

**Assessment report on the  
archaeological investigations  
carried out on Areas C1, C2, E, J1, O, Q and S1  
of the Alienated Land, Colchester Garrison,  
including the Time Team trenches  
and the Alienated Land watching brief**

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**on behalf of  
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## **S Summary**

### **S.1 Project summary**

This is an assessment report on a series of evaluations, excavations and a watching brief carried out by the Colchester Archaeological Trust in association with RPS Planning Transport and Environment and on behalf of Taylor Woodrow, in 2004-2005, on Areas C1, C2, E, J1, O, Q and S1 ahead of the development of the Alienated Land at Colchester Garrison. This report also includes the Time Team trenches and the Alienated Land watching brief.

### **S.2 Previous archaeological work and this project**

Previous stages of archaeological work related to the project reported here consisted of a background study (Desk-Based Assessment or DBA), a fieldwalking survey, a geophysical survey, and the Stage 1a trial-trenching evaluation, all undertaken in 2002. These were conducted in support of full planning permission for the MoD's 'New Garrison' and outline planning permission for the 'Alienated Land' element (ie the redevelopment of the former military garrison sites). In 2003, Stage 2 excavations were carried out on behalf of RMPA and MoD on Areas 2, 6 and 10 ahead of the development of the New Garrison, Colchester Garrison. The evaluations, excavations and the watching brief described here are Stage 1b and Stage 2 of the equivalent and linked on-going archaeological project to mitigate the impacts of the Alienated Land project on behalf of Taylor Woodrow. All archaeological works were designed by RPS and were agreed by CBC ahead of commencement

### **S.3 Summary of location and areas evaluated/excavated**

*Area C1* – Area C1 was located within the angle of the crossroads between Flagstaff Road and Napier Road, to the west of Flagstaff House. The archaeological investigation of this area consisted of three evaluation trenches totalling 74m in length and an area excavation totalling 292m<sup>2</sup>.

*Area C2* – Area C2 was located within the angle of the crossroads between Napier Road and the Circular Road East, to the south of Flagstaff House. The archaeological investigation of this area consisted of three evaluation trenches totalling 70m in length and an area excavation totalling 1950m<sup>2</sup>.

*Area E* – Area E was located on a sports field to the west of Mersea Road and to the east of Circular Road East and the Abbey Field. The archaeological investigation of this area consisted of four evaluation trenches totalling 213m in length.

*Area J1* – Area J1 was located between Butt Road, Le Cateau Road, Circular Road North and the Cavalry Barracks. The archaeological investigation of this area consisted of 17 evaluation trenches totalling 581m in length and four area excavations totalling 8,565m<sup>2</sup>.

*Area O* – Area O was located on the south side of Circular Road South and the west side of what was Ypres Road (Ypres Road has now been removed to make way for the New Garrison redevelopment). The archaeological investigation of Area O consisted of one evaluation trench 50m in length.

*Area Q* – Area Q was located to the east of Berechurch Road, approximately 400m north of Roman Barracks and immediately to the north of Area 10 (excavated in 2003). The archaeological investigation of Area Q consisted of four evaluation trenches totalling 200m in length and an area excavation of approximately 1 ha.

*Area S1* – Area S1 was located on the north side of Berechurch Hall Road and to the east of the perimeter wire of Roman Barracks. The archaeological investigation of Area S1 consisted of five evaluation trenches totalling 159m in length.

*Time Team trenches* – Seven trial-trenches, funded by Channel Four's Time Team programme, were placed over the Roman circus. The trenches totalled 49m in length

*Watching brief* – A watching brief was carried out during service works along Circular Road East, Circular Road North, Le Cateau Road, Flagstaff Road, and Napier Road.

#### **S.4 Area C1**

Area C1 included the remains of a short section of a large Roman circus found across the Alienated Land development area. Other archaeological activity recorded from the site included a series of Late Neolithic features, three boundary ditches forming part of the Late Iron Age/early Roman field system, a Roman road, a post-medieval ditch and a number of modern/military features.

#### **S.5 Area C2**

Area C2 was dominated by a large late Roman cemetery and intercepted a short section of the remains of the large Roman circus found across the Alienated Land development area. Other archaeological activity recorded from the site included the remains of a single Late Neolithic pit, a Roman droveway/track, a number of post-medieval pits and some modern/military features.

#### **S.6 Area E**

Area E included a series of field boundary ditches and a Roman enclosure containing a small villa/farmstead. Other archaeological activity recorded from the site included the remains of a post-medieval ditch that may be associated with siegeworks constructed during the English Civil War.

#### **S.7 Area J1**

Area J1's northern area was dominated by a large Roman cemetery. The eastern area was dominated by the remains of the large Roman circus found across the Alienated Land development area, whilst a wide Roman road and smaller droveway were located in the southern area where a much smaller burial plot was also encountered. Other evidence included a small number of Late Bronze Age features, a series of post-medieval field boundary ditches and road, and a number of modern/military features.

#### **S.8 Area O**

Area O contained a single Roman field boundary ditch.

#### **S.9 Area Q**

Area Q was dominated by Late Iron Age/Roman field boundary ditches. Other evidence recorded from the site included a prehistoric 4-post structure, three Roman graves, three possible stake holes and two hearths.

#### **S.10 Area S1**

The archaeological investigation of Area S1 successfully located the ditch and rampart of Berechurch Dyke. A post-medieval ditch was also recorded during the investigation.

#### **S.11 Time Team trenches**

The Time Team trenches successfully located part of the walls of the Roman circus, the starting gates and the *spina*.

#### **S.12 Watching brief**

The trenches dug during the watching brief for a stormwater drain exposed three prehistoric pits, three sections of the Roman circus (which included two sections over the outer and inner *cavea* walls, an entrance and part of the *spina* comprising a probable monument base), a single Roman burial, several medieval robber trenches, and a number of post-medieval features.

