

An archaeological evaluation by trial-trenching at Westrope Haulage Yard, Sturmer Road, Birdbrook, Essex April 2013



**report prepared by
Adam Wightman

on behalf of
Westrope Haulage Yard & Ray Chapman Associates**

CAT project ref.: 12/06a
HEM site code: BKWH12
NGR: TL 70980 42788



Colchester Archaeological Trust
Roman Circus House,
Off Circular Road North,
Colchester,
Essex CO2 7GZ

tel.: 07436273304
email: archaeologists@catuk.org

CAT Report 698
April 2013

Introduction

This is the summary report on the archaeological evaluation by trial-trenching carried out by the Colchester Archaeological Trust (CAT) at the Westrope Haulage Yard, Sturmer Road, Birdbrook, Essex ((NGR TL 70980 42788); Fig 1).

A hybrid planning application (11/01169/OUT) for the partial redevelopment of the site in two phases (Phase 1 & Phase 2), was submitted to Braintree District Council in August 2011. The following archaeological investigation was undertaken in advance of Phase 1 of the redevelopment, which comprises the erection of two new retail buildings, associated parking and a new access road (Fig 2).

The site is located within an area of archaeological potential. Roman building remains have been identified to the north of the development area (EHER 6958-62) and Roman burials were excavated in the late 18th and 19th centuries near the road junction to the south of the site (EHER 6963-64). For more information on the historical background of the area and details of archaeological finds recovered in the vicinity, see the Essex County Council brief (O'Connor 2012) and the Written Scheme of Investigation (CAT 2012), both of which are appended to this report.

Five trial-trenches (T1-T5) were excavated within the footprints of the two proposed retail buildings and within the area of the new access road where it is to be located upon undeveloped ground (Fig 2). The trenches were excavated under archaeological supervision using a tracked excavator equipped with a toothless ditching bucket.

Results

T1 & T2 (Figs 2-4, Plate 1)

T1 and T2 were located in a cultivated field to the east of the haulage yard (Fig 3). In both trenches, a mid brown/grey sandy-silt ploughsoil (L1) overlaid a light brown buried topsoil (L2), which, in turn, overlaid an orange/brown granular sand mixed with a flint and chalk gravel (L3) (Fig 4 & Plate 1). The sand/gravel is a river terrace deposit of the River Stour which is located 200m to the north of the investigation area (Fig 2).

No archaeological features were uncovered in either trench. Six worked flints were recovered from the ploughsoil (L1): one primary flake, two patinated tertiary flakes, one retouched tertiary flake, one end scraper and one multiple tool (denticulated edge and a retouched notch). Fragments of post-medieval/modern brick, peg-tile and pieces of modern agricultural ironwork were also identified in the ploughsoil but were not retained. In addition, two sherds of Roman sandy greyware (one of which is the rim from a large jar) and three worked flints (one of which exhibits scraper retouch) were recovered from the surface of the field to the north-east of the development area (Fig 2; Roman pottery find-spots marked by purple triangles, worked flint find-spots marked by orange triangles).

T3 & T4 (Figs 3-4, Plates 2 & 3)

T3 and T4 were located in the car park of the current Haulage Yard (Fig 3). In both trenches, successive layers of tarmac planings (L4) overlaid old surfacing materials (concrete, gravel and crushed hardcore) in a dark grey/black sandy-silt matrix (L5) (Fig 4 & Plate 3). Modern bottles, clinker, ironwork, wood, brick and slate were all observed in L5 but not retained. Beneath L5, a dark grey/green sandy-silt layer (L6) was identified which directly overlaid the natural sand and gravel (L4) (Fig 4 & Plate 2). L6 is presumably the same topsoil deposit as L1 & L2, which has been stained grey/green by pollutants from the hardsurfacing materials.

In the south-eastern end of T4, there was both visual and olfactory evidence of the presence of hydrocarbons in the soil. This is attributable to the presence of fuel tanks and pumps in the vicinity of this trench (Fig 3).

An Early Neolithic retouched flint blade was recovered from L6. No other finds or features were identified in either trench.

T5 (Figs 2-4, Plate 4)

T5 was located in an area of the site that had previously been used as an allotment garden (Fig 3). In T5, as in T1 and T2, a cultivated topsoil (L1) overlaid a light brown buried topsoil (L2), which, in turn, overlaid the sand and gravel (L3) (Fig 4).

Two pits (F1 & F2) were identified in the southern end of T5 (Fig 3 & Plate 4). Both pits contained articulated sheep bones and modern glass and pottery fragments.



Plate 1: T1, view south-west.



Plate 2: T3, view south-west.

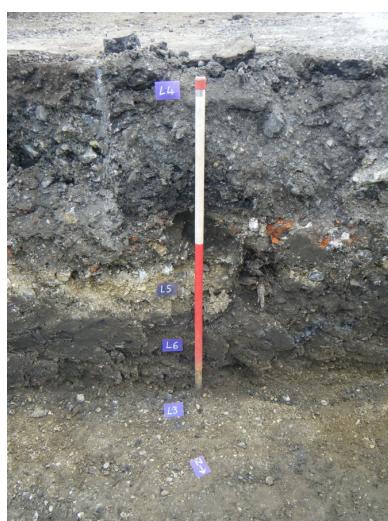


Plate 3: T4 stratigraphy, view south-west.



Plate 4: T5, view north-east.

Conclusion

No evidence of Roman activity was identified in the five trial-trenches. Moreover, if Roman features or deposits do survive within the haulage yard, they are likely to be largely unaffected by the proposed groundworks due to the depth of the modern deposits overlying most of the development area.

Acknowledgements

CAT would like to thank Ray Chapman of Ray Chapman Associates for commissioning the project and Stuart and John Westrope for funding it. The site work was undertaken by A Wightman, B Holloway and M Baister. The pottery was identified by S Benfield and E Holloway illustrated the sections.

The project was monitored by Teresa O'Connor for the Essex County Council Historic Environment team.

References

Note: all CAT fieldwork reports are available online in .pdf format at <http://cat.essex.ac.uk>

CAT	2012	Written Scheme of Investigation for archaeological trenching on land at Westrope Haulage Yard, Sturmer Road, Birdbrook, Braintree, Essex by A Wightman
O'Connor, T	2012	Archaeological trial-trenching on land at Westrope Haulage Yard, Sturmer Road, Birdbrook, Braintree

© Colchester Archaeological Trust 2013

Distribution list:

Ray Chapman, Ray Chapman Associates
Stuart and John Westrope, Westrope Haulage Yard
Teresa O'Connor, ECC Historic Environment team
Essex Historic Environment Record



Colchester Archaeological Trust

Roman Circus House,
off Circular Road North
Colchester,
Essex CO2 7GZ

tel.: 07436273304
email: archaeologists@catuk.org

checked by PC 01/05/13

Appendix 1: contents of archive

One A4 document wallet containing:

1 Introduction

- 1.1 Copy of the evaluation brief issued by ECC
- 1.2 Copy of the WSI produced by CAT
- 1.3 Risk assessment
- 1.4 Geotechnical report
- 1.5 1 x A4 site plans provided by developer
- 1.6 2 x A3 site plans provided by developer

