
ARCHAEOLOGICAL SOLUTIONS LTD

**MEGAZONE LASER CENTRE,
NEW WRITTLE STREET, CHELMSFORD,
ESSEX**

AN ARCHAEOLOGICAL EVALUATION

Authors: Lisa Smith (Fieldwork & Report) Peter Thompson (Archaeological Background) Kathren Henry (Graphics)	
NGR: TL 7075 0633	Report No: 4394
District: Chelmsford	Site Code: CF74
Approved: Claire Halpin MIfA	Project No: 5154
Signed:	Date: 29 August 2013

This report is confidential to the client. Archaeological Solutions Ltd accepts no responsibility or liability to any third party to whom this report, or any part of it, is made known. Any such party relies upon this report entirely at their own risk. No part of this report may be reproduced by any means without permission.

Archaeological Solutions is an independent archaeological contractor providing the services which satisfy all archaeological requirements of planning applications, including:

Desk-based assessments and environmental impact assessments
Historic building recording and appraisals
Trial trench evaluations
Geophysical surveys
Archaeological monitoring and recording
Archaeological excavations
Post excavation analysis
Promotion and outreach
Specialist analysis

ARCHAEOLOGICAL SOLUTIONS LTD

98-100 Fore Street, Hertford SG14 1AB
Tel 01992 558170

Unit 6, Brunel Business Court, Eastern Way,
Bury St Edmunds IP32 7AJ
Tel 01284 765210

e-mail info@ascontracts.co.uk
www.archaeologicalsolutions.co.uk



twitter.com/ArchaeologicalS



www.facebook.com/ArchaeologicalSolutions



**INVESTORS
IN PEOPLE**

Silver

CONTENTS

OASIS SUMMARY

SUMMARY

- 1 INTRODUCTION**
- 2 DESCRIPTION OF THE SITE**
- 3 TOPOGRAPHY AND GEOLOGY**
- 4 ARCHAEOLOGICAL & HISTORICAL BACKGROUND**
- 5 METHODOLOGY**
- 6 DESCRIPTION OF RESULTS**
- 7 CONFIDENCE RATING**
- 8 DEPOSIT MODEL**
- 9 DISCUSSION**
- 10 DEPOSITION OF ARCHIVE**

ACKNOWLEDGEMENTS

BIBLIOGRAPHY

WEB SITES

APPENDICES

- 1 CONCORDANCE OF FINDS**
- 2 SPECIALIST REPORTS**

OASIS SUMMARY SHEET

Project details			
Project name	<i>Megazone Laser Centre, New Writtle Street, Chelmsford, Essex. An archaeological evaluation</i>		
Summary <p><i>In August 2013 Archaeological Solutions (AS) conducted an archaeological evaluation at the Megazone Laser Centre, New Writtle Street, Chelmsford, Essex (NGR TL 7075 0633). The evaluation was undertaken in compliance with a planning condition attached to planning approval to demolish the existing building and erect seven houses with ancillary car parking, cycle storage and bin/recycling store (Chelmsford Planning Ref. 12/00884/FUL).</i></p> <p><i>After the demolition of the Megazone building the evaluation encountered a series of well-preserved Roman pits and ditches dating to the 2nd century AD which is consistent with the site's position within the south-western corner of the Roman town of Caesaromagus. There is evidence of modern truncation across site and therefore the full extent of preservation is unknown at this time.</i></p>			
Project dates (fieldwork)	21 st & 22 nd August 2013		
Previous work (Y/N/?)	N	Future work	Y
P. number	P5154	Site code	CF74
Type of project	<i>An archaeological evaluation</i>		
Site status	None		
Current land use	<i>Megazone Laser Centre</i>		
Planned development	<i>Residential</i>		
Main features (+dates)	<i>2nd century AD Roman pits and ditches</i>		
Significant finds(+dates)	<i>Roman assemblages of pottery, CBM, animal bone and environmental remains</i>		
Project location			
County/ District/ Parish	Essex	Chelmsford	Chelmsford
HER/ SMR for area	<i>Essex HER</i>		
Post code (if known)			
Area of site			
NGR	TL 7075 0633		
Height AOD (max/ min)	c.28m AOD		
Project creators			
Brief issued by	<i>Essex County Council HEM Team (Alison Bennett)</i>		
Project Supervisor	<i>Lisa Smith</i>		
Funded by	<i>NR Powell Dev Ltd</i>		
Full title	<i>Megazone, Laser Centre, New Writtle Street, Chelmsford, Essex. An archaeological evaluation</i>		
Authors	<i>Smith, L. and Thompson, P.</i>		
Report no.	4394		
Date (of report)	August 2013		

MEGAZONE LASER CENTRE, NEW WRITTLE STREET, CHELMSFORD, ESSEX

AN ARCHAEOLOGICAL EVALUATION

SUMMARY

In August 2013 Archaeological Solutions (AS) conducted an archaeological evaluation at the Megazone Laser Centre, New Writtle Street, Chelmsford, Essex (NGR TL 7075 0633). The evaluation was undertaken in compliance with a planning condition attached to planning approval to demolish the existing building and erect seven houses with ancillary car parking, cycle storage and bin/recycling store (Chelmsford Planning Ref. 12/00884/FUL).

After the demolition of the Megazone building the evaluation encountered a series of well-preserved Roman pits and ditches dating to the 2nd century AD which is consistent with the site's position within the south-western corner of the Roman town of Caesaromagus. There is evidence of modern truncation across site and therefore the full extent of preservation is unknown at this time.

