features recorded at the Chalet Site that did not contain dateable artefactual evidence or did not display convincing stratigraphic, spatial or functional relationships with other features that served to indicate their date, remain classified as undated. The majority of these undated features were discrete pits or postholes that had no positively identifiable interrelationships with features that were dateable. Although the majority of the undated features offered little evidence in terms of the history, character and development of the site, others were intrinsically interesting or affected the understanding of the site.

F1358: the possible grave

F1358 (Grid Square C10) lay between Phase 2 Ditches F1274=F1224=F1234 and F1273=F1235. It was aligned north to south and was sub-rectangular in plan, with rounded corners, near-vertical sides and an irregular base that sloped down to the south.

The shape of the feature, in both plan and profile, its size (2.30 × 0.60 × 0.30m), and its proximity to so many other Anglo-Saxon funerary features have led to the tentative suggestion that it represented an inhumation grave. Mixed burial rite cemeteries are not unusual in the Anglo-Saxon period. Indeed, Taylor (2001, 138) states that most cemeteries of this date have an element of both inhumation and cremation. Very large cremation cemeteries with a small minority of inhumations are early in origin and are concentrated in eastern England (Taylor 2001, 138). If F1358 were indeed a grave, then its presence would indicate that the Chalet Site cemetery fits into the pattern described by Taylor (2001).

The lack of human remains within F1358 does not hamper its interpretation as a grave. The natural sand/gravel deposits present at the Chalet Site are the type of soils that provide the kind of acidic environment in which bone will quickly dissolve leaving no detectable

trace (Goodyear 1971, 147). The cremated bone from the site survives as a result of the chemical changes that occurred to it during the cremation process. The lack of grave goods may, however, call in to question the interpretation of this feature. Taylor (2001, 135) states that the normal inhumation custom in the early Anglo-Saxon period was for clothed burial with a wealth of grave goods. While the soil conditions at the site would appear to be unfavourable for the survival of organic materials, evidence from elsewhere on the Chalet Site indicates that inorganic materials survive reasonably well in the soil conditions at the site. It would be unusual for a grave good assemblage to be composed entirely from items made of organic materials and so it must be considered that F1358 suffered some form of grave robbing, that it did not conform to the conventional norms of inhumation burial at this time or that it was not a grave at all.

It should, however, be considered that F1358 may have been a grave, but that it was not of Anglo-Saxon date. The position of the feature between Phase 2 Ditches F1274=F1224=F1234 and F1273=F1235 may indicate that it was contemporary with these features. Inhumations without grave goods are not uncommon in the Iron Age.

Features within Ring-Ditch F1271=F1277

With the exception of Pit F1854, which lay close by to the south, no features of Phase 3 date were recorded in association with Phase 3 Ring-Ditch F1271=F1277. This would appear to be strange as the very similar Ring-Ditch F1214 contained, within the area that it enclosed, Cremations C1676 and C1558 (in Cremation Pits F1678 and F1560, respectively). Small ring-ditches, such as this, sometimes constructed around a central cremation pit, may indicate that a mound originally existed over the burial deposit, as with inhumation burials in the early Anglo-Saxon period (Welch 1992, 66).

The only features that lay within the area enclosed by Ring-Ditch F1271=F1277 (F1903, F1905 and F1907) yielded no dateable artefacts. It was not possible to assign these to Phase 3 solely on the basis of their presence within Ring-Ditch F1271=F1277 as features of both Phase 2 and Phase 4 date were recorded within the area enclosed by Ring-Ditch F1214. Furthermore, F1271=F1277 was only assigned to Phase 3 on the basis of its similarity to F1214.

F1903 (Grid Square F10) was a sub-circular pit. F1905 (Grid Squares F9, F10) was a curvilinear feature. It was recognised both to the north and south of Phase 4 east to west aligned Ditch F1644, which cut it close to its southern terminus. Pit F1907 (Grid Square F10) was truncated to the south by Pit F1903 and to the north by Curvilinear Gully F1905; its shape in plan was, therefore, indeterminable.

Although the nature of the evidence makes it impossible to assign any of these features to a particular phase of activity, their presence within the area enclosed by Phase 3 Ring-Ditch F1271=F1277 suggests that any of them may have been of the same phase. The character of Ring-Ditch F1271=F1277 suggests that it may represent the remains of a burial mound and could have been expected to be associated with funerary activity in the same way that Ring-Ditch F1214 was. If a cremation deposit did at any point exist in the area within Ring-Ditch F1271=F1277 then the most likely of the three features for it to have been deposited would have been the small Pit F1907, with the subsequent truncation by Pit F1903 and Curvilinear Gully F1905 removing any trace of the cremation deposit. However, no trace of any element that may hint at the presence of a cremation within this feature was recorded. The intercutting nature of these features may be the result of attempts to rob the mound of the 'treasure' that it may have contained.

Possible grave markers

Several undated features were regarded during excavation as being grave markers associated with Anglo-Saxon Cremations. Single-post markers are more commonly associated with Anglo-Saxon inhumations (Lucy 2000, 102) with cremations being more usually marked by four-post 'gravehouse' structures. It is possible, however, that cremations or groups of cremations were marked by the presence of an upright post. At some Anglo-Saxon cemeteries, stones appear to have been used to mark the positions of cremation depositions (Welch 1992, 69); it is reasonable to suggest that in the case of the Chalet Site, and possibly at other sites, that such stones were substituted with upright posts. Furthermore, Welch (1992, 69) asserts that many aspects of Anglo-Saxon inhumation and cremation rites are very similar, in terms of the way the body was laid out and the way in which it was equipped either in the grave or on the pyre. This may provide support for the suggestion that the same external appurtenances were used with cremation deposits as they were with inhumations. Indeed, some cremations within Anglo-Saxon cemeteries have been positively identified as being marked by posts. A cremation at the Great Chesterford cemetery was associated with a posthole containing vertically inserted packing stones; this cremation, however, was contained within a wheel-thrown Roman vessel, possibly indicating that it was a Roman cremation that later attracted Saxon burials (Evison 1994, 30). Of the undated features initially suggested to represent grave markers associated with cremations, most cannot be considered to be associated with the cremations with which they were linked during excavation with any certainty beyond a loose proximity, due to their undated status.

ARTEFACT AND ENVIRONMENTAL REPORTS

The Flint

Martin Tingle

Introduction

The flint assemblage is composed of 16 pieces weighing 244g, although if burnt but unworked flint is excluded the worked flint assemblage totals 11 pieces weighing

Context	Find	Number	Weight (g)	Comment
1050	Tertiary Flake	1	6	
1076	Uncorticated Flake	1	1	
1180	Burnt Flint	2	126	
1225	Burnt Flint	1	9	
1261	Uncorticated Flake	1	1	
1302	Secondary Flake	1	9	Crem 1301
1335	Uncorticated Flake	1	6	
1524	Uncorticated Flake	1	10	
1537	Uncorticated Flake	1	5	Vessel 1338 Crem 1339
1616	Burnt worked	2	32	
1671	Burnt worked	1	3	
1744	Retouched	1	20	Resembles ?Oblique Arrowhead but over large
1198 B	Burnt Flint	1	11	
U/S	Tertiary Flake	1	2	
	Total	**16**	**241**	

Table 2 The composition of the assemblage (terminology following Andrefsky 1998)

95g. It was recovered from a group of pit and ditch fills associated with the cremation cemetery and in three instances (contexts C1301, C1615 and C1539) from the fills of the cremations themselves.

Raw Materials
Although much of the flint is without surviving dorsal cortex, the remaining pieces suggest that the flint derives from a mixture of primary and secondary sources and the colour varies from dark grey to pale brown.

Composition and Technology
The worked assemblage is largely composed of a small number of unretouched flakes that vary from small squat flakes to large, blade like flake in Pit F1523. Context L1744, the upper fill of Pit F1743, contained a single retouched piece that strongly resembles an oblique arrowhead, although it is almost certainly far too heavy and thick to have functioned as one. Its resemblance could, therefore, be fortuitous.

Dating
There are no obviously datable pieces within the assemblage although, if the piece, which resembles an oblique arrowhead, were a contemporary with the arrowheads themselves, it would date from the later Neolithic.

Conclusion
The assemblage is too small and too dispersed for any conclusions to be drawn from it.

The Pottery

Peter Thompson

The excavation of the Chalet Site, Heybridge in 2006 produced 4,849 sherds of pottery weighing 55.245 kg. The bulk of the sherds (75.1%) are early Saxon, the majority coming from the cremation cemetery, but pottery from the late Neolithic (1.4%) and late Bronze Age/early Iron Age (23.5%) is also represented (Table 3).

Period	Sherd number	% of sherd number	Fabric weight (g)
Late Neolithic	69	1.4	1,243
Late Bronze Age/Early Iron Age	1,138	23.5	12,222
Early Saxon	3,642	75.1	41,780
Total	4,849	100.0	55,245

Table 3 The pottery by period

Fabric	Sherd count	Fabric weight (g)	Description
A: Grog	63	1,139	Moderate to common grog sometimes with rare sand and very
	(1)	(1)	coarse flint/mineral
Aa: Grog	1	9	As for Fabric A but also containing a little grass tempering
B: Sand	4	94	Moderate fine to medium quartz with rare very coarse flint/mineral
Total	69	1,243	

Table 4 The Neolithic fabric groups. Quantification of sherds by number and weight (numbers in brackets represent residual sherds)

The late Neolithic

The earliest pottery, comprising 69 sherds weighing 1.243 kg, came from three discrete pits (F1062, F1694 and F1877). The decoration indicates that the assemblage is late Neolithic Grooved Ware (with one exception), where grog tempered pottery and flat-based vessels were introduced to the ceramic record of southern Britain (Gibson 2002, 32 and 84).

Fabrics

Three main fabric groups are present, these were categorised on the basis of the main inclusions within the clay matrix, whether naturally occurring or deliberately added (Table 4). The assemblage is characterised by grey cores with surfaces varying between buff, orange-buff, (usually on the most heavily flint tempered coarse wares), and brown or grey for the remainder.

Forms and Decoration

The assemblage from Pit F1877 (L1878) represented a minimum number of ten vessels, and those from the two remaining pits each contained sherds from a single vessel. Thirty-two sherds (46%) displayed decoration, although this does not necessarily reflect how many vessels might originally have been decorated, as some undecorated sherds came from decorated vessels. The decoration comprises vertical cordons (Figure 15.1) or rows of incised lines meeting other lines at acute angles forming geometric patterns (Figures 15.2, 15.3 and 15.6). Some of the decoration comprising vertical cordons and panels of incised geometric lines, such as Figures 15.5 and 15.6 can be paralleled with Grooved Ware of the Durrington Walls sub style (Gibson 2002, 85 fig 40.4 and Garwood 1999, 158). Rims comprise a simple tapered and slightly inturned example from a plain barrel shaped jar (Figure 15.7), and another small rim with incised decoration of similar form. Three flat bases (including Figures 26.8 and 26.9) and a small lug fragment almost complete the more diagnostic elements. The exception is a fragment of rim (Figure 15.10) which is probably from an undecorated Collared Urn (Longworth 1984, 5 fig. 3).

Discussion

In southern Britain the distribution of Grooved Ware is most commonly riverine and coastal, and in East Anglia the rivers Chelmer and Blackwater have a concentration of such sites (Cleal 1999, 5). The Chalet Site Grooved Ware is paralleled in decoration by pottery from a pit located within what was to become a late Bronze Age enclosure along the river Chelmer, at Great Baddow (Brown and Lavender 1994, 3). Grooved Ware was also found in pits outside another late Bronze Age enclosure at Broomfield, situated further west along the Chelmer (Brown 1995a, 11 and fig 7.1–3). Here, as at the Chalet Site, the form and division of the body by cordons into decorative panels is a trait identified with the Durrington Walls sub style (Brown and Lavender 1994, 8 and fig 6.1). A few small sherds of Grooved Ware recovered from Elms Farm, Heybridge were also thought to be of Durrington Walls type although the small sample did not allow confident attribution to a particular style (Brown 2001, 60). Further small assemblages have been recovered from Chigborough Farm and Slough House Farm, immediately north of Heybridge, which show complex geometric incised designs similar to the Chalet Site. At the Stumble, on the Blackwater Estuary, Grooved Ware came from pits in a rare example of a buried Neolithic land surface including possible structures (Holgate 1996, 20 and Brown 1998, 55 and 136 and fig 95.8–9, and Longworth and Cleal 1999, 184).

Grooved Ware is often associated with monumental complexes and many deposits have been recognised as being deliberately selected and carefully placed. A connection has also been identified between Grooved Ware sites and the later use of the same sites for round barrows (Cleal 1999, 6). Grooved Ware in Southern Britain is dated between c.2900 and 2100/2000 BC (Cleal 1999, 6 and Garwood 1999, 152). Garwood suggests, from vessels excavated at Durrington Walls, that later forms are generally larger and more elongated and rounded, whilst earlier vessels lack the vertical cordons and other applied decoration. Rigid structuring of decoration using cordons and grooved/incised design boundaries appears to become more elaborate over time (Garwood 1999, 157). This suggests a late date for the Chalet Site assemblage, and this is supported by the small Collared Urn type rim; Collared Urns appear in the archaeological record around 2200 BC (Gibson 2002, 96).

Garwood also suggests Durrington Walls assemblages are most commonly found in large deposits associated with monumental complexes such as henges or timber circles, while the Clacton/Woodlands sub style assemblages are generally small and found in isolated pits or pit groups (Garwood 1999, 159). There is a dearth of henges in Essex with only one known to date (Robertson 2007, 169). In the Chelmer valley, however, the northern ditch of the Springfield cursus, at a location near a timber post setting, produced fragments of Grooved Ware representing one or two vessels (Holgate 1996, 17–19). The Chalet Site, and other Durrington Walls style assemblages mentioned above, do not appear to fit the henge pattern (although this might partly be influenced by lack of excavations at monumental complexes), and the mode of deposition might differ slightly to the norm in this part of Essex.

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Figure 15.1. L1061 Grooved Ware with vertical cordons
Figure 15.2. L1878 Grooved Ware with incised decoration
Figure 15.3. L1878 Grooved Ware with incised decoration
Figure 15.4. L1878 Grooved Ware with horizontal cordon and incised decoration
Figure 15.5. L1878 Grooved Ware with vertical cordon and incised decoration
Figure 15.6. L1878 Grooved Ware with cordon (broken off) and incised decoration

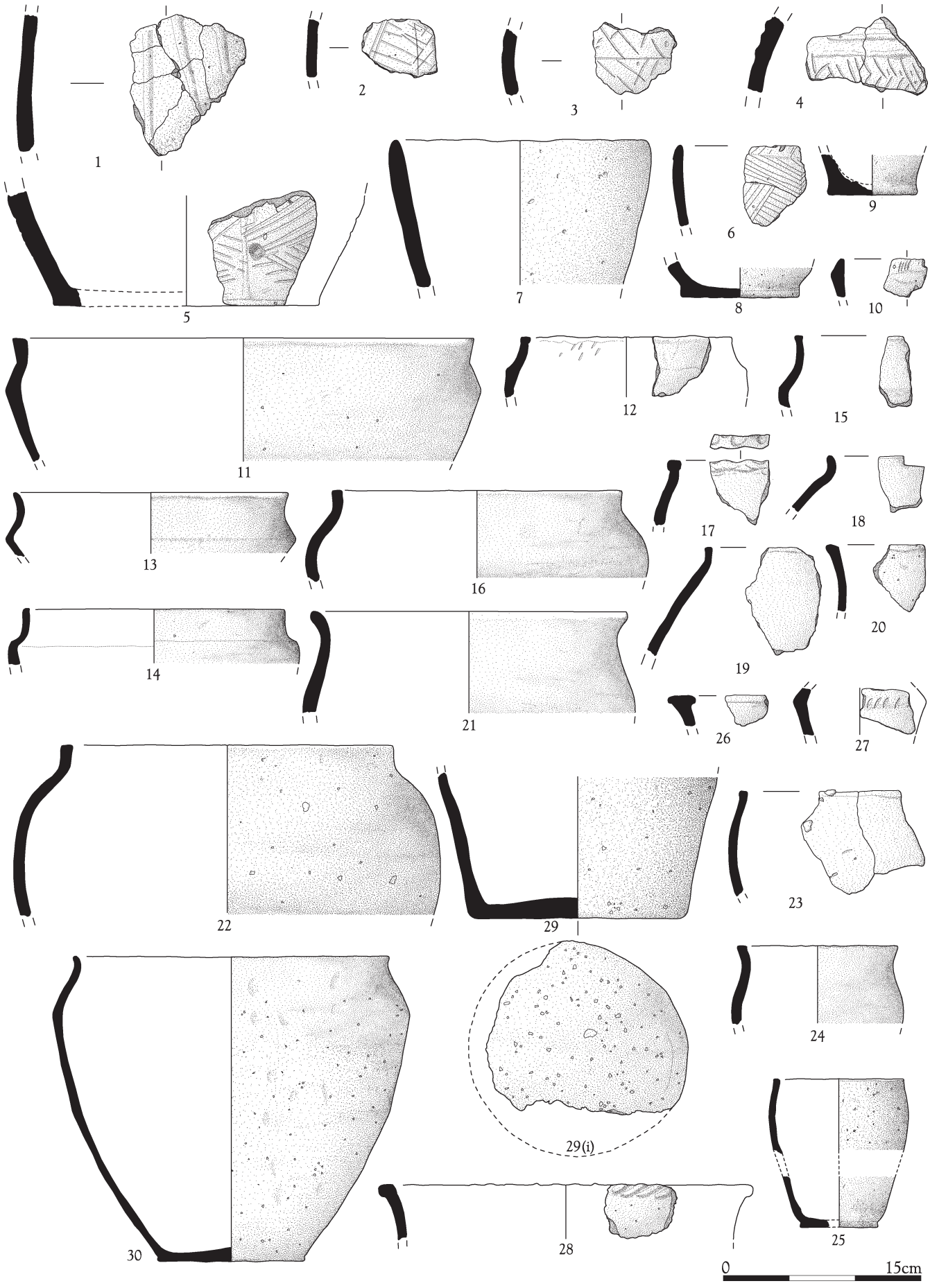

Fig. 15 Illustrations of Neolithic and late Bronze Age to early Iron Age pottery

Figure 15.7. L1878 straight-sided jar
Figure 15.8. L1878 pedestal base
Figure 15.9. L1878 pedestal base
Figure 15.10. L1879 Collared Urn-type rim

The late Bronze Age to early Iron Age Pottery
A total of 1,138 sherds, weighing 12.222 kg, were recovered, of which 748, weighing 9.475 kg, were in a primary deposition context, the remainder being residual in early Saxon features. The pottery came from the feature types below (Table 5), with over half of the assemblage coming from pits.

Feature	Number containing pottery	Sherd count	% of LBA-EIA total
Pits	16	582	51.1
Post-holes	10	42	3.7
Ditches	6	119	10.5
Uncertain	2	5	0.4
Residual	-	390	34.3
Total		1,138	

Table 5 Quantification of LBA/EIA sherds by feature type

Fabrics

The pottery can be divided into three main fabric groups (Table 6) comprising flint, flint and quartz sand, and sand. A sub-group is Fabric Da, comprising fine flint with smoothed or burnished brown or black surfaces, which constitutes a finer ware as well as a fabric sub-group. Surfaces on the other fabrics are brown or orange, the latter usually from the more abundantly flint gritted coarse wares. The assemblage is dominated by flint; 81% of sherds are exclusively, or almost exclusively, flint tempered, and over 98% of the assemblage contains at least some flint.

Forms and Decoration
The assemblage is characterised by shouldered jars and bowls, whilst there is also a fine ware component including cups. High and round shouldered jars and bowls (Figures 15.16 and Figure 15.30), globular vessels (Figure 15.22), carinated jars (Figure 15.11), and finer ware carinated bowls (Figures 15.12, 15.13 and 15.14) are all present. Other forms include a long shouldered jar (Figure 15.19), an ovoid jar (Figure 15.25) and small cups (Figure 16.34). The latter is attributable to Barrett's Class V late Bronze Age/early Iron Age pottery (Sarah Percival pers.comm.). Several thin walled vessels in quite coarse fabrics are also represented (Figure 15.24 and Figure 15.25). Rims are mainly simple rounded or flattened, and can be upright or slightly everted (Table 7); bases are flat with an absence of pedestal, ring or omphalos types.

Decoration is rare but examples present are described below (Table 8). Approximately 6.2% of the sherds are burnished fine wares, in fine flint and sand fabric, whilst several sherds have scoring on the outside surfaces.

Five features contained comparatively large quantities of pottery in excess of 30 sherds (Table 9).

Discussion
The assemblage with its diverse range of forms including shouldered jars, bowls and cups, and its distinction between coarse and finer wares, places it in the late Bronze Age to early Iron Age period (Gibson 2002, 112–116). The middle Iron Age trend of largely replacing flint tempering with sand and other inclusions, and having more sinuous forms seen, for example, at Little Waltham,

Fabric	Sherd count	Fabric weight (g)	Description
C: Sand	18	130	Varying amounts of medium to coarse quartz
E: Quartz sand and Flint	192	1,626	Sparse to common medium to very coarse quartz
	(3)	(21)	with sparse to moderate very coarse flint
D: Flint	505	7,511	Sparse to common flint, can contain a little sand
	(349)	(2415)	
Da: Fine Flint	32	174	Sparse to common fine white flint, can contain
	(39)	(315)	varying amounts of sand
Total	1,138	12,222	

Table 6: The Late Bronze Age to Iron Age Fabric Groups. Quantification of sherds by number and weight (those in brackets represent residual material)

Rims	Number	
Simple upright or slightly everted	14	Figures 15.18 and 15.21
Flat upright or slightly everted	10	Figures 15.11 and 15.22
Simple fairly upright with slightly outurned or pinched out lip	5	Figure 15.20
Flat fairly upright with slightly outurned or pinched out lip	2	Figure 15.28
T-shaped or 'hammerhead'	1	Figure 15.26

Table 7 Rims

Decoration	Neck?	Rims	Shoulder	Above base
Finger tip decoration		2		
Slash/cable decoration		1	3	1
Incised lines	1			

Table 8 Decoration

Features with over 30 sherds	Sherd number	Fabric weight	Illustrated examples of diagnostic pottery
Pit F1522 (L1521)	237	2.995 kg	Figure 15.14 and 15.20
Pit F1931 (L1932)	165	1.487 kg	Figures 15.12, 15.19, 15.27 and 15.29
Ditch F1235 (L1241, 1900)	109	0.855 kg	Figure 15.26
Pit F1258 (L1257)	33	1.582 kg	Figure 15.30
Pit F1467 (L1468)	32	0.175 kg	Figure 15.16

Table 9 Features with over 30 sherds

is largely absent (Drury 1980, 52). The only complete profile from the Chalet Site assemblage is the high-shouldered cremation vessel, V1257, from Pit F1258; at Barham in Suffolk a similar jar form had an associated radiocarbon date of 2640 +/- BP (cal. BC 845–795).

Late Bronze Age fabrics from sites such as Mucking and Springfield Lyons are dominated by flint tempering. This gives way towards the end of the period to an increased use of sand and other fabrics in the early Iron Age (Brown 1987, 28 and Court and Mepham 2004, 31). At sites such as Fox Hall Farm, Southend, and North Shoebury, located around the Thames Estuary and coastal south-east Essex, shell tempered pottery becomes dominant during the early Iron Age (Brown 1995b, 33). The coastal Chalet Site lacks such shell-tempered fabrics, but these seem rare anyway in assemblages along the Chelmer valley/Blackwater estuary, possibly being a little too far north, although a few sherds have been found at Maldon and Heybridge (Brown 1992, 18). The overwhelming presence of flint in 98% of the sherds (some of which also contain sand) is indicative of a late Bronze Age date.

The Chalet Site is noticeable for its general lack of decoration (Table 8), which would fit with Barrett's 'plain ware assemblages' of the 9th century BC. The residual rim sherd (Figure 15.19) from L1523, is similar in fabric and form to examples from an assemblage at Lofts Farm, 2 km north of Heybridge, dated between the 10th-9th centuries BC (Brown 1988, 269 and Fig 15.10). It is also reminiscent of examples from Runneymede Bridge *c.*1000 to 700 BC, as is another residual burnished jar (Figure 16.33) from L1211 (Longley 1992, fig. 84, P115 and P112). The few decorated examples, however, including the flint tempered rim with cable or finger decoration on the exterior (Figure 15.28), and the body sherd with restrained slash decoration along the shoulder (Figure 15.27), have later parallels (Brown 1997, 32). Both types of decoration were present in a later deposit at Lofts Farm (*c.* 8th-5th centuries BC) (Brown 1988, 268 and 272), and at Great Baddow which was assigned an 8th-7th BC century date based on Barrett's sequence for Southern Britain (Brown and Lavender 1994, 8). Kinnes also suggests from studying the Orsett collection, that assemblages combining such rim and shoulder decoration in association with burnished, undecorated bipartite bowls, have their origins in the 8th century BC (Kinnes 1978, 277). At Runneymede, Surrey, sharply carinated bowls appeared by the 8th century BC, and it has been suggested that the regional defining Darmsden bowls of Suffolk, identified by Cunliffe, may have come into use as early as the 9th century BC (Last 2004, 40). One burnished bowl rim from Ditch F1195 (L1196) on the Chalet Site, (Figure 15.13), is reminiscent of Darmsden-Linton forms whose distribution lies between the Thames Estuary and Norfolk. The profile matches forms from Beacon Green, Maldon, which comprised a 'classic' or 'developed' Darmsden-Linton assemblage of the 6th-5th centuries BC, but lacks the small cordons above the carination (Brown 1997, 10 and 16 no.5). The Chalet Site also lacks the Beacon Green pedestal and foot ring bases which become relatively common after *c.* 600 BC (Cunliffe 2005, 102). At Orsett Camp they are believed to have been introduced early in the 5th century BC (Drury 1980, 52), and together with its presence of coarse fabrics, suggests that the Chalet Site rim might suit an 'Early' Darmsden date. Parallels can also be made with Linford where, in particular, the fine ware bowl rims (Figures 15.12 and 15.13), the 'situla' jar (Figure 15.11) and the high shouldered cremation vessel (Figure 15.30), can all be matched (Barton 1962, 79 fig I.1, I.5, I.6 and fig III.11). Linford was assigned an early Iron Age Hallstatt date by the excavator, subsequently refined as comprising some 5th century BC Darmsden-Linton style pottery along with some probable 4th century BC pottery, but mainly consisting of earlier material (Drury 1980, 52). The cup or bowl profiles (Figures 15.14 - 15.16) are also fairly typical of Barrett's late Bronze Age/early Iron Age ceramic sequence (Barrett 1980, 305 fig 6.12). These feature at Linton, South Cambridgeshire, although in comparison the Chalet Site rims are a little more upright, and the vessels undecorated (Fell 1953, 36 no.19–21).

A further dating indicator is the presence of heavily calcined flint bases appearing in comparative abundance seen, for example in Ditch F1195 (Figure 15.29) and Pit F1931. This is a late Bronze Age trait which dies out before the end of the early Iron Age and is found on late Bronze Age sites including Mucking and Runneymede Bridge (Philip 1984, 127). At Monkton Court Farm in North Kent, such bases are described as having a visually obvious basal 'skin' of flint grits acquired from their manufacture on beds of burnt and crushed flint temper (MacPherson-Grant 1984, 253). They were dated between *c.* 850 and 600 BC. At Highstead, also in North Kent, the appearance of such heavily flint gritted bases was demonstrated to have died out, or virtually so, by the end of the 5th century BC (Perkin *et al.* 1994, 278). Chalet Site Pit F1931, helps characterise the Chalet Site assemblage having a combination of diagnostic pottery, including burnished and decorated sherds (incised line and finger nail decoration), along with a fine ware carinated bowl rim and two profusely flint tempered bases. Therefore, whilst the whole assemblage need not necessarily be of one phase, the overall evidence indicates a date between the 9th and 5th centuries BC with a suggested core date of *c.* 800–600 BC for the majority of the diagnostic pottery.

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Figure 15.11. L1183 carinated jar
Figure 15.12. L1932 carinated jar
Figure 15.13. L1195 carinated bowl
Figure 15.14. L1521 carinated bowl
Figure 15.15. L1932 shouldered vessel
Figure 15.16. L1468 round shouldered bowl
Figure 15.17. L1740 finger decorated rim
Figure 15.18. L1740 burnished ovoid jar
Figure 15.19. L1523 long shouldered jar
Figure 15.20. L1521 jar rim
Figure 15.21. L1932 burnished jar
Figure 15.22. L1150 very coarse globular jar
Figure 15.23. L1740 thin walled globular vessel
Figure 15.24. L1223 thin walled ovoid jar
Figure 15.25. L1223 thin walled coarse ovoid jar with pedestal base
Figure 15.26. L1900 T-shaped or 'hammerhead' bowl rim
Figure 15.27. L1932 carinated shoulder with slash decoration
Figure 15.28. L1511 externally cable decorated rim
Figure 15.29. L1932 coarse ware jar base
Figure 15.29.i L1932 calcined underside of base
Figure 15.30. L1256 cremation vessel V1257
Figure 16.31. L1243 round shouldered coarse ware jar
Figure 16.32. L1211 (residual) burnished everted jar rim
Figure 16.33. L1523 (residual) scored jar
Figure 16.34. L1524 (residual) small cup
Figure 16.35. Unstratified high shouldered jar

The early Saxon Pottery

The early Saxon pottery comprises 3,642 sherds weighing 41.780 kg of which 3,531 weighing 41.185 kg

Feature	Number containing pottery	Sherd count	% of Early Saxon total
Cremation Pits	54	2,490	68
Pits	25	537	18.7
Ditches	14	482	13.5
Post-holes	10	20	0.6
Unknown features	2	39	1.1
Unstratified	-	74	2.1
Total		3,642	

Table 10 Quantification of Early Saxon sherds by feature type

Fabric	Description
F: Sand and Grass	Moderate to common quartz with rare to moderate grass, can contain rare very coarse white quartz and/or flint
Fa: Coarse Sand/Mineral and Grass	Moderate coarse to very coarse quartz and flint with sparse to moderate grass
Fb: Sand, Grass and Clay pellets	Moderate to common fine to medium quartz, sparse to moderate grass with rounded clay pellets or grog
Fc: Sand, Grass and Calcareous	Moderate to common fine to medium quartz, sparse to moderate grass with rare sub-angular to sub-rounded coarse white calcareous material (limestone?) and rare coarse mineral (flint or quartzite)
G: Grass and Sand	Moderate to abundant grass with rare to moderate quartz
H: Sand	Moderate to common fine to coarse quartz
Ha: Coarse Sand	Moderate to common coarse quartz with occasional very coarse flint/mineral
I: Iron mineral?	Abundant angular to sub-rounded well-sorted medium black shiny opaques with sparse medium to very coarse quartz

Table 11 The Early Saxon fabric groups

were in a primary context; 68% of the pottery was identified to have come from cremation vessels (Table 10). The cremation vessels are generally in very poor condition; one pot could be reconstructed but the vast majority were so fragmented it was rarely possible to identify the forms.

Four main fabric groups were identified based on the main added or naturally occurring inclusions within the clay matrix (Tables 11 and 12) but the assemblage is essentially characterised as comprising various combinations of grass and sand (77.3%) and sand only (22.4%). In a few cases, most notably Pit F1524 (Ll523) which contained a comparatively large amount of residual prehistoric pottery there was some ambiguity between sand tempered early Iron Age sherds and Saxon pottery, which is not an uncommon problem in East Anglia.

The Cremation vessels

Of the 54 cremation pits containing pottery, 33 contained diagnostic pottery in terms of form, rims, bases and decoration. Only one pot could be completely reconstructed; Cremation Vessel 1499 (Figure 16.47) with its pre-firing suspension holes had clearly been made for a different function and re-used for the cremation.

Context Vessel

1056 V1055 Flat base
1194 V1193 Rounded flat base
1206 V1205 Burnished, horizontal grooves on neckline
1295 V1309 Shouldered jar
1303 V1302 Burnished, bossed and incised
1344 V1343 Bossed and stamped (Stamps 1 and 2) Figure 16.36 and 15.37
1350 V1349 Burnished and stamped (Stamps 3 and 4) Figure 16.37 and 15.39
1375 V1374 Burnished
1384 V1386 Line and dot with incised neck lines
1417 V1416 Rounded flat base
1442 V1445 Rounded flat base
1500 V1499 Complete pot with pierced upright lugs Figure 16.47
1506 V1508 Burnished, bossed and stamped (Stamp 5) Figure 16.38
1537 V1538 Burnished and stamped (Stamp 6) Figure 16.39
1560 V1559 Rounded base
1593 V1594 Line and dot with bossing and stamp (Stamp 7) Figure 16.40
1602 V1604 Rounded flat base
1625 V1624 Incised deco with possible boss and ring base
1631 V1630 Burnished, incised lines
1635 V1634 Incised lines, rounded base
1688 V1687 Burnished, incised lines
1798 V1797 'Cable' decorated rim with external finger nail decoration
1822 V1821 Rounded flat base Figure 16.48
1838 V1837 Burnished, line and dot, bossed and stamped (Stamp 8) with ring base Figure 16.41
1851 V1850 Splayed base
1868 V1867 Burnished, incised pendant triangle, dots Figure 16.49
1882 V1883 Burnished, bossed, stamped (Stamp 9) flat base Figure 16.42
1894 V1893 Incised, bossed and stamped (Stamp 7) Figure 16.43
1899 V1898 Line and dot, bossed and stamped (Stamp 7)Figure 16.44
1924 V1923 Incised lines
1928 V1927 Splayed base Figure 16.50
1943 V1944 Incised lines, bossed and stamped (Stamp10) Figure 16.45
2003 V2002 Round base

Fabric	Sherd number	Fabric weight
F: Sand and Grass	1840	21869
	(37)	(130)
Fa: Coarse Sand and Grass	7	378
Fb: Sand, Grass and Clay Pellets	150	856
Fc: Sand, Grass and Calcareous	9	242
G: Grass and Sand	700	11224
	(74)	(402)
H: Sand	802	6419
Ha: Coarse Sand	14	184
I: Iron Mineral	9	76
Total	3,642	41.780 kg

Table 12 Quantification of Early Saxon sherds by number and weight by fabric (those in brackets are unstratified)

Vessel V1302 was associated with lead suggesting it had been mended and therefore re-used. Reuse of vessels is quite a common practice in this period whilst cremation burials in undecorated vessels is not necessarily a sign of low status, for example cremations in undecorated vessels at Springfield Lyons were associated with a high status barrow (Turner and Major 2005, 180). The only other complete cremation vessel profile to be recovered (minus the rim) was vessel V1837 (Figure 16.41) of similar form to buckelurnes but lacking variation in size of the bosses (Myers 1977, 14). The stamp decoration has been recorded by Diana Briscoe who holds the Anglo-Saxon stamp archive and her full report is below.

Five vessels (Table 13) contained line and relatively simple dot impressions classed as A1a in Briscoe's Anglo-Saxon stamp category (Briscoe 1981, 4). These are generally very common, with the exception of Vessel V1867 where the stamps situated in an incised pendant triangle are flattened at one end and are rare (Briscoe Pottery Report Appendix 1). Other than the above, eleven different stamps were present, ten from the cremation vessels and one from Ditch F1214 (L1213). Several of the motifs fit closely with Briscoe's classification of stamps and are well attested on other sites

Vessel number	Incised lines (not associated with dots)	Line and dot	Boss	Stamp
1205	Y			
1302	Y		Y	
1343			Y	YY
1349				YY
1386	Y	Y		
1508			Y	Y
1538				Y
1594		Y	Y	Y
1624	Y		?	
1630	Y			
1687	Y			
1837	Y	Y	Y	Y
1867		Y		
1883			Y	Y
1893	Y		Y	Y
1898		Y	Y	Y
1923	Y			
1944	Y		Y	Y

Table 13 Decoration on the cremation vessels

Stamp and vessel	Illustration	Category
Type 1 1343	Figure 16.36.i	A 4a very irregular cutting
Type 2 1343	Figure 16.36.ii	N 1 type impromptu tool – comb tooth impressions
Type 3 1349	Figure 16.37.i	C 1a rectangle (with rosette motif)
Type 4 1349	Figure 16.37.ii	A 5a rosette motif
Type 5 1508	Figure 16.38	M 1 No parallel
Type 6 1538	Figure 16.39	A 5a rosette motif
Type 7 1594	Figure 16.40	G 4 No close parallel
Type 8 1837	Figure 16.41	A 5f iii ornate circle
Type 9 1883	Figure 16.42	A 2a thin negative circle?
Type 7 1893	Figure 16.43	G 4 No parallel
Type 7 1898	Figure 16.44	G 4 No parallel
Type 10 1944	Figure 16.45	A 3a grid/chequerboard motif
Type 11 L1213	Figure 16.46	A 2d triple negative circle?

Table 14 Stamp decoration classification based on Briscoe 1981

in East Anglia one of the most common being the A5 rosette (Table 14, Figure 16.39). The Type 1 stamp (Figure 16.36.i) appears irregularly cut and indistinct but is rare having only eight other known examples in its category, all from the Cambridgeshire/Lark Valley region (Briscoe, Pottery Report Appendix 1). The associated Type 2 'comb point' stamp (Figure 16.36.ii) is a common motif also seen at other sites in Essex including Mucking, Springfield Lyons and Rainham although the Chalet Site is possibly less usual, the vessel having the decoration down the 'spine' of the boss rather than in between as at Springfield Lyons (Tyler and Major 2005, 97, fig 54. 6507). Another rare stamp is Type 8 the ornate circle on Vessel V1837 (Figure 16.41) which has parallels with Spong Hill and other Norfolk and Cambridgeshire sites (Briscoe, Pottery Report Appendix 1). However, two stamps have no matches in Briscoe's Anglo-Saxon stamp archive, Myers Corpus of Anglo-Saxon pottery or any large publications for East Anglia. Type 5 stamp (Figure 16.38) is an 'elongated double axe-head' or stylised rectangular shape, the closest comparison noted came from Caistor-by-Norwich, but the latter has marked differences including its asymmetrical shape (Myres and Green 1973, fig 51 M23(a)). Type 7, a 'sub-horseshoe shape (Figure 16.40) is also unparalleled. The closet match noted is Thurmaston, Leicestershire (Williams 1983, 12 and 53 fig 15.20) but whilst the two stamps might be classed in the same group there are marked differences in shape and decorative detail. Type 7 is also the only stamp to be repeated on the Chalet Site and two different cremation vessels were decorated using the same die (Table 14) indicating that they were made, or at least decorated, by the same potter.

Saxon Pottery from other Features

In addition to the cremation vessels (above) four further vessels or features contained decorated pottery similar to that found on the cremation vessels although such pottery was also commonly used in domestic settings seen for example at Mucking. One of these

Context	Vessel	
1211	-	Bossed and stamped (Type 11) Figure 16.46
1422	V1420	Bossed and incised lines
1642	V1643	Boss?
1981	V1982	Line and dot (Stamp A 1a in Briscoe 1981)

is the remaining stamped sherd, Type 11 (Figure 16.46) containing multiple negative circles. This is another very rare motif with only three other known examples (Briscoe, this report). Five features contained comparatively large quantities of pottery in excess of 30 sherds, in particular, Ditch F1212 contained 553 sherds weighing nearly 6.5 kg (excluding the residual Iron Age pottery (Figures 16.52–16.56 and 16.60). One unusual upper profile comprises a globular jar with cable decoration to the rim and scoring to the body (Figure 16.55). Combing or scoring of the external surface of pots occurs on early Saxon vessels, for example at Mucking (Hamerow 1993 128 GH 57 and fig 115.16) but the rim decoration is more in keeping with the Iron Age and no early Saxon parallels have been found at the time of writing. However, the fabric and form is characteristic of the other early Saxon coarse ware fabrics

Features with over 30 sherds	Sherd number	Fabric weight	Illustrated examples of diagnostic pottery
Ditch 1212	553	6.495 kg	Figures 16.52–16.56 & 16.60
Ditch 1210	58	0.591 kg	Figure 16.57
Pit 1523	42	0.508 kg	
Ditch 1224	32	0.311 kg	
Pit 1739	32	0.472 kg	

Table 15 Features with more than 30 pot sherds

and whilst residual Iron Age sherds are present it is probable that this is simply an unusually decorated early Saxon pot (Sue Tyler pers. comm.). Another unusual vessel is a small cup with a high shoulder and flattened rim and outer lip (Figure 16.56) which is atypical for an early Saxon form (Sue Tyler pers. comm.). However, these vessels are probably idiosyncratic to the site rather than local sub-styles. Pit F1809 (L1812) contained the only other complete profile in the form of a round based globular bowl or drinking vessel (Figure 16.61).

Discussion

A problem with the Chalet site is that in most cases the full extent and type of decoration on the pots is not known, nor were many relatively complete profiles recovered. However, the assemblage does appear fairly typical for the region and comparisons can be made with south Essex sites including Springfield Lyons and Rayleigh. Springfield Lyons is an inhumation and cremation cemetery outside Chelmsford dated by grave goods spanning the period AD 450–700. Rayleigh dated between the mid 5th and late 6th centuries, and like Heybridge, yielded only cremation burials. One similarity between the sites is the use of pendant triangles, cremation Vessel V1867 (Figure 16.49) is paralleled at Springfield Lyons, and this is thought to be a largely 6th century English development (Tyler and Major 2005, 103 fig 60.6954 and 120). Six pots with dot infilled pendant triangles from Rayleigh were dated between the later 5th and mid 6th centuries (Tyler 2008, vessels 30, 258, 461, 530, 533 and 536). Another comparable example with Springfield Lyons is cremation Vessel V1634 (not illustrated) with its geometric patterns and absence of stamps (Tyler and Major 2005, 105 fig 62.8592).

Comparisons can also be made with Rayleigh in some of the stamp designs and forms. In particular biconical urn V1837 (Figure 16.41) from the Chalet Site is similar in form and placement of decoration to Rayleigh example V585 dated between the second half of the 5th century and the mid 6th (Tyler 2008, vessel 585). This is also similar to an example from Northfleet, Kent decorated with long bosses and a row of stamps demarcated above by concentric neck lines with at least one line below, although the Northfleet example also contains other more elaborate decoration (Myres 1977, 253 and fig 206 no. 346). One area from the Chalet Site provides a stratigraphic sequence for the early Saxon pottery. Cremation Pit F1593 enclosed by the pennanular Ditch F1212 contained incised, bossed and stamp decorated Vessel V1594 (Figure 16.40) whose decorative style is comparable to cremation Vessel V1837 and is therefore possibly of a late 5th to early 6th century date. The silted up or backfilled fill of Ditch F1212 was then cut by cremation Pit F1506 containing stamped vessel V1508 (Figure 16.40). Cremation Vessels V1893 and V1898 which shared stamp decoration (Type 7) from the same die, and V1594 which had very similar decoration, came from pits spread across the centre of the site and so do not appear to be associated with one particular group of burials.

Cremation vessel V1349 (Figure 16.37) with a simpler decorative style comprising two or three concentric parallel rows of stamps, but no bosses or neck lines, has parallels with an example from Rayleigh dated tentatively to the mid 6th century (Tyler 2008, V229). Cremation vessel V1499 (Figure 16.47) with pierced upright lugs is similar to examples from the settlements of West Stow and Mucking (Myres 1977, fig. 74 no 3994, and Hamerow 1993, fig. 168, GH 177.7). At Sutton Courtenay in Berkshire, it was noted that so-called swallow's nest lugs could largely be dated to the 7th century (Hamerow *et al.* 2007, 184). Also at Mucking, comb tooth impressed decoration was predominantly associated with the 7th century area of occupation, and parallels with other sites on the continent suggest this decoration was primarily a 7th to 8th century style (Hamerow 1993, 45 and Myres 1977, 353–4 fig. 362–3). It has been suggested that cremation vessels feature early in the Saxon period but at the Chalet Site it is probable that the cremation vessels were being deposited throughout the 6th century and evidence from other cemeteries such as Springfield Lyons supports this where cremations have been interred after inhumations.

The Chalet Site is of especial interest because it contained only cremation pots (although the whole cemetery is unlikely to have been excavated and it is possible inhumations are located elsewhere). In Essex, early Saxon burials are almost exclusively either inhumation or mixed inhumation and cremation, with the number of cremations lower than that of the inhumations (Tyler 2008, 56–7). The Chalet Site shares its trend with Rayleigh, based on the current information from the sites, but unlike Rayleigh the Chalet Site may have continued into the 7th century. The Chalet Site is also of interest for its unusual stamps with Types 5 and 7 (Figures 16.38 and 16.40/16.43) unparalleled outside the Chalet Site, and three others classed as rare. The forms and

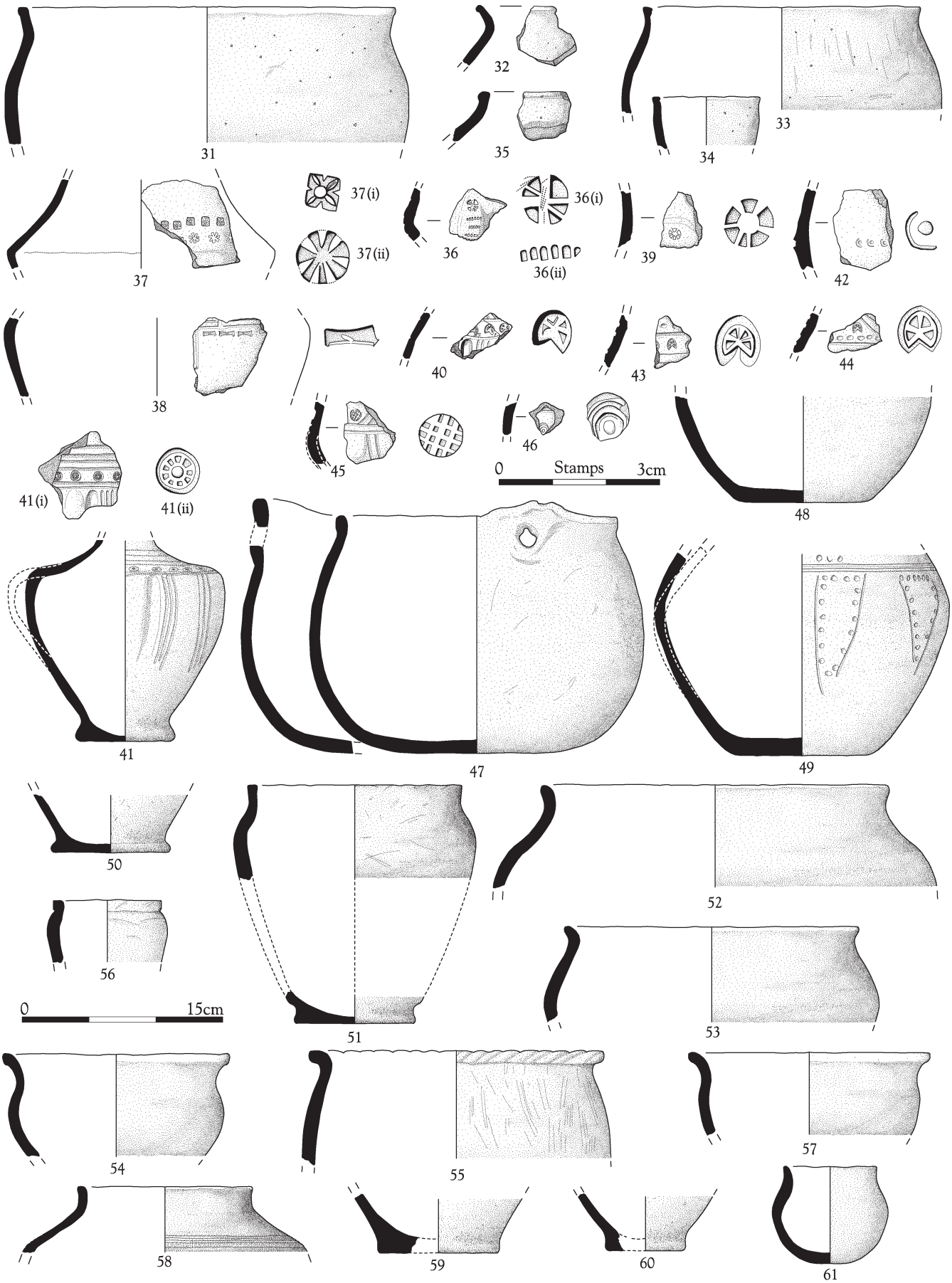

Fig. 16 Illustrations of late Bronze Age to early Iron Age and Saxon pottery

decoration show links with other sites that have a Thames Estuary distribution, most notably Springfield Lyons, Mucking and Rayleigh in South Essex and Northfleet in Kent. The stamps also show a second connection with the Lark Valley and Cambridgeshire (Briscoe report below).

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The pottery stamps

Diana C. Briscoe

The site lies just to the east of the present-day confluence of the River Chelmer and the River Blackwater and at the north-western end of the Heybridge Basin. Because of the location, I have spread my comparisons wider than usual, to allow for access by ship to the south side of the Thames Estuary. As a result, I considered 20 sites in Essex and Kent which are reasonably close to the Thames Estuary. Of these, 12 sites have provided comparable stamps as follows below.

Rarity of Stamps

1–20	Rare	21–40	Uncommon
41–70	Fairly common	71–100	Reasonably common
100–150	Common	151+	Very common

'Die' means the actual piece of carved bone, wood, (possibly) chalk or metal used to make the impression.

Where stamps are described as 'like' , it means they have been made with the same die.

A closing bracket after size and pot type definition indicates the presence of more than one stamp motif.

The site has produced a total of 17 stamps displaying 13 motifs as listed opposite.

Category A includes all circular stamps. These are by far the most common stamps from the early medieval period, representing well over half the total identified stamps.

A 2ai describes two negative rings of equal proportions. This is an extremely common stamp and is found widely distributed. As such, it is of little use for diagnostic purposes. Locally there are five examples in various sizes from Mucking, Essex. The closest in size (6 × 6 mm) comes from a globular urn, which is interesting as I had tentatively classified the Heybridge urn as globular.

A 2dii describes multiple negative circles which are clustered on the outer edge of the stamp, while the centre is blank (although it may have a central negative dot). This is a very rare stamp with only three examples recorded in the Archive: they are from Spong Hill, Norfolk; West Keal, Lincs; and Bremerhaven in Germany. The closest in design is the stamp from West Keal, although it is smaller (6 × 6 mm).

Site	County	Archive site No	Nat. grid	No of stamps
Barking Abbey	Essex	174	TQ 4584	EM 8
Bulmer Tye	Essex	040	TL 8438	4
Canterbury	Kent	179	TR 1557	19
Chadwell St Mary	Essex	037	TQ 6478	2
Darenth Court Farm Pipeline	Kent	379	TQ 5671	10
Dartford: St Edmund's Church	Kent	382	TQ 5517	4
Feering	Essex	039	TL 8720	3
Horton Kirby: Riseley Estate	Kent	141	TQ 5667	14
Mucking	Essex	094	TQ 6881	404: 19 non-AS
Northfleet	Kent	106	TQ 6274	15
Orsett Cock	Essex	043	TQ 6481	6
Springfield Lyons	Essex	042	TL 7208	9

The **A 3aiv** stamp describes a negative grid of 4 × 4 squares. This is a common motif, with over 120 stamps recorded. It also has a very wide distribution and, as such, is completely undiagnostic. Locally there are two parallels from Barking Abbey, Essex; and one each from Mucking; Northfleet, Kent; and Horton Kirby (Riseley Estate), Kent. They are all of a similar size to this stamp.

A 4aviii is a 'catch-all' group; it currently includes all the stamps which do not fit into any of the categories A4ai–A 4avii. There are eight examples in this category which I consider bear a distinct similarity to this stamp. There are no local parallels; more distant examples come from Sandy, Beds; St John's, Cambs; Spong Hill; West Stow, Suffolk (2); Lackford, Suffolk; Loveden Hill, Lincs; and Little Wilbraham, Cambs.

Because it is entirely possible that this distinctive motif has been made by a dirty or damaged die, I am loath to build too much on these parallels, but the fact that most of them come from the Cambridge / Lark Valley access, which is a known area where stamp motifs are shared, is certainly noteworthy.

A 5a comprises the rosette stamps which are one of the most common groups. They are classified according to the number of 'petals', so that **avi** has six petals, **avii** has seven and so on. **A 5ai** describes part stamps that it is impossible to classify.

A 5avi describes a circular negative rosette stamp with six petals. This is a reasonably common stamp, with a wide distribution. Locally there are three parallels from Mucking (all smaller than this example) and two from the Riseley Estate, which are bigger.

A 5avii describes a circular negative rosette stamp with seven petals. This is a reasonably common stamp with nearly 100 examples recorded in the archive, and it has a wide distribution along the east side of Britain. Locally there are six parallels from Mucking, two of which are almost the same size as this one.

A 5fiii describes a segmented negative ring enclosed in two negative rings, with a positive central dot. This is a rare stamp with only 17 examples recorded in the Archive, of which two come from sites on the continent (Wehden and Westerwanna). Locally there is reputed to be one parallel from Mucking, but as I cannot find either the cast or the card, I believe that Teresa must have reclassified it before her death. More distantly there are parallels from Girton, Cambs (2); Loveden Hill (2); Spong Hill (3); St John's, Cambs; and Caistor-by-Norwich, Norfolk.

Category C covers all square and rectangular stamps. **C 3biv** describes a diagonal closed positive cross with positive triangles forming its quarters. This is a very rare stamp with only seven examples recorded in the archive. There are no local parallels; further afield there are parallels from South Elkington, Lincs; Spong Hill (4); St John's (2); Loveden Hill; and King's Newton, Derby. I do not have a cast of the South Elkington stamp, which

Briscoe type	Size in mm	Pot type	Archive number	Museum	Ref. no.
A 2ai	6 × 6 ??	Globular ??	001	Arch Solutions > Colchester	Vessel 1883/9
A 2dii	9 × 9 ?	Sherd	002	Arch Solutions > Colchester	Vessel 1213/11 (13)
A 3aiv	8.5 × 9		003	Arch Solutions > Colchester	Crem 1943 Vessel 1944/10
A 4aviii	10 × 10)	Sherd)	004	Arch Solutions > Colchester	Vessel 1343/1+2
A 5avi	8 × 8	Sherd	005	Arch Solutions > Colchester	Crem 1537 Vessel 1538/6
A 5avii	10 × 11)	Shouldered (small))	006	Arch Solutions > Colchester	Vessel 1349/3+4
A 5fiii	9.5 × 9	Buckelurn ?	007	Arch Solutions > Colchester	Crem 1836 Vessel 1837/8
C 3biv	7 × 7)	Sherd)	008	Arch Solutions > Colchester	Vessel 1349/3+4
D 1ai	5 × 2.5)	Sherd)	009	Arch Solutions > Colchester	Crem 1892 Vessel 1893/7
D 1ai	5 × 3)	Biconical)	010	Arch Solutions > Colchester	Crem 1866 Vessel 1867
D 1ai	5 × 3)	Buckelurn ??	011	Arch Solutions > Colchester	Crem 1897 Vessel 1898/7 (11)
G 1ai	5 × 2)	Biconical)	012	Arch Solutions > Colchester	Crem 1866 Vessel 1867
G 4giii	7.5 × 7)	Buckelurn ??	013	Arch Solutions > Colchester	Crem 1897 Vessel 1898/7 (11)
G 4giii	7.5 × 7.5	Buckelurn ??	014	Arch Solutions > Colchester	Crem 1593 Vessel 1594/7
G 4giii	7.5 × 7.5)	Sherd)	015	Arch Solutions > Colchester	Crem 1892 Vessel 1893/7 (10)
M 1aiii	10 × 3	Sherd	016	Arch Solutions > Colchester	Crem 1507 Vessel 1508/5
N 1ai	10 × 3	Sherd)	017	Arch Solutions > Colchester	Vessel 1343/1+2
A 2ai	6 × 6 ??	Globular ??	001	Arch Solutions > Colchester	Vessel 1883/9
A 2dii	9 × 9 ?	Sherd	002	Arch Solutions > Colchester	Vessel 1213/11 (13)
A 3aiv	8.5 × 9		003	Arch Solutions > Colchester	Crem 1943 Vessel 1944/10 (12)
A 4aviii	10 × 10)	Sherd)	004	Arch Solutions > Colchester	Vessel 1343/1+2
AA 5avi	8 × 8	Sherd	005	Arch Solutions > Colchester	Crem 1537 Vessel 1538/6
AA 5avii	10 × 11)	Shouldered (small))	006	Arch Solutions > Colchester	Vessel 1349/3+4
A 5fiii	9.5 × 9	Buckelurn ?	007	Arch Solutions > Colchester	Crem 1836 Vessel 1837/8
C 3biv	7 × 7)	Sherd)	008	Arch Solutions > Colchester	Vessel 1349/3+4

Briscoe Type	Size in mm	Pot Type	Archive Number	Museum	Ref. No.
D 1ai	5 × 2.5)	Sherd)	009	Arch Solutions > Colchester	Crem 1892 Vessel 1893/7 (10)
G 1ai*	5 × 2)	Biconical)	012	Arch Solutions > Colchester	Crem 1866 Vessel 1867
G 4giii	7.5 × 7)	Bucal Urn ??	013	Arch Solutions > Colchester	Crem 1897 Vessel 1898/7 (11)
M 1aiii	10 × 3	Sherd	016	Arch Solutions > Colchester	Crem 1507 Vessel 1508/5
N 1ai	10 × 3	Sherd)	017	Arch Solutions > Colchester	Vessel 1343/1+2

appears to be closest in design to this example, although it is probably smaller.

Category D covers the oval stamps. This is a small category and comparatively unusual.

D 1ai describes a simple negative oval. As such, it is common, widely distributed and completely undiagnostic. Locally there are 26 parallels from Mucking, plus one each from Darenth Court Farm, Kent, and from Orsett Cock, Essex.

Category G includes all stamps shaped like half-circles, crescents and horseshoes. **G 1ai** describes all negative crescents. There are many varieties of these and so the following sub-varieties have been allocated:

Horseshoe: +
Chevron: #
Crescent: %
Thin crescent: &
Vestigial: $
Half-circle or slice off a circle: *

G 1ai* describes a negative half-circle or slice off a circle, which can have a small depression on the flat edge. It is a rare stamp with only 11 examples in the archive, but with a reasonably wide distribution in East Anglia and Lincolnshire. Locally there is one example from Feering, Essex. There are also four examples of other variations from Mucking.

G 4 represents 'hybrid' types where the horseshoe or crescent is contained in another shape – circle, rectangle, etc. – or vice-versa.

G 4giii describes a negative horseshoe containing another motif. There are only three other stamps assigned to this variation and none of them are comparable to this stamp. I have considered motifs in the M category (see below), but there is nothing comparable, so I can confidently say that at present this stamp is unique to Heybridge.

Category M covers stamps made by pieces of jewellery and other miscellaneous bits of metal. I am not satisfied with the way the classification of this type has been organised and may well revise it in the near future. Provisionally, however, I have allocated the following classification.

M 1aii describes a negative rectangle or similar shape with a central positive dot. This is another unique stamp, which is not recorded from anywhere else in the Archive.

Category N covers all stamps made with 'impromptu tools'. **N 1ai** describes comb impressions with five or more teeth. They are very common and it is almost impossible to identify the dies unless the comb used had broken teeth or a particularly unusual spacing. Locally there are 10 parallels from Mucking, and one from Springfield Lyons, Essex.

Discussion
This is a most interesting site, but the obvious connections with Mucking are hardly surprising. I would also deem it probable that the community had connections to settlements in the north of Kent.

What is interesting is that there do not appear to be many connections to the area around Felixstowe, Harwich and Ipswich (I only have small collections of stamps from this area, but there is a marked lack of even fairly common stamps that connect to Heybridge). There are also only a couple of connections to the site at Bloodmoor Hill (Carlton Colville), where I am convinced that there is evidence from the pot stamps to show trading or other contacts by water, both along the coast and inland along the rivers.

These absences make the definite connection with the Cambridge/Lark Valley axis, and the potential connection to south Lincolnshire even more intriguing. Perhaps what we are seeing here is evidence of trading in pottery (or something packaged in pottery) around the coast of East Anglia, and possibly changing hands more than once before it reaches a resting place.

The Fired Clay and Ceramic Building Materials

Andrew Peachey

Excavations produced a total of 106 fragments (2051g) of Iron Age and early Saxon fired clay and 32 fragments (2811g) of post-medieval CBM.

Very low and abraded fragments of oxidised fired clay, containing sparse inclusions of quartz (0.1–0.5mm) and organics (0.5–3mm), were present in Iron Age Pit F1535 and early Saxon Pit F1626. Concentrations of comparable fired clay were present in Pits F1570 (L1571) (48 fragments, 724g) and F1589 (L1590) (27 fragments, 261g) but were not associated with any datable finds.

Two further occurrences of fired clay are probably associated with fragmented clay objects. The first

comprises 25 fragments (930g) in Ditch F1322 (L1323), including a single 855g fragment, in a bonfire fired, soft, black to very dark red/brown fabric with inclusions of sparse quartz sand (0.1–0.5mm) and flint (3–20mm). The largest fragment has a smoothed upper surface and two sides partially intact forming one corner of a triangular object approximately 50mm thick, possibly a loom or thatch weight. The second comprises 2 fragments (111g) from Posthole F1510 (L1511) in a fabric with mottled reduced surfaces and an oxidised core, with inclusions of common calcined flint (0.5–6mm) and an abrasive surface. The fragments exhibit a crude lip on the extant edge and a partial pre-firing circular hole, 35mm in from this edge, possibly indicating that these fragments formed part of a prefabricated, perforated slab used in a kiln, oven or corn dryer. The date of either possible object cannot be ascertained from these fragments.

The post-medieval CBM was principally concentrated in Ditch F1984 (L1983), which contained a fragment (856g) of post-medieval brick (dimensions: ?x115x55mm) and 25 fragments (1652g) of 12mm thick peg tile. Sparse further fragments of peg tile were also present in Pit F1059 (L1060), Pit F1388 (L1389), Pit F1400 (L1401) and Pit F1764 (L1765). All of the post-medieval CBM is in a hard, oxidised (2.5YR4/6) fabric with inclusions of common quartz (0.1–0.3mm) and sparse flint (5–25mm). The limited quantities of post-medieval CBM are not consistent with structural activity and are probably the result of secondary deposition.

Ceramic, metal and glass small finds

Nina Crummy

The objects in this small assemblage range in date from late Bronze or early Iron Age to early Anglo-Saxon. The prehistoric items consist of a small fragment of copper-alloy and parts of two or three fired clay slabs, one retaining parts of two perforations (Fig. 17.1). Such slabs occur in late Bronze Age to early Iron Age contexts in association with post-Deverel-Rimbury pottery, defined in Essex as Darmston-Linton pottery, dating broadly from 600–300 BC. They have been found on many sites in the Thames Valley and south-east England (Champion 1980, 237–8), and in Essex at Lofts Farm and North Shoebury (Major 1988; Barford 1995, 126).

Much of the Saxon material consists of small fragments of metal, but some items from cremations are more complete. Cremation Pit F1303 contained a lead double-flanged plug, now in fragments, which was used to repair a hole in a wooden bowl or a vessel. Plugs of this type were used from the Roman to medieval periods, with other early Saxon examples coming from West Stow and Lackford in Suffolk (West 1985, 57, fig. 231, 1). Another repair to a wooden vessel, again probably a bowl, is represented by a small iron staple from the upper fill of an unphased cremation. Clips of this form, in both iron and copper alloy, have been found in several Anglo-Saxon burials in the eastern region and are thought to have been used to repair wooden vessels, as they were in the medieval period (MacGregor and Bolick 1993, 263; Keys 1998, 207, no. 583). They have been found, for example, at Caistor-by-Norwich in Norfolk, Holywell Row in Suffolk, Little Wilbraham and Barrington, Cambridgeshire, and Great Chesterford in Essex (Myres and Green 1973, fig. 1; Lethbridge 1931, fig. 9, 5, fig. 14, J2, K, fig. 39, 9; Malim and Hines 1998, fig. 3.38, 1, top right; Evison 1994, fig. 27, 36b).

The only glass object is part of an early Anglo-Saxon annular glass bead of cobalt blue with white spots (Fig. 17.2) belonging to Guido's Group 6xiv, examples of which are not numerous but have a wide distribution (Guido 1999, 54, 273–4).

The Cremated Bone

Carina Phillips

Introduction

Burnt bone was recovered from 74 features in total; all were truncated by ploughing. In Phase 2, cremated human bone was recovered from three urned cremation burials (F1256, F1515 and F1711).

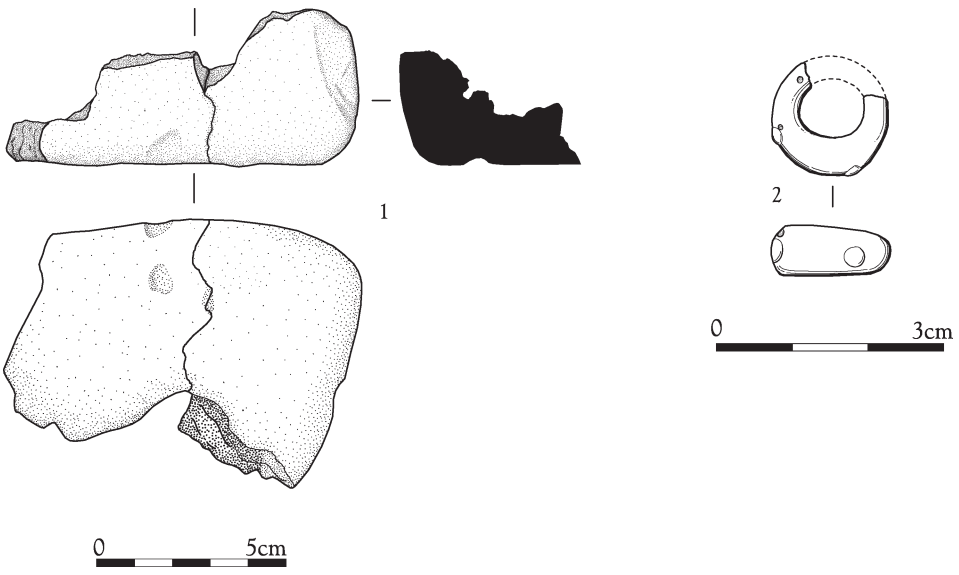

Fig. 17 Small finds: late Bronze Age to Early Iron Age clay slab and Anglo-Saxon annular glass bead

Sixty-eight Phase 3 (Anglo-Saxon) features produced burnt bone. Bone survived in 56 cremation burials, 52 urned (including those identified as being possibly destroyed) burials and two un-urned burials. An additional seven other features (including two possible grave markers) also contained burnt bone within this phase. Animal bone was identified within five Phase 3 features (see Figs. 10 and 18).

A single Phase 4 (post-medieval) feature contained cremated human bone (Pit F1389).

It was not possible to date seven of the cremations. All of the undated cremations were un-urned, four of which contained adult remains (F1119, F1053, F1804 and F1942). It was not possible to age the remains from F1815, and two of the undated cremations F1778 and F2011 did not have any human bone present.

Method

All of the cremation burials and other contexts containing burnt bone were sampled and processed. All urned cremation burials were block lifted and excavated away from site before processing. The spits were separated into three sieve fractions during analysis, Fraction 1 (<10mm), Fraction 2 (10–5mm), Fraction 3 (5–2mm). Fraction 4 (>2mm) has been excluded from total weights as this consisted mainly of extraneous material; it was visually scanned for identifiable bone fragments.

Each fraction was then broadly separated into four categories; skull, axial skeleton, upper limbs and lower limbs, where possible. Weights for each category have been recorded. The fragments from each category have been further recorded by identification to skeletal element when possible. The identification of multiple individuals in one cremation burial is based on the presence of bones from different aged individuals and/or the presence of duplicate bones. If there is no evidence of multiple individuals, it is assumed that the bones represent one individual. Any identifiable animal bone was excluded during weighing and recorded as present.

The bone fragments were analysed in order to determine age and sex when possible. The identification of adult remains has been based on the presence of epiphyseal fusion, and cranial suture closure (see Brickley and McKinley 2004, Buikstra and Ubelaker 1994 and Ferembach *et al.* 1980 for details). Observable cranial suture closure has been used to estimate a rough adult age group, however, it was not possible to assess all aspects of the suture closure following Buikstra and Ubelaker (1994) and it is therefore only a tentative indicator of age. No pelvic traits survived in any of the cremation burials to provide age estimations based on pelvic changes. Some of the adult bones have been classed as 'adult' based on their size as no other indicators of age were present, when this has occurred it is indicated.

The term sub-adult has been used in this report to refer to immature remains. Sub-adult remains were identified using the state of epiphyseal fusion (Scheuer and Black 2004; Baker, Dupras and Tocheri 2005) and dental development (Buikstra and Ubelaker 1994). As with the adult remains some of the sub-adult bones have been classed as 'sub-adult' based on size when there is no other ageing evidence. Any evidence of pathological change has also been recorded.

Results- Phase 2: Iron Age

Three urned cremation burials in Phase 2 were identified during excavation and analysis. Two burials consisted of adult individuals. Details are presented in Table 17. C1256 includes fragments of the skull, mandible, vertebrae, ribs, humerus, tibia and a hand phalanx. A

	Age group	Definition
Immature/ Sub-adult	Foetal	Before birth
	Perinate	Around time of birth
	Neonate	Birth to the end of the first month
	Infant	Birth to the end of the first year
	Child	Early childhood: To the end of the fifth year
		Late childhood: c.6yrs to puberty
	Adolescence/puberty	Puberty to young adulthood.
Adult/ Mature	Young Adult	20–34 years
	Middle Adult	35–49 years
	Older Adult	50+ years

Table 16 Age group definitions (see Scheuer and Black 2004; Buikstra & Ubelaker 1994; Ferembach *et al.* 1980)

Feature	Context	Vessel	Backfill	Age	Fraction 1 (g)	Fraction 2 (g)	Fraction 3 (g)	Burial Total (g)	Backfill (g)
1258	1256	1257	1255	Adult sized	37	33.7	7.8	75.5	5
1514	1515	-	-	Adult sized	13.8	26.2	7.3	47.3	-
1711	1713	-	1712	Unknown	0	3.1	6.2	9.3	-

Table 17 Details of Phase 2 (Iron Age) cremated human bone

majority of the bones are white in colour, although vertebrae fragments and the hand phalanx are light grey. Fragments of skull, vertebrae, ribs, humerus, and femur and a metacarpal and tarsal were identified in C1515. The vertebrae, metacarpal and calcaneal fragments are grey in colour, all other bones are white in colour.

Results- Phase 3:Anglo-Saxon cremation burials

Sixty-nine cremation burials were preliminarily identified during excavation of the site; however, seven had no surviving bone. Of the originally identified 52 urned cremation burials, bone did not survive in five (C1204, C1489, C1617, C1796, C1976). One of the ten originally identified un-urned cremation burials did not have bone surviving (2011). A further seven features dating to Phase 3 contained burnt bone, these are discussed separately below (Table 19).

Human bone was positively identified in 51 of the 52 urned cremation burials with surviving bone and all eight of the un-urned burials with surviving bone (see summary Table 18). It was not possible to confirm the small amounts of bone in urned cremations C1352, C1732, C1812 as definitely human. C1688 was the only burial identified as containing the remains of more than one individual. The remains of an adult and infant were identified, however the amount of bone recovered in total from this urn was very low, suggesting that much of the bone may have been lost. Excavation records indicate that only the very base of the urn (V1687) survived. It is possible that disturbance has resulted in contamination of the bone from this burial, and it is therefore only tentatively identified as a dual burial.

Age and Sex

Adults dominate the Anglo-Saxon assemblage, having been identified in 40 cremation burials (71%); sub-adults were identified in 11 cremation burials (19%) (Table 19). Adult age was more closely indicated for five individuals through cranial suture closure; however, it is emphasised that these can only provide a tentative estimation of age group. Significant closure of the saggital suture in C1865 and the coronal suture in C1584 suggests that these adults are more likely to be middle-older adults. The open lambdoid of C1839, coronal of C1658 and saggital and lambdoid of C1415 suggests that these individuals are more likely to be younger adults.

Two cremation burials are likely to be infants/young children. The size of the humerus fragment in double burial C1688 is comparable to an infant and the bones in F1215 are more comparable to an individual in young childhood. C1946 is a young child aged less than four years as illustrated by the fusion of the dens (following Baker, Dupras and Tocheri 2005)

The unfused acetabulum of sub-adults C1558 and C1606 (in addition to an unfused proximal humerus and tibia in C1606) indicates these to be children aged less than 11–17 years following Scheuer and Black (2004, 340). The unfused proximal femora of C1926 and C1635 (and unfused distal tibia in C1635) indicates these individuals to be aged less than 12–19 years following Scheuer and Black (2004, 356). The tooth development and bone fusion (proximal femur) of C1835 indicates this is a child aged over two years and less than 12–19 years. The size of the bones of these four cremations is more suggestive of the older child age group.

Sex could only be estimated for two adult individuals C1308 and C1498. These were both indicated to be male individuals through cranial traits.

Weights

The cremation burials vary greatly in weight, ranging 0.2g-750.6g (based on totals of fractions 1, 2 and 3, backfill bone excluded and discussed below). 65% of the cremations weigh less than 100g; this consists of 20 adults, all 11 sub-adults, the dual burial and the seven unidentifiable/un-ageable burials (Chart 1). Immature remains would be expected to weigh less than mature remains. Studies suggest that the mean weights of immature remains are 54g for a 0–6 month child, 185g for a 6 month-3 year old child and 661g for a child aged 3–13 years (Mays 2000, 220 calculated from Trotter and Hinxton 1974). The average weights of adults from a modern cremation study were 1615.7g (females) and 2283.5g (males) (McKinley 1993, 285). These weights illustrate the difference between mature and immature cremation burial, but do not reflect the affects of bone collection before deposition and truncation (see below).

The double cremation C1688 is notably low in weight, consisting of only 2g of bone. The presence of two individuals was identifiable due to the survival of both an adult skull fragment and an infant long bone.