2 Site archive

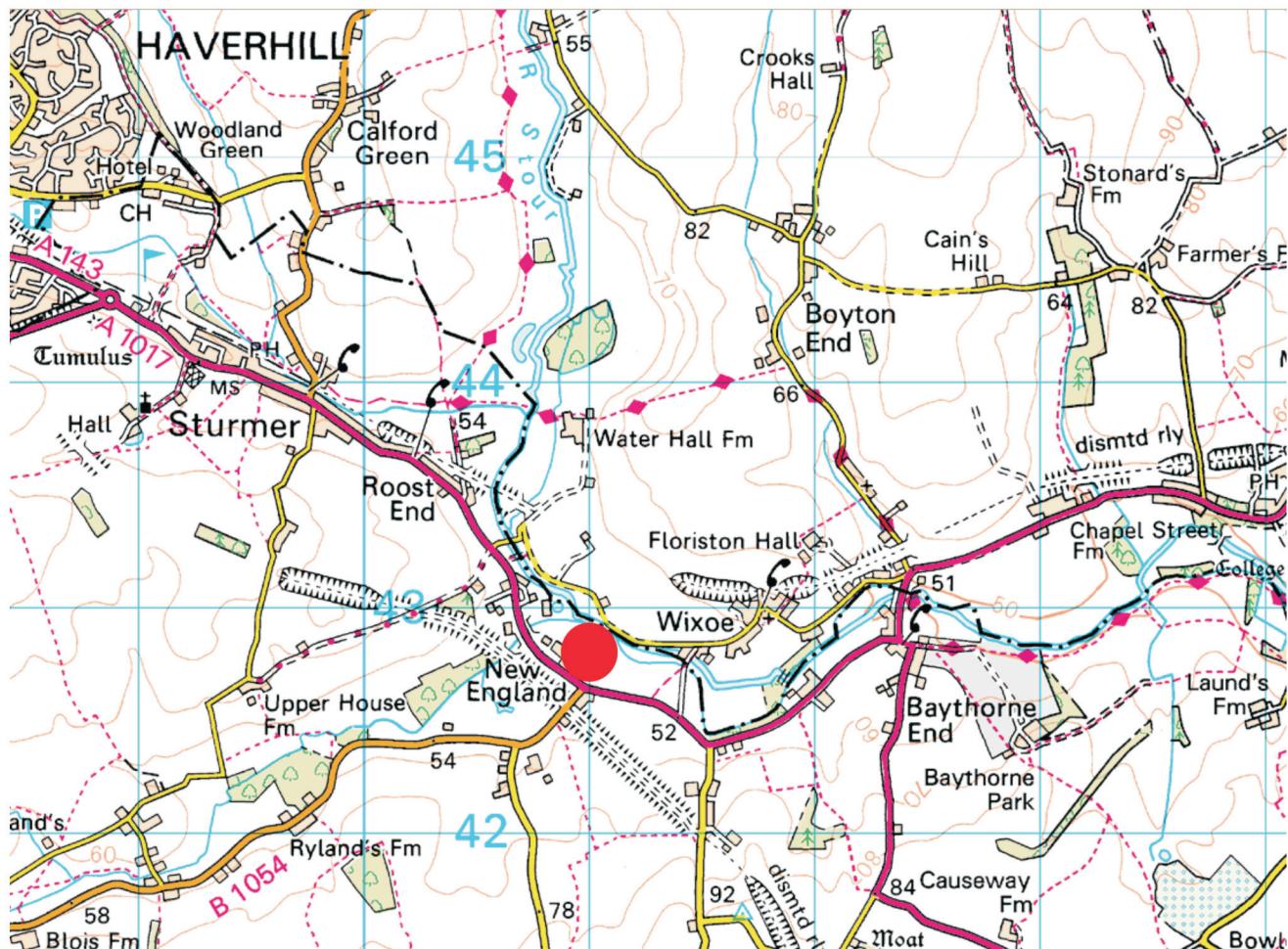
- 2.1 Site digital photographic record
- 2.2 Attendance register
- 2.3 Context sheets (F1-F2, L1-L6)
- 2.4 Finds register
- 2.5 Site photographic record on CD
- 2.6 OS benchmark information

3 Research archive

- 3.1 Monitoring (client) report

Not in wallet

- The finds (1 small bag)
- 1 x A3 Sx sheet



© Crown copyright. All rights reserved. Licence number 100039294.

Fig 1 Site location, marked by a red dot.



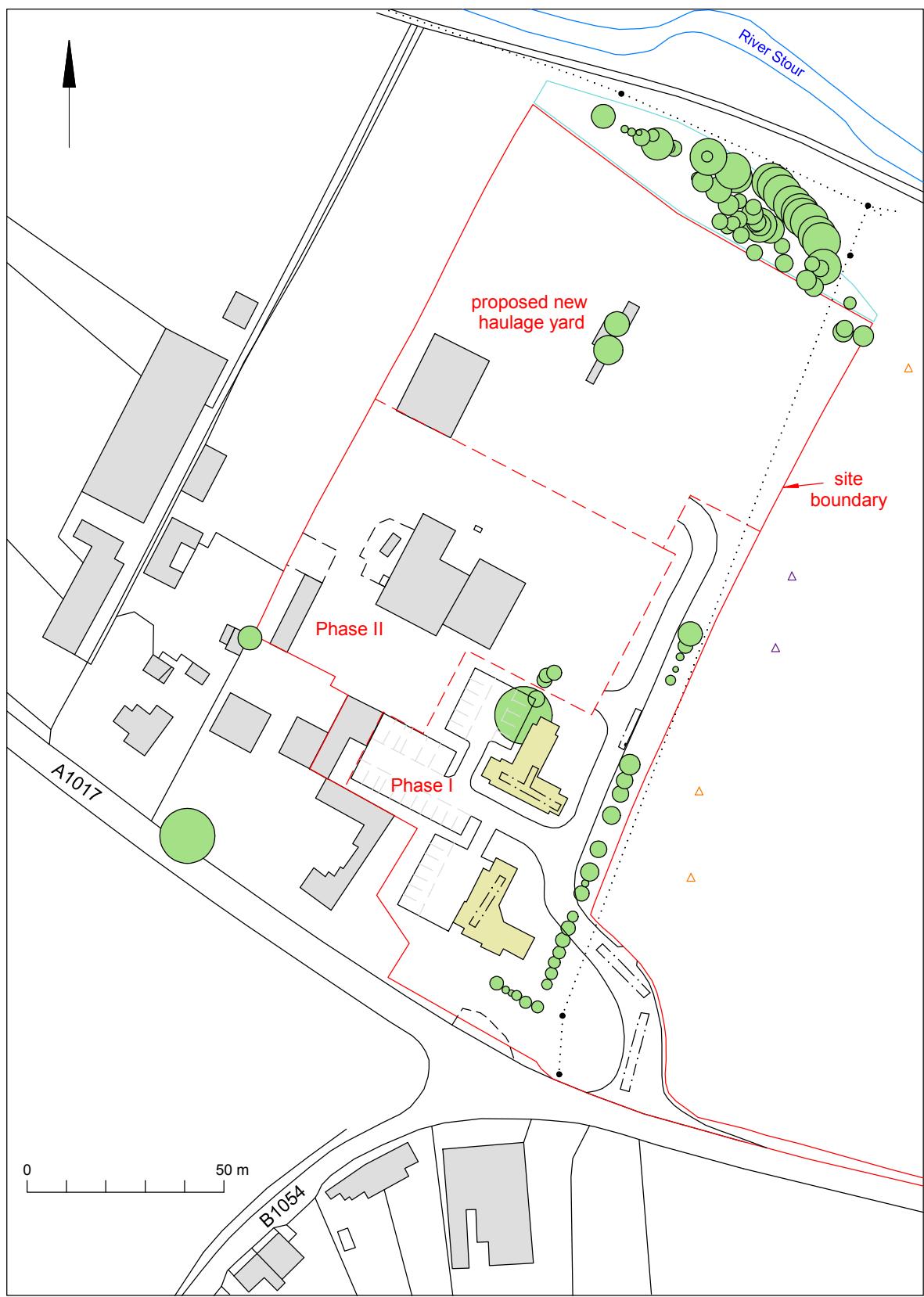


Fig 2 Site plan showing the proposed Phase 1 development (yellow).