1 INTRODUCTION

1.1 In August 2013 Archaeological Solutions Ltd (AS) carried out an archaeological evaluation on land at the Megazone Laser Centre, New Writtle Street, Chelmsford, Essex (TL 7075 0633; Figs.1 - 2). The evaluation was commissioned by NR Powell Dev Ltd and conducted in compliance with a planning condition attached to planning approval for the proposed demolition of the existing building and the construction of seven houses with ancillary car parking, cycle storage and bin/recycling store (Chelmsford Planning Ref. 12/00884/FUL), as advised by Essex County Council Historic Environment Branch (ECC HEM).

1.2 The evaluation was conducted in accordance with a brief issued by Essex County Council Historic Environment Branch (ECC HEM) (Alison Bennett dated December 2012), and a written scheme of investigation prepared by Archaeological Solutions (dated 08/01/2013), and approved by ECC HEM. The project adhered to appropriate sections of Gurney (2003) 'Standards for Field Archaeology in the East of England', *East Anglian Archaeology Occasional Paper 14*, and the Institute for Archaeologists' *Code of Conduct and Standard and Guidance for Archaeological Field Evaluation* (revised 2008).

1.3 The aims of the evaluation were to investigate the location, extent, date and character of any surviving archaeological remains liable to be threatened by the proposed development.

Planning policy context

1.4 The National Planning Policy Framework (NPPF 2012) states that those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest are heritage assets. The NPPF aims to deliver sustainable development by ensuring that policies and decisions that concern the historic environment recognise that heritage assets are a non-renewable resource, take account of the wider social, cultural, economic and environmental benefits of heritage conservation, and recognise that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. The NPPF requires applications to describe the significance of any heritage asset, including its setting that may be affected in proportion to the asset's importance and the potential impact of the proposal.

1.5 The NPPF aims to conserve England's heritage assets in a manner appropriate to their significance with substantial harm to designated heritage assets (i.e. listed buildings and scheduled monuments) only permitted in exceptional circumstances when the public benefit of a proposal outweighs the conservation of the asset. The effect of proposals on non-designated heritage assets must be balanced against the scale of loss and significance of the asset, but non-designated heritage assets of demonstrably equivalent significance may be considered subject to the same policies as those that are designated. The NPPF states that opportunities to capture evidence from the historic environment, to record and advance the understanding of heritage assets and to make this publicly available is a requirement of development management. This opportunity should be taken in a manner proportionate to the significance of a heritage asset and to impact of the proposal, particularly where a heritage asset is to be lost.

2 DESCRIPTION OF THE SITE

2.1 The site is located on the northern side of New Writtle Street, in the centre of Chelmsford. It comprises the site of the recently demolished former Megazone laser centre building and adjacent open area.

3 TOPOGRAPHY AND GEOLOGY

3.1 The site is situated at approximately 28m AOD at the base of a river valley, and is 500m south-west of the confluence of the rivers Can and Chelmer. The local soil is un-surveyed due to the urban setting. The town of Chelmsford is situated on the margin of the boulder clay plateau of north and west Essex. The drift geology of the site comprises Quaternary River Terrace Deposits of sandy gravels covered by a Quaternary Alluvium of silty clay that may also include layers of sand, silt, peat or basal gravel. The solid geology of the area is Eocene London Clay Formation.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

4.1 The site lies in an area of considerable archaeological potential, within the south western part of the Roman town of *Caesaromagus*, and there are 62 EHER points of all periods within 100m of the site. The development of the town of

Chelmsford is detailed by Medlycott (1999). The earliest evidence in the vicinity of the site comprises a group of prehistoric post-holes and a pit containing flint tempered pottery excavated at Godfrey's Yard some 100m to the south (EHER 5844). A large prehistoric mound of unknown function which contained Bronze Age or early Iron Age pottery was located beneath the Odeon Roundabout to the north-east (EHER 5864).

4.2 The Roman settlement of *Caesaromagus* probably developed after the establishment of a fort following the Boudiccan revolt of AD 60-61. Civilian settlement grew along the contemporary London to Colchester road (which shadows the course of present Moulsham Street adjacent to the Megazone site), and a more minor road leading south east to Heybridge and Wickford. Roman strip building has been identified fronting Moulsham Street approximately 100m to the south of the site (EHER 16137). The Roman town included a bath-house, a *mansio* (EHER 5834), and a temple precinct (EHER 5865). The site lies in the south western corner of the enclosed part of the Roman town. A possible section of the Roman town defensive ditch has been excavated close by to the south-west (EHER 5848), and another section a little further to the south (EHER 5851). Previous investigations on the site have revealed Roman finds including pottery and oyster shell that probably derived from a single rubbish pit of Trajanic date c. AD 110-130 (EHER 5858). Other Roman finds in the vicinity include a late 4th century boundary ditch at 17-18 Grove Road (EHER 17710), and two Roman burials at Godfreys Court (EHER 17758). Whilst there will certainly have been truncation from previous development on the site, other sites in the area, as illustrated above, have revealed surviving Roman horizons buried at depth, there is also a potential for roadside deposits associated with the medieval settlement at Chelmsford .

4.3 At the end of the Roman period the Roman town was abandoned and settlement was focused on rural estates in the surrounding area (Medlycott 1999, 26). New timber bridges were constructed over the Rivers Can and Chelmer in the early 12th century and the town of Chelmsford was re-founded by the Bishop of London to the north of the River Can, in the area of the modern High Street. Evidence for some of the earliest re-occupation in the vicinity of the site comes from 12th century ridge and furrow identified off Moulsham Street 80m to the south (EHER 5846). At 37 Moulsham Street 13th-14th century rubbish pits were identified (EHER 5888), and medieval pottery has been identified at other locations nearby (EHER 5943, 18463).

5 METHODOLOGY

5.1 A trench measuring approximately 20m was excavated along the axis of the proposed new buildings, following demolition of the existing building. The trench extended roughly parallel to New Writtle Street and was approximately 1.6m wide.