Urned – Un-urned

As adults dominated the assemblage, they were present in larger numbers in both urned and un-urned cremation burials (Table 19). It is difficult to assess the amount of bone chosen for deposition as all of the cremation burials have suffered from plough damage. All of the un-urned cremation burials weigh more than 250g and 83% of urned cremations weigh less than this (Chart 2). The nine urned cremation burials that weigh more than this account for 17% of the urned assemblage. It is possible that the larger size of these is related to their urned deposition. It may be that this has increased the survival rates of bone over un-urned cremation burials. Some authors have suggested an association between the amount of bone collected and the context of deposition, i.e. urned, un-urned. White (1982) and Petersen (1981) suggest that the context of deposition of bones would affect the survival of a cremation burial (c.f. Allen *et al.* 1987, 211). At Kingston Heath, Dorset (Petersen 1981), Simons Ground, Dorset (White 1982) and Coneygre Farm, Nottingham (Allen *et al.* 1987, 211) uncontained burials frequently weighed less than contained burials. However, McKinley (1997a, 139) suggests that while this often appears to be the case it is not a consistent occurrence. It is possible that the lower weights of un-urned burials do follow the pattern seen on some sites, however, all of the Heybridge cremation burials are

Feature	Context	Vessel	Backfill	Type	Age group	Weights (g) Fraction 1	Fraction 2	Fraction 3	Total	Backfill	Animal bone	Comments
1054	1055	1056	1287	Urned	Adult sized	27.2	40	18.5	85.7	-		
1194	1192	1193	1191	Urned	Adult sized	65.6	94	12.3	171.9	-		
1206	1204	1205	1203	Urned	No surviving bone	-	-	-	-	-		
1218	1216	1217	1215	Urned	Infant/Child sized	0	10.5	14.8	25.3	-		
1295	1308	1309	1307	urned	Adult	293.6	121.9	22.6	438.1	16.8		Nuchal Crest=Male
1303	1301	1302	1300	Urned	Adult	482.4	229.7	38.5	750.6	-	yes	Left sheep/goat tibia also present (8.4g)
1304	1305	1305	1306	Urned	Adult	20.8	28.1	5.3	54.2	-		Iliac crest fused
1344	1342	1343	1341	Urned	Adult sized	40	26.6	13.9	80.5	-		
1350	1348	1349	1347	Urned	Sub-adult sized	1.5	3	4.1	8.6	0.5		
1351	1352	1353	1354	Urned	Unidentifiable	0	1	0.6	1.6	-		
1360	1361	1362	1363	Urned	Adult sized	68.5	197.3	218.2	484	5.6		
1375	1373	1374	1372	Urned	Adult sized	10.7	9.4	12.5	32.6	-		
1384	1385	1386	1387	Urned	Adult sized	44.8	28.2	0.5	73.5	23.5		
1407	1406	-	-	Un-urned	Adult sized	22.8	135	74.7	232.5	-		
1417	1415	1416	1414	Urned	Adult	114.6	90.2	10.9	215.7	0.7		Saggital and lambdoid suture both open
1421	1420	-	-	Urned (Destroyed)	Adult sized	0	4.5	3.2	7.7	-		
1435	1433	1434	1432	Urned (Backfill only)	Adult sized	0	0	0	0	2		
1439	1437	1438	1436	Urned	Adult	34.8	64.7	25.6	125.1	7.1		
1453	1455	1454	1456	Urned	Adult sized	14.2	18.1	8.9	41.2	0.4		
1469	1445	1444	1470	Urned	Adult sized	49.9	39.5	3.7	93.1	-		
1482	1457	1458	1481	Urned	Sub-adult sized	0.3	6.1	4.8	11.2	-		
1486	1493	1494	1487	urned	Adult sized	7.3	20.2	6.2	33.7	-		
1491	1489	1490	1492	Urned	No surviving bone	-	-	-	-	-		
1500	1498	1499	1497	urned	Adult	173.4	59.1	12.4	244.9	8.7		Glabella and nuchal crest=male. Lost teeth ante-mortem (reabsorbing)
1506	1509	1508	1507	Urned	Adult sized	233.6	110	14.7	358.3	1.9		Possibly related to cremated bone recovered from Ditch F2133
1537	1539	1538	1540	urned	Adult sized	7.7	42.9	44.2	94.8	1.1		
1560	1558	1559	1557	Urned	Sub-adult	34.5	35.8	5.6	75.9	14.1		Unfused pelvis Size more suggestive of later childhood
1577	1575	1576	1574	Urned	Adult sized	63.7	59.4	9.5	132.6	-		
1578	1579	-	1579	Urned (Destroyed)	Adult sized	2.6	1.3	1.4	5.3	-		
1582	1584	-	1583	Urned	Adult sized	81.9	119.9	52.8	254.6	-		Significant closure of coronal suture
1593	1594	1594	-	Urned?	Adult sized	7.4	3.3	0.2	10.9	-		

1602	1605	1604	1606	Urned	Sub-adult	45.5	28	2.7	76.2	5.1		Unfused pubis, proximal humerus and proximal tibia
1615	1617	1616	1614	Urned	No surviving bone	-	-	-	-	-		
1625	1623	1624	1622	urned	Unidentifiable	0	2.4	0.2	2.6	-		
1631	1629	1630	1628	Urned	Adult sized	0	2.2	0.1	2.3	0.3		
1635	1633	1634	1632	Urned	Sub-adult	29.4	38	4	71.4	0.2		Unfused proximal femur and distal tibia
1656	1658	-	1657	Un-urned	Adult sized	0.8	2.3	1.2	4.3	-		Open coronal suture
1678	1676	1677	1675	Urned	Adult	119.2	68.1	8.3	195.6	85.7		Adult tooth development. Notable amount of bone in backfill
1679	1680	-	-	Un-urned	sub-adult sized	0	1.1	2.9	4	-		
1706	1704	1705	1703	Urned	Adult sized	12.4	12.1	0.7	25.2	25.7		
1731	1733	1732	1734	Urned	Unknown	0.3	1.3	0.6	2.2	0.1	yes	One animal bone fragment also present (1.1g) white in colour
1775	1773	1774	1772	Urned	Adult	53.7	241.5	114.9	410.1	-		
1798	1796	1797	1795	Urned	No surviving bone	-	-	-	-	-		
1809	1818	1812	1810, 1811	Urned	Unidentifiable	0.6	0	0	0.6.	-		
1822	1820	1821	1819	Urned	Adult	196.7	123.2	16.5	336.4	0.7		Occipo-mastoid sutures open. Non-metric trait- Mastoid foramen on the suture is present
1838	1836	1837	1835	Urned	Sub-adult	14.1	21.4	1.8	37.3	-		At least 2 years based on surviving dentition (Buikstra & Ubelaker 1994). Unfused proximal femur
1840	1839	-	-	Urned (Destroyed)	Adult sized	103.9	73.3	48.9	226.1	-		Open occipo-mastoid & lambodial sutures.
1851	1849	1850	1848	Urned	Adult sized	0	3.4	0.4	3.8	-		
1868	1866	1867	1865	Urned	Adult	145.5	90.5	13.5	249.5	0.3		Saggital suture has significant closure
1882	1884	1883	1885	Urned	Adult	286.8	237.5	42.3	566.6	8.9		
1894	1893	1894	1892	Urned	Adult sized	43.3	87.9	8	139.2	0.5	yes	Sheep/goat astragalus also present
1899	1897	1898	1896	Urned	Adult sized	12.3	40.9	23.3	76.5	1.2		
1924	1923	-	-	Urned (Destroyed)	Adult sized	18.8	17.9	9.5	46.2	-		
1928	1926	1927	1925	Urned	Sub-adult	36.8	24.4	4.5	65.7	-		Unfused proximal femur
1943	1945	1944	1946	Urned	Sub-adult	7.4	10.7	0.5	18.6	-		Dens has fusion line present on all aspects. Aged <4 years (Baker, Dupras & Tocheri 2005)
1978	1976	1977	-	Urned	No surviving bone	-	-	-	-	-		
1999	1997	1998	1996	Urned	Sub-adult sized	0.2	2.6	2	4.8	0.4		
2003	2001	2002	2000	Urned	Adult sized	127.2	127.2	37.3	291.7	-		
-	1405	1404	1207	Urned	Adult	52.9	117.2	4	174.1	9.4		Animal bone in backfill
-	1430	1431	-	Urned	Unknown	0	0.6	1.4	2	-		
1685/ 2012	1686/1689	1687	1688	Urned	Adult & Infant	1.2	0.7	0.2	2.1	<0		

Table 18 Phase 3 (Anglo Saxon) cremation burials

	Un-urned	Urned	Total
Double burial – Adult & Infant	0	1	1
Sub-adult	1	10	11
Adult	2	38	40
Unknown Age Group	1	3	4
Unidentifiable bone	0	3	3
Grand Total	8	54	62

Table 19 Phase 3 cremation burial ages

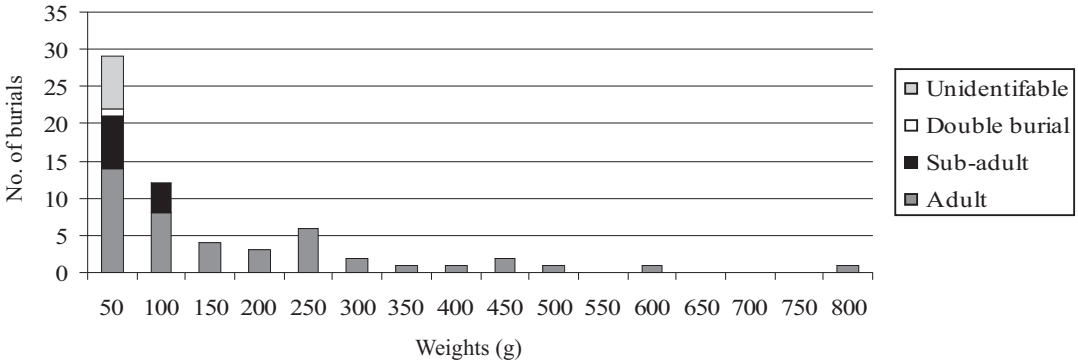

Chart 1 Phase 3 (Anglo Saxon) cremation burials weights by age group (n=62)

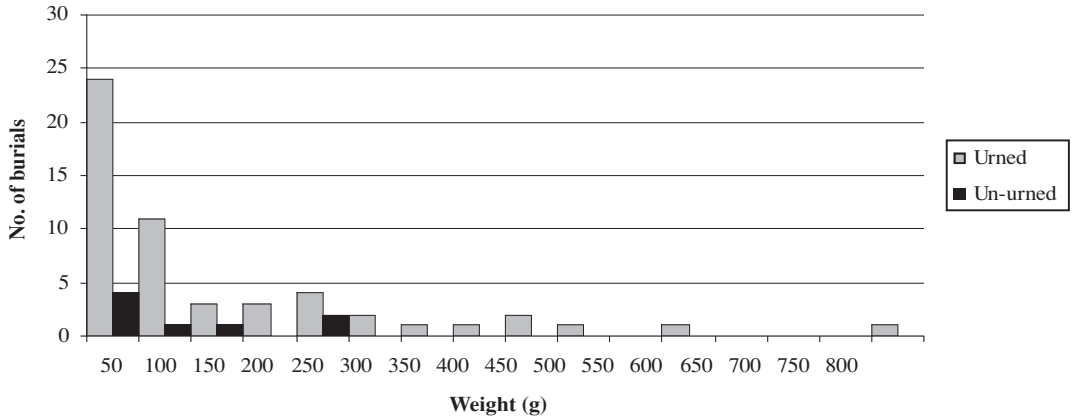

Chart 2 Weight of Phase 3 (Anglo Saxon) and possible Phase 3 cremation burials by deposition type (n=62)

notably low in weight, with 85% weighing less than 250g and the greatest weighing 750.4g. Plough damage to all of the burials is likely to have affected survival of the bone.

Backfills

Twenty-five urned cremation burials had burnt bone recovered from their backfills. The amount of bone recovered from the backfills ranged 0.1–85.7g in weight, 54% of these weighed less than 2g. The bone recovered from ten backfills was identifiable as adult/adult sized and one as sub-adult, these correlated with the ages assessed from the burial fills. The bone from the backfills of seven cremations could not be aged and seven other backfills contained bone that could not be positively identified as human or animal. Using the ages indicated through the bone in the burial fills, 20% of the 25 cremations burials with bone in the backfills belonged to sub-adults, 76% came from adult cremation burials and 4% is from a burial of unknown age, this is comparable to the age distribution found in the entire Phase 3 assemblage (Chart 3). The bone recovered from backfill L1678 of adult C1676 (weighing 85.7g) is much larger than the amounts from the other backfills. The amount of bone recovered from the urn weighed a total of 195.6g. The urned burial is described as heavily truncated in the excavation records which may have resulted in mixing of the bone and it is possible that truncation is the cause of bone recovery from all 25 backfills. It is, however, possible that bone was deliberately included within the backfills. At Spong Hill a very small number of undisturbed cremations had deposits of bone in the urn pit (McKinley 1994a. 86).

Skeletal representation

In order to assess skeletal representation the skeleton was broadly grouped into six categories, skull, axial skeleton, arm, hand, leg and foot. 81% of burials had identifiable skull fragments present; the axial skeleton is represented

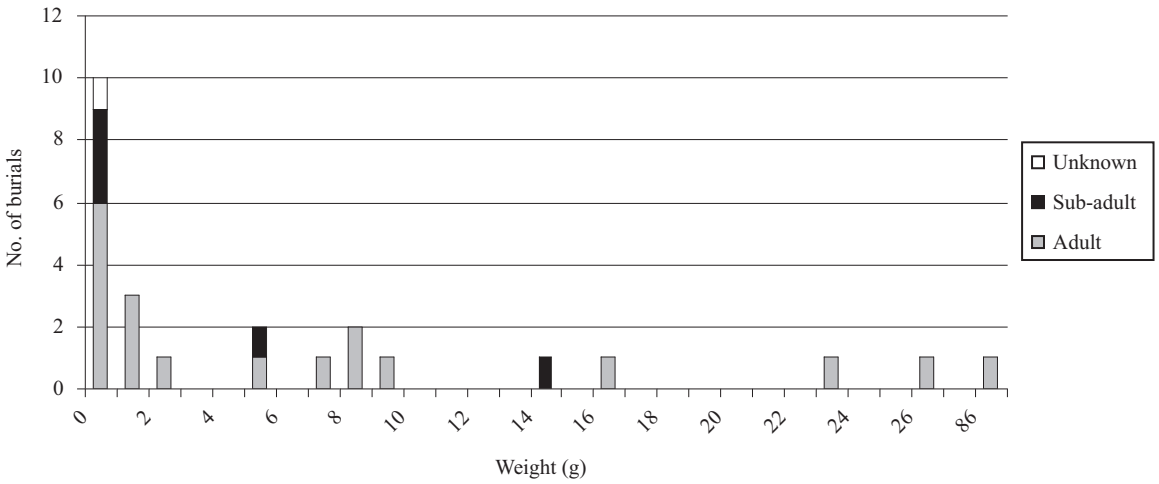

Chart 3 Phase 3 (Anglo Saxon) backfill weights (n=25), ages based on the bone from the associated burial fills

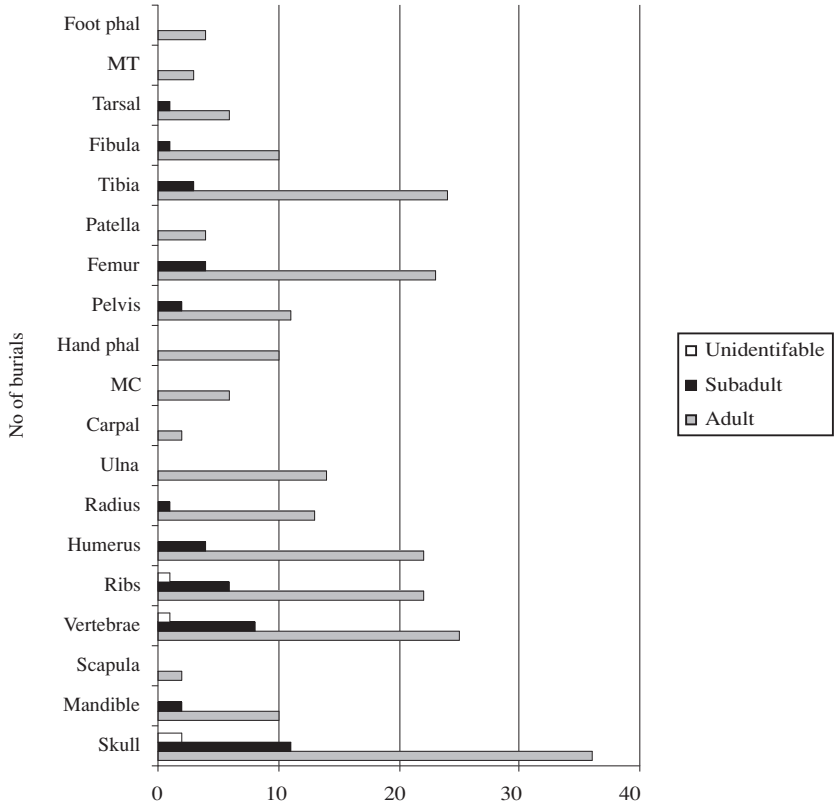

Chart 4 Bones identified in Phase 3 cremations burials and backfills

in 65%, arms in 55%, legs in 60%. Hand and foot bones were identified in the lowest numbers, each element appearing in 27% of burials.

The frequency of different skeletal areas identified during analysis of the cremation burials is likely to be influenced by the different survival rates of different bones and how easily recognised fragments of a particular bone are. In consideration of the differences between immature and mature individuals (Chart 4), the small bones of the hand and foot of immature individuals are more likely to be lost during collection of the bone from the pyre for deposition, due to their smaller size. Fragments of the skull were recovered in the highest number for both adult and immature cremation burials. This probably relates to how to the ease of recognition of skull fragments. Vertebrae fragments are the second most frequently identified bone. This is likely to be related to the poorer oxidation of these bones (see below). The long bones, tibia, femur, humerus were also frequently identified. These bones have been frequently identified in other studies (cf. Holck 1986). Like the skull, these bones are probably more recognisable when fragmented and therefore identified more frequently.

Bone colour

The colour of cremated bone ranges between brown or black (charred bone), through to blue, grey and white. White is associated with oxidised bone (McKinley 2001, 282). All of the cremation burials and the bone from the backfill consist of bone that is well-burnt, commonly cream in colour, and occasionally white. Thirty-nine cremation burials also included smaller amounts of bone showing poorer oxidation, being brown, grey, blue and occasionally black in colour. In most instances these darker coloured bones were fragments of vertebrae, the epiphyses of long bones, pelvis, and hand and foot bones. In two instances the ectocranial surface of some skull fragments were tinged blue, and one exhibited a brown coloured mandible fragment. Four individuals had light grey coloured fragments from the shafts of the femora and tibiae and one had a light grey fragment of radius shaft.

This pattern is the result of differences in the exposure of the bone to heat; bones with thick layers of soft tissue or adjacent bones are often less severely affected than those bones that are less shielded (Walker and Miller 2005; Holck 1996; Buikstra and Swegle 1989). The less burnt appearance of the hand and foot bones is often observed in archaeological cremated bone and is due to the lack of fat deposits in these extremities. The body areas covered by abundant fat may be expected to reach higher temperatures than those that are not (Mays 2000, 220). Poor oxidation of the lower leg and lower arm bones is likely to relate to the low amount of soft tissue coverage that these areas have (McKinley 1994a, 83). The poor oxidation of the vertebrae and pelvis is likely to be related to the spongy nature of these bones, with greater time needed for these to reach oxidation than other areas of the body (McKinley 1994a, 83).

Fragment size

44% of the Phase 3 cremated bone was recovered from Fraction 1, >10mm and 42% was recovered from Fraction 2, 5–10mm in size. The majority of the bone is therefore over 5mm in size. Minimum and maximum fragment sizes were recorded for each cremation burial.

The 56 cremation burials ranged from 1.4 mm (min) to 74.2 mm (max). Of these, the identified 40 adults have a range of 1.5–74.2mm, with a minimum mean of 3.3 mm and a maximum mean of 40.8 mm. Of the identified 11 sub-adults the bones range from 1.4 to 52.6 mm, the minimum mean is 2.8 mm and the maximum mean is 25.8mm for sub-adults. These measurements suggest that immature bones were more highly fragmented than adults. Plough damage is likely to have caused fragmentation of the bone (McKinley 1994a, 85); this may have affected immature bones to a higher degree due to their more delicate nature.

Cremations burials with animal bone

Burnt animal bone was identified within the fills of three urned cremation burials (C1301, C1733 and C1893) and the backfill of one urned cremation (L1207) (Table 20). All cremation burials, except C1733 of unknown age, consist of adult individuals; this is possibly related to the general dominance of adults in the assemblage. Sheep/goat (Ovis/Capra sp.) was the only species positively identified from the animal bone, this was identified in two urned burials and the backfill. However, cattle/horse sized bone fragments were also identified in two burials (one backfill and one urn fill). Unidentifiable burnt animal bone was also identified within Posthole/possible Grave Marker F1422 (L1423) and a pit fill (L1284) discussed below.

Grave Goods

The possibility of the sheep/goat astragalus in adult cremation burial C1893 as a playing piece and grave good is discussed below. Small finds were recovered from four cremation burials (three urned, one un-urned) and Posthole F1144. All of the cremation burials containing small finds are of single adult individuals. Adult C1301, the largest cremation in the assemblage, weighing 750.6g, contained a fragmented double-flanged lead plug which was used to repair a hole in a wooden bowl (Crummy this report). This burial also contained burnt animal bone (including an identifiable sheep/goat bone) within the urn

Context with animal bone	Feature type	Feature	Context	Vessel	Backfill	Comments
1207	Backfill of Urned Cremation burial	-	1405	1404	1207	3x animal bone fragments. A sheep/goat 1st phalanx and two cattle/horse sized long bones (1.5g, white in colour). Two other unidentifiable fragments are possibly animal bone
1301	Urned	1303	1301	1302	1300	A fragment of a left sheep/goat tibia (8.4g) (cream in colour)
1733	Urned	1731	1733	1732	1734	A cattle/horse sized long bone fragment, white in colour (1.1g)
1893	Urned	1894	1893	1894	1892	Sheep/goat astragalus (white/grey in colour)

Table 20 Phase 3 (Anglo Saxon) Cremation burials with animal bone

fill. Two iron nails were recovered, a complete one with a narrow rectangular head from urned probable male adult C1308 and a fragment of nail shank from urned adult C1884. C1884 is the second largest cremation burial in the assemblage weighing 566.6g and C1308 is the fourth largest at 438.1g. Un-urned cremation burial C1658 of a probable young adult contained a small iron staple, of a type thought to have been used to repair wooden vessels (Crummy this report). Such staples have been found in several Anglo-Saxon burials in the eastern region (see Crummy this report).

A fragment of copper alloy-sheet was recovered from Posthole F1144. This feature contained 1.1g of cremated human bone from an individual of unknown age.

Pathologies

Part of the right mandible survived in the urned burial of a probable male C1498. The sockets of the 2nd incisor to the 2nd molar were observable. The 1st and 2nd molars had both been lost ante-mortem and were in the process of reabsorbtion (M2), or had been fully reabsorbed (M1).

Non-Metric Traits

The right temporal of urned adult C1820 exhibited a mastoid foramen on the sutural.

Cremation Groups

Distinct groups of cremation burials both within and outside the possible Iron Age enclosure have been identified at Heybridge (Pole 2007). 37 cremations were identified within the Iron Age enclosure and 32 are located outside of it (Figures 10 and 18). Chart 5 illustrates the proportions of these by deposition type (urned, un-urned) and age (adult, sub-adult; see also Fig. 18).

The cremation burials have been considered by the groups identified (see below and discussion).

Cremation groups within Iron Age enclosure

- Enclosure Ditch F1233=F1212=F1222 and associated cremations
  Twelve cremation burials were associated with Enclosure Ditch F1233. Possible cremation burial C1649 was also originally thought to be possibly associated with F1233, it contained a small amount of bone that was unidentifiable to species and has been considered separately from the cremation burials (see below). All twelve cremation burials associated with F1233 were urned. C1615 and C1491 did not have any surviving bone. Seven of those with bone are adult individuals (C1054, C1192, 1493, C1509, C1539, C1445, C1593). C1688 is a dual burial of an adult and child (see below for discussion of possible contamination). C1605 is a sub-adult. C1733 contained bone that could not be positively identified as human or animal.

- Cremation in the entranceway of penannular Ditch F1324
  C1204, located in Cremation Pit F1206 in the entranceway of the penannular ditch, did not have any surviving bone

- Six-post funerary structure
  Urned cremation burial C1633 (in F1635) was located within the six-post funerary structure. This cremation burial is indicated to be a sub-adult (probably in later childhood) aged less than 12–19 years (see above).

- Four-post funerary structure
  C1308 an urned cremation burial of a probable male adult was located within a four-post structure. This was the fourth largest burial recovered from site, consisting of 438.1g of bone. A complete nail with a narrow rectangular head was recovered from this burial.

- North-west cremation group
  Five adult cremations (C1406, C1415, C1420, C1433 and C1437), two sub-adults (C1216 and C1457), and unidentifiable cremation C1430 form this cremation group. Post-hole F1447 was a possible marker for this group of cremations, no bone was recovered from this posthole.

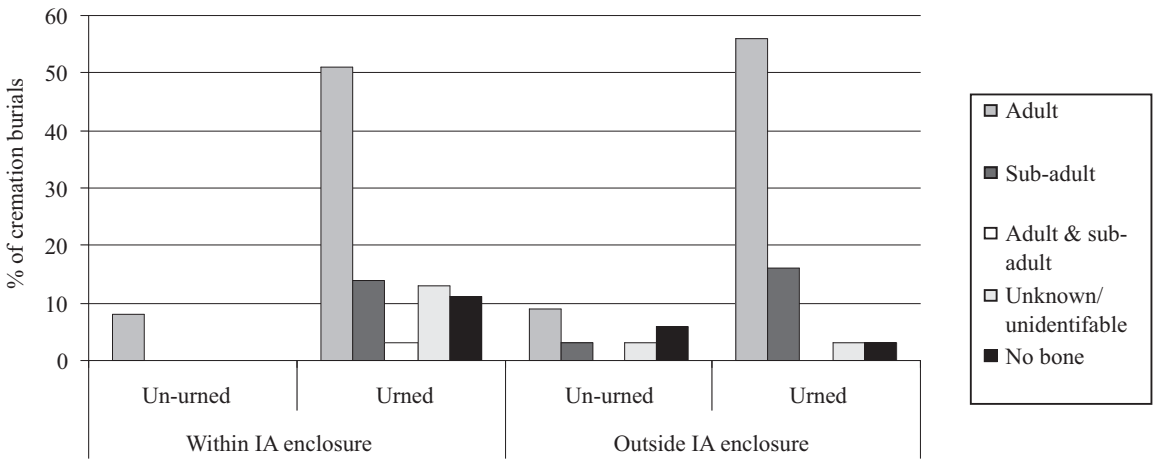

Chart 5 Phase 3 Cremation burials identified both within and outside the Iron Age (Phase 2) enclosure

- South-western cremation group within the enclosure entranceway
  Seven cremations have been grouped into this group. All of these are urned. Five were identified as adults (C1301, C1305, C1579, C1584 and C1629). Two were unidentifiable as human or animal (C1352 and C1623).

- Isolated cremations within Iron Age enclosure
  Five isolated Anglo-Saxon cremations were located within the Iron Age enclosure. Four were urned cremation burials (adult C1361, adult C1773, sub-adult C1348 and unidentifiable C1818). C1796 had been substantially destroyed by plough damage, no bone survived but the presence of small quantities of possible cremation urn led to its identification as a cremation.

Cremations outside the Iron Age enclosure

- Cremations associated with Ring Ditch F1214
  Six urned and one un-urned cremation form this group consisting of four adults (all urned, C1676, C1498 (probable male), C1385, C1575) and three sub-adults (C1558 and C1926 urned, C1680 un-urned). Postholes F1496, F1672 and F1681 are thought to have acted as possible grave markers for cremations in this group. F1681 was the only one to contain bone (see below and Table 20); it consisted of a very small amount of adult sized bone.

- Cremations associated with Ditch F1208
  Three urned cremations were associated with this group (C1405, C1455 and C1704), all were adult individuals. Animal bone was identified in the backfill of C1405.

- Cremations to the east of Ditch F1273=F1235
  Ten cremation burials were located in an approximate north-west to south-east alignment parallel to the north-eastern outer ditch of the Iron Age enclosure (F1235=F1273). C1976 did not have any surviving bone. All of the burials in this group were urned. Seven of the ten with surviving bone are adults (C1866, C1820, C1839, C1923, C1884, C1849 and C2001). C1836 and C1997 are both sub-adults.

- Eastern cremation group
  Three urned cremation burials form this group. C1893 and C1897 are both adult burials, C1945 is a young child aged less than four years.

- Cremations at the northern end of F1273=F1235
  This group was located near to the northern terminus of Enclosure Ditch F1235 (=F1273) and south-west of Ring-ditch F1214. It consisted of one urned cremation burial C1373 (adult) and one un-urned adult burial (C1658).

Posthole (F1694) may be the remains of a grave marker for this group; no bone was recovered from this feature.

Results- Phase 3: Anglo-Saxon – burnt bone from other features

Burnt bone was recovered from seven other features dating to Phase 3 (two fills of Ditch F1233 contained burnt bone) (Table 21). Human bone was positively identified in four of these seven features, Ditch F1210, Ditch F1233 (L1211 and L1240), Post-hole F1144 and Posthole/possible grave marker F1681. It is possible that the 'adult sized' bone recovered from Ditch F1233 is related to cremation burial C1509 of an adult, which was interred within L1211 the backfill of this ditch. Both postholes F1144 and F1681 contained human bone, the bone from F1144 is from an individual of unknown age. F1144 also contained a fragment of burnt copper alloy sheet. F1681 is a possible grave maker for Cremation Pits F1679 (sub-adult C1680), F1384 (adult C1385) and F1577 (adult C1575), an adult sized skull fragment was present in this feature.

Pit F1648 contained 0.3g of bone, which was unidentifiable to human or animal, this has been identified as a possible cremation burial (see interim Pole 2007), but has been excluded from the cremation counts due to the uncertainty of its identification.

Burnt animal bone was identified within Pit F1283 and Posthole F1422. Pit F1283 contained a fragment of sheep/goat radius, in addition to three small unidentifiable fragments; all are white in colour. Posthole F1422 was located to the north of Grave F1358 and may have originally held a grave marker, it contained small white fragments of probable animal bone (*pers comm*. R. Jones).

Results- Phase 4: Post Medieval

A single small fragment of white unidentifiable bone was recovered from Pit F1388.

Discussion- Phase 2: Iron Age Cremation Burials

Two urned cremation burials and a probable urned cremation burial were recovered from this phase. The two urned burials are adult individuals while the age of the third is unknown as insufficient material remains. The use of cremation as a means of body treatment and disposal is widely attested in Iron Age England. The urned nature and isolated position of these burials is more indicative of the Aylesford-Swarling culture which is thought to have been introduced to areas of south-east England from the Continent as a result of cross channel trade and contact from around 70BC (Fitzpatrick 1997, 208). Both of the definitely urned cremations are low in weight (47.3g, 75.5g), these are at the lower end of the scale found from a sample of *c*.4000 undisturbed adult burials from multi-period sites which ranged 57–2200g (McKinley 1997, 139). It is likely that truncation of the burials has resulted in bone loss. In both cremations all areas of the body were represented to some degree (skull, axial skeleton, upper and lower limb). During the Iron Age it is indicated that only a proportion of each

Feature	Context	Vessel	Backfill	Type	Age group	Weights (g)					Comments
						Fraction 1	Fraction 2	Fraction 3	Total	Backfill	
1210	1287	-	-	Ditch	Unknown Age	0	3.7	2.8	6.5	-	
1233	1211	-	-	Ditch	Adult sized	17.1	17.4	2.6	37.1	-	Possibly related to 1509
1233	1240	-		Ditch	Adult sized	0	1.4	0	1.4		Possibly related to 1509
1648	1649	-	1649	Pit	Unidentifiable as human or animal	0	0	0.3	0.3	-	
1283	1284	-	-	Pit	Animal Bone and unidentifiable	0	0	0	0		Identifiable sheep/goat radius fragment present
1144	1145	-	-	Post-hole	Unknown Age	1	0.1	0	1.1	-	
1422	1423	-	-	Post-hole/grave marker?	Probable animal bone	1.7	0	0	1.7	-	
1681	1682	-	-	Post-hole/grave marker?	Adult sized	0.3	0.1	0	0.4	-	

Table 21 Burnt bone from other Phase 3 (Anglo Saxon) features

skeletal area was included in the burial (McKinley 1997b, 68). This suggests that a selection of bones representing the entire body may have been deliberately selected from the pyre for deposition within the urns at Heybridge. The white colour of a majority of the bone from these two cremation burials suggests that they exceeded temperatures of 645°C (Mays 2000, 217; Shipman *et al.*, 1984, 307). See Phase 3 Anglo-Saxon cremation burials above (bone colour) for an explanation of the grey bones included within these two cremation burials.

Discussion- Phase 3:Anglo Saxon Cremation Burials

Demography

The individuals from the Heybridge cremation cemetery are likely to have been linked to the early Saxon settlement at Heybridge (Drury and Wickenden 1982) and the other Saxon settlements sites located in the adjacent area (i.e. Slough House Farm, Chigsborough Farm; Wallis and Waughman 1998, 226–229). Of the 69 cremation burials preliminarily identified during excavation of the site, 62 contained bone. Adults account for 70% of cremated individuals, sub-adult 19%, 6% are of unknown age and 5% could not be positively identified to human or animal. A majority of the sub-adults were indicated to be in later childhood. The absence of very young children may be related to taphonomic issues, i.e. the poorer preservation of smaller bones. Similar taphonomic-biased patterning is attested at a number of sites, including the large Anglo-Saxon cremation cemetery at Spong Hill, where only a small number of infants were discovered (McKinley 1994a). As discussed below it is also possible infants are missed from dual cremation burials due to collection biases related to the small and fragile nature of immature bones. A combination of taphonomic preservation, fragmentation and the incompleteness of the burials have also affected the analysis of sex; it was only possible to estimate sex for two individuals, both of which are probable males (C1308 and C1498).

One cremation at Heybridge (C1686) contained the remains of two individuals; an adult and an infant. As discussed above it is possible that damage to the cremation by ploughing has resulted in contamination of the burial, although there are not any other cremation burials or features containing cremated bone located near to this feature. It therefore seems likely that this is a dual burial, although definite confirmation is not possible. At Spong Hill, multiple cremation burials were identified, including possible ones such as C1686, which may have been contaminated due to truncation. At various Anglo-Saxon sites, dual cremations form 4–7% of the assemblage (see McKinley 1994a, 101 for details). In most periods (Bronze Age to Saxon) dual burials, commonly comprise of an adult and an immature individual, as found here (Davies and Mates 2006, 11). The implication is that these individuals, placed together in death, were closely related in life (Davies and Mates 2006, 11), such as a mother and infant. McKinley (1994a, 102) suggests that the low number of dual burials of infants with adults is related to the small and fragile nature of immature bones, which would have been difficult to identify and collect from the pyre. Differences in the survival of mature and immature bones is also likely to have contributed to an under-representation of infants. The individuals within the same burial are likely to have been cremated together on the same pyre, based on the mixing of the skeletal elements from each individual throughout the cremation (McKinley 1994a, 102). However, it is possible that a second individual was added to a burial some period after the first; this could be indicated through the position of the bones within in the burial.

The cremation process

The dearth of evidence for a pyre at the site may be related to plough damage, although it is not unusual for a pyre to be absent from cemetery sites in the Saxon period (Davies and Mates 2006, 12). The absence of a pyre at Spong Hill has led to suggestions that cremation had taken place off-site and the filled urns were then brought to the cemetery, perhaps from quite a long distance (Lucy 2000, 106; McKinley 1994a, 82). It is possible that pyre sites at Heybridge were located in the local area, but outside the area of excavation. Direct evidence for a pyre is limited in the Anglo-Saxon period, with the possible identification at Snape providing the only example (Filmer-Sankey and Pestell 2002, 252). Here the pyre appears to have conformed to the type found at the cemetery in Liebenau, Kr. Nienburg, Germany. Aspects of their interpretation are still problematic, but the pyres are generally characterised by spreads of pyre debris and occasionally postholes arranged variously in circles, triangles or 'as the ground plan of miniature houses' which have been interpreted as part of the pyre superstructure (Genrich 1981, 60 cited in Filmer-Sankey and Pestell, 2002, 253). It has been suggested that the cremation pyres of Liebenau, that have parallels in the Iron Age, are an exclusively Saxon phenomenon (Genrich 1981, 18, Filmer-Sankey 1999, 49).

Although direct evidence is limited, an understanding of the construction of the pyre and the process of cremation is possible as the basic process of cremation is the same in the past as today, (McKinley 1994a, 78). Other than some slight variation, all pyres would have required fuel and a stable, body sized platform on which the body could be supported, which would allow circulation of oxygen (McKinley 1997a, 132). At Spong Hill evidence for pyre construction suggested that the main structure consisted of large logs, infilled with brushwood to aid initial ignition and open the pyre for the circulation of the air (McKinley 1994a, 82). Oak (*Quercus* sp.) charcoal was present in some of the environmental samples assessed from Heybridge and it is possible that this species was used in construction of the pyre (Pelling, this report). On various other sites oak has been the dominating wood species found in cremation burials, with other species such as beech, poplar, willow, Scots pine and fir occurring less frequently (Wahl 1982,

McKinley 1994a, 82). Studies have demonstrated that *c.*146 kg of wood is needed under ideal conditions to produce the same amount of heat as a modern cremator; this is two to four times the amount used in modern cremation pyres in India (Holck 1986). Experiments have also shown that a minimum temperature of 400°c is needed to cremate a body (Holck 1986). The range of temperature in Anglo-Saxon cremations appears to have been from 400° up to a possible 1200° (Lucy 2000, 104). The colour of the bone from the cremation burials at Heybridge suggests that the pyre exceeded temperatures of 645°c (Mays 2000, 217; Shipman *et al.* 1984, 307). The environmental sample from C1406 (an un-urned adult) is consistent with uprooted sedges or grassland flora presumably from the floodplain which are likely to have been used as an aid to ignition and fuel (Pelling, this report). Similar findings occured at the Saxon cemetery at Springfield Lyons (Murphy 1994; Pelling, this report). It is likely that the duration of the cremation would have been as long as the pyre took to burn out. Piontek (1976) has found this to be approximately 10 hours, which corresponds with the overnight period given in ethnographic sources (McKinley 1994a, 84). It is possible that the amount of time the pyre was left to burn was sometimes restricted at Heybridge. The incomplete oxidation of some of the bones (i.e. the vertebrae) present in some of the cremation burials could be the result of this, although poor oxidation may also be the result other factors, such as damp wood or a damp atmosphere producing insufficient heat (McKinley 1994a, 83).

Collection and deposition

The weights of the cremation burials vary considerably, ranging from 0.2g to 750.6g (see above). A sample of *c.*4000 undisturbed adult burials from multi-period sites have been found to range from 57g to 2200g (McKinley 1997a, 139; 1994). All of the Heybridge cremation burials were disturbed and therefore cannot be directly comparable to these weights. However, McKinley's (1994c) study does illustrate the variation in the amounts of bone collected from the pyre for burial. Studies suggest that only 40–60% of the expected bone weight is recovered from cremation burials, this equates to 650.4g – 975.6g based on the average weight of 1625.9g for adults from modern cremations (see McKinley 1993). Modern experiments of pyre cremation using a sheep and lamb indicate that by the end of the cremation the entire skeletal remains of both animals were clearly visible above the wood ash and the bones were easily collected by hand. However, total recovery of the remains through hand collection took approximately 4 hours (McKinley 1997a, 134). Time may therefore have been a reason for the partial collection of the bones from the pyre. The remaining bones on the pyre would have been incorporated with the pyre debris, which may have been left at the pyre site or removed and disposed of elsewhere (McKinley 1997a, 130). The largest cremation at Heybridge (C1301) weighs 750.6g which represents 46% of the bone weight that could have been deposited. All but two (95%) of the individual adult cremation burials weigh less than 500g, suggesting that they represent less than 31% of the bone weight that could have been deposited. The disturbance of the cremation burials through ploughing is likely to have resulted in some loss of bone.

It is possible that the inclusion of bone within the backfills of some of the cremation burials was a mortuary ritual. This was also found in some of the cremation burials at Spong Hill. In the Bronze Age, pyre debris was sometimes deliberately incorporated into the backfill of a cremation burial. However, the absence of charcoal and burnt flint suggests that the bone included in the backfills at Heybridge is not pyre debris, but collected bone from the pyre. It is possible, considering the plough damage across the site, that truncation resulted in a dispersal of the bone from the burial fill into the backfills of some of the cremation burials.

Animal bone and grave goods

The inclusion of animal remains on the pyre was a common characteristic of the Anglo-Saxon cremation rite (McKinley 2007, 278). Its presence in only four burials, representing only 6% of those with surviving bone, is lower than that found at other Anglo-Saxon cemeteries. At Spong Hill, 46% of cremation burials had animal bone present, at Sancton 48% contained animal bone (McKinley 1994b, cf. Bond, 1996), other sites range from 30 to 23% (Baston (Manchester 1976), Elsham and Newark (Harman 1989), Loveden Hill (Wilkinson, unpublished)) (all figures taken from McKinley 1994a, 92). These figures are likely to be minimum numbers only, as the identification of animal bone is dependent on recognition as separate from human bone during analysis; it is also possible that animal remains were present on the pyre, but were not collected for deposition with the burial (McKinley 1994a, 92). Three of the four cremation burials with animal bone were adults, the fourth was of unknown age. This is possibly related to the general dominance of adults in the assemblage. The evidence from Spong Hill suggests that adults, especially males, are generally more likely to have animal bone included (McKinley 1994a, 99–100; Lucy 2000, 113). The small number of burials with animal bone at Heybridge and the loss of bone due to truncation restrict further consideration of this.

Sheep/goat was the only species identified positively in the assemblage, although cattle/horse sized bone fragments were also present. Sheep/goat is generally the most commonly represented species in cremation, for example Newark (Harman 1989) and Illington (King unpublished, cited in McKinley 1994a), although it is noted that at Spong Hill, slightly greater numbers of horse were identified in addition to various other species (McKinley 1994a, 92). The high amount of sheep/goat in cremation burials is probably related to the general dominance of this species in bone assemblages from settlement sites of this date (Crabtree 1995, 23–25, Williams 2001, 198). Analyses of animal remains found with Anglo-Saxon cremations suggests that pig and

sheep/goat remains appear to have been butchered and placed on the pyre as joints of meat, rather than as complete carcasses as is more common for dogs and horses (Williams 2001, 198). Williams (2001, 198) suggests that these joints may therefore have provided food for the mourners and the dead.

All of the identified animal bone was burnt to a similar colour as the human bone, suggesting it was subjected to the same temperature, most likely on the same pyre. As described above, modern experiments suggest that the body remains clearly distinguishable on the pyre debris once cremation is over (McKinley 1997a, 130). Therefore, if it was possible to distinguish the burnt animal bone from the human remains, the animal bone may have been collected separately from the cremated human bone. The excavation of an urn at Anglo-Saxon Minerva, indicated that the animal remains and other grave goods were inserted into the urn after the cremated bone (McKinley 2007, 278–9). Whereas at Spong Hill, animal bone was scattered throughout the spit-excavated urns (McKinley 1994a, 98). At Heybridge, it was not possible to assess the distribution of the bone within the urns, and so it is unknown whether animal remains and grave goods were deposited after the cremated bone, if they were, however, they may well have been more affected by truncation of the vessels than the bone lower within the urn. The truncation of all of the burials is likely to have affected the survival and fragmentation of all of the bone (see above) and therefore it is likely that this has contributed to the low number of burials containing animal bone. The features containing identifiable animal bone are positioned across the site with no obvious relationship.

Grave goods were recovered from four cremation burials (three urned, one un-urned). The possibility of the sheep/goat astragalus in additional adult cremation burial C1893 as a playing piece and grave good is discussed below. It is perhaps significant that the three urned burials with small finds recovered were some of the largest cremations recovered on site. However, it is unknown whether this is related to a variation in mortuary practices with a greater collection of the bone from the pyre and the inclusion of grave goods or if it is consequence of survival biases, these burials being less affected by plough damage therefore exhibiting a greater survival of bone and grave goods. If this is not a consequence of survival biases then it is possible that a variation in mortuary practices was carried out for these individuals.

Included in a few burials from Spong Hill (McKinley 1994a, 97), Caistor-by-Norwich (Myres and Green 1973, 98–100; Lucy 2000, 109) and Loveden Hill (Wilkinson 1980, 28; Lucy 2000, 109) a number of sheep/goat astragali were identified as playing pieces, due to the quantity of them and the absence of other sheep bones within the burial. It is possible that the sheep/goat astragali recovered from C1893 represents a grave-good, although this is a tentative suggestion based on this being the only one present within the assemblage. No other animal bone was identified within the fill of C1893, however 0.5g of bone unidentifiable as either human or animal was recovered from the backfill of this burial.

Burial groupings

Similarities have been found in the burial practices (notably in the types of grave goods) in Anglo-Saxon Essex, Cambridgeshire and Suffolk; however, there is also evidence indicating that there was strong regional variation in these communities (Tyler and Major 2005, 192). At the Saxon inhumation cemetery at Edix Hill, Barrington, Cambridgeshire burial groupings by age and gender have been identified (Malim and Hines 1998). Several examples of grouping by kinship were also identified. At the multi-burial rite cemetery at Springfield Lyons, Essex family groups were apparent for both inhumation graves and cremation burials (Tyler and Major 2005, 186). Age and gender groupings are not apparent at Heybridge, however the limited age and sex estimations possible for the assemblage may have hindered identification of these. Evidence from grave furnishings indicates that females were approaching social maturity at 12 years old and males at 15–18 years in the Anglo-Saxon period (Malim and Hines 1998). The cremations at Heybridge could only be assigned into very broad age groups which has restricted consideration of the age of the individuals and their position within the cemetery.

Richards' (1987) study found close correlations between the age and sex of the cremated individual and the size of the vessel: from infants in the shortest to older adults in the tallest (cf. Lucy 2000, 115). Unfortunately the plough damage to the cremations at Heybridge restricts consideration of this aspect of burial ritual.

It is possible that the distinct groups previously identified at Heybridge (see Pole 2007 and above) represent kinship groupings. Malim and Hines (1998, 303) suggest that kinship will have been of at least equal importance as gender and age groups within the Anglo-Saxon community.

It is noted that all the cremation burials positioned within the southern half of the excavated area within the Iron Age enclosure were all urned burials. This includes the group of burials associated with Enclosure Ditch F1233, the burials loosely forming the south-western cremation group, the burial within the six-post structure and isolated burials C1350 and C1773. In contrast, all but one of the burials positioned to the south-west, outside the Iron Age enclosure are un-urned.

Discussion- Phase 3: Anglo Saxon other features

Bone was recovered from seven other features dating to Phase 3. Human bone was identified within four of these. It is possible that the 'adult sized' bone recovered from Ditch F1233 is related to adult cremation burial C1509 interred within the backfill of this feature. Human bone was also recovered from possible grave marker Posthole F1681, like the backfills containing bone it may have been deliberately incorporated into the feature. However, the close location of the posthole to three cremation burials and truncation of these features may have resulted in

dispersal of the bone. One feature, Pit F1648, contained a small amount of bone unidentifiable to human or animal.

Burnt animal bone was identified within two features. Pit F1283 contained a fragment of sheep/goat radius in addition to three small unidentifiable fragments, all were white in colour. Posthole F1422 was located to the north of Grave F1358 and may have originally held a grave marker, it contained small white fragments of probable animal bone (*pers comm*. R. Jones). It is possible that the animal bone within possible Grave Marker F1422 is an animal accessory deposit. At Spong Hill, vessels containing a large amount of animal bone were identified as animal accessory vessels (McKinley 1994a, 94). At Baston, (Manchester 1976, cited in McKinley 1994a, 94) at least two cremations were found to consist entirely of animal bone; three were also identified at Sancton (McKinley 1994b). The possible nature of this posthole as a grave marker suggests that the presence of cremated animal bone within it is significant. However, animal bone burnt to a similar degree was recovered from Pit F1283, which does not have any evidence to suggest it is related to the cremation burials and practices at the site.

Discussion- Phase 4: Post Medieval
Further discussion of the single fragment of unidentifiable burnt bone from this phase is not possible.

Summary
Three urned cremation burials of adult individuals were recovered from Phase 2. All were truncated by ploughing. The urned nature and isolated position of these burials is suggestive of the Aylesford-Swarling culture burial practice.

The Phase 3 cremation burials with surviving bone consist of 40 adults, 11 sub-adults and five unidentifiable. This includes one probable dual burial of an adult and immature individual. Although analysis of these was somewhat limited due to truncation, it was possible to provide some information on the individuals buried and the cremation method used. Adults were more frequently identified. Young children and infants are likely to be under-represented due to the small size and fragile nature of their bones, contributing to lower survival and identification rates. There does not appear to be any difference in the cremation process and deposition of the burials based on age group in terms of temperature, urned and un-urned deposition, inclusion of animal bones, grave goods and backfill. However, consideration of position within the cemetery based on age is limited by the broad age estimates that could be assigned to the age groups. All areas of the skeleton were presented to some degree in the cremation burials; this may have been intentional during collection of the cremated bone from the pyre. The cremation pyre appears to have been located away from the excavated area of the cemetery, although direct evidence for pyres is generally absent from the archaeological record for this period.

Distinct groups of cremation burials have been identified and it is possible that these represent kinship groupings, as identified at other Anglo-Saxon cemeteries. A possible chronological difference in the cremation burial is also illustrated at Heybridge with a predominance of urned cremations being situated within the southern half of the excavated area within the Iron Age enclosure and a predominance of un-urned burials to the south-west, outside the Iron Age double-ditched enclosure

Burnt bone was also recovered from seven other features within Phase 3. These include two possible grave markers, one containing human bone (which may be related to the truncation of the three closely situated cremation burials) and one containing only animal bone, which may be an animal accessory deposit.

A single small fragment of white unidentifiable bone was recovered from a Phase 4 feature.

The Charred Plant Remains

Ruth Pelling
Introduction
Bulk samples derived largely from the Iron Age enclosure and Anglo-Saxon cemetery. Features sampled included pits, postholes, ditches and cremation deposits. Samples were processed by mechanical bulk flotation and flots collected onto a 500 m mesh. Dried flots were submitted to the author. Following initial scanning of 155 flots under a binocular microscope to assess the presence and preservation of charred plant remains, 11 samples were selected for further analysis. The selected samples were of Iron Age and early Anglo-Saxon date and were taken from pit fills, postholes, ditch fills and one cremation deposit. The samples not selected for further analysis tended to be dominated by roots with some contained charcoal (predominantly oak) and rare (less than 10) grain or weed seeds. Such deposits are likely to represent 'background noise' derived from burnt deposits of crop remains and processing waste which have been scattered across the site and re-deposited and consequently offer little potential for further discussion.

Methods
The samples selected for analysis were sorted under a binocular microscope at x10 to x20 magnification for the retrieval of charred grain, chaff and weed seeds or other quantifiable plant items. Identifications are based on morphological characteristics and by comparison with modern reference material. Grain has been quantified on the basis of embryo ends. Weeds are represented by seed, nutlet and so on unless otherwise stated. Chaff part is given. Nomenclature and habitat information for weeds derives from Clapham, Tutin and Moore (1989).

Results and Discussion
The density of remains in the samples is generally low to moderate, consistent with piecemeal deposition over time rather than rapid single episodes of burning and deposition. In the majority of samples, cereal grain out numbers chaff or weed seeds. This would be consistent with the presence of processed grain with occasional processing waste (chaff and weed seeds). Preservation

tended to be poor, however, which raises the possibility that the sample composition is affected by preservation, chaff tending to survive charring less well than grain and consequently being under-represented (Boardman and Jones 1990). The cremation sample produced a noticeably different composition, which is dominated by weed seeds. This sample is discussed in more detail below.

Discussion

Identification of the cereal grain was hampered by preservation as well as sediment deposits still adhering to the grain. In addition, the identification of wheat (*Triticum*) species was problematic due to the range of species and grain morphology reflected in the limited number of wheat grains identified to species level. At least three species of wheat are represented. The Iron Age samples produced grain and chaff of two glumed wheats: spelt wheat (*Triticum spelta*) and emmer wheat (*Triticum dicoccum*). The Anglo-Saxon samples produced both glumed wheat species as a single grain of a possible free-threshing wheat, (*Triticum aestivum/turgidum,* bread/rivet type wheat). A number of short wheat grains, particularly in Sample 80 (Pit Fill L1571) could not satisfactorily be identified to species, showing characteristics of both glumed and free-threshing varieties. The paucity of chaff further limited identification of wheat, but did confirm the presence of the two glumed wheats in both Iron Age and Anglo-Saxon samples. Barley (*Hordeum vulgare*) was identified in both periods and includes the hulled six-row variety on the basis of asymmetric grains (in six row barley each rachis node produces three grains, the two lateral grains of which are twisted). Oats (*Avena* sp.) were identified in two samples, one of which was Anglo-Saxon, and one was undated. Chaff of barley was rare consisting of one rachis internode. No oat chaff was present. One pulse was tentatively identified as broad/Celtic bean (*Vicia faba*).

The range of cereal species and particularly the presence of glumed wheats into the early Saxon period is likely to reflect a local tradition not generally seen nationally. Spelt wheat is typically associated with the Iron Age and Roman periods in southern Britain and only rarely recorded beyond the end of the Roman period. Emmer wheat is more typically recorded in Neolithic and Bronze Age deposits, although an increasing number of sites in eastern England, for example in Kent and Essex (e.g. Stansted Airport, Carruthers 2006), are producing Iron Age and Roman records suggesting the distribution is more complex than once thought. There is also limited evidence for the cultivation of emmer wheat in the early Anglo-Saxon period in parts of the Thames Valley, particularly from the sites of Yarnton in Oxfordshire and Dorney in Berkshire (Pelling 2003; Pelling and Robinson 2001). Locally the continued cultivation of glumed wheats into the Saxon period has been suggested from deposits recovered from both early and late Anglo-Saxon features at Springfield Lyons. Here, spelt and possibly emmer were recorded in the early Saxon cemetery in addition to barley, oats, rye and possible pea. West Stow in Suffolk (Murphy 1994), and Mucking, Essex, have also produced evidence for the continued cultivation of spelt into the Saxon period, although only at Springfield Lyons is there evidence for this in the late Saxon period. At the Chalet Site, it is difficult to rule out the possibility of contamination of Saxon period deposits by Iron Age material, although there is clearly an argument for a local tradition of glumed wheat cultivation long after it ceased to be cultivated in the majority of the country. Locally then, there appears to be either continued cultivation of spelt and emmer wheat well into the Saxon period or at least their continuation as weeds of the free-threshing crops, which may also be seen elsewhere in parts of eastern and central England. It is possible, therefore, that at least early Saxon arable traditions were more varied than has been assumed and this is particularly the case along the estuaries and river valleys of eastern England.

A limited range of wild species was represented which includes ruderal species, and plants of grassland or wet, marshy habitats. While some of these species may have been growing with cereal crops, particularly the ruderal plants of disturbed ground (*Chenopodium album*, *Atriplex* sp., *Rumex* sp., *Fallopia convolvulus* and *Galium aparine*), typical corn-field weeds were absent. This would suggest that many of these seeds did not enter the assemblages as crop processing waste but via an alternative route. *Linum catharticum* (fairy flax) is a species of calcarious grassland while the *Vicia/Lathryus* (vetch/tares) and *Medicago/Trifolium/Lotus* (medick/trefoil/clover etc.) type leguminous weeds includes possible grassland flora. *Rumex acetosella* (sheep's sorrel) is typical of light sandy soils including grassland and would occur within grassland on the gravel terraces. *Montia fontana* subsp. *chondropserma* (blinks), *Eleocharis palustris* (common spikerush), *Schoenoplectus* sp. (club rush) and *Polygonum persicaria* (red shank, persicaria) are typical of river or pond edge habitats and are likely to have derived from the river and estuary floodplain. Many of the *Carex* species (sedge) are also typical of wet, marshy habitats. Interestingly, several samples assessed produced recent seeds of *Montia fontana* suggesting some continuity of vegetation in the area of the site, presumably reflecting local conditions.

Sample 51 taken from Anglo-Saxon Cremation C1406 produced a very different assemblage to the remaining samples dominated by weed seeds and root/rhizome fragments. This sample contained one glume base and no grain. A large number of seeds of a limited range of species were present including frequent *Montia fontana* and *Carex* spp. with fewer seeds of *Rumex acetosella*, *Medicago/Trifolium/Lotus* sp., *Chenopodium album* and small grasses. The *Carex* seeds were dominated by large, broad, two sided seeds probably derived from a single species. This sample is clearly not arable in origin but rather would be consistent with uprooted sedges or grassland flora presumably from the floodplain, which had been burnt as kindling for the funeral fire. A similar sample producing roots/rhizome with seeds of grassland flora, including *Rumex acetosella* and *Medicago/Trifolium* spp. was interpreted as uprooted

weedy grassland vegetation used as kindling for cremation pyres at the Saxon cemetery at nearby Springfield Lyons (Murphy 1994) and therefore may represent a local tradition.

Conclusions

The archaeobotanical remains from the Chalet Site, Heybridge, are consistent with low levels of processed cereals and associated waste that had been deposited over time in piecemeal fashion. The samples do not allow interpretation of cereal processing activities or the nature of the economy of the site although they do provide useful information about local arable traditions. While it is not possible to rule out the possibility of contamination of the Saxon samples by Iron Age material, the range of species identified is consistent with evidence from the local area, which suggests a localised tradition of glume wheat cultivation into the Saxon period. Few plant remains other than charcoal were recovered from the cremation deposits with the exception of one sample interpreted as uprooted floodplain and grassland vegetation used as kindling on the cremation fire. Again, this appears to be a local tradition also noted at Springfield Lyons cemetery (Murphy 1994).

DISCUSSION

Neolithic activity in the Heybridge Area

The identification of features representing Neolithic activity at the Chalet Site was not unexpected due to the presence of lithic artefacts of late Neolithic date (and a possibly earlier, but undiagnostic, flake industry) and pottery of a similar date at the Crescent Road site, excavated in 1972, which lies *c.* 1km north-west of Heybridge Hall (Wickenden 1986, 61). Furthermore, in 1985, at Heybridge Basin, 1.2km east of the Chalet Site a pit, containing Neolithic pottery and flint was recorded (HER 8017; Brown and Adkins u/d).

The Crescent Road and Heybridge Basin sites form just a small part of the substantial evidence for occupation of the Heybridge area in the Neolithic. Artefacts of this date, in context, have been recorded at Lofts Farm (EHER 7892, 7879), Elms Farm (EHER 17444) and at Goldhanger Creek (EHER 13630), amongst other locations. A small number of residual finds have also been recorded in the area. The evidence recorded in the area suggests that there was sustained activity on the gravel terraces of the Blackwater estuary (O'Connor 2007, 13). Indeed, some of the best evidence for early Neolithic settlement in eastern England comes from the Blackwater estuary due to what is now the intertidal zone in this area having been dry land during the Neolithic. A particularly large area of preserved land surface at the Stumble, has produced evidence for settlement in the form of structural features, pits and large quantities of flintwork and pottery (Essex CC Historic Environment Branch 2008, 16).

The Neolithic evidence recorded at the Chalet Site, which comprised three pits and a total of 1522g of late Neolithic pottery, is of a small scale in comparison to some of the evidence recorded for this period in the area surrounding the Blackwater estuary. The pottery assemblage may be considered fairly typical for the region; Grooved Ware, which comprised the majority of the assemblage, has been found at a concentration of sites on the banks of the Blackwater. That this type of pottery is often associated with monumental complexes is probably coincidental with regard to the later (in Phases 2 and 3) use of the site as a cremation cemetery. Thompson (this report) indicates that the assemblage from the Chalet Site would appear not to be associated with such a complex. The presence of this Neolithic activity suggests that further evidence of the same, or similar, date may still exist beyond the excavated area at the Chalet Site.

The late Bronze Age to early Iron Age site

The Chalet Site in the local late Bronze Age to early Iron Age landscape

The Phase 2 enclosure (and associated activity) recorded at the Chalet Site can be seen to be part of the corpus of known of late Bronze Age/early Iron Age activity that has been recorded in the area surrounding Heybridge and the Blackwater estuary. The site may, therefore, be considered to fit in to the landscape of farms, set within a pattern of fields and woods, that has been identified for this part of Essex in the late Bronze Age (Essex CC Historic Environment Branch 2008, 17).

Of the contemporary activity recorded in the area it is the Loft's Farm site that is perhaps most similar to the late Bronze Age/early Iron Age enclosure at the Chalet Site. Both appear to have been ditched enclosures and both yielded pottery of Darmsden-Linton type, or at least of a contemporary date (see Thompson, this report). A large quantity of the Darmsden-Linton type pottery recorded at Loft's Farm was recovered from within the upper fills of the well that was present at the site. The deposition of large quantities of pottery of this date is recorded at several of the late Bronze Age sites to the north of the Blackwater and is considered to represent part of a significant change in the character of settlement in the area during the early Iron Age (Brown 1988). No evidence for this kind of event was recorded at the Chalet Site. This may be because a large proportion of the presumed enclosure lay beyond the limits of the excavated area. However, it may alternatively indicate that the enclosure at the Chalet Site did not experience this kind of event, and therefore did not suffer the abandonment that this sealing of wells may imply.

Given its broad similarity in form to the Loft's Farm enclosure, the Chalet Site enclosure may represent a relocation of settlement from the possibly abandoned sites to the north where these well-sealing events have been identified. Despite the assertion that this event represented a 'significant change' (see Essex CC Historic Environment Branch 2008, 18), the apparent sudden sealing of wells at the late Bronze Age sites to the north of the Blackwater estuary does not, of course, mark the dividing line between the end of this period and the early Iron Age. A degree of continuity is apparent in the

settlement evidence for the two periods; it is possible to identify Bronze Age origins to features that would come to characterise the earlier Iron Age in southern and eastern England (Haselgrove and Pope 2007, 6). The dating evidence from the pottery assemblage places the Chalet Site between the 9th and 5th centuries BC with a suggested core date of *c.* 800–600 BC, indicating that it was in existence during the transitional phase between the late Bronze Age and the early Iron Age (see Thompson, this report). Furthermore, a shift from the higher land to the north of the estuary to the more riverine environment of the Chalet Site would appear to be an unlikely move during what Megaw and Simpson (1988, 20–21) describe as a period of climatic deterioration marked by an increase of rainfall and a decline of temperature. This suggests that the Chalet Site enclosure is more likely to have been occupied at a similar time to that at Loft's Farm and the other settlements to the north. It may have even fallen in to disuse at a similar time to these sites. The Phase 2 evidence from the Chalet Site represents an early phase of the continuous occupation of the Heybridge area from the late Bronze Age and early Iron Age, through the middle Iron Age (with occupation represented at sites such as Slough House Farm) and culminating in the late Iron Age to Romano-British settlement at Elms Farm (cf. Atkinson & Preston 2001).

The nature of activity represented by the Phase 2 features

The size, morphology and spatial arrangement of the Phase 2 Ditches F1195, F1197, F1235=F1273 and F1274=F1224=F1234 would appear to suggest that they formed an enclosure. The presence of a similar set of ditches forming an enclosure of the same (or similar) date at the Loft's Farm site aids interpretation of the Chalet Site ditches as those of an enclosure. This is despite much of the presumed enclosure lying beyond the limits of the excavation. While the Lofts Farm enclosure was double-ditched, stratigraphic relationships and some aspects of ditch morphology suggest that the ditches of Chalet Site enclosure were not contemporary and did not form a double-ditched enclosure, despite superficial appearances.

Internally, the late Bronze Age enclosure at Loft's Farm displayed a fence line dividing the northern and southern parts. The entrance to the enclosure appeared to have been designed to guide traffic in to the northern half. A rectangular longhouse was situated in the south-eastern corner and the entrance to the centrally located roundhouse opened in to the southern area. A concentration of probable two- and four-post structures, representing possible granaries and drying racks, were concentrated in the southern half of the enclosure (Brown 1988, 294). Such detailed understanding of the interior of the Chalet Site enclosure is not possible. This is partly due to much of the enclosure lying outside of the excavated area and partly because the features, both of definite Phase 2 date and undated, that lie within the area understood to be the interior of the enclosure form no coherent structural configurations. The pottery assemblage contains domestic elements, comprising shouldered jars, bowls and cups (see Thompson, this report) but with the absence of clearly definable domestic structures, this is far from incontrovertible evidence.

Unlike Loft's Farm, the Chalet Site enclosure displays evidence for funerary activity, in the form of the three cremation burials assigned to Phase 2. Barrow burial is a defining characteristic of Bronze Age burial for both interments and cremation burials; however, no barrows, or evidence for barrows, were recorded in association with the Phase 2 cremations at the Chalet Site. During the early part of the late Bronze Age the building of new barrows gave way to reuse of older ones or the use of flat urnfields (Taylor 2001, 39). Bronze Age cremation deposits are known from settlement contexts; Brück (1995, 249) cites the examples of Knight's Farm, Berkshire (Bradley *et al.* 1980), where a cremation burial in a bowl was found adjacent to a ring-ditch and Thwing, Yorkshire (Manby 1980), where an urned cremation burial was placed in a pit in the centre of a very large timber building. The general pattern of late Bronze Age cremation burial continued throughout the 7th, 6th and probably 5th centuries BC (Cunliffe 1975, 287).

The distribution of the features containing the Phase 2 cremations at the Chalet Site sheds little light on the function of the enclosure. Cremation Pit F1258 lay to the south of the west-south-west to east-north-east aligned pair of ditches (F1195 and F1197). Cremation Pit F1514 lay to the north of Ditches F1195 and F1197 and to the west of Ditches F1235=F1273 and F1274=F1224 =F1234 indicating that it lay within what is understood to be the interior of the enclosure. Cremation Pit F1711 lay to the east of Ditch F1274=F1224=F1234 and *c.* 1.2m to the north-north-west of the terminus of Ditch F1235=F2173 and therefore on the same alignment as the ditch. If these features represented an urnfield, then it may be expected that they would be present in greater numbers and would have lain exclusively within an enclosed area or exclusively outside an enclosed area.

The distribution of these cremations pits in relation to the ditches, and their low number, makes it seem more likely that they represent cremation deposition in a settlement context. During the late Bronze Age, human remains were deposited in a variety of contexts. The remains of the dead appear to have been a powerful symbolic resource that could be drawn on for a number of reasons. One of these uses is to define and mark boundaries and points of boundary transition (Brück 1995, 257). Human remains are also known from boundaries in Iron Age contexts (cf. Lally 2008). Boundaries had great ritual and symbolic importance to various Iron Age societies in northern Europe (Hingley 1990, 100) and, to many communities in the 1st millennium BC, enclosure features were symbols of the kinship division between 'insiders' and 'outsiders' (Thomas 1997, 216). These cremated human remains may have been placed in these locations on either side of the enclosure ditches for their powerful symbolic value.

Early Anglo-Saxon activity at the Chalet Site

The Phase 3 site in local context

Early Saxon settlement in Heybridge has been recorded in areas of Roman occupation. The associated Saxon pottery suggests that the settlement belongs to the first half of the 5th century AD, and evidence has been identified for the contemporary use of Romano-British pottery. Drury and Wickenden (1982, 34) state that it seems possible that this Saxon settlement operated in a symbiotic relationship with the sub-Roman settlement; the Saxon settlement, which was located on the periphery of the Roman small town, would have acted as an extension of the perhaps now contracted settlement of the pre-existing Romanised population. Under these circumstances it seems that the Saxon population occupying this area were probably not settlers farming land in the area but were directly participating in the town's economy or soldiers deployed, with their families, in the area (Drury and Wickenden 1982, 34). The populations of these two concurrent settlements may have been using the cemetery recorded in Barn Field, which produced both Roman and Saxon burials, for the burial of their dead. The 5th to 6th century Saxon occupation of these areas of Heybridge is considered to have been short term (Wallis and Waughman 1998). Indeed, on the basis of the part of it that they excavated, Drury and Wickenden (1982, 30) estimated a short lifespan for the early Saxon settlement of a single generation of 25 to 30 years.

Evidence from the surrounding area demonstrates that Anglo-Saxon occupation of the area continued after settlement shifted away from the area recorded by Drury and Wickenden (1982). The rising water-table is understood to have made the low-lying areas around Elms Farm uninhabitable and therefore possibly precipitating a shift on to the higher ground to the north (O'Connor 2007, 16). Dates obtained from the pottery assemblage (see Thompson, this report) place the Phase 3 features recorded at the Chalet Site in the date range *c.* AD 450 to 700. This indicates that the Chalet Site cemetery was contemporary with the early settlement but continued to be used even as settlement of the Heybridge area shifted away from the location of the Roman town. It may provide a link, in terms of a continually utilised location, between the initial Saxon activity in the area and the known middle Saxon occupation of Maldon District.

The layout and morphology of the Phase 3 Site

Site plans show a striking zigzag of connected Phase 3 features, following the alignment of Phase 2 Ditch F1843, and cutting across the north-north-west to south-south-east aligned Phase 2 enclosure ditches. These features appear to have had some degree of influence on the arrangement of the cremation burials recorded at the site. Arnold (1988, 128) states that ditches, sometimes with a causeway and sometimes forming a complete ring, with a diameter of 6m to 7m are often found around Anglo-Saxon inhumation graves. Ring-Ditch F1214 and Sub-Circular Enclosure Ditch F1233=F1212=F1222 (which display slightly larger diameters) with their associated cremations may represent a similar form of funerary architecture. These were linked by Ditches F1165=F1612, F1263 and F1220. Although these linear ditches were not stratigraphically contemporary with Ring-Ditch F1214 and Sub-Circular Enclosure Ditch F1233=F1212=F1222, and they demonstrated stratigraphic relationships to suggest that these circular and sub-circular features were not contemporary with each other, they appeared to form a boundary incorporating, but not contemporary with, Ring-Ditch F1214 and Sub-Circular Enclosure Ditch F1233=F1212=F1222.

The southern-most of these linear features, Ditch F1165=F1612, cut the western edge of the late Bronze Age/early Iron Age Ditch F1843, tracing its route almost exactly. This suggests that Ditch F1165=F1612 was deliberately designed to follow the route of this earlier feature and indicates that elements of the Phase 2 site were still visible in the landscape, possibly as depressions, in the early Saxon period. This also suggests that the previous use of the site was of some interest to the Saxon period population. Reuse of earlier sites is a constant theme of Anglo-Saxon burial (Taylor 2001, 158). The identification of the Chalet Site, by the Anglo-Saxon population, as an area of earlier activity, either through its remaining visibility in the landscape at the time or through some kind of folk memory, may explain why it was chosen for use as a cremation cemetery.

Immediately adjacent to the northern terminus of Ditch F1165=F1612, lay Sub-circular Enclosure Ditch F1233=F1212= F1222. This was the stratigraphically earliest feature of those forming the striking zigzag of features; it did not have a stratigraphic relationship with Ditch F1165=F1612. It appears likely that this ditch may have functioned as some kind of monumental feature. The north-eastern part of Ditch F1233=F1212= F1222 was cut by the broadly north-east to south-west aligned Ditch F1263, which was probably a continuation of the broadly north-west to south-east aligned Ditch F1220. F1220 was cut by Ring-Ditch F1214. This may have been a simple circular ditch surrounding the cremation deposits at its centre, functioning in a similar way to those surrounding the inhumation burials at the St. Peter's Broadstairs cemetery (see Lucy 2000), or may represent the ploughed out remnant of a barrow; a more likely explanation given the large (*c.* 8m) diameter of the feature. A second, very similar ring-ditch (F2171=F1277) lay to the south and this too may be the ploughed out remains of a barrow. The intercutting, undated features, devoid of artefacts, that lay within the area enclosed by F2171=F1277 may be the result of interference, possibly robbing, prior to the ploughing that caused damage to many of the archaeological features recorded at the site. Of 19 examples of similar ring-ditches at Apple Down in West Sussex only four were associated with surviving burials (Down and Welch 1990).

Sub-circular Enclosure Ditch F1233=F1212= F1222 is, therefore, the stratigraphically earliest of these features, followed by Ditches F1263 and F1220 and then

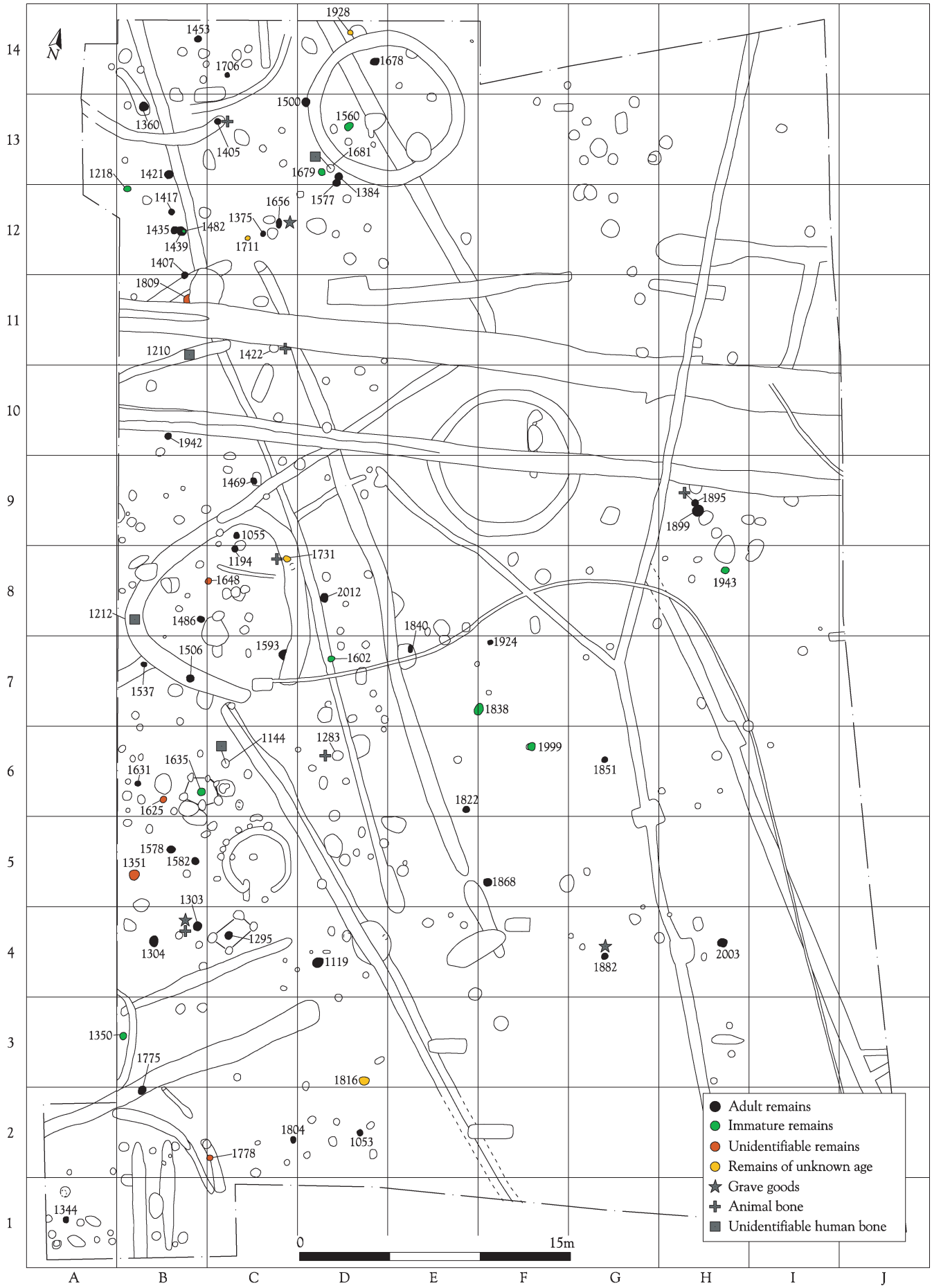

Fig. 18 Age and finds distribution within Phase 3 and possible Phase 3 cremations

Ring-Ditch F1214. It seems possible that, given its relationship with the earlier Ditch F1843, that Ditch F1165=F1612 may have been earlier than or contemporary with Ditch F1233=F1212= F1222. It would have served to emphasise the link between the Saxon use of the site and the late Bronze Age/early Iron Age occupation and may, therefore, have legitimised the use of the site as a burial ground. For this reason, it may have been one of the earlier features at the site.