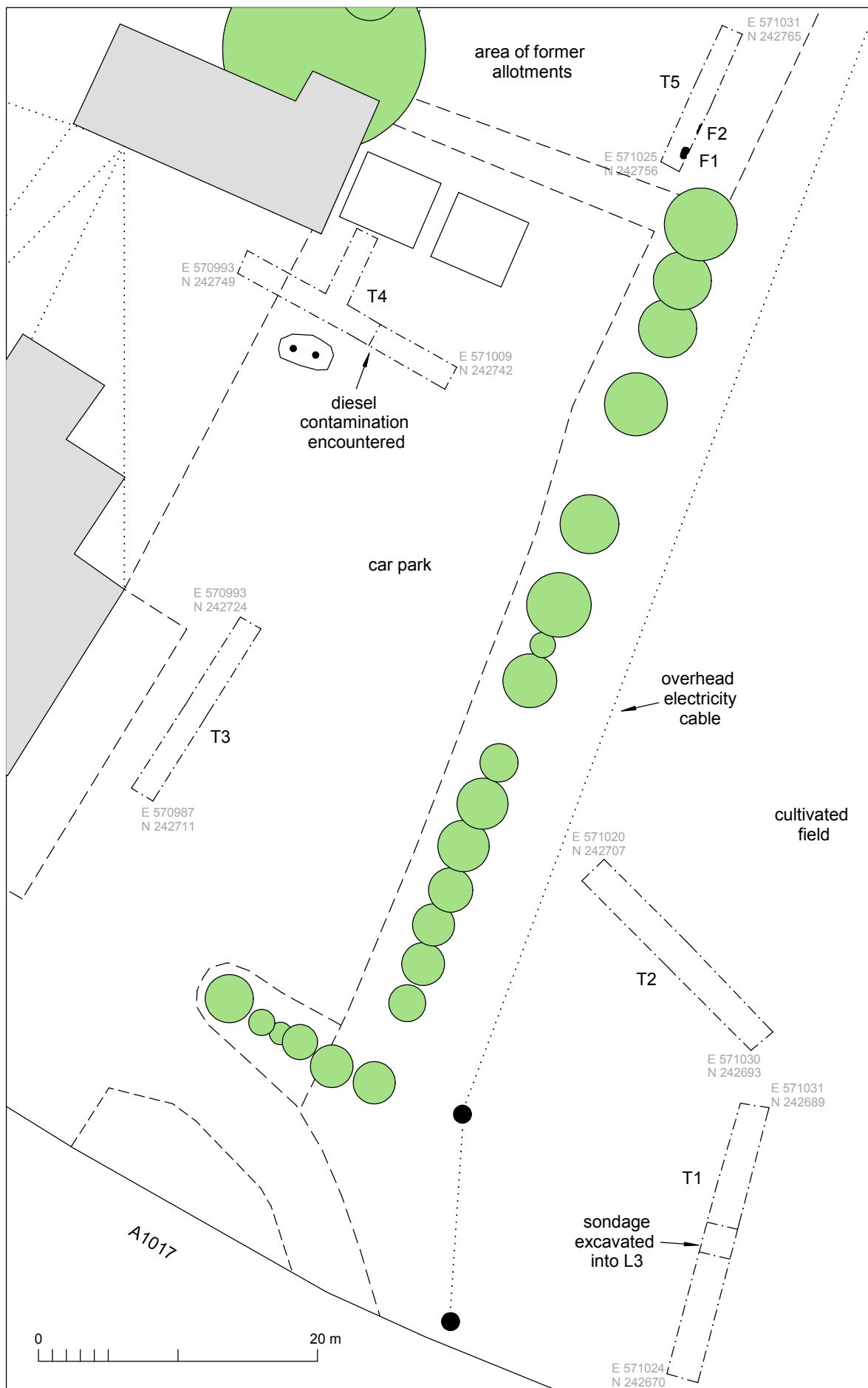


Fig 3 Site plan showing the trial-trenches in relation to the existing haulage yard.

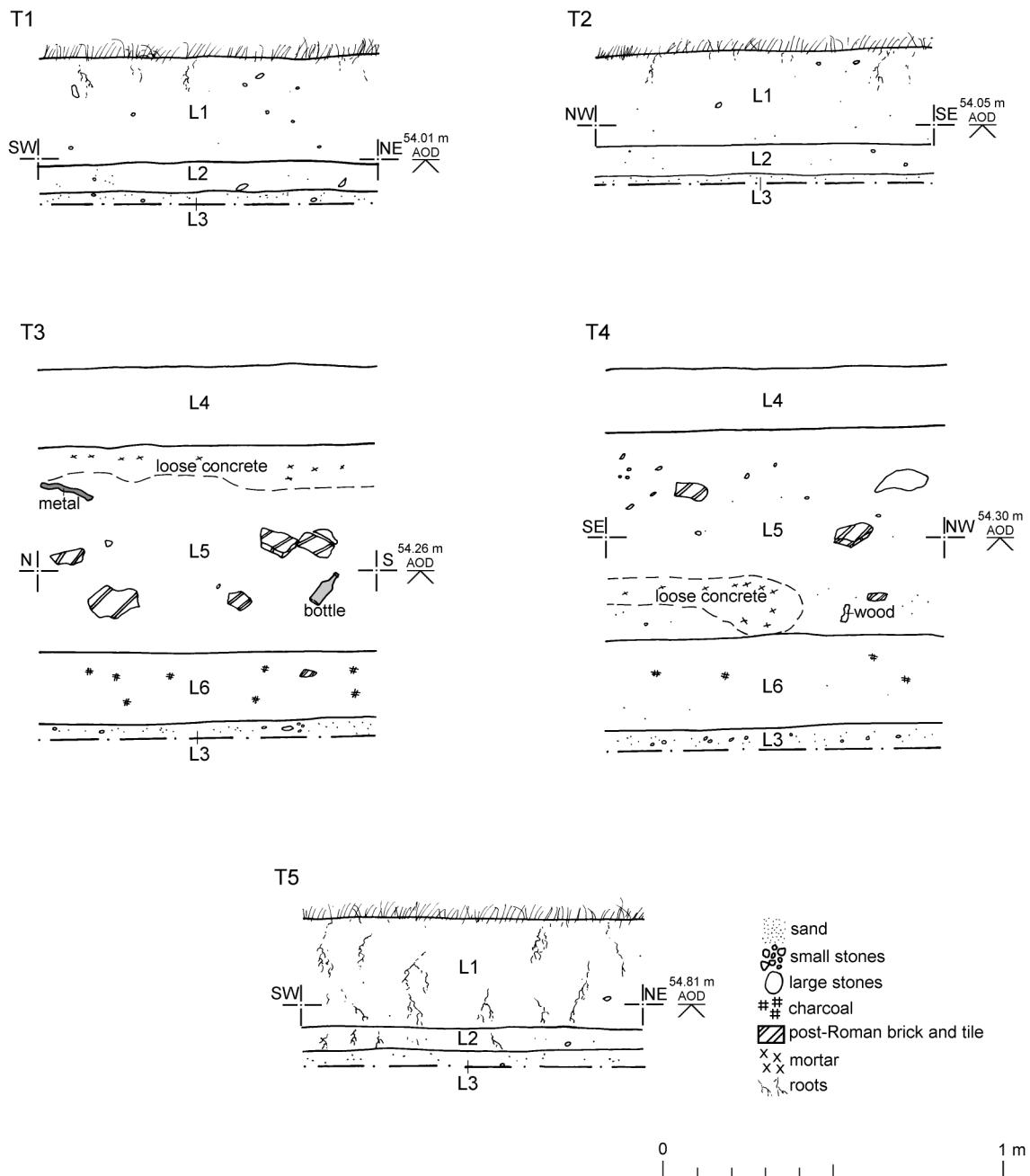


Fig 4 Representative trench sections (T1-5).

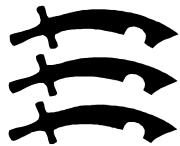
Essex Historic Environment Record/ Essex Archaeology and History

Summary sheet

Address: Westrope Haulage Yard, Sturmer Road, Birdbrook, Essex	
Parish: Birdbrook	District: Braintree
NGR: TL 70980 42788	Site codes: CAT project – 12/06a ECC – BKWH12 Museum accession – pending
Type of work: Evaluation by trial-trenching	Site director/group: Colchester Archaeological Trust
Date of work: 16th April 2013	Size of area investigated: 5 trenches totalling 84m in length
Location of curating museum: Braintree Museum	Funding source: Developer
Further seasons anticipated? No	Related EH&R numbers: 6958-64
Final report:	CAT Report 698
Periods represented:	-
Summary: <i>Five trial-trenches were excavated by the Colchester Archaeological Trust within the footprints of two proposed buildings and a new access road at the Westrope Haulage Yard in Birdbrook, Essex.</i> <i>No archaeological features were identified in the trial-trenches. Worked flints were recovered from the topsoil.</i>	
Previous summaries/reports: none	
Keywords: -	Significance: neg
Author of summary: Adam Wightman	Date of summary: April 2013

**ARCHAEOLOGICAL TRIAL TRENCHING ON
LAND AT WESTROPE HAULAGE YARD,
STURMER ROAD,
BIRDBROOK,
BRAINTREE**

April 2012



Essex County Council

HISTORIC ENVIRONMENT BRANCH

Site: Westrope Haulage yard, Sturmer road, Birdbrook

Planning app. no.: 11/01169/OUT

Agent: Ray Chapman (Email: ray@rcaconsulting.co.uk, Tel: 01621 860625)

Historic Environment Management (HEM) Team Officer: Teresa O'Connor,
teresa.oconnor@essex.gov.uk, 01245-437638

Museum: Robert Rose, Museum Collections & Heritage Manager, Braintree District Museum

E-mail: robert.rose@braintree.gov.uk Tel. (01376) 325266 or (01376) 551414 Ext. 6180

This archaeological brief is only valid for six months. After this period the HEM Team of the Historic Environment Branch of Essex County Council should be contacted to assess whether any changes are required. Any written scheme of investigation resulting from this brief shall only be considered for the same period.

The contractor is advised to visit the site before completing their written scheme of investigation as there may be implications for accurately costing the project.

1. Introduction

The HEM Team of the Historic Environment Branch of Essex County Council has prepared this brief for an archaeological investigation at the above site. The proposed development comprises the erection of 2 new retail buildings, associated parking and new access onto Westrope Haulage Yard, Sturmer Road. The site has the possibility of features relating to the nearby Roman site as well as to other periods surviving within the proposed development area.

2. Site Location and Description

The proposed development is located at Westrope Haulage yard, Sturmer Road, New England (TL 70980 42788). The site is approximately rectangular in shape and covers an area of c.125m x 100m. It is bounded by the Sturmer Road in the south and lies adjacent to the River Stour in the north. The site has had a previous industrial history and been used as a haulage yard for the last 50+ years. The northern part of the site was used as an orchard and allotment gardens until the 1990's. The site is currently hard landsurfaced with a mixture of concrete blocks and compacted gravel surface. There are industrial buildings and fuel bunds extant within the site.