5.2 Due to site logistics and modern intervention the trench was divided into three sections and allocated A, B & C. A modern cellar excavated in the south-east corner of the site limited the length of the trench to 20m. A second cellar truncating the central portions of the trench (1B) and filled with made-ground was backfilled prior to the excavation of the eastern section of the trench (1C).

5.3 Undifferentiated overburden was removed under close archaeological supervision using a mechanical excavator fitted with a toothless ditching bucket. Thereafter, all further investigation was undertaken by hand. Exposed surfaces were cleaned as appropriate and examined for archaeological features and finds. Samples were taken from each of the features in order to examine the environmental evidence. Deposits were recorded using *pro forma* recording sheets, drawn to scale and photographed. Excavated spoil was checked for finds and the trenches were scanned by metal detector.

6 DESCRIPTION OF RESULTS (Fig. 3)

Trench 1A

Sample section 1A: South-West facing 0.00m = 28.15m AOD		DP1
0.00m–0.41m	L1000	Demolition layer. Greyish brown, loose, mixed brick/concrete rubble.
0.41m–0.86m	L1002	Layer. Mid greyish brown sandy silt layer.
0.86m+	L1003	Sandy silt natural. Light brownish yellow sandy silt.

Description: Trench 1 contained Ditch F1014 and Pit F1016 (DP 2 & 3).

Ditch F1014 (>1.56m x 1.48m x 0.51m) was linear in plan aligned NE/SW across the SE end of Trench 1A where it was cut by a modern wall. It had gradual stepped sides and a flattish base. It cut Pit/Well F1016. Its fill, L1015, was a dark brownish grey, friable, sandy silt with frequent charcoal and CBM flecks and occasional large rounded pebbles. It contained 11 sherds of Roman pottery (175g), CBM fragments (1066g) and animal bone (34g).

Pit F1016 (1.50m+ x 1.88m x >0.72m) was large and circular in plan. It had near vertical sides. It was excavated to a depth of 0.72m below the base of the trench though not fully excavated due to the safety reasons. It was cut on its eastern edge by Ditch F1014. It contained at least two fills. Its upper fill, L1017, was light brownish grey, firm, sandy silt. It contained 19 sherds of Roman pottery (141g), CBM (219g), animal bone (2g) and slag (20g). Its secondary fill (L1018) possibly lining the feature, was a dark brownish grey, friable, sandy silt with occasional charcoal flecks, CBM and small angular flints. No finds were present.

Trench 1B

Sample section 1B: South-East end, South-West facing 0.00m = 28.10m AOD		DP4
0.00m–0.18m	L1000	Demolition layer. As above.
0.18m–1.71m	L1001	Made-ground. Mixed yellowish brown-brownish grey, loose, sandy silt matrix with frequently-moderate brick, drainage pipe, glass etc.
1.71m+	L1003	Sandy silt natural. As above.

Description: This section of the trench was entirely truncated by a modern cellar backfilled with made-ground L1001. The natural was encountered at a depth of c.1.70m. No features or finds were present.

Trench 1C

<i>Sample section 1C: South-West facing 0.00m = 28.08m AOD</i>		<i>DP5</i>
0.00 – 0.34m	L1000	Demolition layer. As above.
0.34 – 0.79m	L1013	Layer. Mid greyish brown, friable, sandy silt layer with frequent charcoal, CBM flecks and moderate rounded pebbles and flint.
0.79m +	L1003	Sandy silt natural. As above.

Description: Trench 1 contained Pits F1004 and F1008 and Ditch F1010.

Pit F1004 (1.78m x 0.72m+ x 1.10m) was sub-rectangular in plan (DP6). It had near vertical sides and a flattish base. It contained three fills. Its upper fill, L1005, was a mid greyish brown sandy silt with frequent charcoal flecks, occasional rounded pebbles and angular flints. It contained large quantities of Roman pottery (1011g), CBM (563g), animal bone (655g) and oyster shell (59g). Its middle fill, L1006, was light brownish yellow, soft, silty sand with occasional angular flint and charcoal flecks. No finds were present. Its basal fill, L 1007, was a mid reddish brown, friable, sandy silt with mod charcoal and CBM flecks. It contained 22 sherds of Roman pottery (450g), CBM (424g), animal bone (349g), oyster shell (57g) and two iron objects (41g).

Pit F1008 (1.80m x 0.76m) was an irregular shape in plan with an upper fill (L1009) consisting of a mid brownish grey sandy silt with frequent flecks of charcoal and CBM. This feature was unexcavated during the evaluation.

Ditch F1010 (>1.60m x >1.80m x 0.46m) was linear in plan, orientated NE/SW across Trench 1C. It had moderately sloping sides and an irregular base and was cut ion its eastern edge by a modern cellar. It contained two fills, its upper fill, L1011, was a mid yellowish brown, friable, sandy silt with occasionally charcoal and CBM flecks. It contained no finds. Its basal fill (L1021) was mid brownish grey, friable, sandy silt with occasional charcoal and CBM flecks and angular flint gravel. It contained 6 sherds of Roman pottery (27g).

7 CONFIDENCE RATING

7.1 It is not felt that any factors restricted the identification of archaeological features or finds during the evaluation.

8 DEPOSIT MODEL

8.1 Modern rubble layer (L1000) was the uppermost layer within the trench resulting from the demolition of the former Megazone Laser Centre which until recently occupied the site. This layer varied in depth (up to 0.41m) and sealed a series of modern wall footings and services including two cellars also backfilled with modern material.

8.2 Despite modern intrusion a layer (L1002) consisting of a mid greyish brown sandy silt layer remains in tact in Trench 1A containing CBM (262g) and a residual sherd of Roman pottery (6g) and seals the Roman features. This is also the case in Trench 1C where Layer L1013, a mid greyish brown sandy silt with frequent charcoal, CBM flecks and moderate rounded pebbles and flint survives also sealing earlier features although this layer remains undated at present.