Arnold (1988, 127) discusses the Anglo-Saxon cemetery at Updown, Kent, stating that for much of its life it was bounded by a ditch but burial activity spilled beyond this when the cemetery was perceived to be completely full. The boundary formed by Ditches F1165, F1263 and F1220 may have originally marked the outer limit of the cemetery; a small majority of the recorded cremations of Phase 3 date lie to the west of this line of features. Those to the east may be seen as later deposits, still in close proximity to the burial ground but outside of its original limits. The approximate alignment of Cremations C2001, C1849 and C1923 with Ditch F1165 may represent some attempt to follow or adhere to the original form of the burial ground. The presence of Ring-Ditch F1271=F1277 to the east of this possible boundary line, although no cremations were identified in direct association with it, might offer further support to this possibility. While it may simply have been a piece of funerary architecture associated with now unidentifiable cremation burials within the area it encircled, it may, either as its sole and primary function or as a secondary function, have provided legitimisation to the use of the area to the east of Ditches F1165=F1612, F1263 and F1220 as a burial ground.

The stratigraphic evidence suggests that the boundary formed by Ditches F1165=F1612, F1263 and F1220 was probably constructed where it was due to the presence not only of Phase 2 Ditch F1843 but also Sub-Circular Enclosure Ditch F1233=F1212=F1222, which appears to have been filled in prior to the construction of these 3 ditches as F1263 cuts its north-eastern quadrant. Following the in-filling of the boundary ditches Ring-Ditch F1214 was constructed straddling the line of the boundary. Why these broadly circular features influenced the positioning of, or were placed on, the boundary is difficult to identify. It seems reasonable to suggest that, when they were constructed, they would have been noticeable in the landscape. The construction of monumental funerary structures may be equated to the burial of individuals of high status. The link between high status and the boundary, initially incepted through the connection between Ditch F1233=F1212=F1222 and the boundary may have been reiterated in the placing of F1214 over the boundary ditches.

The Cremations

It is difficult to identify a clear chronological sequence for the deposition of the Phase 3 Cremations. Some display stratigraphic relationships with other features; some were cut in to the backfill of features such as Sub-circular Enclosure Ditch F1233=F1212=F1222 and there are rare instances of cremation deposits truncating earlier cremations. In the case of Sub-circular Enclosure Ditch F1233=F1212=F1222 it would appear that the cremations that lay within the area that it enclosed were probably fairly contemporary with its construction and therefore earlier than those that were deposited in pits cut into its backfill. A clear depositionary sequence is, however, not apparent for most of the cremation deposits. The stratigraphic relationships that some of the cremation deposits display do hint at longevity of use of the site as a burial ground. This can be demonstrated by the stratigraphic relationships between Sub-circular Enclosure Ditch F1233=F1212=F1222 and the cremations associated with it. Pit F1593 contained a cremation deposit (C1594), its eastern side was cut by Ditch F1233=F1212=F1222. Those cremations within the area enclosed by the ditch may be considered broadly contemporary with it, while those cut in to its backfill are clearly later. Therefore the deposition of cremations clearly extended from before, and well beyond, the lifespan of this fairly substantial feature. The dating derived from the ceramic evidence suggests a potential lifespan for the site of as much as 250 years. It is quite possible that cremation deposition was occurring throughout this period.

As Phillips (this report) demonstrates, much of the demographic information that was sought from the cremations was affected by a combination of taphonomic preservation, fragmentation and the incompleteness of the burials. The apparent absence of very young children may be a result of taphonomic factors such as the small size and fragile nature of immature bones leading to poor survival. It was only possible to estimate the sex of two individuals as the required diagnostic elements did not survive in most cases. It was, however, possible to identify that adults dominated the assemblage; they accounted for 70% of the cremated individuals while sub-adults accounted for 19%. It was not possible to identify the age grouping of 6% of the represented individuals and 5% of the cremations could not be positively identified to human or animal. Of the sub-adults, most were identified as being in later childhood. By their nature, there is a great deal of variability in the quantity and quality of demographic information that can be obtained from cremations (Stirland 1999, 42). While the cremation assemblage did not offer the kind of insights in to the early Anglo-Saxon population of Heybridge that an inhumation assemblage might have done it does provide some information regarding death rates and patterns. The dominance of adults in the assemblage over youths or children would suggest a fairly normal death rate amongst the population with no apparent evidence for epidemics or similar events wiping out large numbers of sub-adult individuals.

The double cremation C1686, which contained the remains of an infant and an adult, is paralleled at various Anglo-Saxon cemetery sites (see McKinley 1994a, 101). In most periods, from the Bronze Age to Saxon, dual burials, commonly comprise of an adult and an immature individual; the implication is that these individuals

represent a mother and infant or other closely related family members (Davies and Mates 2006, 11). Stoodley's (2002) study of multiple inhumation burials, however, demonstrates that infants are restricted to burial with an adult female, making the options for the burial of an infant limited. The lack of a female with whom to bury an infant may explain why they are scarce in Anglo-Saxon cemeteries but may also suggest that the grave of any available female was considered an appropriate resting place for an infant (Stoodley 2002, 118–119).

Lucy (2000, 116) states that usually, cremated skeletal remains were collected from the pyre and placed in pottery urns, or other vessels, and then deposited in pits in the ground. The Chalet Site cremations, of course, fit in to this pattern. Some cremation graves appear to have wooden structures associated with them (Lucy 2000, 118). These are generally posthole structures around and above cremations forming miniature wooden 'houses of the dead' (Welch 1992, 66). This practice has also been identified at the Chalet Site. Cremation Pit F1295 lay at the centre of a rectangular formation of four postholes. The 'houses of the dead' associated with Anglo-Saxon burials are typically four-post structures and so it appears likely that this is what these four post-holes represent. Cremation Pit F1635 was observed to lie at the centre of a hexagonal formation of 6 postholes. It is possible that these postholes represent a similar but more elaborate version of the four-post 'houses of the dead' that have been recorded at several Anglo-Saxon cemeteries in southern England, but most notably at Apple Down in West Sussex (Welch 1992, 66). Ring-ditches, similar to F1214 and F1271=F1277, are known from other sites in Essex (Lucy 2000, 119). Nineteen such examples were recorded at Apple Down, West Sussex (Down and Welch 1990), but, as the ditches were rather shallow, these seem to have been intended to delimit the area around the central cremation rather than to provide material for a barrow overlying the cremation pit (Lucy 2000, 119).

It is a regularly observed feature of Anglo-Saxon burial that there was, apparently, little problem identifying earlier graves, either to avoid disturbing a previous burial or to locate a grave in which to place another family member (Taylor 2001, 144). This would suggest that markers of some kind may have been used. These might have taken the form of single posts, as evidenced in association with some cremation deposits at the Chalet Site, or may have been more elaborate monumental structures. At the Anglo-Saxon cemetery at St Peter's, Broadstairs, Kent, structural features associated with graves included posts on both sides or at the head or foot of the grave, floor slots, ledges, upright stone slabs and circular or penannular ditches (Taylor 2001, 145). Arnold (1988, 128) reports that ditches with a diameter in excess of 6m, some with a causeway, others forming a complete circle are often associated with Anglo-Saxon graves. Evidence for free-standing upright posts and vertical timbers suggesting enclosing fences is also found in association with such features. Sub-circular Enclosure Ditch F1233=F1212=F1222, Penannular Ditch F1324 and the Ring-Ditches F1214 and F1271=F1277 would all appear to conform to this pattern. All of these features, however, are associated with cremation burials whereas Arnold's (1988, 128) observations are mainly associated with inhumation burials. It is worth noting though, that many aspects of Anglo-Saxon inhumation and cremation rites are very similar, in terms of the way in which the body was laid out and the way in which it was equipped either in the grave or on the pyre (Welch 1992, 69). Therefore, as beneath the basic distinctions in burial rite a considerable amount of variability is found (Arnold 1988, 131), there is no reason why the structural components of an inhumation grave may not be adapted or copied for use in association with the burial of cremated remains.

This evidence demonstrates that burial practices that are well attested at other Anglo-Saxon cemetery sites were being carried out at the Chalet Site. As Arnold (1988, 131–132) states, the majority of burials in early Anglo-Saxon England conform to a set of basic types. This indicates that there were several set burial practices, all of which were suitable for the burial of individuals during the lifespan of the cemetery at the Chalet Site. The evidence from the site does nothing to demonstrate what, if anything, the differences between these practices imply. For example, while more is known about C1308 (the identification of a pronounced nuchal crest indicates that it is probable male and an iron nail was recovered from the cremation vessel) than C1676, both were urned cremations identified as adults. There is no evidence to adequately explain why C1308, which lay in Cremation Pit F1295, was buried within the four-post structure whereas C1676, contained with Cremation Pit F1678, was buried within the area enclosed by Ring-Ditch F1214. This difference may demonstrate a different position in society, a different gender, a difference in personal or familial wealth, a different family group or that one was of a different date to the other; alternatively, it may represent a choice based on nothing but the personal preference of the interred individual or the persons responsible for their funerary arrangements. The burial of C1633 (in Cremation Pit F1635) within the six-post structure, a very similar though perhaps slightly more elaborate burial monument to the four-post structure, would suggest that this kind of burial practice was not associated with C1308's age as the individual represented within C1633 was a sub-adult. A mix of burial rites within one cemetery appears to be quite usual within Anglo-Saxon cemeteries. Even Sutton Hoo, understood to be the burial place of a royal family over a short period, the kind of site where conformity might be expected, displayed a mix of burial rites (Taylor 2001, 138). Dr Ian Longworth's excavations in the late 1960s recorded unaccompanied inhumations, with no grave goods or coffins, and urned and unurned cremations (Evans 1989, 104–105). Burials beneath roundbarrows, split almost equally between inhumations and cremations (some on wooden trays, some wrapped in linen, some in bronze vessels) and inhumations in coffins and wooden chambers have also been recorded at Sutton Hoo (Taylor 2001, 138).

The similarity of the contents of the environmental sample taken from Cremation C1406, which comprised the remains of sedges and grassland flora, to samples taken from the Anglo-Saxon cemetery at Springfield Lyons may be indicative of a local tradition in funerary rite (see Pelling this report). These plants would have been used as kindling for the funeral pyre. While it is most likely that they were used for this purpose as they were a convenient source of suitable material for this function, their continued use in this way may have eventually developed into a local funerary custom.

The Anglo-Saxon cemetery and the history of the site prior to this use

As the evidence presented earlier in this report would suggest, the presence of the earlier enclosure at the site influenced the siting of the Anglo-Saxon features. Taylor (2001, 158) asserts that the reuse of earlier sites is a constant theme of Anglo-Saxon burial. As Semple (1998, 109) has stated, archaeological investigation has revealed a consistent tradition of Anglo-Saxon secondary activity occurring at Bronze Age burial mounds and Neolithic long barrows. It is, however, not just sites of Bronze Age or Neolithic date that Anglo-Saxon burials appear to have been associated with; Evison (1994, 30), suggests that the presence of a possibly Roman cremation, marked by a post, encouraged the use of the surrounding area for the deposition of Saxon cremations at Great Chesterford. It is not just earlier sites primarily of a burial or funerary function that have been reused as Anglo-Saxon burial sites. Williams (1997) has identified early Anglo-Saxon period burial sites reusing Iron Age forts, linear earthworks, henges and enclosures, natural mounds and Romano-British villas.

The use of the Chalet Site in the Anglo-Saxon period as a cremation cemetery clearly relates to the previous use of the site in the late Bronze/early Iron Age. This is perhaps most clearly illustrated by the apparent recutting of a late Bronze/early Iron Age ditch (F1843) in the early Anglo-Saxon period (F1165=F1612). It is not possible to determine whether the presence of the late Bronze/early Iron Age cremations encouraged the Anglo-Saxon population to use the site as a cemetery, as only a small number were recorded during excavation and Anglo-Saxon cremations were not placed in particularly close proximity, or if it was merely the presence of a known earlier site. In either case, it appears likely that the site was evident to the Saxon population because visible earthworks remained or through some kind of folk memory.

Semple (1998) demonstrates that several examples of Anglo-Saxon poetry make reference to barrows or prehistoric earthworks being associated with the supernatural. Williams (1998a, 91) states that the ancient burial structures referred to in the epic *Beowulf* were considered to be the constructions of an ancient race and the residence of dangerous supernatural powers but that they also relate to a memory of a distant mythological past. The antiquity and monumentality of ancient structures could imbue them with ancestral and supernatural qualities that newly built structures could not possess. The spirits of the dead and supernatural powers can be associated with ancient, abandoned or ruinous locations, which can lead to their use as sacred places and burial sites; there is ethnographic evidence for this idea (Williams 1998b, 3).

The practice of reusing ancient sites for burial is known in the 'Anglo-Saxon homelands' from at least the 3rd century (Taylor 2001, 158). Its use in Anglo-Saxon England may, states Williams (1998a, 104), have helped immigrant Germanic groups portray themselves as the legitimate heirs of the ancient peoples and supernatural beings that originally created these structures. As Bradley (1993, 116) states, "new developments are more secure when they are invested with the authority of the past." This would appear to indicate that it was possible for the population of early Anglo-Saxon England to identify elements of the landscape as the constructions of past groups or societies. There was, therefore, clearly some understanding of the history of the landscape. It is apparent, though, that Anglo-Saxon period concepts of history were intertwined deliberately, and inextricably, with mythology or theology; for example, the pagan god Woden was placed at the end of many Anglo-Saxon royal genealogies.

Williams' (1998a, 104) assertion is based strongly on the concept of the Anglo-Saxon period in England having been the result of mass migration or invasion by groups from mainland Europe and the suppression of the native British population. This concept is not universally accepted; Chadwick (1965) and Higham (1992), amongst others, have proposed the possibility of small numbers of Anglo-Saxon incomers 'anglo-saxonising' a population that was substantially British in its ancestry (Ward-Perkins 2000, 520). An 'anglo-saxonised' (or partially 'anglo-saxonised') British population may have felt the need to demonstrate links with the ancestral beings that created the prehistoric monuments in the landscape in much the same way, although for obviously different reasons, as Williams' (1998a, 104) immigrant Germanic groups.

Whether it was a Germanic elite seeking legitimisation of their claim to the land or a British population who, despite consciously adopting new cultural practices, needed to maintain some link to their ancestral heritage, that reused the late Bronze Age/early Iron Age enclosure at the Chalet Site as a burial ground is open to debate. It is clear, however, that the overriding intention was to place the dead in a location associated with spirituality, the supernatural and ancestors: a suitable place in the physical and metaphysical landscape for new ancestors to inhabit. Despite the socio-political implications of the reuse of monuments, the practice was not necessarily always carried out to achieve any kind of legitimisation; the foremost thought in the minds of those selecting an ancient monument as a new burial ground may have been the well-being of the dead. Of course, the paradigm that made ancient monuments suitable locations for burial grounds may have been deliberately manufactured for political means. There does indeed appear to be some

kind of Anglo-Saxon obsession with the historical landscape and its supernatural qualities as Shook (1960) demonstrates in his comparison of the Anglo-Saxon poetic rendering of the life of St Guthlac, *Guthlac A*, with the earlier, Felix's *Vita Sancti Guthlaci*. The Anglo-Saxon version centres strongly on the struggle between Guthlac and the demons that formerly occupied the barrow that the saint has chosen to inhabit as his anchoritic dwelling; Felix's concern regarding the struggle between saint and demons is the liberty of Guthlac's soul rather than the occupancy of a barrow (Shook 1960, 8–9).

Different elements of the historic site might have influenced the layout of the Saxon period burial ground. Lucy (2002, 85) describes the cemetery at West Heslerton in East Yorkshire, where an Anglo-Saxon cemetery was located in an area containing a Neolithic hengiform enclosure, a Bronze Age barrow and an Iron Age pit alignment. At this site there was clear differentiation in the locations in which different individuals were buried. It was observed in the southern half of the cemetery that females, young individuals or burials that were flexed or crouched were more likely to be buried within the barrows or ditches, or within the enclosures whereas weapon burials and extended burials were located in other areas (Lucy 2002, 85). Despite some cremations being placed within the Phase 2 enclosure and some outside of it, no clear patterning of this kind is evident at the Chalet Site. This is in part due to the evidence required for the identification of sex being lacking amongst the cremations. This suggests that differentiation in burial location may have been practised but it is archaeologically unidentifiable. It is, however, possible to recognise a high probability that the form of the late Bronze Age/early Bronze Age enclosure influenced the form of the Anglo-Saxon period cemetery as evidenced by the recutting of Ditch F1843 by Ditch F1165=F1612. Furthermore, the zigzagged line of Anglo-Saxon features, formed by Ring-Ditch F1214, Sub-Circular Enclosure Ditch F1233=F1212=F1222 and Ditches F1165, F1263 and F1220, that traversed the site from north to south broadly followed the line of Phase 2 Ditches F1274=F1224=F1234 and F1273= F1235 Anglo-Saxon Cremation Pit F1840 (C1839) was cut in to the backfill of Phase 2 Pit F1859 and the presence of 434g of Anglo-Saxon pottery in the fill of Phase 2 Ditch F1224 may represent the plough-damaged remains of a cremation vessel deposited in to a pit cut into the backfill of the earlier feature. The placing of Anglo-Saxon inhumation graves cut into filled in ditches of Iron Age date has been recorded at the Anglo-Saxon cemetery at Edix Hill in Cambridgeshire (Malim and Hines 1998, 20, fig. 7.2). This may suggest that the placing of cremations into the backfills of Phase 2 features at the Chalet Site was carried out deliberately.

Like many of the Anglo-Saxon burial practices identified at the Chalet Site, the reuse of an earlier site as a burial ground is attested at several other locations. This may be considered to be representative of an overall conformity within early Anglo-Saxon burial comprising of a variety of different practices, a selection of which may be expected to be identifiable at any given site.

The post-medieval features

It is not possible to reconcile the post-medieval features that were recorded at the Chalet Site with any features shown on the historic maps of the site. This may be because these features predated the cartographic evidence. Given Vaughan and Grassam's (2005, 11) suggestion that the cartographic evidence indicates that the site was marshy in the late 18th century, but had been improved by the 19th century, and the alignment of the major Phase 4 features leading to the Heybridge Creek to the west, it appears that the features of this date were primarily associated with drainage.

Acknowledgements

Archaeological Solutions would like to thank Redrow Homes Ltd for commissioning the excavation.

AS also gratefully acknowledges the assistance of Pat Connell at Essex County Council Historic Environment Management.

Peter Thompson would like to thank Sarah Percival of NAU Archaeology for advice on identification and bibliography for the prehistoric pottery, Sue Tyler of the Essex Historic Environment, County Council for advice on Saxon fabrics and dating, and Diana Briscoe of the Archive of Anglo-Pottery Stamps for recording and comparing the stamps with her database.

The archive records from the excavation, with an inventory, will be deposited with the finds from the site at Colchester Museum.

The excavation was directed by Chris Pole on behalf of AS; the project was managed for AS by Jon Murray. Finds were coordinated by Claire Wallace. Graphics for this report were produced by Tansy Collins; illustrations are by Caroline George. The pottery was analysed by Peter Thomson, the flint by Martin Tingle, the fired clay and Ceramic Building Materials by Andrew Peachey, the ceramic, metal and glass small finds by Nina Crummy, the cremated bone by Carina Phillips and the bulk environmental samples by Ruth Pelling.

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Bibliography

Allen, C.S.M., Harman, M. and Wheeler, H. 1987, Bronze Age cremation cemeteries in the East Midlands, *Proceedings of the Prehistoric Society 53*, 187–221

Andrefsky, W. 1998, *Lithics. Macroscopic approaches to analysis*, Cambridge University Press, Cambridge

Arnold, C.J. 1988, *An archaeology of the early Anglo-Saxon kingdoms*, Routledge, London and NewYork

Atkinson, M. and Preston, S.J. 1998, 'The Late Iron Age and Roman Settlement at Elms Farm, Heybridge, Essex, Excavations 1993–5: An Interim Report', *Britannia* XXIX, 85–110

Atkinson, M. and Preston, S.J. 2001, 'Prehistoric settlement and burials at Elms Farm, Heybridge', *Essex Archaeology and History*, 42–74

Baker, B.J., Dupras, T.L. and Tocheri, M.W. 2005, *The Osteology of Infants and Children,* Texas A & M University Press

Barford, P.M. 1995, 'Fired clay' in J.J. Wymer and N.R. Brown, *Excavations at North Shoebury: settlement and economy in south-east Essex 1500 BC–AD 1500*, East Anglian Archaeology 75 (Chelmsford), 125–7

Barrett, J. 1980, 'The Pottery of the Later Bronze Age in Lowland England', *Proceedings of the Prehistoric Society* 46, 297–319

Barton, K.J. 1962, 'Settlements of the Iron Age and Pagan Saxon Periods at Linford', *Essex Transactions of the Essex Archaeological Society* 1 (2), 57–104

Boardman, S. and Jones, G.E.M. 1990, 'Experiments on the effects of charring on cereal plant components', *Journal of Archaeological Science* 17, 1–11

Bond, J.M. 1996, 'Burnt offerings: animal bone in Anglo-Saxon cremations, *World Archaeology* 28 (1), 76–88

Bradley, R. 1993, *Altering the earth: the origins of monuments in Britain and continental Europe*, Society of Antiquaries of Scotland Monograph Series 8

Bradley, R., Lobb, S., Richards, J. and Robinson, M. 1980, 'Two Late Bronze Age settlements on the Kennet Gravels', *Proceedings of the Prehistoric Society* 46, 217–295

Brickley, M. and McKinley, J. 2004, *Guidelines to the Standards for Recording Human Remains*. Institute of Field Archaeologist Paper No. 7, BABAO, 9–14

Briscoe, T. 1981, 'Anglo-Saxon Pot Stamps' in Brown D., Campbell J., and Hawkes S. (eds.) Anglo-Saxon Studies in Archaeology and History 2, *BAR British Series* 92, 1–37

Brown, N. 1987, 'Prehistoric Pottery' in Milton B. (ed) Excavations at Barrington's Farm, Orsett Cock, Thurrock, Essex 1983, *Essex Archaeology and History* (1987), 16–33

Brown, N. 1988, 'A Late Bronze Age Enclosure at Lofts Farm, Essex' *Proceedings of the Prehistoric Society 54,* 249–302

Brown, N. 1992, 'The Prehistoric Pottery' in Bedwin O. (ed.) Early Iron Age Settlement at Maldon and the Maldon 'Burh': Excavations at Beacon Green 1987, *Essex Archaeology and History* 23 (1992), 10–24

Brown, N. 1995a, 'Prehistoric Pottery' in Atkinson (ed.) A Late Bronze Age enclosure at Broomfield, Chelmsford, *Essex Archaeology and History* 26, 1–24

Brown, N. 1995b, 'Prehistoric Pottery' in Ecclestone J. (ed.) 'Early Iron Age settlement at Southend: excavations at Fox Hall Farm', 1993 *Essex Archaeology and History* 26, 24–37

Brown, N. 1995c, 'The Prehistoric Pottery' in Wymer J.J. and Brown N.R. (eds.) *Excavations at North Shoebury: settlement and economy in south-east Essex 1500 BC–AD 1500*, East Anglian Archaeology Report No. 75

Brown, N. 1997, 'Prehistoric pottery' in Langton B. and Holbrook N. (eds.) 'A prehistoric and Roman occupation and burial site at Heybridge: excavations at Langford Road, 1994' *Essex Archaeology and History* 28, 12–46

Brown, N. 1998, *'Prehistoric Pottery'* in Wallis S. and Waughman M. (eds*) Archaeology and the Landsacape in the Lower Blackwater Valley*, East Anglian Archaeology Report No. 82

Brown, N. 2001, 'Pottery' in Atkinson M. and Preston S (eds) Prehistoric settlement and burials at Elms Farm, Heybridge, *Essex Archaeology and History* 32, 42–74

Brown, N. and Lavender N.J. 1994, 'Later Bronze Age sites at Great Baddow and settlement in the Chelmer valley, Essex, 1500 to 500 BC', *Essex Archaeology and History* 25, 3–13

Brown, N. and Adkins, P. undated, *Heybridge Basin*, Essex County Council

Brück, J. 1995, 'A place for the dead: the role of human remains in Late Bronze Age Britain', *Proceedings of the Prehistoric Society* 61, 245–277

Buikstra, J.E. & Swegle, M. 1989, 'Bone Modification Due to Burning: Experimental Evidence' in Bonnischen, R. and Sorg, M.H. (eds.). *Bone modification*. Orono: Peopling of the Americas Publications, Center for the Study of the First Americans, Institute for Quaternary Studies, University of Maine, 247–258.

Buikstra, J.E & Ubelaker, D.H. 1994, *Standards for Data Collection from Human*

Skeletal Remains, Arkansas Archaeological Survey Report No. 44, Fayeteville, Arkansas

Carruthers, W. 2006, *Stansted airport: the charred, mineralised and waterlogged plant remains* (unpublished report for Oxford Archaeology)

Chadwick, N. 1965, 'England is Celtic too!', *Irish Digest* lxxxii, 77–80

Champion, T., 1980, 'Settlement and environment in Later Bronze Age Kent' in J. Barrett and R. Bradley, *The British Later Bronze Age*, BAR British Series 83 (Oxford), 223–246

Clapham, A.R., Tutin, T.G. &. Moore, D.M. 1989, *Flora of the British Isles*, 3rd ed., Cambridge University Press, Cambridge

Cleal, R. 1999, 'The What, When and Why of Grooved Ware' in Cleal, R. and MacSween, A. (eds.) *Grooved Ware in Britain and Ireland: Neolithic Studies Group Seminar Paper 3*, Oxbow (Exeter)

Court, R. and Mepham L. 2004, 'Pottery' in Manning, A. and Moore, C. (eds.) 'A Late Bronze Age site at Springfield Park, Chelmsford', *Essex Archaeology and History* 34, 19–35

Couldrey, P. 1984, 'Late Bronze Age and Iron Age Pottery in the Prehistoric, Roman and Saxon Sites at Darenth' in Philip, B. (ed.) *Excavations in the Darent Valley,* 4th Research Report in the Kent Monograph Series, Kent Archaeological Rescue Unit, 123–127.

Crabtree, P. 1995, 'The Symbolic role of animals in Anglo-Saxon England' in Ryan, K, and Crabtree, P. *The Symbolic Role of Animals in Archaeology*. Philadelphia: MASCA. University of Pennsylvania Museum of Archaeology and Anthropology

Cunliffe, B. 1975, *Iron Age Communities in Britain*, Book Club Associates, London

Cunliffe, B. 1982, 'Social and Economic Development in Kent in the Pre-Roman Iron Age' in Leach, P E (ed.) *Archaeology in Kent to AD 1500* Council for British Archaeology Res. Rev. 48

Cunliffe, B. 2005, *Iron Age Communities in Britain* (4th edition). London and New York, Routledge

Davies, D.J. and Mates, L.H. 2006, *Encyclopaedia of Cremation*, Ashgate Publishing Ltd

Down, A and Welch, M. 1990, *Chichester Excavations VII; Apple Down and the Mardens*, Chichester District Council, Chichester

Drury, P.J. 1980, 'The early and middle phases of the Iron Age in Essex' in Buckley, D.G. (ed.) *Archaeology in Essex to AD 1500*, The Council for British Archaeology Research Report No 34, 47–7

Drury, P.J. 1978, *Excavations at Little Waltham 1970–71*, Council for British Archaeological Research Report 26, Chelmsford Excavation Committee Report 1

Drury, P.J. and Wickenden, N.P. 1982, 'An Early Saxon Settlement within the Romano-British Small Town at Heybridge, Essex' *Medieval Archaeology 26*

Essex County Council Historic Environment Branch, 2008, *Maldon District Historic Environment Characterisation Project*, Essex County Council Historic Environment Branch

Evans, A.C. 1989, *The Sutton Hoo Ship Burial*, British Museum Publications, London

Evans, C. 2003, *Power and island Communities: Excavations at Wardy Hill Ringwork, Coveney, Ely*, East Anglian Archaeology 103, 145–183

Evison, V.I. 1994, 'An Anglo-Saxon cemetery at Great Chesterford', *Essex CBA Research Report* 91

Fell, C.I. 1953, 'An Early Iron Age Settlement at Linton, Cambridgeshire' *Proceedings of the Cambridge Antiquarian Society* 46 (1952), 31–42

Ferembach, D., Schwidetsky, I. and Stloukal, M. 1980, *Recommendations of Age and Sex Diagnoses of Skeletons*, Journal of Human Evolution 9, 517–549

Filmer-Sankey, W. 1999, 'Snape Anglo-Saxon Cemetery: The current state of knowledge' in Carver, M.O.H. *The Age of Sutton Hoo*, Boydell Press

Filmer-Sankey, W. and Pestell, T. 2002, *Snape Anglo-Saxon Cemetery: Excavations and Surveys 1824–1992*, East Anglian Archaeology Volume 95

Fitzpatrick, A. 1997, *Archaeological Excavations on the Route of the A27 Westhampnett Bypass, West Sussex, volume 2: The Iron Age, Romano-British and Anglo-Saxon Cemeteries, 65–6*, Salisbury, Wessex Archaeology Report 12

Garwood, P. 1999, 'Grooved Ware in Southern Britain: Chronology and interpretation' in Cleal, R. and MacSween, A. (eds.) *Grooved Ware in Britain and Ireland: Neolithic Studies Group Seminar Paper 3*, Oxbow

Genrich, A. 1981, *Die Altsachsen*, Lax, Hildesheim

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

Gibson, A. & Wood A. 1997, *Prehistoric Pottery for the Archaeologist*, Leicester University Press

Gilman, P.J. (ed.) 1994, 'Archaeology in Essex 1993', *Essex Archaeology and History* 25, 239–57

Gilman, P.J. and Bennett, A. (eds.) 1995, 'Archaeology in Essex 1994', *Essex Archaeology and History* 26, 238–58

Goodyear, F.H. 1971, *Archaeological Site Science*, Heinemann Educational Books Ltd, London

Guido, M. 1999, *The glass beads of Anglo-Saxon England, c. AD 400–700*, Woodbridge

Hamerow, H. 1993, *Excavations at Mucking Volume 2: the Anglo-Saxon Settlement Excavations by MU and WT Jones*, English Heritage Archaeological Report No. 21

Hamerow, H., Hayden, C. and Hey, G. 2007, 'Anglo-Saxon and Earlier Settlement near Drayton Road, Sutton Courtenay', *Berkshire Archaeological Journal* 164, 109–96

Harman, M. 1989, 'Cremations' in Kinsley, A.G., *The Anglo Saxon Cemetery at Millgate, Newark-on-Trent, Nottinghamshire*, Nottinghamshire Archaeology Monograph 2, 23–25

Healy, F. 1996, *The Fenland Project, Number 11: The Wissey Embayment: Evidence for Pre-Iron Age Occupation Accumulated Prior to the Fenland Project*, East Anglian Archaeology Report No. 78

Higham, N. 1992, *Rome, Britain and the Anglo-Saxons*, Seaby, London

Hingley, R. 1990, 'Boundaries surrounding Iron Age and Romano-British settlements', *Scottish Archaeological Review* 7, 96–103

Haselgrove, C. and Pope, R. 2007, 'Characterising the Earlier Iron Age' in Haselgrove, C. and Pope, R. (eds.) *The Earlier Iron Age in Britain and the near continent*, Oxbow, Oxford

Holck, P. 1986, *Cremated Bones: a medical-anthropological study of an archaeological material on cremation burials*, University of Oslo, Oslo, Anthropologiske Skrifter 1

Holgate, R. 1996, 'Essex 4000–1500 BC' in Bedwin O. (ed.) *The Archaeology of Essex Proceedings of the Writtle Conference*, Essex County Council Planning Department, Chelmsford 1–25

Hunter, J. 1999, *The Essex Landscape; a study of its form and history*, Essex Record Office Publications, Chelmsford

Keys, L. 1998, 'Wooden vessels' in G. Egan, *The medieval household*, Medieval Finds from Excavations in London 6, London, 196–217

King, J.E. unpublished, 'Animal Bone from the Anglo-Saxon Cemetery at Illington'

Kinnes, I. 1978, 'The Earlier Prehistoric Pottery' in Hedges J. and Buckley D. (eds) 'Excavations at a Neolithic Causewayed Enclosure, Orsett, Essex, 1975', *Proceedings of the Prehistoric Society*, 44, 259–308

Lally, M. 2008, 'Bodies of Difference in Iron Age southern England' in Davies, O., Sharples, N. and Waddington, K. (eds.) *Changing perspectives on the first millennium BC*, Oxbow Books, Oxford

Last, J. 2004, 'Prehistoric Pottery' in Gibson C. *Lines in the Sand: Middle to Late Bronze Age Settlement at Game Farm, Brandon,* East Anglian Archaeology Occasional Paper No. 19, 2004

Lavender, N.J. 1991, 'A Late Iron Age Burial Enclosure at Maldon Hall Farm, Essex: Excavations 1989', *Proceedings of the Prehistoric Society* 57 (2), 203–209

Lethbridge, T.C. 1931, 'Recent excavations in Anglo-Saxon cemeteries in Cambridgeshire and Suffolk', *Proceedings Cambridge Antiquarian Society*, Quarto Publication 3

Longley, D. 1991, 'The Late Bronze Age Pottery' in Needham S. (ed.) *Excavations and Salvage at Runneymede Bridge, 1978: The Late Bronze Age Waterfront Site*, English Heritage

Longworth, I.H. 1984, *Collared Urns of the Bronze Age In Great Britain and Ireland*, Cambridge University Press

Longworth, I.H. and Cleal, R. 1999, 'Grooved Ware Gazetteer' in Cleal, R. and MacSween, A. (eds) *Grooved Ware in Britain and Ireland*. Neolithic Studies Group Seminar Paper 3, Oxbow

Lucy, S. 2000, *The Anglo-Saxon Way of Death*, Sutton Publishing Ltd, Stroud

MacGregor, A. and Bolick, E. 1993, *A summary catalogue of the Anglo-Saxon collections in the Ashmolean Museum (non-ferrous metals)*, BAR British Series 230, Oxford

Major, H. 1988, 'Fired clay', in N. Brown, 'A Late Bronze Age enclosure at Lofts Farm, Essex', *Proceedings of the Prehistoric Society* 54, 249–302

Malim, T. and Hines, J. 1998, *The Anglo-Saxon cemetery at Edix Hill (Barrington A), Cambridgeshire*, CBA Research Report 112, York

Manby, T.G. 1980 'Settlement in Eastern Yorkshire' in Barrett, J. and Bradley, R. (eds.) *Settlement and Society in British Later Bronze Age*, BAR (British Series) 83

Manchester, K. 1976, 'The human remains' in Mayes, P and Dean, M.J. 'An Anglo-Saxon Cemetery at Baston, Lincolnshire' *Occasional Papers in Lincolnshire History and Archaeology*

Mays, S. 2000, *The Archaeology of Human Bones,* Routledge, London

McConnell, D., Mundin, A. and Grassam, A. 2006, *Chalet Site, Hall Rd, Heybridge, Maldon, Essex: an archaeological trial trench evaluation.* Archaeological Solutions unpublished report no. 2094

McKinley, J.I. 1993, 'Bone Fragment Size and Weights of Bone from Modern British cremations and the Implications for the Interpretation of Archaeological Cremations', *International Journal of Osteoarchaeology* 3, 283–287

McKinley, J.L. 1994a, *The Anglo-Saxon cemetery at Spong Hill, North Elmham. Part VIII: The cremations*, East Anglian Archaeology 69

McKinley, J.L. 1994b, 'Cremated bone' in Timby, J.R. 'Sancton 1 Anglo-Saxon Cemetery excavations carried out between 1976 and 1980', *Archaeological Journal* 150, 243–365

McKinley, J.L. 1994c, 'Bone fragment size in British cremations: have we missed something?' *Antiquity* 68, 132–4

McKinley, J.I. 1997a, 'Bronze Age barrows and funerary rites and rituals of cremation', *Proceedings of the Prehistoric Society* 63, 129–145

McKinley, J.I. 1997b, 'The Cremated Human Bone from Burial and Cremation-related Contexts' in Fitzpatrick, A. *Archaeological Excavations on the Route of the A27 Westhampnett Bypass, West Sussex, volume 2: The Iron Age, Romano-British and Anglo-Saxon Cemeteries, 65–6*, Salisbury: Wessex Archaeology Report 12, 55–73

McKinley, J.I. 2001, 'Cremated Bone' in Brothwell, D.R. and Pollard, A.M. *Handbook of Archaeological Sciences*, John Wiley & Sons Ltd

McKinley, J.L 2007, 'Cremation burial 1296' in Gibson, C. 'Minerva: An Early Anglo-Saxon Mixed Rite Cemetery in Alwalton, Cambridgeshire', Early Medieval Mortuary Practices, *Anglo-Saxon Studies in Archaeology and History 14*, 238–350

Megaw, J.V.S. and Simpson, D.D.A. 1988, *Introduction to British Prehistory*, Leicester University Press, Leicester

Murphy, P. 1994, 'The Anglo-Saxon landscape and rural economy: some results from sites in East Anglia and Essex' in J. Rackham (ed.) *Environment and Economy in Anglo-Saxon England: a Review of Recent Work on the Environmental Archaeology of Rural and Urban Anglo-Saxon Settlements in England: Proceedings of a Conference Held at the Museum of London, 9–10 April 1990* (York, 1994), 23–39

Myres, J.N.L. 1977, *A Corpus of Anglo-Saxon Pottery of the Pagan Period* Volumes 1 and 2 Cambridge University Press

Myres, J.N.L. and Green, B. 1973, *The Anglo-Saxon Cemeteries of Caistor-by-Norwich and Markshall Norfolk,* Society of Antiquaries of London, Thames and Hudson

Newton, A.A.S. 2008, *Excavation of land at Black Horse Farm, Old Great North Road, Sawtry, Cambridgeshire: Research Archive Report*, Archaeological Solutions Ltd unpublished report number 2999

O'Connor, T. 2007, *Heybridge Historic Settlement Assessment Report*, Essex County Council/Maldon District Council

Pole, C. 2007, *The Chalet Site, Hall Road, Heybridge, Essex: an interim report,* Archaeological Solutions Ltd unpublished report number 2877

Pelling, R. 2003, 'Early Saxon cultivation of Emmer wheat in the Thames Valley and its cultural implications' in K.A. Robson Brown (ed) *Archaeological Sciences 1999: Proceedings of the Archaeological Sciences Conference, University of Bristol, 1999*, BAR International Series 1111, 103–110

Pelling, R. and Robinson M. 2001, 'Saxon Emmer Wheat from the Upper and Middle Thames Valley, England', *Environmental Archaeology* 5, 117–119

Perkin, D., MacPherson-Grant N. & Healey E. 1994, 'Monkton Court Farm Evaluation 1992', *Archaeologia Cantiana* 237–314

Percival, S. c.2000, 'The Pottery' in Davies and Williams *Land of the Iceni,* Centre of East Anglian Studies

Petersen, F. F. 1981, *The excavation of a Bronze Age cemetery on Knighton Heath, Dorset*, BAR (British Series) 98, Oxford

Philip, B. 1984, The Prehistoric, Roman and Saxon sites at Darenth

Piontek, J. 1976, 'The process of cremation and its influence on the morphology of bones in the light of results of experimental research', *Archeologia Polski* t..XXIZZ, 254–280

Priddy, D. (ed.) 1984/5, 'Excavations in Essex 1983/4', *Essex Archaeology and History* 16, 123–39

Richards, J.D. 1987, *The significance of form and decoration of Anglo-Saxon cremation urns*, BAR (British series) 166

Robertson, A, 2003, *Chappel Farm, Little Totham; archaeological excavation – Phase 1*, Essex County Council Field Archaeology Unit

Robertson, A. 2007, 'Boreham, Old Hall and General's Farm' in Bennett, A. and Havis, R. (eds.), 'Archaeology in Essex 2006', *Essex Archaeology and History* Vol 38, 166–90

Roy, M. 2003, *39–45 Crescent Road, Heybridge, Essex; archaeological evaluation*, Essex County Council Field Archaeology Unit

Scheuer, L. and Black, S. 2004, *The Juvenile Skeleton*, Elsevier Academic Press, London

Semple, S. 1998, 'A fear of the past: the place of the prehistoric burial mound in the ideology of middle and later Anglo-Saxon England', *World Archaeology* 30 (1), 109–126

Shipman, P., Foster, G. and Schoeninger, M. 1984, 'Burnt Bones and Teeth: an Experimental Study of Colour, Morphology, Crystal Structure and Shrinkage', *Journal of Archaeological Science* 11, 307–325

Shook, L.K. 1960, 'The Burial Mound in "Guthlac A"', *Modern Philology* 58 (1), 1–10

Stirland, A. 1999, *Human Bones in Archaeology*, Shire Publications, Princes Risborough

Stoodley, N. 2002, 'Multiple Burials, Multiple Meanings? Interpreting the Early Anglo-Saxon Multiple Interment' in Lucy, S. and Reynolds, A.J., *Burial in Early Medieval England and Wales*, The Society for Medieval Archaeology, London

Taylor, A. 2001, *Burial Practice in Early England*, Tempus, Stroud

Thomas, R. 1997, 'Land, Kinship relations and the rise of enclosed settlement in first millennium BC Britain', *Oxford Journal of Archaeology* 16 (2), 211–218

Trotter, M and Hinxton, B.B. 1974, 'Sequential changes in weight, density and percentage ash weight of human skeletons from an early foetal period through to old age', *Anatomical Record* 179, 1–18

Tyler, S. 2008, 'Pottery' in Ennis, T. (ed.) 'An Early Saxon Cemetery at Rayleigh, Essex', *East Anglian Archaeology* Report 127

Tyler, S. and Hilary, M. 2005, *The Early Anglo-Saxon Cemetery and Later Saxon Settlement at Springfield Lyons Essex*, East Anglian Archaeology Report No. 111

Vaughan, T. & Grassam, A. 2005, *The Chalet Site, Hall Road, Heybridge, Maldon, Essex; an archaeological desk-based assessment*, Archaeological Solutions Ltd unpublished report number 1826

Wahl, J. 1982, 'Leichenbrändun ter suehungen tin Uberbluck uber die Bearbeitungs und Aussagge-Möglichkerten von Brandgräber' *Praehistorische zeitschrift* 57 (i), 1–125

Walker, P. L. and Miller, K.P. 2005, 'Time, temperature, and oxygen availability: an experimental study of the affects of environmental conditions on the color and organic content of cremated bone', *American Journal of Physical Anthropology*, Supplement 40, 222

Wallis, S. 1998, 'Chapter 2. Excavations at Slough House Farm' in Wallis, S. and Waughman, M., *Archaeology and the Landscape in the lower Blackwater Valley*, East Anglian Archaeology 82

Wallis, S. and Waughman, M. 1998, *Archaeology and the Landscape in the lower Blackwater Valley*, East Anglian Archaeology 82

Ward-Perkins, B, 2000, 'Why did the Anglo-Saxons not become more British?', *The English Historical Review*, Vol. 115 No. 462, 513–533

Welch, M. 1992, *Anglo-Saxon England*, English Heritage/BT Batsford, London

West, S. 1985, *West Stow: the Anglo-Saxon village*, East Anglian Archaeology 24

White, D.A. 1982, *The Bronze Age cremation Cemeteries at Simons Ground, Dorset*, Dorchester, Dorset Natural History and Archaeological Society Monograph Series No. 3

Wickenden, N.P. 1986, 'Prehistoric settlement and the Roman-British small town at Heybridge, Essex', *Essex Archaeology and History* 17, 7–68

Wilkinson, L. Unpublished, *An Anglo-Saxon cemetery at Loveden Hill, Lincolnshire*

Wilkinson, L. 1980, 'Problems of analysis and interpretation of skeletal remains', in *Anglo-Saxon cemeteries 1979; fourth Anglo-Saxon Symposium at Oxford* in Rahtz, P., Dickinson, T. and Watts, L. (eds) British Archaeological Report series 82, 221–231

Williams, H. 1997, 'Ancient Landscapes and the Dead: The Reuse of Prehistoric and Roman Monuments as Early Anglo-Saxon Burial Sites', *Medieval Archaeology* 41, 1–32

Williams, H. 1998a, 'Monuments and the past in early Anglo-Saxon England', *World Archaeology* 30 (1), 90–108

Williams, H. 1998b, 'Ancient Landscapes and the dead: the reuse of prehistoric and Roman monuments as early Anglo-Saxon burial sites', *Medieval Archaeology* 41, 1–32

Williams, H. 2001, 'An Ideology of Transformation: Cremation Rites and Animal Sacrifice in early Anglo-Saxon England' in N. Price (ed.) *The Archaeology of Shamanism*, Routledge, London, 193–212

Williams, H. 2005, 'Keeping the dead at arm's length: memory, weaponry and early medieval mortuary technologies', *Journal of Social Archaeology* 5 (2), 253–275

Williams, P.W. 1983, *An Anglo-Saxon Cremation Cemetery at Thurmaston, Leicestershire,* Leicestershire Museums Publication, Leicester County Council

Essex Archaeology and History 39 (2008), 124–135

A Roman Road and a Late Iron Age and Romano-British settlement in The Rodings

Peter Sharp

With contributions by Peter Morris

This article summarises the results of fieldwork (both geophysics and fieldwalking) and evidence from aerial photography to clarify the exact course of a missing section of Roman road in The Rodings, and to plot a range of linear features interpreted as contemporary fields, trackways and centres of occupation, adjacent to the road.

INTRODUCTION

Among the Roman roads in Essex, one identified by Margary (1973, 253: M30), from Clapton in East bcLondon to Great Dunmow, has received little recent study. This article focuses on a section towards the northern end of the road, and its relation to an extensive roadside settlement, which almost certainly had its origins in the late Iron Age.

Margary describes the course of the road (Fig.2) from Clapton to Great Dunmow (49km long), identifying it with parish boundaries, hedgerows and some stretches of modern road. The Roman road itself has been excavated at a number of places towards its southern end: Harvey (1970, 127) traced it at various points near Chigwell, Abridge and Woodford Bridge. He describes one section as '30 feet (9.6m) wide, made of flints bedded on clay, another stretch as '21–25 feet (6.75–8m) wide'. The most recent identification comes from Leyton in East London, where excavation uncovered a well-preserved road, 6m wide, oriented north-east to south-west (English Heritage 2005, 59–75). It lay on the alignment suggested by Margary, with flanking ditches 2m wide on each side.

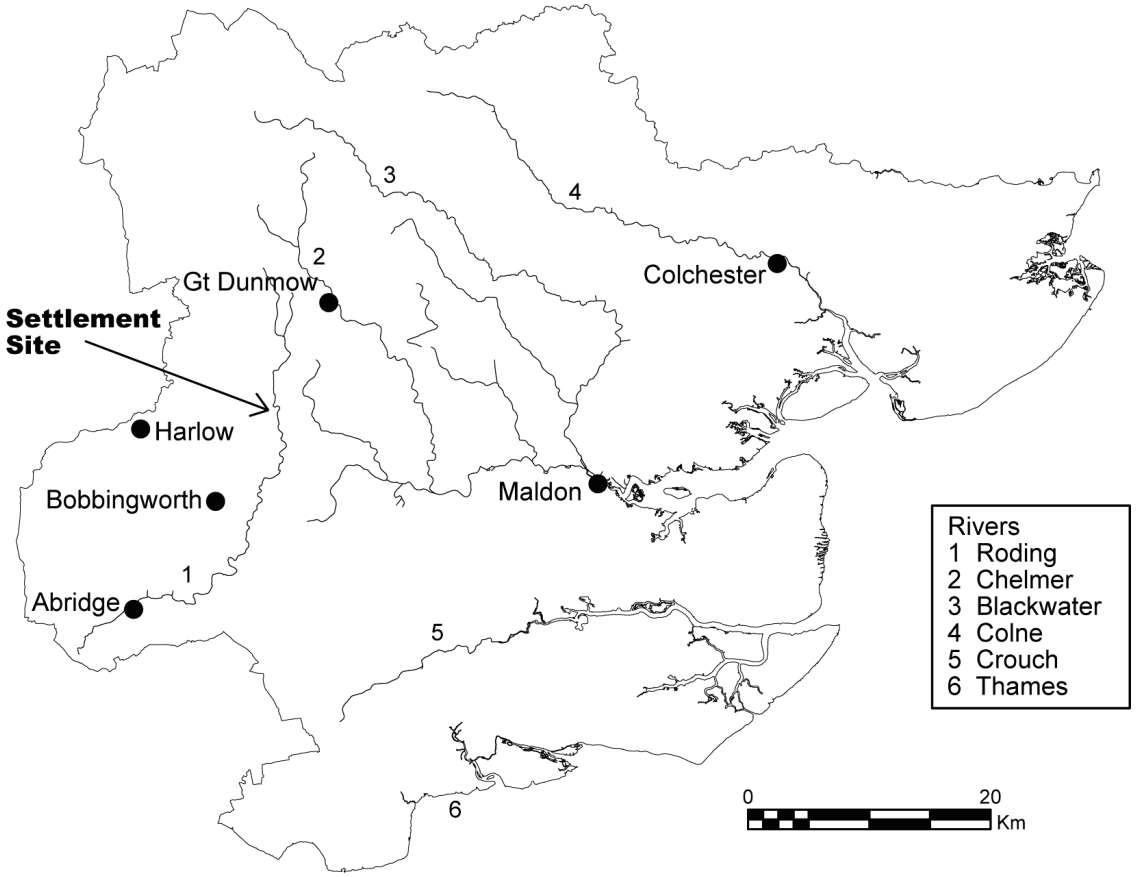

Fig. 1 Leaden Roding. Location map showing the study area and places mentioned in the text

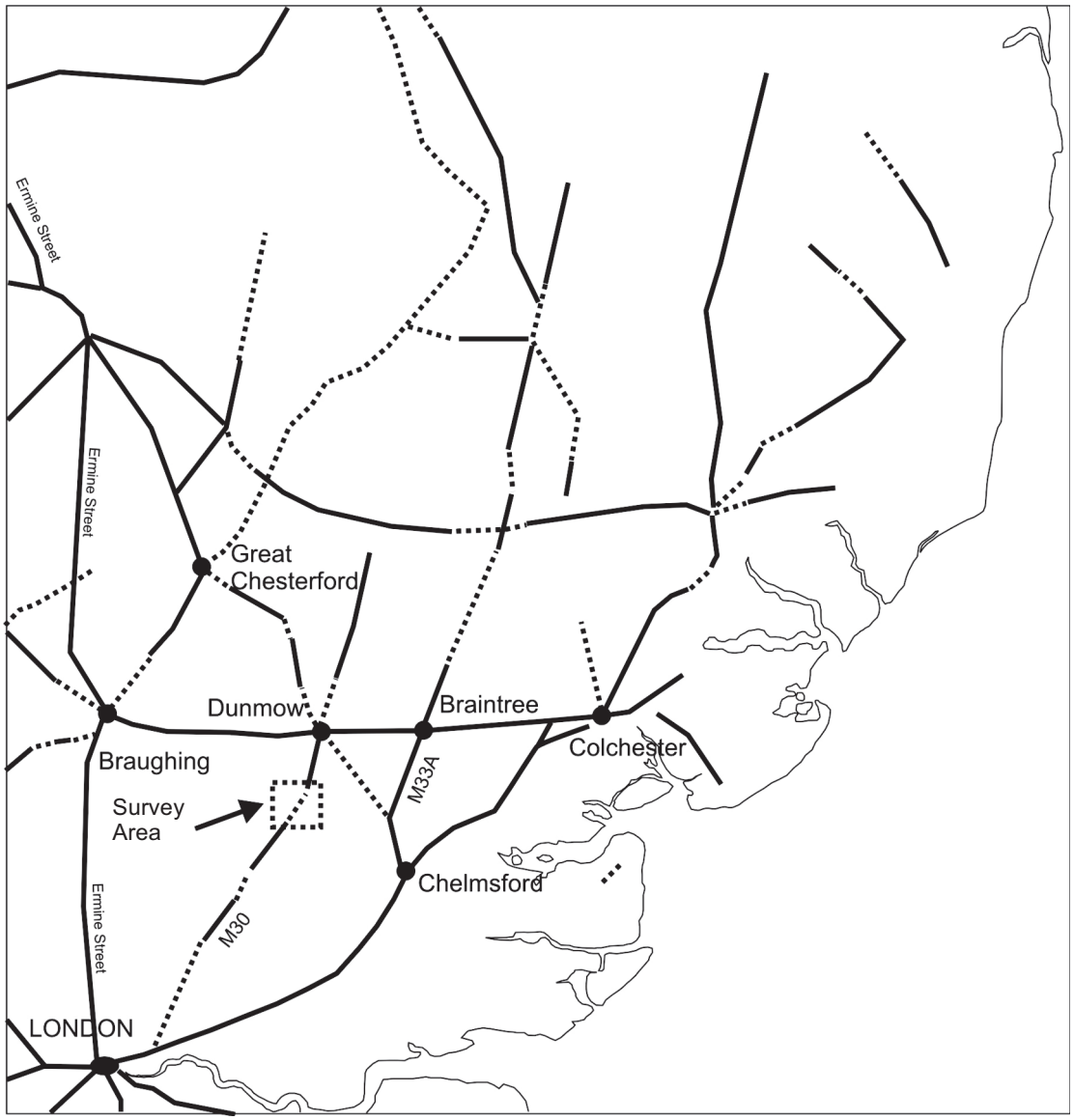

Fig. 2 Leaden Roding. Roman road network in Essex and Suffolk (not to scale)

Part of the northern route of this road has a missing section of about 3.05km, where the road should cross the River Roding (Fig.3; TL 584 136), in Leaden Roding. This article presents the findings from an extensive field survey (both geophysics and fieldwalking) and evidence from aerial photography to clarify the exact course of the road at this point. The geophysical survey also identified for the first time a range of linear features interpreted as contemporary fields, trackways and centres of occupation, adjacent to the road. The fieldwork was carried out between 1995 and 2005; it was begun by the late Peter Cott (to whom this paper is dedicated), who invited the authors to help him in his research.

The Roman Road and its approaches to the missing section

From the south

Beyond Abridge (Fig.1: TQ 464975), the Roman road is clearly defined on Ordnance Survey Landranger map 167 northwards to Abbess Roding and clearly visible on satellite photography e.g. www.Googleearth.com. The north end of this section of road is located about 1.75km south of the River Roding, and 500m north of Green Hill Farm (TL 573 122: Fig. 3).

From the north

The northern section of the Roman road extends in a virtually straight line from just south of Great Dunmow (TL 618 205) in a south to south-west direction for 6.5 km. The modern road maintains the line, which is clearly defined on Ordnance Survey map, 167. The southern end of the northern section ends in Aythorpe Roding village (TL 591 145: Fig 3), about 1.3km from the River Roding. Field boundaries/ditches indicate that the road continued southward on its original alignment for at least a further 400m.

The road from Abridge to Great Dunmow follows high ground throughout, except where it crosses Cripsey Brook at Moreton and the River Roding, at Leaden Roding, probably making it useable at most times throughout the year.

Topography of the missing section

The River Roding flows south with a number of small tributaries joining it before it reaches the area of the missing road link (Figs 1 and 3). The river varies in width at this point from 3.2m to 5.75m and in depth from 0.3m to 1m flowing throughout the year. As it approaches the area of the projected road crossing, the river turns sharply from due south, eastwards for some 650m before taking a southerly course, then south-westerly, forming a rough semi-circular shape, some 550m from north to south. The river flows some 250m south-west before it reverts to its southerly course to the River Thames. The current of the river at the northern end of the bend has cut into its eastern bank and now flows about 100m east of an earlier course. The southern section of the bend was canalised in the 1930's. (K. Pavitt pers. com.). The river appears to have been forced eastwards by a substantial outcrop of 'head gravel' found on the inside of the semi circular shape, forming a land promontory. The promontory rises westwards from close to the river at 60m above O.D. to about 68m above O.D. for about 750m before it merges with a plateau. A shallow valley with a ditch defines the southern side of the promontory. The ditch carries a substantial year round spring fed watercourse. Until 1985 a parallel ditch about 60m to its north was located. The former ditch can be seen as an anomaly on geophysics survey Fig. 7 and an interpretation of the geophysics Fig.8. The head gravel outcrop with a varying mixture of boulder clay on the surface, forms a thumbnail shape on the promontory, surrounded by boulder clay. Close to the centre point of the western end of the thumbnail, a further year round spring (Fig. 8) was located (K.Pavitt pers. com). The mixture of head gravel and boulder clay provides a well-drained surface throughout the year.

The boulder clay provides The Rodings with one of the highest crop yielding areas in Great Britain; it was only surpassed with the drainage of the Fens.

The availability of river water on three sides of the promontory, complemented by two year round fresh water springs and well-drained ground provided a suitable area for a settlement.

Other than small pockets of gravel and the wide scatter of glacial erratics, predominately Yorkshire grit, there are no natural building materials in the district other than degenerating organics. There are indications The Rodings area in the Late Iron Age was substantially clear of woodland due to its soils high yielding crops (Ordnance Survey Map, Roman Britain 2001).

The Missing Section

To help establish the possibility of the south and north sections of the Roman road joining, the existing alignments of the road were extended diagrammatically to the River Roding. It was noted that the joined points formed a perfect dogleg exactly at the projected river crossing. The projected road crossed the river at a point where it flowed significantly in an eastern direction. The perfect dogleg at this point indicated a very high level of surveying by the Romans. If the projected road had been planned only 30m to the east, it would have encountered a 3–4m high bank angled at 50/60A° on its exit when travelling north.

Signal stations/observation points

The Roman London to Dunmow road appears to have had at least two signal stations/observation points along its route. A signal station/observation point may be found at Green Hill Farm, Abbess Roding (TL 573119; Fig.3) close to the northern end of the southern section of the road and 2km from the River Roding. Miller Christy described the Abbess Roding signal station/observation point in 1926 as being 25' (8m) through and 12' (3.84m) high. (Essex Archaeology and History 1926,184). This signal station stood on one of the highest points in the area at 84.16m above O.D. The adjacent farm, 'Green Hill Farm', is named after the hill (The Barrows of East Anglia, 1981,4–6); no reference to a mill mound has been located. This location may have been the crossing point of an east to west Iron Age road. Trees currently surround the site, however if the view northwards was unobstructed, the settlement site would be visible. Views southwards would only be about 2km along the Roman road. The mound has been progressively reduced in height to improve road safety and is now only 1.5m high.

A second signal/observation mound remains at Bovinger/Bobbingworth (TL 523 053; Fig.1) on one of the highest points in the area at 78m above O.D. The mound, with a diameter of about 16m adjoins the east side of the Roman road. Views from the site, particularly to the east where the ground falls away into the Cripsey Brook and River Roding valleys extend several kilometres. Views southwards and northwards along the Roman road are only 1.5km in either direction. Views west and north-west are about 3km. When viewed from the east, the mound is now a little less than 2m above the natural level of the land. There is a ditch 3m wide and 1m deep for about a third of its circumference on the eastern side, the upcast from which was probably used to add height to the observation station. The mounds are built of boulder clay. When disturbed, clay can increase in bulk by about 25% and take up to five years to consolidate to within 2–5% of its original density and stability. (Brian Keeble, Writtle College email). This indicates the mounds were substantially higher when first built.

The VCH (IV 1956, 9–10) suggests a windmill may have been erected on the Bovinger/Bobbingworth mound as early as 1640. A windmill was certainly on the Bobbingworth site from 1848 until it was blown down in 1923 (Farries 1981, 103–107; 1988, 43).

There are indications that the Roman road may have crossed an Iron Age road at right angles 100m north of the signal station. If such road existed it would place the signal station/observation point in an excellent strategic position.

Fieldwork

Fieldwalking

An area of about 18 hectares covering fields on both sides of the River Roding were fieldwalked following a rare ploughing (Figs 7 and 8). Pottery sherds were abundant,

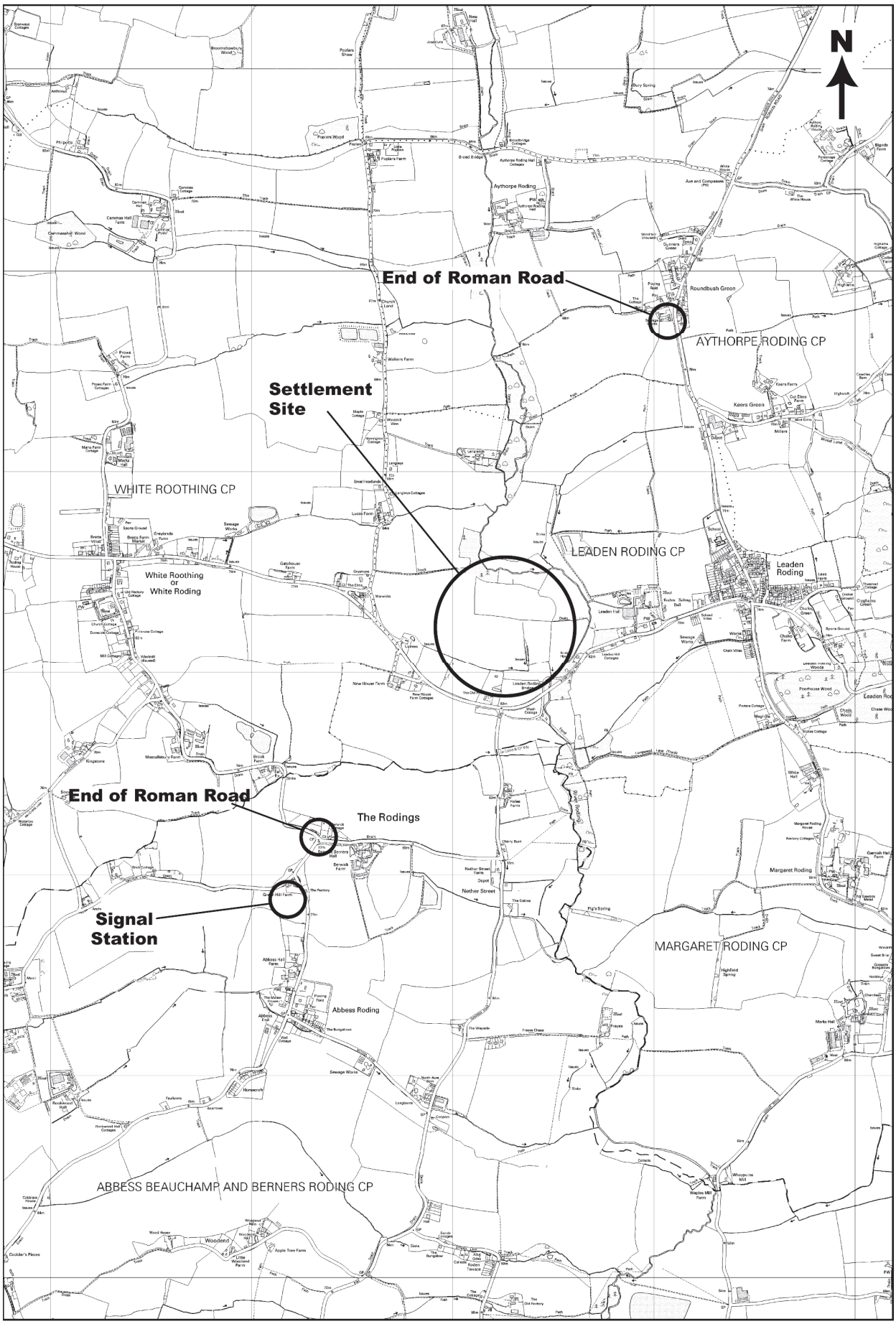

Fig. 3 Leaden Roding. Map showing the missing section of Roman road, the newly identified settlement and Signal Station at Green Hill Farm. Map squares are 1km.

only selected rims and bases were collected for identification and dating. Brick and tile fragments up to a third of their original size were located; also Hypocaust tile and *tesserae* suggested the presence of high status buildings. The pottery indicated dates from *c.* 100BC to the 4th century AD. (summarised below). Oyster shells were also widely found, and five pieces of slag indicating iron working nearby.

Geophysical Surveys

Resistivity

An area of meadowland in field 3136 (See Figs 4, 5 and 8. The scale of this survey and all other survey maps are shown in 100m grid squares) about 100m south of what was estimated to be the point where the Roman road crossed the River Roding was selected as a site for a resistivity survey. The base line dissected the apparent alignment of the projected road.

The survey was carried out in August 1997 using a Geoscan RM4 resistivity meter. A primary plot measuring 120 × 80m on an east to west orientation was surveyed and a further sample survey was carried out on the same alignment measuring 80 × 40m in meadowland next to the River Roding. Readings were taken at half metre intervals along the survey line one metre apart. The survey plots failed to show a road, however it indicated anomalies. An east to west linear feature was shown in the first plot. At each end of the line two parallel linear features extending southwards were shown, forming playing card shaped right angles. The plot next to the river was inconclusive.

From this time on more attention was given to magnetic methods. In 2001, however a second resistivity survey using a geoscan RM4 was attempted. This extended the area covered by earlier resistivity work somewhat but few significant anomalies were found. The full resistivity coverage is shown in Fig 4.

Magnetometry

In 1999 measurements along a number of parallel profiles using a total field proton magnetometer in the field where the resistivity survey had been conducted showed clear anomalies; some of these were obviously linear, extending across several profiles. This suggested that a magnetic survey could be of value. In the same year a soil susceptibility survey of the same field (3136) was carried out. The earlier ploughing meant that it was simple to collect a 25m spaced grid of soil samples. These were dried, crushed and sieved before magnetic susceptibilities were measured using a Bartington MS3 instrument. The resulting susceptibility values were plotted on a map and it was found that they could be contoured very readily. The distribution was by no means random with a clear high susceptibility area being found towards the south central area of the field. (Fig 6). There is no obvious geological reason for this so it seemed probable that it was indicative of some form of human activity.

In 2000 a Geoscan FM36 fluxgate magnetic gradiometer was made available for a day and a small magnetic survey (0.28 Ha) was carried out. Though this showed a few linear anomalies they did not look particularly significant. In the light of subsequent work it became obvious that a very poor area had been picked for this trial.

In 2002 as a final attempt to obtain some useful data, a magnetic survey of some 1.7 Hectares in field 3136 was carried out using a Geometrics G858 caesium gradiometer. For the first time a striking pattern of linear anomalies was revealed suggesting the presence of a settlement. (see Figs 4 and 5 indicating the varying profiles between resistivity and magnetometry surveying). A similar sized survey was carried out in 2003 and the anomaly pattern was seen to extend much further than had ever been anticipated.

At the end of 2003 a Bartington G601 fluxgate gradiometer became readily available to the authors and

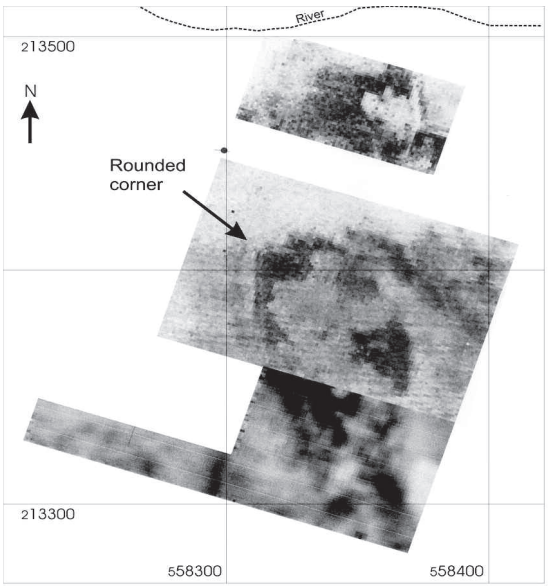

Fig. 4 Leaden Roding. Resistivity survey in field 3136

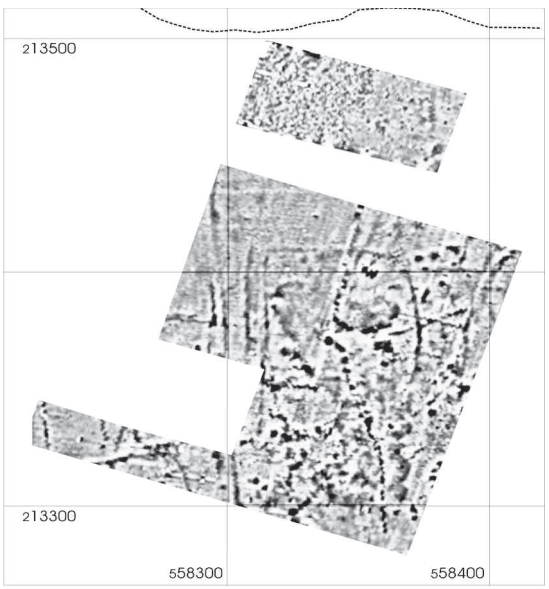

Fig. 5 Leaden Roding. Magnetometry survey in field 3136

Scale of Figs 4 and 5 Ordnance Survey grid references superimposed

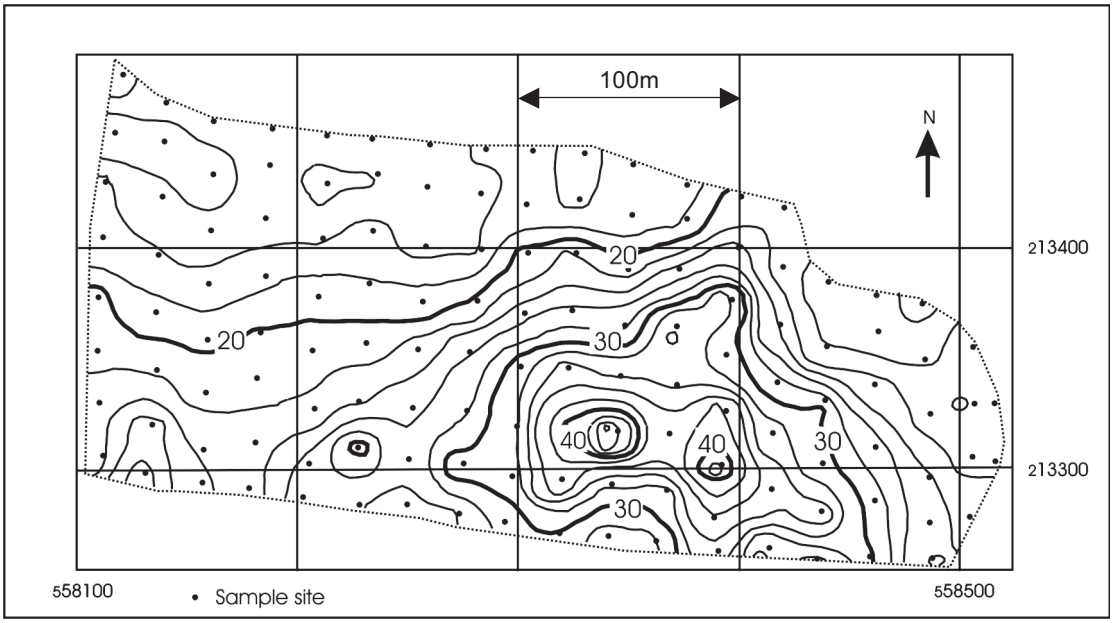

Fig. 6 Leaden Roding. Plot of magnetic susceptibility in field 3136 with Ordnance Survey grid references superimposed

over the next year magnetic surveys were extended over a further 14 hectares of the main and adjoining fields until it appeared that the settlement site had been adequately defined. Fig. 7 is an image plot of the overall survey area. The total area encompassed within the area surveyed, including inaccessible ditches and hedgerows and two sample survey areas on the north side of the river to establish the possible presence of the Roman road continuing, amounted to about 22 hectares/54 acres. The gradiometer surveys were carried out with a line spacing of 1m and normally with an inline sampling interval of .25m. The magnetic data were edited, levelled to a common datum and then plotted as an image map (Fig.7).

It seems fairly reasonable to suppose that virtually all the linear magnetic anomalies seen are produced by ditches of one sort or another; the topsoil with which the ditches were unfilled is considerably more magnetic than the undisturbed boulder clay. Some of the concentrations of high magnetic values found scattered throughout the site probably mark the sites of former habitations but it is not possible to find the unambiguous trace of any building on the magnetic anomaly plots. This is not surprising as most local buildings were probably constructed in wood with only shallow foundations that have decayed, been robbed or ploughed out since the end of the Roman period. The correlation of the magnetic topsoil from the main field magnetic susceptibility plot (Fig. 6) with the area of maximum magnetic anomaly activity (Fig. 7) is remarkable. Fig. 8 shows a diagrammatic interpretation of a number of the magnetic anomalies.

Although the resistivity survey area was relatively small, the magnetometry survey, in part mirrored a number of anomalies, Figs 4 and 5.

Geophysics guidelines published by English Heritage (1995) were considered throughout the survey.

Discussion

Evidence for the missing section of road

Strong magnetometry anomalies indicate parallel ditches 10.5m apart and 50m long (Figs 7 and 8). These commence 25m south of the River Roding, oriented in a south-westerly direction, 17 degrees east of grid north. David McComish (English Heritage) noted a distinct agger visible for virtually the whole length of the magnetic anomaly (Figs 7 and 8). The agger is one of the few visible archaeological landscape features of the area. The correspondence of agger and linear magnetic anomaly constitute the best evidence for the line of the Roman road south of the river. It is noted that this section of the road is aligned, unexpectedly on the northern section of the Roman road. This alignment may indicate that the dogleg that may have joined the north and south sections was in fact south of the river. Faint traces of parallel lines are also found on the magnetometry survey about 450m south of the Roding (Figs 7 and 8) along the projected route of the road. However, they are not strong enough to interpret as road ditches.

The average width of the Roman road from the River Roding southwards to London is 8.16m indicating that it is the fourth widest Roman road in Britain. The average width of Roman road metalling in Britain is 6.51m. The width of the road normally indicates the volume of traffic (Davies 2004.73–78). The Roman road north of the River Roding has not been sectioned.

Two separate surveys 100 × 20m in width were carried out on the northern side of the River Roding at 50m and 150m from the river, centred on the projected alignment of the Roman road. The survey proved negative. The surveys have not been shown on Figs 7 and 8. The existence of the Roman road north of the River Roding until it reaches Aythorpe Roding has not been established.

Fig. 7 Leaden Roding. Magnetic anomaly (black positive). Ordnance Survey grid superimposed

The settlement

An area of 18 hectares in Leaden Roding/White Roding was surveyed to establish definite edges to the geophysical anomalies, which may be reasonably interpreted as evidence of settlement. The good survival of anomalies may reflect the area surveyed had been meadowland for many years, with little impact from modern ploughing. The finds of metal and pottery indicate that settlement existed from *c.*100BC to at least the early 5th century. However, finds of relatively rare Saxon coins are indicative of the settlement being occupied into the Anglo-Saxon period. The settlement may have survived for a period of around a thousand years, explaining the complex geophysics patterns (Aston 1997, 29–31). Many pits are present, as are distinctive drove ways and small field enclosures. The drove ways clearly continued beyond the surveyed area, particularly to the south and west.

The absence of magnetic anomalies in the extreme north and east of the survey area may be due to the modern flood plain of the River Roding where ditch preservation has been poor, or where anomalies have been masked by modern alluvium.