3. Planning Background

A planning application (11/01169/OUT) was submitted to Braintree District Council in August 2011. The application is a hybrid application for redevelopment of site (in part) in two phases.

Phase 1: Full planning permission sought for the Erection of 2No. detached buildings for A1 (Retail), A2 (Financial & Professional services) and/or B1 (Business, including Offices, Research and Development and/or Light Industry) or any mix of uses thereof. Construction of new vehicular access from the A1017 Sturmer Road and formation of internal access road to serve application site and the existing Haulage business;

Phase 2: Outline planning permission sought for B1c (Light Industry), B2 (General Industrial) and/or B8 (Storage or Distribution) or any mix of uses thereof, with all matters except access thereto reserved for future determination.

As the development lies in an area of significant archaeological potential, the Historic Environment Branch of Essex County Council made the following recommendation to the LPA in line with advice given in *Planning Policy Statement 5: Planning for the Historic Environment*.

RECOMMENDATION: Full condition

"No development, or preliminary groundworks, of any kind shall take place until the applicant has secured the implementation of a programme of archaeological work and recording in accordance with a written scheme of investigation which has been submitted by the applicant, and approved by the planning authority."

All archaeological work should be undertaken by a professional recognised archaeological contractor and there will be a financial implication for the applicant.

4. Archaeological Background

The following archaeological background utilises the Essex Historic Environment Record (EHER) held at Essex County Council, County Hall, Chelmsford. Prospective contractors are advised to visit the EHER prior to the completion of any written scheme of investigation (To make an appointment contact Ms A. Bennett, 01245 437637).

The site lies within an area of considerable archaeological potential. A Roman cemetery (EHER 6964) was partially excavated in the 1860s immediately to the east of the site, and the discovery of human remains (EHER 6963) to the south of the site (at the road junction) in 1863 would suggest that the cemetery originally covered a large area, including the area of the proposed development. The skeletons are reported to have been "7 feet deep" with two urns and were positioned 'arm in arm, each clasping an urn, the right leg of one laid across the left leg of the other, the lower urn being placed between their hips'. Several other urns were discovered as well as further skeletons without urns. To the north of the site there are antiquarian reports of a 'Roman camp', which included a flint rubble wall and tower (EHER 6958-62). Whilst there are no above-ground remains of these extant, watching-

briefs undertaken during the work associated with the extension of the Abberton reservoir at the adjacent waterworks and in Suffolk have recorded numerous finds of Roman pottery and features indicative of an extensive settlement, as well as prehistoric worked flints and medieval and post-medieval finds. In addition a former channel of the River Stour, complete with important palaeoenvironmental remains has also been recorded from the adjacent site and other palaeochannel and/or waterlogged deposits may exist within the development area.

5. Requirement for Work

The specific aim of the investigation is to determine the presence or absence of archaeological deposits within the development area and to preserve, by record, any archaeological deposits that will be destroyed by the construction of the new buildings, access roads and other significant groundworks.

The proposed development area is within an area of archaeological potential that will be assessed by trial trenching in the first instance. A single trial trench shall be located to cover the length of each new building (associated with Phase 1) and a suitable proportion (10%) of the new access road where it is located upon undeveloped ground (the new access and in the area of former allotment land) or where it will require significant groundworks into undisturbed ground. For Building A this will take the form of an L shape trench plan and for building B this will take the form of a T shape trench plan.

The final location and number of trenches will be dependant on the results of the site investigation works which may reveal areas of previous disturbance. Any previous site investigation results should be consulted and used to determine the positioning of the trial trenches where they are of relevance (ie. Either to avoid contaminated ground/modern disturbance or to investigate relevant site stratigraphy and possible archaeological horizons/features.)

Specific attention should be paid to the possibility of Roman features and finds relating to the Roman site nearby, specifically the potential for deeply buried human remains and grave goods.

Should significant archaeological deposits be revealed further open area excavation will be required which will be defined following a site meeting.

6. Methodology

- 6.1 The archaeological work shall be undertaken by a professional team of field archaeologists. The number of staff involved and the structure of the team shall be stated in the written scheme of investigation.

- 6.2 The archaeological contractor is expected to follow the Code of Conduct of the Institute of Field Archaeologists and the document Standards for Field Archaeology in the East of England (Gurney, 2003).
- 6.3 All of the latest Health and Safety guidelines must be followed on site.
- 6.4 The contractor shall ensure detailed study of all mains' service locations and avoid damage to these.
- 6.5 Notification of the supervisor/project manager's name for the project shall be provided to the Historic Environment Management Team one week in advance of commencement of work.
- 6.6 A site code shall be obtained from the HEM Team Officer of Essex County Council.
- 6.7 At the start of work (immediately before fieldwork commences) an OASIS online record <http://ads.ahds.ac.uk/project/oasis/> must be initiated and key fields completed on Details, Location and Creators forms.
- 6.8 The contractor shall provide details of the site surveying, excavation and finds recovery policy in the written scheme of investigation. The site grid shall be tied into the National Grid.
- 6.9 Machine stripping shall be undertaken to an agreed standard, using a toothless ditching bucket, and under the supervision and to the satisfaction of a professional archaeologist. The exposed sub-soil or archaeological horizon will be cleaned by hand immediately after machine stripping and any archaeological deposits or negative features planned.
- 6.10 Masonry walls shall be carefully cleaned and planned. Where possible these will be left in situ. If these have to be removed then detailed drawings both in plan and section will be required.
- 6.11 The contractor shall provide details of the sampling strategies for retrieving artefacts, biological remains (for palaeoenvironmental and palaeoeconomic investigations), and samples of sediments and/or soils (for micromorphological and other pedological/sedimentological analyses). Advice on the appropriateness of the proposed strategies will be sought from the English Heritage Regional Adviser in Archaeological Science (East of England). A guide to sampling archaeological deposits (Murphy and Wiltshire 1994) is available from the HEM.
- 6.12 Should human remains be discovered the coroner will be informed and a licence from the Home Office sought immediately; both the client and the monitoring officer will also be informed.

Burials will require 100% excavation . A new exhumation form and guidance has been issued by MoJ to be used with immediate effect.

- 6.13 The site and spoil heaps shall be checked by metal detector, with any finds recovered.
- 6.14 Details of the site planning policy shall be given in the project written scheme of investigation. The normal preferred policy for the scale of archaeological site plans is 1:20 and sections at 1:10, unless circumstances indicate that other scales would be more appropriate.
- 6.14 Section drawings shall be completed on all trenches identifying the depth of the archaeological deposits and the depth of the natural sub-soil.
- 6.15 The photographic record policy shall be given in the written scheme of investigation. A photographic register detailing as a minimum feature number, location, and direction of shot shall accompany the photographic record.
- 6.16 The IFA's Standards and Guidance for Archaeological Evaluations and the document Standards for Field Archaeology in the East of England (Gurney, 2003) should be used for additional guidance in the production of the archaeological written scheme of investigation, the content of the report, and the general execution of the project.

7. Finds

- 7.1 All finds, where appropriate, shall be washed.
- 7.2 All pottery and other finds where appropriate, shall be marked with the site code and context number.
- 7.3 The written scheme of investigation shall include an agreed list of specialist consultants, who will be required to conserve and/or report on finds, and advise or report on other aspects of the investigation.
- 7.4 The requirements for conservation and storage shall be stated within the written scheme of investigation.
- 7.5 Finds work should be to accepted professional standards and adhere to the Institute of Field Archaeologists Guidelines for Finds Work.

8. Results

- 8.1 The full report shall be submitted to the HEM Team within a length of time (but not exceeding 4 months) from the end of the fieldwork, with a copy supplied to the EHER. A full digital copy shall be supplied to the HEM team.

8.2 This report must contain:

- The aims and methods adopted in the course of the archaeological programme.
 - Location plan of excavated areas in relation to the proposed development. At least two corners of excavated areas shall be given 10 figure grid references.
 - A section/s drawing showing depth of deposits including present ground level with Ordnance Datum, vertical and horizontal scale.
 - Any relevant borehole logs and explanation from previous site investigation works
 - All specialist reports
 - Methodology and detailed results including a suitable conclusion and discussion. Where appropriate the discussion should be completed in consultation with the Eastern Counties Research Agenda and Strategy (Brown and Glazebrook 2000).
- 8.3 An EHER summary sheet shall also be completed within four weeks. This will be completed in digital form (copy can be emailed). This shall include a plan showing the position of the trenches.
- 8.4 All parts of the OASIS online form must be completed for submission to the EHER. This should include an uploaded .pdf version of the entire report (a paper copy should also be included with the archive).
- 8.4 Publication of the results at least to a summary level (i.e. round up of archaeology in Essex in *Essex Archaeology and History*) shall be undertaken in the year following the archaeological field work. An allowance shall be made within the costs for full publication in an appropriate journal.