8.3 The sandy silt natural (L1003) was encountered at a depth of approximately 0.80m below the existing ground level. In central areas where truncated by a modern cellar it was seen at a depth of 1.71m.

9 DISCUSSION

9.1 Three pits (F1004, F1008, & F1016) and two ditches (F1010 & F1014) were identified in Trenches 1A-C. All features were well preserved sealed by layers L1002 and L1013 and produced finds dateable to the 2nd century AD (Roman).

9.2 The recently demolished building which once stood on the site had its origins in the 19th century and is depicted on early maps as a cinema before becoming the Megazone Laser centre. In light of this a certain impact was expected on below ground deposits and this was evident in the south-eastern corner of the site and in central areas of the trench (Trench 1B) where cellars relating to the building had inflicted severe truncation. The evaluation however did identify areas of preservation with Roman features sealed by a post-medieval layer which is consistent with the site's position within the south-western corner of the Roman town and its location to the west of Moulsham Street which follows the route of the old Roman road.

9.3 Overall the features contained a good quantity of well-preserved Roman pottery (95 sherds) dating to the second century AD. The assemblage included imported central Gaulish samian ware and east Gaulish fine ware beakers suggesting primary deposition from moderate to high status occupation in the south-western corner of Caesaromagus (Chelmsford) (Pottery Report below).

9.4 The environmental samples taken from the features revealed a limited amount of information due mainly to the narrow scope of the evaluation. A small quantity of grain was collected consistent with other Roman activity of this date (Environmental Report below).

9.5 The evaluation at the Megazone Laser Centre identified evidence of well-preserved 2nd century Roman occupation indicating that modern truncation of the site has not been total. The results signify that there is a strong possibility that the proposed development will impact on archaeological deposits.

10 DEPOSITION OF ARCHIVE

10.1 The requirements for archive storage will be agreed with Chelmsford Museum. The archive will be deposited within one month of the final publication report and confirmed with ECC HEM. A summary of the contents of the archive will be supplied to ECC HEM at the time of the deposition to the museum.

ACKNOWLEDGEMENTS

Archaeological Solutions Limited would like to thank Mr Norman Powell of NR Powell Dev Ltd for commissioning the evaluation and for his assistance.

AS is pleased to acknowledge the advice and input of Ms Alison Bennett of the Essex County Council Historic Environment Management Team.

BIBLIOGRAPHY

British Geological Survey 1991 *East Anglia Sheet 52°N-00° 1:250,000 Series Quaternary Geology*. Ordnance Survey, Southampton

CgMS, May 2012, *Archaeological Desk-based Assessment; Former Cinema Site, New Writtle Road*, Chelmsford, Essex

Gurney, D. 2003 *Standards for Field Archaeology in the East of England*. East Anglian Archaeology Occasional Paper no. 14

Institute of Field Archaeologists 1994 (revised 2008) *Standard and Guidance for Archaeological Evaluation*

Medlycott, M. 1999 Historic Towns in Essex, Chelmsford *English Heritage*

WEB SITES

Heritage Gateway
Unlocking Essex's Past

APPENDIX 1 CONCORDANCE OF FINDS

Feature	Context	Trench	Description	Spot Date	Pottery	CBM (g)	A.Bone (g)	Other
1002			Layer	Post-med	(1) 6g	262		
1004	1005	1C	Upper Fill of Pit	Mid-Late 2nd C AD	(36) 1011g	563	655	O. Shell - 59g
	1007		Basal Fill of Pit	2nd C AD	(22) 450g	424	349	O. Shell - 57g Fe. Frag (2) - 41g
1010	1012	1C	Fill of Ditch	2nd C AD	(6) 27g			
1014	1015	1A	Fill of Ditch	2nd C AD	(11) 175g	1066	34	
1016	1017	1A	Upper Fill of Pit	2nd C AD	(19) 141g	219	2	Slag - 20g

APPENDIX 2 SPECIALIST REPORTS

The Roman Pottery

Andrew Peachey MIfA

The trial trench evaluation recovered a total of 95 sherds (1810g) of Roman pottery (Table 1) that represents 2nd century AD activity, with a particularly diagnostic group contained in Pit F1004 including imported central Gaulish samian ware and east Gaulish fine ware beakers. The assemblage is very well-preserved with slight abrasion and fragmentation, suggesting primary deposition from moderate to high status occupation in the south-western corner of Caesaromagus (Chelmsford).

The pottery was quantified by sherd count and weight (g), with fabrics analysed at x20 magnification, and all data entered into a Microsoft Excel spreadsheet that forms part of the site archive. Where possible fabric and form types have been cross referenced with the type-series for Chelmsford (Going 1987). Samian ware forms reference Webster (1996). The pottery fabrics are described, below, and quantified (Table 1)

LEZ SA2	Lezoux samian ware 2 (Tomber & Dore 1998, 32)
MOS BS	Moselkeramik Black-slipped ware (Tomber & Dore 1998, 60; Going 1987, 5: fabric 9)
KOL CC	Cologne colour-coated ware (Tomber & Dore 1998, 57; Davies et al 1994, 131; Going 1987, 5: fabric 6)
BSW	Black-surfaced/Romanizing grey wares (Going 1987, 9.
COL WH	Colchester buff ware 1 (Going 1987, 7: fabric 27)
OXS	Oxidised (sandy) red ware, probably a Chelmsford product (Going 1987, 6: fabric 21)

Fabric	Sherd Count	Weight (g)	R.EVE
LEZ SA2	4	134	1.00
MOS BS	6	37	1.15
KOL CC	1	15	0.05
BSW	75	1578	0.00
COL WH	7	29	0.00
OXS	2	27	0.00
<i>Total</i>	<i>95</i>	<i>1810</i>	<i>1.20</i>