The Rodings settlement surrounded by boulder clay was built on an outcrop of head gravel and boulder clay, that provides a well drained surface throughout the year. The local resources requirements of a settlement suggested by Chisholm (1979,7) of water, arable land, grazing land following the flood plain of the river, and fuel from woodland that would also have provided building materials, are fully met. The settlement reflects the local pattern of Late Iron Age settlements continuing into the Roman period, including the small town at Great Dunmow 9 km to the north. The size of The Rodings settlement was such that it may have acted as the hub for surrounding smaller settlements. The presence of Late

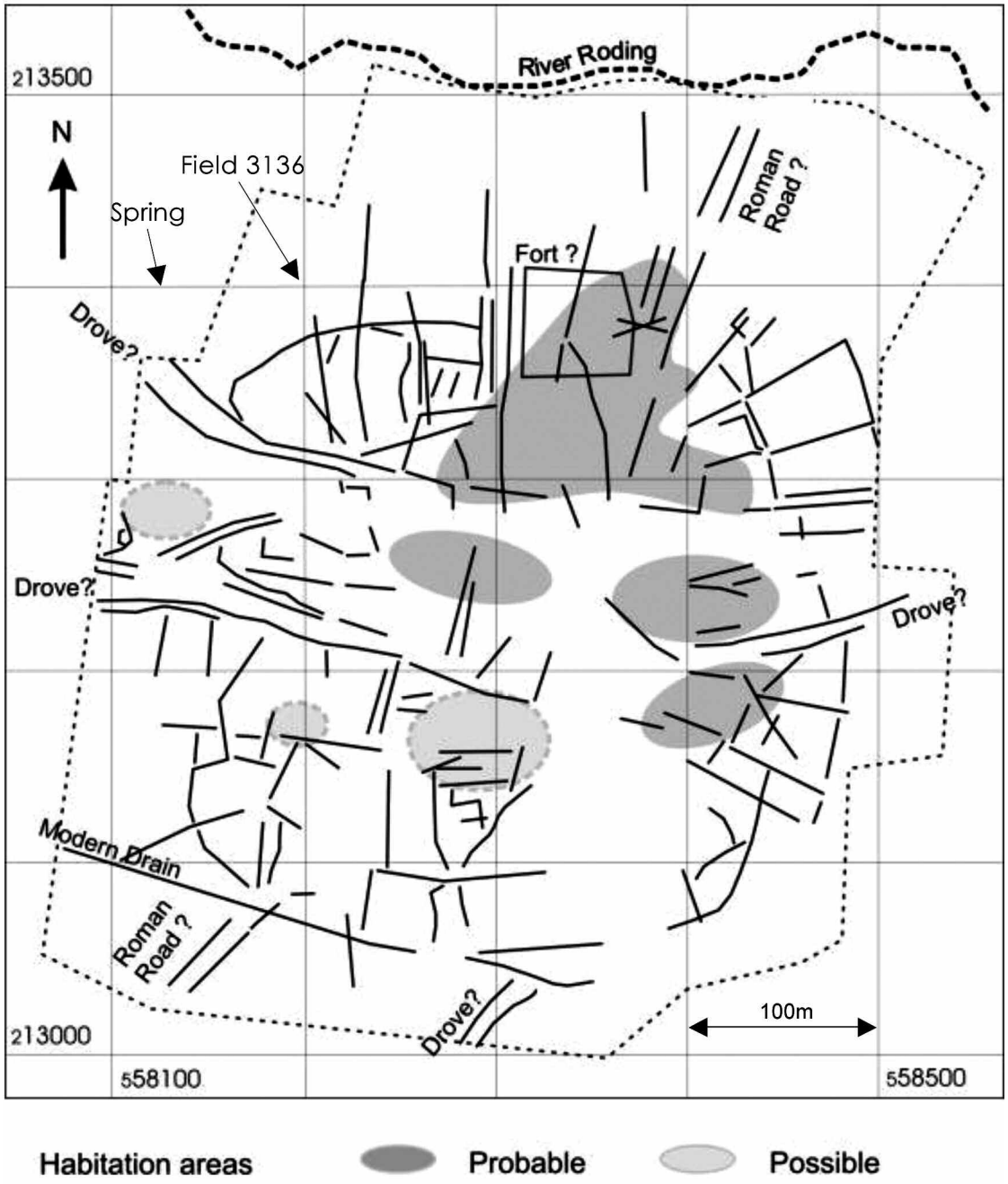

Fig. 8 Leaden Roding. Diagrammatic interpretation of geophysical survey. Ordnance Survey grid superimposed

Neolithic worked flint in the south west corner of the site (David McComish pers comm.) suggests occupation much earlier than the late Iron Age/Roman focus. Six lead weights and one-yard arm weight (none compare to the Roman weight system) from the site are indicative of a trading area within the settlement. Five spindle whorls were also found.

Putative Marching Camp

Both the resistivity and magnetometry surveys showed a distinct oblong, with rounded corners on a broadly north-south orientation measuring about 85 × 65m. The northern side was 100m from the river and close to the projected alignment of the Roman road (Figs 4, 5, 7 and 8). The oblong enclosure is indicative of a small marching camp. A north-facing apse shape is found within the camp area.

Metal detecting

The site had been subjected to metal detecting before the archaeological survey reported here. Two detectorist, one of whom had surveyed the site for a substantial time, were located, and their finds viewed and dated by the British Museum, the Portable Antiquities Scheme, Essex County Council finds specialists, the Essex Numismatic Society and Guy de la Bédoyère. The identified metal artefacts are shown in Tables 1 and 2. A number of the recorded finds can be found on the internet web site of the Portable Antiquities Scheme at www.finds.org.uk.

Finds

Metal Artefacts

The number of metal artefacts found including 282 coins dating from 100BC to AD 410 identified by a number of agencies is substantial. The coins are listed in Table 2 below. Detailed descriptions of the coins are held by the identifying agencies and the authors. Three Cunobelin coins can be viewed on the Portable Antiquities site at www.findsdatabase.org.uk (ESS-D13B82). A further forty-two coins dating from AD 570 -1806 have also been included. Later dated coins are not listed. The finds locations of about 50% of the coins were recorded within an accuracy of 10m. There are no concentrations; the spread is broadly within the area of the magnetic survey area. A range of brooches have also been found; their number does not appear to be proportionate to the number of coins found. Among the metal finds are a fairly rare Iron Age tankard handle and a Roman strap fitting, a detailed description is found below. These artefacts can be viewed on the Portable Antiquities web site ref. ESS-B07C21 and ESS-3B0796. They are listed in Table 1.

Guy de la Bédoyère comments on the metal finds (Tables 1 and 2): 'Most striking thing to my mind is the sheer quantity of medieval coins. If this is open land it must have been a market site of sorts. Medieval coins are rarer than Roman, that's a huge number and two of Saxon date as well. To my mind this is so striking a difference from normal, with each medieval coin being of great statistical significance, perhaps by a factor of 100' (email to author).

Copper-alloy artefacts (Caroline McDonald)

Object Type, Tankard handle/Corcoran type IIIa. Broad Period, Culture: Vessel, IRON AGE, not attributed.
Class/Subclass:
Description: Fragment of cast copper-alloy tankard handle of Corcoran Class IIIa. Approximately just under one half of the handle survives. The terminal of the handle would once have been formed from a flat, circular disc, but due to damage now has an irregular outline, making it sub-rectangular in plan. There is a single rivet hole, with the copper-alloy rivet now missing. With the terminal placed flat and horizontally, at the bottom end of the terminal is an integral, thick solid semicircular flange which rises vertically at an angle just under 90°. From the top of the flange, the openwork bow of the handle arches up and away. The bow is truncated. What remains is a complete circular loop, with a further half a circular loop surviving beyond that. It is impossible to conjecture what may have proceeded beyond the second loop, but it is possible that there was a solid, moulded central section or boss, and then the two open loops were mirrored on the other side with an opposing terminal. The break edges are worn smooth, suggesting damage occurred in antiquity. Much of the original surface survives with an even mid green patina, though slight abrasion and pitting reveals a lighter green surface below. The object is 25.36mm long, 9.36mm wide and 11.32mm wide across the bow of the handle. The handle is 1.26mm thick at the terminal, 3.6mm thick at the bow and weighs 3.09g. A similar and complete example of a tankard handle can be seen in Corcoran (1952), who dates type IIIa handles to the 1st century AD.

Object Type, Strap fitting, Broad Period, Culture:, ROMAN, not attributed.
Description: Cast copper-alloy Roman strap fitting. The fitting is lentoid in plan and flat in section. It is decorated to the middle of the front face with a circular groove, giving it an eye-like appearance. The groove may once have held enamel, though nothing of this material survives. There is a raised line, extending from each pointed end of the fitting, which butts with the circular groove. The object is very abraded and it is hard to

Date	Description	No
300–200BC	La Tène brooch body section only (Hattatt 1989, No. 1447)	1
150–70BC	Polden Hill brooch (part)	1
AD 50–70	Colchester type brooches (parts)	4
AD 1–99	Langton Down type 27mm brooch, upper section only	1
AD 1–99	Rosette type brooch, upper section 28mm	1
AD 1–99	Langton Down type brooch, upper section 11mm	1
AD 1–100	Tankard handle (part) Concoran type IIIa	1
AD 43–99	Colchester type brooch	1
AD 43–100	Plate type brooch remains of silvering 23mm	1
AD 1–199	Upper fragment Bow type brooch with separating mechanism 22mm	1
AD 1–199	Fragmentary Bow type brooch 24mm	1
AD 1–199	Bow type brooch, catchplate only 16mm	1
AD 1–199	T shaped type brooch, upper section 30mm	1
AD 1–199	Bow type brooch, catchplate only 28mm and 35mm	2
AD 1–199	Colchester two piece type brooch, upper section	1
AD 43–199	Brooch catch plate fragment	1
AD 100–199	Lozenge shaped plate brooch	1
AD 43–300	Bow and fantail brooch	1
AD 43–410	Acorn mount	1
AD 43–410	Lead Pot repairs	
11AD 43–410	Lead Spindle whorls	5
AD 43–410	Lead weights varying from 16 to 116g (Guy de la Bédoyère)	6
AD 43–410	Yard arm weight spherical with part of iron suspension loop attached 1.475g	1

Table 1 **Metal artefacts** (Caroline McDonald and Guy de la Bédoyère)

tell whether the circular field within the groove is also recessed with a design to hold enamel. The reverse of the fitting is plain. There is a rectangular loop, which is not split at one corner, and is squashed against the rear of the fitting. Nothing of the original surface survives and exposed surfaces are bright, light green. The fitting is 32.24mm long, 18.82mm wide, 4.42mm thick and weights 11.17g. It is probably 1st or 2nd century in date.

Late Iron Age Coins

1. Illegible Late Iron Age bronze unit (Portable Antiquities (PA) ref. No ESS-D17387) Dated 100–40BC Thickness 1.74mm diameter 12.48 mm. Weight 1.01g. Obverse and reverse illegible. (Caroline McDonald)
2. Late Iron Age bronze unit of Cunobelin. VA 2103–1 (PA ref. No. ESS-D13B82) Dated AD 20–40. Thickness 2.18mm, diameter 14.76mm. Weight 1.66g. Obverse: Romanised head of Jupiter Ammon, inscription 'CVNOBELIN'. Reverse; Warrior on horse facing right, inscription 'CAM' on exergual line. (Dr Paul Sealey)
3. Late Iron Age bronze unit of Cunobelin. VA2107–1 (PA ref. No. ESS-D16354) Dated AD 20–40. Thickness 2.16mm. Diameter 11.72mm. Weight 1.12g. Obverse Romanised head of Jupiter Ammon facing right. Inscription 'CVNOB' around head. Reverse Lion crouching right. Inscription 'CAM' in tablet below lion. (Dr Paul Sealey)

Pre Roman and Roman Coins

Date	Description	No
100–40BC	Illegible bronze	1
81BC	Denarius Obv Hispan.Rev Posta Albin	1
46BC		1
20–10BC	Cunobelin VA 2103 1	2
15BC–AD 19		1
20BC–AD 40	Cunobelin VA 2107 1	1
7–6BC		1
Late Iron Age	Illegible	1
Total		9

Date	No	Date	No
AD 10–40	2	AD 268–273	1
AD 14–17	1	AD 270	5
AD 14–37(s)	1	AD 270–273	2
AD 20–40	2	AD 270–284	14
AD 20–40	2	AD 270–402	20
AD 54–68	1	AD 273–274	1
AD 67–68	1	AD 287–296	1
AD 69–71	1	AD 293–296	5
AD 70–117	1	AD 297–319	1
AD 71–79	1	AD 300–399	10
AD 72–78	1	AD 307	1
AD 77–79	1	AD 307–337	1
AD 81(s)	1	AD 310–311	1
AD 96–138	1	AD 314–324	1
AD 98–103	1	AD 315–316	1
AD 1–138	3	AD 315–330	1
AD 1–260	1	AD 318–319	1
AD 101–199	5	AD 319–320	3
AD 125–126	1	AD 320–324	7
AD 138–140(s)	1	AD 321–323	1
AD 138–192	2	AD 321–375	13
AD 175–210	1	AD 323–324	2
AD 188–189	1	AD 324–325	1
AD 196–197	1	AD 324–337	4
AD 200–300	16	AD 325–326	1
AD 205	2	AD 328	1
AD 218–222	2	AD 330–335	8
AD 231–235	1	AD 330	1
AD 259–268	2	AD 330–348	2
AD 260–268	3	AD 335–337	1
AD 260–273	3	AD 335–341	1
AD 260–284	7	AD 347–348	2
AD 260–296	4	AD 348–350	3
AD 260–402	71	AD 350–353	2
AD 268–270	6	AD 364–378	1
		AD 388–395	1
		Total	282

(s) = Silver

Post-Roman Coins

Date	No	Date	No
AD 570–750	1	AD 1526–1544	1
AD 616–825	1	AD 1544–1551	1
AD 1180–1247	1	AD 1550–1553	1
AD 1217–1242	1	AD 1573	1
AD 1242–1247	1	AD 1580–1590	1
AD 1251–1272	1	AD 1587–1590	1
AD 1282–1335	1	AD 1636–1644	1
AD 1301–1310	1	AD 1697	1
AD 1344–1351	2	AD 1699	1
AD 1400–1499(s)	1	AD 1719	1
AD 1485–1625	1	AD 1730	1
AD 1501–1509	1	AD 1755	1
AD 1500–1581	1	AD 1806	1
AD 1500–1599	11	16–19c possible coins	4
		Total	42

Table 2 **Chronological coin list** Essex Numismatic Society, Ralph Jackson British Museum, Caroline McDonald, Colchester Museum, Philip McMichael Essex County Council.

Pottery and Tile

A scatter of Roman brick, tile and tesserae fragments were found virtually over the whole survey area. Tile fragments up to a third of their original size were located, but due to their size weight and volume were left *in situ*. Pottery sherds were abundant: identification of the collected sample showed a date range of *c.*100BC to AD410 or later. A range of grog–tempered wares (100BC – AD70), both coarse and finer fabrics, appear to be from storage jar type vessels, the finer fabrics from necked bowls and platters. The presence of platters indicates a Gallo-Belgic influence.

Meadowland adjoining the river, mainly in the flood plain, was not ploughed and was the only area where pottery was not obtained (however these areas have been subjected to metal detecting surveys). The authors hold all pottery sherds.

Pottery and Tile Identifications
by T.S.Martin and Joyce Compton

Black-surfaced wares.
Brockley Hill (Middlesex) 2–3rd century.
A range of grog–tempered wares (100BC – AD70), both coarse and finer fabrics. The coarse fabrics appear to be from storage jars, the finer fabrics from necked bowls and platters. The platters indicate Gallo-Belgic influence.
Hadham (Hertfordshire) white slipped ware.
Hadham grey wares
Late shell-tempered wares that generally postdate *c.* AD350, produced at a number of centres, including Harrold, Bedfordshire, Nene Valley, Peterborough and Lakenheath, Suffolk.
Miscellaneous fine grey and red wares.
Nene Valley (Peterborough) colour coated and coarse wares
Oxford red coated wares
Rettendon (Essex) ware, characterised by the use of flint tempering, probably 4th century.
Roman storage jar fabrics from the 1st to 4th Centuries.
Samian ware, 2nd century Gaulish, including rim sherd from a cup, form Dr.33, Central or East Gaulish, probably mid 2nd – 3rd century.
Roman brick, including hypocaust type brick.
Tile; *imbrex* and *tegula*

Conclusion

The Rodings settlement was a substantial one, covering many hectares. It was surrounded by high crop yielding land. It probably acted as a market for the surrounding district. The number of weights and metal slag found, also suggest trade taking place. Its origins were founded by the Trinovante tribe, however it was under the influence of the Catuvellauni tribe at the time of the Roman invasion in AD 43. It may be reasonable to suggest that the settlement continued virtually unchanged until the Boudiccan rebellion in AD 60/61, as Wickenden (1996, 76–94), notes Trinovantian Essex was already heavily Romanised by the time of the invasion and there was no need for much military presence. The possible marching camp found within the settlement, may indicate the occupants participated in the rebellion. The Roman road established in the settlement may have been built initially as a military penetrating road, then developed into the fourth widest Roman road in Britain with signal station and observation points.

The artefact record suggests continuity of the settlement from at least 100BC to the Saxon period. Imported metal and pottery are indicative of cross-channel trade that began before the Roman period. No reason has been identified for the settlements demise. Rosalind Dunnett (1975, 8) notes after the Bouddican revolt, there is no further reference to the Trinovantian tribe, that no cantonal capital has been identified for them in Roman Britain.

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Acknowledgements

The late Peter Cott (who initiated the research), Channel 4 Television Time Team and their advisors (Michael Aston, Guy de la Bédoyère and James Mower), Epping Forest Museum, Essex County Council Historic Environment Branch staff, Essex Numismatic Society, Ralph Jackson (British Museum), Brian Keeble, Writtle College, Caroline McDonald (former Finds Liaison Officer, Colchester Museum), David McComish (English Heritage), Robert Osborn (New Hall Farm), Kenneth Pavitt, Strutt and Parker Farms Ltd (their farm managers, Peter Thorpe, Thomas Quilter and Andrew Cook), Paul Sutton (formerly Epping Forest District Council), Mr and Mrs Venditti (Bovinger Mill House, Bobbingworth), Nick Wickenden (Chelmsford Borough Council Museums Service) and Owen Bedwin, for editorial comments.

Bibliography

Aston, M. 1997 *Interpreting the Landscape*, Routledge 29–31
Barrows of East Anglia 1981 (The Place Name Evidence) The East Anglian Archaeology Report, No 12 4–6
Chisholm, M. 1979 *Rural Settlement and Land Use*, Hutchinson 7
Christy, M. 1926 On Roman Roads in Essex, *Essex Archaeology History*. XVII, 184
Corcoran, J.X.W.P. 1952 'Tankards and tankard handles of the British Early Bronze Age', *Proc. Prehist. Soc.* 18, 85–102, plate X, no. 3
Davies, H. 2004 *Roads in Roman Britain*, Tempus 73–78
Dunnett, R. 1975 *The Trinovantes*, Duckworth 8
English Heritage 1995 *Geophysical Survey in Archaeological Field Evaluation. Research and Professional Services Guideline No 1*
English Heritage 1999 *Postmills (Medieval) Single Monument Class Description, 31*
English Heritage 2005 *London Region Archaeology, Annual Review* 34, 59–75
Farries, K.G. 1981–88 *Essex Windmills – Millers & Millwrights*, Vol.1, 103–107; Vol. 3, 43

Going, C.J. 1996 'The Roman Countryside', in O. Bedwin (ed.), *The Archaeology of Essex Proceedings of the Writtle Conference*, ECC, 95–107
Harvey, F.B. 1970 *London Archaeologist*, 1 (No.6), 127
Margary, I.D. 1973 *Roman Roads in Britain*, 127 and 253
Ordnance Survey 1998 Landranger Map 167
Ordnance Survey Map 2001 Roman Britain
Victoria County History (Essex), IV, 9–10
Wickenden, N.P. 1996 'The Roman Towns of Essex', in O. Bedwin (ed.) *The Archaeology of Essex – Proceedings of the Writtle Conference*, 76–94

The cost of publishing this article is supported by the Society's Publications and Research Fund.

Essex Archaeology and History 39 (2008), 136–151

The Old Slaughterhouse, Stour Street, Manningtree

Phillippa Sparrow

With contributions from Hillary Cool, Jane Cowgill, Nina Crummy, Val Fryer, Carina Phillips, Andrew Peachey, Martin Tingle and Peter Thompson. Illustrations by Charlotte Davies.

Archaeological monitoring and recording at The Old Slaughterhouse, Stour Street, Manningtree, Essex (NGR TM 1074 3183) revealed at least four phases of activity. The Phase 1, late 3rd–4th century pit represents the only Roman activity identified within a one kilometre radius of Manningtree, apart from the road from Colchester. Phases 2 and 3 comprised five groups of late medieval and early post-medieval intercutting quarry pits, possibly created to extract sand and clay for tile manufacture onsite. Phase 4 (1700 to 1900+), comprised a cobbled surface and a small pit, two fencelines representing plot boundaries, buried topsoil and subsoil and a large foundation cut. This final stage of activity indicates a period of major alteration to the site; a large number of buildings were constructed, possibly associated with industrial activity. Cartographic data suggests the majority of the 19th century buildings had been demolished by 1923, possibly to make way for the slaughterhouse.

INTRODUCTION AND BACKGROUND

During August 2006, Archaeological Solutions Limited (AS) conducted archaeological monitoring and recording at the Old Slaughterhouse, Stour Street, Manningtree, Essex (NGR TM 1074 3183; Fig. 1). The site is located on a roughly square, small plot of land fronting onto Stour Street, with a small square extension in the south-east corner. The site formerly contained a disused slaughterhouse which had been demolished prior to the archaeological investigation. The southern part of the site had been set on a raised terrace contained by a brick retaining wall. The site is bounded to the north by Stour Street and to the west by a modern dwelling and garage that was built on the site of the slaughterhouse's smokehouse and holding-pen area. The site lies on a solid geology of London Clay (SSEW 1983) overlain by gravel and alluvium (Medlycott 1999).

Medieval Manningtree is first noted in 1248. A market was granted to Schiddinghou Manor (now Old Hall, HER 3206) in 1238, and is thought to have been held at Manningtree. The town appears to have been deliberately planted on virgin ground during the first half of the 13th century, presumably by the lord of the manor. The town was intended as a new port, and achieved some success in local trade, transhipping provisions to the fleet in Harwich and Colchester. During the early 19th century Manningtree, and Mistley to the east, were major centres in the Essex malt industry.

Detailed descriptions of all features, in addition to all specialist reports, including methodologies and supporting data, can be found in the site Research Archive Report (Sparrow 2007), available through the Essex Historic Environment Record and the National Monuments Record (Swindon). Specialist report summaries are included here where relevant to the current synthetic text.

RESULTS OF THE INVESTIGATION

Archaeological monitoring and recording undertaken at the site, revealed four chronological phases of activity, which were identified on the basis of datable artefactual evidence, stratigraphic relationships between features, and spatial and functional associations (Figs 2 and 3).

- **Phase 1** – Romano-British (late 3rd–4th century AD)
- **Phase 2** – Late medieval (AD 1400–1550)
- **Phase 3** – Late medieval/early post-medieval (AD 1500/1550–1700)
- **Phase 4** – Late post-medieval/early modern (AD 1700–1900+)

Phase 1 (Fig. 3) comprised one feature of late Roman date; a heavily truncated pit. Phase 2 (Fig. 3) features comprised two sleeper-beam trenches and five groups of quarry pits dated to AD 1400–1550. Phase 3 (Fig. 3) comprised four pits seemingly associated with the late medieval pit groups. Phase 4 represents late post-medieval to modern activity on the site (Fig. 3). Closer inspection of the site's stratigraphic evidence, suggests that there may have been four stratigraphic sub-phases within chronological Phase 4: (i) the earliest of which dates to the late 18th century and comprised one pit and one cobbled surface; (ii) this appears to have been followed by the construction of two possible fence lines, potentially associated with garden activity and plot division; (iii) followed by a possible foundation cut, and (iv) the subsequent development of the slaughterhouse (comprising a cistern, a boundary wall

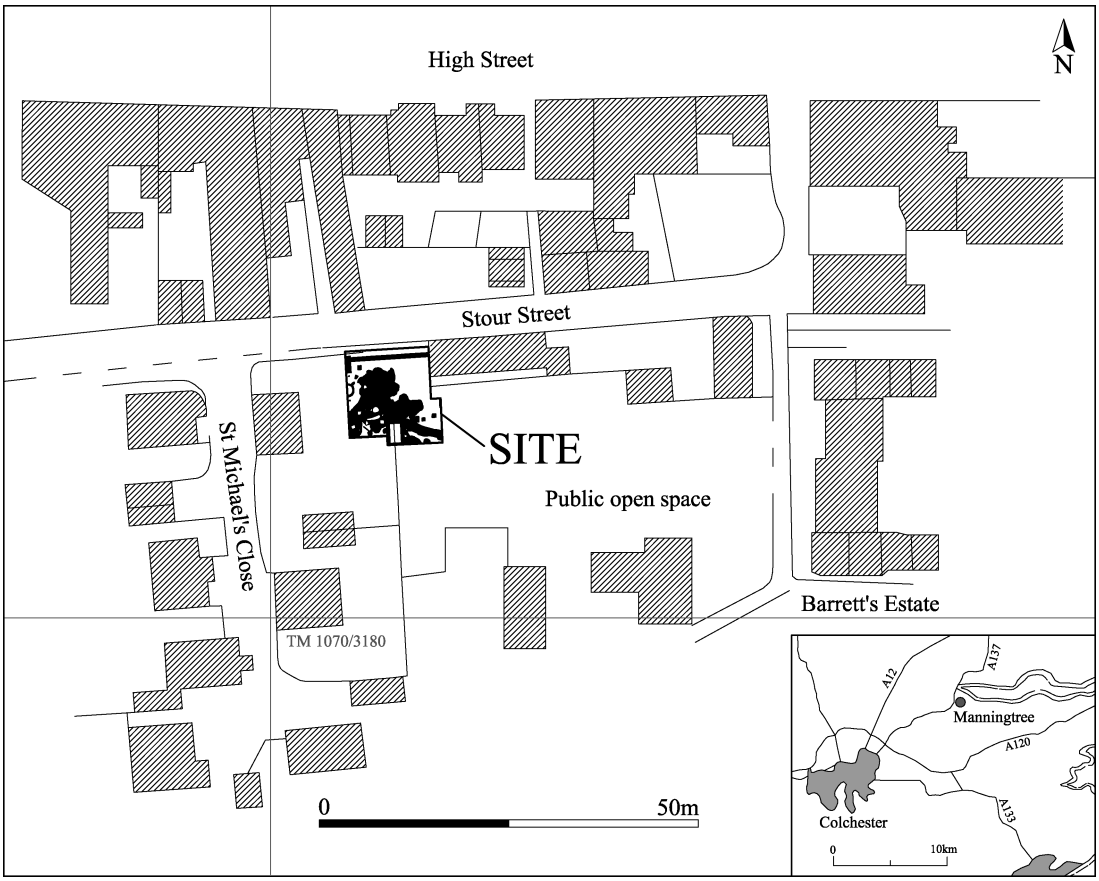


Fig. 1 Detailed site location. © Crown copyright and/or database right. All rights reserved. Licence number 10001 4800

and cellar, an offal pit, a barn or stable and an adjoining structure).

A lack of stratified diagnostic finds prevented a number of features from being phased; these are termed and discussed under the title 'unphased' (Fig. 3). A small number of features revealed small amounts of residual earlier medieval pottery, attesting to earlier activity on site, but not indicating the nature of land use during the early medieval period.

PHASE 1: LATE ROMAN (LATE 3RD–4TH CENTURY AD) (Figs 2–5)

Phase 1 comprised one late Roman pit (F230, L201), located in Grid Squares (GS) D5–7 and E5–7 (Fig. 3). Three Phase 2 pits and three Phase 3 pits cut the feature; thus it was not possible to identify the full extent of late Roman activity on the site. The finds assemblage recovered consisted of locally produced sandy grey ware pottery, common throughout south-east England. Two sherds from Harrold, Bedfordshire, and one from Hadham, indicate a non-local provenance. These wares are commonly recovered from domestic contexts within the south-east, but none of the sherds exhibited evidence of domestic use. A flake of Central Gaulish Samian Ware identifies a link to the Continent but cannot be suggestive of the social status of the depositor, due to such a small quantity.

Fill L201 (F230) produced evidence of charred oat, rye and wheat grains; all of which had been heated at high temperatures. Small amounts of charcoal and black cokey material, probably the result of combustion at a very high temperature, were also identified. This evidence may inform upon the type of occupation in the area of Manningtree during the Roman period (the three types of grain present within the fill conform to the common crops produced in England during the Roman occupation (Morris 1979)), and therefore may indicate that the area was utilised for agricultural purposes, however this remains speculative. It is also possible that the grain was imported onto the site from further afield. The small amount of burnt material and pottery sherds within the pit appear to be indicative of domestic activity; however, as the evidence for this remains so limited, the extent of this activity remains uncertain.

Roman settlement and activity is attested around the Stour Estuary by a Roman settlement site at Dovercourt, Harwich, *c.* 15km east of Manningtree (Medlycott 1999; Anon. u.d.; EHNMR-638888). A Roman villa was also discovered at Little Oakley, *c.* 11km south-east of Manningtree (Medlycott 1999; Anon. u.d.; EHNMR-638048). To date, Pit F230 comprises the only known Roman activity from within Manningtree, and is therefore significant. The only Roman evidence, within 1km of the site, noted in the Historic Environment

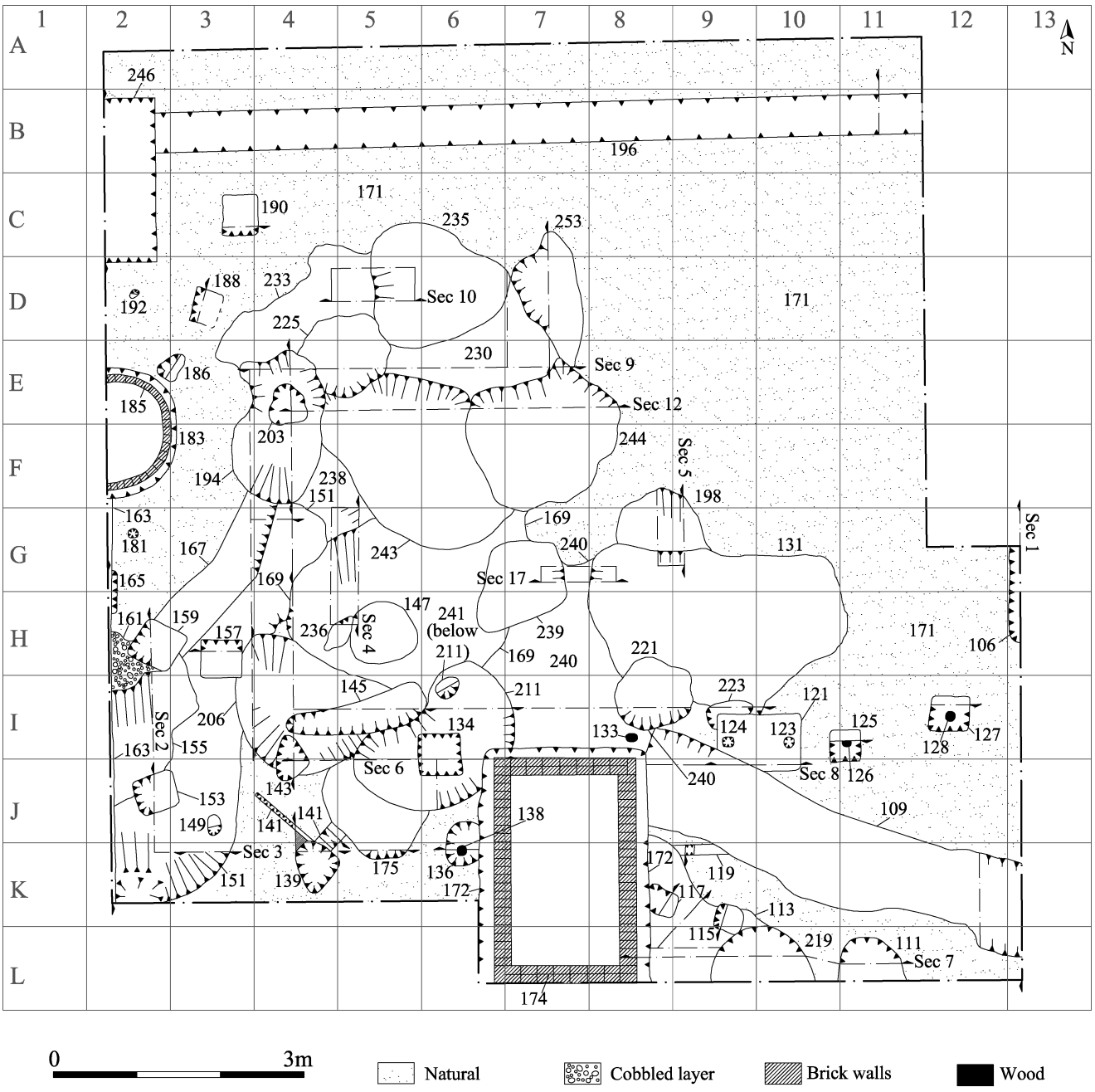


Fig. 2 Site plan

Record for Manningtree, is the possible presence of a Roman road from Colchester to Mistley which potentially leads to Harwich (HER 3233), and appears to run just to the south-east of Manningtree. The site is located in close proximity to the River Stour Estuary, thus the Roman activity could also be associated with use of the river.

PHASE 2: LATE MEDIEVAL (AD 1400–1600) (Figs. 2–5)

Phase 2 comprised sixteen large pits (F151, F155, F167, F141, F175, F169, F206, F211, F243, F194, F233, F225, F198, F131, F113, F111), one sleeper-beam trench (F167), three post-holes (F241, F115 and F117) and one small, linear feature (F141); which may have been a sleeper-beam trench for a small, temporary structure (Trott, Grassam and Woolhouse 2007; Graham and Woolhouse 2007). These features (based on the stratigraphic evidence) can be divided into five intercutting groups.

The pit groups described below, appear to have originated during the late medieval period. Similar pottery assemblages from within the fills, suggest a comparable use of the site throughout the period. The pits appear to represent quarrying; with deeper pits possibly created to access clay deposits, and shallower ones dug for sand extraction. A very small sleeper-beam trench (F141) might indicate a temporary three-walled shelter, possibly designed to dry the clay once it had been quarried (GS J3–4). Much research has been conducted into the creation of pottery during this period (the initial moulding of the clay, its firing within a kiln,

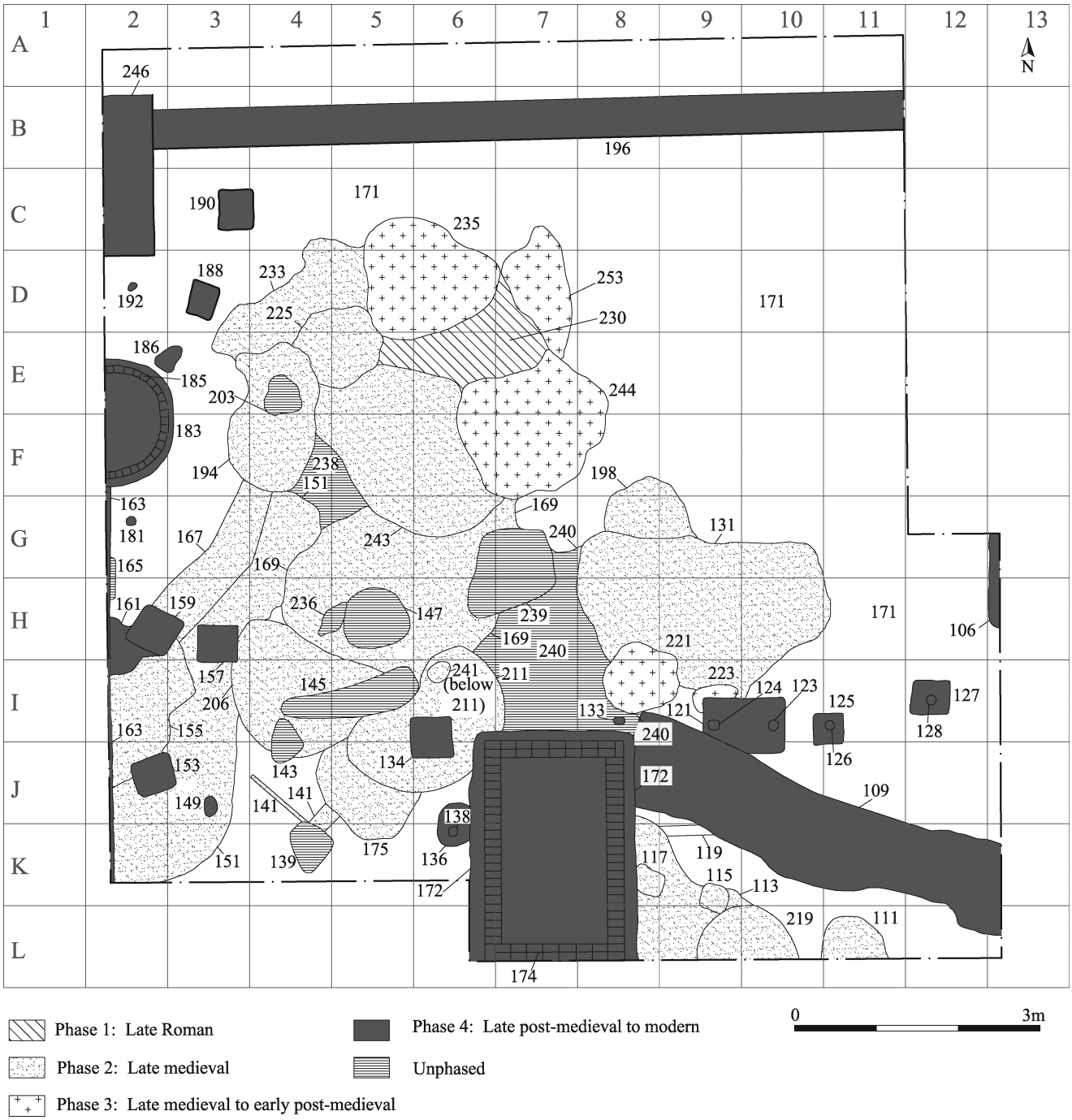


Fig. 3 Phase plan

subsequent trade and possible export); however, very few studies have been conducted in relation to the manufacture and acquirement of raw material (Clarke 1984). Clarke (1984) states that at this time, clay was often left in heaps over winter months, in order for it to dry sufficiently to enable manufacture (Smith 1985). The clay was often then tempered by adding water and 'working it over with shovels or walking on it in bare feet' (Smith 1985, 40). This may explain the later presence of the well on site; although the well was infilled at a later date it may have been contemporary with late medieval Pit Groups 1–4. Although speculative, the proximity of the site to the Stour Estuary (close enough for a relatively high water table and far enough away to limit potential flooding) may have also been advantageous in the acquirement of a local water supply. Smith (1985) states that during the spring, after the clay had been tempered, it was often laid out evenly on sand or grass, and cut into slabs. As suggested above, the differing depths of the quarry pits may imply that onsite quarrying of sand also occurred at this time, although there is no direct evidence for this.

The earliest feature is likely to have been a possible sleeper-beam trench (F141) (GS J3–4). Forming an L-shape, the trench was aligned north-west/south-east and south-west/north-east. The trench was flat-bottomed, with vertical sides, indicating it was a possible structural foundation cut. The north-eastern leg was cut by Phase

2 Pit F175 and thus, the extent of the feature is not apparent. The north-western leg is not associated with a further linear feature or sleeper-beam trench, which suggests this may have formed a three-walled structure, possibly associated with the drying of quarried clay or sand.

Pit Group 1

This group comprised two pits (F151 and F155) and sleeper-beam trench F167. Pit F151 (GS K2–3, J2–3, I2–3, H2–3, G3–4 and F4) was cut by both F155 (GS J2, I2–3 and H2) and F167 (GS H2–3, G2–3 and F3). This truncation meant the shape of the feature was not fully discernible. The pottery assemblage recovered from both fills (L152 and L202) was dated to between 1450 and 1600, and comprised Medieval Coarse Ware with medieval Sandy Orange Ware from L202. The upper fill (L152) contained a wide range of pottery fabrics, the majority of which were variants of Medieval Sandy Grey Ware, Colchester Ware and late medieval transitional wares. Five fragments of 17th to 19th-century flat roof tile were also recovered from this pit. These fragments may have been intrusive, as F151 was cut by Phase 4 Post-holes F149 and F153; however, based on ceramic evidence, the pit appeared to have been infilled by 1550.

Animal bone recovered from L202, comprised a small amount of bone belonging to horse, sheep/goat, cattle, domestic fowl, pig and fish; three fragments of which displayed evidence of butchery. An environmental sample taken from the feature's upper fill (L152), contained corn marigold, indicative of arable cultivation within the landscape surrounding the site (Wilson and King 2003). L152 also contained a small amount of charcoal; though the limited amount prevents any associated interpretation.

The sleeper-beam trench F167 cut the north-western edge of Pit F151. The southern part of the trench was aligned north-east/south-west, with a slight turn to the north-north-east/south-south-west. No finds were recovered. That F167 was cut by Pit F155 indicates the sleeper-beam trench predated the pit. Unfortunately, F167 was truncated at both ends by two Phase 2 pits. This restricts any detailed interpretation of the feature, although it was possible to note that the trench was much wider than sleeper-beam trench F141; possibly indicating that F167's associated structure was the larger of the two.

Pit F155 was shallow in depth, suggesting it may not have been created to quarry clay, although the pit did extend beyond the limits of the excavation and may have deepened at some point. Two types of pottery were recovered from F155: medieval Sandy Orange Ware and Colchester Ware, dated to between 1200 and 1550. Pit F155 cut Sleeper-Beam Trench F151, which contained pottery dating to between 1400 and 1550. It is therefore likely that F155 was originally excavated shortly after F151 went out of use.

Pit Group 2

The site's stratigraphic evidence suggests that Pit Group 2 originated after Pit Group 1. Pit Group 2 comprised four pits (F175, F206, F211, and F169) and one probable post-hole (F241). It is possible that unphased Pit F240 also related to this group, though a lack of stratified diagnostic finds, and the fact that it was located slightly further to the east of the main features, prevents a direct association being made. Pit F175 (GS K5, J3–4 and I4) appears to have been created before any of the cluster's other features. F175 cut F141, and was truncated by F211. F175 was a similar depth to that of F151, Pit Group 1. This may suggest that both features (F175 and F151) shared a similar purpose; possibly related to the quarrying of clay, though this interpretation is speculative. Fill L176, produced a similar finds assemblage to the majority of Phase 2 features: medieval sandy grey wares, Colchester wares, medieval sandy orange wares and late medieval coarse wares and imported Raeren Stoneware (dated to between 1450 and 1550). Two fragments of flat roof tile and a small amount of charcoal were also recovered from this pit, along with a small quantity of fragmented animal bone including cattle and sheep/goat bone.

Based upon the stratigraphic evidence, the next cluster-associated feature to have been created was Pit F206 (GS J4, I3–5 and H3–4). This feature cut F175, and was cut by F169 and F211. F206 contained three fills (L210, L252 and L207), plus one sand lens (L205=209). Primary fill L207 is thought to have comprised redeposited natural, mixed with topsoil, possibly related to the quarrying of clay. It contained late medieval pottery (dated to 1400–1550). The presence of sherds of Dutch redware within this layer, coupled with the implication that Manningtree may have boasted a port by this time, may suggest that Manningtree was already connected to continental trade routes by the late medieval period. One fragment of flat roof tile was also recovered from this fill. Environmental sampling revealed barley, oat and indeterminate cereal grains, as well as charcoal. The amount of grain was very small and therefore cannot be indicative of site use, but does show the area surrounding Manningtree produced oat and barley crops during this phase.

No finds were recovered from the secondary fill (L252). The upper fill (L210) contained around 80% charcoal and a small quantity of pottery sherds, common to East Anglia between 1400 and 1550. It is possible that the concentration of charcoal related in some unknown way to minor industrial activity, though this is speculative. Two fragments of flat roof tile were found within this fill; dated to between the 17th and 19th centuries. Environmental sampling of this fill identified a small amount of domestic waste, comprising an indeterminate amount of cereal grain, small amounts of unidentifiable bone, burnt/fired clay and a large amount of charcoal.

Large, irregular shaped Pit F169 (GS I5, H4–6 and G4–7) cut earlier Pit F206. Although the width and length of the feature were much greater than the other pits within Group 2, its depth was much shallower. This might indicate that a different material was being quarried from this feature; perhaps sand. Pottery

recovered from F169's only fill, L170, comprised late medieval coarse ware; dated 1450–1600. Pit F169 was cut by smaller pit F239 (H6–7 and G6–7) which produced a small amount of residual pottery, dated to 1100–1350.

Pit F169 was cut by Pit F211 (GS J5–6, I5–7 and H6). F211 contained a single fill (L177). This contained pottery (dated to between 1480 and 1550) and a large amount of flat roof tile (6574g). Environmental sampling of the fill identified a small amount of indeterminate cereal grain, mallow and two fragments of oyster shell. Mallow is indicative of marshy grassland, perhaps from land surrounding the site.

Pit Group 3

Pit Group 3 was located to the north of Pit Group 2. The group comprised Pits F225, F243, F194 and F233. Two of the pits cut Pit F169 of Pit Group 2, while one truncated Sleeper-Beam Trench F167 of Pit Group 1.

Pit F233 (GS E3–4, D3–5 and C4–5) was one of the earliest pits from within this group. Its shallow form may indicate sand quarrying. The feature contained two fills (L231 and L232). Basal fill L232 comprised redeposited natural with topsoil and no finds. Upper fill L231 produced late medieval pottery dated 1500–1550; including Colchester Ware, medieval sandy grey wares and imported types such as Raeren Stoneware. The presence of Germanic wares may reinforce the view that the town of Manningtree had some trade association with the continent at this time. This fill also produced a hearth bottom and iron nails (perhaps indicative of onsite industrial activity). Also present were ten fragments of flat roof tile and animal bone, although only a small amount of this was identifiable to species (cattle, sheep/goat and goose). A single cattle bone, sheep/goat bone and one unidentified bone displayed evidence of butchery, suggesting that the site may have been associated with minor domestic activity at this time.

Pit F233 may have been contemporary with Pit F243 (G5–6, F5–6 and E4–6). This pit was shallow and may have been associated with sand quarrying. The fill (L200) contained pottery dated to 1450–1600. It is unlikely, however, that the feature post-dated 1500, as it was cut by Pit F225; the upper fill of which yielded pottery dated between 1300 and 1500. The upper half of an oyster shell was retrieved from L200, possibly indicating consumption of local shellfish on site.

Pit F225 (GS E4–5 and D4–5) was much smaller, but deeper than the earlier two pits within Pit Group 3. The deeper nature of this feature might indicate the quarrying of deeper natural deposits on site, such as clay. The pit contained five fills (L229, L204, L228, L227 and L226), of which only one produced datable artefacts (L226). Primary fill L226 yielded 14th-16th century medieval sandy orange ware. The pit is likely to have fallen within the later range of the date bracket, as it was cut by Pit F194, which yielded pottery dating from between 1450 and 1600. Three fragments of flat roof tile were found within primary fill L226, indicating that the material was unlikely to have been intrusive. The date of the roof tile (17th-19th centuries) coincides with the latest possible date for the pottery assemblage recovered from Pit F194; possibly indicating that the pottery recovered from L226 may have been residual.

Environmental evidence recovered from L226 supports the above suggestion that the site may have been located in a grassland environment at this time. This is evidenced by the presence of dock within a sample taken from this fill. A small amount of unidentifiable burnt bone was also recovered from the sample, suggestive of waste associated with domestic activity. Charred wheat grain may suggest the presence of agriculture within the area; however the small amount of grain is more likely to have been associated with domestic activity.

L227 (above L226) produced no finds. The fill was concentrated toward the eastern edge of the pit, suggesting it was the result of deliberate infilling. L228 also appeared to be the result of deliberate infilling, with the deposit tipped in at the eastern edge. L204 followed a similar infilling line to that of L227 and L228. This would suggest the feature was left open for a while, perhaps with the intention of waste deposition.

Pit F194 (GS F3–4 and E3–4) cut Pit F225 and Sleeper-Beam Trench F167 of Pit Group 1. F194 was a shallow, but long and wide pit. No pottery was recovered from its primary fill (L208); however upper fill L195 yielded late medieval transitional ware, dated to 1450–1600.

Pit Group 4

Pit Group 4 (GS I9, H8–10, G8–10, G8–89 and F8–9) comprised two pits (F198 and F131). F198 was the earliest feature; as it was cut by F131. Its shallow depth indicates it may have been created for the purpose of sand (rather than clay) extraction. A small amount of medieval coarse ware was recovered from the fill (L199), indicating an infilling date of the 13th to 15th centuries. Pottery recovered from Pit F131 (L132=179) was dated to between 1480 and 1550. F131 was much larger and deeper than F198 and may have been used to quarry clay. Its dark brown compact sticky clay fill, suggests the natural clay was reached, and slightly over-cut, when the pit was created.

Pit Group 5

This group (GS L8–10, K8–9 and J8) extended beyond the site boundary and comprised two large pits (F113 and F111) and two post-holes (F115 and F117).

Pit F111 was one of the smaller pits on site, its fill (L112) produced local and imported pottery dating to 1480–1550. The finds represent a typical assemblage from this site; a variety of fairly coarse wares with a small amount of imported ware. Two fragments of 17th-19th century roof tile, four fragments of sheep/goat bone, indeterminate cereal grains and mallow seeds were also recovered from L112, complementing results from other pit groups. A large amount of charcoal was present within the sample, as was a small amount of black porous 'cokey' material suggestive of combustion at very high

temperatures. The presence of this material may indicate that a kiln was located nearby, but not necessarily within the site's boundaries.

Pit F113 was located to the west of Pit F111, and was cut by Post-holes F115 and F117, Well F219 and Phase 4 Pit F172. F113 was very shallow, possibly due to sand quarrying. The fill (L114) contained late medieval/early post-medieval pottery (1480–1610). The fact that it was cut by F219 the lower fill of which contained pottery with a date range of 1480–1550, suggests that the feature was created prior to 1550, therefore was late medieval in date.

Post-holes F115 (L116) and F117 (L118) were cut into the top of Pit F113. Neither produced any finds, however F117 was cut by the Phase 3 Well (F219), indicating it was created prior to the 16th century. The similarity of form and fill suggests they were closely associated; however their function remains unclear, possibly due to the truncation of other associated features to the south and west by Phase 3 Well F219 and Phase 4 Offal Pit F172.

PHASE 3: LATE MEDIEVAL/EARLY POST-MEDIEVAL (1500/1550–1700) (Figs 2–5)

The Phase 3 evidence comprised six pits and one well in close proximity to Phase 2 pits. Pits F235, F244 and F253 were situated to the north-east of Pit Group 3, and may be considered a later extension of this group. Pits F221 and F223 cut Phase 2 Pit F131. Well F219 was located in the area of Pit Group 5; it cut through Pit F113 and clipped Post-hole F117. All of the Phase 3 features represent a continuation of onsite mineral extraction throughout the early post-medieval period, and are therefore considered in relation to Phase 2 Pit Groups.

Pit Group 3

Pit Group 3 comprised Pits F235, F244 and F253. F244 and F253 did not contain pottery within the 1550–1700 date range; however their location, respecting the edge of a definite Phase 3 Pit (F235) and cutting Phase 2 Pit F243, suggests they should be treated along with the other Phase 3 features.

Pit F235 (GS D5–6 and C5–6) cut Phase 2 Pit F233, but respected Pit F225. F235 contained one fill (L234) which produced nineteen sherds of Border Ware, common within the south-east of England during the post-medieval period. The shallowness of the pit indicates it might have been created in order to extract sand from the site.

Pit F253 (GS E7, D6–7 and C6–7) almost abutted F235. This feature was considerably deeper and narrower than F235. It contained a similar fill (L254) to F235, but produced no pottery or other artefactual evidence. Pit F244 (GS F6–8 and E6–8) abutted the southern tip of F253 and cut Phase 2 Pit F243, to the west. This pit was of a similar form to Pits F235 and F253. Fill L245 was very similar to the fills of F235 and F253 and contained four sherds of residual medieval pottery dated to 1200–1400/1500.

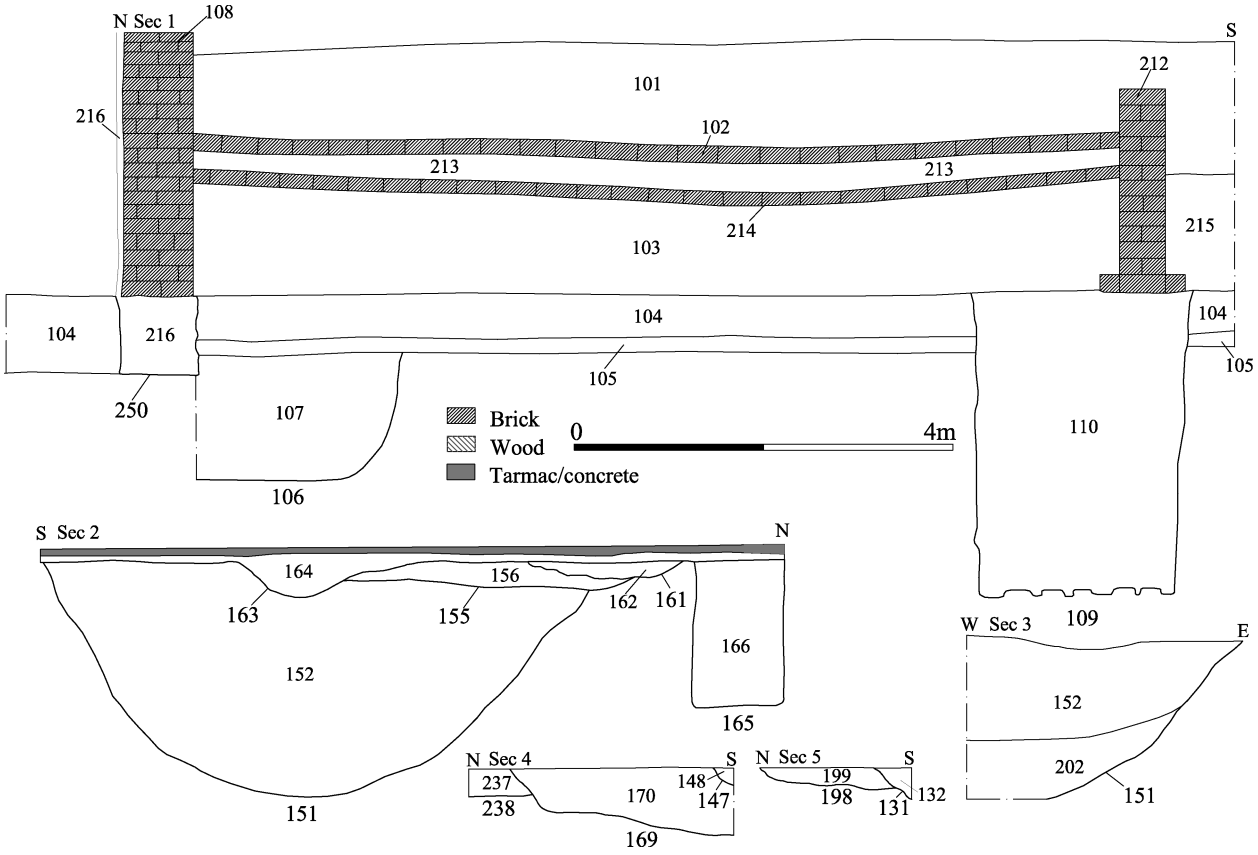


Fig. 4 Sections

Pit Group 4

Two small Phase 3 pits (F221 and F223) cut Phase 2 Pit F131. Pit F221 (GS I8–9 and H8–9) produced 34 sherds of Post-Medieval Red Earthenware, dated to between 1580 and 1700. Pit F223 (GS I9) contained imported Rhenish stoneware (Frechen Stoneware) pottery dated 1550–1700. Links to Germany appear to have continued from the late medieval period into the post-medieval period. Four fragments of 17th to 19th-century flat roof tile were also recovered from this fill, coinciding with the pottery collected. Animal bone within the fill belonged to cattle, sheep/goat and pig, as well as unidentifiable large and small sized animals. None of the bones exhibited evidence of butchery. The presence of this small amount of bone within the fill may be indicative of possible domestic activity associated with the site. A body fragment of an olive-green glass vessel was also recovered and has subsequently been attributed a likely 18th century date. The late date of this material may suggest it was intrusive within the Phase 3 feature, as Pit F223 was cut by Phase 4 Post-hole F121; however it could be indicative of the use of the pottery until a later than usual date.

Pit Group 5

F219 was an extremely deep, narrow circular feature; probably a well. The primary fill (L218) contained pottery dated 1480–1700, including Medieval Coarse Ware and Post-Medieval Red Earthenware, dated to the late 15th to early 16th centuries. Four fragments of 17th to 19th-century roof tile were recovered from this fill. This layer extends considerably higher up along the eastern wall of the well, than the western wall, suggesting the well was deliberately backfilled at this time. Its secondary fill (L217) consisted of a thin layer of yellow sand and contained three fragments of 17th to 19th-century roof tile.

Upper Fill L220 contained residual pottery; dated 1480–1550. Twenty fragments of 16th to 17th-century roof tile were recovered from this fill. The well was likely to have been created during an earlier phase of activity on site; however the full extent of the feature could not be excavated due to health and safety regulations. As such, earlier layers were not identified. Pottery dated to 1480–1550 should be considered residual due to the presence of material of later date within earlier deposits.

PHASE 4: LATE POST-MEDIEVAL/EARLY MODERN (1700–1900+) (Figs. 2–5)

Phase 4 comprises four sub-phases of onsite activity, all of which date to between 1700 and 1900+. The earliest activity is represented by a cobbled surface and a small pit, which is followed by two lines of post-holes, probably associated with a fence line; the post-holes are likely to have been associated with Buried Topsoil L104 and its subsoil (L105). A possible foundation cut was subsequently created, prior to the final stage of development, which comprised the construction of the Slaughterhouse.

The earliest Phase 4 features were Pit F106 (GS H12 and G12) and Cobbled Surface F161 (GS I2 and H2); these were both cut by later Phase 4 features. Pit F106 was located beneath the buried topsoil and subsoil (L104 and L105). Pottery recovered from the fill of this feature

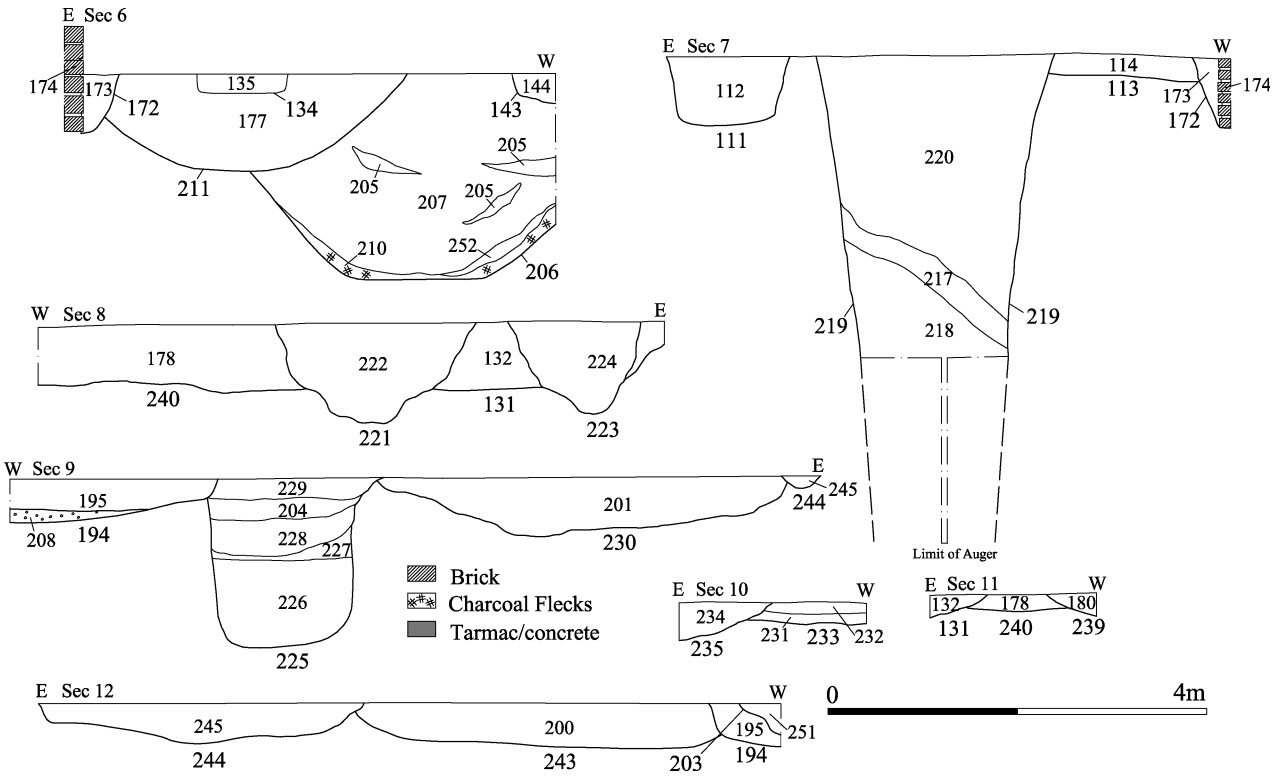
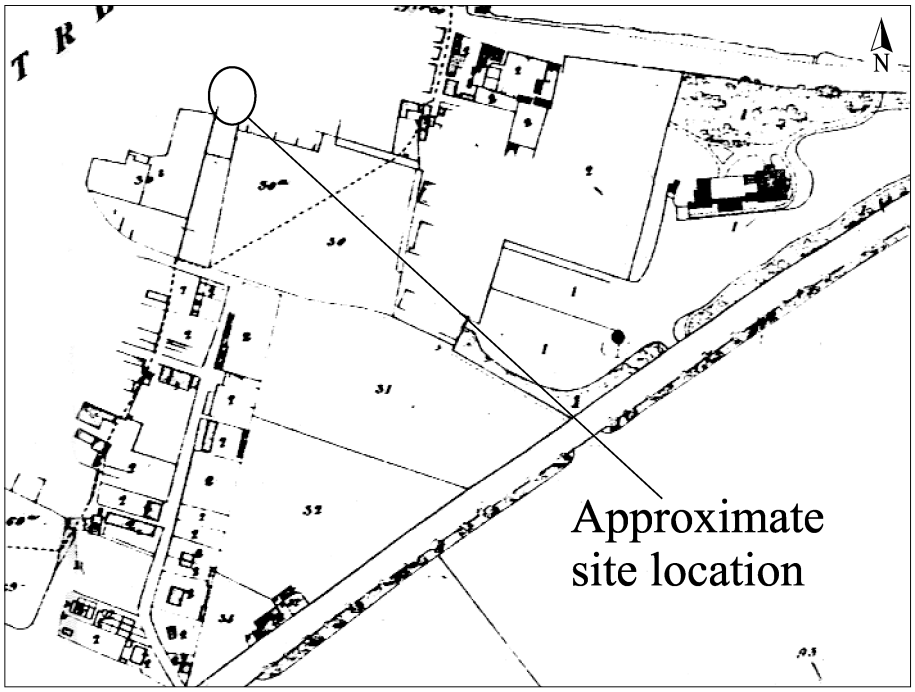


Fig. 5 Sections

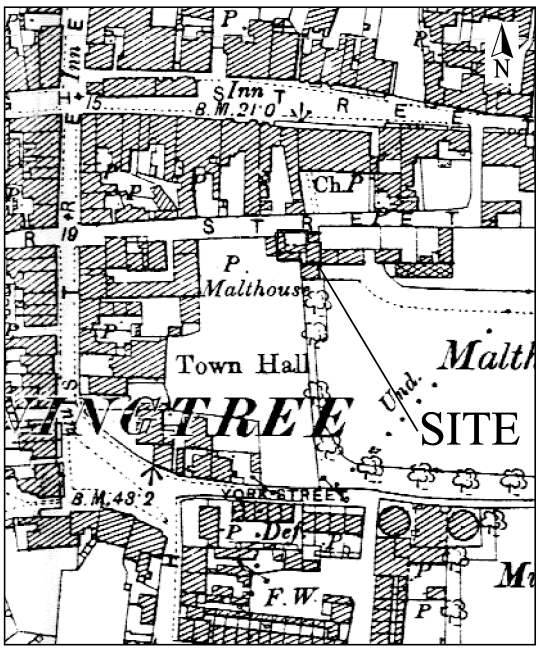
dates from *c.* 1790 onwards, thus suggesting that the later Phase 4 features were created after the turn of the 18th century.

Cobbled Surface F161 was cut by Phase 4 Post-hole F159. F161, L162 produced pottery (dating from between 1750 and 1800), one fragment of pig bone, two fragments of large-sized animal bones, and one undetermined animal bone. The large-sized animal bones exhibited evidence of chopping and smashing suggestive of butchery.

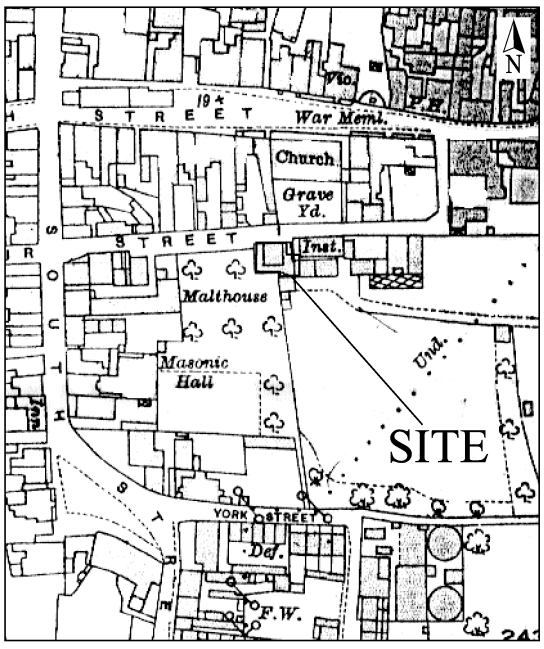
The Mistley Tithe Map of 1843 (Essex Record Office Ref: DC/T 243; Fig. 6) shows that land owned by Francis Norman, to the south-west of the site, was used as a garden. The plot to the south-east of the site was owned by Edward Norman, who used half of it as a meadow and half as a paddock. The exact location of the site is not defined on the tithe map for either Mistley or Lawford parish, but is situated just to the north of the aforementioned plots. No buildings are shown on the site; however an L-shaped plot of land divided Edward Norman's meadow and Francis Norman's garden. The site is located in the northern part of this division; the dividing lines shown on the tithe map may have been physically represented by two fence lines of differing



1843 Mistley tithe map



1897 2nd edition OS map, scale: 25" to 1 mile



1923 OS map, scale: 25" to 1 mile

Fig. 6 Cartographic sources. (Top) reproduced by kind permission of the Essex Record Office. (Bottom) reproduced from 1897 and 1923 Ordnance Survey Maps. © Crown copyright

date; the line of which may be expressed by the post-holes (F121 (GS I9–10 and J9–10), F125 (GS I10–11), F127 (GS I11–12), S133 (GS I8), F134 (GS J5–6 and I5–6), F136 (GS K6 and J6), F149 (GS J3), F153 (GS J2), F157 (GS H3), F159 (GS H2), F181 (GS G2), F188 (GS D3), F190 (GS C3) and F192 (GS D2)). Buried Topsoil L104 and Buried Subsoil L105 may have been associated with the garden and meadow to the south of the site.

The post-holes were mostly square in shape, with the exceptions of S133, F149, F181 and F192. S133 was cut into the south-eastern corner of unphased Pit F240, with only the post remaining; if it was associated with a sub-square cut, evidence of the cut had been disturbed by the time of archaeological investigation. Post-holes F181 and F192 appeared to be associated due to their similar form and alignment. Post-holes F149 and F136 may also have been associated with this alignment. These four do not conform to the shape or alignment of the square post-holes, and therefore may have formed a separate fence line at a difference time.

Square post-holes F121, F125, F127, F133, F134 and F153 followed an east-west alignment. Five of the posts were preserved within their cuts (S133, S124, S123, S126 and S127), indicating a relatively recent date as the conditions on site were not conducive to wood preservation (the site was not waterlogged). F121 formed a double post-hole. No finds were recovered from these features.

Square post-holes F157, F159, F188 and F190 lay on a north-south alignment, and were probably associated with the east-west aligned post-holes above. These formed a slightly curved fence line. F157 was located in an irregular position to the east of F159, suggesting that the line altered slightly during its lifetime. Post-hole F157 was the only feature within this group to produce archaeological finds; this comprised one sherd of Medieval Coarse Ware (dated to 1175–1400) and is considered to have been residual as the feature cut Phase 2 Quarry Pit F151. A hearth bottom with coal fuel was also recovered from this post-hole, indicating that small-scale industrial activity may have occurred on site during the post-medieval period.

The four remaining post-holes (F136, F149, F181 and F192) may have formed another fence line. F136 was cut by Phase 4 Offal Pit F172, and although its form was slightly different, it cannot be associated with the other fence lines, due to its circular shape and location. Pottery recovered from the fill, dates from between 1480 and 1700, and may have been residual. The line this fence might have formed would have followed an east-west/south-north alignment, just inside the modern site boundary. None of the other post-holes yielded any archaeological finds.

Linear Feature F109, (GS L12, K8–12, J8–11 and I8–9) which lay on a north-west/south-east alignment, may have been a foundation cut for a large building, not noted on any of the 19th-century maps. This feature was created after the east-west fence line became disused; as it cut double post-hole F121. F109 also cut through Phase 4 layers L104 and L105. F109 was cut by brick lined Offal Pit F172, and is therefore not deemed to have been associated with the slaughterhouse. The wall of Structure S212 was situated on a plinth on top of the southern side of this linear feature; the feature was too wide to be considered a foundation cut associated with the erection of this structure. Four sherds of Post-Medieval Red Earthenware were recovered from the fill (L110), indicating a date between 1480 and 1900. Sixteen fragments of flat roof tile were also found within L110, assisting to refine the date of the feature to between the 17th and 19th centuries. A shoulder fragment of a cylindrical dark olive-green glass bottle was also found; this was probably 18th century in date. Two iron nails were collected from the fill, although they cannot be dated. The content of the fill suggests the feature was filled with deposits of domestic waste during the 18th century.

There is no documentary evidence available that states when the slaughterhouse was developed, therefore the onsite structures need not be related to the initial construction of the slaughterhouse. An institution was identified on the Ordnance Survey map of 1923 (Fig. 6), immediately to the east of the site. This building was not depicted on the Second Edition Ordnance Survey of 1897 (Fig. 6), when the site was occupied by four structures. A large square building overlapped the western site boundary and was abutted to the south by a rectangular building, aligned east-west. To the east of this structure, a large rectangular building, aligned north-south, overlapped the eastern boundary, and abutted the eastern edge of the northern wall of a square building to the south. A narrow rectangular building was located in the centre of the site, on an east-west alignment; this abutted all three other structures.

The structures situated along the eastern site boundary might be represented archaeologically by Structures S212 (GS L12 and K12) (a barn or stable) and S108 (GS G12) (a Victorian structure). The fill of Structure S212 comprised five layers. Basal layer L103 comprised a light grey sandy silt-rubble/hardcore deposit; a probable levelling layer below the floor of the structure. L214 overlay L103 and comprised a yellow brick floor, above which lay L213. This was a dark grey, compact clinker deposit, which may have formed a levelling layer for the laying of later red brick Floor L102. L101 (modern topsoil) overlay L102. To the south of Structure S212, a beach pebble layer (L215) probably denoted an exterior yard area associated with the buildings; this was level with the first brick floor (L214).

Wall F196 (GS B2–11) appears to have formed the northern boundary of the site; the cellar (F246) (GS C2 and B2) might have originally belonged to a gatehouse structure. Neither the wall, nor the structure associated with the cellar, were marked on the 1843 Tithe Map (Fig. 6), the Second Edition O.S. of 1897 (Fig. 6) or the 1923 O.S. (Fig. 6). This might indicate that Wall F196 and Cellar F246 post-dated 1923; however, shards of seven cylindrical glass bottles recovered during excavation of Cellar F246 indicated a late 18th to early 19th-century

date for the fill of the structure. Two fragments of cattle and sheep/goat bone were also recovered from L247 (F246); no indication of butchery was discernible. The pottery assemblage comprised English Stoneware (1700–1900), china (1794–1900), Transfer Printed Ware (1780–1900), and three sherds of Nottingham Stoneware (1700–1800). The presence of Nottingham Stoneware, combined with the china and Transfer Printed Ware, would indicate a late 18th to early 19th-century date for the infilling of the structure. Such an early date is supported by the lack of a structural presence on the tithe map of 1843.

The brick-lined cistern (F183, S184, and L185 (GS F2 and E2)) may have been a later feature, possibly constructed for the slaughterhouse. No pipes or trenches were identified leading off from the cistern, suggesting it may have been related to features beyond the western site boundary. No finds were recovered from the feature. One shallow, but long, wall trench, complete with its wall, was located along the western boundary of the site (F163 (GS K-G2). F163 cut the top of Phase 2 Pits F151 and F155 and unphased Pits F161 and F165. This was associated with the creation of the brick-lined cistern (F183), as the wall abutted the roof. Small Pit F186 (GS E2–3) may have been associated with the construction of the cistern, as it contained the only brick discovered on site, dating to the late 18th/19th century. Brick-lined offal Pit F172 (GS L6–8, K6–8 and I6–8) was located to the west of S212, and was the only building certainly related to the modern, now demolished, slaughterhouse. No finds were recovered from the fill of this feature.

UNPHASED FEATURES (Figs 2–5)

Two pits (F238 and F240) and one possible small sleeper-beam trench (F119) of potentially (but uncertain) early to late medieval date, comprise the earliest unphased features. Pit F238 (GS G4–5 and F4–5) was located between Pit Groups 1, 2 and 3. The pit was cut by four Phase 2 pits (F243, F169, F151 and F194). No finds were recovered from this feature. Pit F240 (GS I6–8, H6–8 and G7) was located between Pit Groups 2 and 4. One fragment of flat roof tile was recovered from the fill (L141) indicating a 17th-19th century date of creation, however this could have been intrusive, as the pit was cut by seven later features (Phase 2 Pits F211, F169 and F131; Phase 3 Pits F221; Phase 4 Post-hole S133 and Offal Pit F172). Pottery dating from 1780–1900 was also discovered within fill L141, however this must be considered to be intrusive due to the amount of disturbance by later features. F119 (GS K8–9) may have been a similar structure, created at an earlier or later date than F141. Truncation at either end of the feature restricted further interpretation.

Pit F239 (GS H6–7 and G6–7) cut Phase 2 Pit F169 and unphased Pit F240. A molar belonging to a sheep/goat was identified within the fill of the feature, as was an unidentified unbutchered animal bone and residual Hedingham Ware; this suggests a date between 1150 and 1350. Five pits (F143 (GS J4 and I4), F145 (GS I4–5), F147 (GS H5), F139 (GS K4) and F236 (GS H4–5)) failed to produce any stratified diagnostic finds. These pits cut Phase 2 features and could, therefore, be contemporary with unphased Pit F239; no stratigraphic or geographic relationships were discernible.