9. Archive Deposition

- 9.1 The requirements for archive storage shall be agreed with the appropriate museum (Braintree), and confirmed in writing to the HEM Officer.
- 9.2 If the finds are to remain with the landowner a full copy of the paper archive shall be housed with the appropriate museum.

9.3 The full archive shall be deposited with the appropriate museum within 2 months of the completion of the report and confirmed in writing to the HEM Team.

9.4 A summary of the contents of the archive shall be supplied to the HEM Team at the time of deposition to the museum.

10. Monitoring

10.1 The HEM Team of Essex County Council will be responsible for monitoring progress and standards throughout the project. This will include the fieldwork, post-excavation and publication stages.

10.2 Notification of the start of the archaeological work shall be given to the HEM Team one week in advance of its commencement.

10.3 Any variations of the written scheme of investigation shall be agreed with the HEM Team prior to them being carried out.

10.4 All excavated trenches must be inspected by the HEM Team Officer prior to their backfilling.

11. Contractors Written Scheme of Investigation

11.1 In accordance with Standards and Guidance produced by the IFA this design brief should not be considered sufficient to enable the total execution of the project. A WSI is required therefore in order to provide the basis for a measurable standard and for submission by the developer to the Local Planning Authority for approval.

11.2 Archaeological contractors shall forward a WSI to the HEM Team of Essex County Council for validation prior to fieldwork commencing.

11.3 The involvement of the HEM Team shall be acknowledged in any report or publication generated by this project.

References

- Brown, N. and 2000 *Research and Archaeology: A Framework for the Eastern Counties 2.*
Glazebrook, J. *Research agenda and strategy.* East Anglian. Archaeol. Occ. Pap. 8

Gurney, D. 2003 *Standards for Field Archaeology in the East of England.* East Anglian.
Archaeol. Occ. Pap. 14

Medlycott, M. 2011 *Research and archaeology revisited: A revised framework for the East of England,* East Anglian Archaeol. Occ. Paper 24

For further information regarding the content of this brief and as part of our desire to provide a quality service, we would welcome any comments you may have on the content and presentation of this archaeological brief. Please address them to the author at the address below.

Teresa O'Connor
Historic Environment Management Team
Historic Environment Branch
County Hall
Chelmsford
CM1 1QH

Tel (01245) 437638
Mobile: 07786 125894
Email : teresa.oconnor@essex.gov.uk

Written Scheme of Investigation for Archaeological trial-trenching on land at Westrope Haulage Yard, Sturmer Road, Birdbrook, Braintree, Essex

**Planning applications: 11/01169/OUT
NGR: TL 70980 42788**

June 2012



COLCHESTER ARCHAEOLOGICAL TRUST,
ROMAN CIRCUS HOUSE, CIRCULAR ROAD NORTH,
COLCHESTER, ESSEX CO2 7GZ
tel: 07436273304
email: archaeologists@catuk.org

1 Introduction

- 1.1 This is a Written Scheme of Investigation (WSI) for archaeological trial-trenching on land at Westrope Haulage Yard, Sturmer Road, Birdbrook, Braintree, Essex. The work is to be carried out on behalf of Ray Chapman (ray@rcaconsulting.co.uk, 01621 860625) by the Colchester Archaeological Trust.
- 1.2 The proposal is for the erection of 2 new retail buildings, associated parking and new access onto Westrope Haulage Yard, Sturmer Road (TL 70980 42788).
- 1.3 The site lies within an area of archaeological potential with the possibility of features relating to the nearby Roman site, as well as to other archaeological periods, surviving within the proposed development area.
- 1.4 The site is approximately rectangular in shape and covers an area of c125m x 100m. It is bounded by the Sturmer Road in the south and lies adjacent to the River Stour in the north.
- 1.5 The site has previously had an industrial history and been used as a haulage yard for the last 50+ years. The northern part of the site was used as an orchard and allotment gardens until the 1990's. The site is currently hard landsurfaced with a mixture of concrete blocks and compacted gravel surface. There are industrial buildings and fuel bunds extant within the site.
- 1.6 A planning application (11/01169/OUT) was submitted to Braintree District Council in August 2011. The application is a hybrid application for redevelopment of site (in part) in two phases.
Phase 1: Full planning permission sought for the erection of 2 detached buildings for A1 (Retail), A2 (Financial & Professional services) and/or B1 (Business, including Offices, Research and Development and/or Light Industry) or any mix of uses thereof. Construction of new vehicular access from the A1017 Sturmer Road and formation of internal access road to serve application site and the existing Haulage business;
Phase 2: Outline planning permission sought for B1c (Light Industry), B2 (General Industrial) and/or B8 (Storage or Distribution) or any mix of uses thereof, with all matters except access thereto reserved for future determination.
- 1.7 Given the archaeological potential of the site, a full archaeological condition was recommended to be attached to the planning consent based on the advice given in Planning Policy Statement 5: Planning for the Historic Environment, the wording is as follows:
Recommendation: "*No development, or preliminary groundworks, of any kind shall take place until the applicant has secured the implementation of a programme of archaeological work and recording in accordance with a written scheme of investigation which has been submitted by the applicant, and approved by the planning authority.*"
- 1.8 Any variations to this WSI will be agreed beforehand with Essex County Council's Historic Environment Management team (HEM).

2 Archaeological background

This section is based on records held by The Essex Historic Environment Record (EHER).

The site lies within an area of considerable archaeological potential. A Roman cemetery (EHER 6964) was partially excavated in the 1860s immediately to the east of the site, and the discovery of human remains (EHER 6963) to the south of the site (at the road junction) in 1863 would suggest that the cemetery originally covered a large area, including the area of the proposed development. The skeletons are reported to have been "7 feet deep" with two urns and were positioned 'arm in arm, each clasping an urn, the right leg of one laid across the left leg of the other, the lower urn being placed between their hips'. Several other urns were discovered as well as further skeletons without urns. To the north of the site there are antiquarian reports of a 'Roman camp', which included a flint rubble wall and tower (EHER 6958-62). Whilst there are no above-ground remains of these extant, watching-briefs undertaken during the work associated with the extension of the Abberton reservoir at the adjacent waterworks have recorded numerous finds of Roman pottery and features indicative of an extensive settlement, as well as prehistoric worked flints and medieval and post-medieval finds.

In addition a former channel of the River Stour, complete with important palaeoenvironmental remains has also been recorded from the adjacent site and other palaeochannel and/or waterlogged deposits may exist within the development.

3 Aims

The specific aim of the investigation is to determine the presence or absence of archaeological deposits within the development area and to preserve, by record, any archaeological deposits that will be destroyed by the construction of the new buildings, access roads and other significant groundworks.

5 Methodology (Fig 1)

- 5.1 Trench 1 will be excavated within the area of the new road which is currently used as allotments (Fig 1). The trench will be located as close as possible to the field boundary (Fig 1). Trench 1 will be 10m long and the width of one machine bucket (1.6m) meaning that over 10% of the area is evaluated. This will compensate for the loss of trench length through the concrete bund in Building A.
- 5.2 A trench will be excavated within the footprint of Building A (Fig 2) which avoids the concrete bund currently supporting two large fuel tanks (Fig 1). Trench 3 is 'T-shaped' (one 5m length and one 20m length) and is located to the south of the concrete bund (Fig 1). Trench 3 is 17m long and NE-SW aligned and is located in Building A (Fig 2). Only one trench is being excavated in Building A so that access to the Haulage Yard can be maintained (Fig 1). Both trenches will be the width of one machine bucket (1.6m).
- 5.3 The area of the new access road located beyond the current site boundary will also be evaluated (Fig 1). Two trenches will be excavated in this area and have been located to try to cover the areas where human remains have been previously discovered. Trench 4 will be 17m long and its final location will be influenced by the presence of overhead power cables in this area. Trench 5 will be 20m long and is located in the area of the new road near to the A1017 (Fig 1 & 2). Both trenches will be 2m wide.
- 5.4 Specific attention will be paid to the possibility of Roman features and finds relating to the Roman site nearby, specifically the potential for deeply buried human remains and grave goods. Should human remains be discovered a site meeting will be required to determine possible mitigation measures. Where the access road is located upon current hardstanding and will not require excavation beyond the made ground horizon then no archaeological investigation is required.
- 5.5 All features and finds uncovered will be planned and excavation will be undertaken to achieve the aims set out in section 3. A report will then be prepared to inform any subsequent decision-making. It is possible if archaeological remains are recovered that open area excavation will be required which will be defined following a site meeting or that the layout of the development can be designed so as to avoid known areas of archaeological importance.
- 5.6 Where appropriate, modern overburden and any topsoil stripping/leveling will be performed using a mechanical excavator equipped with a toothless ditching bucket under the supervision and to the satisfaction of a professional archaeologist.
- 5.7 Where necessary, areas will be cleaned by hand to ensure the visibility of archaeological deposits.
- 5.8 Fast excavation techniques involving (for instance) picks, forks and mattocks will not be used on complex stratigraphy.
- 5.9 Individual records of excavated contexts, layers, features or deposits will be entered on pro-forma record sheets. Registers will be compiled of finds, small finds and soil samples.
- 5.10 All features and layers or other significant deposits will be planned, and their profiles or sections recorded. The normal scale will be site plans at 1:20 and sections at 1:10, unless circumstances indicate that other scales would be appropriate. The site will be located to the National Grid.
- 5.11 The photographic record will consist of general site shots, and shots of all archaeological features and deposits, a photographic scale (including north arrow) shall be included in the case of detailed photographs. Standard "record" shots of contexts will be taken on a digital camera. A photographic register should accompany