### **S.13 Finds summary**

Finds varied across the areas of archaeological investigation.

*Areas C1, C2, J1, the Time Team trenches and the watching brief* – A large quantity of finds was recovered from these areas. The cemeteries/burials produced the most number of finds with large quantities of Roman pottery, coffin nails and small finds (in the form of burial goods). A large amount of building material was recovered from around the Roman circus, along with Roman and medieval pottery and a number of small finds (nails from the circus structure, part of a horse-harness and several hobnails). Finds from the Roman boundary ditches included pottery, building material, animal bone (especially cattle jaws) and small finds (including a hoard of silver coins).

*Areas E, O, Q, S1* – A much smaller quantity of finds was recovered from these areas. The majority of these features produced a small quantity of pottery along with some building material and small finds. The building and domestic material recovered from the Romanised building within Area E is of particular importance.

### **S.14 The excavations in the context of pre-*oppidum* activity**

Pre-*oppidum* activity was dominated by a series of features and finds dated to the Late Neolithic (Areas C1, C2, J1 and Q) and to the Late Bronze Age (Areas E, J1 and Q). These features appear to represent small-scale domestic activity which was mainly concentrated to the north of the Abbey Field on the ridge to the south of the town centre, with some activity further to the south.

### **S.15 The excavations in the context of the *oppidum***

The archaeological investigations were all within the *oppidum* territory as defined by the dyke system. In that respect, they have a direct bearing on the internal organisation of the *oppidum* and its landscape. Evidence for the dykes and the coaxial ditched landscape (field system) included:

*Area S1* – Berechurch Dyke was successfully located within Area S1.

*Area C1* – three boundary ditches were recorded within Area C1 which appear to date to the Late Iron Age or Early Roman field systems.

*Areas E, O and Q* – most of the ditches recorded within these areas dated to the Roman field system. Although it remains possible that the ditched boundaries recorded within Areas E, O and Q originated within the Late Iron Age and were subsequently re-dug within the Roman period, the strikingly low density of Late Iron Age pottery across the sites considered here may alternatively suggest that these areas remained largely forested until the early Roman period.

### **S.16 The excavations in the context of the hinterland of the Roman town**

All of the areas investigated were located within the hinterland of the Roman town. The immediate hinterland was used primarily as the location for a large Roman circus (Areas C1, C2 and J1, the Time Team trenches and the watching brief) and for a series of Roman cemeteries and burial plots (Areas C2 and J1 and the watching brief). The circus, the first to be confidently identified in Britain, and burials potentially associated with Germanic units of the Roman army, constitute a major advance of archaeological knowledge for Roman Britain. Further away from the centre of the town, the hinterland consisted mainly of agricultural fields (Areas C2, E, J1, O and Q) with some domestic activity (a single Roman 'villa' was recorded in Area E). A large Roman road was also recorded (Area J1) which appears to have led from the Roman town into the hinterland.

### **S.17 The excavations in the context of medieval activity**

Evidence for medieval activity was restricted to several robber trenches (and associated features) which had removed the walls of the Roman circus (Areas C1, C2, J1, the Time

Team trenches and the watching brief). During the medieval period, a number of building works within the town required a large amount of raw material. It was at this point that many surviving Roman structures were robbed of their building stone/brick/tile and the materials reused. This activity may be associated with the construction of St John's abbey whose precinct wall appears to partially overlay the central barrier of the circus.

**S.18 The excavations in the context of post-medieval activity**

Evidence for post-medieval activity included a series of field boundary ditches, a road and a number of isolated pits (Areas C1, C2, E, J1, Q and S1 and the watching brief). The most interesting post-medieval features are a ditch located within Area E and a road located in Area J1 West, both of which may be associated with the English Civil War.

**S.19 The excavations in the context of the military defences**

Several modern military features were recorded during the archaeological investigations. These included a number of air-raid shelters (Areas C2 and J1), communication trenches (Area C2), practice trenches (Area J1), pits (Areas C1, C2 and J1) and many foundations and service trenches associated with demolished military buildings (Areas C1, C2 and J1).

# **1 Introduction**

- 1.1 The Colchester Garrison Alienated Land proposal involves the redevelopment of 84ha of surplus land for residential development, with some mixed use community facilities and recreational/open space. The scheme is proceeding in concert with the construction of the New Garrison by RMPA, which is now well advanced. As new facilities become available the MoD will decant from the existing barracks, providing a phased release of previously occupied land for re-development by Taylor Woodrow. To date, Phases 1 and 2 (of the 5 phases) have been made available for archaeological investigation ahead of construction. This report is an assessment of the results of archaeological evaluation and subsequent mitigation excavations of these areas and has been prepared by the Colchester Archaeological Trust (CAT) in association with RPS on behalf of Taylor Woodrow. The fieldwork was conducted by CAT, managed by RPS, from May 2004 to January 2006.
- 1.2 This document details the main interim results of a series of archaeological evaluations, excavations and a watching brief undertaken in 2004-5 to mitigate the archaeological effects of construction on the Alienated Land at Colchester Garrison (formerly known as the ‘Urban Village’; Fig 1).
- 1.3 The strategy supporting the work reported here is fully laid out in the strategy proposal and research designs for the project (RPS and CAT 2004; RPS 2004). In addition, a series of site-specific written schemes of investigation were compiled by RPS in association with CAT. These documents are provided within Section 5.
- 1.4 The Colchester Garrison Alienated Land sites are located between 250m and 4km to the south of the modern town centre. The sites have been divided into 22 areas (Fig 1) for the purposes of present and future development. The areas closer to the town centre comprise plots which have historically formed the core of the garrison – barracks, offices and leisure facilities – distributed around the open ground of the Abbey Field. Areas further to the south, beyond Circular Road South, are largely open fields, although some also fall within built-up, formerly military, areas such as the Roman Barracks.
- 1.5 The Colchester Garrison occupies an extensive area on the eastern flank of a plateau capped with Pleistocene gravels, sands and clay/silt. The site overlooks the River Colne to the north and the Roman River to the south. These rivers meet to the south-east of the site, before entering the Blackwater and Colne estuary. The Garrison site is divided into northern and southern halves by a shallow east-west dry valley, followed today by Circular Road South, which slopes eastwards into the Colne valley. This valley drains eastward into the River Colne and is presently partly filled by the Bourne Lakes. The ridge to the north of this rises to over 100m, dominating the site of the Roman and medieval town which lies on a slightly lower ridge beside the river. The local drift geology is predominantly sands and gravel. This is occasionally in a clay matrix, and is capped by cover loam, around 0.4m in depth.
- 1.6 There has been a military garrison along the northern fringes of the site, adjoining the historic urban Colchester, since the late 18th century, although the current extent of the property is mainly the result of land acquisitions in the 19th and 20th centuries. Prior to the construction and expansion of the Garrison, with the exception of the restricted area of the historic suburb, the property had been largely rural in character, with agriculture the dominant form of historic land-use. The Alienated Land Developments are taking place within the context of a complete redevelopment of the Garrison on the largely open land to the south of the Circular Road South. This development is presently well underway and construction is expected to continue in this area for some years.