Pit F165 (GS H2 and G2) was cut by cobbled surface F161. The depth of this feature indicates it was not related to the Phase 4 post-holes, even though its shape in plan appears similar. This feature appears to represent a foundation cut but the structure it would have supported was not discovered during the archaeological investigation. F165 contained a fragment of a clay tobacco pipe, which cannot be closely dated but must post-date the 16th century.

SPECIALIST REPORTS

Romano-British Pottery

By Andrew Peachey

A single context, Pit F230 (L201), produced 16 sherds (196g) of Roman pottery and a single sherd of Stamford Ware that is probably intrusive from an inter-cutting medieval feature. This assemblage is dominated by sherds of locally produced Sandy Grey Ware (12 sherds, 171g), including a bead and flange rim dish and a miscellaneous everted jar rim. Also present are two small cross-joining sherds (17g) (of Shell-Tempered Ware), probably from Harrold, Bedfordshire (South Midlands), a single sherd of Hadham Oxidised Ware (7g) (from an everted rim jar) and a flake of Central Gaulish Samian Ware (1g). The group is slightly abraded, and contains a small range of fabrics and forms common to the region that indicate a date in the late 3rd to 4th century AD.

The Medieval and Post-Medieval Pottery

By Peter Thompson

The excavation recovered 280 sherds (4.545 kg) dating from the medieval to the early modern periods. The assemblage is in a mixed, but generally poor, condition. The medieval pottery is more abraded compared to the later pottery. Little archaeological excavation has been carried out before at Manningtree and a selection of sherds was sent for examination to pottery specialists Berni Sudds and Helen Walker who are familiar with the local fabrics and wares.

The Medieval Pottery

The medieval pottery consisted of 203 sherds, of which 100 came from pit F151 (L152 and L202). The two main groups present are Sandy Grey Wares (F20) and Orange Sandy Ware (F21) (See Appendix 1).

Sandy Grey Wares

The term 'Sandy Grey Wares' encompasses all reduced wares made in Essex, and sometimes, further afield. They date from the late 12th century to the end of the 14th century (Cotter 2000, 91–2 and McCarthy and Brooks 1988, 300). The 72 Sandy Grey Ware sherds recovered, account for over 25% of the pottery from the Old Slaughterhouse site. Included here are eighteen sherds,

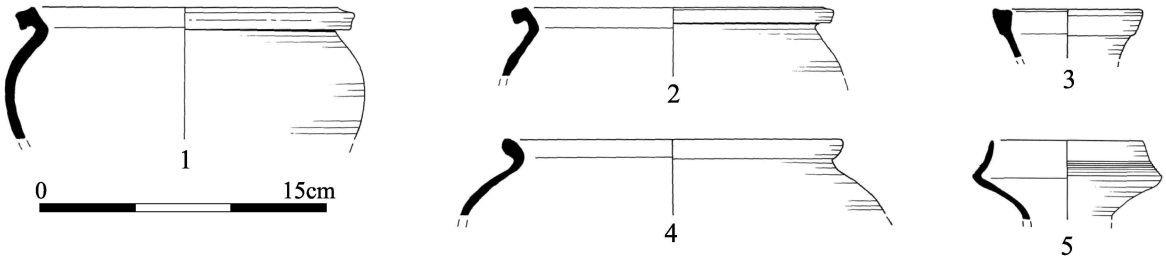


Fig. 7 Medieval pottery

which can be classed as 'North Essex Grey Wares' (Helen Walker pers. com.), in a fabric similar to Hedingham Coarse Ware. These were possibly a little coarser and therefore might be products of the Mile End/Horksley kiln outside Colchester. The largest sub-group comprised 38 sherds, with all but two from Pit F151 (L152). They have grey surfaces with brown cores, with the inner core sometimes reduced. Fabrics contain poorly sorted clear, white and occasionally red quartz, whilst black, burnt organics and rounded red ironstone is frequently present. These fabrics have not been provenanced and a cooking-pot upper profile with down-turned squared rim (Fig. 7.1) has no close parallels, although it is likely they were made within a 25 mile radius of Manningtree. Another rim of a fairly similar type, (Fig. 7.2) in another sandy grey fabric, also came from L152. Both of these vessels have rim diameters of approximately 18cm.

Colchester Type Wares and Sandy Orange Wares

Sandy Orange Wares account for 66 sherds (23.6% of the site total), of which 41 are Colchester-type wares (14.6%), with some white slip and/or green glaze decoration. Colchester Wares date between *c.* 1200 and 1550, with the painted white slip thought to occur more frequently between *c.* 1400–1550. Two painted slip decorated Colchester Ware jug rims came from L152 (Fig. 7.3). A thumbed jug base, similar to examples from Colchester (Cotter 2000, 114 fig. 71), was present in F155 (L156). Another group of sherds (25/9%) of Fabric 21 (a hard orange fabric sometimes with reduced cores) was similar to, and probably included, further Colchester-type ware.

Medieval Coarse Wares

Thirty-six (12.8%) sherds are made of a fairly coarse brown fabric, sometimes with grey cores, containing poorly sorted quartz sand and a little mica. Two thirds of these sherds displayed a clear patchy glaze. Some examples of this fabric have similarities with Mill Green Coarseware however, Mill Green Coarseware is not commonly found in North Essex and a cooking pot rim from F233 examined by Helen Walker (Fig. 7.4) is not a recognisable Mill Green form (Helen Walker pers. com). The fabric is, therefore, a possibly locally made north Essex or south Suffolk form. These wares are probably late medieval as they frequently appear with late medieval and early post-medieval wares.

Other medieval sherds

Hedingham-type Fine Ware, but in a coarse ware form (Helen Walker pers.com.), is present in five sherds of fine, oxidised, sandy fabric with grey surfaces. Hedingham Ware is traditionally dated *c.* 1140–1350 (Cotter 2000, 91), however, as most of the sherds appear with late medieval transitional wares, the sherds are either residual, or the fabric has greater longevity in this part of Essex. Two small sherds of highly decorated glazed red earthenware with applied red slip from L152 have a superficial appearance of Low Countries Highly Decorated Ware, sometimes known as Aardenburg Ware, though they were not a good match for the Essex reference collection (Helen Walker pers. com.). Two further glazed sherds could be classed as Essex glazed wares, but the exact provenance cannot be determined (Helen Walker pers. com.). Twenty sherds (4.3%) were Late Medieval Transitional, of which twelve came from L152.

The Post-medieval Pottery

This comprises 77 sherds including imported Rhenish stonewares from Siegburg (1350–1550), Raeren (1480–1610), and Frechen (1550–1700). Probably the most intrinsically interesting sherd is the rim of a thin walled Siegburg drinking bowl or shallow beaker (Fig. 7.5) from F175 (L176), (AD 1350–1550) (Berni Sudds pers. comm.; Beckmann 1974, 220). Twelve sherds (4.3%) in Raeren Stoneware include a drinking jug from F111 (L112), whilst a single sherd of Bellarmine jug in Frechen Stoneware came from F223 (L224). One sherd of 15th century Dutch red earthenware with brown glaze was recovered from F206 (L207) (Berni Sudds pers. comm.). The majority of the remaining pottery is early modern, mainly associated with Victorian activity and includes English Stoneware, Nottingham-type Stoneware, Creamware, Transfer Printed Ware, china and a handle from an imported Westerwald Stoneware jug. F246 contained 31 sherds accounting for 40% of the post-medieval pottery.

Discussion

The medieval component is dominated by Fabric 20 sandy grey wares and Fabric 21 sandy orange wares (including Colchester-type Ware), which account for 68% of the medieval assemblage. There is no evidence to show that any features pre-date the 13th century, although it is possible some sherds, most notably from the Fabric 20 sandy grey wares, could be a little earlier

and residual. The 57 sandy grey ware sherds from F151, including cooking-pot rims (Figs. 7.1 and 7.2), are likely to be residual, as the context contains transitional or very early post-medieval redware, of late 15th to 16th century date. Three sherds of sandy grey or brown fabrics were also found in an excavation at the neighbouring Manningtree Church in 1974 and dated to the 13th century. This excavation recovered a sherd of Aardenburg Ware (Rodwell 1976, 277). The sherd of glazed Dutch red earthenware also suggests a connection with the Low Countries whilst the importation of German stonewares shows links with the Rhineland. The relative frequency of Raeren Stoneware appearing in Features F111, F113, F131, F175, F211, F219 and F233 is reflected in its popularity in England between 1475 and 1550 when it has a strong association with Colchester wares; after 1550 both decline (Cotter, 2000 112–3). The association of Raeren Stoneware also with late medieval transitional ware and the late medieval coarse ware with clear glaze supports this date and suggests the main period of activity on site.

The Ceramic Building Materials (CBM)

By Andrew Peachey

Excavations produced a total of 196 fragments (13465g) of late-medieval/post-medieval CBM. With the exception of a single fragment of brick in Pit F186 (L187), the entire assemblage comprises flat roof tile. The CBM was quantified by fragment count and weight; all extant dimensions were measured and the fabric was examined at ×20 magnification. All data are recorded in a MS Excel spreadsheet that will be deposited as part of the archive (see Appendix 2). Forms and fabrics are categorised below:

Flat roof tile (10–12mm thick). The surfaces of this tile are slightly irregular, and the edges of the tile slightly thicker, often exhibiting finger impressions. Circular pre-firing peg/nail holes (10–15mm diameter) may also be present near the edge of the tile. The fabric of the flat roof tile in this assemblage is homogenous. Surfaces are reddish-brown (5YR 5/4–5/6) and the core is reduced. Inclusions comprise moderately sorted, coarse quartz sand (0.2–0.555, occasionally to 1mm), with sparse iron rich grains (0.2–0.5mm). 17th to early 19th century.

Suffolk White-type brick (Ryan 1996, 95) (?x100x60mm). This brick has a flat base (no frog), regular faces and arrises. The fabric is cream/pale yellow with inclusions of common, well-sorted sand (<0.3mm), sparse limestone and flint (both <10mm). Late 18th to 19th century.

The bulk of features contain insignificant concentrations of less than 10 fragments of flat tile, however these fragments are relatively unabraded despite fragmentation. Equally well preserved is the significant group of roof tile in Pit F211 (L177) that accounts for 56.63% of the assemblage by fragment count (48.82% by weight). There are also comparable, but smaller concentrations in Well F219 (L217, L218 and L220) and in Gully F109 (L110). The CBM in Pit F186 L187 is notable only because it contains a single fragment of Suffolk White-type brick alongside a small quantity of flat roof tile.

Glass

By H. E. M. Cool

Pit F247 contained base fragments from seven cylindrical bottles. These were not machine made and a date of the late 18th to early 19th centuries would be appropriate. The other fragments are less diagnostic, but two are most likely to be of eighteenth century date and another belongs to the nineteenth century.

The Copper-alloy and Iron Objects and Clay Tobacco Pipe

By Nina Crummy

None of the objects is closely datable, although the clay tobacco pipe stem from F165 must post-date the later 16th century. See Appendix 4 for data table.

The Slag

By Jane Cowgill

Two pieces of slag were submitted for recording. They were washed before being identified solely on morphological grounds, by visual examination, sometimes with the aid of a ×10 binocular microscope. They were recorded on a *pro forma* recording sheet and this information was entered directly into the catalogue.

Both pieces are by-products of iron smithing – the forging or recycling of iron objects. One piece of coal was identified as a fuel used in the smithy hearth.

The Animal Bone

By Carina Phillips

A total of 113 fragments of animal bone were hand excavated. The animal bone came from sixteen contexts. These have been dated to Phase 2, Late Medieval (1400–1550), Phase 3, Late Medieval/early post-medieval (1500/1550–1700), Phase 4d, Late post-medieval/modern (1700–1900+); some contexts remain unphased. The bone is of moderate-poor preservation. Surface erosion is frequent. A number of contexts contained bone exhibiting a 'cessy' appearance.

Of the entire assemblage, 42% (48 fragments) came from features dating to Phase 2. Twenty-three fragments (48%) were identifiable to species. Sheep/goat bones were most frequently identified. Cattle, pig, horse, domestic fowl, goose and fish are also present in the assemblage. Seven bones exhibit observable butchery marks, three are smashed, two have chop marks, one fragment exhibits cut marks and one was sawn. The smashed bone fragments are likely to have been caused by breaking the bone for marrow. Carnivore gnaw marks were observed on only one bone. Phase 3 features yielded 22% of the entire assemblage. Sheep/goat, cattle and pig were the only identifiable species in this phase. A single bone exhibits butchery marks in the form of cut marks. One bone fragment exhibits carnivore gnaw marks. Phase 4 features contained only two fragments of animal bone,

these are identifiable to cattle and sheep/goat. Neither fragment exhibits butchery evidence. Thirty-eight fragments (34% of the assemblage) were excavated from unphased features. Details of these bones are presented in Appendix 3.

The small size of the animal bone assemblages in all phases has limited the analysis of the animal husbandry and processing. All the species, except the unidentifiable fish bone (and with the possible exception of the goose bone) were domestic species, which are the most commonly exploited animals. Cattle sheep/goat, pig, domestic fowl and goose are likely to have been utilised for their meat in addition to other produces such as dairy, wool and eggs. Cattle may have also been used in traction and transport; horses however would have provided a faster means of transport.

Shell

By Carina Phillips

Twenty-two fragments of oyster shell *(Ostrea edulis)* were recovered from eight contexts, spot dated to 1400–1800/1900. The oyster shells came from a minimum of seven individuals. There were no other shell species present.

Charred Plant Macrofossils and Other Remains

By Val Fryer

Cereal grains and seeds of common weeds were present at a low density (mostly as single specimens) within all but one of the assemblages. Preservation was generally poor, with most of the grains being severely puffed and distorted, probably as a result of combustion at very high temperatures. Oat (*Avena* sp.), barley (*Hordeum* sp.), rye (*Secale cereale*) and wheat (*Triticum* sp.) grains were recorded, although cereal chaff was entirely absent. Weed seeds occurred in only five samples. All were of common segetal or grassland plants including corn marigold (*Chrysanthemum segetum*), mallow (*Malva* sp.) and dock (*Rumex* sp.). Charcoal fragments were present throughout and abundant within the assemblages from contexts L210 and L177. Other plant remains were rare, although Well F219 contained a small number of indeterminate rachis nodes. Fragments of black porous and tarry material were present throughout. Although some may be residues of the combustion of organic remains (including cereal grains) at very high temperatures, others had the appearance of fuel residues, possibly coke. Other remains were exceedingly scarce.

In summary, the density of plant remains within the assemblages is extremely low, and the few remains recorded are very poorly preserved. There would appear to be a moderate degree of modern contamination within most of the assemblages, probably as a result of recent root disturbance. Although cereals were probably being utilised on or near the site during the entire medieval period, there is insufficient material to accurately identify any particular focus of activity.

DISCUSSION

Phase 1

The identification of a Roman pit on site is significant for the local area. Manningtree was not thought to have been settled until the 13th century, however, Roman activity, albeit limited, has now been attested pushing the history of Manningtree back almost 900 years. Several other later features cut this pit, suggesting the possibility of other Roman activity in the area, but were disturbed by later activity. The pit also raises the question of mobility in the area; a Roman road from Colchester to Mistley has been identified but it is not clear whether the road led up to the River Stour, or whether it took a route along the estuary bank, towards Harwich. The Roman settlement at Dovercourt, Harwich, indicates use of the estuary mouth and may suggest the river was navigated up to the end of the estuary to Manningtree or Mistley.

Phases 2 and 3

The late medieval and early post-medieval pitting at the site might be indicative of quarrying for the purpose of tile manufacture. Both clay and sand may have been quarried (clay tiles were often laid out to dry on a bed of sand). No definite structures or kilns were identified on site, unlike the tile production site at Danbury (Drury and Pratt 1975), however, three possible sleeper beam trenches were excavated which had the potential to support two very small, possibly temporary structures and one larger structure.

The finds assemblages from these features are suggestive of domestic waste, associated with food preparation, for example the presence of butchered animal bone, oyster shells and very small amounts of charred grain. The pottery recovered also hints at domestic use as the forms used were of common, fairly coarse fabrics and comprised drinking vessels, jugs and cooking-pots. The presence of Rhenish pottery indicated continental trade links for the town at this time, suggesting Manningtree was used as a port since the town's early history.

The presence of 17th to 19th-century flat roof tile within many of the pits containing 16th century, or earlier, pottery, may indicate that the site was involved in early production or use of this type of tile. Alternatively some of this pottery may have been residual in later features, or used beyond the periods commonly employed to define their chronological lifespan.

Phase 4

The latest phase of activity showed a changing use of the land during the late post-medieval period. A structure and cobbled surface may have been contemporary during the late 18th century but no evidence for land use was collected. The fence lines of the next stage of activity, combined with the buried topsoil and subsoil, may be indicative of the use of the site as a garden and meadow as noted in the Mistley Tithe Apportionment of 1843. A large linear feature, possibly a construction cut, then ran through the south-east of the site on a south-east/north-

west alignment, cutting through one of the post-holes, but no associated features were identified. The final stage of activity may have represented the construction of the slaughterhouse and its associated buildings.

BIBLIOGRAPHY

Anon, undated. www.ads.ahds.ac.uk. Accessed 11-12-07

Beckman, B. 1974 'The Main Types of the First Four Production Periods of Siegburg Pottery' in Evison, V., Hodges, H. and Hurst, J. G. (eds) *Medieval Pottery from Excavations,* John Baker, London

Clarke, H. 1984 *The Archaeology of medieval England,* British Museum Publications Ltd, London, 129–165

Cotter, J. 2000 'Post-Roman Pottery from excavations in Colchester 1971–85', *Colchester Archaeological Trust Report 7*

Drury, P.J. and Pratt, G.D. 1975 'A late 13th and early 14th century tile factory at Danbury, Essex, *Medieval Archaeology* 19, 92–164

Graham, E-J. and Woolhouse, T. 2007 *Old Slaughterhouse, Stour Street, Manningtree, Essex: post Excavation Assessment and Updated Project Design,* Hertford, Archaeological Solutions Ltd Report 2188

McCarthy, M. and Brooks, C. 1988 *Medieval Pottery in Britain AD 900–1600,* Leicester University Press

Medlycott, M. 1999 *Harwich: Historic Towns Assessment Report 1999,* Chelmsford, English Heritage and Essex County Council

Morris, P. 1979 *Agricultural Buildings in Roman Britain,* British Archaeological Reports (British Series) 70

Rodwell, K. 1976 'A trial excavation at Manningtree church in 1976' in Dunning G.C. (ed) 'Aardenburg Ware from Manningtree, Essex and finds of Aardenburg Ware and other pottery imported from the Low Countries found in England and Wales', *The Transactions of the Essex Archaeological Society,* Vol 8, 184–279

Ryan, P. 1996 *Brick in Essex: from the Roman Conquest to the Reformation,* Private Publication

Smith, T.P. 1985 *The Medieval Brickmaking Industry in England 1400–1450,* British Archaeological Report (British Series) 138, British Archaeological Reports, Oxford

Sparrow, P. 2007 *The Old Slaughterhouse, Stour Street, Manningtree, Essex: Research Archive Report,* Archaeological Solutions Ltd Report 2269

Trott, K., Grassam, A. and Woolhouse, T. 2007 *The Old Slaughterhouse, Stour Street, Manningtree, Essex: Archaeological Monitoring and Recording,* Archaeological Solutions Ltd Report 2135

Wilson, P. and King, M. 2003 *Arable Plants – a field guide,* London, Hanway Press

APPENDIX 1: The Pottery Data

Code	Name	Date Range
HED	Hedingham Ware	1140–1350
AARD	Aardenburg-type Ware	1150–1400
ESSG	Essex Glazed Ware	1150–1400
F20	Medieval Sandy Grey Wares	1175–1400
F20e	North Essex Sandy Grey Wares	1175–1400
MCW1	Medieval Coarse Ware (unglazed)	1200–1400/1500
MCW2	Late Medieval Coarse Ware (clear glazed)	1200–1400/1500
COL	Colchester-type Ware	1200–1550
F21	Medieval Sandy Orange Ware	1200–1550
SIEG	Siegburg Stoneware	1300–1630
LMT	Late Medieval Transitional Ware	1450–1600
RAER	Raeren Stoneware	1480–1610
PMRE	Post-Medieval Red Earthenware	1480/1580–1900
BORD	Border Ware	1500–1700
FRECH	Frechen Stoneware	1550–1700
WEST	Westerwald Stoneware	1590–1900
STSL	Staffordshire Slipped Ware	1680–1800
NOTS	Nottinghamshire-type Stoneware	1700–1900
ENGS	English Stoneware	1700–1900
CREAM	Creamware	1740–1880
ENPO	English Porcelain	1745–1900
REFW	Refined White Earthenware	1750–1900+
TPW	Transfer Printed Ware	1780–1900+
CHIN	China	1794–1900+
KW	Kitchen Ware	1800–1900+

Wares present with date range

APPENDIX 2: The Ceramic Building Material

Feature (F)	Layer (L)	Flat tile		Brick	
		No. of fragments	Weight (g)	No. of fragments	Weight (g)
105		1	48		
109	110	16	706		
111	112	2	144		
151	202	5	392		
155	156	1	5		
157	158	1	21		
175	176	2	129		
186	187	8	481	1	1912
206	207	1	81		
206	210	2	72		
211	177	111	6574		
219	217	3	234		
219	218	4	388		
219	220	20	1573		
221	222	4	173		
225	226	3	63		
233	231	10	396		
240	178	1	73		
		195	**11553**	**1**	**1912**

Ceramic Building Material

APPENDIX 3: The Animal Bone Data

Species	Phase 2	Phase 3	Phase 4d	Unphased	Total
Sheep/goat	12	6	1	14	33
Cattle	5	7	1	8	21
Pig	2	2	0	1	5
Horse	1	0	0	0	1
Dog	0	0	0	1	1
Domestic fowl	1	0	0	0	1
Goose	1	0	0	0	1
Fish	1	0	0	0	1
Large sized	10	5	0	3	18
Small sized	4	1	0	3	8
Unidentifiable	11	4	0	8	23
Total	**48**	**25**	**2**	**38**	**113**

The number of identifiable specimens|fragments (NISP) of animal bone

APPENDIX 4: The Copper Alloy and Iron Objects, and the Clay Pipe

Small find	Feature (fill)	Description
SF 1	F203 (L204)	Pit fill. Copper-alloy nail with round flat head. Length 28mm.
SF 2.	F219 (L220)	Pit fill. Copper-alloy wire fragment. Length 52mm.
N/A	F109 (L110)	Gully fill. a) Iron nail with flat, round head; part of the shank is missing. Length 38mm. b) Iron nail or nail shank fragment. Length 50mm.
N/A	F219 (L218)	Well fill. Iron nail with small, slightly convex head. Length 64.5mm.
N/A	F233 (L231)	Pit fill. Iron nail with ?globular head. Length 67mm.
N/A	F240 (L178)	Pit fill. a) Three iron nails with round, flat or slightly convex head. Lengths 69, 54 (clenched) and 52mm. b) Iron nail shank fragment. length 71mm. c) Iron fragment, ?nail head. Diameter 18mm. d) Amorphous iron fragment, ?slag. 41 by 26 by 16mm.
N/A	F165 (L166)	Pit fill. Fragment of clay tobacco pipe stem; length 45mm; bore diameter 1.75mm.

Catalogue of copper-alloy and iron objects and clay pipe

Essex Archaeology and History 39 (2008), 152–161

The East and Middle Saxon estates of Westminster Abbey

James Kemble

INTRODUCTION.

This article examines the early history of the church of St Peter at Westminster from its foundation, probably in the 7th century, to the early Norman period. Despite probable despoliation in the 9th century by Viking raids, by the end of the 11th century it had substantial land-holdings in Essex, Hertfordshire and Middlesex as well as farther afield. The location of some unidentified manors and place-names is re-examined. The granting of land to religious bodies was, in the medieval period, an act of piety, spiritual benefit, and also a source of financial gain. Several estates acquired by such grants before 1066 had been lost by the time of Domesday, either by compulsion or by exchange for others in the pursuit of strategic purposes. The accumulation and disposal of estates can be traced from charter evidence, and some conclusions about the strategies being pursued by the monks in the use to which its land-holdings were being put are discussed.

Topography, Early Tradition and History

The island of Thorney ("bramble island") where the great abbey and the king's hall called Westminster would later be built lay in the marshes of the river Thames at its junction with the Tyburn stream. Excavations and bore-hole soundings have shown that the Tyburn entered the Thames in two arms which encircled the sand and gravel island to north and south. A contour survey and excavations show that the abbey stands on the highest point at +2m O.D. Parliament Square lies on a plateau at +1m O.D. Layers of peat suggest that the stream's course has migrated over the years allowing vegetation to grow along the banks. Water levels rose in the Saxon period and the main stream ran to the south of the abbey along the line of Great Smith Street then Great St. Peter Street East. The western side of the island at the bifurcation of the two outlets of the Tyburn, at -3m O.D., was located near where now is Storey's Gate, and the northern outlet at Richmond Terrace, marked on Ralph Agas's map of *c.*1560 Preuy bridge (Fig. 1). Traces of the island still existed in the 18th century (Sloane 1995). The great floods of 1928 rendered Westminster an island again when the rising waters were stopped just south of Great College Street by a slight rise in ground level (Barton 1962).

There is evidence of activity before the first church. A timber structure located on the island has been carbon-dated to *c.*590 BC. A Roman timber structure, Roman building material and a post-and-timber revetment of a sand slope have been excavated on the east side of the square close to where the abbey now stands (Cleary 1996). Dugdale (1718) mentions a temple to Apollo. Thorney was not wholly isolated since a crossing of the Thames may have existed there at least since Roman times, and later monks would have benefited from passing travellers (Margary 1955).

Saxon *Lundenwic* flourishing in the 8th century in the area of Aldwych only a little over a mile to the northeast must have been of significance for the monastic foundation. Close to Thorney and connected to *Lundenwic* by a Roman road The Strand (known in the 11th century as Akeman Street), Whitehall has been shown by excavations to have had settlement from the 7th century, possibly earlier with the earliest finds (in the Trafalgar Square area) dated to the 6th (Vince 1984, 1990; Sheppard 1998).

Medieval monastic tradition placed the foundation of Westminster Abbey at the start of the 7th century. About 1076x82, Sulcardus, a monk of Westminster writing at the command of abbot Vitalis, recorded that Sabert, king of the East Saxons *c.*604–616, founded a church dedicated to St. Peter at a place called Thorney (Scholz 1964). Although there is no contemporary confirmation of Sabert's grant, the date and context would appear feasible. At about the same time Æthelbert, king of Kent, was founding St. Paul's for its first bishop Mellitus, just 7 years after the arrival of Augustine at Canterbury. Although London was nominally in East Saxon territory, the Kentish kings at this time exercised a degree of influence over the East Saxons since Sabert's father Sledd had been married to Ricula, the sister of Æthelbert. That Sabert had a major role, perhaps as founder, may be further supported by the tradition of his and his wife Athelgoda's burial in the church at Westminster and their reburial in the new abbey in the 14th century (Stowe 1598).

After Sabert's death, his sons reverted to paganism, and the new church would have had an uncertain start. Christianity was restored to the East Saxon kingdom in *c.*653 under Sigebert II, and it was under his patronage that the monk Cedd was sent from Lindisfarne in Northumbria to found churches at Tilbury and Bradwell. Being of the Celtic tradition, not Roman, he did not take the See at St. Paul's, and whether Westminster benefited from his ministry is not known, though no doubt the monks, had they survived the 37-year pagan interval, experienced less harrassment than under non-Christian rulers. It is uncertain whether Westminster received

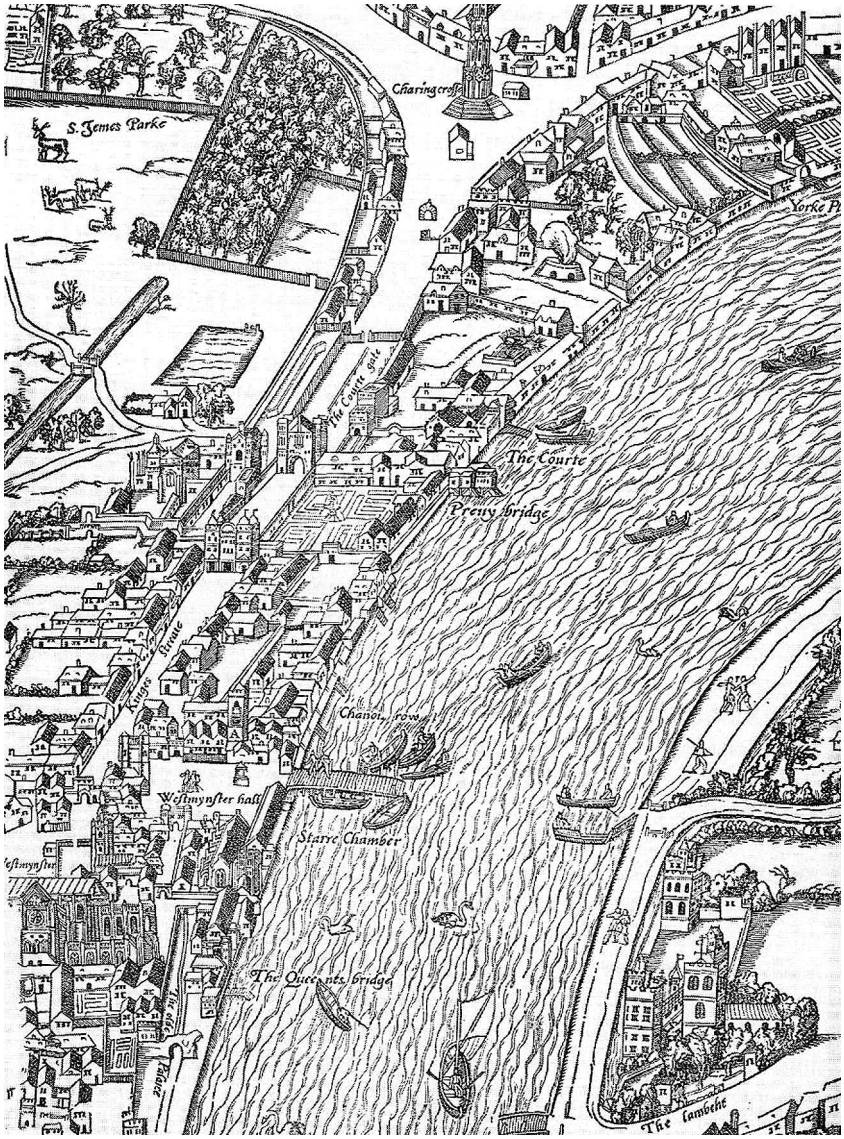


Fig. 1 Ralph Agas' map of Westminster, *c.*1560

grants in Essex during the kingship of Sighere *c.*664 since at least part of the kingdom had again lapsed into idolatory (HE III, 30), but restoration of the faith by Bishop Jaruman sent by Wulfhere king of Mercia in 665 resulted in the reopening of churches and possibly the building new ones. Indeed, during the 7th century the East Saxon kings came to acknowledge Mercian overlordship in Middlesex and as early as 635 Wulfhere, king of Mercia, had sold the bishopric of London at St. Paul's to Wine (HE III, 7).

In the following century there was a Mercian mint in London during the reign of Æthelbald (716–757) who also controlled the tolls of *Lundenwic* (S 86–88), and by 731 Mercian bishops were being appointed to the See at Canterbury. Although East Saxon kingship continued until the 9th century, Westminster came increasingly within the Mercian province during the 8th (Yorke 1990). It seems probable that the connection with powerful Mercia increased the prestige of the church and provided an impetus for its growing lands and wealth in Middlesex, Essex and elsewhere.

Excavations in the undercroft of the abbey have produced an early ninth century coin of King Egbert (802–839) and mid-Saxon pottery, confirming that the island was occupied at this time (Mills 1987). In 839 there had been great slaughter of London's inhabitants by a Viking army, and the small monastery on Thorney may have been ransacked then. At the time of Edmund's martyrdom, 870, raiders burnt a congregation of virgins at Barking in their church. The Viking raids along the east coast and up the Thames which probably caused the demise of Barking monastery may have despoiled Westminster too. Raids on London are recorded for 851 and 872, but in 886 London was regained by Alfred, and ealdorman Æthelred was given the task of administering it. By 888 the focus of settlement and trade had moved away from *Lundenwic* and Westminster, eastwards to within the walls of *Lundenburgh*. The latest Saxon finds from the *Lundenwic* area date to the early 9th century. There is evidence that there was certainly a church building on Thorney in the 10th century for excavations beneath the abbey have found a 10th century ditch,

which may be the boundary of the monastic precinct, and potash-rich glass presumably from the church (Vince 1990).

In the lull between Viking raiding, Wulfinus was appointed abbot in 958 (Hennessy 1898) and the following year King Edgar confirmed grants of land to Dunstan, bishop of London, to restore the Westminster monastery for 12 monks (S 1293; Newcourt 1708). Westminster's abbot was active in royal circles at the end of the 10th century for, in 993, two years after the Danish attack on Essex at Maldon, we find him attending King Æthelred II's court (Stenton 1971). In 994 London was attacked by Swein, father of the future king Cnut, and the city was set on fire. The Danes then burnt and harried in Essex but Westminster may have survived. Considering the disruptions to Essex in the closing years of the 10th century the lack of charter evidence is perhaps unsurprising, though some semblance of order is confirmed by Wulfstan's consecration as bishop of London in 996. Overwintering in Kent in 1009/1010, the Danes drew on supplies from Essex, a burden which would certainly have fallen mostly on the south of the county. The following year Essex and Kent were again attacked and Archbishop Ælfheah was captured in Canterbury, later to be beaten to death because he refused payment to ransom him. He was buried in St. Paul's.

Edmund regained the London hinterland in 1016 and pursued Cnut into Essex where he confronted Cnut at *Assandun* (Kemble 2007). Edmund died later the same year, and Cnut was proclaimed king of the English in 1017 retaining the territory of Wessex which included London and Essex to himself. The church on Thorney was still active during this period, for in 1039 Cnut's son Harold Harefoot was buried at Westminster. His half-brother Harthacnut had his body exhumed and thrown into the fen (ASC), and tradition tells that a fisherman took his body to the Vikings who reburied it in a mid-eleventh century cemetery serving a small Danish settlement (Whitelock 1968). The site was excavated by Mortimer Wheeler at St. Clement Danes church in Fleet Street (Wheeler 1927). In 1042 on Harthacnut's death, the Saxon regnal line was re-established by the son of Æthelred II, Edward, who had been brought up in Normandy.

The Early Charter Evidence

Westminster acquired estates over a wide area in southern England for which some documentary evidence exists from the 8th century. Estates were mainly in Middlesex (Table 1), Hertfordshire and Essex, but as far afield as Sussex, Staffordshire, Northamptonshire, Worcestershire, Gloucestershire and Lincolnshire.

The authenticity of some of Westminster's Saxon charters and writs has long been suspect and the subject was discussed by F.E. Harmer (1989) in some detail. Westminster was certainly not alone in the practice of forging documents. Professor Brooks (1984) has discussed the extensive forgeries by the monks at Christ Church, Canterbury, and it is likely that the pressures to produce written evidence of ownership were similar to both monasteries. While the witnesses to Westminster's charters may be spurious and hence the dates ascribed to them suspect, property ownership seems to be affirmed by the subsequent evidence that the monastery was obtaining rents and service. Thus Edward the Confessor's First Charter of 1065 confirming the gifts of Kelvedon and Moulsham is a clear forgery but the abbey's account rolls of the second half of the 14th century show that it was receiving rents from those manors. Likewise the charter of 1042x44 confirming the gift of Kelvedon Hatch to Westminster is spurious, but the abbey was holding 2 hides of that manor at Domesday, and in 1138x57 abbot Gervase granted this Kelvedon Hatch for lights and other offices of the high altar at Westminster (Harmer 1989).

While the monastery had been subjected to repeated Viking raids in the 9th and 10th centuries and had thereby been deprived of written proof of gifts and grants, it is perhaps not surprising that the pressure from the grasping Norman followers of William I was enough to set in train a process of re-recording such 'evidence' as could be remembered. There were no doubt several reasons for fabricating documents for purposes of claiming lands and privileges, not least that those written in Old English were unintelligible to the new Norman landlords, but there is evidence enough in Domesday Book that the danger of losing rights and property to the new Norman followers was all too real. It is not proposed to revisit the already much-discussed question of authenticity here, but to accept Armitage Robinson's conclusion that many charters "though not genuine as they stand, incorporate a great deal of valuable tradition" (Harmer 1989).

The earliest grants to churches for which there is reliable information suggest that they tend to the largest or amongst the largest. For example, Barking at its foundation in *c*.666 received 40 hides and soon an additional 75 hides (S 1171), the see of Rochester received 47 sulungs of land in Kent between 734 and 789, while Minster-in-Thanet between 675 and 780 received over 80 hides (Hart, 1971; Brooks, 1984). According to Sulcardus, Offa, king of the East Saxons in the early 8th century, restored the church at Westminster with the grant of *Blechenham* (in Hendon, Middlesex), a grant of 5 hides later confirmed by Dunstan. He had intended to place monks there but his intention was not carried out (Harmer 1989). According to a charter of doubtful authenticity dated 785 (CS 245), the other Offa (of Mercia) granted ten *cassates* of land at Aldenham, Herts, "to St. Peter and the needy people of God in Thorney at the aweful place which is called Westminster", abbot Ordbriht having paid 100 *mancuses* of gold (Gelling 1979) (Fig. 2). The grant of 5 hides and Offa's grant of ten *cassates* (hides) compare unfavourably with foundation grants to monasteries such as Gloucester and Pershore (S 70) of 300 hides, and Chertsey of 95 hides, augmented by an additional 205 hides within ten years (S 1165; Bassett, 1989). Even a 'minor' house such as Nazeing was founded with 40 hides (Bascombe 1987).

Charter Dates of Estate Holdings in Middlesex and Hertfordshire

Held	Estate
*c.*785 (?971)	Westminster vill; *Aldenham.*
'951'	Blecceanham (in Hendon); Hampstead.
959	Codanhleaw (in Hendon); Cowley; Hanwell; Hendon; Kingsbury; Paddington; Shepperton; Sunbury; *Brickendon.*
963x975	Ashford; Feltham; Halliford (by Sunbury); Staines; Teddington.
969	Lothereslegh (in Hendon); *Holwell; Datchworth; Watton-at-Stone.*
1002	Berewican (Charing, on north of Westminster vill).
1042x1046	Chalkhill; Ulf the portreeve's wharf (on Thames).
1053x1066	Staining Lane (in London); *Wormley; Ayot St Lawrence.*
1060	*Wheathampstead.*
1062	*Hitchen.*
1065	Greenford; Knightsbridge (Westbourne); *Ashwell; Stevenage.*

Estates in Middlesex and Hertfordshire lost before 1086

Before 1086	Feltham; Greenford; Ashford; Teddington. *Brickendon; Holwell; Wormley; Hitchin.*

Table 1

Though we cannot be sure other estates did not come for Westminster's foundation from Offa (who is reputed to have granted or regranted the vill around the church), it is curious that none is included in this charter or known from elsewhere (Table 1). If however Offa was merely adding to earlier possessions, and these were not foundation grants, then perhaps the smallness of the gifts is explicable. The fact that the abbot "of the needy people of God" was in a position to pay for the 'gift' suggests an abbey was already in existence when Offa granted Aldenham. Looked at in this light, a foundation by an earlier king such as the Christian Sabert keen not be unduly outshone by his Kentish contemporary who was establishing St. Paul's in East Saxon London seems credible (HE II,3).

Offa may have granted or reconfirmed other possessions and privileges that the monastery already had, extracting payment in the process, as he did to the bishop of Rochester. He also dispossessed churches in favour of his thegns and Westminster may have suffered at his hands. But if that occurred, record has not survived. We can perhaps see Offa granting additional land and privileges to a monastery which was already a functional entity from an earlier foundation in a similar way that Frithuwold, sub-king of Surrey, increased the possessions of Chertsey abbey founded by Egbert of Kent and abbot Eorconwald, and Œdilred did for Barking founded by King Suidfred and Abbess Æthelburga (Bassett 1989; Kemble, 2007). Offa of Mercia had inherited from his predecessor Æthelbald sovereignty over Middlesex and London, formerly in the East Saxon kingdom, though East Saxon kings probably retained authority over Essex. The Middlesex possessions may therefore have suffered more than the Essex ones, and there is no evidence, genuine or spurious, that Æthelbald or Offa of Mercia made grants in Essex to Westminster. After 825, the East Saxon kingdom fell under the influence of Wessex but the dearth of 9th century charters for Essex makes Westminster's subsequent acquisitions (if any) in that century difficult to trace with any degree of certainty (Williams 1996).

Grants in the Reign of Edgar

By the middle of the 10th century, Westminster was receiving grants again, with a particular impetus to monasticism being given by the accession to the throne of Edgar (957–975). The bounds of an estate regranted to Westminster by King Edgar are contained in Old English in a charter *c.*971 copied in the 12th century (CS 1048):

> *"ærest up of temese* [Thames] *andlang merfleotes* [boundary-fleet] *to pollene stocce swa on bulunga fenn. of ðam fenne æfter ðær ealden dic* [ditch] *to cuforde* [cow-ford]. *of cuforde upp andlang teoburnan* [boundary-stream, i.e. Tyburn] *to þære wide here stræt. æfter ðære here stræt to ðære ealde stoccene sancte andreas cyricean* [wood church of St. Andrew] *on holeburna swa innan lundene fenn. andlang fennes suð on temese on middan streame andlang stremes be lande and be strande* [by land and strand] *eft on* [back to] *merfleote".*

The estate included Thorney and probably extended from an inlet somewhere between Lambeth and Vauxhall bridges, through marshland, then along the course of the Tyburn (east of Berkeley and Grosvenor Squares) to Oxford Street (*here stræt*) to St. Andrews church Holborn (at Holborn Circus), then south back to the Thames down the Fleet River (Farringdon Street). In Domesday Book, Westminster's vill there (which by then may have included Paddington and Charing) was assessed as 13½

hides of the abbot, plus three hides and four arpents of newly planted vineyards which Ralph Baynard held as the abbot's tenant.

The Estate of Ham

The charter granting five 'mansiunculae' at *Hamme* (East and West Ham) to Æthelstan, a Mercian ealdorman, in 958 is of interest not least since it contains the bounds of East and West Ham (S 676; Reaney 1935). Eleven years later Edgar confirmed lands and liberties in *Hamme* to Westminster (S 774). This was purported to be one of the endowments by Dunstan, bishop of London in 959 and archbishop of Canterbury 960–988, as part of the refoundation after the monastery's disruption by the Vikings. Westminster still held two hides in *Hame* in 1086 which Morris (1983) identifies as being in East Ham (Table 2). We can distinguish Westminster's two hide Domesday holding from Robert Gernon's seven hides in East Ham and Ranulf Peverel's eight hides 30 acres in West Ham, at least part of which came to Stratford Langthorne Abbey which held it until the Dissolution. It seems likely that Æthelstan's holding reverted to the Crown, but, while *Ham* was valued at £4 to Westminster in 1535, whether all of Dunstan's endowment remained intact to the monastery is unclear.

East Ham included East Ham village, Manor Park, Plashet and Green Street, the way from Romford to the marshes. The name of the ancient hamlet of Plashet, 'enclosure in woodland', and the bounds of Waltham Forest described in 1225 and 1227 (Kemble 2007) indicate that this part of East Ham contained forest, woodland and pasture. There were two early medieval churches in East Ham, the mother church of St. Mary Magdalene in High Street South, and St. Mary's by Wanstead Flats. The former contains Norman work, reused Roman bricks and the opening into a hermit's cell. Excavations have revealed a Roman cemetery 900 yards west of the church, suggesting there was a pre-Saxon settlement here. St. Mary's, also 12th century, is very much a subsiduary church, with a nave only 50 feet long (Mee 1972), but both may have had Saxon antecedents.

The dubious charter of King Edgar dated 969 (K 555, S 774) confirming privileges and land at Ham, Fanton Hall and Wennington given to the abbey by Dunstan, an enthusiast for Benedictine Rule, probably signifies the adoption by Westminster of this Rule by this date. Whether the date, 969, ascribed to this charter is correct or not, it is clear that it was believed that these three estates had been held early after the 'refoundation' of the abbey by Edgar and Dunstan. In the middle of the Viking attacks on London, Ælfhelm Polga bequeathed to Westminster Brickendon (Herts) in *c.*989, and Leofwine, thegn of Essex and son of Bishop Wulfstan, bequeathed Kelvedon and Markshall in 998 (Whitelock 1930; Hart 1971). Five hides at *Kynleuedene* were confirmed by Edward in 1065, and these five hides at *Chelleuedana*

Charter Dates of Estate Holdings in Essex

Held	Estate and purported charter date
Before 1000	**Ham**, 969; **Wennington**, 969; **Fanton** (N.Benfleet), 969; **Kelvedon**, 998; Markshall, 998.
Before 1060	**Wennington** and *lea*, *c.*1042; **Kelvedon Hatch**, *c.*1042; **Moulsham**, *c.*1052.
Before 1066	**Ham**, 1065; **Wennington**, 1065; **Great Fanton** (N.Benfleet), 1065; **Kelvedon**, 1065; **Kelvedon Hatch**, 1065; **Moulsham** and *Brom*, 1065; Maplestead, 1065; Rayne, 1065; Latchingdon, 1065; Wanstead, 1065; **Leyton**, 1065; **Paglesham**, 1065; **Bowers Gifford**, 1065; **Little Fanton** (N.Benfleet), 1065; **Ingeddesdoune**, 1065.
Between 1066 and 1075	**Feering**, 1066x75; **N.Ockendon**, 1066x75.
Between 1066 and 1087	**S. Benfleet**, 1066x87; Walthamstow, 1066x87; Stratford (mill), 1066x87; **Kelvedon Hatch** 1066x87; land and marsh at Tilbury**,** 1068x85; **Havering-atte-Bower** (40 acres in), DB,1086.
1086 to 1087	**Colchester (houses)**, DB, 1086; Berden, 1087; Iltney (Mundon), 1087; Moze (fishery), 1087; **Moulsham** and Brom, 1087.
*c.*1087	Wheatley (Rayleigh), *c.*1087.
Between 1087 and 1094	**Moulsham** and *Brom*, *c.*1090; **Feering**, 1093.

Held by Westminster *in capite* wholly or in part at Domesday, 1086, in **bold** type.

Essex Estates lost by Westminster before 1086

Lost	Estate
Before 1066	Markshall; *æt þære lea*?
Between 1066 and 1086	Maplestead; Rayne; Latchingdon; Wanstead; Walthamstow; Stratford (mill); *Brom* (restored *c.*1090); Tilbury.
1085/6	Ockendon (part of tithe).

Table 2

were still held by the monastery in 1086. It was still holding *Keluedene* in 1163–88. Leofwine also left Barling to his father Wulfstan, bishop of London at St. Paul's to which it descended, so Leofwine was supporting both monasteries. But Markshall was apparently not in Westminster's possession in 1066 when it was held by Guthmund, a king's thegn, and by Domesday by Hugh de Montfort, one of William I's followers.

Edward's Refoundation of the Monastery

According to Stowe (1598), the early church on Thorney was reported to be very poor, the few monks given little for their relief. Edward's desire to be buried in his newly rebuilt church, his successors Harold's and William's coronations there and the removal of the centre of administration from within the walls of London to the vill at Westminster assured that the church was to be at the centre of royal attention thenceforth.

Edward the Confessor was assiduous in grants or confirmations of grants to the church throughout his reign. His determination to build his mausoleum, to restore the abbey and append an adjacent church dedicated to St. Margaret for the use of the monks gave the monastery a status it had not hitherto possessed (Armitage Robinson 1910; Barlow 1962). His new abbey church, built in the Norman style, was portrayed in the Bayeux Tapestry as having a tower, transepts and a lead roof. His death in January 1066 occured just a week after its consecration in the presence of his queen Edith, he being too ill to attend.

Edward II's early Charters

A charter (S 1118) purporting to date from the beginning of Edward's reign (1042x44) confirmed the grant by Ailhre the chamberlain and his wife Gode of Kelvedon Hatch (which Westminster held for two hides with a mill in 1086). However, Domesday Book states that Ailric (presumably the same as Ailhre the chamberlain) bequeathed it to Westminster after returning from a naval battle against King William. The only known naval battle against William took place in 1066 (ASC). If the date ascribed to the grant is correct either the battle was not the one waged in 1066, which seems unlikely since Edward is not known to have fought William, or Ailhre may have given the estate to Westminster in 1042x44 but retained a life tenancy until 1066 (Harmer 1989). The fact that Westminster still held it in 1086 and in 1157 suggests Ailric's grant was accepted as genuine, despite the lack of a writ. The abbey's ownership can be traced in later centuries. In 1225 the abbey granted the tenancy of Kelvedon Hatch in demesne to the Multon family of Egremont (Lincs), and in 1232 licence was given to impark the wood. Thomas de Multon supported Simon de Montfort (died 1265) against Henry III and was dispossessd though he later regained his property. Richard Bolles esq (died 1521) and then his son John (died 1532) and his son Richard held *Kelweden* (the manor of Kelvedon Hall) from the Abbot of Westminster. The monks and abbot continued to hold the overlordship of Kelvedon Hatch until 1540 (Morant 1768).

The Wennington estates and 'Geddesduna'

Attributed to 1042x44 is Edward's confirmation of the grant of four hides at Wennington with its *burh* and land *æt þære lea* by Ætsere Swearte and his wife Ælfið. At the time of Domesday, Westminster held it as a manor of 2½ hides, but it had lost half a hide taken by Robert Vaizey, 'the Perverted', tenant of Robert Gernon, which became the manor of Wennington Enveyze (VCH vii, 1978; Powell 2005; Kemble 2006). There is a discrepancy of one hide between the three hides accounted for in Domesday and the four hides originally granted by Ætsere Swearte. What had happened to it?

Immediately to the east of Wennington within Chafford Hundred is the parish of Aveley which Domesday Book makes clear was in multiple ownership before 1066. In one of these holdings might be *æt þære lea* of Edward's charter. Ekwall (1960) and Watts (2004) follow Reaney (1935) in deriving 'Aveley' from a female personal name *Ælfgyð's leah*, possibly Ætsere Swearte's wife. However the forms with 'th', 'd', *Alvithele* and *Alvideleye* suggest they may derive from '*þære*'. *æt þære lea* implies woodland, or a clearing in woodland becoming pasture; there was still some wood or wood pasture in Aveley into the 18th century (as shown on Chapman and André's map). But which manor is the missing hide? The later medieval manors were Belhus, Bumpstead, Kenningtons and Bretts, and Aveley manor. Belhus, first documented in 1389, lay on the opposite side of Aveley parish from Wennington. Domesday *Aluithelea*, one hide and 40 acres, held by Mauger from Bishop Odo probably became Bumpstead (Powell 1984). Before 1066 Swein held the 3½ hides of *Auileia*, too large, and Ansger Cook's 50 acres of *Aluilea* is too small to make up the discrepancy. William de Warenne's *Kelituna* in Aveley (which Morris (1983) associates with the manor of Kenningtons) held by three free men before 1066 for four hides is also too large.

Earl Swein's *Helituna*, a one hide manor, later became part of the adjacent manor of Bretts of which Hugh de Bret held ¼ of a knights fee in 1212 (VCH viii, 1983; Powell 1990). In 1345 Sir Henry Gernett held 120 acres in Bretts from the Prior of Prittlewell who had received it from Robert son of Swein, the holder of *Helituna*. *Helituna* held by Wulfstan before 1066 is a possible candidiate for the missing hide if we allow either that Westminster had lost it before 1066 or that Wulfstan had held it in tenancy from Westminster, a fact that went unnoted by the Domesday commissioners. Wulfstan had other associations with Westminster for he had given Denham (Bucks) to the monastery before 1065. In the 18th century part of Lord Dacre's holding in Bretts still extended into Wennington (Morant, 1768).

There is another more compelling piece of evidence to be explored. According to the unpublished 'Widmore' charter dated 1065, Edward granted or confirmed an estate '*Ingeddesdoune*' to Westminster (Harmer 1989). This estate appears again in King William's Writ, 1066x75, restoring to his man Deorman '*Gyddesdune*' of which he had been deprived, but in 1086 the one hide manor '*Geddesduna*' was again in Westminster's

possession. In Domesday Book, the entry of '*Geddesduna*' immediately follows after Wennington suggesting an association.

The location of *Geddesduna* has been discussed without certainty (Reaney 1935; Hart 1971) and the etymology has not been satisfactorily explained. Although an isolated prominence is one on which might have been built an Iron Age fortified '*dunos*', an origin from Old English '*dun*', a hill with an expansive top or ground rising towards a top, seems more likely (Gelling 2000). The first element is unresolved. Powell (1984) follows the suggested siting at *Inglondes*, Old Englands Farm, now represented by a 17th century house in Little Warley. Although that farm is not on elevated ground, and Westminster is not known to have held land in Little Warley, an origin from '*dune*', a place below another, cannot be entirely ruled out on etymological grounds. However, a more plausible site is suggested. A long tongue of Aveley protrudes into Wennington parish southeast of Wennington Hall, and on the Wennington-Aveley border are Monks Marsh and Monks Meadow (later part of Bretts) (Ordnance reference TQ545807). The tongue rises to the east to a knoll of high ground (now centred on the Romford Road-Sandy Lane junction, TQ561808) which stands over 100 feet above the marshes and Mar Dyke. While there is archaeological evidence of early Iron Age through to early Saxon occupation here (Barton 1959), this topography well suits the description of a '*dun*', and the projection of Aveley into Wennington fits satisfactorily an associated estate. This one hide measure, its extension into Wennington parish, its rising elevation, its position in Domesday Book immediately after Wennington, and archaeological evidence make *Geddesduna* now in Aveley a credible candidate for being the 'missing' hide *æt þære lea* (Kemble 2006; Saunders 2002).

The Moulsham Estates and '*terra de brom*'.

King Edward's charter which is securely dated to 1052x53 confirmed that *Molesham* (in Chelmsford Hundred) belonged to Westminster just as Leofcild had bequeathed it (S 1128) (Table 2). The Telligraphus, dated 1065, affirmed Leofcild's grant but added that it contained *Mulesham cum terra bruerii* ('heathland') *appendice sua*, the latter apparently dependent land. In Domesday Book Westminster held *Molesham* for 5 hides less 30 acres with a mill which, rebuilt in 18th century, still stands at the confluence of the rivers Can and Chelmer. Moulsham in Chelmsford remained with Westminster until it was surrendered to Henry VIII in 1540 when Thomas Mildmay, king's commissioner for valuing the religious houses, purchased Moulsham manor of over 1300 acres with a watermill and *Mulsham fryth* for £622–5–8d.

There are two other manors called Moulsham in Domesday Book of Essex, both held by Odo, bishop of Bayeux, one which had been held before 1066 by Godric (Moulsham Hall in Great Leighs) and the other which immediately follows Godric's entry, *alia Molesham*, which had been held by Wulfmer. Wulfmer's heathland is referred to again in a writ of 1087 which confirmed that the abbot of Westminster was to have *Mulesham cum terra de brom* which Wulfmer had held of the church, just as King Edward had confirmed it. *Mulesham cum terra bruerii* and *Mulesham cum terra de brom* are hardly likely to be other than the same. Later, according a writ of 1087x1094, Odo was to return a dependent estate *terra de brom* which Wulfmer had held of St. Peter's to Westminster as he had seized it illegally. Harmer (1989) dismisses the possibility of locating *brom*, the name being "too common to identify". That *brom* was *alia Molesham*, the dependent estate in Great Leighs is suggested by the statement in Domesday Book that Wulfmer had held *alia Molesham* before 1066 (Powell 1984); he had also held *terra de brom*.

A large expanse in the north of Great Leighs parish was, before the 18th century, Fairwood Common, the western part devoid of trees which could be perceived as 'heathland' and 'broom', the eastern part more wooded (Clark 1911). This was part of the manor of Moulsham Hall with Fayrewood (Morant 1768). The Common extended into the adjacent manor of Breames, associated with Eustace de Brayham in 1258, and William Brayham of Great Leighs in 1304/5. The descent of these two manors was for many years the same. (A common etymology of *Brom* and *Breames* is unsound and the near-homophone may be fortuitous). Either Odo never returned *brom* to the monastery, or Westminster had lost it again before the 13th century. Thomas Mildmay who held Moulsham in Chelmsford also held land in Great Leighs at his death in 1566, and it appears that the Moulshams in Chelmsford and in Great Leighs were closely interlinked (Round 1921). It is likely that *terra de brom* of the Writ of 1087 was the Domesday manor of *alia Moulsham* with Fairwood in Breames.

Domesday Holdings

At the Domesday Survey of 1086, St. Peter's Westminster held 15 manors in Essex totalling 39 hides 70 acres (assuming 120 acres to a hide), ten in Middlesex and nine in Hertfordshire totalling almost 143 hides, including 13½ hides in the Westminster vill. Of the Essex possessions, four had come to the monastery at or after 1066.

The first-recorded of Westminster's Essex possessions in Domesday Book is the holding of 7 hides and 30 acres of *Benflet*, which had been confirmed to Westminster by King William in 1066x87 as *Beamflete*. It had belonged to St. Mary's church in South Benfleet before 1066. The west wall and two windows of the extant church are part of the Norman erection (Pevsner 2007). The existence of a Saxon church there is therefore very likely, perhaps raised after the burning of the Viking's ships by the English at *Bleamfleote* (ASC *anno* 894). The same spelling *Bleamfleote* which occurs in the Anglo-Saxon Chronicle occurs also in the Telligraphus of King William dated 1087.

Turning to North Benfleet, there are two Domesday entries under Westminster Abbey relating to Fanton Hall, *Phantuna* for four hides and 30 acres, and *Phantuna* for

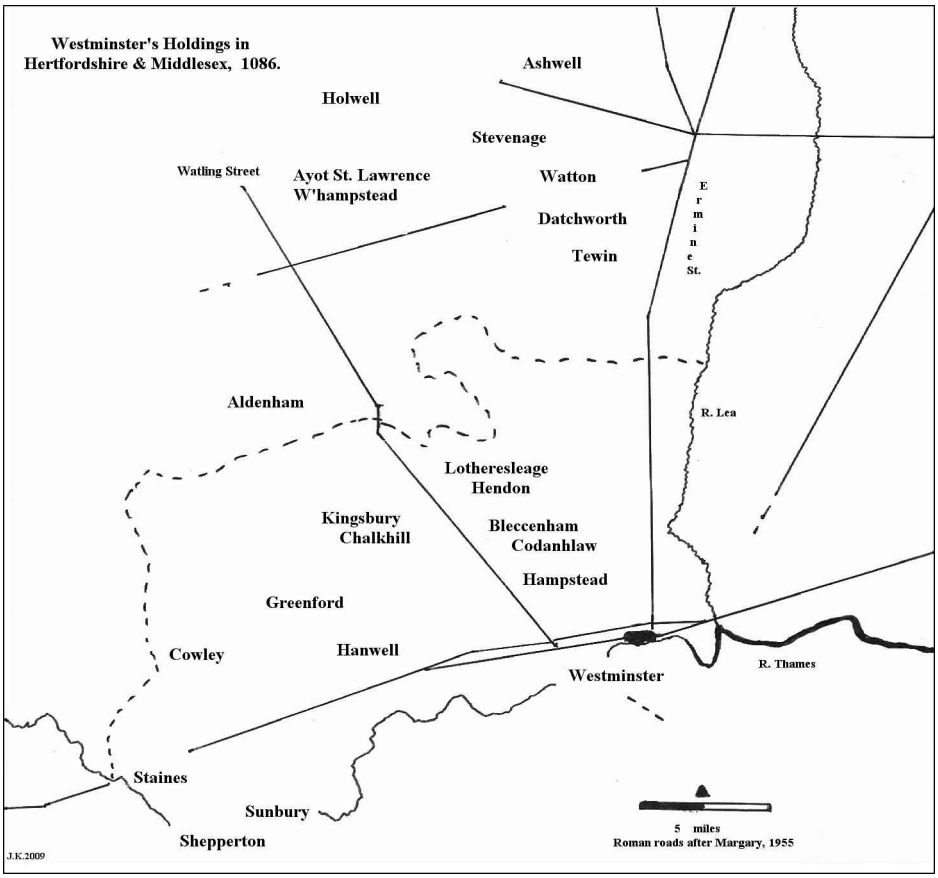


Fig. 2

one hide which Alestan Stric had before 1066 (which, Domesday declared, came to the monastery by a false Writ, and was therefore claimed for the king's use). The four hides confirmed by Edward to Westminster at *Fentune* (Great Fanton) in 1065 which had been acquired as part of King Edgar's and Dunstan's refoundation we can perceive as being the four hides and 30 acres Domesday holding. Alestan Stric's holding (Little Fanton) was in danger of being wholly lost to Westminster, but it was still holding one hide in 1086 while William I and Barking Abbey held another hide between them. *Fanton* also appears in a 12th century Writ in the Westminster Abbey muniments confirming its freedom from royal obligations. Westminster's possession of the manor in North Benfleet can be traced into the 13th century when Barbara, daughter of William Garrey, held there of the Fee of the abbot of Westminster 46 acres of arable and 3s. rent (Morant 1768). The locations of Great and Little 'Faunton' adjacent to oneanother are shown on the 1st edition Ordnance Survey map (1801) between Nevendon and Rawreth, named on Chapman and André's map of 1777 Fann Hall.

Compared to St. Paul's, Westminster suffered badly from losses during the 20 years after the Conquest. It lost more than half of its Essex estates out of the 18 it held or had held before 1066 (Fig. 3). It had let out many estates to tenants whereas St. Paul's managed many of their lands with bailiffs, and this perhaps explains in part Westminster's losses (Harvey 1977; Keene 2004). These losses were partly offset by the appearance for the first time amongst its holdings of seven manors after 1066, but of these only four had been successfully transferred to its possession by 1086. Many of Westminster's estates had been seized by Normans including Bishop Odo, William's half-brother, the Bishop of London and Judith, William's niece. The Count of Mortain took two hides in Laleham (Middlesex, now in Surrey) which the Reeve of Staines had held from the abbot. It is possible that there was some exchange of estates between the abbey and new landlords. There is evidence for this in the instance of Windsor which King William took in exchange for Battersea, Feering and North Ockendon, an exchange which provided him with a hunting park and a strategic manor in which he built his great castle giving him control of the Thames valley. Clearly there was only scant respect paid to Edward's charters, spurious or genuine. Even grants made in William's reign could fail in their implementation: Geoffrey de Mandeville had granted to Westminster land and marsh at (East?) Tilbury for the soul of his wife Alice in 1068x85, but it was not in the abbey's possession in 1086. By a writ dated 1057x1066, Wormley (Herts) was granted and confirmed by King Edward to Westminster, but, despite a writ dated after 1066, it was sold after the Conquest for 3 marks of gold, and in 1086 it was held by King William; there is no evidence that Westminster ever gained a manor here (Gelling 1979; Mason 1988; Harmer 1989). How the new intruders rejected out of hand the monastery's attempts to hold on to its estates can only be imagined, but the evidence of the losses is clear.

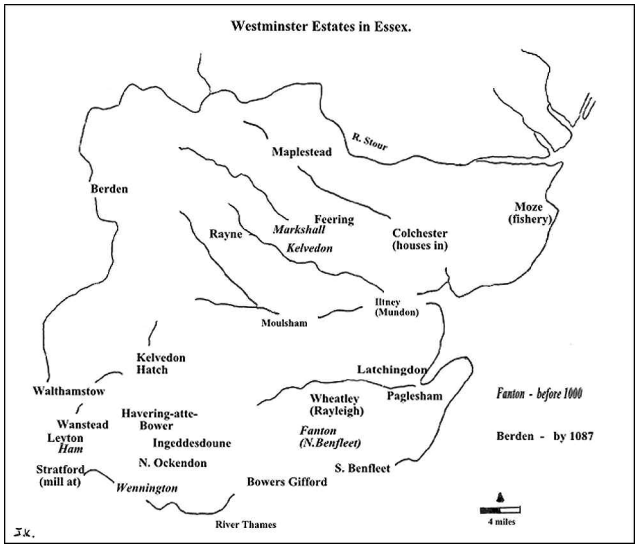


Fig. 3

The Distribution of Estates

No doubt initially the young church would have been grateful to receive whatever grants it could obtain. But there is evidence that, as time passed, there was an attempt to rationalise its holdings, and it is of interest to see what strategy was being pursued. From the south, merchandise could be sent from its manors at Merton and Tooting (Surrey) up Stane Street directly into the city of London. From the west, Hanwell and Easthampstead (Berks) could be reached along the former Roman road from Silchester. Up the Thames accessible by road or river, the abbey held Battersea, Sunbury, Shepperton and Staines, and Cowley lay close to the Colne tributary of the Thames (Fig. 2). The abbot held several estates north-west of London, including Hampstead, Hendon, Chalkhill and Kingsbury, at Ayot St. Lawrence and Wheathampstead (Rumble, 1976) all which could be reached along the Roman Watling Street (Edgware Road). The 10th century 'Kingsbury' charter (CS 994) gives the bounds *wic stræt*, now Honeypot Lane, which marked the Kingsbury-Stanmore boundary. At Domesday, except for two small manors, Tyburn (now around Marble Arch, held by Barking Abbey) and Lilestone (in the Lisson Grove area of Marylebone), its estates east of Watling Street were continuous from the Thames almost to the Middlesex-Hertfordshire boundary (Sullivan 1994). The estates at Brickendon, Tewin, Datchworth, Watton and Ashwell (Herts) were accessible down Ermine Street (now Stoke Newington Road) which entered *Lundenburgh* at Bishopsgate (Margary 1955).

By the time Edward II died in January 1066, many of Westminster's holdings in Essex such as Wennington, Paglesham and Leyton lay by estuaries and rivers of the Thames, Crouch and Blackwater and along the Lea valley (Fig. 3). There appears to have been an intent to accumulate properties which could be reached by water. Other properties such as Moulsham and Kelvedon could be accessed along the former Roman roads which were still in use (Kemble 2001), but less accessible Maplestead, acquired before 1065, was not in Westminster's possession at Domesday.

Westminster's economic strategy was akin to that of the double monastery at Barking, a foundation of the 7th century as may have been Westminster (Hart 1953). At Domesday, Westminster's possessions in Essex, Middlesex and Hertfordshire amounted to 182 hides compared with Barking's 86 hides. Though Barking's early holdings were mainly along the Thames estuary, by Domesday it held both coastal and inland estates which would have produced a similar range of merchandise for the local and London markets (with the exceptional additions of salt-making at Tollesbury and Wigborough and honey at Barking) as Westminster's.

By contrast, Harold's foundation of Waltham Holy Cross with 36 hides in Essex and 10 in Hertfordshire depended heavily on transport along the river Lea and along the old Roman road from the heartland of Essex to reach London. Its much smaller produce base was probably more locally directed than to the capital.

Westminster's Essex estates were not so concentrated on the coast as were those of St. Paul's. Dr. Hart (1992) makes the observation that a strategy based on sheep was at the heart of St. Paul's economic success. But Westminster's estates would also have contributed furs, cloth, wheat, vegetables, cheese, beef, pork, oats and animal fodder to London's markets and fairs (Rosser 1989). To those we can add wood products, hops, barley, fish (traps carbon-dated from the 7th century which have been identified at low tide along the Essex coast), fruit, eggs and fowl (for which the outline of duck decoys can still be seen in the marshes) (Strachan 1995, 1998). While the Westminster vill tenanted by Ralph Baynard, sheriff of Essex between 1066 and 1086, had a vineyard perhaps for Baynard's use alone, maybe the abbot and monks obtained their own supply of wine from the vineyard in demesne at Staines.

Initially the smaller number of estates held by Westminster compared to that of St. Paul's may have limited its options for exchanging those which suited its economic strategy less favourably. In 1066 the total value of the monastery's income amounted to about £430, by 1086 about £515. By the time of Henry VIII's valuation in 1535 the abbey's clear value was £3470 (VCH London; Harvey 1977), exceeding St. Pauls. So great was the difference that St. Paul's was granted some of Westminster's estates, adding new poignancy to the already-extant aphorism of "robbing Peter to pay Paul". From "a poor church" St. Peter's had become the second richest monastery in England. The abbot and monks of Westminster had gained sufficiently in grants and gifts from the example of Edgar's, Edward's, William's and, later, Henry III's patronage to ensure it held an influential position throughout the later medieval period.

Acknowledgements

The author wishes to thank the Librarians of the Muniment Room & Library, Westminster Abbey and of The Chapter House, St. Paul's Cathedral for their ready

assistance, the anonymous reviewer for helpful suggestions, and the staff of the Essex Record Office for their courteous identification and provision of sometimes obscure references.

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Bibliography

ASC: Anglo-Saxon Chronicle, ed. Garmonsway, G.N., 1972. Dent, London.

Armitage Robinson, 1910. The Church of Edward Confessor at Westminster. *Archaeologia*, 62, 81–100.

Clark, A., 1911. 18th century Land Surveying. *Essex Review*, xx, 96.

Cleary, A.S.E. ed. 1996. Westminster, London. *Britannia*, 27, 433.

Barlow, F., ed., 1962. Vita Edwardi Regis, 44.

Barton, K.J., 1959. Excavations at Aveley. Thurrock Historical Society. (Essex Heritage Environment Record No. 5070).

Barton, N., 1962. The Lost Rivers of London. Historical Publications, London.

Bascombe, K., 1987. Two Charters of King Suebred. In Neale, K (ed), An Essex Tribute, London, p.85.

Bassett, S.R., 1989. The Origins of Anglo-Saxon Kingdoms. Leicester. pp. 97, 231.

Brooks, N., 1984. Early History of the Church of Canterbury. Leicester University.

CS: Birch, W. de Grey, 1885–93. Cartularium Saxonicum. London.

Dugdale, W., 1718. Monasticon Anglicanum. ii, p.119.

Ekwall, E., 1960. Dictionary of English Place-names. Oxford.

Gelling, M., 1979. The Early Charters of the Thames Valley. Leicester University.

Gelling, M. and Cole, A., 2000. The Landscape of Place-names. Tyas. p.164.

Grieve, H., 1988. Sleepers and Shadows, vol 1. Essex Record Office.

Harmer, F.E., 1989. Anglo-Saxon Writs. Watkins, Stamford.

Hart, C.R., 1953. The Early Charters of Barking Abbey. Colchester.

Hart, C.R., 1971. The Early Charters of Essex. Leicester University.

Hart, C.R., 1992. The Danelaw. Hambledon, London.

Harvey, B.F., 1977. Westminster Abbey and its Estates in the Middle Ages. London.

HE: Bede, A History of the English Church and People. ed. L. Sherley-Price, 1955. Penguin.

Hennessy, G., 1898. Novum Repertorium Ecclesiasticum Parochiale Londinense. London.

K: Kemble, J.M., ed., 1839–48 Codex Diplomaticus Aevi Saxonici. London.

Keene, D., Burns, A. and Saint, A., (eds), 2004. St. Pauls Cathedral Church of London. Yale.

Kemble, J., 2001. Prehistoric & Roman Essex. Tempus, Stroud. p.183.

Kemble, J., 2007. The Tithe Place-names of Wennington. Essex Record Office.

Kemble, J., 2007. Essex Place-names; Places, Streets and People. Historical Publications, London. pp. 30,39,42.

Margary, I.D., 1955. Roman Roads in Britain. Phoenix, London, i, pp. 51,169.

Mason, E., ed., 1988. Westminster Abbey Charters 1066-C.1214. London Record Society.

Mee, A., 1972. The King's England, London North of the Thames. Hodder & Stoughton. p.335.

Mills, P, 1987. Westminster Abbey Undercroft Excavations. *Medieval Archaeology*, 31, 133.

Morant, P., 1768. History & Antiquities of the County of Essex, 2 volumes.

Morris, J., 1983. Domesday Book – Essex. Phillimore.

Newcourt, R., 1708. Repertorium I, London, p.709.

Pevsner, N. and Bettley, J., 2007. The Buildings of England – Essex. Yale University.

Powell, W.R., 1984–5. Essex Domesday Topography. *Essex Archaeology & History*, 16, 40.

Powell, W.R., 1990. Essex in Domesday. Essex Record Office.

Powell, W.R., 2005. The Norman Government of Essex. *Essex Archaeology & History*, 35, 111.

Reaney, P.H., 1935. The Place-names of Essex. Cambridge.

Rosser, G., 1989. Medieval Westminster 1200–1540. Oxford.

Round, J.H., 1921. The Mildmays. *Transactions of Essex Archaeological Society*, xv, 14.

Rumble, A., 1976–7. The Bounds of Wheathampstead. *Journal of English Place-name Society*, 9, p6.

Saunders, M., 2000. The Tithe Place-names of North Ockendon. Essex Record Office.

Saunders, M., 2002. The Tithe Place-names of Aveley. Essex Record Office.

S: Sawyer, P., 1968. Anglo-Saxon Charters: an Annotated List and Bibliography. London.

Scholz, B.W., 1964. Sulcard of Westminster: Prologus de Construccione Westmonasterii, Traditio 20, 59.

Sheppard, F., 1998. London, a History. Oxford.

Sloane, B., Swain, H. and Thomas, C., 1995. The Roman Road and the River Regime. *London Archaeologist*, 7(14), 359.

Stenton, F., 1971. Anglo-Saxon England. Oxford.

Stowe, John, 1598. A Survey of London, ed H. Morley, 1893. Routledge.

Strachan, D., 1995. Aerial Photography and Archaeology of the Essex Coast. *Essex Journal*, 30(2), 41.

Strachan, D., 1998. Intertidal Stationary Fishing Structures. *Essex Archaeology History*, 29, 274.

Sullivan, D., 1994. The Westminster Corridor. Historical Publications, London.

Victoria County History of Essex, 1978, vii, 180 and 1983, viii, 1.

Victoria County History of London, i, 428.

Vince, A., 1984. The Aldwych. *Current Archaeology*, 93, 310.

Vince, A., 1990. Saxon London. Seaby, London.

Watts, V., 2004. Dictionary of English Place-names. Cambridge.

Wheeler, R.E.M., 1927. London and the Vikings. London Museum.

Whitelock, D., 1930. Anglo-Saxon Wills. Cambridge.

Whitelock, D., 1968. English Historical Documents I, no. 9, p.291. Eyre & Spottiswoode.

Williams, A., 1996. The Vikings in Essex, 871–917. *Essex Archaeology & History*, 27, 92.

Yorke, B., 1990. Kings and Kingdoms of Early Anglo-Saxon England. Routledge, London.

The cost of publishing this article is supported by the Society's Publications and Research Fund.

Essex Archaeology and History 39 (2008), 162–171

The Wheel of Fortune and the Bohun Family in the early fourteenth century[1]

Jennifer Ward

Many families have suffered sudden changes in wealth, standing and prestige throughout history, and the Wheel of Fortune epitomised this in the medieval mind. Illustrations of the Wheel are common in paintings and manuscripts in England and Europe, the example nearest to Essex being in Rochester cathedral. However slowly and carefully a man climbed up the wheel, and however pleased he was on reaching the top, there was always the danger of a sudden fall through loss of favour, or through accident, treason or death (Plate 1). Such a descent was experienced by the Bohun family, earls of Hereford and Essex, in the 1320s, and their recovery was slow and by no means always sure. It was not until 1337, when William de Bohun was created earl of Northampton, that it can be said that they had recovered their position.