- the photographic record. This should detail as a minimum feature number, location, and direction of shot.
- 5.12 A metal detector will be used to check spoil heaps and any suitable strata, and the finds recovered. This will not normally be done on demonstrably modern strata.
- 5.13 The site boundary and features and site levels will be tied into Ordnance Datum.

6 General methodology

- 6.1 The relevant documents of the Institute for Archaeologists (IFA) will be followed, i.e. *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (2008a) and *Standard and Guidance for archaeological field evaluations* (2008b). Other guidelines followed are those published in EAA 3, EAA 8 and EAA 14.
- 6.2 A site code will be requested from HEM before fieldwork commences.
- 6.3 At the start of work an OASIS online record will be initiated and key fields completed on Details, Location and Creators forms.
- 6.4 All the latest Health and Safety guidelines must be followed on site. CAT has a standard health and safety policy, which will be adhered to (CAT 1999 updated 2008).

7 Finds

- 7.1 Should human remains be discovered the coroner will be informed and a licence from the Home Office sought immediately; both the client and the monitoring officer will also be informed.
- 7.2 Environmental sampling policy. CAT has an arrangement with Val Fryer at the University of East Anglia whereby any potentially rich environmental layers or features will be appropriately sampled as a matter of course, but only if they are datable. Any processing and reporting will be done by Val Fryer. If any complex or outstanding deposits are encountered VF will be asked onto site to advise. Helen Chappell of EH is available for further advice.
- 7.3 All finds of archaeological relevance will be retained. Policies for later disposal of any finds will be agreed with the HEM officer and the site owner.
- 7.4 All finds, where appropriate, will be washed.
- 7.5 A policy of marking for pottery and other finds will be agreed with Braintree Museum. Marking will include the site code and context number.
- 7.6 The site archive will be presented to Braintree Museum in accordance with their requirements.
- 7.7 All finds of potential treasure will be removed to a safe place, and the coroner informed immediately, in accordance with the rules of the Treasure Act 1996. The definition of treasure is given in pages 3-5 of the Code of Practice of the above act. This refers primarily to gold or silver objects.
- 7.8 Finds work will be to accepted professional standards as presented in *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (IFA 2008a).
- 7.9 A list of specialists available for consultation is given at the end of this WSI.

8 Results

- 8.1 The full report will be submitted within 4 months from the end of the fieldwork, with one hard copy, a PDF, and a photo disk supplied to the HEM Team. The report will contain both the results of the metal detector survey and the archaeological evaluation and more specifically;
- The aims and methods adopted in the course of the investigation.
 - Location plan of excavated areas and/or other fieldwork in relation to the proposed development. At least two corners of each trench will be given 10 figure grid references.
 - A section/s drawing showing depth of deposits including present ground level with Ordnance Datum, vertical and horizontal scale.
 - The discussion and conclusions will be made (where appropriate) with reference to the objectives outlined in *Research and Archaeology: A Framework for the Eastern Counties* (Brown, N. and Glazebrook, J. (eds.) 2000).

- Specialist reports
 - A concise non-technical summary of the project results.
 - Any relevant borehole logs and explanation from previous site investigation works
- 8.2 An EHER summary sheet will be completed within four weeks (copy attached with brief) and supplied to the HEM Team officer. This will be completed in digital form (copy can be emailed). This will include a plan showing the area of monitoring and excavation and the converted structures.
- 8.3 If, after discussion with HEM, the results are considered worthy of publication, a report (at least at a summary level) will be submitted to *Essex Archaeology and History*. An Oasis online form will be completed for submission to the EHER, which will include an uploaded .pdf version of the report.

9 Monitoring

- 9.1 The HEM Team of Essex County Council will be responsible for monitoring progress and standards throughout the project. This will include the fieldwork, reporting, and publication stages.
- 9.2 Notification of the start of work will be given to the HEM Team one week in advance of its commencement.
- 9.3 Any variations of the WSI shall be agreed with HEM Team before they are carried out.

10 Archive deposition

- 10.1 The full archive will be deposited at Braintree Museum within 2 months of completion of final publication report on the project, and confirmed to HEM.
- 10.2 Finds (and other retained materials) will be bagged and boxed in the manner recommended by Braintree Museum. The storage of the archive will accord with Braintree Museum's guidelines.
- 10.3 A summary of the contents of the archive shall be supplied to HEM at the time of deposition at the museum.
- 10.4 Plans will be presented on hanging strips to fit Braintree Museum's storage systems.
- 10.5 The photographic archive is to be presented as follows: original digital data on disk and hard copies of selected digital photos on high-quality paper, or as otherwise requested by Braintree Museum.

11 References

Brown, N and Glazenbrook, J.	2000	<i>Research and Archaeology: a frame work for the Eastern Counties 2 Research agenda and strategy</i> , East Anglian Archaeological, occasional papers 8 (EAA8)
Colchester Archaeological Trust	1999	<i>Policies and procedures</i> . 1999 (updated 2008)
Glazenbrook, J.	1997	<i>Research and Archaeology: a frame work for the Eastern Counties 1 resource assessment</i> , East Anglian Archaeological, occasional papers 3 (EAA3)
Gurney, D.	2003	<i>Standards for field archaeology in the East of England</i> East Anglian Archaeological, occasional papers 14 (EAA14)
IfA	2008a	<i>Standard and guidance for the collection, documentation, conservation and research of archaeological materials</i>
IfA O'Connor, T	2008b	<i>Standard and guidance for archaeological field evaluations. Archaeological trial-trenching on land at Westrope haulage yard, Sturmer Road, Birdbrook, Braintree</i> , HEM brief.
	2012	

Adam Wightman 11/06/12

Appendix - team structure and details

List of team members

Site supervision and Recording

Adam Wightman

Assistants

TBC

Finds consultants

Stephen Benfield (CAT): Prehistoric and Roman pottery
Joanna Bird (Guildford): Samian ware
Ernest Black (Colchester): Roman brick/tile
Howard Brooks (CAT): Medieval and Post-Medieval pottery
Dr Hilary Cool (Nottingham): Roman glass
Nina Crummy (Colchester): Small finds
Julie Curl: Human bone and large Animal bone assemblages
John Davis (Norwich Museum): Roman coins
Val Fryer (UEA/Loddon): Environmental remains
Helen Chappell (English Heritage): Regional Science Advisor
Hazel Martingell (Braintree): Lithics
Valerie Rigby (British Museum): LIA ceramics
Dr Paul Sealey (Colchester Museums): Roman Amphoras
Patricia Ryan (Chelmsford): Medieval and later brick and tile
Sue Tyler (ECC): Saxon Pottery.
Helen Walker (ECC): Saxon, Medieval and post-medieval pottery.
Adam Wightman (CAT): small animal bone and lithic assemblages

Graphics

Adam Wightman & Chris Lister

Report writing

Adam Wightman & Howard Brooks

Senior Site Staff

Adam Wightman BSc, MA

After graduating from the University of Sheffield in 2004 with a BSc Hons in Archaeology and Prehistory, Adam worked for CAT during the Roman Circus excavations at Colchester Garrison in 2004/5. He then went on to work for Cambridge Archaeological Unit before completing a Masters in the Archaeology of Human Origins at the University of Southampton where he focused on lithic and animal bone analysis. Since returning to CAT in 2006 Adam has carried out evaluations and excavations at the Great Dunmow Salesrooms, 143-147 High Street Maldon, Firstsite Newsite in Colchester town centre, and at 21 St Peters Street adjacent to Colchester's Roman wall. He now completes assessments and full reports on small assemblages of animal bone and lithics for CAT.