- 1.7 Virtually the entire Garrison forms part of a historic landscape dominated by the major Late Iron Age defended settlement (*oppidum*) of Camulodunum. The defences of the *oppidum* were formed by a series of dykes (monumental bank and ditch boundaries). The dyke marking the eastern side of Camulodunum, Berechurch Dyke, runs across the south-eastern part of the development, turning to the north-east well south of the town centre.
- 1.8 The area to the north of the dry valley adjoins the Roman legionary fortress and town of *Colonia Victricensis* and includes the remains of the medieval St John's abbey (Scheduled Ancient Monument). This part of the Garrison includes substantial portions of Colchester's Romano-British cemeteries and portions of the medieval suburbs which are largely ecclesiastical in character.
- 1.9 To the south of the valley, the land was rural until the 19th- and 20th-century expansion of Colchester Garrison. A short section of the Berechurch Dyke, the eastern defences of the Late Iron Age/early Romano-British *oppidum*, is included in this area. Extensive cropmarks and linear features indicate the presence of Late Iron Age and Romano-British fields and droveways, whilst previous investigations have also identified the remains of Romano-British buildings within the Kirkee McMunn Barracks (Shimmin 1988). Excavations carried out ahead of the present Garrison redevelopment (Brooks & Masefield 2005) have further clarified our understanding of this area, indicating a possible origin of the field-systems in the later part of the Middle Iron Age, and their development into an extensive network of field boundaries, stock pens and drove-ways in the Late Iron Age/early Roman period.
- 1.10 Prior to the commencement of the work described in this report, a total of 30 archaeological investigations and 88 watching briefs had been carried out by the Colchester Archaeological Trust at or within 300m of the Garrison site since 1965 (CAT Report 97, appendices 1 and 2; plus the excavation of Areas 2, 6 and 10, New Garrison, and three further watching briefs).
- 1.11 This assessment report has been structured in accordance with guidance published by English Heritage (Oliver 1996). It includes sections on methodology, results, finds, and assessment of potential of the data to contribute to the research aims and recommendations for further work.
- 1.12 The project was managed for CAT by Philip Crummy with fieldwork managed by Ben Holloway (Area C1 and C2 excavations, Areas E, J1, O, S1, the Time Team trenches and the watching brief), Kate Orr (Area C1 and C2 evaluations), and Mariusz Gorniak (Area Q), assisted by Chris Lister, Laura Pooley, Don Shimmin and Emma Spurgeon. RPS were present as overall Project Managers (Robert Masefield, Ken Whittaker and Charles Le Quesne) and as Principal Contractor under CDM regulations.

## **2 Archaeological strategy and previous archaeological work**

2.1 A staged programme of site investigations has previously been undertaken for each of the areas within the proposed development in support of the Colchester New Garrison *Composite environmental statement* (RPS 2002a). The 2002 archaeological investigations within the Alienated Land areas took place in the context of preparing a strategy for the redevelopment of the New Garrison sites. They were not intended to provide definitive information upon which further planning judgements could be made; rather, they were designed to inform the on-going process of planning and design. All areas required further evaluation up to the 3% overall level ahead of formulation of mitigation strategies. The previous works (evaluation Stage 1a) included a desk-based assessment, magnetometer (geophysical survey) and fieldwalking survey and a partial Stage 1a trial-trenching evaluation, as described below. All reports from these stages are listed in Table 1.

### **2.2 Desk-based assessment (DBA)**

2.2.1 The DBA was completed for both the New Garrison and Alienated Land areas and considered the entire site and adjoining areas. The assessment reviewed the extent, date, character, condition, interpretation, importance and quality of the surviving archaeological features or deposits that might be threatened by the overall development. The information presented in the DBA included the results of aerial photographic survey and numerous recent field evaluations, watching briefs and excavations carried out by CAT. The information provided a detailed understanding of the character of the archaeological remains likely to be affected by the development. This has enabled further stages of evaluation to be designed and targeted in the most appropriate and efficient way.

2.2.2 The results of the DBA are reported in *An archaeological desk-based assessment of the Colchester Garrison PFI site* (CAT Report 97).

### **2.3 Magnetometer and fieldwalking survey**

2.3.1 The detailed methodology for these surveys was described in *Colchester Garrison redevelopment: method statement and risk assessments for archaeological fieldwalking survey, geophysical survey, and evaluation trenching* (RPS/CAT 2002).

2.3.2 The geophysical survey was conducted by Bactec International within all available green fields, and also included trial surveys in a number of soft and hardstanding locations within the built-up areas. These tests demonstrated the limited potential for geophysical survey in areas affected by previous development.