There was no sign of the future disaster when Earl Humphrey de Bohun married Elizabeth, daughter of Edward I and widow of John, count of Holland (d.1299). Edward I pursued a policy of marrying his daughters, without dowries, to members of the English higher nobility, and insisting on a marriage settlement which might potentially diminish their power and augment that of the Crown. Earl Humphrey had to surrender all his lands, and his office of Constable of England, to the king; the estates were settled on the couple jointly, with the succession passing to the earl's children, and collateral heirs being excluded. If the earl died childless before Elizabeth, the earldoms of Hereford and Essex after her death were to pass to the Crown, together with the office of Constable, and the power of the family would thus be substantially reduced.[2] Fortunately, this did not happen, since the earl and Elizabeth had a large family, and Elizabeth predeceased her husband in 1316.

Details of the children were recorded by the family monasteries of Lanthony Secunda near Gloucester, and, in 1387, by Walden abbey.[3] According to the Lanthony record, there were six sons and four daughters, not all of whom grew up. The first two children, Margaret and Humphrey, died young; Edward I greeted the news of Humphrey's birth with a payment of £26. 13*s*. 4*d*. to the messenger, but the baby died on 10 September, 1304. John was born on 23 November, 1306, and lived to adulthood, together with another son named Humphrey, the twins, Edward and William, and Eneas. Between the twins and Eneas came Eleanor and Margaret; the youngest child, Isabella, died young. The Walden account gives the birthplace of most of the children, but has no reference to the eldest daughter's death, and no mention of Eleanor. The level of infant mortality was high at this time, and John and Humphrey may well have suffered from some bodily weakness; both succeeded to the earldoms but neither served as Constable and Humphrey never married. Eneas died probably as a teenager or a young adult.

Earl Humphrey made provision for his children during his lifetime. For his first-born son the provision was spiritual, as seen in the surviving account-roll for his journey from Knaresborough to his burial in Westminster abbey, via Nottingham, Northampton, Stony Stratford, Watford, and Fulham. The baby's body was accompanied by an escort, and four grooms took turns to hold the body. A lead coffin was made in London and four candles, each weighing three pounds, were purchased to stand round the coffin. A requiem mass for the baby's soul was celebrated on the day of his burial, the bells at Westminster were rung for his soul, and the Dominican friars of London were paid five shillings to pray for him.[4]

Margaret's marriage was arranged at an early age. The agreement for her marriage to Hugh de Courtenay was drawn up in 1315 by her parents and Queen Margaret, widow of Edward I, on one side, and Hugh's father on the other. The earl agreed to give Margaret a dowry of 1,000 marks (£666. 13*s*. 4*d*.), to be paid at the wedding, while land worth 400 marks (£266. 13*s*. 4*d*.) was to be settled by Hugh's father on the couple, to be held jointly. If Hugh died before his father, Margaret would continue to hold the land; if he survived his father, as he did, Margaret was to have dower in all his lands.[5]

For the sons, the rule of primogeniture meant that John stood to succeed his father. Earl Humphrey took steps to ensure that the younger sons would have land, but it was taken for granted that younger sons would make a career in royal service or the Church, and, with luck, gain wealth through marriage. In 1312, for instance, the earl arranged that William should have the reversion of property in Margaret, Beauchamp, Leaden, Abbess and Berners Roding and in Chelmsford. For Eneas, the reversion of the manor of Great Leighs was purchased in 1315, and the reversion of land to William in Bedfordshire and Huntingdonshire was arranged in the same year.[6]

Plate 1 The Wheel of Fortune: Miniature from Boethius 'De Consolatione Philosophiae', M320
Reproduced by kind permission of the Trustees of the Wallace Collection, London

Further provision for the children was made in the earl's will of 1319.[7] John, his heir, received little mention, although he was bequeathed his father's armour, and the green bed embroidered with white swans, the Bohun badge. Humphrey, Edward, William and Eneas were left £2,000 each, so as to buy lands, or marriages, or other things approved by the earl's executors. £200 was left to Eleanor, and 200 marks (£133. 6*s*. 8*d*.) to Margaret for their wedding clothes. Margaret's dowry was to be paid to Hugh de Courtenay. It was usual for children of the higher nobility to be in the charge of a master or mistress, and bequests to these were included in the will. Sir Robert de Haustede the elder and his wife Margery were left £100 as guardians of Eneas; Huard de Soyrau, in charge of Humphrey, £20; Robert Swan, in charge of John and his brothers, £20; Philippa Wake, mistress of Eleanor, £20; and Katherine de Boklaunde, mistress of Margaret, £10.

The prospects for the children looked bright, but political developments were to bring disaster. Edward II's reign was marked by baronial opposition and rebellion, largely the result of hatred of royal favourites. Earl Humphrey was involved in the execution of the Gascon knight, Piers Gaveston, in 1312, against whom early opposition had crystallised. He took part in the Scottish campaign of 1314, and was taken prisoner at the battle of Bannockburn. Once released, he was often at court, and engaged in Welsh and Scottish campaigns. However, by 1321, he and other lords were bitterly opposed to another favourite, Hugh le Despenser the younger, because of the latter's ambitions in South Wales. Having been awarded Glamorgan in the partition of the lands of the Clare earls of Gloucester in 1317, Hugh's ambition was to build up a great Welsh principality by taking over other Marcher lordships; the Bohuns held Brecon, just to the north of Glamorgan. Earl Humphrey and the Welsh lords attacked Hugh's estates in 1321 and secured his banishment, but Hugh was back with the king by the end of the year, and he and Edward mounted a campaign against the rebels. At the end of December, 1321, and in January, 1322, orders were sent to the sheriffs to take all Earl Humphrey's castles, lands and goods into the king's hands, the Essex lands coming into the custody of Nicholas de la Beche. On 16 March, the royal army defeated the rebels at the battle of Boroughbridge. Earl Humphrey was killed, and buried in the house of the Dominican friars in York.

Earl Humphrey died a rebel and a traitor, and the penalties for treason in the 1320s were severe. According to the 13th-century legal treatise formerly attributed to Bracton, the traitor's heirs were to be disinherited for ever and were to receive nothing from their father's or

mother's inheritance.[8] The growing use of joint tenures by husband and wife, and of entails from the later 13th century led to the question as to whether they should be included in the traitor's forfeiture, and entailed estates were exempted from 1285. In practice, the penalties for treason had been less severe, but leniency could by no means be taken for granted in the 1320s. The younger Despenser was known to be extremely greedy and ambitious, and the political atmosphere after Boroughbridge was very bitter. All Earl Humphrey's lands were taken into the king's hands, and his movable goods confiscated. In July, 1322, Despenser was appointed keeper of the lordship of Brecon.[9]

The evidence of the confiscated goods, together with the earl's will, throws interesting light on the family's wealth and lifestyle. A few earlier records survive which illuminate the lifestyle of Elizabeth, countess of Hereford.[10] The earl's goods were kept in various residences and family monasteries; in addition to those in the abbey of Walden, where the inventory has survived, orders were issued for goods to be confiscated and an inventory made in Brecon castle, and in Lincolnshire and Cambridgeshire.[11] In Essex, on 15 March, 1322, the day before the battle of Boroughbridge, Nicholas de la Beche was appointed to examine the jewels and other goods belonging to Earl Humphrey and other rebels in Walden abbey, and at the priories of Hatfield Broad Oak, Little Dunmow and Leez, and to take them into the king's hands.[12] The Walden inventory is, therefore, by no means a complete statement of the family's wealth. Moreover, some goods fell into private hands. In a later letter to John, earl of Hereford, Thomas de Garton, parson of Over, Cambridgeshire, wrote that he had in his parsonage of Over some of Earl Humphrey's goods, including his war-pavilion, decorated with his arms. He also had vessels, jewels and goods belonging to Thomas, earl of Lancaster, executed after the battle of Boroughbridge. All had been taken at the instigation of Hugh le Despenser the younger.[13]

The Walden inventory lists the goods handed over by the abbot to Nicholas de la Beche and viewed by the sheriff, Nicholas de Engaine. It starts by listing the possessions of the earl's sons and daughters, the daughters having far more than the sons. This is followed by a short list of goods owned by the earl, and the inventory ends with an account of furnishings, armour and weapons, and a list of service books and vestments found in a chest in the chapel of Denny. At least some of the goods, those with the arms of Holland, had belonged to the Countess Elizabeth and derived from her first marriage. The inventory underlines the importance of splendour and lavish display in noble life. Conspicuous consumption was taken for granted in their lifestyle; they were expected to show off their wealth, status and connections through what they wore and how they furnished their residences. As time passed, or circumstances changed, plate and jewellery were refashioned. Noble connections were displayed by coats of arms; Earl Humphrey's son, Edward, had two silver basins with the arms of England and France, and William two silver basins with the arms of England and Ulster.

Jewellery was worn by men and women. Edward had a gold clasp with four emeralds and three rubies, and John a gold clasp with six large emeralds. Both had a gold ring with a diamond. The girls had rings, and jewelled ornaments and girdles. They also wore ornaments on their heads, and had jewelled coronets and circlets. The richer of Eleanor's two coronets was set with emeralds, rubies, sapphires and white pearls, and she also had a chaplet of pearls with the arms of Holland. Margaret similarly had two gold coronets, set with emeralds, rubies and pearls.

All the children had silver plate, and some items of silver-gilt and gold. John, who eventually succeeded his father as earl, had six dishes, six shallow bowls, and ten pieces of silver, two silver basins with the arms of England and Holland, one charger, and twelve silver spoons. Margaret possessed a gilt basin with one shield of the arms of England and four shields with divers arms; three goblets of which one was gold, one silver-gilt and enamelled with an ewer to match, and one of crystal with a silver-gilt foot and an ewer to match; a gold ewer with the arms of Holland; one gilt salt-cellar; two plates for spices with silver feet; twenty-four silver dishes; seven shallow bowls of silver; two basins and one silver charger; and two gold spoons and one of silver. The plate was for use as well as display, as were the furnishings which the girls possessed; brides were expected to provide the household furnishings when they married. The provision for a household chapel had specifically been made for Eleanor: a wooden table painted for an altar, a cross with a silver-gilt foot, two little silver basins, an ivory image of the Virgin Mary in a closed tabernacle, a little ivory image of St Katherine, two silver candlesticks, a bucket and a silver sprinkler for holy water, two cruets, a silver bell, a silver incense-boat, a silver-gilt censer, and a silver-gilt chalice. Certain items were for private piety, such as the two rosaries, one of coral and one of jet with gilt beads, for Margaret, and, for Eleanor, two rosaries, one of amber and one of silver.

The short list of the goods of the earl of Hereford comprised a gold goblet decorated with a shield of arms of Holland and Hereford, with a pot and gold ewer to match; a silver pot for alms; a silver-gilt salt-cellar; and the great crown with rubies, emeralds and pearls, and rubies and sapphires on the crest, which the earl's mother-in-law, Queen Eleanor of Castile, gave to her daughter, Elizabeth.

The inventory ended with a list of possessions which John de Tosseburi handed over to the abbot. These included eighteen green hangings and bench-covers embroidered with swans, the Bohun badge; cloths, coverlets and hangings for beds; a child's cradle, and a few items of plate. The armour included a hauberk, two surcoats, two bacinets, and four swords: one with the earl's arms, one of St George, one Saracen sword, and a war-sword. The earl possessed a copy of Sydrac's Book on All the Sciences written for King Boctus, a work which enjoyed a high reputation at the time.

With estates and possessions forfeited to the king, the Bohun family had tumbled to the bottom of the Wheel of Fortune. Information about the children is sparse until the very end of Edward II's reign. John, Edward and Humphrey were in the king's custody at Windsor on 24 March, 1322, where they were held with Edmund and Roger Mortimer, sons of Roger Mortimer. The Bohun boys were provided with an establishment of two masters, who ranked as esquires, two chamberlains, two grooms and one page; there was a separate, smaller establishment for the Mortimers.[14] John and Humphrey remained in custody with the two Mortimer boys in 1322–3, and a fragmentary account survives for Humphrey and Edward in 1325–6.[15] The whereabouts of the other four children at this time is unknown. There are a few signs that the situation of the family was improving in 1325; in October, reference was made to Bohun land being in the king's hands because of the minority of John, Earl Humphrey's son and heir, and not to treason and forfeiture.[16] This can be taken as a sign that their estates would eventually be restored, and they would not be disinherited for ever.

Arrangements were being made for John's marriage to Alice, daughter of Edmund, earl of Arundel in 1325.[17] The intention was probably to bind John to the party of the king, the Despensers and Arundel. The king was still anxious to keep John on his side after he fled to the west in the autumn of 1326 in face of the invasion of Queen Isabella and her lover, Roger Mortimer. John was restored to his estates on 31 October, 1326, even though he was still a minor.[18] Progress was also made with his sisters' marriages. Margaret married Hugh de Courtenay on 11 August, 1325. Whether her dowry was paid is unknown, but the agreement to settle 400 marks' worth of land on the couple by Hugh's father went ahead.[19] The marriage lasted over fifty years until Hugh's death in 1377; Margaret died in 1391. Eleanor married James Butler, created earl of Ormond in 1328. In December, 1325, James, who as a minor was in the king's wardship, was given licence to marry whom he liked, in return for a payment of 2,000 marks, to be paid at the rate of £200 a year. He received his father's lands in England at the same time. He married Eleanor in 1327.[20] Eleanor was provided with land by Joan de Bohun, out of Joan's inheritance. Joan was the sister and heir of Alan Plukenet, and succeeded to her inheritance in 1325; she died two years later. She had married as her second husband Henry de Bohun of Haresfield, Gloucestershire, the grandson of Humphrey, earl of Hereford and Essex (d.1275).[21] Whether Joan's grant was to ensure that Eleanor did not marry without a dowry is unclear.

Although these moves indicate that Bohun fortunes were beginning to revive, it was the deposition of Edward II and the accession of his son, Edward III, that saw them really on the road to recovery of fortune and reputation. The restoration of lands and goods was only part of the process. To recover the position and prestige enjoyed by Earl Humphrey before 1322, it was essential for them to make their mark at court, in royal service and by marriage. This was achieved to a small extent by John de Bohun, and far more spectacularly by the twins, Edward and William. Edward died in 1334; had he survived, it appears likely that he would have eclipsed William's success. William, who died in 1360, enjoyed a long enough life for him to make his mark as an able commander in the Hundred Years War, and to gain another earldom for the family.

Earl John's lands had been wasted since the forfeiture in 1322, and on 10 January, 1327, steps were taken to allow him resources to repair his castles and manors. Soon after, he was granted the third penny of Essex and Herefordshire, the earl's perquisite from shire revenues.[22] Some at least of Earl Humphrey's confiscated goods were returned to him. The charter of 10 January specified that he was to receive all the corn, goods and chattels that were in the restored castles, manors and lands at Michaelmas, 1326, and also farms and rents.[23] In view of the general spoliation of 1322, it is most unlikely that anything of value remained on the estates. However, the Privy Wardrobe account of John Fleet for 1324–41 refers to goods returned to Earl John. For instance, by an indenture dated 5 February, 1327, the earl received furnishings for beds and for the hall, including curtains and tapestries; two nightcaps were also included in the list. Vestments, chapel furnishings, and service books were also returned, together with a Latin Brut (a chronicle of British history), and a book of romances. Six swords were restored to the earl, and a large number of cloths, including eight cloths of velvet, thirty-six of 'camok' (probably a silk material), seven of silk, and two of cloth of gold, and two pieces of brocade and one of old brocade, four pieces of Aylsham cloth (linen), and one of fustian. Also listed were a great chest and two long chests, into which many of the items may well have been packed.[24]

John was knighted on 1 February, and served on the Scottish campaign later in the year.[25] It is, however, likely that he suffered from ill-health, as the king agreed in 1330 that Edward should take over the earl's duties as Constable of England because of his infirmity.[26] At the end of that year, John went on pilgrimage to Santiago de Compostella, possibly in search of better health. He went overseas again three years later, but his destination is unknown. He was summoned for the Scottish campaign of 1333, and present on the Scottish campaign of 1335, when he was strengthening the castle of Lochmaben which had been granted to his parents in 1306, but he died in northern England early in 1336, leaving no children.[27] He was buried in the Cistercian abbey of Stratford Langthorne, not in one of the Bohun family monasteries. He was succeeded by his brother Humphrey who never married and died in 1361, outliving all his brothers. He played little part in national affairs, and never carried out his duties as Constable of England, granting the office for life to his brother William in 1338.[28] He is best known for his patronage of the London Austin friars and for his cultural patronage. He may have lived very much as a recluse.[29]

Neither Earl John nor Earl Humphrey had a role in the forefront of politics like their father. Edward and William, however, saw their way to this through royal

service and marriage. Edward was certainly the more prominent early in the reign. He was with Edward II in Wales in November, 1326, and sent with the abbot of Neath and others to the queen and Prince Edward to discuss the affairs of the realm.[30] His close relationship with the future Edward III may have dated from this time or earlier. In the list of liveries issued by the king at the feast of the Nativity of St John the Baptist (24 June), 1328, he ranked among the king's bannerets, and was listed third among the bannerets in an issue of liveries two years later. By then, William also ranked as a banneret, and Eneas was listed as an esquire.[31] Edward had been knighted at the beginning of Edward III's reign, a grant of £100 a year being made to him in order to support his knightly rank until he was provided with land and rents to the same value; he is described as a knight in the king's company by royal command. The money payment from the Exchequer was converted into a grant of farms for life in May, 1330. He was granted land and farms in Devon, Somerset and Essex in return for his agreement to become the king's retainer for life and to serve with seven men-at-arms in time of war.[32] His closeness to the king is exemplified by the grants and pardons issued at his request, and by his presence when the great seal changed hands.[33]

During the first three years of Edward III's reign, power was wielded by Queen Isabella and Roger Mortimer. The king was little more than a cipher. During 1330, a conspiracy was afoot to get rid of Mortimer, and this was put into effect during the meeting of the great council at Nottingham in October. William de Montagu was a prime mover in the plot, and was joined by Edward de Bohun and others. Isabella and Mortimer had locked themselves into Nottingham castle, but the conspirators were shown a secret entrance via an underground passage into the castle where they were joined by Edward III. They burst into the queen's chamber, killing the two men on guard, seized Mortimer, and hurried him off to London where he was tried and put to death.[34] Edward de Bohun was one of those subsequently pardoned for the accidental killing of Hugh de Turpliton, knight, and Richard de Monemuth during Mortimer's arrest.[35]

There is no doubt that Edward took part in the coup. It is generally assumed that William also took part, although this is never stated outright in the sources. The circumstantial evidence, however, makes his involvement likely. The fact that he was named as a banneret in the livery list for the winter of 1330 suggests closer involvement with the king than was apparent before.[36] Moreover, when he married Elizabeth de Badelesmere, the widow of Edmund Mortimer and daughter-in-law of Roger Mortimer, the papal dispensation stated that the marriage had been arranged so as to end the enmity between the two families, as Roger had been killed by William and his accomplices.[37] It is somewhat ironic that about two months after the coup Edward and William were in the party escorting Queen Isabella from Berkhamsted to Windsor for Christmas.[38]

By the early 1330s, Edward was well on his way to establishing a successful career in royal service. His responsibilities increased after the coup. He was appointed justice of North Wales in October, 1331, an office which comprised administrative and judicial duties. In addition to holding judicial sessions, he was in overall charge of royal officials in North Wales, he had to deal with outbreaks of disorder and seizures of lands, and to ensure that castles were in good repair, and all officials were carrying out their work satisfactorily.[39] At the time of the Scottish campaign of 1333, he was responsible for raising a force of 1,500 men, including archers.[40] In order to support his position, he was made a grant of lands in Wiltshire. This was probably why he was appointed a keeper of the peace in Wiltshire in 1332, and justice of oyer and terminer the following year.[41] Edward was by this time in a position to get married; he married Margaret de Roos, probably in 1332.[42] Rewards continued; early in 1333, Edward and three other of the king's close friends were granted the sum of 200 marks each.[43]

How does this compare with William's activities? Although there is no sign that he carried out administrative and judicial duties, the number of rewards that he received from the king multiplied after 1330, and there are signs that he was acting with other young men of the king's circle.[44] In October, 1331, the king ordered the payment of £60 to William, so that he could maintain himself better in royal service, and pay off the debts which he had accrued while serving the king. The following April, payments were to be made to him out of the lands of Edmund, earl of Kent, which had come into the king's hands. Of greater significance was the grant of September, 1332, in recognition of William's good service, of lands in Berkshire, Oxfordshire, Buckinghamshire, Lincolnshire, Nottinghamshire, Gloucestershire and Essex, together with a farm in Sussex, which Thomas de Brotherton, earl of Norfolk, held of the king's grant. The grant was made to William and the heirs of his body, and the lands were to be held of the king, as Earl Thomas had held them before surrendering them to Edward, and were to render £800 a year at the Exchequer.[45] Even bearing in mind the amount of the rent, the grant gave William sizable estates of his own, and indicates that the king valued his service.

Both Edward and William served on the Scottish campaign of 1333, with Edward taking greater prominence. The Scottish forces were defeated at the battle of Halidon Hill, after which Edward Balliol, as king of Scotland, did homage to Edward III, while the young David II (David Bruce) fled to France where he gained the protection of Philip VI. Edward de Bohun, as Constable of England, together with the Earl Marshal, was described as being in command of the first division of the army at Halidon Hill.[46] It is likely that there was strong rivalry among the young leaders of the English army. During the summer, Edward Balliol had granted the lordship of Annandale to Henry Percy, and appointed him to reduce Lochmaben castle. Before he took action, the castle had surrendered to Edward de Bohun who presumably based his claim on Edward I's grant to his father in 1306. Edward III intervened in the dispute, and

a year later Percy resigned his claims to him, while Edward de Bohun was granted Lochmaben and Annandale.[47]

In August, 1334, Henry de Percy and Ralph de Nevill were appointed keepers of the Marches, to suppress the Scots who were striving to drive out Edward Balliol. Soon after, Edward de Bohun was appointed a keeper of the Marches.[48] Edward, however, did not long enjoy his gains. By early November, he was dead. According to the chronicle of Geoffrey le Baker, he saw that his squire was in danger when he wanted to drive his plundered cattle across a river. Edward went to help him and rode his horse into the river. It lost its footing among the stones and fell. Edward was in armour, and, before anyone could come to his rescue, he had drowned. Baker regarded Edward as a noble of natural talents and ability.[49]

Edward did not leave any children, and his death left William to continue the task of building up the family's prestige. This he achieved as a soldier and diplomat in royal service, notably during the Hundred Years War. About a year after his brother's death, he married Elizabeth de Badelesmere. As a widow, Elizabeth held dower in the Mortimer lands, and further Mortimer property was committed to William and Elizabeth to hold until Elizabeth's son, Roger Mortimer, came of age. Elizabeth was, moreover, one of the four sisters and coheiresses of Giles de Badelesmere who died in 1338.[50] William's marriage added appreciably to his wealth, and constituted a strong base for further service to the king.

William proved himself during the Scottish wars. He fought on all the Scottish campaigns of 1333–36, and may well have been at the battle of Halidon Hill, although this cannot be proved. He led a troop of sixty mounted archers on the Roxburgh campaign of 1334–35, and served again in 1335 and 1336–37, on the former occasion with forty-three men-at-arms and eighty mounted archers. He was in charge of the western march in the autumn of 1335, and was one of those appointed to negotiate a truce with the Scots in 1336.[51] On his campaign that year for the relief of Stirling, one of his retainers was Robert de Marny, serving in his first campaign.[52] It is likely that William learned in Scotland the tactics he later deployed in the Hundred Years War. As king's captain in Brittany, he defeated Charles of Blois, the French claimant to the duchy, at the battle of Morlaix in 1342, and there for the first time in France the English made use of dismounted men-at-arms and archers. According to Andrew Ayton, William played an active part in developing English fighting methods under Edward III.[53]

In 1337, with the outbreak of the Hundred Years War imminent, William was one of the five close associates of Edward III to be created an earl. This can be regarded as a triumph, not only for William, but for the Bohun family, and marks their full recovery from the events of 1322. William was created earl of Northampton, and granted the third penny of the county, valued at £20 a year. He was granted the reversion of estates up to a yearly value of £1,000, namely, the castle, manor and town of Stamford, and the manor and town of Grantham, held for life by John de Warenne, earl of Surrey; the castle and manor of Fotheringhay, held for life by Marie de St Pol, countess of Pembroke; and the castle and manor of Oakham and the shrievalty of Rutland, held for life by Hugh Audley, earl of Gloucester, and his wife Margaret. These lands were granted to William and his male heirs, and were to come into William's hands on the deaths of their holders. In the meantime, he was to receive £400 from the customs duties of the city and port of London, together with £150 from the town and port of Boston, £150 from the town and port of Hull, £200 from the farm of the city of London, and £100 from the farm and issues of Essex, payable to him and his male heirs at Easter and Michaelmas each year.[54] Whether he was fighting in Scotland or France, he was paid wages, and these augmented his other resources.

With his title and his growing military reputation, William was able to attract a military following; he was also the active head of the Bohun family, with the office of Constable of England from 1338.[55] He was able to attract knights and other soldiers from the Bohun lordships and the counties where they were the leaders of the local nobility and gentry, to draw on some of his Bohun relations, and to attract men from the court and from northern England who had no record of previous service to the Bohuns. Members of his retinue often served with him for several successive campaigns.[56]

Looking at the evidence for his retinue after his creation as earl of Northampton and in the early years of the Hundred Years War, it is clear that Essex knights and gentry were joining him, serving for wages, and receiving compensation for loss of horses. The men with him in the Low Countries between 1337 and 1339 included his kinsmen, Oliver and Edmund de Bohun among the knights, and Thomas de Dagworth among the squires; Thomas subsequently married William's sister, Eleanor, and served with William in Brittany in the mid-1340s.[57] Essex knights included John de Nevill and John de Wauton. John de Wauton had fought in the Scottish campaign of 1322 in the retinue of Robert Fitzwalter; he was in William's retinue early in the Hundred Years War, and fought with him at the battle of Crécy, as did John and Hugh de Nevill. John de Nevill held extensive lands in Essex and elsewhere, and at the end of their lives John sold his Essex lands to William. Among the squires between 1337 and 1339 were Hugh de Nevill, John Fitzwalter, Robert de Marny, Nicholas de Belhous and Peter de Favelore; Peter later frequently served as attorney and administrator and William rewarded him with land.[58] Others who served in 1338 included William Marny, Robert's father, and Hugh de Badewe.[59] To serve as a squire could be the preliminary to a knightly career; John Fitzwalter was serving as a banneret at Crécy, like Sir John de Nevill, and with his own following was in the retinue of the Black Prince.[60] Robert de Marny was subsequently knighted. William Talmach, a squire in 1337, became a retainer of Earl William in 1340, receiving land in Essex in return for his service in peace and war.[61]

Further information about William's retinue is to be found in *The Wardrobe Book of William de Norwell, 1338–40*, which provides information on the compensation for lost horses.[62] William received £577. 13*s*. 4*d*. for the loss of twenty-four horses in his retinue, the largest payment being £100 for one of his own warhorses. Bannerets usually had five horses and a knight four; in January and February, 1340, for the crossing of the horses by sea from Sluys to England, costing 6*s*. 8*d*. for each horse, William had six horses himself, five for one banneret, ninety-six for twenty-four knights, and 192 for sixty-four men-at-arms. Among the Essex men who lost horses were Sir John de Wauton who lost one clear bay horse, valued at £40, and one black horse with a white hind right foot, valued at forty marks. Hugh de Nevill lost a sorrel piebald horse worth £33. 6*s*. 8*d*., and a piebald with a black streak and one white hind foot, worth £28. 6*s*. 8*d*. Sir John de Nevill lost a piebald sorrel, worth £20, and Nicholas de Belhous a bay horse with a star and two white hind feet, valued at £5.

By the late 1330s, there is no doubt that Earl William de Bohun, and through him the Bohun family, were on top of the Wheel of Fortune, a position retained by William for the rest of his life. It had been a long and arduous climb back to the top, and it may be doubted whether William would have gained such eminence had Edward not drowned in 1334. In one sense, William's was an individual achievement, but it is likely that he saw it as the return of the whole Bohun family to an honoured place among the higher nobility. William's acquisitions of land later in his career show that he identified himself with the areas where the Bohuns held most of their estates, in Brecon and Essex, and on his death his son united William's estates with those of the eldest line of the family, becoming earl of Hereford, Essex and Northampton.[63]

The chantry which William founded in Walden abbey in 1342 expressed his strong sense of family, and his gratitude to those who had helped in his rise to power.[64] The chantry ordinance recorded that William was to be buried at Walden, and he and his wife were received into confraternity. Both the living and the dead were to be commemorated by the celebration of masses, to be sung by five monks. The list of beneficiaries was headed by Edward III without whose patronage William's rise would have been impossible. There followed Earl William and his wife Elizabeth; Humphrey, their son and heir; William's brother, Humphrey, earl of Hereford and Essex; his cousin, Elizabeth de Burgh, lady of Clare; his sisters, Eleanor and Margaret; his trusted administrator, Sir John de Engaine; and Master Simon Islep, canon of Lincoln. All these people were to be commemorated during their lives and after their deaths. Of the dead to be remembered, William included his parents, his brothers John, Edward and Eneas, and the rest of their dead brothers and sisters. Prayers were to be said for Thomas de Brotherton, earl of Norfolk and Earl Marshal; Henry de Burghersh, bishop of Lincoln; John de Bohun, clerk; Sir Roger de Clifford; for his wife's parents, Bartholomew and Margaret de Badelesmere; and for the souls of all the faithful departed. Of these, Thomas de Brotherton can be linked with the grant of lands to William in 1332, and Henry de Burghersh, like William himself, with the diplomacy in the Low Countries in the early years of the Hundred Years War. The range of people commemorated is far wider than is usually found in chantry foundations, and reflects William's strong sense of family, and the way in which he reached the top of the Wheel of Fortune.

Appendix

Translation of the indenture recording the goods of Humphrey de Bohun, earl of Hereford, in Walden abbey, delivered by the abbot to Sir Nicholas de la Beche, Wednesday after the feast of the Annunciation of the Blessed Virgin Mary, 15 Edward II [31 March, 1322].[65]

This indenture witnesses to divers goods of the earl of Hereford found in the abbey of Walden and delivered by the abbot to Sir Nicholas de la Beche, on Wednesday after the feast of the Annunciation of the Blessed Virgin Mary, 15 Edward II.

Of Eneas de Bohun, one gold and jewelled ornament[66] with three grains of emerald and nine pearls, and a sapphire in the centre; one gold ring with an emerald; twelve silver dishes,[67] twelve shallow bowls,[68] and two silver basins.

Of William de Bohun, one gold and jewelled ornament with four garnets, four pearls, and one emerald; one gold ring with an emerald; six dishes, six shallow bowls, and four pieces of silver; two silver basins with escutcheons of the arms of England and Ulster.[69]

Of Humphrey de Bohun, a gold clasp with three emeralds and three rubies; one gold ring with a diamond; twelve dishes, twelve shallow bowls, and four pieces of silver; two little silver basins with the arms of England and France; one silver charger.

Of John de Bohun, one gold clasp with six large emeralds; one gold ring with a diamond; six dishes, six shallow bowls, and ten pieces of silver; two silver basins with the arms of England and Holland; one charger; and twelve silver spoons.

Of Edward de Bohun, one gold clasp with four emeralds and three rubies; one gold ring with a diamond; six dishes and six shallow bowls of silver; and four pieces of silver; two silver basins with the arms of England and France.

Of Margaret de Bohun, one gilt basin with one escutcheon of the arms of England and four escutcheons of divers arms; one pax[70] with one silver-gilt image; three goblets of which one [is] of gold, one of silver-gilt and enamel, with one ewer to match, and one of crystal with a silver-gilt foot, with one ewer to match; one silver censer; one gold ewer with the arms of Holland; one silver bucket for holy water; one silver sprinkler with it; two little silver cruets and one gilt salt-cellar; two plates with silver feet for spices; twenty-four silver dishes; seven shallow bowls of silver; two basins and one silver charger; two gold spoons and one of silver; two little ivory images of the Blessed Virgin Mary; one little box with silver

leaves; two gold coronets with emeralds, rubies and pearls; three gold circlets with emeralds, rubies, sapphires and pearls; two circlets of work of Paris, and two garlands, and two hair-ornaments[71] with pearls and other work; four leaves of Paris work; one large gold and jewelled ornament powdered full of emeralds, rubies and pearls; one small gold and jewelled ornament with four garnets and one emerald; one small gold and jewelled ornament with two garnets and two rubies and one pearl in the centre, and pearls and stones for buttons; three small clasps of silver-gilt; one little gold tablet enamelled inside; two rosaries, one of coral, and the other of jet with gilt beads; one girdle of say[72] powdered with white pearls and coral, and [on] the strap-end three escutcheons of arms of France, Spain and the Empire; three gold rings with three sapphires; one gold ring with a chrysolite; one cameo set in silver; one other precious stone set in silver; one ring with a ruby; two rings with emeralds; one ring with sapphires; one ring with grain of ruby; one ring with grain of emerald; two rings with garnets; four silver pennies enamelled; one portion of white pearls, and another portion of pearls of the Indies; one scent-ball of amber set in three silver claws; one branch of coral;[73] three eagle stones;[74] one alms-dish in the shape of a boat.

Of Eleanor de Bohun, one painted wooden table for an altar;[75] one cross with a silver-gilt foot; two little silver basins for the chapel; one ivory image of Our Lady [the Blessed Virgin Mary] in a closed tabernacle; one little ivory image of St Katherine; two silver candlesticks for the chapel; one bucket and one silver sprinkler for holy water, two cruets and one silver bell, and one silver incense-boat; one silver-gilt censer; twenty-two dishes and six shallow bowls of silver; two little basins and one charger of silver; one silver plate for spices with escutcheons of divers arms on the foot; two other flat silver plates for spices; four silver pots with covers and one ewer to match, and one silver-gilt pot with two ewers to match; one silver mazer with cover; one gold and enamelled goblet with cover and fastening, and one gold pot; one silver-gilt chalice for the chapel; one silver salt-cellar; one gold goblet with one escutcheon of the arms of Holland; one foot for one silver-gilt goblet; two gold spoons and one of silver; one gold and jewelled ornament shaped like a shield with one eagle, sapphires, rubies, pearls, and one ruby hanging in its 'Beek'; one rich gold crown with emeralds, rubies and pearls, and another, richer crown of gold, with emeralds, rubies, sapphires and white pearls; two silver circlets of Paris work; one chaplet of pearls with the arms of Holland; one hair-ornament of small pearls and stones; four gold circlets of emeralds, garnets and pearls; one hair-ornament of pearls with escutcheons of arms of England and Holland; one enamelled silver box, with one gold ring with a ruby; one little ornament with silver leaves with one frontal of pure say;[76] one bacinet; three branches of coral; one nutmeg scent-ball set in silver with small stones and pearls; three eagle stones; one flower of Our Lady; one little cup of nutmeg-wood with silver-gilt foot and cover; four leaves of Paris work; three clasps of silver-gilt; pearls of divers colours and stones with them; three little silver spoons with 'kockilies' [shells] of the sea; one little tablet with a crucifix, and one enamelled picture of Our Lady; two silver brooches for a mantle in a little ivory case; one gold comb and one silver mirror, with one silver brooch in a case; one girdle of silver thread; one black box decorated with gold; two gold rings with sapphires; one gem set in silver; one rosary of amber and another of silver, and three enamels,[77] and one purse, and one ring with one sapphire; two rings with emeralds; one ring with one little ruby; two rings with little emeralds; one piece of broken gold, and one ivory box bound with silver.

Of the earl of Hereford, one gold goblet with one escutcheon of the arms of Holland and Hereford, one pot and one gold ewer to match; one silver pot for alms and one silver-gilt salt-cellar; the great crown with rubies, emeralds and pearls and on the crest rubies and sapphires which the queen her mother bequeathed to the countess of Hereford.[78]

These are the goods which the abbot has received from John de Tosseburi, namely, eighteen green tapestries and bench-covers powdered with swans,[79] and one light hauberk called Bohoun; one pair of plates covered with green velvet;[80] two tunics;[81] two surcoats with the earl's arms; four pairs of shoulder-plates[82] with the arms of the earl of Hereford; one cloth of gold for a bed; one coverlet of red samite[83] and one of samite of the Indies; one little coverlet of say for a baby's cradle; four swords, one with the earl's arms, one of St George, the third Saracen, and the fourth a war-sword; one quilt of Holland and one of white sendal,[84] and a striped one of red velvet and peacock's feathers, and another quartered with the arms of England and Hereford, and one curtain to match; one large tablecloth and three towels; three coverlets of ermine, one for a child's cradle, two coverlets of minever, one of grosvair, and two of gris of which one was for a child's cradle;[85] one cloth and one curtain of green and red sendal for a bed; two silver chargers; one basin for alms with one escutcheon of the arms of Hereford of which one ring is missing; one book called Sydrak;[86] two bacinets, one covered with leather and the other burnished; two 'coverchiefs' for the head of the bed lined with minever, one of tartarin[87] and the other embroidered, one curtain of red sendal, two tapestries of the Indies; one pair of buttoned Cordovan hose; one iron corset; one lined coverlet; one cover for a horse with the arms of Hereford; one bay sumpter-horse.[88]

Found in a chest in the chapel of Denny, the following items, namely: two missals; one book of saints' lives; two books of antiphons; two breviaries; one glossed psalter in two volumes; three graduals; one manual; one book of epistles; two books of tropes; one psalter with a hymn book; the canon of the mass on its own; five chasubles; five albs; three amices; four stoles; four maniples; four girdles; two corporal-cloths with cases; six tunicles; four choir-copes; six large and three small towels; two cloths for the lectern; one cloth of gold; one cushion; two surplices; one rochet; two gold chalices; two crosses; one table of relics; two gold cruets; one silver censer; one little chest with relics; one purse with charters; one latten, enamelled vessel; one silver-gilt box; one paper.

In witness of these goods, delivered to the aforesaid Sir Nicholas de la Beche by the aforesaid abbot of Walden, on the year and day aforesaid, under the supervision of Sir Nicholas de Engaigne, sheriff of Essex and Hertfordshire, the said abbot and Sir Nicholas de la Beche affixed their seals to each copy of the indenture.[89]

Endnotes

1. I would like to thank Dr Jenny Stratford for help with the Bohun inventory, and for drawing my attention to sources which throw further light on the Bohun family in the 1320s.
2. K.B. McFarlane, *The Nobility of Later Medieval England* (Oxford, 1973), 261–2; *Calendar of Charter Rolls, 1300–26*, 33; *Calendar of Patent Rolls, 1301–7*, 96; *Calendar of Fine Rolls, 1272–1307*, 458–9.
3. W. Dugdale, *Monasticon Anglicanum*, ed. J. Caley, H. Ellis and B. Bandinel (London, 1817–30), vi, part I, 134–6; BL, Harley MS. 3697, fol.24v.
4. TNA:PRO, E101/365/17.
5. TNA:PRO, DL27/13; G.W. Watson, 'Marriage Settlements', *The Genealogist*, xxxiv (1918), 29–34; *Calendar of Patent Rolls, 1313–17*, 267. Hugh de Courtenay, the father, was styled earl of Devon from 1335, and his son succeeded him as earl in 1341.
6. *Feet of Fines for Essex*, ii (Colchester, 1913–28), 138, 159; TNA:PRO, DL10/218.
7. TNA:PRO, DL27/14; T.H. Turner, 'The Will of Humphrey de Bohun, Earl of Hereford and Essex, with Extracts from the Inventory of his Effects, AD 1319–22', *Archaeological Journal*, ii (1845), 346–8.
8. *Bracton, De Legibus et Consuetudinibus Angliae*, ed. G.E. Woodbine, trans. S.E. Thorne (Cambridge, Mass., 1968–77), ii, 334–7.
9. *Calendar of Fine Rolls, 1319–27*, 50, 84–5, 88, 91, 143; *Calendar of Memoranda Rolls, 1326–7*, 303.
10. TNA:PRO, E101/365, 17, 20; E101/366/30; E101/367/1.
11. *Calendar of Memoranda Rolls, 1326–7*, 63, 246; *Calendar of Fine Rolls, 1319–27*, 120.
12. *Calendar of Fine Rolls, 1319–27*, 108. TNA:PRO, DL25/29, the Walden inventory, is printed in translation in the Appendix.
13. TNA:PRO, DL34/1/16.
14. TNA:PRO, E101/378/16.
15. TNA:PRO, E101/382/23; E101/379/10.
16. *Calendar of Fine Rolls, 1319–27*, 365.
17. *Calendar of Patent Rolls, 1324–7*, 281; *Calendar of Memoranda Rolls, 1326–7*, 32; *Calendar of Entries in the Papal Registers relating to Great Britain and Ireland; Calendar of Papal Letters, 1305–42*, 242.
18. *Calendar of Patent Rolls, 1324–7*, 345–6; ibid. *1327–30*, 5; *Calendar of Close Rolls, 1327–30*, 26.
19. *Complete Peerage of England, Scotland, Ireland, Great Britain and the United Kingdom* (London, 1910–59), iv, 324; *Calendar of Close Rolls, 1327–30*, 444–5.
20. *Complete Peerage*, x, 118; *Calendar of Fine Rolls, 1319–27*, 367–8; *Calendar of Patent Rolls, 1324–7*, 203; *Calendar of Close Rolls, 1323–7*, 551. James died in 1338.
21. *Calendar of Patent Rolls, 1327–30*, 175, 181, 403.
22. The official beginning of Edward III's reign was 25 January, 1327, but Queen Isabella and Roger Mortimer were firmly in power before the end of 1326. *Calendar of Patent Rolls, 1324–7*, 345–6; ibid. *1327–30*, 5; *Calendar of Close Rolls, 1327–30*, 26.
23. TNA:PRO, DL10/247.
24. BL, Add. MS. 60584; J. Stratford, 'The Early Royal Collections and the Royal Library to 1461,' in *The Cambridge History of the Book in Britain*, iii (Cambridge, 1999), 257–9.
25. *Complete Peerage*, vi, 470.
26. *Calendar of Patent Rolls, 1330–4*, 12–14.
27. Ibid. 24, 471; *Calendar of Close Rolls, 1333–7*, 99; *Rotuli Scotiae in Turri Londinensi et in Domo Capitulari Westmonasteriensi asservati, 19 Edward I – Henry VIII*, ed. D. Macpherson, J. Caley, W. Illingworth and T.H. Horne (Record Commission, 1814–19), i, 387a; *Calendar of Charter Rolls, 1300–26*, 6; *Calendar of Inquisitions Post Mortem*, viii, 25–9; *Complete Peerage*, vi, 471.
28. *Calendar of Patent Rolls, 1338–40*, 91, 95.
29. J. Nichols, *A Collection of All the Wills of the Kings and Queens of England* (London, 1780), 44–56; L.F. Sandler, *The Lichtenthal Psalter and the Manuscript Patronage of the Bohun Family* (Turnhout, Belgium, 2004) 16–19. There is no reference to Earl Humphrey visiting Elizabeth de Burgh, Lady of Clare; according to her household accounts, she entertained all the local noble families.
30. *Calendar of Patent Rolls, 1324–7*, 336.
31. *Calendar of Memoranda Rolls, 1326–7*, 373, 377–8. William was no. 26 on the list of bannerets. No references have been found to Eneas after this time, and he probably died in the 1330s.
32. *Calendar of Patent Rolls, 1327–30*, 39, 517; ibid. *1330–4*, 79, 222.
33. E.g. *Calendar of Charter Rolls, 1327–41*, 84; *Calendar of Patent Rolls, 1327–30*, 419; ibid. *1330–4*, 114; ibid. *1334–8*, 10; *Calendar of Close Rolls, 1330–3*, 550–1.
34. *Chronicon Galfridi le Baker de Swynebroke*, ed. E.M. Thompson (Oxford, 1889), 46.
35. *Calendar of Patent Rolls, 1330–4*, 53. Hugh's death is also referred to in Baker's account.
36. *Calendar of Memoranda Rolls, 1326–7*, 377.
37. *Calendar of Entries in the Papal Registers relating to Great Britain and Ireland: Calendar of Papal Letters, 1305–42*, 527–8.
38. *Calendar of Patent Rolls, 1330–4*, 36.
39. Ibid. 181; *Calendar of Fine Rolls, 1327–37*, 293, 297, 300; *Calendar of Close Rolls, 1330–3*, 135, 379–80; ibid. *1333–7*, 14–15, 94.
40. *Calendar of Close Rolls, 1333–7*, 27.
41. *Calendar of Patent Rolls, 1330–4*, 78, 294, 296; *Calendar of Close Rolls, 1333–7*, 98.
42. *Calendar of Close Rolls, 1330–3*, 529; ibid. *1333–7*, 299.
43. Ibid. *1333–7*, 7.
44. *Calendar of Close Rolls, 1330–3*, 548.
45. Ibid. 266, 459; *Calendar of Fine Rolls, 1327–37*, 323–4; *Calendar of Patent Rolls, 1334–8*, 236.
46. *Chronicles of the Reigns of Edward I and Edward II*, ed. W. Stubbs (Rolls Series, 1882–3), ii, 114.
47. *Calendar of Close Rolls, 1333–7*, 185, 327; *Calendar of Documents relating to Scotland, 1307–57*, ed. J. Bain, 198; *Rotuli Scotiae*, ed. D. Macpherson *et al.*, i, 280–1; *Calendar of Charter Rolls, 1327–41*, 319–20; *Rotuli Parliamentorum* (London, 1783), ii, 57; R. Nicholson, *Edward III and the Scots. The Formative Years of a Military Career, 1327–35* (Oxford, 1965), 147, 150–1, 170.
48. *Rotuli Scotiae*, ed. D. Macpherson *et al.* (Record Commission, 1814–19), i, 276, 282; *Calendar of Close Rolls, 1333–7*, 347.
49. *Chronicon Galfridi le Baker de Swynebroke*, ed. E.M. Thompson (Oxford, 1889), 57. Baker dates his death to 1335, but it is clear from official documents that he died in 1334; the order for his lands to be taken into the king's hands was dated 8 November, 1334 (*Calendar of Fine Rolls, 1327–37*, 424).
50. *Calendar of Entries in the Papal Registers relating to Great Britain and Ireland: Calendar of Papal Letters, 1305–42*, 527–8; *Calendar of Fine Rolls, 1327–37*, 495; ibid. *1337–47*, 103, 239–41; *Calendar of Patent Rolls, 1334–8*, 252; ibid. *1340–3*, 489; *Calendar of Close Rolls, 1337–9*, 194, 354; ibid. *1339–41*, 279–84.
51. R. Nicholson, *Edward III and the Scots* (Oxford, 1965), 176–7, 224, 247–8; W.M. Ormrod, 'William de Bohun, First Earl of Northampton, *c.*1312–60', *Oxford Dictionary of National Biography* (Oxford, 2004), vi, 447–8.
52. *The Scrope and Grosvenor Controversy*, ed. N.H. Nicolas (London, 1832), i, 170.
53. M. Jones, 'Edward III's Captains in Brittany', in *England in the Fourteenth Century. Proceedings of the 1985 Harlaxton Symposium*, ed. W.M. Ormrod (Woodbridge, 1986), 104; A. Ayton and P. Preston, *The Battle of Crécy, 1346* (Woodbridge, 2005), 205.
54. *Calendar of Patent Rolls, 1334–8*, 417; *Calendar of Charter Rolls, 1327–41*, 401, 484–5. John de Warenne and Hugh Audley died in 1347; Hugh's wife predeceased him. Marie de St Pol died in 1377, thus outliving the male line of the Bohun family.
55. *Calendar of Patent Rolls, 1338–40*, 91.
56. William de Bohun's retinue has been discussed by A. Ayton, *Knights and Warhorses. Military Service and the English Aristocracy under Edward III* (Woodbridge, 1994), *passim*, and by A. Ayton and P. Preston, *The Battle of Crécy, 1346* (Woodbridge, 2005), *passim*.

57. TNA:PRO, C81/1734/40.
58. *Calendar of Inquisitions Post Mortem*, viii, 681; x, 436; G.A. Holmes, *Estates of the Higher Nobility in Fourteenth-Century England* (Cambridge, 1957), 23, 69–70, 75; J.C. Ward, *The Essex Gentry and the County Community in the Fourteenth Century* (Chelmsford, 1991), 18; G. Wrottesley, *Crécy and Calais* (London, 1898), 110, 117, 163.
59. *Treaty Rolls, 1337–9*, 125–6, 242, 259; *Calendar of Patent Rolls, 1334–8*, 530–1.
60. G. Wrottesley, *Crécy and Calais* (London, 1898), 33, 83–4.
61. TNA:PRO, DL25/32; *Private Indentures for Life Service in Peace and War, 1278–1476*, ed. M. Jones and S. Walker (Camden Miscellany, xxxii: Camden Society, fifth series, iii (1994), 71–2. This is the only surviving indenture of retainer of Earl William de Bohun.
62. *The Wardrobe Book of William de Norwell, 12 July, 1338, to 27 May, 1340*, ed. M. Lyon, B. Lyon and H.S. Lucas (Brussels, 1983), xciii-iv, 309–10, 386.
63. G.A. Holmes, *Estates of the Higher Nobility in Fourteenth-Century England* (Cambridge, 1957), 23.
64. BL, Harley MS. 3697, folios 258r-259r.
65. TNA:PRO, DL25/29. The indenture was written in French.
66. The word, *nouche*, denoted a jewelled gold ornament which was used as a brooch or clasp.
67. *esquele*.
68. *sauser.*
69. The document has *Woluistir*.
70. The pax was passed round and kissed at the exchange of the Peace during mass.
71. *tressor.*
72. Say was a type of silk or satin.
73. T.H. Turner, 'The Will of Humphrey de Bohun, earl of Hereford and Essex, with Extracts from the Inventory of his Effects, AD 1319–22,' *Archaeoplogical Journal*, ii (1845), 344–5, suggests that ambergris was the principal ingredient.
74. Eagle stones were thought to be found in eagles' nests, and to have medicinal and talismanic properties, especially during childbirth; T.H. Turner, op.cit., 345.
75. This may have been a retable.
76. T.H. Turner, op. cit., 343–4; he suggests that this decorated a bacinet, and was probably like a coronal.
77. *aymaux*.
78. This is a reference to Eleanor of Castile, wife of Edward I, and mother of Elizabeth, countess of Hereford.
79. The swan was the Bohun badge.
80. This was part of the body armour.
81. The tunic was worn underneath body armour.
82. Turner, op. cit. 343; these were of leather and covered with cloth, and attached to the shoulders by laces.
83. Samite was a heavy silk.
84. Sendal was a silk material.
85. Gris was the grey back of the Baltic squirrel, minever the white belly skin, with a little grey surrounding it, and grosvair denoted the whole squirrel skin; E.M. Veale, *The English Fur Trade in the Later Middle Ages* (2nd edition, London Record Society, 38, 2003), 228–9.
86. Turner, op. cit. 345; this was the book which the mythical King Boctus had had written on all the sciences by the famous Sydrac. Both author and patron were mythical. The book enjoyed a high reputation in the early 14th century.
87. This was a kind of rich silk.
88. A sumpter-horse was a packhorse.
89. The seal of Sir Nicholas de la Beche survives.

The cost of publishing this article is supported by the Society's Publications and Research Fund.

Essex Archaeology and History 39 (2008), 172–198

Archaeology in Essex 2007

Edited by A. Bennett

This annual report, prepared at the request of the Advisory Committee for Archaeology in Essex, comprises summaries of archaeological fieldwork carried out during the year. The longevity of many projects often results in a lengthy post-excavation and publication process. The publication of these summaries therefore provides a useful guide to current archaeological research, and the opportunity to take an overview of significant advances. This year 109 projects were reported to the County Archaeological Section (Fig. 1).

Sites are listed alphabetically by parish; the directors of excavations, organisations involved and information regarding the location of archives, including finds, are listed where known. Projects continuing from previous years are indicated by reference to previous summaries in the relevant 'Archaeology in Essex …. '.

Contributors are once more warmly thanked for providing information. The illustration is by A. Bennett

The original summaries, and any associated limited circulation reports, have been added to the Essex Historic Environment Record (EHER) held by the Historic Environment Branch, at Essex County Council, Environment and Commerce, County Hall, Chelmsford CM1 1QH. Regarding sites in the London Boroughs of Barking and Dagenham, Havering, Newham, Redbridge, and Waltham Forest enquirers should contact the Greater London SMR, English Heritage London Region, 1Waterhouse Square, 138–142 Holborn, London, EC1N 2ST.

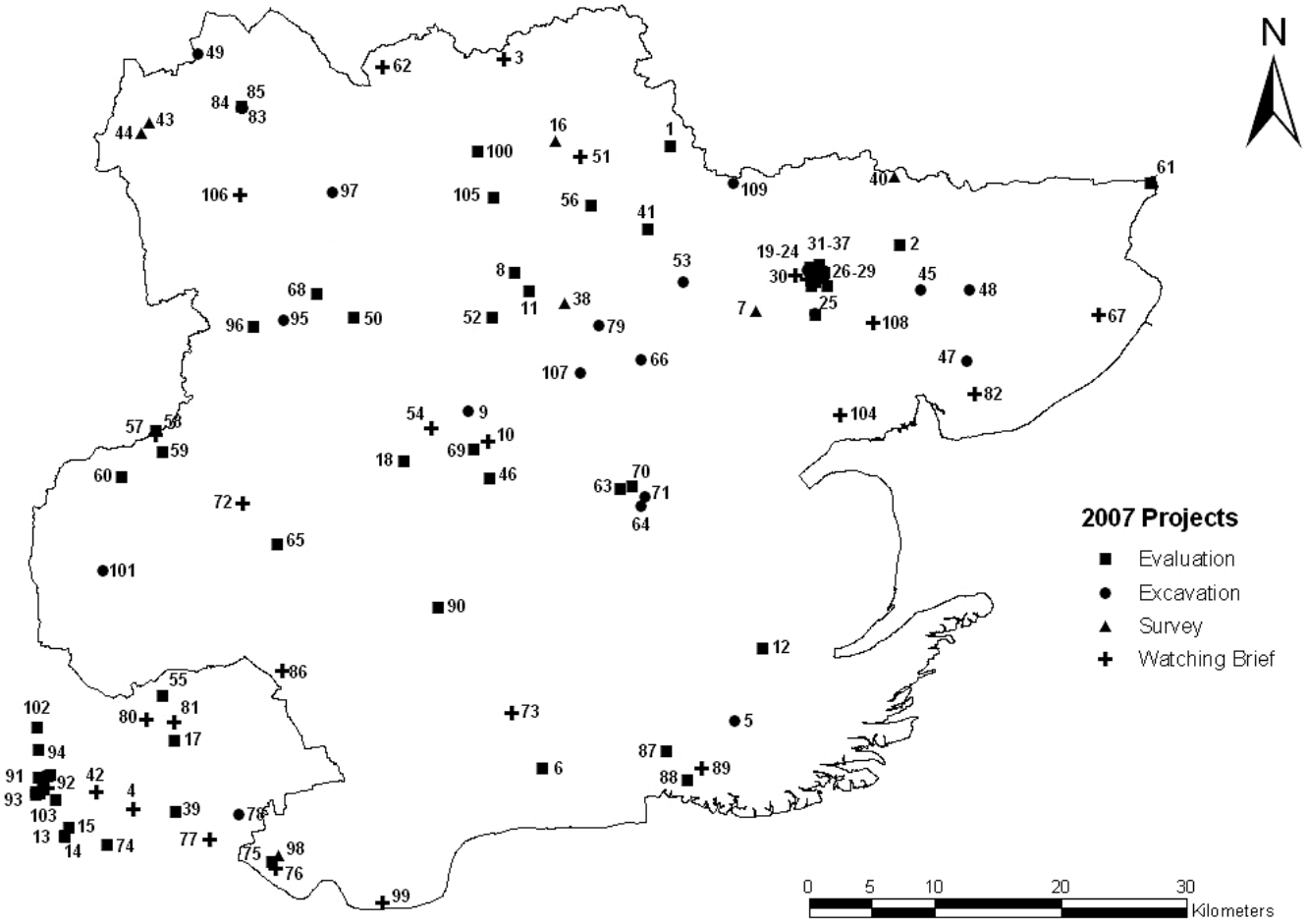

Fig. 1

Progress in Essex Archaeology

Introduction

This year the total number of summaries submitted to the HER was 156, 109 of which are reported here. This includes 61 evaluations and 22 excavations. Sixteen projects followed on from work in previous years. This year seven projects have been carried out by local societies. Only the most significant summaries are mentioned in the following period paragraphs.

Prehistoric

At Dagenham (39) evidence of a palaeochannel was found with subsequent environmental evidence for alder carr woodland of the Neolithic and Bronze Age Thames floodplain. A deep alluvial sequence relating to the prehistoric floodplain was also seen at North Woolwich (74). A late Pleistocene/early Holocene gravel ridge with associated prehistoric activity was recorded at Stratford (94 – PDZ3,WP2). A concentration of worked flints from Birch (7) is interpreted as possibly being the site of a seasonal Mesolithic hunting camp. An early Neolithic cremation vessel was found at Chignall St James (18), together with evidence for late Bronze Age/early Iron Age occupation. A Neolithic pit group was found at Great Bentley (47). Late Neolithic and Early Bronze Age occupation evidence was recorded at Takeley (95). A possible late Bronze Age/early Iron Age round-house was revealed on the Colchester Garrison Butt Road site (25). Late Bronze Age domestic occupation evidence was recorded at Great Baddow (46). Excavation at Boreham (9) investigated an Early Bronze Age henge. Evidence of late Bronze Age/early Iron Age agricultural activity was revealed at Witham (107). Further excavation took place on the Iron Age enclosure at Great Tey (53). A late Iron Age /early Roman cemetery was revealed at Thaxted (97).

Roman

Work continues on the Colchester Garrison site (25), revealing the Roman agricultural landscape including a droveway, and cremation and inhumation burials. Within Colchester town, evidence was found of buildings (22, 23, 24, 31), tessellated floors (31), cemetery (33), burials (21, 22, 34), roads (22, 23, 34), and the temple (35). Evidence of Roman occupatation came from Ardleigh (2) and Heybridge (64).

Saxon

A Saxon or Norman burial was found at Alphamstone (1). Pottery came from Colchester (26). Early Saxon features were excavated at Harlow (59) including a sunken-featured building. Middle Saxon occupation was recorded at Maldon (71). Late Saxon to early medieval revetting was found at Stratford (94 – PDZ 3, WP3). Saxon environmental evidence came from the Mardyke (98). A Saxon doorway was recorded at Prior's Hall, Widdington (106).

Medieval

Resitivity survey at Hedingham Castle revealed the foundations of the Great Hall (16). Part of the church of the Crouched Friars in Colchester (22) has been revealed. Foundations of the Grey Friars were excavated in Colchester (26). Medieval building remains were found at Heybridge Hall (64). Medieval features were excavated at Prittlewell Priory (87). Medieval environmental evidence came from Stratford (94 – Footbridge F10a). Parts of the medieval abbey of Stratford Langthorne were excavated at West Ham (103). Remains of a suspected Tudor hunting lodge are being excavated at Wormingford (109).

Post-medieval

The site of Barling windmill (5) was excavated. Occupation evidence and a possible stoke hole were recorded at Earls Colne (41). Features excavated at Little Easton Airfield (68) were probably associated with a deer park. Post-medieval buildings were found in Saffron Walden (85). Monitoring of work at Tilbury Fort (99) revealed the remains of Victorian buildings.

1 Alphamstone, St Barnabas' Church (TL 8788 3545)

K. Orr, C.A.T.

Three test-holes dug in the northern side of the nave revealed features and layers, some pre-dating the construction of the nave. Of principal interest was an east-west aligned inhumation burial, of probable Anglo-Saxon or Norman date. A Roman layer or feature fill in one of the test-holes may be associated with the nearby villa. The nave foundation was seen to extend to between 400 and 500mm below ground-level and to be of unmortared stone and earth construction.

Archive: Bt.M.
Report: C.A.T Report 417

2 Ardleigh, Martell's Quarry, Slough Lane (TM 061 276)

D. Fallon, A.S.E.

Evaluation trenches revealed a number of ditches that had a broad correlation to some of the cropmarks plotted from aerial photography. This activity was observed across the site with concentrations in the northwest and in the southwest.

The earliest securely identifiable activity on the site was of Roman date. It consisted of a number of pits and ditches located to the northwest of the site, two isolated finds and one single sherd of pottery to the southwest, a single fragment of brick in the centre of the site, and a cremation to the east. Other artefacts included slag, roof tile, human bone, animal bone, imported and locally produced pottery, including two semi-complete vessels, and iron nails. This is interpreted as an assemblage indicative of domestic habitation.

The majority of features encountered during the fieldwork were undatable and were comprised of boundary ditches within an agricultural landscape. To the southwest of the site there was tantalising evidence for the presence of early domestic structures including postholes, pits and a possible enclosure.

Archive: S.M.

3 Ashen, Ashen House Farm, Doctors Lane (TL 7473 4232)

T. Ennis, E.C.C. (F.A.U.)

Archaeological monitoring was undertaken during ground-works for the construction of an extension to Ashen House, a Grade II listed building dating to *c.*1540, part-rebuilt in the later 17th or 18th century, with later additions (EHER 6980). The moated enclosure surrounding the house is part of a Scheduled Ancient Monument (SAM Essex 20768)

The partially-robbed brick foundations of a demolished building were recorded, probably the remains of the east wall of a structure that extended from the south end of the standing building. It is likely that this was an outbuilding of 16th-century date, and possibly part to the original construction of the house. There is unfortunately no historical map evidence to provide a context for the structure, the earliest map to show distinct structures, the Tithe Map of 1839 (ERO D/CT 10b), shows the house and surrounding area in its present-day layout.

Archive: Bt.M.

4 Barking, Marley Waterproofing, River Road (TQ 4529 8276)

P. Cardiff, M.o.L.A.S.

Work on replacing sheet piling along the east bank of Barking Creek (River Roding) was monitored. During the excavations a number of timbers were observed and recorded in the short time allowed by tidal inundations. These timbers were interpreted as part of a dismantled revetment or river wall dating prior to the 1930s when the later river wall was installed.

5 Barling Magna, site of Barling Windmill, adjacent to 47 Church Road (TQ 9306 8979)

M. Pocock, E.C.C. (F.A.U.)

An excavation was carried out on the site of the Barling windmill, demolished in 1946, before construction of a new house in the garden of Mill House, 47 Church Road, Barling Magna. The windmill site had already been partially excavated in 1991 (Byford *et al.* 1992).

The 2007 excavation successfully located and surveyed in both phases of the windmill and recorded the northernmost two-thirds of its ground plan. The recorded remains of the post mill comprised the central post-pit and the brick footings of a roundhouse built around it. Lines of post-holes aligned on the central post-setting may represent small timber piles inserted to stabilise the ground beneath the cross-trees. The remains of the later smock mill survived very poorly, but mortar impressions enabled its outline to be reconstructed.

Archive: S.M.

6 Benfleet, 74 High Street (TQ7773 8596)

G. Priestley-Bell, A.S.E.

A trial trench revealed remains from the Roman and post-medieval periods. The Roman remains comprised a small quantity of residual pottery and ceramic burnt material within post-medieval contexts. The earliest post-medieval remains consisted of a similarly small quantity of 16th- to 17th-century pottery and ceramic burnt material within apparently naturally deposited alluvium. A possible mooring station, comprising three large timbers extending 1.4m into the underlying alluvium and was possibly also post-medieval in origin. This timber was unsuitable for dendrochronological analysis. A 19th-century brick building was also recorded on the site.

Archive: S.M.
Report: A.S.E. Report 3093

7 Birch, Coronation Grove (TL 947 223)

W.J. Mallinson, C.A.G.

A field walk in February confirmed the presence of a high concentration of worked flint on this site. Over 200 flint artefacts were recovered, mainly dating to the mesolithic or neolithic. No evidence of habitation was found, and the site is interpreted as a "working floor" area, used over a long period of time, and possibly the site of a seasonal mesolithic hunting camp.

Archive: C.M.
Report: C.A.G. Bulletin 47 (2007)

8 Bocking, The Old Deanery, Deanery Hill (TL 756 254)

A. Scruby, E.C.C. (F.A.U.)

An archaeological strip, map and sample excavation was undertaken by Essex County Council Field Archaeology Unit on land at the Old Deanery, Deanery Hill, Bocking, in advance of the construction of a new dementia unit. The features investigated consisted of the basal remains of two, clearly long-lived, parallel boundary ditches, running south-east to north-west across the site, a series of pit/ post hole clusters and several gullies. Although pottery was recovered from a number of features, the un-diagnostic nature of much of it renders phasing problematical, beyond assigning a broad 12th – 14th century date, with a notable concentration around the early part of the 13th century. Although large quantities of daub, some with flat surfaces and wattle impressions suggesting they derived from a structure of some kind, were recovered from the fill of the boundary ditches, no evidence for the medieval priest's house was uncovered in the excavation area, supporting the theory that the medieval Deanery stood on the site of the present Deanery building, which is largely of 16th century origin.

Archive: BT.M.

9 Boreham, Old Hall (TL 76 08)

M. Germany, E.C.C. (F.A.U.)

An archaeological excavation carried out by the county council's Field Archaeology Unit during the summer months of 2007 found and investigated six prehistoric barrows and a large prehistoric monument known as a henge. It took place alongside the River Chelmer at

Boreham and was carried out in advance of the construction of an agricultural reservoir.

The remains of the henge consisted of a ring of large post-holes surrounded by a circular ditch. It had a diameter of about 30m, lay close to the river, and was probably constructed during the Early Bronze Age (*c.* 2000 BC). Access into the henge was via two opposing entranceways, one to the north and one to the south. The henge and the river were linked by an avenue of post-holes. Four of the monument's postholes contained stumps of large wooden posts. It appears that each of these posts had originally consisted of an oak tree trunk, which had been cut down with a bronze axe, and then stripped of its bark. The stumps are currently being analysed by the Museum of London. It is hoped that dendrochronological dating will establish their precise age.

The barrows were found close to the henge. Circular ditches defined the majority of them, although one was square, and may have been a small enclosure. It is likely that each of the barrows had originally been associated with a central mound. Large pits lay within some of the barrows and may have been the remains of associated graves, although no human bone had survived to confirm this. Unfortunately, most of the barrows contained no closely datable finds and as a result are difficult to date. The single exception to this was associated with a central burial pit containing two iron penannular brooches and is Middle Iron Age (450 to 300 BC).

Previous summaries: Bennett & Havis 2007
Archive: Ch.E.M.

10 Boreham, Bulls Lodge Quarry (TL 7342 1185)

T. Ennis, E.C.C. (F.A.U.)

Monitoring and rapid excavation was undertaken on the latest area of topsoil strip at this former WW2 airfield. Approximately 0.7ha was investigated to the immediate north-west of areas stripped and monitored in 2005 and 2006. The position of a second narrow stripped area, adjacent to the quarry boundary fence, was noted and currently awaits investigation.

Three pits were recorded; the largest contained a small amount of burnt material but there was no evidence of *in-situ* burning. Two smaller shallow pits may have been the truncated remains of prehistoric cremation burials. Three ditches were uncovered, all of post-medieval or later date. Two of these, and a cable trench, were associated with the World War II airfield or later usage of the site.

Archive: Ch.E.M.

11 Braintree, Great Bradfords Infant and Junior Schools, Marlborough Road (TL 7671 2385)

A. Letch, E.C.C. (F.A.U.)

Two trial trenches were excavated on the sites proposed for the construction of two new classrooms; in addition a small area fronting Marlborough Road was excavated in advance of the construction of new staff facilities. A previous evaluation had found disturbed Roman post-holes and pits.

No archaeological deposits or features were discovered, although two residual fragments of Roman brick and a sherd of probable Roman pottery were collected. Most of the finds retrieved were modern.

Archive: Bt.M.
Previous summaries: Bennett 1997, 207

12 Burnham-on-Crouch, Anchor Cottage, The Quay (TQ 9523 9552)

M. Germany, E.C.C. (F.A.U.)

An archaeological evaluation consisting of two trenches was carried out prior to the construction of a new house. It was apparent that a significant amount of material has been deposited behind the existing retaining wall of the quay, in order to raise ground levels. These deposits seal archaeologically sterile estuarine clay-silts and produced a range of late 17th and early 18th-century cultural material, suggesting the river bank was built up in the early – mid 18th century. A small gully and a number of wooden stakes were noted cutting the estuarine deposits, indicating that activity had been taking place along the foreshore before the quay was built. The stakes are thought to represent rudimentary wooden structures, such as mooring posts or jetties. No archaeological remains predating the 17th century were found.

Archive: C.M.

13 Canning Town, Site A, Dock Road Industrial Estate, West Silvertown (TQ 3984 8069)

K. Tyler, E. Eastbury, M. Nicholls, M.o.L.A.S.

A single evaluation trench was excavated in the NW of the site. The trench exposed a sequence of alluvial deposits possibly dating from the Bronze Age when the environment consisted of mudflats/marshland affected by either tidal or seasonal regimes from the confluence of the rivers Thames and Lea. After this period the environment changed possibly due to a rise in the river level and a thick deposit of alluvial silty clay accumulated, which was subject to temporary waterlogging and at the top of the sequence weathering. Three late medieval or 16th-17th century timber stakes were revealed driven into the upper alluvial deposits.

Archive: M.o.L.A.S.

14 Canning Town, Thames Wharf, Dock Road (TQ 3980 8056)

K. Tyler, M. Nicholls, M.o.L.A.S.

A total of six cable percussion boreholes, twenty six machine-excavated test pits and nine terrier rig window samples were sunk for geotechnical purposes. The sediments observed represent a Quaternary sequence spanning the period from the Late Pleistocene

(Palaeolithic) to the 19th century. Early Holocene deposits appear to have undergone reworking as a result of the proximity of the site to the Thames and the Lea rivers. Late Holocene alluvium makes up the majority of the profile. This alluvium appears *in situ* and probably represents mudflat environments that become sub-aerially weathered towards the top of the unit. Re-deposited alluvial clays cap the sequence, dumped during the excavation of Royal Victoria docks and the channel to the tidal basin in the 1850s.

Archive: M.o.L.A.S.

15 Canning Town sites: Ford Park Road (TQ 4015 8145), Crediton Road (TQ 4025 8136), Butchers Road Garages (TQ 4042 8144), Vandome Close (TQ 4077 8120), 206–300 Butchers Row (TQ 4027 8120)

E. Eastbury, M. Nicholls, M.o.L.A.S.

The area around Canning Town is situated at the confluence of the River Lea and the River Thames. The floodplain in this area is characterised by deep river channels with areas of higher sand and gravel "islands". Investigations took place at five related sites prior to redevelopment to establish evidence for in-situ human activity on these areas as opposed to residual material introduced from erosional activity of the river channels.

Initially, the investigation commenced with the excavation of a single evaluation trench in each of the five sites to provide information of the palaeoenvironmental sequence. On the five sites, modern material overlay thin layers of 18th-19th century made ground which sealed a series of floodplain deposits. The earliest of these probably dated to the Iron Age and a sequence was observed continuing through the Roman and Medieval periods, with the latest being of 16th-17th century date. When the base of the palaeoenvironmental sequence was not reached during the trench excavation, a power auger was used to record the depth and nature of any remaining deposits. On the basis of the evaluation, further work was carried out at Ford Park Road, Crediton Road, and Vandome Close.

On all three sites, a series of augur holes were placed in transects of produce a geo-archaeological deposit model which would enable a better understanding of the past environment of the sites and their relationship with the surrounding landscape. Analysis of material from this exercise is still ongoing. At Ford Park Road, after alluvial floodplain deposits were removed, it was observed that a scatter of prehistoric flint debitage was present on alluvial sand. A controlled excavation was carried out to ascertain whether the flint assemblage was in-situ, whether it was residual or re-deposited, and what the date was for it. Small fragments of prehistoric pottery and some ephemeral post-holes were also observed. These remains, and the flint debitage, have been provisionally dated to the Bronze Age.

Archive: M.o.L.A.S.

16 Castle Hedingham, Castle (TL 788 358)

J. D. & A. M. Black, C.A.G.

At the invitation of the owner, and with a licence from English Heritage, a resistance survey was carried out of the castle mound; surrounding the Keep. The survey revealed the location of the foundations of the Great Hall and other 15th century buildings. A full report will be produced in 2008.

17 Chadwell Heath, 237–241 High Road and 430 Whalebone Lane North (TQ 4855 8814)

E. Eastbury, M.o.L.A.S.

The north of the site was undisturbed. The west of the site was truncated by a former migrating stream channel, which had silted up by the late 19th century. The south and south-eastern part of the site had been truncated by previous post-medieval buildings: the remains of the 19th century 'Beer House' foundations had been constructed on in the 20th century to form a domestic house; and a possible robbed out late 19th century wall foundation aligned east-west may represent a building depicted on the Ordnance Survey map dated 1864. Modern services also truncated the south and south-east of the site. Natural gravel on the site survived to a height of 22.28m OD in the north east of the site sloping to 20.90m OD in the east of the site, where it had been truncated by post-medieval buildings.

18 Chignall St. James, Chignall Hall Farm (TL 668 104)

T. P. Schofield & A. Peachey, A.S.

Archaeological Solutions conducted an archaeological evaluation on land at Chignall Hall Farm. This revealed dry valleys, tree hollows, medieval and post-medieval agricultural furrows and ditches. Prehistoric activity includes an early Neolithic cremation vessel containing human bone, and worked flint. The late Bronze Age/early Iron Age was represented by an occupation site on top of the rise in the south field. Features included a re-cut rubbish pit, postholes and ditches. There were also four ditches, two of which were particularly wide, in the south-eastern corner of the site. Iron Age activity is less represented, with only a posthole and a ditch close to the late Bronze Age/early Iron Age occupation site. Roman features in the south-west of the site include a large ditch present in three trenches and a small ditch. Two further ditches were present in the centre and south-eastern corner of the field.

Archive: Ch.E.M.
Report: A.S. Report 2958

19 Colchester, Balkerne Passage (TL 9923 2518)

K. Orr, C.A.T.

A contractor's trench close to the Mercury Theatre and Balkerne Gate was not deep enough to impinge on any archaeological remains. A few fragments of post-medieval and Roman pottery were exposed at the eastern end, close to the Mercury Theatre.

Previous summaries: Bennett & Havis 2007
Archive: C.M.
Report: C.A.T. Report 421

20 Colchester, 3 Church Street (TL 9934 2513)
H. Brooks, C.A.T.
A watching brief on contractors' underpinning trenches revealed the following stratigraphical sequence: from modern ground level to 1.2m below ground, a sequence of modern soils and drain runs: from 1.2m to 2.4m, a mixed Roman clay layer; at 2.40m, a 10cm-thick, pale brown mortar floor with a burnt surface (a Boudican horizon); at 2.55m below ground level, a clean clay layer which, at this depth, is probably a fortress-period clay floor; below the fortress-period clay floor, a layer of dumped sand which may be fortress-period make-up for the clay floor above.

Archive: C.M.
Report: C.A.T. Report 411

21 Colchester, rear of 31 Creffield Road (TL 9980 2477)
H. Brooks, B Holloway, C.A.T.
A single possible inhumation grave cut was observed during a watching brief on a site within the Roman 'West Cemetery' of Colchester. No coffin nails or other objects associated with the grave were found, but Roman pottery was recovered from overlying strata.