Finds Specialists

Stephen Benfield BA, Cert Archaeol (Oxon) (CAT) Prehistoric and Roman pottery

Steve's first involvement with Colchester archaeology was in 1985, working on a Manpower Services Commission sponsored project to assist in processing the enormous collection of Roman pottery from excavations in the town. He graduated from Reading University with a degree in archaeology and subsequently studied for his post-graduate Certificate in Archaeology at Oxford. Returning to CAT, he has since worked on many CAT projects at various supervisory and directorial positions, including the major projects at Stanway Iron Age burial site and Gosbecks Roman temple/theatre complex. Stephen has also, through much hands-on experience, built up a considerable working knowledge of LIA and Roman ceramics. He now completes ceramic assessments and full reports for CAT, drawing on the unrivalled catalogues provided by the standard Colchester works *Camulodunum* (Hawkes & Hull 1947), *Roman Colchester* (Hull 1958) and now *CAR 10*, and by examining the fabric series held at CAT headquarters.

Joanna Bird FSA (Guildford) Samian

Joanna is one of the country's top samian specialists. Among her large corpus of work is a contribution to the publication *Colchester Archaeological Report 10: Roman pottery from excavations in Colchester 1971-1986*.

Ernest Black (Colchester) Roman brick/tile

Ernest is a Colchester schoolteacher with a wide interest in archaeology and the classical world. In this sense, he is following in the footsteps of A.F. Hall, and Mike Corbishley who were also local schoolmasters. He has developed his specialism by large scale hands-on experience with Roman brick and tile, and has contributed to the *Arch J, CAR 6: Excavations at Culver Street, the Gilberd School, and other sites in Colchester 1971-1985*.

Howard Brooks BA, MIFA (CAT) Medieval and Post-Medieval pottery

Howard's involvement in Essex archaeology goes back to 1970 when he dug at Sheepen, Colchester with Rosalind Dunnett (now Niblett). He studied archaeology at the University of Wales, and graduated in 1975. He worked for Colchester Archaeological Trust between 1976 and 1981, and again in 1985, where he was involved at various levels of responsibility (up to Co-Director) in the excavation of deeply stratified urban remains in Roman Colchester and suburbs (Colchester Archaeological Report 3 [1994]). Between 1992 and 1995 he worked for Essex County Archaeology Section, first in directing the fieldwalking and excavation project at Stansted Airport (East Anglian Archaeology 107, 2004), and then in Development Control. Howard then left ECC to set up and run HBAS, the county's smallest contracting team, in which capacity he carried out over twenty field projects and wrote a dozen consultancy reports. He rejoined CAT in 1997. He regularly contributes to Essex Archaeology & History, and teaches University evening classes on archaeology.

Dr Hilary Cool FSA MIFA (Nottingham) Roman glass

Yet another graduate of the University of Wales, Hilary is now a freelance glass and finds specialist, and has written many reports on glass from Colchester sites, including contributions to *Colchester Archaeological Report 6: Excavations at Culver Street, the Gilberd School, and other sites in Colchester 1971-85*, and *Colchester Archaeological Report 9: Excavations on Roman and later cemeteries, churches and monastic sites in Colchester 1971-88* (1993). Among her major works is the internationally selling *Colchester Archaeological Report 8: Roman vessel glass from excavations in Colchester 1971-85*.

Nina Crummy (Colchester) Small finds

Nina first worked in the early 1970s as finds assistant on the major urban excavations in Colchester for the Colchester Excavation Committee (later the Trust). Over the next twenty years she built up an unrivalled working knowledge of small finds of all types. She has collaborated in most of the *Colchester Archaeological Reports*, and was principal author of the best-selling *Colchester Archaeological Reports* 2 (Roman small finds), 4 (*The coins from excavations in Colchester 1971-9*) and 5 (*The post-Roman small finds from excavations in Colchester 1971-85*). She recently worked for the Museum of London, and was instrumental in the recent transfer of and the massive improvement in accessibility to archaeological archives in London. She now works freelance on small finds reports for CAT, HBAS, and other bodies including Winchester Excavation Committee.

Julie Curl (Norfolk) Animal Bone

Julie has over 16 years of experience in archaeology and in particular finds for the Norfolk Archaeological Unit and Norfolk Museums Service. After many years working as both a bone specialist and in graphics for the NAU Julie has recently established her own freelance company Sylvanus in which she specialises in Archaeological and Natural History illustrations as well as being a freelance animal and human bone specialist. She has been producing faunal remains reports for many years and produces assessments and analysis reports for clients across the East Anglian region. She has her own extensive bone reference collection built up over many years. Her particular interests in faunal remains are animal husbandry and pathologies. She has also worked as a conservator, particularly on Pleistocene vertebrates and a wide variety of archaeology and natural history projects at the Norwich Castle Museum. Julie is also an extra-mural lecturer with the University of East Anglia, teaching Animal bones in Archaeology.

Dr John A Davies (Norwich Museum) Roman coins

John has, for some years, written reports on Roman coins from Colchester excavations. He specializes in barbarous radiates, and has contributed to *British Numismatic Journal* on that topic. Among his other publications is a contribution to *Colchester Archaeological Report 4: The coins from excavations in Colchester 1971-9*, and *CAR 9: Excavations on Roman and later cemeteries, churches and monastic sites in Colchester 1971-88* (1993).

Val Fryer (Norfolk) Environmental Archaeologist BA, MIFA

Val has fifteen years experience in environmental archaeology, working for English Heritage, County Units and independent archaeological bodies across the United Kingdom and Southern Ireland. She has published reports in East Anglian Archaeology (including occasional papers), Proceedings of the

Prehistoric Society, Medieval Archaeology and Norfolk Archaeology. Specialist work for various police authorities across England and Northern Ireland. Val is a Member of the Institute of Field Archaeologists with special accreditation for environmental archaeology and she is also a Member of the Association of Environmental Archaeologists.

Helen Chappell (English Heritage) Regional Science Advisor

Helen Chappell is English Heritage's Regional Science Advisor (RSA) for the East of England, providing regionally-based advice on all aspects of archaeological science: geophysics, scientific dating, hydrology, geoarchaeology, analysis of biological remains and technological residues, artifact analysis and conservation. RSAs give advice to a range of organizations and also produce good practice standards and guidelines. RSAs are all actively involved in research, and applying new methodologies to site investigation and management.

Hazel Martingell BA, FAAIS (Braintree): Lithics

Hazel has for many years worked as a lithics illustrator and specialist, undertaking work for The British Museum, ECC Field Archaeology Unit and for London and Cambridge Universities, to name but a few. Since 1987 she has been self-employed and has excavated at a Middle Stone Age site at Gorham's Cave, Gibraltar as well as writing and illustrating worked flint reports for CAT, ECC FAU, and the British Museum. Her impressive publication record includes reports on sites from around the globe. Closer to home she has published work in *Essex History and Archaeology*, The *East Anglian Archaeology* Monograph series, *Antiquity* and *British Museum Occasional Papers*. Hazel is a fellow of the Association of Archaeological Illustrators and Surveyors and a founder member of the Lithics Study Group, London.

Valerie Rigby (Hertfordshire) LIA ceramics

Formerly working for the British Museum, Val is one of the country's leading authorities on later prehistoric ceramics in general, and traded wares in particular. She has published widely. Her major work include *Baldock : the excavation of a Roman and pre-Roman settlement, 1968-72 (Britannia Monograph Series 7*, with Ian Stead). On a more local level, she has contributed to the magisterial *Colchester Archaeological Report 10: Roman pottery from excavations in Colchester 1971-88*, and to Ros Niblett's *Sheepen: an early Roman industrial site at Camulodunum* (CBA Research Report 57, 1985).

Patricia Ryan (Chelmsford) Medieval and later brick and tile

Pat has for many years been examining excavated collections of brick and tile from Essex sites, and contributing reports which are usually consigned to the gloomier parts of archive reports, or as footnotes in published texts. Her regular contributions to *Essex Archaeology & History*, therefore, under-represent the devoted study which Pat has put in over the years. Nobody knows more about local brick and tile, except for David Andrews, with whom she collaborated on significant sections of *Cressing Temple: A Templar and Hospitaller Manor in Essex* (1993).