2.3.3 The geophysical survey located the position of buried ferrous objects, which may be discarded munitions, and identified the location of possible buried archaeological features. The ferrous items could include archaeological artefacts.

2.3.4 The fieldwalking survey provided a quantified record of the distribution of artefacts exposed within the topsoil following ploughing. Basic statistical tests were used to identify concentrations which might indicate areas of archaeological potential.

2.3.5 The result of the geophysical and fieldwalking surveys are reported in *An archaeological evaluation by fieldwalking and geophysical survey at Colchester Garrison PFI site, Colchester, Essex* (CAT Report 184). These results are considered in the context of further information on cropmarks shown on archive aerial photographs.

2.3.6 RPS carefully considered both the geophysical and fieldwalking data in drafting proposals for trial-trenching. Trial-trenches were positioned to check possible archaeological features and potentially significant artefact distributions, and to validate and extend the non-intrusive geophysics and fieldwalking survey results. Because there was a significant Health and Safety risk associated with unexploded munitions, archaeological trenches were located to avoid ferrous items. Trench positions targeted possible archaeological features where possible.

## 2.4 Trial-trenching evaluation

2.4.1 A detailed methodology is described in *Colchester Garrison redevelopment: method statement and risk assessments for archaeological fieldwalking survey, geophysical survey, and evaluation trenching* (RPS/CAT 2002). The works were also designed in compliance with the *Colchester Garrison PFI archaeological project Health and Safety plan* (RPS 2002b).

2.4.2 The first stage of trial-trenching (Stage 1a) in 2002 involved the excavation of 74 trenches in Areas A1, B1a, B1b, H, J1, J2, L, N, O, Q, S1 and S2 North. This came to a total of approximately 1,970m of trenching, representing, in most cases, less than 1% of the proposed Alienated Land development areas.

2.4.3 The second stage of trial-trenching (Stage 1b), of which this assessment is a part, involves further trenches in some designated areas.

2.4.4 The full results of the 2002 evaluations are reported in a series of Colchester Archaeological Trust technical papers set out below (see Table 1).

Organisation	Date	Title
Colchester Archaeological Trust	2000	CAT Report 97: An archaeological desk-based assessment of the Colchester Garrison PFI site
Colchester Archaeological Trust	May 2002	CAT Report 184: An archaeological evaluation by fieldwalking and geophysical survey at Colchester Garrison PFI site, Colchester, Essex
Colchester Archaeological Trust	July 2002	CAT Report 203: An archaeological evaluation by trial-trenching on Areas E and F at Colchester Garrison PFI site, Colchester, Essex
Colchester Archaeological Trust	August 2002	CAT Report 205: An archaeological evaluation by trial-trenching on Area KR at Colchester Garrison PFI site, Colchester, Essex
Colchester Archaeological Trust	August 2002	CAT Report 206: An archaeological evaluation by trial-trenching in Areas A, B, D, GJ, H, J, N, V and YP of the Colchester Garrison PFI site, June-July 2002
Colchester Archaeological Trust	September 2002	CAT Report 207: An archaeological evaluation by trial-trenching on Areas DR, G, M, P, Q, R, RO, S, and T at Colchester Garrison PFI site Colchester, Essex: May-September 2002

Table 1 Stage 1a survey and evaluation technical reports.

### **3 Archaeological background**

- 3.1 The archaeological background of the Colchester Garrison area prior to the Garrison PFI project has been comprehensively discussed in the DBA (CAT Report 97).
- 3.2 The surveys and evaluations described in section 2 (above) have added to the background discussed in the desk-based assessment and have revealed a detailed sequence and pattern of archaeological remains.
- 3.3 The archaeological phases previously identified on the site of Colchester Garrison cover a 6000-year timescale during which cultural activity had a significant impact on the landscape.
- 3.4 Several phases or sub-phases of archaeology have been tentatively identified extending across the Alienated Land. These phases/sub-phases represent events spanning the Neolithic to the present:
- Pre-oppidum*
    - Late Neolithic-Middle Bronze Age possible funerary landscape
    - Late Bronze Age-Middle Iron Age agricultural landscape
  - Late Iron Age oppidum*
    - Late Iron Age/Roman farm and coaxial field system
    - Berechurch Dyke
  - Hinterland and suburbs of the Roman town*
    - Romano-British cemeteries
    - settlement and roads
  - Anglo-Saxon, medieval and post-medieval activity*
    - Anglo-Saxon church and burials
    - medieval abbey and burials
    - Civil War defences
  - Colchester Garrison*
    - nineteenth-century buildings
    - twentieth-century military activities at Colchester Garrison, including World War I and II military training and defence
- 3.5 The following section considers the evidence for these phases/sub-phases and includes a table referencing the relevant baseline data. The references are based on the archive references which can be identified either by UAD number (Urban Archaeological Database held at Colchester Borough Council), by DBA number, or by feature number (in the case of the 2002 evaluations).

#### **3.6 Pre-oppidum**

##### **3.6.1 Late Neolithic-Middle Bronze Age possible funerary landscape**

Area	Reference number	Feature	Artefacts
A1	AF301	Pit	Grog-tempered pottery: MBA+
B2	UAD ref. 3019/CAT excavation 1972, F70; CAR 9, 205	Pit	Neolithic blade
B1a	UAD ref. 1249	?burial pit	Late Neolithic/Early Bronze Age beaker
J1	UAD ref. 1247	?burial pit	2 Middle Bronze Age food vessels

Table 2 Neolithic-Middle Bronze Age features.

Evidence for early prehistoric activity at the Garrison site is notably sparse and there is a very low incidence of the ubiquitous flint tools and flakes associated with Mesolithic, Neolithic and Early Bronze Age activities. The blade found at the north-eastern corner of the St John's abbey precinct is, therefore, probably best understood as an isolated stray find.