Archive: C.M.
Report: C.A.T. Report 407

22 Colchester, 38–40 Crouch Street (TL 9913 2494)
S. Benfield, H. Brooks, C.A.T.
The east end of the church of the Crouched Friars has come to light in a watching brief and excavation in advance of redevelopment. It is now apparent that Colchester Building 181, excavated to the west of this site in 1988, is part of the west end and cloisters of the same church (Shimmin 1993). The central tower and cruciform plan could be early medieval, and it is presumed that this church is contemporary with the first documentary reference to the presence of the Crouched Friars here in AD 1251 (although there is no archaeological evidence to directly support this contention). Over fifty inhumation burials were laid out across areas corresponding to the north and south transepts. The burials are of a mixture of juvenile, adult and old males and females, with no apparent monastic characteristics. It is therefore assumed that they are the burials of parishioners. Although the evidence is not definitive, the most likely occasion for the creation of this cemetery would be after AD 1403, when a documentary reference suggests that some parts of the church were in need of repair, and were refurbished. Were the transepts demolished, and the cemetery established among the ruined walls? There is little dated material in the grave fills, but the presence of peg-tile favours a late (rather than an early) medieval date for these burials. The medieval church walls and burials were all cut into a deep, dark earth layer which is probably late Roman and later, and indicates that the area was open land (presumably farmed) in the later Roman and post-Roman periods. A few sherds of pre-Norman conquest pottery show that there was some, limited activity on the site before the establishment of the medieval friary.

The dark earth layer sealed a sequence of Roman deposits. These included a series of gravel patches which are probably parts of the metalled surface of a previously unknown minor Roman road heading towards the Balkerne Gate. At least one Roman building (Colchester Building 213) lay on the south side of this metalled road. A fragment of what may be a glass Roman cremation vessel indicates that there may have been at least one Roman cremation burial on this site. In addition to the medieval burials, there was at least one Roman inhumation burial. The presence of residual bone and possible coffin nails in the fills of medieval graves supports the idea that there were more Roman inhumation burials on this site, in addition to those recorded here previously.

Previous reports: Bennett 2005, 151; Bennett & Havis 2007
Archive: C.M.
Report: C.A.T. Report 434

23 Colchester, Colchester Institute, Sheepen Road (TL 9880 2552)
K. Orr, B. Holloway, D. Shimmin, C.A.T.
This site is on the fringes of the important LIA/Roman settlement at Sheepen, one of the core sites of the oppidum of Camulodunum. In advance of the construction of new college buildings, an open area excavation was followed by the excavation of foundation pits.

Two previously unknown Roman gravelled roads were found, one probably heading towards Balkerne Gate (the west gate of the Roman town). Beside the roads were timber buildings (some with cellars), hearths and metal-working floors. It is hoped that analysis of the slag, crucibles and small finds will shed light on the nature of this metal working industry.

Ovens or kilns were also recorded, along with two timber-lined wells (one possibly with a ritual use). The date of amphora sherds in the fill of one of the wells may prove to be crucial evidence for the foundation date of the Sheepen settlement, and thus of Camulodunum as a whole.

Elsewhere were closely-packed inter-cutting pits, some containing cremation burials and others votive pots with no cremated bone. These burials may be outliers of the larger Roman cemetery known at the former St Mary's Hospital site (now 'Balkerne Heights').

Previous reports: Bennett & Havis 2007
Archive: C.M.
Report: C.A.T Report forthcoming

24 Colchester, East Hill House (TM 001 252)
K. Orr, C.A.T.
In association with the continuing construction of the new Visual Arts Facility, four test pits were dug in the garden and car park of East Hill House. Exposed so far are the robbed walls of a Roman house, plus a probable well and a dump of stone chippings – perhaps rejects from a mosaic floor. The remains are located on the edge of the gardens of East Hill House, where they have escaped destruction from 19th century garden landscaping.

Previous reports: Bennett & Havis 2007
Archive: C.M.
Report: C.A.T. Report forthcoming

25 Colchester, Colchester New Garrison and Urban Village Redevelopment
Here follow a number of summaries of various projects connected with the continuing Colchester Garrison redevelopment project. Land plots released for development were previously referred to as GUV (Garrison Urban Village), but are now referred to as Garrison Alienated Land (GAL).

Abbey Field, Circular Road North (TL 9931 2427)
H. Brooks, B. Holloway, C.A.T.
This site lies on the south-western side of the Colchester Garrison athletics track. Its historical context is that it falls within the oppidum of Camulodunum. An area of land measuring approximately 28m by 56m was excavated on the site of a new car-park. The principal discovery was a double-ditched Roman track or droveway heading north-south. Between the track or droveway ditches were a number of patches of gravel, which may be the remnants of a more extensive metalled surface. To the east of the east ditch of the track or droveway were five urned and two unurned Roman cremation burials. Four recent and presumably Army-related pits were left unexcavated due to ordnance risk.

A number of excavations or evaluations have taken place in the vicinity as part of the GUV/GAL project including an evaluation on this site in 2006.

Report: C.A.T. Report 424

Butt Road/Circular Road West and North (TL 9910 2430)
H. Brooks, B. Holloway, C.A.T.
This site (GAL Area J2) lies between Butt Road, Circular Road West, and Circular Road North, and it coincides with the southern part of the former Cavalry Barracks.

An archaeological evaluation by nineteen trial-trenches revealed fragments of an undated but probably Roman agricultural landscape.

Previous GAL excavations and evaluations have identified a north-south droveway linking the main Roman road system to the fields of the oppidum of Camulodunum. This droveway should have crossed the extreme north-east corner of Area J2, but the presence of an access route meant that a trench could not be placed in the appropriate position to confirm this.

The relevance of this droveway to Area J2 is that it appears to act as a boundary between two different areas of land use – Roman cemetery areas to its east and enclosed Roman farmland to its west. Sections of Roman ditches excavated in eight of the trenches are best interpreted as field boundaries belonging to that Roman farmland.

The discovery of a few sherds of prehistoric pottery indicates limited activity here in the Late Bronze Age or Iron Age.

Post-Roman features included a post-medieval north-south gravelled track (possibly associated with a similar track excavated on GAL Area J (west) in 2004), two medieval or later field ditches, and a large number of modern, Garrison-related foundations and services.

Report: C.A.T. Report 437

Cavalry Barracks/Butt Road (TL 9930 2460)
H. Brooks, B. Holloway, C.A.T.
This site (GAL Area H) coincides with the 'Pay and Display' car park on the east side of Butt Road, and the land west of the former Cavalry Barracks. An archaeological evaluation by seven trial-trenches revealed two Roman cremation burials and twelve Roman inhumation burials. A number of east-west and north-south aligned ditches may define the boundaries of discrete burial plots. The burials were not excavated fully; it is anticipated that excavation will be completed during a later stage of Garrison archaeological work.

Report: C.A.T. Report 413

Circular Road North (TL 9951 2451)
H. Powis, C.A.T.
This site is close to the remains of the recently-discovered Roman circus. A watching brief was held on the excavation of four trenches dug to uncover service pipes running under Circular Road North. The only significant remains were in T1, where a greensand wall foundation (part of the Roman circus) was uncovered at 800mm below ground level).

Report: C.A.T. Report 446

Garrison Church, Military Road (TM 0037 2435)
H. Brooks, B. Holloway, C.A.T.
This plot is a known burial ground for the Napoleonic garrison at Colchester. Following a geophysical survey conducted by Dr Tim Dennis of Essex University, an evaluation by four trenches revealed twelve linear features, which are interpreted as intercutting graves. No human bone was exposed.

There is scope for informative documentary research into burial records held by the Essex Record Office. This would shed light on the regiments whose soldiers were

buried here, and would add to our knowledge of this interesting era in Colchester's history.

Report: C.A.T. Report 419

Roman Way Camp/Berechurch Hall Road (TL 9945 2200)

H. Brooks, B. Holloway, C.A.T., R. Masefield, R.P.S.

This was a two-stage project: evaluation, followed by excavation. This site (GAL Area S2 (south)) coincides with the sports pitches to the south of the Roman Way Camp and north of Berechurch Hall Road. Its historical context is that it lies on the eastern side of the oppidum of Camulodunum, and it is flanked by the Berechurch Dyke on its eastern side. Evaluation in January 2007 revealed a number of prehistoric, Roman and post-medieval ditches. The ditches were on three different alignments, and appeared to represent fragments of three distinct landscapes: early or Middle Iron Age, Late Iron Age or Roman, and post-medieval ditches.

Following the evaluation in January, four sites with a total area of approximately 0.5 ha were excavated, Sites A-D (NGR: Site A: TL 9928 2208, Site B: TL 9935 2209, Site C: TL 9957 2193, Site D: TL 9967 2197).

These excavations revealed a number of phases of occupation. Early prehistoric flints, Grooved Ware and a Beaker sherd may indicate a passing presence here in the Mesolithic, Neolithic and Early Bronze Ages. The first permanent settlement was marked by a possible Late Bronze Age to Early Iron Age round-house. A single ditch approximately at right-angles to the Berechurch Dyke may date to the Iron Age although a later (Anglo-Saxon or medieval) date is also possible. There was no firm evidence of Late Iron Age activity here, and only a minor Roman presence can be demonstrated, presumably because in both periods this was farmland inside the oppidum. However, a small stock control system probably used for the close handling of sheep and tentatively dated to the Roman period shows some pastoral use of this landscape. Elements of a farmstead's enclosure (probably fronting onto the medieval precursor of Berechurch Hall Road) and further field boundaries were laid out in the medieval period. These may have been maintained and added to up to the mid 18th century. At that time, a small agricultural building, possibly a barn, was erected. Later, but still in the 18th century, the old field system was rendered redundant by the creation of a large enclosure. This is shown on the Chapman and André map of 1777, and appears to contain a large building, which would have stood beyond the east edge of Site D. This enclosure was itself no longer in use by the final quarter of the 19th century.

Report: C.A.T. Reports 404, 428

St Johns Abbey/Colchester Garrison (TL 9974 2463)

H. Brooks, B. Holloway, C.A.T., R. Masefield, R.P.S.

This 5.2ha land parcel (GAL Area B1b) was located mainly away from modern roads, but its south-eastern corner is on the north side of Napier Road, and its east side is partly on Mersea Road. Historically it occupies an important site, coinciding with the southern and western part of the walled precinct of St John's Abbey, and with the eastern end of the Roman circus. An archaeological evaluation by twenty-five trenches uncovered evidence for prehistoric, Roman, medieval and post-medieval activity. A small number of struck flints indicates a low level of activity here in the prehistoric period. A large quantity of residual Roman pottery and tile (including floor cubes, under-floor heating tile and roofing tile) is presumably derived from domestic activity and unidentified Roman buildings in this area. Two Roman inhumation burials and one cremation burial were excavated at the south end of the site. These were probably part of the same Roman cemetery previously excavated in GAL Area C2, 150m to the WSW and on Napier Road immediately to the south-west. Loose finds indicate the former existence of at least three more burials. Roman quarrying was also evident in the SE corner of the site.

The predicted position of the east end of the Roman circus coincided with the southern edge of the site, and five trenches were specifically targeted on the circus structure. These confirmed the expected position of the cavea walls, and also exposed the south face of the partially-robbed St John's Abbey precinct wall. A gravel surface was located on the outer side of the circus, matching that previously found on GAL sites C1 and C2.

Although Anglo-Saxon burials are recorded on the east side of Mersea Road, no Anglo-Saxon material was recovered.

Despite the location of this site in southern and western part of St John's Abbey precinct, only one building could definitely be associated with the medieval Abbey. This was a right-angled wall with a rough cobble surface on its west side and a clay floor on its east side, possibly the SW corner of building with an internal clay floor. Other possibly medieval structural remains were located on the western edge of the site, where buildings appear to have linked with the western precinct wall of the Abbey. Another Abbey-period structure was a lime kiln or pit probably contemporary with the rebuilding of the Abbey (after the major fire of AD 1133). Finds probably from the Abbey church include thick glass from a stained-glass window. Other walls containing peg-tile may be late medieval (and so connected with the Abbey), or post-medieval (and associated with post-Dissolution use of the site and particularly the Lucas Mansion).

Archive: C.M.

Previous reports: Bennett & Roy 2004,137; Bennett 2005, 151–153; Havis 2006; Bennett & Havis 2007

26 Colchester, Grey Friars, High Street (TM 0012 2532)

K. Orr, C.A.T.

An evaluation targeted on the remains of the friary of 'Grey Friars' demonstrated the existence of medieval, post-medieval and possibly Roman archaeological

features on the site. The possible Roman feature was a robbed foundation. One piece of Anglo-Saxon pottery suggests occupation on the site between the 5th to the 7th centuries.

In T1, a wide medieval foundation is likely to represent part of the friary church. Next to it was a large amount of building rubble. A copper-alloy buckle typical of that worn on a monk's girdle came from this rubble. Three pieces of floor tile and four fragments of worked stone all point to a monastic building. In T2 was another medieval wall foundation, at right-angles to that found in T1 and probably part of the same building (or perhaps a cloister attached to the church). The layer of demolition debris sealing these features contained medieval and post-medieval material indicating that these buildings continued in use well after the Dissolution of 1538. Farther south, no foundations were exposed but there were two probable medieval sand-quarry pits. A linear spread of building rubble and a large pit filled with building rubble probably derive from demolished friary buildings such as the church, cloister, precinct wall or the gatehouse. Although no graves were exposed, one piece of skull was found, which was probably already disturbed out of its original context.

Activity following the Dissolution of the monastery is evidenced by spreads of building rubble in T2 which appear to have been used as some kind of surface or walkway. Several other post-medieval pits and ditches were exposed.

A WW2 air-raid shelter was exposed, dating to the time of the site's use as the County High School for Girls.

Archive: C.M.
Report: C.A.T. Report 408

27 Colchester, High Street (TL 9985 2520)
D. Shimmin, C.A.T.
A series of small trenches was dug by contractors at the east end of the High Street during the replacement of gas mains. Most of the trenches were too shallow to reach significant archaeological deposits, although part of a large Roman foundation was observed in one of the deeper trenches.

Archive: C.M.
Report: C.A.T. Report 426

28 Colchester, rear of 99 High Street (TL 9986 2523)
D. Shimmin, C.A.T.
The north side of a well-preserved west-east Roman drain, constructed of brick set in opus signinum mortar, was uncovered during rebuilding work. This was the southerly one of the pair of east-west Roman drains shown by previous excavations to run south of and parallel with the southern enclosure wall of the Temple of Claudius (Hull, 1958, 175 and fig 88).

Archive: C.M.
Report: C.A.T. Report 440

29 Colchester, Jarmin Road (TL 9980 2595)
L. Pooley, C.A.T.
Seven evaluation trenches were dug in the former old Jarmin Road depot in advance of construction works. In total, 20 features were recorded: seven modern; four Roman; four undated (Roman?); four natural; and one post-Roman. The Roman features consisted of at least two ditches and a small number of pits, each containing domestic waste dating from the early Roman or possibly Late Iron Age period through to the early 2nd century. A late 4th-century kiln is recorded at a spot coinciding with the NW corner of the depot (UAD event 3757). For logistical reasons it was not possible to trench the exact spot, but no evidence of kilns was found in nearby trenches. One piece of cremated human bone may derive from a nearby disturbed Roman burial.

Archive: C.M.
Report: C.A.T. Report 409

30 Colchester, Lexden Grange, 127 Lexden Road (TL 9786 2513)
K. Orr, C.A.T.
A watching brief on groundworks for a small residential development revealed part of a Late Iron Age pedestal urn, probably disturbed from a cremation burial. Pits and Roman pottery recovered from spoil heaps may also be burial-related. A crucible and possible metal-working debris point to metal-working on the site in the Roman period.

Archive: C.M.
Report: C.A.T. Report 431

31 Colchester, Sixth Form College, North Hill (TL 9930 2536)
K. Orr, C.A.T.
Contractors were installing a ramp for wheelchair users on the 'South Site' of Colchester Sixth Form College. An area 13m long by 3.3m wide was stripped of tarmac at the eastern end of the car-park (previously a tennis court). Two patches of a Roman tessellated pavement, no more than 1.3m x 1.2m in total extent were exposed at 21.1m AOD (570mm below the level of the car-park surface). The tesserae were plain red, aligned north-south/east-west, and laid into an opus signinum mortar bed. The pavement appeared to continue to the east, where it had been destroyed by the foundations of a modern building. There was no sign of any other structures (such as robbed walls) to the west.

The pavement belonged to a Roman building, the remains of which do not appear to have been previously documented. The pavement lies within insula 9a of the Roman town and is situated 6m west of a Roman street. Floors and wall foundations of private town houses have been recorded to the north in what is now the 'Mid Site' and 'North Site' of the college (in Insula 1a), and to the south, under the original college building (in Insula 9a). The dating of other buildings on the 6th Form College ranges from mid-2nd to 3rd century AD and, as the

tessellated pavement matches their alignment, they are likely to be contemporary.

The tessellated pavement is to be left in situ, preserved beneath the new ramp.

Previous reports: Havis 2006
Archive: C.M.
Report: C.A.T. Report 430

32 Colchester, Osborne Street (TL9976 2493) and Stanwell Street (TL9973 2488)

D. Shimmin, C.A.T.

As part of the archeological work connected with the Vinyard Gate development a borehole was drilled to a depth of 7m on the south side of Osborne Street. A thick deposit of post-Roman topsoil or 'dark earth' sealed an undated peaty layer just above undisturbed natural sand and gravel. Samples were taken for pollen, palaeoenvironmental and geological analyses, and for radiocarbon dating. A test-pit near the junction of Stanwell Street and Southway revealed a modern service trench and other obstructions at a depth of 0.5m.

Archive: C.M.
Report: C.A.T. Report 432

33 Colchester, 3 Oxford Road (TL 9883 2486)

H. Brooks, C.A.T.

This plot lies 0.5km to the south-west of the Roman town, on the projected line of a Roman road and in the Roman cemetery area. Following an evaluation in 2006, footings trenches were excavated in advance of a small residential development. Two phases of activity were evident. First, a demolition layer incorporating much domestic debris from a Roman house on (or close to) this spot. Second, (and later), at least two brick-built oven structures. There was no associated debris or waste product to suggest what was burnt in the ovens, but, given this site's location in the cemetery area, they may be pyre sites. The earlier evaluation showed that the Roman road lay a little farther north-west than had been anticipated, and so it was not exposed in the 2007 footings excavation.

Previous reports: Havis 2006; Bennett & Havis 2007
Archive: C.M.
Report: C.A.T. Report forthcoming

34 Colchester, 'Topfield', Rawstorn Road (TL 9902 2522)

K. Orr, C.A.T.

An archaeological watching brief and partial excavation were undertaken during a small residential development. Two Roman inhumation burials were exposed in the south-eastern part of the site. Previously, four inhumations were found here by an evaluation in 2001, and all six burials are probably outliers of the Roman cemetery on the land now known as Balkerne Heights (and formerly St Mary's Hospital), which lies west of the Balkerne Gate. Downslope, in the north-western area of the site, waterlogged wooden posts probably dating to the Iron Age or Roman period were removed by machine during the digging of a sewer trench.

Following the watching brief and partial excavation (above) an investigation by two trial-trenches failed to locate any further Roman burials. However, Roman features were present in the form of small pits of uncertain function in Trench 1 and one large pit in Trench 2. Also in Trench 1 was an area of compact gravel which may be a metalled trackway or road of presumed Roman date.

Archive: C.M.
Report: C.A.T. Reports 323, 429

35 Colchester, St Helena School, Sheepen Road (TL 9898 2578)

L. Pooley, C.A.T.

St Helena School is on the fringes of the pre-Roman settlement at Sheepen. Six evaluation trenches (totalling 87m by 1.6m) were cut in advance of the extension of the school car-park. Eighteen features were recorded: one mid/late Bronze Age pit; ten Roman features (seven pits, one wall foundation, one ditch and one metalled surface); a post-medieval ditch; six undated features, and one natural feature.

Significantly, the Roman wall foundation appears to have been part of the precinct wall for the late 1st-century Roman temple on this site. A large quantity of Roman finds included two coins which belong to the post-conquest pre-Boudican occupation of Sheepen.

Previous reports: Bennett & Havis 2007
Archive: C.M.
Report: C.A.T. Report 414

36 Colchester, Short Cut Road (TL 9944 2544)

K. Orr, H. Brooks, C.A.T.

A trial-trenching evaluation of a site in Insula 2 of the Roman town found 1.3m to 1.8m of modern and post-medieval soils sealing Roman strata. The trenches were too shallow to intrude into the Roman strata, but a significant quantity of residual Roman brick and tile shows that Roman buildings once stood here. They were presumably demolished by the medieval period at the latest, as is usually the case in Colchester. Historic maps indicate that this was an area of gardens in the post-medieval period.

Archive: C.M.
Report: C.A.T. Report 406

37 Colchester, Upper Castle Park (TL 9993 2543)

K. Orr, C.A.T.

Five test-pits were excavated by hand on the putting green and in the nursery of Upper Castle Park. Those on the putting green did not reveal any Roman deposits or features, only topsoil and post-Roman dark earth. The two test-pits in the nursery did reach Roman levels, i.e. a

late Roman demolition layer at between 820mm and 950mm below ground-level.

Archive: C.M.
Report: C.A.T. Report 422

38 Cressing/Bradwell, Withies Farm, Coggeshal Road (TL 7952 2299)

B. J. Hillman-Crouch, H.E.M.

Some pieces of Roman tegulae were reported in a field belonging partly to Withies Farm. A scan of part of the field was carried out which was largely under early crop but which had several distinct barren areas. Two areas in particular were identified as having a dense spread of large (100 -200mm) flint and stone nodules, some definitely shaped as cobbles. Romano-British pottery including one piece of foliated samian rim and thick Roman style tile was recovered. A complete honestone and the tip of another were also found. One struck flint core 57 x 34 x 23mm was recovered from which many flakes had been removed. There was also much post-medieval peg tile and some earlier thicker nib-tile of the type found on medieval barns.

39 Dagenham, Dagenham Dock, Plot D2, Choats Road (TQ 4862 8257)

E. Eastbury, W. Mills, M.o.L.A.S.

Following the recommendations of two previous archaeological assessments (CGMS 2002a, 2002b), a 12m by 12m stepped trench was excavated through the centre of the site. The purpose of the evaluation trench was to record and sample the section by taking monolith samples through the deposit sequence, and to auger to the top of the floodplain gravels.

The results of the field evaluation have helped to refine the initial assessment of the archaeological and geoarchaeological potential of the site. Although no artefacts or structures were found on the site the deposit sequence has good potential for past environment reconstruction. The site appears to have lain within a palaeochannel in early prehistory, which subsequently became abandoned and began to infill with peat. Peat may have begun to form on the site earlier than on nearby sites, where peat belonging to a wet woodland, known as alder carr, ubiquitous on the prehistoric floodplain of the Thames is dated to the Neolithic and Bronze Age in particular. A long peat sequence was recovered from the site, which probably spans the later Mesolithic to early Iron Age and has good potential for preserving environmental indicators such as pollen and other plant remains.

40 Dedham, St Mary's Church (TM 3305 0573)

K. Orr, P. Crummy, C.A.T.

Lack of space in the graveyard prompted the PCC to look into removing gravestones from a 27m x 36m area on the western side of the churchyard in order to re-use the space (this area was chosen because of the lack of vaults, and because most of the graves here appeared to be at least 100 years old). A survey of this area recorded 84 gravestones. Twenty-five of these were under the turf and were located by probing and subsequent hand-excavation. The gravestones were erected between 1880 and 1984.

Archive: C.M.
Report: C.A.T. Report 427

41 Earls Colne, adjacent to 3 Church Hill (TL 8614 2881)

D. Shimmin, C.A.T.

The site is located on a vacant plot immediately south of 3 Church Hill, opposite St Andrew's Church. An archaeological evaluation and a subsequent watching brief recovered evidence for post-medieval occupation including several ditches and pits, a possible stoke hole for an oven or kiln, a gully/slot and gravelled surfaces.

Archive: Bt. M
Report: C.A.T. Report 435

42 East Ham, 149–153 High Street North (TQ 4237 8406)

A. Mackinder, M.o.L.A.S.

A World War Two air raid shelter discovered during earlier excavations was recorded. This concrete structure was located underground and was accessed through two small manholes in the roof with wooden steps. The shelter could have accommodated about 10 people and may have been built for use by a small local workforce.

43 Elmdon, East of Cogmore, Duddenhoe End (TL 466 373)

B. Bridgland, Archaeology RheeSearch Group

Magnetometry and resistivity surveys were carried out on this site as it had been suggested that it might be the location of one of the Duddenhoe manor houses.

A North-South strip was found that is perhaps bordered by low resistance lines. A possible interpretation is that it is a general route across the field which has been partly metalled using fired clay debris, such as broken brick or tiles. Some evidence of a plank bridge was found over the field's northern boundary ditch in approximately the expected position. An East-West, high resistance feature points towards the road junction on the west and might represent a path from there to the NW corner of Dawes Wood to the east of the site. The length of ditch in the North-West corner of the magnetometry survey suggests that the road may have been moved slightly W to its present course.

No distinct evidence of building structures was found but the 14–20 m width of the North-South magnetic feature could be sufficient to obscure responses attributable to foundations. Scatter due to demolition would not normally be expected to be linear unless it was used to form a track.

44 Elmdon, Duddenhoe End (TL 459 365)

B. Bridgland, Archaeology RheeSearch Group

Magnetometry and resistivity surveys were carried out on this site as it had been suggested that it might be the location of one of the Duddenhoe manor houses.

This site is similar to another site to the west of Cogmore in Duddenhoe End, in that the degree of magnetic background noise, probably as a result of the area's geology, makes the elucidation of archaeological traces difficult. This has resulted mainly in discontinuities within lines which might have been exacerbated by plough damage to the sub-surface features. The soil mark immediately to the W of the survey area corresponds to a field boundary shown on the Enclosure map. Nearby features parallel, or at right angles, to this feature might therefore be assumed to be related in some way. The magnetometry survey detected four such features which might therefore reasonably be classified as pre-enclosure or medieval boundary ditches, with traces of one and possibly some others being detected by resistivity.

A circular feature, with a diameter of about 14 m, is somewhat small and had a poor signal definition but is suggestive of a barrow. The strongest magnetometry response, running North-South, does not seem to be related to the other features and may in fact be better considered as separated parts rather than a continuous line. The strongest signal is at the southern end in association with an isolated strong signal and defined by a diffuse area of soil marking. No interpretive suggestions are made for this area, which will probably only be clarified by digging a trench from the circular feature to the East termination of the suggested Enclosure feature. There are a number of other possible alignments discernible in the magnetic survey, but given the background noise they remain speculative. No distinct evidence of significant building remains was found within the areas surveyed. However, the high resistance area in West corner of the resistivity survey could be due to building debris. This might represent a single structure in the corner of a small close whose South and East boundaries are given by the magnetometry results, but the area surveyed was insufficient for the results to be conclusive.

45 Elmstead Market, Fen Farm (TM 0545 2376)
T. Ennis, E.C.C. (F.A.U.)
Excavation of a *c.*2ha area was undertaken in October 2007, ahead of the construction of an agricultural reservoir and following an evaluation in 2002 which had identified the presence of both Bronze Age burials and possible Late Iron Age settlement remains across the southern half of the application area. The vicinity of the Bronze Age cremation cemetery remains was removed from the scheme and therefore not subsequently subject to further investigation.

Area excavation revealed ditches marking the boundaries of Late Iron Age land divisions – most probably fields, but possibly including occupation areas – that were clearly laid-out in relation to the natural topography. Post-medieval farming had probably removed the ephemeral remains of roundhouse buildings, but a scatter of post-holes and pits containing fragments domestic pottery, triangular clay loomweights and hearth waste suggest the presence of a settlement within this Late Iron Age managed landscape. Although post-excavation analysis is ongoing, at least two distinctive four-post structures, often interpreted as raised granaries, have been recognised. Further clusters of post-hole and gullys may yet prove to denote the remains of further, scattered, buildings.

Archive:

46 Great Baddow, Chelmsford Park & Ride Phase 2 site (TQ 697 870 c)
H. Brooks, B. Holloway, C.A.T.
An area coinciding with Phases 1 and 2 of the Chelmsford Park and Ride site was evaluated by trial trenching in 2005. In advance of the construction of Phase 2, excavation of an 0.8 hectare site (to the north of the Phase 1 Park & Ride site) uncovered evidence of activity in the Late Bronze Age. This took the form of an area of post holes, which may include elements of domestic structures. Finds of spindle whorls and oven debris indicate a domestic occupation and a local economy which must have included an element of pastoral farming. In addition to the settlement activity, two groups of cremation burials suggest a cemetery area separated from the domestic focus. C14 dating of the cremations suggests they are contemporary with the pottery-dated domestic activity. A series of later field ditches suggest that the site was later converted to pastoral farming (still in the LBA), and later pits show that there was some undefined activity here in the Middle Iron Age.

Previous reports: Havis 2006
Archive: Ch.M.
Report: C.A.T. Report 418

47 Great Bentley, Brook Farm (TM 0975 2215)
H. Brooks and B Holloway, C.A.T.
In advance of an application to construct an agricultural reservoir, a group of important cropmarks (including a ring-ditch and a potential Neolithic enclosure) was excluded from the application site in order to protect them. On the remaining application site, an evaluation by 84 trial trenches has revealed thinly-spread activity ranging from the Neolithic to the Roman period (discounting modern field boundaries). The most important archaeological feature was a Neolithic pit containing at least four early Neolithic bowls, associated with flints, burnt flints and conglomerate stones. This pit group may be associated with the potential Neolithic enclosure, which lies 25m to the east. Other prehistoric features and finds (principally Neolithic) occur sporadically across the site, but not at a density to suggest intensive or long-lived activity.

A Roman field system separated the area occupied by the earlier monuments from Roman fields and paddocks, in one of which was a possible Roman agricultural structure.

Archive: C.M.
Report: C.A.T. Report 450

48 Great Bentley, Dead Lane (TM 1152 1836 c)
H. Brooks, B. Holloway, C.A.T.
This is the site of the new West Clacton reservoir and pumping station. Aerial survey had revealed the cropmarks of unexcavated and undated field systems on either side of this site. An evaluation in 2006 uncovered a number of field ditches, as well as evidence of prehistoric and Roman activity.

The 2007 excavation was located in the southern half of the evaluated field. Two field systems were revealed. The first was aligned north-south, and was undated. The second was aligned north-west to south-east, and was dated to the Late Iron Age or early Roman period. Earlier occupation was indicated by the presence of residual Neolithic flints and Bronze Age pottery in the ditch fills.

The results of the excavation differ in two ways from those of the evaluation. First, the evaluation indicated that there were medieval and post-medieval ditches here, but none of those in the excavated area were dated later than 1st century Roman, although some were undated and may be medieval or later. Second, the northern part of the evaluation site produced fragments of loom weights and Mayen lava which are evidence of a mixed farming economy in the Late Iron Age and Roman periods, but the excavation (in the southern part of the evaluation site) produced few finds of this date. One interpretation of this would be that the excavated area coincided with the farmed fields rather than the settlement centre, which lies to the north in the area unaffected by the construction of the reservoir.

The most remarkable find was a group of small fragments of Roman coloured glass – the raw materials of enamelling. These came from the fill of an early Roman ditch. The circumstances of discovery indicate that these were in a cloth or leather bag dropped or placed in the ditch. This discovery, which will be fully published elsewhere, has implications for local enamelling and metal-working.

Previous reports: Bennett & Havis 2007
Archive: C.M.
Report: C.A.T. Report 425

49 Great Chesterford, Mill House (TL 5046 4273)
T. Ennis, E.C.C. (F.A.U.)
Archaeological monitoring and excavation was undertaken at Mill House, Newmarket Road, Great Chesterford during groundworks for a small extension to an existing dwelling, an already-converted former outbuilding, within the grounds of the property.

A late Roman ditch and a possible Roman pit were investigated within the foundation trench. In addition to late 4th century pottery recovered finds included a late Roman shale spindle whorl, bone hairpin and a 4th century coin. These remains provide further evidence of late Roman settlement activity within the bounds of the postulated second walled enclosure/annex of the Roman town.

No archaeological features of Saxon or medieval date were identified. A quarry pit of postmedieval date was investigated along with an 18th century rubbish pit. The latest feature was an L-shaped foundation for a garden structure of later 19th or earlier 20th century date, probably contemporary with the house and garden. Most of the archaeological remains were sealed beneath deep topsoil attributed to landscaping and garden activities over the last 200 years.

Archive: S.W.M.

50 Great Dunmow, 37–61 High Street (TL628 218)
M. Pocock, E.C.C. (F.A.U.)
An archaeological evaluation by trial trenching was undertaken prior to redevelopment of the site.

The earliest remains were medieval, dating from the 12th/13th to 14th centuries and consisted of a probable well and small pit located alongside the site boundary with the Boars Head public house. Later remains include a number of post-medieval and modern pits and small isolated post-holes. The importation of material onto the site in the Early Modern/ Modern period, along with the construction of a concrete loading bay or building platform, has resulted in the raising of ground levels across the area of investigation by up to 1.3m.

Archive: S.W.M.

51 Great Maplestead, St Giles' Church (TL 8081 3457 c)
K. Orr, C.A.T.
The church authorities received faculty for various works including the excavation of foundation pads to support posts in the tower, the cutting of beam bearings in the tower walls. To the south of the church, in the churchyard, trenching was carried out for various services. Where possible, these services were cut under existing pathways where the likelihood of burials was low, and therefore they were not monitored archaeologically. A short length of foundation trench was also dug for the construction of a wall to convert the store next to the south porch into a toilet.

Ground reduction in the tower exposed the flint foundations to the tower but no earlier foundations. The holes made in the tower wall exposed the medieval flint and mortar fabric and putlog holes made for scaffolding. The foundation trench for the toilet was 500mm deep and exposed a concentration of disarticulated human remains at 440mm below ground- level. Removal of part of the eastern wall of the south porch exposed a medieval window.

Archive: Bt.M.
Report: C.A.T. Report 410

52 Great Notley, 'Skyline 120' Business Park (TL 7380 2178 c)
A. Wightman, C.A.T.
This 3.7ha site is located to the north-west of Great Notley Garden Village, and to the east of Great Notley

Discovery Centre, between the A120 and the A131. There have been several previous phases of work on other plots in the new business park, including the excavation of a rectangular ditched enclosure defining the site of a farmstead of the 1st and early 2nd century A.D. (forthcoming Essex Archaeol Hist).

Archaeological features (almost all ditches or gullies, with a few pits) were present in only thirteen of the twenty-four evaluation trenches, and were absent from the south-western part of the site. Only five of the twenty-seven features produced any finds.

Post-medieval field boundaries shown on the 1881 OS map were found in the western and north-eastern parts of the site.

The absence of any obvious Roman finds implies that most of the land here was not inhabited, but it may have been arable associated with the excavated Roman farmstead to the south-west.

Previous reports: Havis 2006; Bennett & Havis 2007
Archive: Bt.M.
Report: C.A.T. Report 433

53 Great Tey, Tey Brook Farm (TL 890 246)
W.J. Mallinson, C.A.G.
Work has continued on the trapezoidal Iron Age enclosure reported in 2006. Topsoil has been removed from approximately 50% of the interior of the enclosure. The position of the entrance to the enclosure has been confirmed, and internal features & finds identified which are indicative of habitation during the middle to late Iron Age. Work will resume in 2008.

Previous reports: Bennett 2005, 156; Bennett & Havis 2007

54 Great Waltham, Church of St Mary and St Laurence (TL 6913 2385)
B. Hillman-Crouch, E.C.C. (H.E.M.)
A watching brief was set on a 40.0m long service trench from the lych gate to the interior of the tower. An unidentified disturbed grave of an aged woman was partially revealed in the section of the trench. There was no dating evidence but a coffin nail was present. The foundations of the tower were of mortar bonded flint rubble and a much later brick foundation was laid in against the threshold. The type of fine red bricks indicated a *c.*1800 date. The present floor was of modern concrete.

55 Hainault, land at Hog Hill, Forest Road / Romford Road (TQ 4414 8505)
E. Eastbury, M.o.L.A.S.
Three trenches were excavated. In two of these, natural gravel was overlain by sandy silt subsoil possibly representing a reworked ploughsoil or garden soil. This was cut by 20th-century foundations representing the walls of the Plough public house which occupied the site. An undated (but probably 17th-19th century) posthole containing disturbed flint packing was also observed. Modern tarmac and concrete sealed these deposits. A third trench contained natural gravel overlain by modern topsoil and grass.

56 Halstead, Red House, Colchester Road (TL 8160 3071)
T. Ennis, E.C.C. (F.A.U.)
An archaeological evaluation comprising two trenches explored an area to the north of the current building, a Grade II Listed Building (EHER 26118), for a proposed new access road and car park.

A series of post-medieval pits dating to the 17th and early 18th centuries were uncovered. These predate the construction of Red House (*c.*1773–1786) and are likely to be back-yard rubbish pits associated with a row of cottages formerly standing along the north-western side of the site. An 18th century brick wall uncovered in the trench closest to the street frontage, may also be connected with the cottages or perhaps form part of one of a number of outbuildings, associated with wool storage/processing, known to be on the site in 1786. A brick drain may be contemporary with this structure.

Archive: S.W.M.

57 Harlow, Harlow Mill, Cambridge Road (TL 4705 1282)
C. Hallybone, A.S.
Archaeological evaluation revealed two ditches of Romano-British date. The earlier of the two contained pottery of late 2nd century AD date. The later ditch cut the earlier and contained mid to late 2nd – early to mid 3rd century AD pottery. The ditches followed the same north-west/south-east alignment as the Roman road running from the nearby river crossing suggesting that they may have been related to land division associated with the line of the road. These features represent activity on the periphery of known Romano-British settlement in the area

Archive: H.M.
Report: AS Report 2887

58 Harlow, M/A-Com Building, Cambridge Road (TL 4711 1245)
D. Hillelson, H.N.
In response to a condition on the planning permission for the construction of a steel framed building and storage yard on the former M/A-COM site, Cambridge Road, Harlow, Essex, the Heritage Network was commissioned by the developers to undertake the archaeological monitoring of the development groundworks, which comprised ground reduction and the excavation of drainage trenches and foundation pads. The present site occupies a spur of rising ground to the south of the river Stort. It lies in a well documented archaeological landscape approximately 300m north-east of the Harlow Romano-Celtic temple. Cartographic evidence shows that much of the site had been subject to

sand and gravel quarrying in the late 19th and early 20th centuries, and that the quarries had subsequently been backfilled and the site levelled. Geotechnical test pitting has shown that the overburden recorded across the eastern half of the site was much shallower than that recorded on the western half, where it reached a depth of 4.10m above the natural sand and gravel.

The evidence exposed in the foundation pads and drainage trenches excavated across the site confirmed that significant ground reduction had taken place on the eastern side of the site, and significant dumping of material had taken place on the western side. Natural sand and gravel was identified at depths of less than 2m below the modern ground surface on the eastern side of the site, but was only identified in a few spots, at depths of over 2m, on the western side. Two modern archaeological features were recorded in the pad foundations. In the western section of Pad 27, a steeply sloping cut line was noted, separating the natural sand and gravel on the northern side from a silty clay deposit on the southern side. This may represent the edge of one of the former quarry pits, or of a working hollow within it, dating to the early part of the 20th century. In Pad 22, the remains of a brick floor were recorded. Although there was no evidence for its original function the depth of brickwork and underlying concrete base suggest that it was a substantial structure, which is likely to be associated with one of the buildings erected between 1921 and 1938.

Despite the proximity of the Roman town and temple, no evidence for archaeological remains pre-dating the 19th century were revealed during the present project. It is likely that post-medieval quarrying has removed any remains from earlier periods, although there is a small possibility that some archaeological features and deposits may survive below the made-ground on the western side of the site. The natural horizon was not reached in this location.

Archive: H.M.

59 Harlow, south of Gilden Way (TL 4765 1115)

M. Germany, E.C.C. (F.A.U.)

The site of a putative Neolithic cursus identified from aerial photographs (SAM Essex No. 24858), was subject to field survey and trial trenching in order to evaluate the impact of the unauthorised re-contouring groundworks to create playing fields. Fieldwork identified the presence of prehistoric and Early Saxon remains, but no trace of the cursus. It was established that there had been relatively little deep and extensive truncation of archaeological remains across the majority of the scheduled area, beyond removal of topsoil. It was therefore concluded that the linear crop-mark features interpreted as a cursus are more likely to have been modern-day tracks, footpaths or other wear marks on the field surface.

Early Saxon remains comprised a pit and a sunken featured building with apparently associated post-holes; perhaps parts of a larger, probably scattered, settlement, dated to the late 5th century. Roman finds were residual in the Saxon features, but still serve to suggest that activity of that period was taking place within the wider vicinity. The sunken-featured building is particularly significant given the fact that few Early Saxon sites have been found in the wider area surrounding Harlow. Indeed, the area has often been written-off as having been devoid of (at least Germanic) habitation during the Early Saxon period. This discovery is therefore important to the understanding of west and north-west Essex in the 5th to 6th centuries.

Archive: Harlow Museum

60 Harlow, Passmores House (TL 4438 0908)

M. Pocock, E.C.C. (F.A.U.)

An archaeological assessment was carried out to determine archaeological mitigation measures necessary before its proposed conversion into a residential rehabilitation home.

Passmores House is an early 18th-century country house with a 19th-century stable block, built on the site of a medieval moated manor house. Parts of the moat are still visible and stone footings of a probable medieval hall show as parch marks on the grass to the south of the present house. All below-ground archaeological remains within the limits of the medieval moated enclosure are protected as a scheduled monument (SAM Essex No. 29468); the house itself is Grade II listed but is not included in the scheduled monument designation.

The assessment established the potential survival of medieval and post-medieval remains both around and beneath the existing house, with only limited areas of modern disturbance. Trial pits identified an extensive gravelly clay levelling layer, undated, but probably related to construction of the present house in the early 18th century. The eastern arm of the moated enclosure was also located, *c.*6m further east than its current projected line, with waterlogged fills towards its base. The general levelling layer overlay the moat but did not extend to the east of the main house into the area of the modern caretaker's house.

Archive: H.M.

61 Harwich, 10 George Street (TL 1602 3247)

T. Ennis, E.C.C. (F.A.U.)

An archaeological evaluation, consisting of a single trench, was carried out prior to construction of a new house. No archaeological deposits earlier than the 19th or 20th century were uncovered, and the results of the trial-trenching suggest that the development site has undergone a considerable amount of landscaping in the last 150 years that has apparently removed or severely truncated any pre-existing archaeological remains.

Archive: C.M.

62 Helions Bumpstead, St Andrew's Church (TL 6513 4167)

M. Atkinson, E.C.C. (F.A.U.)

Monitoring of contractors' groundworks associated with drainage works around the outside of the church was undertaken. A 0.6m wide by 0.4m deep trench (to be gravel-filled) was hand-excavated along the foot of the south and east walls of the church.

These works exposed three or four rough foundation courses of mortared stone and flint rubble below both the standing walls of the medieval church and that of the 19th century brick rebuild of the south aisle. Immediately to the east of the modern south porch, a projecting mortared rubble foundation was identified. This may be remains of an earlier (previously unknown?) porch that was replaced in the 19th century and again in the 1950s. The top of a brick vault, either of a drain or perhaps a post-medieval burial lay to the east of this foundation. The stone rubble foundation of the SE corner and east side of the south aisle was noted to be particularly substantial and projected *c.*0.3m beyond the wall. That at the SE corner of the chancel was also substantial, though less projecting. The east chancel wall appeared to have been underpinned with brick, probably in the 19th century, extending up above ground level where it had been rendered.

Six small, simple, headstones positioned against the foot of the east wall were removed during these works. Bearing only initials and dates it is likely that these were derived from child graves and had clearly been moved here from elsewhere. No graves were found in association with these markers. Indeed, two were found to be set in concrete that abutted the brick underpinning and render.

Archive: B.M.

63 Heybridge, 48 Crescent Road (TL 8488 0844)

S. Hogan & J. House, A.S.

Archaeological Solutions (AS) carried out a trial trench evaluation prior to the redevelopment of the land for housing. The site is located towards the centre of substantial archaeological activity dating from the Neolithic through to the modern period, with particular phases of occupation and industry dating to the Iron Age, Roman and early Saxon eras. The evaluation revealed evidence of Romano-British activity in the form of probable quarrying, represented by a group of three large intercutting pits. Other features may represent boundaries and the presence of a possible refuse pit may attest possible domestic activity nearby.

Archive: C.M.
Report: A.S. Report 2173

64 Heybridge, Heybridge Hall, Hall Road (TL 859 076 c)

H. Brooks, B. Holloway, C.A.T.

Heybridge Hall was a fine 13th-century and later listed building, which burnt down in 2004. An archaeological evaluation by ten trenches around the hall site in 2007 revealed evidence for occupation in the Late Iron Age and Roman periods, and possibly in the Middle Iron Age.

An evaluation in 1991 had located an area of medieval activity to the east of the hall site, (beyond the eastern boundary of the 2007 evaluation site). It is believed that this may have been the site of a timber building, either a predecessor of the now-destroyed 13th-century hall, or an ancillary building. Trenching in 2007 also found a medieval ditch to the east of the site of the 13th-century hall, but no structural evidence such as post-holes or slots. Nevertheless, the few sherds of medieval pottery from this ditch and other (residual) contexts support a 12th- or 13th-century date for the foundation of the medieval hall complex.

Archive: C.M.
Report: C.A.T. Report 439

65 High Ongar, Land adjacent to The Bays, The Street (TL 5666 0378)

T. Ennis, E.C.C. (F.A.U.)

An archaeological evaluation was carried out in advance of a residential development, close to the site of former almshouses given by the local rector to accommodate the old and deserving of the parish in 1607 and demolished in 1937 (EHER 45476).

The trench closest to the street frontage uncovered part of a large cut feature over 3.2m long and 1m deep. The exact nature of the feature was hard to determine within the limited confines of the evaluation trench. It appears to be too broad for a roadside ditch but could possibly be a hollow-way preceding the current road; the lower fill was compact and gravelly and would fit with this interpretation.

Archive: E.F.D.M.

66 Kelvedon, The Old Vicarage, Church Street (TL 8559 1848)

M. Pocock, E.C.C. (F.A.U.)

An archaeological investigation was undertaken prior to construction of a swimming pool. Roman coins and urns are thought to have been found in the field to the south-east of the vicarage (EHER 8149–50) and evidence for Iron Age, Roman, Saxon and medieval settlement exists nearby (EHER 8141–4, 18002–3). The vicarage is probably of medieval origin, as it is adjacent to the 12th-century church of St Mary the Virgin, and is 250m to the north-west of Red House and Church Hall Farm, the site of a medieval manor (EHER 25398, 30054).

A gully and ditch both contained prehistoric pottery, with the pottery from the ditch dating to the Middle Iron Age, probably the 1st century BC. A second ditch remained undated but was probably the backfilled continuation of an existing boundary ditch to the rear of the church and graveyard to the north of the site. This had been replaced in garden of the vicarage by a culvert built in the Victorian period that drained to the stream to

the south. Pits or possible post holes that lined the ditch could have represented a fence line associated with that boundary.

Archive: Bt.M.

67 Kirby-le-Soken, St Michael's Church (TL 2195 2203)

K. Orr, C.A.T.

Contractors' hand-excavation of trenches for underpinning the south aisle was monitored archaeologically. Two articulated skeletons were recorded, plus some other pieces of disarticulated human bone. Three water-logged wooden piles probably dating to the late 14th or early 15th century were exposed at the western end of the south aisle, below the tower. One or possibly two lead coffins were found under the floor of the south aisle.

Archive: C.M.
Report: C.A.T. Report 441

68 Little Easton, Little Easton Airfield (TL 5980 2370)

A. Robertson, E.C.C. (F.A.U.)

The second stage in a programme of archaeological evaluation by trial trenching was undertaken on the site of a proposed gravel quarry, covering c.56 hectares, at the former WW2 airfield. Following the Stage 1 evaluation in 2001 a further one hundred and fifty-five trial trenches were opened.

The identified remains produced a wide date range, from Early Iron Age through medieval/ Post-medieval to remains of the World War II airfield.

Early Iron Age remains consisted of an irregular curvilinear gully, large ditches, fire pits and small linear gullies. Two focal points for this activity were noted. The first, in the south-central part of the site, seems to be the focus for occupation. The second, on the higher ground in the northwest, may be the location of an enclosure as two large perpendicular ditches were identified in association with fire pits and small gullies.

The Late Iron Age/ Roman features consist of two tentatively dated ditches which, although widely separated, have a similar northwest-southeast alignment.

A single medieval feature, a 12th to 13th century ditch, was also identified and while little can be said about the nature or extent of activity on the site in the medieval period, dating evidence from the ditch tallies with the sparse activity noted in the stage 1 area.

The Post-medieval remains consist of ditches which were probably associated with an enclosed deer park, most likely dating to the late 17th or early 18th century. World War II remains consisted primarily of the bases of earth bunds associated with bomb and ammunition storage areas for Little Easton Airfield and correspond to the locations shown on a 1944 Air Ministry plan of the site.

Archive: S.W.M.

69 Little Waltham, Belsteads Farm, Belsteads Farm Lane (TL 7236 1129).

A. Wightman, E. Spurgeon, C.A.T.

In advance of the construction and conversion of three buildings into hotel accommodation, an archaeological evaluation by three trenches located a modern soakaway and a post-medieval pit with upright wooden posts (possibly part of an earlier out-building). The depth of concrete slabs and the thickness of the modern gravel car-park surface indicate that the area was quite extensively landscaped when the car-park was created.

Archive: C.M.
Report: C.A.T. Report 447

70 Maldon Beeleigh Mill Auxiliary Unit Operational Base (TL 8396, 0818)

T. Ennis, E.C.C. (F.A.U.)

Trenching confirmed the position of the operational base and its escape tunnel (EHER 20277. Although partially dismantled, the hideout appears to have survived reasonably well and the Anderson Shelter sheets forming the sides seem intact. However, the escape tunnel is in poor condition; one side has collapsed and the thinner corrugated iron sides used in its construction are very badly corroded. It was not clear whether the escape tunnel had been deliberately destroyed or had infilled more naturally as a result of decay and collapse. In either case, the infilling occurred prior to the backfilling of the hideout with yellow clay.

The Beeleigh operational base appears to differ from the usual structural arrangement for other known underground chambers in Essex (Fred Nash pers. comm.) in that it appears to have no solid end brick wall and has an escape tunnel at a high level. The high level of the escape tunnel was a necessary local adaptation to allow access into the top of the tail-race channel that ran in a large covered brick culvert to the south of the hideout.

The evaluation also identified evidence of the early 19th-century mill structure in the form of a fragment of *in-situ* wall and a possible heat-reddened mortar floor. The heat-reddening and accumulated deposits of ash and charcoal are probably a result of the destruction of the mill by fire in the later 19th century.

Archive: C.M.

71 Maldon, Former Croxley Works (TL 856 068)

T. Ennis, E.C.C. (F.A.U.)

Limited area excavation was undertaken prior to redevelopment for residential. The site produced a number of interesting finds and features indicative of the area's occupation from the Middle Saxon period onwards and pre-dating the establishment of the *burh* in the early 10th century. Much of the evidence pointed towards industrial activity on site including metal working and cloth production. Beam slots and post-holes suggested the presence of buildings on the Church Street frontage during the 13th and 14th centuries. An

important group of Saxon loomweights were recovered from the site indicating weaving taking place.

72 Moreton, Nether Hall (TL 5402 0703)

M. Pocock, E.C.C (F.A.U.)

A programme of archaeological monitoring was carried out prior to the construction of a new agricultural building and associated access. The site lies to the east of the present village of Moreton and adjacent to the 13th century church of St Mary, within an area of medieval agricultural earthworks (EHER 4137).

No archaeological remains were encountered during monitoring works; natural geology was encountered between 0.20 and 0.30m below the existing ground surface. Field and mole drains criss-crossed the northern half of the proposed development, while plough scars and converging wheel ruts marked both the silt and clay. A small number of finds were recovered from the interface between the topsoil and the clay, comprising a prehistoric flint scraper, a fragment of peg-tile and a small abraded sherd of pottery. In addition to the above, scattered across the surface of the ploughed field were large quantities of abraded tile of undetermined date, which were not recovered.

Archive: E.F.D.M.

73 North Benfleet, Bradfields Farm, Burnt Mills Road (TQ 7533 9041)

Mark Germany, E.C.C. (F.A.U.)

An archaeological watching brief was undertaken on ground works associated with the construction of a new house, garage and driveway. The site for the new house lay roughly 40m north-east of the former site of a medieval moated farmstead (EHER 7529). The east and west sides of the moat still survive. The existing farmhouse lies within the moated area and is a Grade II Listed Building.

The results of the work suggested that the medieval farmstead, and its likely post-medieval successors, were largely confined to within the area defined by the existing moat, in the same general area as the existing farmhouse.

Archive: S.M.

74 North Woolwich, 1 Pier Road (land adjacent) (TQ 4324 7990)

D. Sankey, M.o.L.A.S.

Two evaluation trenches were excavated, and these were supplemented with auger sampling of deeper deposits. A deep alluvial sequence was present, consisting of extensive peat and wood peat deposits which were formed in the wooded backswamp of a meandering "inland river" Thames, prior to its flooding in the Late Bronze Age or Iron Age. The upper surface of the peat varies as a consequence of subsequent erosion by tidal creeks as repeated avulsions of the river banks (the natural levees torn away) and daily tidal flooding created a network of channels. The bank of a palaeochannel, either a creek or even the main river, was observed in one trench. The channels were filled by grey estuarine clays to within 1m of the ground surface. Above this, a layer of gravel with coal ash and clinker was present, probably representing the track bed of the 19th century railway line which once crossed the site. Modern concrete completed the sequence. No other archaeological features were observed and Pleistocene deposits were not reached.

75 Purfleet, Esso Sports Field, North Road (TQ 563 785)

W.A.

Of the 24 trnches investigated, 13 contained archaeological features. A further 8 had features of a natural origin i.e. tree or shrub throws. The archaeological features found comprised the north-east corner of a large, wide 'v' profiled boundary ditch, observed in 8 trenches. A second ditch, much less substantial than the first, also formed the north-east corner of a boundary ditch enclosing a similar area, was offset from the first ditch to the north-east. It was not possible to determine their relationship during the evaluation. Two further, unrelated linear features were also identified. Seven pits were recorded, mainly near the centre of the site. Four other large, deep pit type features were located randomly across the site. The pits were investigated and interpreted as quarry pits. The bases were not reached, but the presence of chalk lumps in some of the fills suggests that chalk bedrock was the objective of their excavation. A moderate assemblage of worked flint was recovered from the topsoil and subsoil. Only a small finds assemblage of worked flint was recovered from secure contexts. The finds included two fragments of coarseware Romano-British pottery, ceramic building material, flint and glass.

76 Purfleet, High House, London Road (TQ 566 780)

D. Hawkins, CgMs

A spigot mortar gun emplacement lies within the proposed development site. This was a pit with ammunition lockers surrounding a concrete pedestal, on which was mounted a spigot mortar gun, usually manned by the Home Guard during World War II as an anti-invasion measure. An important feature of the defence of strategic points, the emplacement is listed in the Defence of Britain Project as number 1409295 (TQ 57 NE 102) and is one of only 27 surviving examples in Essex.

Previous summaries: Bennett & Havis 2007

77 Rainham, Beam Reach 8a, Ferry Lane (TQ 5135 8036)

T. Mackinder, M.o.L.A.S.

Excavation of a ditch 134m in length was monitored. The depth of the ditch increased from 0.50m in the north-west to 1.20m in the south-east. The only deposits observed were a mix of black silts and grey clay with occasional fragments of brick and green glassy industrial

slag. The presence of modern concrete fragments and gravel suggests that these deposits have been disturbed recently, probably when the adjacent road was constructed. Natural alluvium was observed at 2.5m OD.

78 Rainham, Spring Farm (TQ 5365 8230)
S. Unger, A.S.
Archaeological Solutions carried out an archaeological excavation of land at Spring Farm, Rainham in advance of proposed quarrying and mineral extraction. A desk-based assessment showed a high potential for prehistoric remains as well as possible Romano-British and medieval activity. Excavations revealed limited prehistoric activity comprising a posthole, a fragmented vessel and a sherd of residual pottery. A post-medieval field system was also revealed, and is dateable to at least 1799 by comparison to cartographic sources. Two medieval pits were excavated as well as numerous modern and undated features.

Archive: M.L.
Report: A.S. Report 2963

79 Rivenhall, Bradwell Quarry Phases 3.1 (East), 3,2, 3.3, and 4.1 (TL 8223 2112)
T. Ennis, E.C.C. (F.A.U.)
Archaeological monitoring of topsoil stripping identified a small number of archaeological features ranging in date from the prehistoric to post-medieval periods.

A prehistoric pit contained sherds of Middle Bronze Age pottery from at least six vessels. The isolated location of the pit and the fact that it contained only a few sherds from each vessel with a bias in favour of decorated upper-body sherds, suggests that this may be a deliberate deposit of a possible ritual or ceremonial nature. One tentatively dated Roman pit was excavated and elsewhere residual Roman tile and Late Iron Age pottery was recovered indicating a Romano/British presence in the landscape early in the first millennium AD.

Medieval pits and a gully dated to the late 12th to early 13th century. A sample of burnt crop-processing waste recovered indicated that wheat was being processed but that previous crops had included barley and oats. Post-medieval field boundary ditches were identified, some latterly infilled during construction of the WWII airfield.

Archive: Ch.E.M.

80 Romford, Aldborough Hall Farm (TQ 4630 8982)
I. Williamson, A.S.
Archaeological Solutions have carried out archaeological monitoring and recording at Fairlop Quarry. The monitoring was undertaken in advance of gravel extraction, and followed two previous phases of archaeological monitoring and recording The archaeological monitoring and recording has revealed a Late Bronze Age Barrow comprising a ring ditch and its central pit. Iron Age settlement activity was evidenced by pits, a gully and a possible cremation situated on a slightly higher ground. Romano-British activity was recorded in the form of two parallel curvilinear ditches one of which truncated the remains of the earlier Bronze Age barrow. Post-medieval boundary ditches were recorded in the southwest corner and central area of the site. 19th century drains offer clear evidence of land drainage for agriculture associated with Aldborough Farm.

Archive: M.L.
Report: A.S. Report 2215

81 Romford Marks Warren Quarry, Whalebone Lane North (TQ 4852 8965)
P. Harris, A.S.
Archaeological Solutions Ltd (AS) carried out a programme of archaeological monitoring and recording during the stripping of topsoil. The monitoring and recording encompassed the topsoil stripping in advance of the area of proposed quarrying (Phase 7). A pair of post-medieval parallel linear ditches extended across the site E/W. Nine pits (three of which were identifiable as prehistoric), and three furrows were recorded.

Archive: M.L.
Report: AS Report 2920

82 St Osyth, The Tithe Barn and Road Diversion to Abbot's Tower, St Osyth's Priory (TM 1210 1570)
A.S.
Archaeological Solutions Ltd (AS) carried out a programme of archaeological monitoring and recording during groundworks associated with the repair, conversion and extension of the brewhouse and the repair and conversion of the tithe barn at St Osyth's Priory. The buildings are located within the scheduled ancient monument of the early 12th century St Osyth's Priory. The construction of the barn is indicative of a later 16th century date and can most likely be attributed to the period of modification and rebuilding by Lord Darcy. Its size suggests that it was used for the collection of tithes, and much of the building survives remarkably intact. A wall of faced cobbles and clunch stone, similar to existing priory remains, was located within a corridor for a new access road to the north of the priory. Within the barn, the make-up for the brick floor was revealed within two test pits.

Previous reports: Bennett & Havis 2007
Archive: C.M.
Report: A.S. Report 2497

83 Saffron Walden, 1–3 Fairycroft Road (TL 5399 3844)
M. Germany, E.C.C. (F.A.U.)
A small archaeological excavation was carried out in advance of the construction of two small apartments. The principal aim of the excavation was to look for the eastern

arm of the town ditch, also known as the *magnum fossatum*.

The excavation found remnants of post-medieval/modern roadside buildings, but no medieval features or finds, nor any trace of the ditch. It was concluded that much of the eastern side of the *magnum fossatum* runs beneath Fairycroft Road itself.

The post-medieval/modern remains included a late 18th/early 19th-century cellar, a brick support for an oil tank, a cut for a ceramic drain pipe, a possible yard surface, and a small number of pits and post-holes. Some of these features lay beneath 0.4m of modern made-ground. It was possible that shallow medieval remains, if ever present, had not survived, because the site had been levelled and terraced into a gentle north-facing slope.

Archive: S.W.M.

84 Saffron Walden, 1–3 Market Hill (TL 5385 3854)

P. Crawley, N.A.U.

An initial trial trench identified extensive remains of post-medieval date covering the area of the proposed storage building. Excavation of these features indicated they dated to the late 16th century onwards. Although no earlier features were identified it is possible these were destroyed by the later occupation. Further monitoring work is proposed during the construction phase of the development.

Archive: to go to S.W.M.

85 Saffron Walden, Land to the rear of the former White Horse PH (TL 5389 3847)

M. Pocock, E.C.C. (F.A.U.)

Excavation at the rear of the Former White Horse Public House uncovered post-medieval features and deposits that included several wall alignments, associated post-holes and floor surfaces. Relating to and overlying these was a series of 18th or 19th century deposits and modern yard surfaces. These post-medieval remains sat above of a well-mixed gravel-rich layer that overlay the natural deposit in place of any clean subsoil or topsoil. Beneath this layer was evidence for survival of earlier remains, at a depth of *c*.1.1m below the modern ground surface, but these were not fully characterised during this stage of the investigation. The Slade Culvert was observed to run through the southern end of the development area.

Archive: S.W.M.

86 South Weald, St Peter's Church (TQ 571 937)

M. Atkinson, E.C.C. (F.A.U.)

Two ground investigation test pits were observed at St Peter's Church, South Weald by Essex County Council Field Archaeology Unit (ECC FAU). One of these was against the west side west side of a large *c*. 19th-century vault, presumably that of a prominent local family. Above ground, it's a *c*. 3.6m square monument constructed of stone slabs, with an ornate edge and a low central pyramid. The inscriptions on two sides of the pyramid are largely illegible. Test pit 1 suggests that the brick structure of the vault below is about 7ft deep and it presumably contains multiple burials. An entrance is conjectured on the north side. The second test-pit was excavated to the base of the foundations of the modern building extension, human remains (mainly skull, a mandible and some long bone and finger/toe fragments) and brick and tile fragments present in the foundation backfill. No significant archaeological remains were observed that are not associated with the site's cemetery usage.

87 Southend-on-Sea, Prittlewell Priory (TQ 8762 8733)

T. Ennis, E.C.C. (F.A.U.)

Two evaluation trenches were excavated across the footprint of a proposed new museum building to be constructed just west of the present museum. No features pre-dating the 12th century Priory were identified, although two sherds of residual Roman pottery were recovered that are suggestive of Roman activity in the vicinity.

One gully, tentatively dated to the 13th to 14th centuries, and a possible pit were the only features encountered that were likely to be associated with the Priory. There was, however, a background scatter of residual medieval material noted. A line of four rectilinear pits, in the northern evaluation trench, may represent one side of a former timber structure, perhaps a stable or cart lodge associated with domestic occupation of the Priory following its dissolution. Brick and roof tile suggests that this structure dates to the post-medieval period. Post-medieval deposits in the southern evaluation trench probably represent levelling dumps of rubbish, with a fragmentary glass bottle suggesting this may have occurred in the second half of the 18th century.

Archive: S.M.

88 Southend-on-Sea, Southchurch Park, Victoria Road (TQ 8933 8505 c)

E. Spurgeon, C.A.T.

This site is at the west end of Southchurch Park. Water-logged deposits, suggested as potentially parts of a prehistoric lake village are reported, to the north of this site. A 3% evaluation by 2 trenches located solid natural clay at between 30cm and 90 cm below ground, sealed by a number of post-medieval and modern horizons. There were two features, both linear, one dated by post-medieval pottery and the other undated. The thin layer of topsoil and other horizons overlying natural indicates that the site had been reduced by landscaping for the site's current use as a football pitch.

Archive: S. M.
Report: C.A.T. Report 444

89 Southend-on-Sea, Southend Girls School (TQ 9044 8602)

T. Ennis, E.C.C. (F.A.U.)

Archaeological monitoring was undertaken during the construction of a new sports hall and technology block. Five archaeological features, three ditches and two pits, were recorded; these are probably all of post-medieval or modern date.

The largest feature recorded, a northnorthwest – southsoutheast orientated ditch, aligned closely with a field boundary depicted on the 1st edition OS (*c.*1876). Two shallower, east-west aligned, ditches ran broadly at right-angles to this boundary and may be sub-divisions within a contemporary field system or, more likely, the boundaries of earlier, smaller fields removed before the late 19th century. The smaller ditches appeared to run parallel to each other and a 10m gap between them was perhaps used as a trackway. One large pit containing tile and coal is likely to be of 19th or later date, while a second smaller pit remained undated.

Archive: S.M.

90 Stock, 71 Mill Road (TQ 6949 9880)

T. Ennis, E.C.C. (F.A.U.)

An archaeological trench was excavated in an area of garden to be subsumed within the enlarged footprint of a new house.

A small number of archaeological features were identified; the earliest of these was a Late Bronze Age or Early Iron Age gully that continued beneath the footprint of the former bungalow. Although no other remains of a similar prehistoric date were encountered the gully does attest to probable farming and/or settlement in the vicinity at this time. Remaining features were probably all of comparatively recent date, and may be associated with 20th-century garden activity.

Archive: Ch.E.M.

91 Stratford, Chandos Road (TQ 3871 8543)

J. Corcoran, M.o.L.A.S.

The evaluation revealed that the site lies at the interface of the Lea valley floor and eastern valley side, with modern ground level around 10.5m OD. Seven geotechnical test pits and two boreholes were monitored by a geoarchaeologist and each hole that penetrated sufficiently deep found Taplow Gravel at c 9.5m OD overlain by brickearth / disturbed brickearth, with a surface at c. 10m OD overlain by about 0.5m of modern made ground. Deposit modelling of the gravel surface, supplemented by data from the surrounding area showed that the area lies on a promontory of river terrace extending into the floodplain, which may have influenced past settlement activity. No archaeological remains were found, although it is uncertain whether brick footings and a pit are of historic or modern date and the disturbed brickearth may relate to the historic ground surface.

Archive: M.o.L.A.S.

92 Stratford, Channelsea River Culvert, (west of) Great Eastern Road (TQ 3847 8442)

K. Tyler, E. Eastbury, M. Nicholls, M.o.L.A.S./P.C.A.

A geo-archaeological watching brief was carried out during the excavation of the river channel for a culvert. Timbers were removed and exposed during this work, but for health and safety reasons the recording of the sediments and of any archaeological deposits could not be carried out.

Subsequently, a 20m. open section orientated NW-SE on the E bank of the Channelsea River was made safe and cleaned and recorded. The earliest deposits were Holocene bedded clays and gravels surviving to a height of 1.90m OD. The highest survival of archaeological deposits occurred at 3.03m OD. The earliest past use of the Channelsea River recorded was a series of three willow stake tips aligned NW–SE, which may have formed a revetment along the east side of the riverbank, perhaps dating from the Iron Age to the early Post-Medieval period. An elm log drainpipe set at 90 degrees to the east river bank probably dates from between the 16th to late 19th centuries, and was probably used to reclaim the area from marshland for agriculture and grazing. The truncated top of an oak pile was also revealed, which might have been associated with a crossing point over the Channelsea River and predates a plank lined timber structure, which was possibly associated with the building of the 19th-century railway line forming either a dam or temporary bridge for early railway use. The unstratified oak and tropical wood timbers dating from the 17th to 19th centuries may also have been reused as a revetment during the building of the 19th-century railway line.

Archive: M.o.L.A.S.

93 Stratford, Major Road (TQ 3851 8534)

K. Tyler, J. Corcoran, M.o.L.A.S./P.C.A.

The site lies at the interface of the Lea valley floor and eastern valley side, with modern ground level around 10m to 11m OD. Eight geotechnical test pits and three boreholes were monitored by a geoarchaeologist and each hole found truncated Taplow Gravel at 8m to 9m OD overlain by up to 2.7m of modern made ground. Deposit modelling of the gravel surface, supplemented by data from the surrounding area showed that the area lies on a promontory of the river terrace extending into the floodplain, which may have influenced past settlement activity. However, no archaeological remains were found.

Archive: M.o.L.A.S.

94 Stratford, Olympic development site

Here follow summaries from various projects connected with the development of the 2012 Olympics site. Sites are ordered in Construction Zone or Planning Delivery Zone (PDZ) order.

Stratford, Footbridge F10a eastern abutment near Carpenters Road in rail freight area (TQ 3809 8437)

K. Tyler, A. Sargent, P.C.A./M.o.L.A.S.

An evaluation trench was excavated to the level of the natural river terrace gravels, which may here represent a late Pleistocene/early Holocene course of the Channelsea River sloping from 2.5m OD to 2.3m OD east to west. This deposit was overlain by a thin early Holocene dry soil horizon, in turn overlain by an alluvial sequence approximately 0.50m thick. This may have begun to accumulate during the early medieval period, and its upper reaches were dated by pottery and CBM to the 17th to 19th centuries. Thus the site appears to have been dry until the early medieval period, when seasonal flooding resulted in the creation of a semi- or fully permanently waterlogged marsh environment. The sequence was sealed by approximately 2.5m of late 19th century made ground, deposited to form a track bed for the railway system in the area.

Archive: P.C.A.

Stratford, Henniker's Ditch, Construction Zone 6a (TQ 3775 8530)

K. Tyler, A. Sargent, W. Mills, P.C.A./M.o.L.A.S.

Eight evaluation trenches were excavated transversely along the length of Henniker's Ditch. The trenches were excavated to the formation level of the proposed culvert. The earliest recorded deposits comprised Late Pleistocene river terrace gravel associated with the River Lea, overlain by early Holocene fluvial sand and gravel, both sloping gradually to the southeast. The latter deposit was thought to relate to a possible earlier course of the Channelsea or Leyton Rivers, possibly located to the southeast of the western end of the ditch. These deposits were overlain by between 0.60m and 1.1m of alluvium, thought to have accumulated gradually over time due to seasonal flooding. The earliest recorded cutting of Henniker's Ditch was cut through this deposit, dated to the second half of the 18th century. The ditch gradually silted up, but was also perhaps responsible for the formation of a relict pastoral topsoil recorded overlying the alluvium and the edges of the ditch. The ditch was re-cut in the second half of the 19th century; two possible tributary ditches adjoining the northern edge of the ditch were also recorded relating to this phase. A third re-cut was associated with the deposition of substantial amounts of made ground across the site during the 1950s to 70s to create the existing Lea Valley Cycleway.

Archive: P.C.A.

Stratford, PDZ 2, Work package 1, Trench PDZ2.09 (TQ 3779 8743)

K. Tyler, P. Thrale, P.C.A./M.o.L.A.S.

The evaluation trench revealed over 7m of 19th–20th century made ground, overlying and disturbing earlier alluvial clay deposits at *c* 2m OD. Only 0.4m depth of in suit alluvium was available for recording. The made ground consists of large dumps of industrial contaminated waste covered by 0.20m of topsoil. The top 4.50m of these waste deposits was compacted, probably in the 1950's for the areas use as a railway siding.

Archive: M.o.L.A.S.

Stratford, Marshgate Lane, PDZ 2, Work package 2 (TQ 3788 8401)

K. Tyler, P. Thrale, P.C.A./M.o.L.A.S.

The evaluation trench undertaken in the north of PDZ 2 recorded alluvial clay between 2.60m OD and 2.80m OD; an organic deposit and sands and gravels that may represent foreshore deposits associated with the River Lea were also present. The irregular foreshore deposit of sands and gravels was recorded at height of up to 2.20m OD. This sandy gravel sealed more alluvial clay recorded at a height of *c* 1.80m OD. The deepest part of the trench exposed river lain gravels at 0.7m OD.

Archive: M.o.L.A.S.

Stratford, Sun Wharf, PDZ 3, Work package 1 (TQ 3781 8410)

K. Tyler, P. Thrale, P.C.A./M.o.L.A.S.

Three evaluation trenches were excavated on the site with one reaching the level of the natural gravels at 1.5m–1.88m OD. The remaining trenches were excavated partly into the alluvial deposits. The overlying alluvial sequence measured *c* 1.0m thick. The dominance of alluvial sediments within the trenches indicates an environment that has been subjected to numerous episodes of seasonal flooding over a long period. Features of archaeological significance included timber revetting that contained an earlier course of the City Mill River, and a possible land surface. The archaeological features were sealed by 19th-20th century made ground/landfill deposits.

Archive: P.C.A.

Stratford, Marshgate Lane PDZ 3, Work package 2 (TQ 3753 8393)

K. Tyler, J. Payne, P.C.A./M.o.L.A.S.

A late Pleistocene/early Holocene gravel ridge or spur, oriented east–west across the northern end of the site was present at the base of the sequence, at *c* 1.1m to 1.8m OD. Indications of prehistoric and historic activity were located upon the higher gravel ridge, notably a possible buried land surface. Pottery fragments recovered from alluvial deposits directly above the land surface date to the LBA–EIA period. A large NW–SE aligned ditch also cut through the earliest alluvial deposits at a height of 2.15m OD. The ditch fills contained abraded pottery of both Roman and Medieval date, plus a heavily abraded 1st century Roman coin.

Alluvial sediments formed above the gravels and the land surface and ditch. The alluvium was recorded between 1.36m to 2.8m in thickness and shows that the

site became increasingly waterlain from the late prehistoric/early Roman period onwards.

Archive: P.C.A.

Stratford, PDZ 3, Work package 3 (TQ 3753 8407)
K. Tyler, A. Fairman, P.C.A./M.o.L.A.S.
Two trenches were excavated to the depth of natural gravels where possible. The evaluation identified the possible undulating surface of Lea Valley gravels at c 1.4m-2.3m OD, giving way to Tufa sand at the south. Iron Age pottery was recovered from the upper layers of the Tufa and from the fill of a possible ditch cut into an alluvial layer immediately above the Tufa. Evidence of possible Late Saxon–early Medieval revetting was observed at the base of the alluvial sequence in the northern part of site. The timbers were sealed by alluvium, cut by an east–west channel and a further revetment made of wattle, presently dated to the early post-medieval period (c 1600). This was again sealed by further alluvial deposits. Further post-medieval revetting was recorded in the southern trench, along with the remains of mooring/rubbing posts and the in situ hull of a late 18th to 19th century clinker built 'gig' type small boat. The abandonment of the boat parallels the general abandonment of the associated river channel and formation of a soil horizon nearby. The remains were sealed by substantial depth of made ground.

Archive: P.C.A.

Newham, PDZ 6, Work package 4 (TQ 3792 8522)
K. Tyler, S. Barrowman, P.C.A./M.o.L.A.S.
Natural river terrace gravels were recorded across the site from 1.85m in the west rising to 3.0m OD in the east. A palaeochannel cut the gravels in the east of the site. Alluvial sequences were present across the site, measuring from 0.6m to 1.4m in thickness. This may reflect the site's location upon what was floodplain, possibly of the historic Leyton River. No archaeological remains were present within the alluvium. A possible 17th–19th century ploughsoil survived across the site, with associated ridge and furrow features. The site was sealed by a considerable depth of made ground/ground raising placed across the site prior to construction of the recently demolished 20th century residential development.

Archive: P.C.A.