Dr Paul Sealey (Colchester Museum) Amphoras

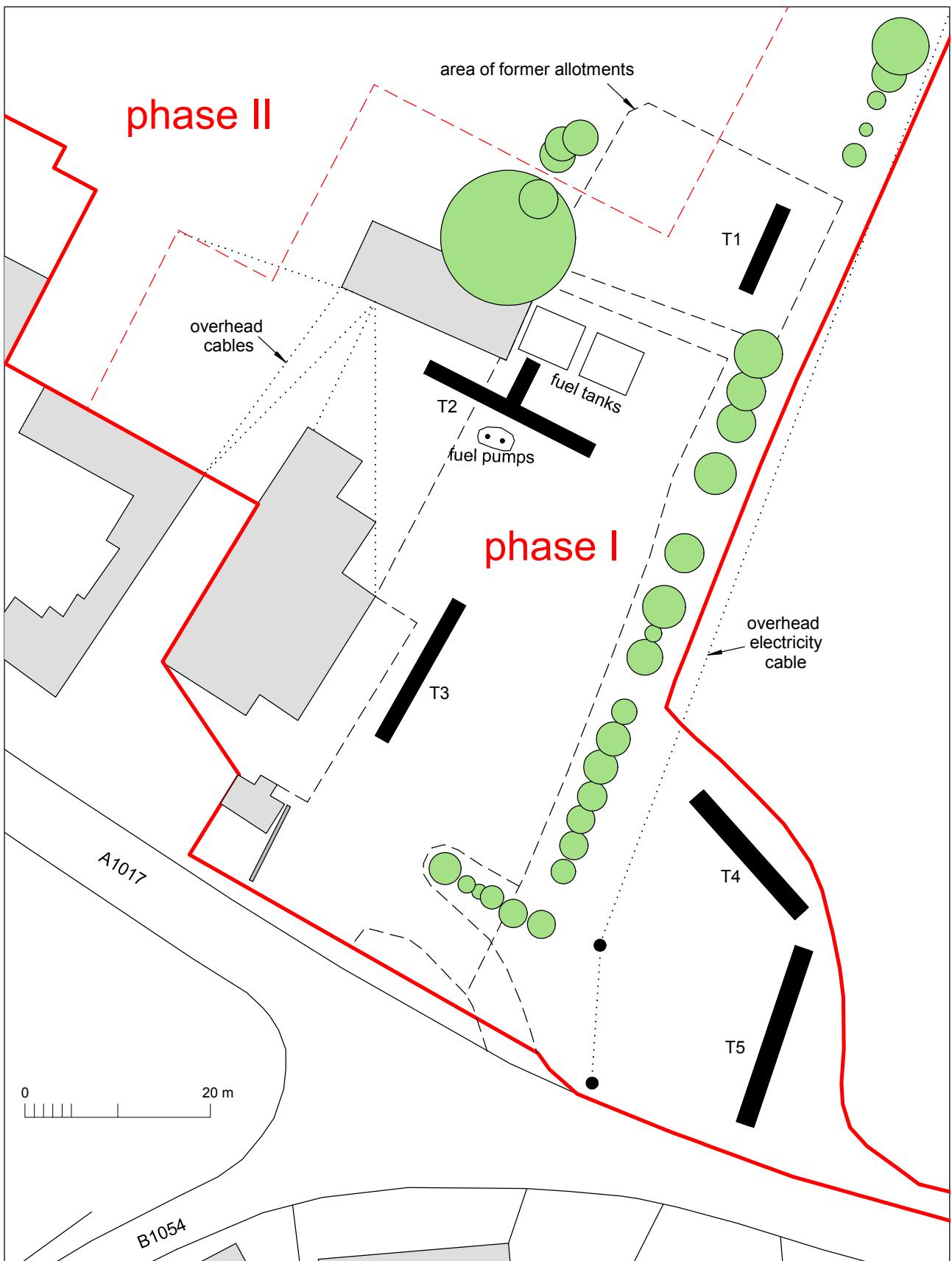
Paul has worked at Colchester Museum since the late 1970s. His PhD specialism was Roman amphoras, a topic on which he writes specialist reports. His main areas of interest are prehistory and the Roman period, and he has developed a familiarity with those periods and their ceramics. He has published widely. His major works include *Amphoras from the 1970 excavations at Colchester Sheepen* (BAR 142, 1985), contributions to Ros Niblett's *Sheepen: an early Roman industrial site at Camulodunum* (CBA Res Rep 57, 1985). He regularly contributes to *Essex Archaeology & History*.

Sue Tyler (ECC) Saxon Pottery

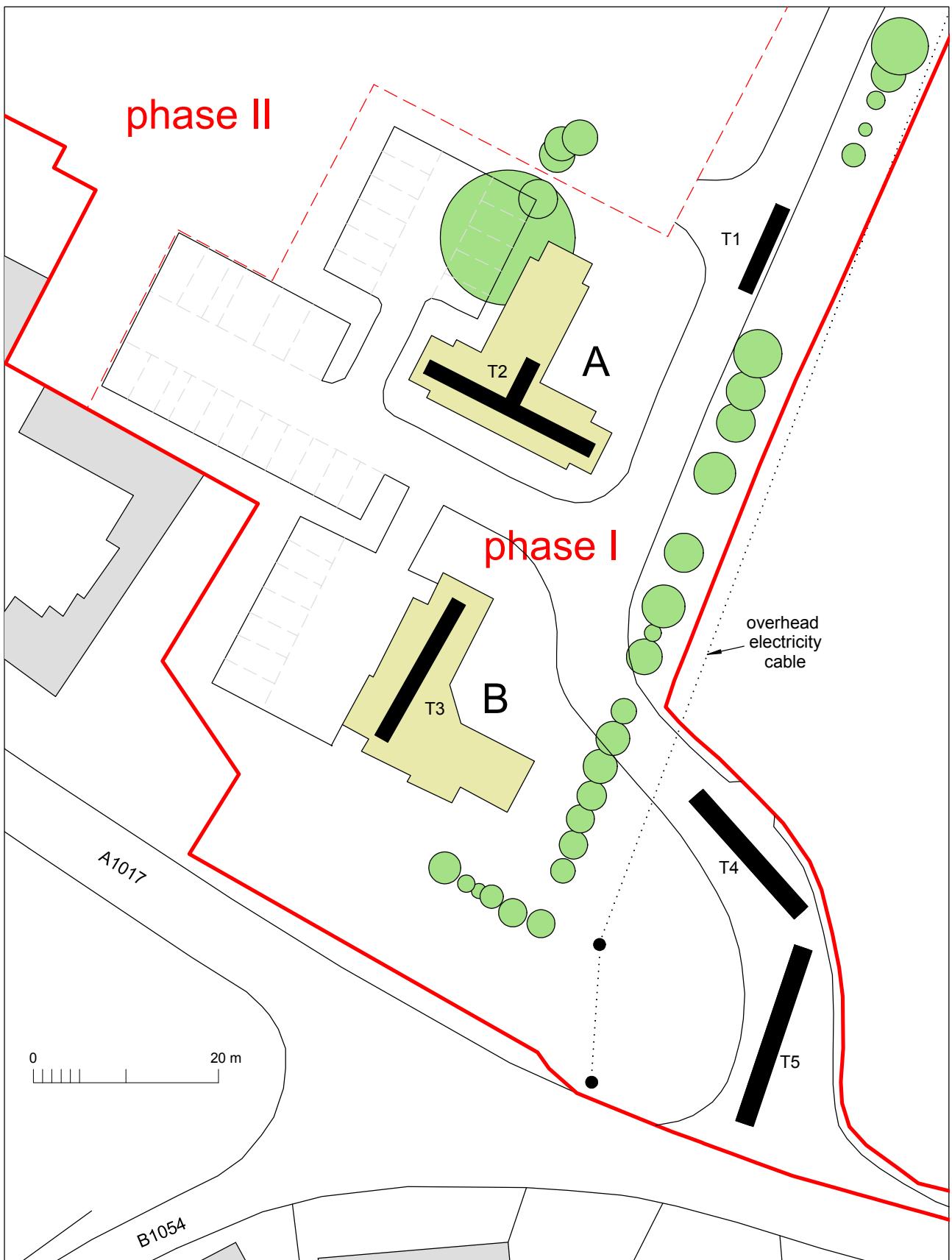
Sue is the County authority on Saxon material, especially pottery. She has had several spells working with Essex County Archaeology Section, interrupted by a late-1980s spell in Hertfordshire. She has written reports on Saxon material for many Essex Projects, and contributes regularly to *Essex Archaeology & History*, including the Anglo-Saxon cemetery at Prittlewell (*Essex Archaeol Hist* 19 (1988)).

Helen Walker BSc (ECC) Medieval and post-medieval pottery.

Helen is Essex County Council Field Archaeology Group's medieval and post-medieval pottery specialist. Before joining ECC in 1985, she worked on finds in Carmarthen, and for Hampshire CC on projects in Winchester. Since 1985, she has contributed reports on ceramics to many other projects in the county. A regular contributor to *Essex Archaeology & History*, her principal publications include reports on the Rayleigh kiln dump, and George Street and Church Street, Harwich (*Essex Archaeology & History*, 21 [1990]), and North Shoebury (*EAA* 75).



WSI Fig 1 Trial-trench locations in relation to the current site plan.



WSI Fig 2 Trial-trench locations in relation to the proposed development.