Table 1: Quantification of pottery

Pit F1004 (L1005 & L1007) contained a total of 58 sherds (1461g) of Roman pottery, including all the diagnostic rim sherds in the assemblage. These included the bulk of a LEZ SA2 Dr.33 conical cup and the base of a LEZ SA2 Dr.18/31R dish with a partial maker's stamp on the interior, which reads [...RIALI.]. This stamp is die 2a of Cerialis ii of Lezoux (Hartley & Dickinson 2009, 350), which was in use between c.AD135-165. Typically the dish form of Dr.18/31R declined after c.AD150, but the presence of a MOS BS beaker in this apparently homogenous group suggests it may be an example from late within this chronological range. The six sherds (37g) of MOS BS, probably manufactured at Trier (east Gaul/Germany) were not cross-joining but were all derived from a single folded beaker with rouletted band decoration (Symonds 1992, 49: group 35). This type of beaker was imported from the late 2nd century onwards, and although also attested at London and Colchester (i.e. Davies et al 1994, 120: vessels 1.129-130; Symonds & Wade 1999, 276: fig.5.37.3) is a rare occurrence in the corpus of pottery from Chelmsford (Going 1987, 5). The presence of east Gaulish imports is further reinforced in L1007, where the base of a KOL CC bag-shaped beaker with roughcast decoration is present, manufactured in Cologne and more typical of 2nd

century fine wares in Chelmsford. The bulk of the pottery in Pit F1004 is accounted for by two BSW jars, both substantially present. Both jars have ovoid bodies, offset necks and everted bead rims, corresponding to Going (1987) type G24 2.1, which is common throughout the 2nd to 4th centuries AD.

The remaining Roman pottery in Ditches F1010, F1014 and Pit F1016 appears contemporary with this 2nd century deposit and is largely consistent with the LEZ SA2 and BSW in Pit F1004, with the addition of occasional sherds of COL WH and OXS. Both the COL WH and OXS appear derived from flagons, with the body sherds appearing to be from globular vessels with bands of white painted decoration.

Overall this small group appears to indicate deposition in the final quarter of the 2nd century AD, corresponding with Phase 4 (c.AD160/175-200/210) in the sequence of pottery supply to Chelmsford (Going 1987, 108). The samian ware and east Gaulish fine ware drinking vessels suggest primary deposition resulting from urban occupation of considerable status, with comparable imported fabrics also a key component of a mid to late 2nd century AD pottery group recorded at Lynmouth Gardens (Peachey 2007, 93-95). Rubbish pits containing 2nd century AD pottery resulting from Roman domestic occupation are relatively common in the vicinity, notably on plots adjacent to Moulsham Street (i.e. Wallis 1988, Robertson 2005), as well as on Anchor Street (Germany 2009).

Bibliography

Davies, B., Richardson, B. & Tomber, R. 1994 *The archaeology of Roman London Volume 5: A dated corpus of early Roman pottery from the City of London*, CBA Res Rep 98

Germany, M. 2009 *8c Anchor Street, Chelmsford, Essex: Archaeological Investigation*. Essex County Council Field Archaeology Unit, Report 1816

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

Hartley, B. & Dickinson, B. 2009 *Names On Terra Sigillata: An Index of Makers' Stamps & Signatures on Gallo-Roman Terra Sigillata (Samian Ware): Vol. 52 (B to Cerotcus)*. Institute of Classical Studies, University of London.

Peachey, A. 2007 'The Pottery' in Nicholson, K. & Roberts, B. 'Roman deposits at Lynmouth Gardens/Parkway, Chelmsford; excavations 2003,' *Essex Archaeology and History* 38, 89-101

Robertson, A. 2005 '145-145A Moulsham Street, Chelmsford' Essex County Council Field Archaeology Unit

Symonds, R. 1992 *Rhenish Wares: Fine Dark Coloured Pottery from Gaul and Germany*. Oxford University Committee for Archaeology Monograph No.23

Symonds, R. & Wade, S. (eds) 1999 *Roman Pottery from Excavations in Colchester, 1971-86*; Colchester Arch. Rep. 10

Tomber, R. & Dore, J. 1998 *The National Roman Fabric Reference Collection*. Museum of London, London

Wallis, S. 1988 'On the outskirts of Roman Chelmsford: excavations at Lasts Garage, 1987,' *Essex Archaeology and History*. 19, 40 -46

Webster, P. 1996 *Roman Samian Pottery in Britain*; CBA Practical Handbook in Archaeology 13

The Ceramic Building Materials

Andrew Peachey MIfA

Trial-trench evaluation excavations recovered a total of 28 fragments (2534g) of CBM; the bulk of which comprised slightly abraded Roman CBM from pit and ditch features, with post-medieval peg tile also present in a single layer (Table 2).

CBM type	Fragment Count	Weight (g)
Roman Tegula roof tile	21	1457
Roman Imbrex roof tile	3	219
Roman Bessalis brick	1	563
Roman box flue tile	1	33
Post-medieval peg tile	2	262
<i>Total</i>	<i>28</i>	<i>2534</i>

Table 2: Quantification of CBM

The bulk of the Roman CBM: 16 fragments (1066g) was contained in Ditch F1014 (L1015), with further sparse fragments contained in Ditch F1016 (L1017) and Pit F1004 (L1005 & L1007). The Roman CBM occurred in a single fabric, almost certainly produced locally, which was oxidised orange with inclusions of common quartz (0.1-0.5mm), sparse red iron rich grains and flint (both 0.5-5mm). All three features contained flanged Tegula roof tile and ridged Imbrex roof tile, with the former the prevalent type. Ditch F1014 (L1015) also contained a single fragment of box flue tile, with a combed chevron key mark on one side, while Pit F1004 (L1005) contained a single fragment of 40mm thick Bessalis brick, which was probably used to form pilae in a hypocaust heating system, but may also have been used as a bonding course in a wall. The combination of CBM form types used for roofing and hypocaust heating systems suggests the presence of a substantial building of some status in the close vicinity, which is not unexpected given the location of the site in the south-western corner of urban Caesaromagus (Chelmsford).