Newham, PDZ 10.01 (TQ 3792 8522)
K. Tyler, S. Barrowman, P.C.A./M.o.L.A.S.
Natural river terrace gravels were seen in the trench base from 2.70m to 2.98m OD, cut by an undated east–west ditch at the north end of the trench. The ditch was sealed by 0.4m depth of alluvium supporting a relict topsoil horizon at 3.38m OD. Victorian to modern made ground deposits overlay the topsoil to a depth of *c* 3.4m.

Archive: P.C.A.

95 Takeley, Priors Green (TL 5726 2154)
A. Robertson, M. Pocock, E.C.C. (F.A.U.)
ECC FAU are currently undertaking the excavation of a c. 3.1ha site, at Priors Green, Takeley, in advance of residential development. The investigation has produced evidence for human activity on the site from the Mesolithic through to the present day, beginning with scattered finds of flint tools, lost or discarded by mobile hunter-gatherer communities who visited the site over 6000 years ago.

Activity increased noticeably during the Late Neolithic and Early Bronze Age, beginning with the clearance of the natural wildwood which covered the site. Features investigated to date include rubbish pits, ditches (no doubt demarcating stock enclosures and paddocks) and a small number of cremation burials, as well as an important series of waterholes or wells along the northern edge of the site. Some three metres deep, these features have so far produced important waterlogged remains including worked timbers, seeds and plant remains, which will provide information about the surrounding landscape, diet, economy and other environmental factors affecting the communities living in the area.

Exploitation of the landscape appears to continue into the Iron Age, with further stock enclosures and field boundaries, although there is evidence to suggest that the soils were becoming exhausted/ denuded, following the deforesting of the site in the Late Neolithic/ Early Bronze Age, with large quantities of silt washing into the waterholes along the northern edge of the site during this period. In contrast to the earlier periods, there is virtually no evidence for occupation during the Roman period, possibly as a result of the poor soils, and the site appears to have been left to scrub over, becoming woodland again, until cleared once more for agricultural purposes in the late 12th or 13th century. At this time, a small hamlet sprang up to the west of the site, at Jacks Green, and fields and paddocks were laid out at right-angles to Jacks Lane, a medieval track which still forms the southern boundary to the site. The medieval field system passed out of use at an unknown date, but certainly prior to the 1840's, when map evidence shows that the area had been reorganized into four fields, the boundaries of which survived until grubbed-out in the 20th century.

Previous reports: Havis 2006; Bennett & Havis 2007

96 Takeley, land adjacent to Westwood House (TL 548 211)
M. Pocock, E.C.C. (F.A.U.)
Three evaluation trenches were excavated in advance of a residential development. A series of build-up and levelling layers, consisting primarily of modern rubbish and rubble, capped the topsoil in lower lying areas of the site. A series of features were identified close to the present road frontage with two ditches running parallel to the road. Finds suggest these features are of medieval or early post medieval date and probably comprise plot divisions close to the road.

97 Thaxted, Bellrope Meadow, Sampford Road (TL 6115 3170)

A. Norton, O.A.

A small, residual, worked flint assemblage, supported by occasional fragments of flint-tempered pottery, suggests that the area was occupied during the later Bronze Age. The fieldwork uncovered a small Roman cemetery comprising seven cremation and five inhumation graves. These dated mainly to the late Iron Age and early Roman period, though one cremation grave contained a ceramic vessel that dated to the 2nd century onwards, while another cremation grave was of later 3rd century date. The richest grave in terms of grave-goods contained hobnails and other metal fragments and at least four vessels; the cremation burial was of a sub-adult aged 6–12 years. The skeletons were generally fragmentary, but the best preserved was of an adult male, probably 35 to 45 years old, who was buried with a ceramic flask placed next to his head. Ditches also uncovered suggested that the evidence belonged to a rural settlement.

Medieval occupation is represented by an enclosure ditch that contained a large amount of roof tile, along with a smaller amount of floor tile and brick. This material was of 15th-17th century date and appears to have been from building of relatively high status.

Previous reports: Bennett & Havis 2007
Archive: S.W.M.

98 Thurrock, Mardyke Valley reedbeds (TQ 568 791 to TQ 801 585)

E. Heppell, E.C.C. (F.A.U.)

Archaeological hand auger survey and walkover survey was carried out in advance of reedbed creation and tree planting which are to take place as part of the Mardyke Valley Project. Excavation of the reedbed sites was monitored later in the year.

A total of 23 locations were sampled by hand auger, 1–3 on the site of each proposed reed bed. These confirmed that an extensive peat deposit was present across the study area. It is likely that this deposit, the same as the Saxon 'upper peat' recorded during the construction of the A13 crossing in 1979–80 (Wilkinson 1988), is present across the valley floor, masked by overlying clay deposits. The walkover survey identified few features in the flat Mardyke valley floor. Those noted were linear dips and short stretches of hedge/scrub which represent the remains of former field boundaries. The locations of these features are illustrated on 19th and early 20th century mapping.

Monitoring confirmed the presence of the peat deposit; the only feature recorded was a length of ditch depicted on successive OS maps.

Archive: T.M.

99 Tilbury, Tilbury Fort (TQ 6511 7532)

S.C.C.A.S.

Archaeological monitoring of an excavation to access an underground drainage culvert revealed the bases and foundations for two separate brick walls. These are believed to be associated with a range of Victorian buildings that formerly stood on the southeast side of the parade ground.

Archive: S.C.C.A.S.
Report: S.C.C.A.S. Rep. No. 2007/101

100 Toppesfield, Gainsford End Mill (TL 7262 3503)

M. Pocock, E.C.C. (F.A.U.)

Trial trenching was carried out prior to the construction of a residential dwelling attached to Gainsford End Mill, a Grade II Listed brick-built tower mill. Documentary sources record that the tower mill replaced an earlier post mill of *c.*1800.

No archaeological remains were encountered or finds recovered during the excavation of a single L-shaped trench positioned within the footprint of the proposed dwelling. It would appear that the earlier post mill has either been completely removed or the footprint reused during construction of the tower mill.

Archive: Bt.M.

101 Upshire, Copped Hall (TL 4286 0170)

W.E.A.G. and C.H.T.A.P.

Archaeological excavation was undertaken during June and August 2007 on behalf of the Copped Hall Trust.

The Project is investigating the remains of 'old' Copped Hall, a 16th-century mansion with possible origins as a hunting lodge of the Abbots of Waltham, which was demolished *c.*1750. Work since 2002 has shown that the lower portions of the brick walls of the South range and West wing survive beneath a thick layer of clay used to level the site post-demolition. A late-medieval water feature has also been located to the South. After the old Hall was demolished the area was laid out as the gardens of the 'new' Hall. Two 19th-century systems of land drains have been recorded, along with the beds of a late19th-century rose garden with a central concrete pedestal.

The 2007 excavations further exposed masonry at the East boundary of the site, first revealed in 2006: brick walls running north-south show evidence of periodic alteration and rebuilding, with the bricks dated to three possible phases within the 16th and 17th centuries. Nearby was a soakaway, constructed from broken clay roof tiles and dug into refuse deposits dumped down beside the remains of the walls. Most of the finds were from the 17th to 19th centuries, and included part of a Metropolitan slipware jug, of *c.*1630.

Ground penetrating radar detected a circular feature, approximately 7m in diameter, just S of the footprint of the old Hall. From the scans, this appeared to be round masonry structure with an open interior. Partial excavation found a carefully set out brick surface, possible a pavement, with a curved edge within the circumference of a substantial, though partially robbed, circular brick foundation. At the time of writing, the

function, precise date and relationship of this structure to the old Hall are far from clear. We plan to investigate further in 2008 to try to answer these questions.

102 Walthamstow School for Girls, Church Hill (TQ 3770 8926)

I. Howell, M.o.L.A.S.

Four evaluation trenches were excavated. Three trenches to the west of the site found the accumulation of wet marsh-type deposits over the impermeable natural clay. Although the deposits were only broadly dated to the post-medieval period it is likely that this area was unattractive for settlement throughout most archaeological periods. A small trench to the south of the site found the underling geology lies close to the present ground surface indicating any potential archaeological remains are likely to have been adversely affected by the construction of the school.

103 West Ham, Stratford Langthorne Abbey (site of), Bakers Row (TQ 3909 8347)

R. Cowie, M.o.L.A.S.

Three trenches were excavated to assess the level, nature and condition of structures on the site of the Cistercian abbey of St Mary Stratford Langthorne, a Scheduled Ancient Monument, with a view to eventual display. These revealed parts of the east end of a medieval building belonging to the abbey as well as later brick walls and two brick-lined cess pits dating from the 16th or 17th centuries, all of which were previously exposed during excavations in 1973–4. The medieval building lay close to the site of the abbey gatehouse and originally may have served as a guest house, but by the Dissolution it had become 'the tenement of the janitor of the great gate'. It was mainly built of flint and mortar with chalk foundations. A stone wall, possibly of medieval date, had been built against the south face of the building. The cess pits and one brick wall apparently represented the northern extension of the medieval building after the Dissolution.

104 West Mersea, The Strood (TM 0139 1405 – TM 0072 1585)

A. Robertson, E.C.C. (F.A.U.)

Archaeological monitoring was carried out during the excavation of a c.2.1km-long trench for a replacement water pipe along the causeway across the Strood Channel. Wooden piles associated with the Saxon causeway across the Strood Channel, carbon-dated to c.700A.D, were previously identified during the laying of the original water pipe in 1978.

Below the modern road were a series of stabilisation layers consisting of alternating bands of chalk and gravel. The layers are likely to be associated with the modern road across the causeway. Silt deposits were only identified in the base of the trench in a few locations but were not intruded into by the works. No further evidence for the Saxon causeway was encountered during the monitoring. This was due to the depth of the trench only being a maximum of 1.2m deep across the channel, whereas the 1978 work encountered the piles at a depth of 1.6m. Any surviving remains of the Saxon causeway were not therefore disturbed during the laying of the water pipe. No archaeological remains were identified on dry land either side of the Strood Channel either.

Archive: C.M.

105 Wethersfield, land north of Wrights Farmhouse, Blackmore End (TL 7392 3133)

T. Ennis, E.C.C. (F.A.U.)

An archaeological evaluation was carried out on land to the north of Wrights Farmhouse, consisting of four trenches excavated across a possible medieval house platform.

One deposit of probable Roman date was uncovered, together with a quantity of unstratified Late Iron Age to Roman pottery. It is clear from the results of the evaluation that the house platform is likely to date to the late medieval period. A ditch demarcating the western side of the platform contained 13th-16th century pottery and further unstratified pottery of this date was recovered from upon the platform itself. No building remains were identified, but it is likely that these sherds of late medieval pottery accumulated during use of the platform. The lack of later pottery suggests that the platform had gone out of use by the end of the 16th century.

The remains of 19th century outbuildings, associated with Wrights Farmhouse and depicted on the 1st edition Ordnance Survey map, were identified along the south edge of the platform and extending into the south of the field.

Archive: Bt.M.

106 Widdington, Priors Hall (TL 5373 3175)

T. Ennis, E.C.C. (F.A.U.)

Monitoring of extensive building renovation works recorded below-ground remains dating to the Saxon, medieval and post-medieval periods. The opportunity was also taken to record significant historic details of the standing structure exposed during the same works.

Part of the flint foundations of the late Saxon building were recorded during reduction of the floor level in the Drawing Room. The internal face of a Saxon doorway, revealed after the removal of a later chimney, was drawn and photographed. A post-hole of possible 14th to 15th-century date was excavated in the Drawing Room and a flint pathway and ditch of probable post-medieval date were recorded during ground reduction in the toilet and kitchen. Within the Drawing Room 18th-century dwarf brick walls (floor supports) were revealed linking with those found in the adjacent room in 2004 and evidence for a change in doorway position was noted. A photographic record was made of an exposed mullion window in the south wall of the building and the remains of 18th-century and later timber framing at the south-east corner.

In the yard to the west of the house a 13th-century pit and a probable linear medieval feature containing

oyster shell and charcoal flecks were excavated. In the garden area later medieval pottery sherds and numerous tile fragments were recovered from soil layers that may be contemporary with construction work on an adjacent 15th/16th-century outbuilding or with the insertion of mullion windows and an upper storey in the east half of the hall. Remains of the demolished 17th/18th-century wing of an outbuilding, at one time used as a brewhouse, were recorded. Within the building were fragmentary brick structural remains of probable ovens and chimneys and a rectangular ash rake-out pit from beneath the presumed position of a copper. Elsewhere on site, two probable post-medieval flint pathways were recorded that probably predate the construction of the west wing of the house in the 18th century.

Archive: S.W.M.

107 Witham, Faulkbourne Farm (TL 8077 1739)
T. Ennis, E.C.C. (F.A.U.)
Archaeological area excavation was undertaken in advance of the construction of an agricultural reservoir. Previous evaluation had revealed the presence of features containing prehistoric pottery..

The excavation revealed two further features resulting from human activity, a pit and a fire-pit perhaps associated with land clearance and early agriculture. A third feature, a probable tree throw, was also identified. The pottery in the pit broadly dated to the Late Bronze Age or Early Iron Age. The remains, although not extensive, do suggest a Late Bronze Age/Early Iron Age presence in the landscape.

A ditch containing post-medieval roof tile was excavated at the northern end of the excavation area. Its position did not match with any boundaries shown on early editions of the Ordnance Survey which might imply a pre-19th century date for this feature. It is possible that this ditch could be contemporary with a number of undated field boundary ditches noted in the evaluation trenches and others recorded from crop marks to the north of the site (EHER 14106)

Previous reports: Bennett & Havis 2007
Archive: Bt.M.

108 Wivenhoe, Cooks Shipyard (TM 040 214 c)
K. Orr, C.A.T.
A watching brief was carried out on groundworks for a residential development on a former shipyard and gasworks in Wivenhoe over an 18–month period. It was possible that remains of medieval waterfront activity and post-medieval ship-building activity would be exposed. Timbers from the 19th-century shipyard were recorded, but otherwise the site showed much evidence of modern disturbance. Foundations to one of the gasworks buildings were exposed, and there was also much contamination in the area of the gasworks.

Archive: C.M.
Report: C.A.T. Report 448

109 Wormingford, Lodge Hills (TL 929 325)
W.J. Mallinson, C.A.G.
Excavation has begun on the site of a suspected Tudor hunting lodge, identified by geophysical survey in 2006 (J.D. & A.M. Black in Bennett & Havis 2007). Destruction remains of a substantial high status building constructed of Tudor materials have been identified, and other structures and artefacts suggest the site was in use for various purposes from approximately 1550 to 1800. Work continues.

Previous reports: Bennett & Havis 2007

Abbreviations

A.S.	Archaeological Solutions
A.S.E.	Archaeology South-East
Bt.M.	Braintree Museum
C.A.G.	Colchester Archaeological Group
C.A.T.	Colchester Archaeological Trust
CgMs	CgMs Consulting
C.M.	Colchester Museum
Ch.E.M.	Chelmsford and Essex Museum
E.C.C. (H.E.M.)	Essex County Council (Historic Environment Management)
E.C.C. (F.A.U.)	Essex County Council (Field Archaeology Unit)
E.F.D.M.	Epping Forest District Museum
H.M.	Harlow Museum
H.N.	Heritage Network
M.o.L.A.S.	Museum of London Archaeology Service
O.A.	Oxford Archaeology
P.C.A.	Pre-Construct Archaeology Ltd
R.P.S.	R.P.S. Clouston
S.C.C.A.S.	Suffolk County Council Archaeology Service
S.M.	Southend Museum
S.W.M.	Saffron Walden Museum
W.A.	Wessex Archaeology
W.E.A.G	West Essex Archaeology Group

Bibliography

Bennett, A. (ed.) 1997 'Archaeology in Essex 1996' *Essex Archaeol. Hist.* **28**, 205–227

Bennett, A. (ed.) 1998 'Archaeology in Essex 1997' *Essex Archaeol. Hist.* **29**

Bennett, A. & Roy, M. (eds) 2004 'Archaeology in Essex 2003', *Essex Archaeology & History* **35**

Bennett, A. (ed.) 2005 'Archaeology in Essex 2004', *Essex Archaeology & History* **36**

Bennett, A. & Havis, R. (ed.) 2007 'Archaeology in Essex 2006' *Essex Archaeol. Hist.* (forthcoming)

Byford, J.P.F., Giles, P.E. and Jackson, J.R. 1992 *'Barling Windmill', Essex Archaeol. Hist. 23, 161–5*

Cott, P. 1998 *Geophysics Survey Report, Gosbecks Archaeological Park, Essex*, Archive report in Colchester Museum.

Crummy, P. 1992 *Excavations at Culver Street, the Gilberd School, and other sites in Colchester 1971–85*, Colchester Archaeol Rep **6**

Crummy, N. and Crossan, C. 1993 'Excavations at Butt Road Roman cemetery, 1976–9, 1986 and 1989', in Crummy, P., Crummy, N., and Crossan, C., 1993, *Excavations of Roman and later cemeteries, churches and monastic sites in Colchester, 1971–88*, Colchester Archaeological Report **9**

Cunningham, C.M. 1985 'A typology for post-Roman pottery' in Cunningham, C.M., and Drury P.J., *Post-medieval sites and their pottery: Moulsham Street Chelmsford*, CBA Res. Rep **54**

Garwood, A. 1998 'A Late Iron Age and Roman site at Shillingstone Field, Great Sampford,' *Essex Archaeol. Hist.* **29**

Havis, R. 2006 'Archaeology in Essex 2005', *Essex Archaeology & History* **37**

Hawkes C.F.C. and Crummy, P. 1995 *Camulodunum 2,* Colchester Archaeol Rep **11**

Hull, M.R. 1958 *Roman Colchester,* Research Report of the Society of Antiquaries of London, no. **XX**

Wilkinson, T.J. 1988 *Archaeology and Environment in South Essex, E. Anglian Archaeol. 42*

The Society is extremely grateful to Essex County Council for a generous grant towards the cost of publishing this article.

Essex Archaeology and History 39 (2008), 199–210

Shorter Notes

Roman remains at 145–145a Moulsham Street, Chelmsford

Andrew Robertson and Joyce Compton

A small excavation revealed Roman remains at the south-western limit of the Roman town, alongside the London to Colchester road (now Moulsham Street). The original roadside ditch, dating to the 1st to 2nd centuries, was re-established in the 3rd century, together with a boundary ditch perpendicular to the street. Although the site had been heavily truncated, pits filled with domestic waste suggest the existence of a ribbon development along the main road, initially in the 2nd century, but with a second period dating to the 3rd to early 4th centuries.

Introduction

An excavation was carried out by the Essex County Council Field Archaeology Unit prior to a residential development at 145–145A Moulsham Street, Chelmsford, (TL 7060 0612), now known as King Charles Court, in February 2005. A detailed excavation report (Robertson 2005) is held in the Essex Historic Environment Record (EHER) and is part of the site archive deposited at Chelmsford Museum.

The development area is located just outside the core of the Roman town and fronts onto Moulsham Street, which follows the line of the Roman London to Colchester road (Fig. 1). The plan and development of the Roman town is summarised by Wickenden (1996, 88–93). A number of excavations along Moulsham Street have been undertaken since the 1960s, including Lasts Garage (now Albion Court) immediately to the south-west, at the corner of Queen Street and Moulsham Street, excavated in 1987 (Wallis 1988).

Excavation (Fig. 1)

The excavation area was L-shaped, covering the footprint of new buildings along the frontages of Moulsham Street and Anchor Street. The site was previously a garage, and as a result had been badly disturbed by modern foundations and services, and was covered by over 1m of modern rubble. The surface geology is gravelly brickearth overlying river gravels of the first terrace of the Chelmer.

Early Roman – 1st to 2nd centuries

Only three features can be securely dated to this period, ditch 37 and pits 16 and 29. Only a short section of the ditch was seen at the south-western corner of the site, as it was cut away by later Roman ditch 53, which perpetuated the original ditch line. Ditch 37 probably had its origins in the 1st century but was open until the 2nd. Both pits are dated to the 2nd century and contained remains associated with food preparation, including fragments of butchered animal bone in pit 16, and fire residue and burnt animal bone in pit 29. Even with no surviving structural remains, it is clear that these pits and their fills are associated with early Roman domestic occupation.

Late Roman – 3rd to early 4th centuries

This period is represented by ditches 53 and 50 and pits 22, 40, 46 and 56. Ditch 53 was a direct replacement of ditch 37 and represents a re-establishment of the roadside ditch. It is comparable to a similar length of ditch excavated in 1987 immediately to the south-west (Wallis 1988). Ditch 50 ran perpendicular to the roadside ditch, which may indicate that it was a boundary for a plot extending back from Roman Moulsham Street. The pits were filled with domestic rubbish which, although no structures were identified, suggests a further period of occupation alongside the road.

Post-medieval

Five pits (13, 19, 26, 34 and 45) were post-medieval in date. The vast majority of the finds from these features are 17th or 18th century; further details can be found in the archive.

The Finds

A variety of Roman finds was recovered, including copper alloy items, worked bone hairpins and fragments of pottery, brick and tile, vessel glass and animal bone. Full details for these, and the post-medieval material, can be found in the archive. The principal finds categories are described below.

Roman Pottery

Late Iron Age and Roman pottery was recorded from twenty-two contexts in total, amounting to 663 sherds, weighing 10.5kg. The pottery in each context has been counted and weighed by fabric and form and the details recorded onto paper proformas which form part of the archive. The pottery fabrics were recorded using the Essex County Council Field Archaeology Unit fabric series. Vessel forms were classified using the type series devised for Chelmsford (Going 1987, 13–54). Sherds of intrinsic interest were also recorded, for instance, pierced sherds or those with notches, stamps or graffiti. The pottery is in good condition overall, with an average sherd

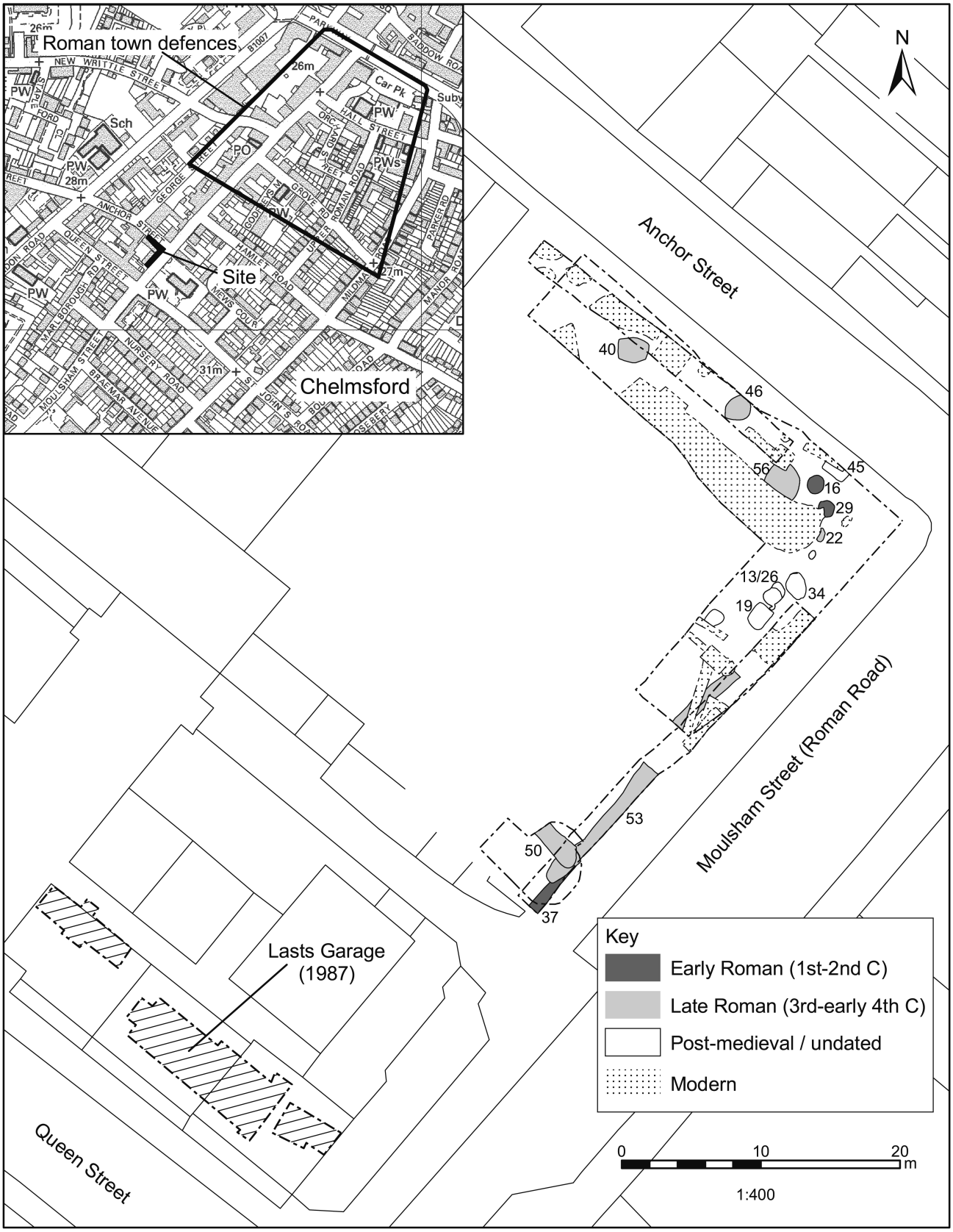

Fig. 1 Site location and plan of all features. © Crown copyright and/or database right. All rights reserved. Licence number 10001 4800

weight of 15.9g. Burnt sherds were noted in six contexts, in particular the fills of pit 40. Full quantification by estimated vessel equivalence (EVE) was not carried out. A representative selection of vessels has been illustrated (Fig.2).

Dating evidence

The pottery was recorded, in the first instance, to provide dating evidence for site features and layers. A large number of contexts contained less than thirty sherds of pottery, and two contexts were from post-medieval features (pits 19 and 34). There were two large and four medium-sized groups of pottery, thus enabling firm dating evidence to be supplied for only a quarter of the contexts with pottery. The recognisable vessel forms are mainly mid to late Roman, although pottery of exclusively late 4th century date is generally absent.

Several features, however, contained early Roman pottery; these include pits 16 and 29 and ditch 37. Pits 16 and 29 produced a range of 2nd century forms and fabrics, with those from pit 16 comprising large and unabraded sherds. Four sherds of 1st-century pottery were recovered from ditch 37, which appears to be the earliest feature, although severely disturbed by later ditches 50 and 53.

More than 95% of the datable pottery is 3rd century or later and the pits containing this later pottery comprise the best-dated features, with pit 40 producing 65% (almost 7kg) of the total datable pottery. The range of fabrics and forms in pit 40 indicate a mid-3rd century or later date, though there are a few later pieces which would carry the date beyond the early 4th century. Pit 56 contained a similar range of fabrics and forms, although much residual material was also present. The latest pieces were recorded as single sherds in the fills of pit 22 and ditch 53, although a firm later-4th century date for these features is unlikely.

Assemblage Composition and Pottery Supply

Eighteen fabrics and fabric groups were recorded, the range and proportions of which are shown in Table 1.

The assemblage is dominated by locally-made coarse wares. Collectively, these wares form more than 80% by weight of the total pottery recovered, with sandy grey wares accounting for a third. Small quantities of white-slipped red and buff wares, including part of a Colchester mortarium, are also present. The main regional industries are represented, albeit by small amounts of pottery. Sherds of BB2, North Kent grey ware, Nene Valley colour-coated ware and Hadham oxidised ware indicate trading links throughout the Roman period. The Oxfordshire industry is represented by two sherds from white ware mortaria. A self-coloured mortarium from the Nene Valley was also noted. The latest pottery comprises two small sherds of white ware (PORD) from the Surrey/Hampshire border. This fabric is uncommon in Essex, but has previously been noted at Chelmsford (Going 1992, 111) and usually appears in late 4th century contexts. Pottery imported from the Continent comprises just one sherd from a Dressel 20 olive oil amphora and samian, recorded in five features. More than half of the recorded samian came from the fills of pit 40, and the vessel forms could all have been current up to the mid 3rd century – mortarium f45, bowl f38, very worn internally, and Curle 23 dishes.

A range of forms was noted, although jars account for the highest proportion of vessel forms identified (33% of the total). Bowls, dishes and beakers are also much in evidence. Of interest is the relatively high number of

Fabric code	Fabric name	Count	Wt (g)	%Count	%Weight
AMPH	Dressel 20 amphora fabric	1	94	0.1	0.9
BB2	Black burnished ware 2	1	14	0.1	0.1
BSW	Black-surfaced wares	227	2363	34.2	22.5
BUF	Unsourced buff wares	1	22	0.1	0.2
COLB	Colchester buff ware	3	34	0.5	0.3
COLBM	Colchester buff ware mortaria	1	114	0.1	1.1
ESH	Early shell-tempered ware	1	18	0.1	0.2
GRF	Fine grey wares	128	1294	19.3	12.3
GROG	Grog-tempered wares	10	230	1.5	2.2
GRS	Sandy grey wares	192	2981	29.0	28.3
HAX	Hadham oxidised ware	3	20	0.5	0.2
MWSRS	White-slipped red wares	3	102	0.5	1.0
NKG	North Kent grey ware	6	58	0.9	0.6
NVC	Nene Valley colour-coated ware	9	42	1.4	0.4
NVM	Nene Valley self-coloured mortaria	9	594	1.4	5.7
OXWM	Oxfordshire white ware mortaria	2	88	0.3	0.8
PORD	Portchester D ware	2	6	0.3	0.1
STOR	Storage jar fabric	37	1934	5.6	18.4
TSG	Unsourced samian wares	27	513	4.1	4.9

Table 1. Fabric range and proportion

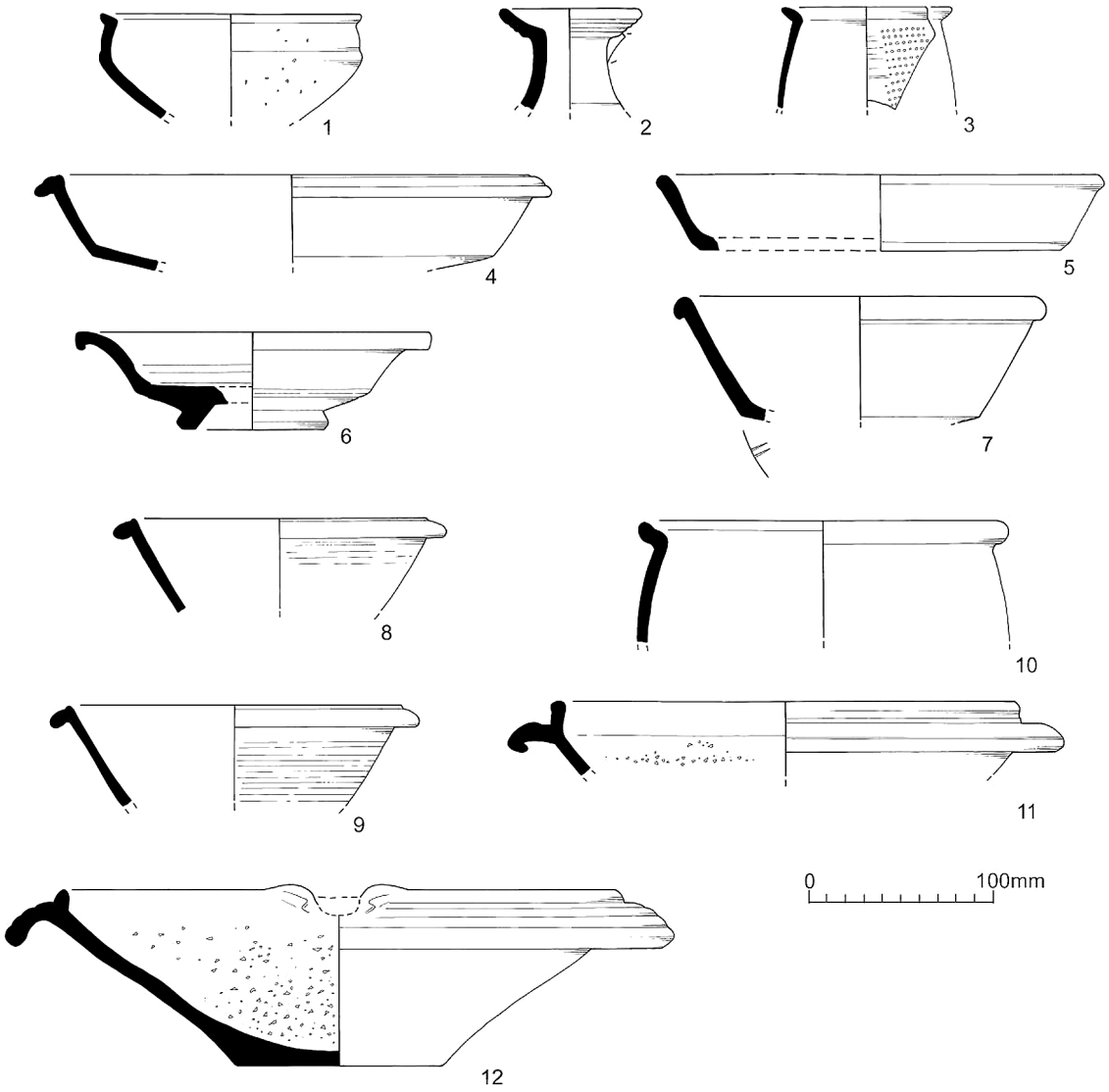

Fig. 2 Roman pottery

mortaria from a variety of sources (7.6% by weight) including the samian example noted above. The average mortarium proportion for Essex assemblages is less than 5% by weight. Flagons, lids and bowl-jars occur in very small numbers and platters, except for the occasional samian example, are entirely absent.

Discussion

As noted above, most of the assemblage derives from the fills of late Roman pit 40. Two further pits, 46 and 56, also contained late Roman pottery and nearby pits 16 and 29 contained pottery of early Roman date. The pit assemblages are all characteristic of rubbish derived from domestic occupation and, indeed, the pits produced other material besides pottery. Pit 40, in particular, contained a range of artefacts and ecofacts, including personal items and quantities of animal bone.

Going (1992, 115) noted an apparent ceramic poverty at Chelmsford, compared with London, Verulamium and Colchester. The elements in the assemblage from Moulsham Street support this view. What is notable, however, is the apparent re-occupation of this part of Roman Chelmsford, following the levelling of the town defences in AD200–220.

Comparison with the pottery from the adjacent excavations at Lasts Garage is difficult, since the published pottery report (Wallace 1988, 43) is in summary form and the pottery records in the archive are incomplete. The excavation report indicates that most of the pottery is early Roman, except for a small number of contexts assigned to Phase 3 (Wallis 1988, 40–2). It perhaps ought to be noted that the pottery from Lasts Garage outweighs that from the current excavations by a factor of 10:1.

Illustrated vessels (Fig. 2):

1. Bowl C16–type (GROG, fill 38, ditch 37)
2. Flagon J3.5 (MWSRS, fill 15, pit 16)
3. Beaker (NKG, fill 15, pit 16)
4. Bowl C16 (BSW, fill 42, pit 40)
5. Dish B1 (BSW, fill 42, pit 40)
6. Dish Curle 23, full profile (TSG, fills 41, 42, pit 40)
7. Dish B4 with two notches (BSW, fill 47, pit 46)
8. Dish B5.1 (GRF, fill 47, pit 46)

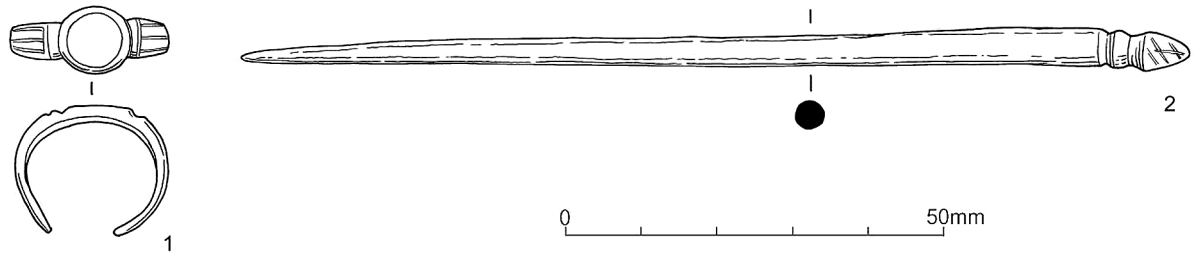

Fig. 3 Roman finger-ring and hairpin

9. Dish B5.1 (GRF, fill 47, pit 46)
10. Bowl-jar E2 (GRF, fill 47, pit 46)
11. Mortarium D5 (OXWM, fill 47. pit 46)
12. Mortarium D14, full profile (NVM, fills 41, 42, pit 40)

Copper alloy

1. Silvered coin: quinarius of Allectus, AD293–296
   Rev: galley R. with legend: "LAETITIA AVG"
   mintmark QC under galley
   Obv: cuirassed bust R, legend "[IMP] C AL[LECTVS P] F [AVG]"
   obverse badly corroded, Colchester mint
   Surface find during metal-detecting. The coin probably derives from ditch 53.
   SF1, fill 4, ditch 3 (= ditch 37), late Roman

2. Incomplete and slightly distorted finger-ring (Fig. 3.1). Oval bezel, 10 x 8mm, traces of enamel round a central raised device. The shoulders have a transverse groove, from which spring three parallel grooves.
   SF4, fill 23, pit 22, 4th century

Worked bone

Complete hairpin (Fig. 3.2) with a pinecone-shaped terminal above a collar (Crummy 1983, Type 5). These are dated to the 4th century at Colchester.
SF5, fill 41, pit 40, mid 3rd century+

Two further hairpin, or needle, shafts (SF7; SF8; not illustrated) were recovered from fill 42 of the same pit.

Glass

(Not illustrated). Four sherds of blue-green vessel glass, all from the same vessel and semi-crazed, perhaps from heat damage. The colour indicates a utilitarian vessel but the form cannot now be discerned.
Fill 58, pit 56, 3rd century+

Conclusions

Although the site lay at the south-western edge of the main Roman settlement, it appears to have been occupied as part of a ribbon development along the London-Colchester road. Although the roadside ditch, dating to the 1st-2nd centuries, was only seen at one end of the site, it corresponds to similar lengths of ditch found along both sides of Moulsham Street, at numbers 191–2 and 193–6 (Isserlin and Wickenden in prep.) on the west side and at numbers 37 (Priddy 1982) and 57–63 (Drury 1988) on the east side. The two 2nd-century pits contained evidence for the disposal of waste related to food preparation. The 1987 excavation at Lasts Garage (Wallis 1988), immediately to the south-west, revealed remains of a timber structure and pits of 2nd-century date and the pits uncovered on the present site are probably related to this occupation.

The late Roman ditch 53 corresponds to a similar length of ditch uncovered to the south-west at Lasts Garage and perhaps indicates that at least parts of the ditches beside the main road were re-established along a similar line in the late Roman period. Ditch 50, which extended perpendicular to the Roman road, suggests that the reinstatement of the roadside ditch may have been associated with defining plot boundaries as well as with road delineation. The domestic nature of the pottery and the personal nature of some of the small finds recovered from the pits suggest that these were filled with rubbish from a nearby dwelling.

The remains uncovered correspond well with the known development of the Roman London-Colchester road and its frontages, particularly with regard to the roadside ditches, while the evidence for 2nd-century occupation is consistent with that seen at Lasts Garage. The later Roman evidence is of particular interest, suggesting that plot boundaries were laid out anew in the 3rd century, perhaps as part of a southward expansion along the main road following the levelling of the town defences (Drury 1988, 62–6 and 135). This apparent expansion, however, was not sustained, as the pottery dating implies an absence of activity from the mid 4th century onwards.

Acknowledgements

The Essex CC Field Archaeology Unit would like to thank IPE Properties Ltd, who commissioned and funded the excavation, especially Kevin Sneath and Debi Morisson, for their assistance throughout. The excavation was carried out by Andrew Robertson with the assistance of Jo Archer, Chris Down, Dave Smith and Adrian Turner, under the management of Patrick Allen. The archaeological work was monitored by Pat Connell of Essex CC HEM on behalf of the local planning authority. The Roman coin was identified by Phil McMichael. Andrew Lewsey prepared the plans and Iain Bell prepared the finds illustrations.

Bibliography

Crummy, N. 1983 *The Roman small finds from excavations in Colchester 1971–9*, Colchester Archaeol. Rep. **2**

Drury, P.J. 1988 *The mansio and other sites in the south-eastern sector of Caesaromagus,* Chelmsford Archaeol. Trust Rep. **3.1**

Going, C.J. 1987 *The Mansio and Other Sites in the South-eastern Sector of Caesaromagus: the Roman pottery*, Chelmsford Archaeol. Trust Rep. **3.2**, Counc. Brit. Archaeol. Res. Rep. **62**

Going, C.J. 1992 'The other pottery', in Wickenden, N, *The temple and other sites in the north-eastern sector of Caesaromagus,* Counc. Brit. Archaeol. Res Rep. **75**, 93–115

Isserlin, R.M.J. and Wickenden, N.P. In prep. *Street frontage sites in the northern sector of Caesaromagus,* Chelmsford Archaeol. Trust Rep

Priddy, D. (ed.) 1982 'Excavations in Essex 1981', *Essex Archaeol. Hist.* **14**, 133

Robertson, A. 2005 *145–145A Moulsham Street, Chelmsford, Essex.* ECC FAU report **1457**, held in Essex Historic Environment Record

Wallace, C. 1988 'Roman pottery', in Wallis 1988, 43

Wallis, S. 1988 'On the outskirts of Roman Chelmsford: excavations at Lasts Garage, 1987', *Essex Archaeol. Hist.* **19**, 40–6

Wickenden, N.P. 1996 *The Roman Towns of Essex* in 'The Archaeology of Essex Proceedings of the Writtle Conference', O. Bedwin (ed.), 1996, ECC Planning Department 76–94

The Society is extremely grateful to Essex County Council for a generous grant towards the cost of publishing this article.

Medieval activity at land to the rear of 32 High Street, Kelvedon

Phillippa Sparrow

With contributions from Peter Thompson, Andrew Peachey and Carina Phillips

Introduction and background

During February and March 2008, Archaeological Solutions Ltd. (AS) carried out a 'strip, map and sample' archaeological excavation on land to the rear of 32 High Street, Kelvedon, Essex (NGR TL 8604 1852) (Barlow 2008). The site lies to the rear (east) of High Street and to the south-west of the early Roman enclosed town area (Fig. 1). A 15th-century listed building is located adjacent to the site, at numbers 26–30 High Street.

Kelvedon lies within the valley of the River Blackwater. The site itself is situated to the north of the river on the gravel/brickearth terrace and lies at a height of *c.* 23m AOD. Kelvedon lies on the deep well drained fine loamy, coarse loamy and sandy soils of the Ludford Association, which are found over gravel deposits and are associated with glaciofluvial drift geologies.

The site itself is not known to have been developed until the medieval period. During the medieval period the south-western part of Kelvedon expanded around the High Street, in the vicinity of the church. A market place was established at the junction between High Street and Church Street. Kelvedon was further developed during the medieval and post-medieval periods, with the majority of expansion occurring along High Street.

Detailed descriptions of all finds and features can be found within the Interim Site Narrative (Barlow 2008) and Research Archive Report (Sparrow 2008) available through the Essex Historic Environment Record and the National Monuments Record (Swindon).

Results of the investigation

Summary

Phase 1: Medieval (12th to 15th century)
Phase 2: Early post-medieval (15th to 17th century)
Phase 3: Late post-medieval (18th to 19th century)
Phase 4: Modern (19th century +).

The excavation revealed four phases of activity (see Fig. 2). Phase 1 comprised medieval activity. Phase 2 was represented by a cluster of refuse pits probably associated with the 16th-century development of the town and backyard activity along High Street. Phase 3 was represented by several post-holes and small pits indicative of domestic refuse disposal, possibly relating to the 18th-century development of High Street. Phase 4 comprised five modern rubbish pits and a post-hole. This report will focus on Phase 1.

Phase 1: Medieval

Medieval activity was represented by two post-holes. F1019 (Fig. 2) was located in the northern corner of the site and was not related to any other medieval activity. Post-hole F1009 (Fig. 2) was situated in the south-eastern section of the site. The forms of the two features differed, though the fills appeared similar, containing charcoal flecks and comprising firm sandy-silt. The post-holes' functions cannot be determined; however, their significance lies in the pottery recovered from their fills. Post-hole F1019 yielded one sherd (7g) of 13th to 15th century medieval grey ware and one sherd of late medieval oxidised ware (3g), while post-hole F1009 produced one small sherd (2g) of Cotter's (2000, 12) Fabric 21 series medieval grey sand tempered ware, dated to between the 12th and the 14th centuries. Medlycott (1998) noted, in the Historic Town Assessment Report for Kelvedon, that many archaeological investigations in the town reported an absence of activity between the 12th and 14th centuries. Though the evidence presented from this site is sparse, it indicates that the town was not deserted during this period. Two other investigations in the area of the High Street have identified 12th to 14th-century pottery, again indicating that the High Street was not devoid of early medieval activity. Archaeological investigations at The Gardens Bungalow, Church Street (TL 8586 1847) undertaken by Essex County Council Field Archaeology Group (ECC FAG) in 1998 (Bennett 1998) identified a large pit or well-shaft that yielded 14th century pottery, as well as a possible linear ditch parallel to Church Road containing 12th to 14th century pottery. A trial trench evaluation at the Star and Fleece Inn, High Street (in 1998, undertaken by ECC FAG), revealed medieval post-holes and produced 12th to 14th century pottery (Bennett 1998).

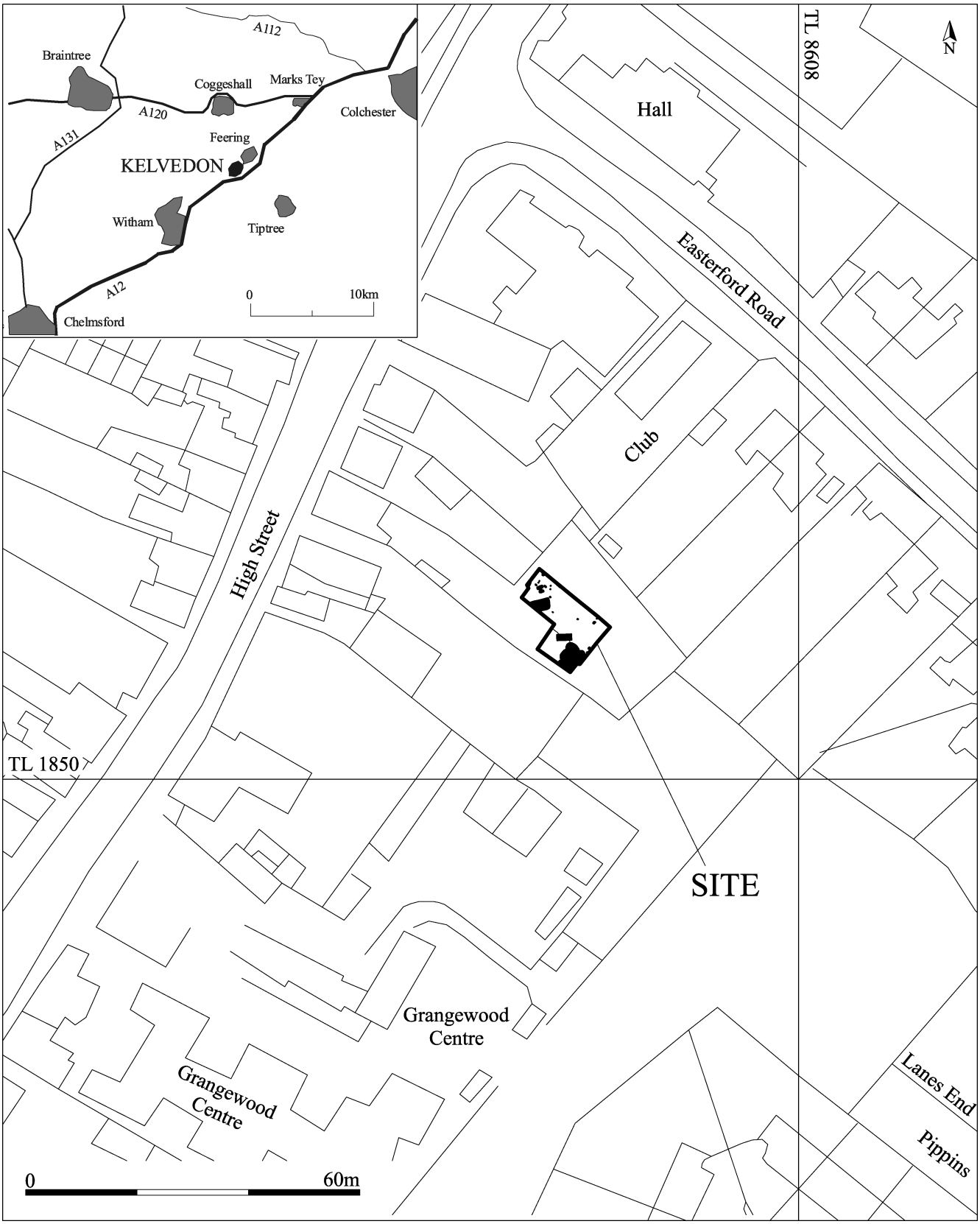

Fig. 1 Site location. © Crown copyright and/or database right. All rights reserved. Licence number 10001 4800

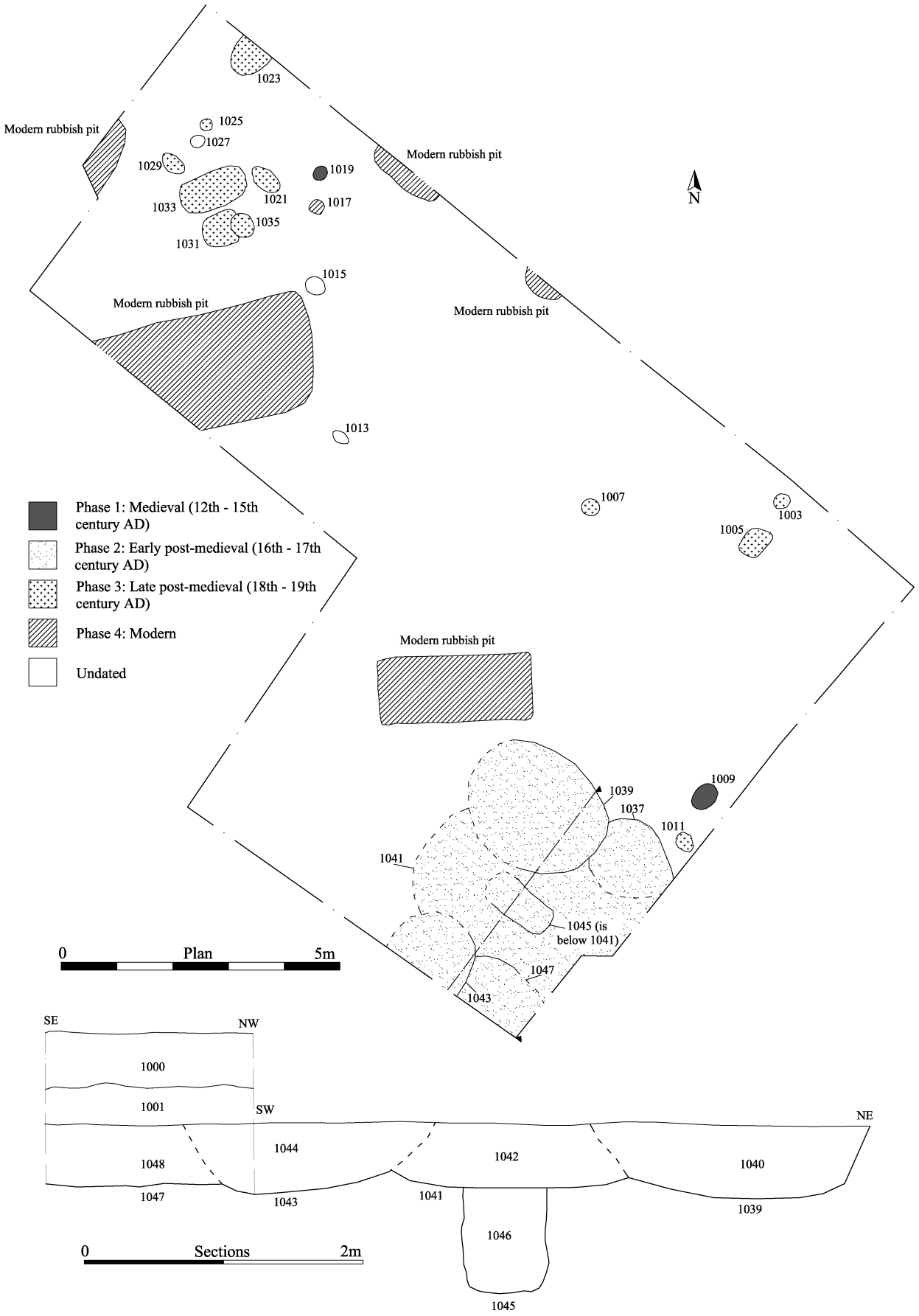

Fig. 2 All features phase plan and section

Conclusions

The two Phase 1 post-holes (F1019 and F1009) did not indicate the medieval function of the site; however, their significance lies in the pottery recovered. Dated between the 12th and 15th century, the pottery recovered from these small post-holes indicates that despite the paucity of medieval evidence, primarily due to limited opportunities to excavate, Kelvedon was actively settled at this time. Clearly, further research into the medieval history of Kelvedon is required, but sites such as 32 High Street, The Gardens Bungalow, Church Street (ECC FAG; Bennett 1998) and the Star and Fleece (ECC FAG Bennett 1998) help piece together the jigsaw. A 15th century listed building is located at numbers 26–30 High Street, it is therefore probable that the post-holes at 32 High Street, or at least the post-hole in the northern section of the site (F1019), may have related to a pre-15th-century building on the street frontage.

Bibliography

Barlow, G. 2008 *Land to the Rear of 32 High Street, Kelvedon, Essex: A 'Strip, Map and Sample' Archaeological Investigation Interim Site Narrative* Archaeological Solutions Ltd Unpublished Report 3046: Hertford

Bennett, A. 1998 'Archaeology in Essex 1997', *Essex Archaeology and History* 3rd Series Vol. 29, 194–215

Cotter J. P. 2000 *Colchester Archaeological Report 7: Post-Roman pottery from excavations in Colchester, 1971–85*. English Heritage

Medlycott, M. 1998 *Kelvedon: Historic Towns Project Assessment Report*, ECC

Sparrow, P. 2008 *Land to the Rear of 32 High Street, Kelvedon, Essex: Research Archive Report* Archaeological Solutions Ltd Unpublished Report 3090: Hertford

Medieval and post-medieval quarrying, tanning and domestic activity at 96 North Street, Barking. TQ 4405 8432

Pip Stone and Mike Lally

Introduction

Between June and October 2006, Archaeological Solutions Ltd. (AS) carried out an archaeological evaluation and excavation on land at 96 North Street, Barking (NGR TQ 4405 8432, Fig. 1). The investigations were conducted immediately to the north/north-west of an area of North Street and George Street which had been previously investigated by Pre-Construct Archaeology in 1996 to 1997 (Hawkins *et al.* 2003). The current excavation revealed four phases of activity:

Phase 1: Medieval (AD 1200 to 1400)
Phase 2: Late medieval to early post-medieval (AD 1400 to 1600)
Phase 3: Post-medieval (AD 1600 to 1800)
Phase 4: Modern (1800 to late 20th century)

This note summarises the more interesting aspects of the limited site evidence. Full details of all the features and finds, including full specialist reports, are provided in the project's Research Archive Report (Stone 2008), held by the Greater London Historic Environment Record Office.

Background

Barking is thought to have been one of Essex's earliest Saxon settlements. The urban settlement developed alongside Barking Abbey, which was one of the largest and earliest conventual houses near London. The Abbey was destroyed shortly after the Dissolution in 1536.

Barking is located on terrace gravels and sands of the Rivers Thames and Roding. During the medieval and post-medieval periods, the settlement flourished due to trade on the River Roding and the local fishing industry. This urban development increased the need for quarrying of raw materials for use in local construction. Although limited, evidence of such activity was present at 96 North Street, and was previously identified on land immediately to the south-east of the site by Pre-Construct Archaeology during their 1996 to 1997 investigations (Hawkins *et al.* 2003, 150–151).

Medieval and post-medieval gravel quarrying

In total, six quarry pits and twelve rubbish pits, dating to the medieval and post-medieval periods, were excavated on site (Fig. 2). Pits F2021 (Phase 1), F2005, F2007, F2009, F2021 (Phase 2), F2055 and F2116 (Phase 4) were all indicative of open-cast quarrying and were probably associated with attempts to access the site's underlying sand and gravel. The evidence for quarrying during Phase 1 was outweighed by features thought to have been associated with 'backyard' activity linked to structures fronting North Street (in the western area of the site) at this time. This interpretation is supported by similar evidence encountered during the investigations conducted by Pre-Construct Archaeology (Hawkins *et al* 2003, 150–151), which, when viewed together, suggest that a routeway existed along the same alignment as North Street prior to 1456 when it was first recorded in documentary sources (Powell 1966).

When examined in conjunction with the 1996 to 1997 excavation results, the evidence at 96 North Street contributes to a growing picture of minor quarrying activity being carried out on land bounded by Kings Street (to the north), North Street (to the east) and George Street (to the west), over a long period between *c.* AD 1100 and AD 1800. It would seem that between *c.* AD 1100 and AD 1350, this quarrying was centred immediately to the south-east of the site (Hawkins *et al.* 2003, 151), after which time, the focus shifted slightly to the north-west, onto land forming part of the present site. Similar activity has also been identified at other local sites, including Barking Library (MLO78364), approximately 400m to the south-east.

Pits F2120, F2116 and F2055 were the largest of the quarry pits discovered. Pit F2120 contained pottery and ceramic building materials (CBM) dating it to the 15th to 17th century (Thompson 2008). The remaining medieval and post-medieval quarry pits were located in the eastern part of the site. Although irregular, the

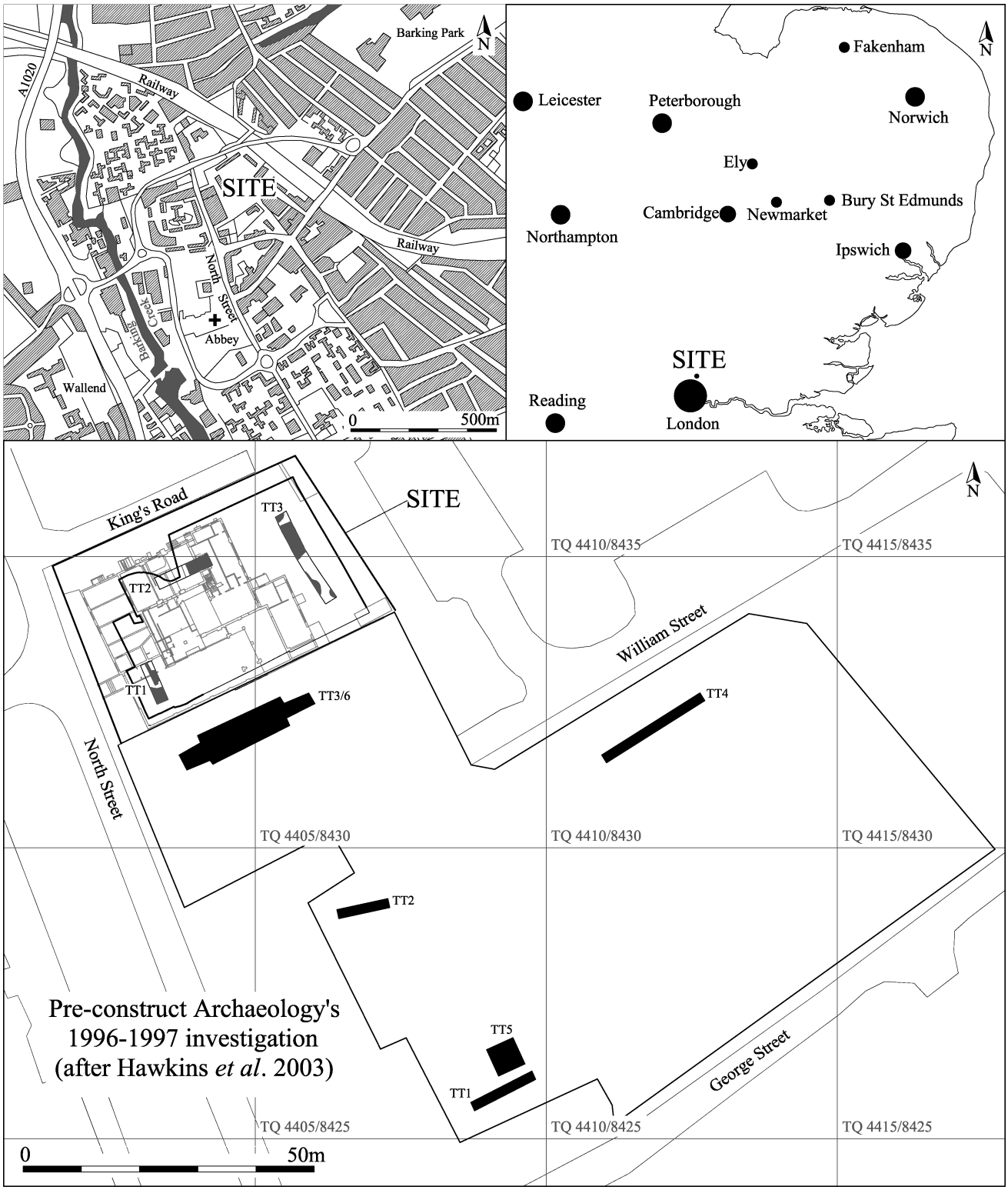

Fig. 1 Site location. © Crown copyright and/or database right. All rights reserved. Licence number 10001 4800

majority were roughly circular in shape, and were all of similar proportions. A cluster of slightly smaller pits was located to the south of F2055. These were also interpreted as quarry pits (F2098, F2132 and F2137).

Late medieval to early post-medieval domestic activity and tanning

Other medieval and post-medieval activity on site was attested by domestic rubbish pits. These were generally much smaller in size and did not appear to have been cut for the purposes of quarrying materials. Rubbish pits were also identified during the 1996 to 1997 investigations to the south-east (Hawkins *et al.* 2003, 150). The most interesting of these rubbish pits (F2069; Phase 2) contained some 87 sherds of 15th to early 16th-century pottery, CBM, animal bone and a several iron objects including a nail, a post-medieval knife blade, a strap with a hooked end and a horseshoe branch

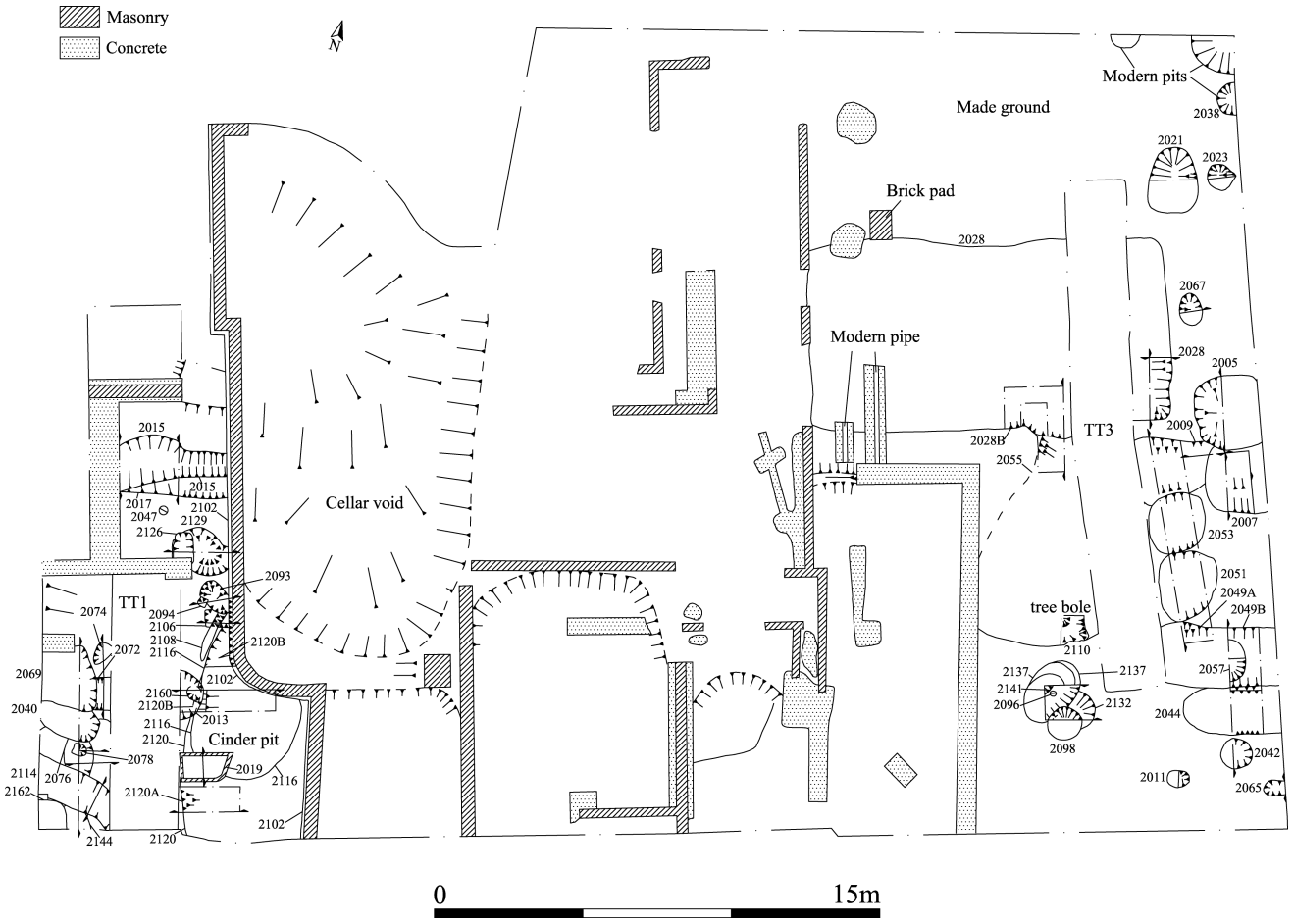

Fig. 2 All features plan

(Crummy 2008). The animal bone assemblage from the pit comprised 119 sheep/ goat metapodials, almost certainly waste from tanning being carried out on or near the site.

Phase 4 domestic activity

In addition to the Phase 2 and 3 rubbish pits, domestic activity was indicated by several Phase 4 features, comprising a possible cinder trap (F2019) and a pit (F2013) in the west of the site, and a large rectangular feature (F2028) in the eastern area. It is evident that by Phase 4, the gravel quarrying of earlier periods had largely ceased and that the site was being used predominantly for the disposal of waste from adjacent dwellings. It seems that the larger of the medieval and post-medieval quarry pits were not all filled in during a single event, instead they were left open and periodically used for the deposition of refuse, gradually filling in over time. The smaller quarry pits contained only one or two fills, indicating that, at some point, they were probably deliberately filled in.

Pit F2028 was rectangular in plan and had straight sides, suggestive of a structural function. However, it does not seem to be associated with any features shown on early cartographic sources. After its disuse, the pit was used for the disposal of waste and was gradually backfilled; it contained eighteen fills, each of which yielded domestic refuse.

F2019 was a possible cinder trap, located in the western area of the site. It was of brick construction, trapezoidal in plan and had vertical sides. The base of the feature was not reached. The feature had a single fill (L2020), which yielded early modern pottery (807g), glass (153g) and clay pipe (54g). Cinder traps of similar form were common in backyards during the nineteenth and early twentieth centuries, when they acted as receptacles for hearth waste. Terraced houses are known to have existed close to the site (Stone 2008) and it is possible that this related to one of these.

Conclusions

When considered along with the results of previous excavations in the area (Hawkins *et al.* 2003; Barking Library (MLO78364)), the limited evidence discovered at 96 North Street suggests that small-scale gravel quarrying occurred in this part of Barking during the medieval and post-medieval periods. This need for raw materials is likely to have been linked to the gradual urbanisation of the area. There was some evidence on the site for activity during the medieval period (AD 1200 to 1400). This limited activity was typical of the 'backyard' areas to the rear of domestic buildings, and it is possible that it may have been related to a precursor of North Street, which was first recorded in 1456.

By 1800, the activity changed from quarrying with some domestic rubbish disposal, to purely domestic

activity, attested by rubbish pits and a possible 19th to 20th-century cinder trap.

Acknowledgements

Archaeological Solutions would like to thank Inner London Developments Limited for funding the work and their agents, Richard Boast Associates (in particular Mr. Scott Cromack for his kind assistance), Havering Demolition and David Divers of English Heritage Greater London Archaeological Advisory Service for their assistance and advice. Illustrations are by Charlotte Davies.

Bibliography

Crummy, N. 2008 Metal and Stone Objects in Stone, P. *96 North Street, Barking; Research Archive Report,* Archaeological Solutions Ltd Report No. 3068

Ginns, A. and Ilson, P. 2006 *96 North Street, Barking. An archaeological trial trench evaluation,* Archaeological Solutions Ltd Report No. 2047

Greater London Sites and Monuments Record

Hawkins, D., Meddens, F. and Moore, P. 2003 Archaeological investigations at North Street/George Street, Barking, *London Archaeologist*. Autumn Edition

Powell, W. R. (Ed.) 1966 The Ancient Parish of Barking: Introduction, *The Victoria History of the County of Essex*, Volume V, Oxford, Oxford University Press, 184–190

Stone, P. 2008 *96 North Street, Barking; Research Archive Report,* Archaeological Solutions Ltd Report No. 3068

Thompson, P. 2008 Medieval and Post-medieval pottery, in Stone, P. *96 North Street, Barking; Research Archive Report*, Archaeological Solutions Ltd Report No. 3068

Book Review

***Wheare most Inclosures be* East Anglian Fields: History, Morphology and Management** by Edward Martin and Max Satchell. East Anglian Archaeology No. 124, 2008. Archaeological Service, Suffolk County Council. ISBN 978 0 86055 160 7. Paperback.

In his seminal book *English Field Systems* (1915, 387), H. L. Gray suggested that 'the early field system of few English counties is so difficult to describe as that of Essex'. Mostly falling outside that part of England whose medieval field systems were characterised by open fields (the exception being the far north-west corner of our county), yet lacking extensive areas whose character is obviously derived from woodland assarting, most scholars appear to have avoided studying the fieldscapes of Essex rather than tackle head on their unusual morphology. The inclusion of Essex in this study of East Anglian fields is, therefore, to be welcomed as a major step forward in our understanding of the history of its landscape.

The volume starts with an excellent introduction to the research project that gave rise to this book and which looked in detail at the field systems of twelve parishes spread across Norfolk, Suffolk, Essex, south-west Cambridgeshire and Hertfordshire. The three Essex parishes were Great Henny in the north, Felsted in central Essex, and Ingatestone in the south. The introductory chapters of Part 1 place the various case-studies in the context of regional and national variation in landscape character, and then discuss the nature of medieval farming across East Anglia: in a subject rich in archaic terminology, the authors are to be congratulated on the great clarity with which they explain what might be unfamiliar phrases or concepts. Part 2 introduces the reader to a typology of field system types with detailed charts and tables showing how different types occur in different parts of the region. There follows detailed essays on each of the case-studies supported by an excellent range of colour illustrations including reproductions of early estate maps, annotated copies of the Ordnance Survey First Edition Six Inch maps showing the distribution of different landscape types, and photographs of the modern landscape giving the reader a feel for its character. Indeed, the use of colour throughout this volume, and provision of large fold-out maps rather than over-reducing them to fit on an A4 page, adds enormously to the pleasure in reading this book.

Part 3 of the volume presents an interpretation and discussion of the evidence, and begins with a visually highly effective map showing pie charts for each of the parish case-studies, with coloured 'wedges' for each of the different types of field system. To summarise, we see open fields dominating to the west and north of the study area (Hertfordshire, Cambridgeshire, north western Suffolk, and Norfolk, with enclosed fields ('tenement blocks' and 'block demesnes') dominating in the south and east (including Essex). These regional differences in field systems are then discussed using a series of data sets that cover the entire region, including the extent of Domesday woodland, Parliamentary Enclosure Acts and the Historic Landscape Characterisations sponsored by English Heritage. The final chapter explores the origins of these different field system types, including a discussion of the apparently planned 'coaxial' landscapes that have been identified by the likes of Paul Drury, Warwick Rodwell and Tom Williamson across East Anglia. The detailed work carried out in this study suggests that some, at least, of the 'coaxial' landscapes are not continuous entities that are 'terrain oblivious' (i.e. that they run across and ignore variations in relief) but consist of a series of smaller blocks (described as 'panels') that relate to individual drainage systems. The Roman or earlier date originally suggested for these landscapes is also questioned based upon aspects of morphology, though this only serves to emphasise the lack of targeted fieldwork designed to date them once and for all! Overall this is a fascinating and extremely well-illustrated study of a previously neglected topic – the complex and unusual field systems of East Anglia – and is a must-read book for anyone interested in the landscape history of Essex.

Gray, H. L. 1915, *English Field Systems*. Cambridge, Massachusetts.

Stephen Rippon

Essex Bibliography

A Bibliography of Essex Archaeology & History January – December 2008

Both monographs and periodic literature are included; articles published in journals (e.g. *Essex Journal*) or festschrifts devoted exclusively to

Crummy, P., Crummy, N., Jackson, R. and Schädler, U., March 2008. Stanway: An elite Cemetery at Camulodunum, *British Archaeology*, 28–33

Kretz, R., 2008. 'The Trinovantian staters of Dubnovellaunos', *Brit. Numismatic Journal*, 78, 1–31

Millward, J., 2008. The East Coast Martello Towers [several Essex examples], *Fort* 35, 173–84

Thompson, P. and Corti, B. (2008). Whose Community? The shaping of Collective Memory in a Volunteer Project [Wivenhoe], *Oral History*, 12 No 2, 89–98

Anon, 2008. Upminster Windmill Restored, *London Archaeologist*, 12, No 2, 60

Ennis, T., 2008. *An Early Saxon Cemetery at Rayleigh, Essex* (East Anglian Archaeology Report 127) (Chelmsford)

Hoselitz, V., 2007. *Imagining Roman Britain: Victorian Responses to a Roman Past*. [a chapter is devoted to Colchester]

Roe, S. (ed.), 2006. *Oil Paintings in Public Ownership in Essex*.

Wilmott, A.R., 2007. 'Two left-handed gladiators in Britain', *Antiquaries Journal*, 87, 141–7 [one of the two is the gladiator Memnon on the *c.* AD 150–200 Colchester Vase]

Compliled by Andrew Phillips and Paul Sealey

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   (EHER 6277)

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   Atkinson, M. 1995 A Late Bronze Age enclosure at Broomfield, Chelmsford, *Essex Archaeol. Hist.* 26, 1–23
   ERO Essex Record Office
   Hawkes, C.F.C., Crummy, P. 1995 *Camulodunum* 2, Colchester, Colchester Archaeological Report 11
   Medlycott, M., Bedwin, O. and Godbold, S. 1995 South Weald Camp – a probable Late Iron Age hill fort: excavations 1990, *Essex Archaeol. Hist.* 26, 53–64
   RCHM Essex 1923 Royal Commission on Historical Monuments, *An inventory* of *the historical monuments in Essex. Vol. IV. South-east Essex*, London, HMSO

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