The pottery vessels found in Areas J1 and B1a are likely to have been associated with cremations. This raises the possibility that the east-west ridge on which the older garrison buildings lie might have developed a tradition as a place of burial before the Late Iron Age. If so, burial monuments or markers of some kind, such as ring-ditches and burial mounds, may have been constructed.

### 3.6.2 Late Bronze Age-Middle Iron Age agricultural landscape

Area	Reference number	Feature	Artefacts
B2	UAD ref. 3019/CAT excavation 1972, F19 and F20; <i>CAR 9</i> , 205	Pits	Late Bronze/Early Iron Age pottery
J1	JF102	Pit	Late Bronze/Early Iron Age pottery
Q	QF106 QF204, QF306	Ditch terminal Ditch	Late Bronze/Early Iron Age pottery In Trench 1 Ditch, possibly contemporary with QF106 (above), in Trenches 2 and 3
S2 North	SF401 SF502, 503 SF604	Ditch terminal Ditch, pit Pit	Residual Early Iron Age sherds, residual flint and Roman brick in Trench 4 Ditch containing prehistoric sherds and a pit with residual LBA/EIA and Roman pottery in Trench 6 LBA+ sherds, burnt flint and Late Iron Age sherds

Table 3 Late Bronze Age/Iron Age settlement.

Evidence from excavations and evaluation trenches in the area of the New Garrison development, to the south of Circular Road South, has suggested that there was rural settlement in the area going back as far as the early first millennium BC. There were indications that the extensive Late Iron Age/early Roman agricultural landscape enclosed by the Camulodunum dykes had its origins in the final stages of the Middle Iron Age. In particular, the excavations at New Garrison 'Area 2', south of the former Officers' Married Quarters on Ypres Road, revealed the existence of a Middle Iron Age ditched settlement enclosure, probably dating to *c* 75-25 BC (Brooks & Masefield 2004, p 20). In Alienated Land Area Q, approximately 250m to the south-east of this enclosure, evaluation trenches located at least one and possibly more ditched boundaries containing Late Bronze Age/Early Iron Age pottery. There were also clear indications of activity of Early-Middle Iron Age date between Berechurch Road, the Roman Barracks and eastwards into Area S2 North, where a series of features produced Late Bronze/Early Iron Age pottery. There was, prior to the surveys undertaken here, significantly less material of this date known from the Alienated Land sites in the northern part of the Garrison, with only occasional finds of fragmentary pottery indicating activity of this date.

## 3.7 Late Iron Age *oppidum*

### 3.7.1 Late Iron Age/Roman farm and coaxial field system

Area	Reference number	Feature	Details
Q	QF101, 102, 106	Ditches and pit	Indeterminate prehistoric and Early Iron Age pottery form Eval Trench 1
	QF204, 306, 305	Ditches and pit	Probable Iron Age boundary ditch as seen in Eval. Trenches 2 and 3
S1	SF1101	Ditch	Late Iron Age/ Roman pottery in ditch found in Eval Trench 11
	SF1003	Ditch	Possible continuation of ditch SF 1101 (see above) in Trench 12
S2 North	SF401	Ditch terminal	Early Iron Age sherds, residual flint and Roman brick in Trench 4
	SF502, 503	Ditch, pit	Ditch containing prehistoric sherds and a pit with residual LBA/EIA and Roman pottery in Trench 6

Table 4 Late Iron Age/Roman field systems.

Evidence of the Late Iron Age and Roman field systems, enclosures, droveways and buildings has been plentiful in the area to the south of Circular Road South. It is quite clear from plots of cropmarks and parchmarks in this southern area that the field system extended into Alienated Land Area Q, including two Roman droveways that were investigated by the excavations in New Garrison ‘Area 10’. Further Stage 1b evaluation trenches in Area Q have confirmed this, although at least some of the features examined dated back to the earlier Iron Age. Cropmarks have also been observed in Area S1 to the east of Roman Barracks, immediately east of the line of Berechurch Dyke (see below), although they are not obviously associated with either the dyke or the landscape to the west. Two of these boundary ditches produced material indicating a Late Iron Age/Roman date.

### 3.7.2 Berechurch Dyke

Area	Reference Number	Feature	Artefacts
S1, S2 North and S2 South	SAM no 10	Berechurch Dyke	Late Iron Age/early Romano-British (south of proposal site)

Table 5 Berechurch Dyke.

The defensive linear dyke on the east edge of Roman Barracks is known as Berechurch Dyke. This dyke is currently thought to demark the eastern extent of the *oppidum*. Some parts of the Berechurch Dyke, where the earthwork bank survives extant, are designated as a Scheduled Ancient Monument. However, the length that passes through the Garrison is thought to consist only of the silted ditch and is therefore not scheduled. No excavations had taken place along this particular length of the dyke until the present project.

## 3.8 Hinterland and suburbs of the Roman town

### 3.8.1 Romano-British cemeteries

Area	Reference number	Feature	Details
A1	UAD ref. 1057; UAD ref. 1080; AF1002	Coffin burial Cremations Burial	Lead coffin Cremation vessels Inhumation
B2	UAD ref. 3019	Burials	34 Roman inhumations found at a depth of 1m+
B1	UAD ref. 1197	Burial	Burial marked on 1882 map
C2	UAD ref. 10 UAD ref. 1069	Burials Burial	Inhumations with beakers and flagons Cremation urn
E	UAD ref.s 1110 and 1098	Burials	Reports of extensive cremation cemetery
H	UAD ref. 1033	Possible tomb	Roman foundations, perhaps a tomb
J1	UAD ref. 1022	Burial	Cremation urn

	UAD ref. 1023 UAD ref. 1095 JF106-108	Burial Burial Burials	Cremation urn Burial shown on 1888 map Inhumation and cremation burial in Eval. Trench J1
	JF605-606, 608-609, 616 JF803	Structures: mausoleum? Pit	Eval. Trench J6 Eval. Trench J8
O	UAD ref. 1073	Burials	Burials found when huts built immediately north of Circular Road South
	UAD ref. 1055	Burials	Three inhumations including a lead coffin

Table 6 Romano-British funerary activity.