Two fragments of post-medieval peg tile were also recovered from Layer L1002, and are likely the result of subsoil disturbance.

The Environmental Samples

Dr John Summers

Introduction

Four bulk soil samples were taken for environmental archaeological assessment during excavations at the site of Megazone, Chelmsford. All of the sampled features are spot dated to the 2nd century AD. This report presents the results from the assessment and discusses the significance and potential of any identified remains.

Methods

Samples were processed at the Archaeological Solutions Ltd facilities in Bury St. Edmunds using a Siraf style flotation tank. The light fractions were washed onto a mesh of 250µm (microns), while the heavy fractions were sieved to 500µm. The dried light fractions were scanned under a low power stereomicroscope (x10-x30 magnification). Botanical and molluscan remains were identified and recorded using a semi-quantitative scale (X = present; XX = common; XXX = abundant). Reference literature (Cappers *et al.* 2006; Jacomet 2006) and a reference collection of modern seeds was consulted where necessary. Potential contaminants, such as modern roots, seeds and invertebrate fauna were also recorded in order to gain an insight into possible disturbance of the deposits.

Results

The assessment data from the bulk sample light fractions are presented in Table 3.

Plant macrofossils

Charred plant macrofossils were present in two samples from contexts L1005 (F1004) and L1012 (F1011). Glume wheat grains (*Triticum dicoccum/ spelta*) and hulled twisted barley grains indicative of six-row barley (*Hordeum vulgare* var. *vulgare*) were both present in low densities. A small quantity of charcoal was present in L1005 but not enough to merit further comment.

Contaminants

Small quantities of modern rootlets and seeds were present in L1005, L1012 and L1017 but insufficient to indicate any significant biological disturbance of the deposits. Sample 3 from L1015 contained abundant elder (*Sambucus nigra*) seeds, demonstrating that modern plant material had become incorporated into this deposit.

Conclusions and statement of potential

The presence of glume wheat and hulled six-row barley is comparable to a wide range of other Roman sites in the region (e.g. Carruthers 2008; Murphy 2003). However, the low density of remains makes it impossible to further consider the relative significance of these crops at the site and the types of activity represented.

The low concentration of cereal remains in the four samples taken during the evaluation is indicative of scattered and wind-blown debris incorporated into open features. There is no indication in the present samples of any intensive use or processing of cereals in the immediate vicinity of the excavated features. As such, it is considered that the site represents limited potential for the further recovery of an analytically viable assemblage of carbonised plant remains.

References

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

Carruthers, W.J. 2008, 'Charred, mineralized and waterlogged plant remains', in Cooke, N., Brown, F. and Phillpotts, C. *From Hunter-Gatherers to Huntsmen: A History of the Stansted Landscape*, Framework Archaeology Monograph No. 2, Chapter 34 on CD

Jacomet, S. 2006, *Identification of Cereal Remains from Archaeological Sites* (2nd edn), Laboratory of Palinology and Palaeoecology, Basel University

Murphy, P. 2003, 'Botanical evidence', in Germany, M. *Excavations at Great Holts Farm, Boreham, Essex, 1992-4*, East Anglian Archaeology Report Number 105, Essex County Council, Chelmsford, 204-215

Site code	Sample number	Context	Feature	Feature type	Spot date	Volume (litres)	% processed	Cereals		Non-cereal taxa		Charcoal		Molluscs		Contaminants					Other remains
								Cereal grains	Cereal chaff	Notes		Charcoal>2mm	Notes	Molluscs	Notes	Roots	Molluscs	Modern seeds	Insects	Earthworm capsules	Animal bone (X)
CF74	1	1005	1004	Pit	mid-late 2nd C AD	30	66%	X	-	E/S (1), NFI (2)	5	X	-	-	-	X	-	X	-	-	-
CF74	2	1012	1011	Ditch	2nd C AD	10	100%	X	-	HTB (1), HB (1), NFI (1)	5	-	-	-	-	X	-	X	-	-	-
CF74	3	1015	1014	Ditch	2nd C AD	20	50%	-	-	-	-	-	-	-	-	X	-	XXX	-	-	-
CF74	4	1017	1016	Pit	2nd C AD	20	50%	-	-	-	-	-	-	-	-	X	-	X	-	-	-

Table 3: Results from the assessment of bulk sample light fractions from Sunnymead, Burnham Market. Abbreviations: HTB = hulled, twisted barley (*Hordeum vulgare* var. vulgare); HB = hulled barley (*Hordeum* sp.); E/s = emmer/ spelt wheat (*Triticum dicoccum/ spelta*); NFI = not formally identified (cereal indet.).

PHOTOGRAPHIC INDEX



DP1
Trench 1A. Looking South-East.