The presence of the Roman cemeteries was archaeologically the most significant predictable resource on the Alienated Land sites, particularly due to their propensity to contain a substantial number of burials. It is well-known that the area south and south-west of the Roman town was the main focus for Late Iron Age and Roman period burial (*CAR 9*). This area of the Garrison has been less-explored and probably less-disturbed than the heavily-urbanised Victorian suburbs south of Lexden Road and north-west of Butt Road, where many hundreds of inhumations and cremations have been recovered (see CAT Report 97, map 4). One result of this was that the distribution and character of the burials within the historic area of the Garrison was less well-understood than elsewhere. However, enough was known prior to this project, in particular as a result of the excavations on the sports ground at the Abbey Field, to demonstrate that extensive Roman cemeteries exist in this area (CAT Report 138).

It is also clear that the distribution of burials is uneven. Where they are encountered – as at the Abbey Field sports ground or in the north-western and north-eastern parts of the Le Cateau Barracks – they occur in dense clusters of cremations and/or inhumations. But there are clear gaps. No burials are known from the Cavalry Barracks or Goojerat Barracks; they have only been recorded on the western fringe of the Meeanee Barracks; and there are no recorded burials from all but the north-eastern corner of the Flagstaff House site. While gaps are apparent in these areas closer to the town, equally there seem to be outlying groups of burials well to the south, such as those found around the Sobraon Barracks, including a group on Somme Road which are the furthest south of the known burials.

The funerary sites, prior to the present investigations, were characterised primarily by cremations in jars, normally of 1st- to 3rd-century AD date, and/or inhumations dating to the 3rd-4th centuries AD. Wherever significant areas have been excavated, such as in the Abbey Field sports ground or at the Butt Road cemetery (*CAR 9*, 4-163), the cemeteries have been divided into rectilinear plots, very probably relating to family groups. While most inhumations seem to have been buried in wooden coffins, as indicated by the presence of nails, a significant number were buried in lead or lead-lined coffins. Stone coffins have also been found but are more rare. Inscribed and carved funerary stone monuments have been found in the concentration of burials around Colchester Royal Grammar School and Essex County Hospital, again to the north-west of the Garrison.

### 3.8.2 Roman settlement and roads

Area	Reference number	Feature	Details
A1	AF1001	Ditch	Redeposited Roman building materials: brick, tile and septaria
B2	UAD ref. 1122	Stray find	Pipeclay model of figure in a bed
B1a	BF106-107, 109 BF203-203, 206	Pits 2 ditches, pit	Features containing Roman pottery in Eval Trench B1 Features containing Roman pottery in Eval Trench B1
B1b	DBA ref. 10 BF605/613	Pits Pit	Roman tile, pottery, oyster and animal bone 2nd-century Roman pottery, brick, tile, septaria and tessera

## Table 7 Roman settlement.

Despite the high concentration of burials in the area to the south and south-west of the Roman walled town, there is also substantial evidence for non-funerary activity in the area. A number of kilns have been found, although not within any of the Alienated Land sites, including a tile kiln found during the construction of the NAAFI Club to the west of Area C2. There are also signs of significant settlement, much of which has been discovered recently during evaluation trenching on the Garrison site. Around the former St John's abbey precinct were a series of finds (in Alienated Land Areas A1, B1a, B1b and B2), including robbed walls, metallised surfaces, building materials and animal bone, which point towards the presence of settlement. The presence of a building on the St John's abbey site is, perhaps, to be expected given the topographical dominance of the town by the ridge on which it stands.

Crucial to an understanding of both settlement and burial distribution is the Roman road network. The only previous direct evidence for road alignments in the area of the Alienated Land sites is the north-south trackway found during the excavations of 2000 on the Abbey Field sports ground (CAT Report 138). Nevertheless, this fits into a clear pattern of an orthogonally-orientated landscape in much of the area to the north of Circular Road South. This forms a marked contrast with the field boundaries and structures further south – for example the villa at Kirkee McMunn Barracks and the driveways and field boundaries of the Late Iron Age/Roman field system either side of Berechurch Hall Road. These are all aligned broadly south-west to north-east. This suggests a distinction (kink) in orientation of this landscape between the agricultural and suburban funerary landscape with the latter (which may also be slightly later) correlating with the orthogonal grid of the town and its walls.

One probable road line is that of the east-west road running from the site of Colchester Royal Grammar School towards the Hythe waterfront on the River Colne to the south-east of the town. Trenches 1 and 2 in Area B1a were both close to the projected line of this road. While neither encountered direct evidence for the presence of the road, they both contained significant evidence for nearby Roman settlement, perhaps indicating roadside activity. Two obvious alignments for north-south tracks intersecting with this known route are those running south from the two gates in the southern wall of the Roman town. The track identified at the sports ground is broadly aligned on Head Gate, the western of these two gates (or could have been running parallel to and immediately east of such a road). An eastern road leading south from the south gate would presumably have broadly followed the course of Mersea Road. The location of the later abbey precinct and the distribution of Anglo-Saxon burials may respect the survival of a road on this line. While the existence of both of these roads does require further substantiation through the on-going programme of archaeological fieldwork, if correct it would provide a basis for understanding the distribution of burials. The cemeteries either side of Butt Road and those in the Le Cateau Barracks area can be seen to be focused around the junction of the road leading south from Head Gate and the east-west Hythe road. The outlying inhumations on Somme Road well to the south would have fallen broadly on the line of this road. The burials at the north-east corner of the abbey compound and scattered burials further south can all be understood as being related to the south gate road on the line now followed by Mersea Road.

### 3.9 Anglo-Saxon, medieval and post-medieval activity

#### 3.9.1 Anglo-Saxon church and burials

Area	Reference number	Feature	Artefacts
A1	UAD ref. 345, DBA ref. 14, P Crummy pers comm	Cremation burial Disturbed inhumation Stray find	Early Anglo-Saxon pot Fragments of skull, assumed to be Anglo-Saxon Middle Saxon pottery
B1a	UAD ref. 1181	Stray find	Coin of Ethelred

Table 8 Anglo-Saxon church/burials

While relatively little Anglo-Saxon material has been found within the Alienated Land sites, there are significant sites immediately east and north of Areas B2 and B1b and immediately north of Area A1. Most significant is the Anglo-Saxon church of St John, which pre-dated the foundation of the Norman abbey of St John in 1095, which was found in 1972 immediately north of the north-eastern corner of B2 (*CAR 9*, 203-235). It is possible that the remains of the Anglo-Saxon suburbs may also fall within the later St John's abbey precinct.

On the opposite side of Mersea Road from Area A1 (St John's abbey), at no 10, a group of early Anglo-Saxon inhumations (5th-7th century AD) were disturbed during construction work in the 19th century. Traces of a cemetery of this date were also found further south, immediately to the north of the Meeanee Barracks (Area A1), in 1926. This cemetery seems to have extended south into the north-western corner of Area A1, where an Early Saxon cremation burial has been found. The distribution of these burials to the east of Mersea Road is unlikely to be a coincidence and further reinforces the probability that this runs along the line of a Roman road that continued in use into the Anglo-Saxon period. It is therefore possible that more burials can be expected in the north-western corner of Area A1.

#### 3.9.2 Medieval abbey and burials

Area	Reference number	Feature	Details
B1a	UAD ref. 343	abbey gatehouse	15th century
B2	UAD ref. 1194 SAM no. 26307	St John's abbey	Completed 1115; burnt down 1133; rebuilt early 13th century; dissolved/partially abandoned 1538-

Table 9 Medieval abbey

The Benedictine abbey of St John was founded close to the site of the Anglo-Saxon church of St John in 1095. It was completed in 1115, burnt down in 1133, and then rebuilt in the early 13th century. A wall surrounding the ecclesiastical precinct had been built by the 13th century and further additions were made in the 14th and 15th centuries. The abbey was dissolved in 1538, although historic maps indicate that many of its buildings remained standing well into the 17th century. The main gatehouse, built in the 15th century, and located in the centre of the north side of the precinct wall, still stands today.

The archaeology and topography of the abbey and medieval monastic buildings has not been investigated to any significant degree. Its walled precinct is represented by Areas B2, B1a and much of B1b, where the southern wall of the precinct runs along the north side of the car-park in the south-eastern corner of the area. Most of the precinct, except for the south-western portion (which has been built over by the administrative buildings of the old Garrison), is a Scheduled Ancient Monument. Excavations carried out at the north-eastern corner of the precinct (north of the Alienated Land sites), when it was removed to make way

for the St Botolph's roundabout in 1972, revealed the foundations of the original, pre-Norman church of St John (*CAR 9*, 203-235). These investigations, together with documentary evidence, suggested that, following the fire of 1133, the monastic buildings to the north of the abbey church were moved to its south side, where substantial levelling took place. The material removed as part of this levelling operation seems to have been dumped to the north of the abbey, sealing the remains of the earlier church and a late Roman inhumation cemetery. On the basis of this information, the abbey church almost certainly stood in the northern part of Area B2, with cloisters, chapter house and domestic buildings probably in the north-eastern part of B1b. A number of medieval burials were also found in this area.

### 3.9.3 Civil War defences

Area	Reference number	Feature	Details
B2, B1a and B1b	SAM no. 26307	Royalist Civil War fortifications of the abbey precinct	1648
J1, E and A1	DBA ref. 16	Parliamentarian siegeworks	Location of 'Fort Needham' on Mersea Road near the football ground (Area E)

Table 10 Civil War defences

The St John's abbey precinct was used as a fortified Royalist stronghold during the Parliamentary siege of Colchester in 1648. Remains of these defences are likely to exist around the line of the precinct walls in Areas B1a, B1b and B2.

During the siege, the Parliamentarians built a string of forts around the town linked by a substantial ditch and bank. The precise line of these fortifications has never been established. A contemporary map indicates their probable alignment, although it contains some errors and inaccuracies which make any precise assessment impossible. Recent geophysical survey failed to locate the Parliamentary defences.

## 3.10 Colchester Garrison

### 3.10.1 Nineteenth-century buildings

Area	Reference number	Feature	Details
J1, H	DBA ref. 35	Le Cateau Barracks	Cavalry Barracks built in the 'Aldershot syle' in the mid-1860s, extended eastwards in 1903-5; the Riding School, Officers' Mess and original Stables Blocks are Grade II listed
J2, K1 and K2	DBA ref. 38	Cavalry Barracks	Barracks built in 1861: oldest 'Aldershot-type' barracks in UK

Table 11 Historic buildings in the Garrison

A number of the older buildings of the Garrison are of historic interest, particularly the original portions of the Le Cateau Barracks, elements of which are Grade II listed, and the Cavalry Barracks. It should be noted, though, that heritage issues relating to standing buildings do not fall within the investigations discussed in this document.

### 3.10.2 Twentieth-century military activities, including World War I and II military training and defence

Area	Reference number	Feature	Artefacts
E, C2	Pill-box ref.s in CAT Report 97	Pill-boxes and air-raid shelters	

Table 12 World War I and II training and defence

A number of World War II air-raid shelters are known to exist in the northern part of the site, including six bunkers in Areas E along the western side of Mersea Road.