DP2
Ditch F1014 & F1016. Trench 1A. Looking North-East



DP3
Ditch F1014 & F1016. Trench 1A. Looking South-West



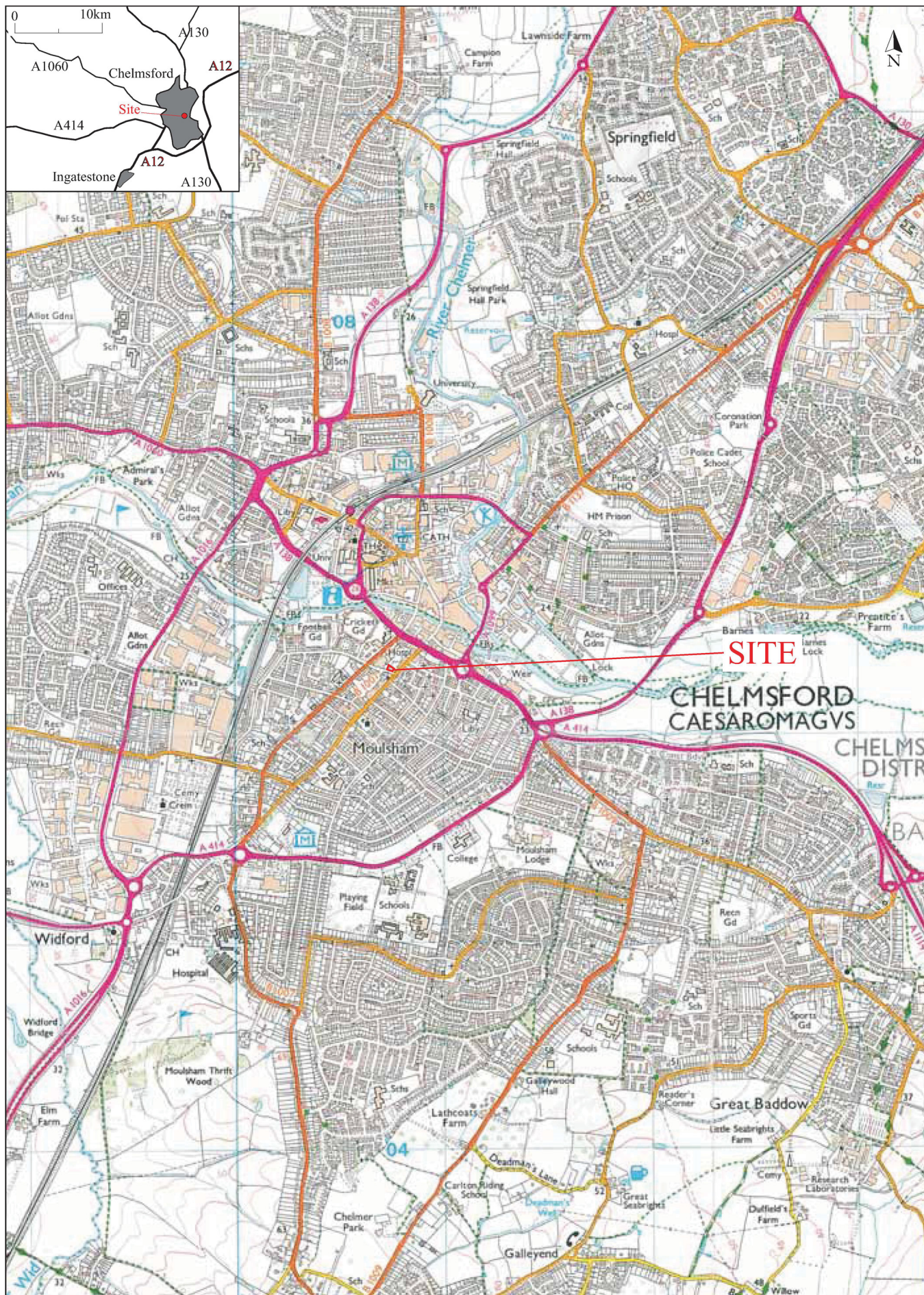
DP4
Trench 1B. Looking South-East.



DP5
Trench 1C. Looking South-East

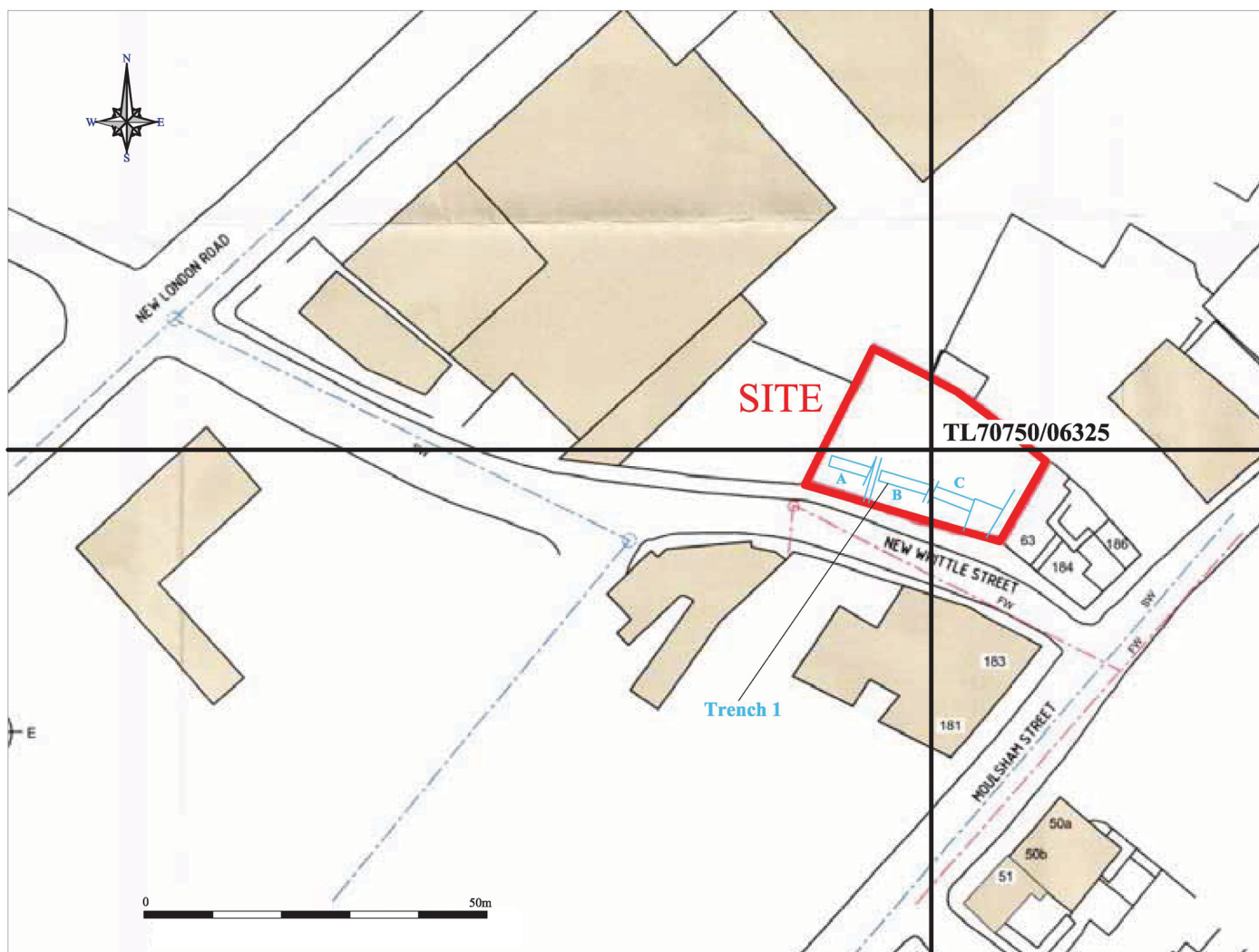


DP6
Pit L1004, Trench 1C. Looking North-East.

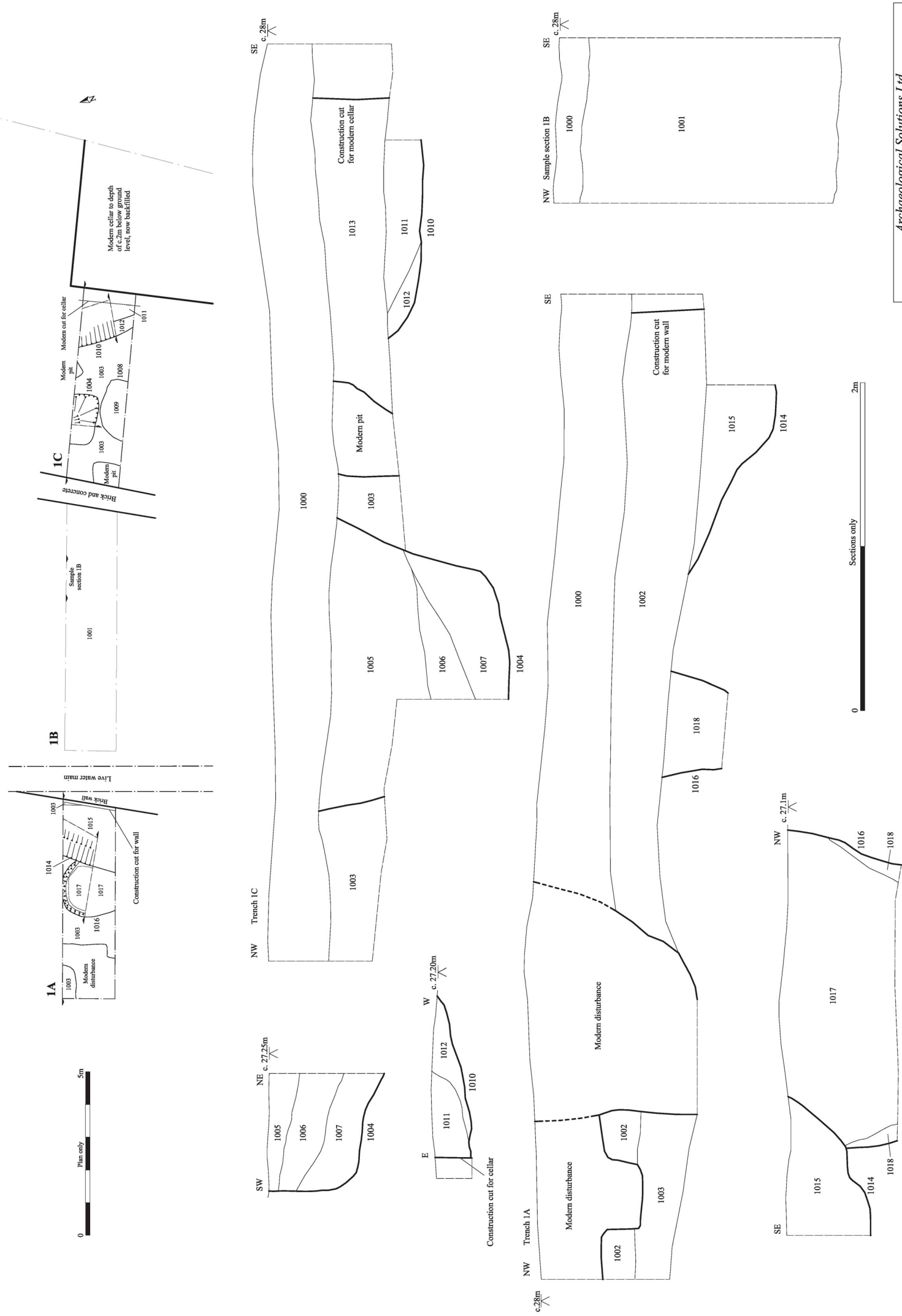


Reproduced from the 1999 Ordnance Survey 1:25000 map with the permission of Her Majesty's Stationery Office. © Crown copyright Archaeological Solutions Ltd Licence number 100036680

Archaeological Solutions Ltd
Fig. 1 Site location plan
 Scale 1:25,000 at A4



<i>Archaeological Solutions Ltd</i>
Fig. 2 Detailed site location plan
Scale 1:1000 at A4



Archaeological Solutions Ltd
Fig. 3 Trench plans and sections
Scale 1:100 and 1:20 at A3