### 3.11 Research potential

3.11.1 The remains summarised above contain elements of a number of different suburban and rural landscapes, including the following:

- 1) rural settlements, trackways and field systems pre-dating the '*oppidum*';
- 2) field systems contemporary with and forming part of the '*oppidum*';
- 3) portions of the southern suburbs of the Roman town, dominated by cemeteries, but with some industrial components as well as elements of the agricultural landscape beyond;
- 4) part of the hinterland of the Anglo-Saxon town, probably including cemeteries and the ecclesiastical compound of St John;
- 5) the medieval precinct of St John's abbey;
- 6) buildings and fortifications in the post medieval southern suburbs, including the Civil War defences, houses and other buildings in the former St John's abbey precinct;
- 7) historic elements of Colchester Garrison.

3.11.2 On this basis, the Alienated Land sites can be divided into three areas with different types of archaeological potential (areas reported in this document are highlighted in bold):

- Group I: Areas A1, A2, B1(a and b), B2, **C1, C2, E, H, and J1**. These represent the immediate suburban fringe of the Roman, medieval and post-medieval town. These areas all fall into a zone within approximately 800m of the town wall and the archaeology that is found within them reflects this. During the prehistoric period it would have been part of the same rural landscape as areas to the south, although the ridge to the south of the town centre may have been favoured due to its topographical position. There is no evidence to suggest that this zone was in any way differentiated during the period of the Late Iron Age *oppidum*. It is therefore likely (assuming that the field system was established before the Roman conquest) that the same types of field system and droveways seen on the New Garrison site extend northwards onto these sites. From the period of the foundation of the Roman town onwards these areas contained cemeteries, industrial installations, the medieval precinct of St John's abbey (and its Anglo-Saxon predecessor), roads, Civil War siege fortifications, and possibly some peripheral settlement.

- Group II: Areas J2, K1, K2, L, N, **O, P1, and P2**. These areas, from the Roman period onwards, lay at the interface of the rural and suburban landscapes described above. They occupy the zone that lies between 800 and 1300m from the Roman walls. As with the Group I sites, there is little indication of the nature of the prehistoric landscape during the prehistoric period. The Late Iron Age/early Roman field system recorded on the New Garrison site may have extended this far, although the evidence is so far unclear on this point. Indeed, at present almost nothing is known about the archaeology of these areas. The limited Stage 1a evaluation trenching that has taken place has largely failed to locate significant features. Archival records indicate only very sporadic Roman burials, such as those on the southern edge of Area O, which may well relate to the lines of former Roman roads. During the Anglo-Saxon and medieval periods, this area was firmly part of the towns' rural hinterland, only becoming absorbed into the urban fabric in the late 19th and earlier 20th centuries.

- Group III: Areas **Q**, **S1**, S2 North and S2 South. These areas essentially fall within the same zone of rural archaeology as the sites investigated on the New Garrison site. This suggests that they are likely to contain sporadic earlier prehistoric archaeology – specifically the evaluations have indicated the presence of Late Bronze Age/Early Iron Age activity, and possible settlement, in Areas S1 and S2 – as well as the field systems associated with the Late Iron Age *oppidum*. Crucially, one of the main boundary dykes of the *oppidum* (although as with many of the smaller field ditches investigated it may have been constructed as late as the early Roman period) – the Berechurch Dyke – runs along the boundary separating Area S1 from Area S2. This stretch of the dyke is not a Scheduled Ancient Monument, unlike the stretch immediately to the south, largely because there is no upstanding earthwork boundary. Nevertheless, it is part of the nationally important dyke network of the *oppidum*. Investigation of these areas may provide an opportunity to examine the nature and date of this portion of the dyke and reveal any distinction between the Late Iron Age/Roman rural landscape inside the *oppidum* (to the west) and outside of it (to the east).

## **4 Aims and objectives**

4.1 The **research potential** of the above archaeological remains has been fully explored in *Research design for archaeological evaluations, excavations and watching briefs on Alienated Land, New Garrison, Colchester* (RPS and CAT 2004).

4.2 The **Over-arching Research Aims** for the Alienated Land archaeological project were:

**Aim 1:** *To characterise the nature of landscape utilisation and change from the Neolithic (or earlier) to the Romano-British period. A central theme of the Colchester Garrison Alienated Land archaeological project is the development of the landscape to include the following:*

1. the evidence for early agricultural clearances in the Neolithic period,
2. burial patterns and the creation of funerary monuments in the Late Neolithic-Middle Bronze Age,
3. the potential establishment of planned and 'owned landscapes' by the Late Bronze/Early Iron Age,
4. the creation of the *oppidum* in the Late Iron Age and
5. the effect of the establishment of the Roman town, and specifically the growth of cemeteries, on the agricultural hinterland.

**Aim 2:** *To characterise the Roman, Anglo-Saxon, medieval and post-medieval extra-mural suburbs of Colchester, their relationships to one another, the town and the countryside. The study of Colchester's suburbs within the Alienated Land sites will involve consideration of the following:*

1. strategies employed by the Romans to incorporate the new city within the existing landscape of the Late Iron Age *oppidum*,
2. the character of the Roman suburbs, looking at how funerary, industrial, rural and settlement functions were combined and/or separated,
3. evidence for suburban activity and/or settlement during the Anglo-Saxon period, considering particularly the impact of St John's church on areas to the south falling within the Alienated Land sites,
4. the development of medieval suburbs and specifically the ecclesiastical precinct of St John's abbey,
5. post-medieval changes, specifically the abandonment and re-use of structures within the St John's abbey compound, and the impact of the Civil War in the form of the Royalist fortifications at St John's and Parliamentary siegeworks further south.

4.3 The specific **Project Aims** for the Alienated Land archaeological project were:

(see Section 9: Assessment of results and recommendations for further work)

## **5 Methodology**

- 5.1 The archaeological investigations assessed here are part of a continuing strategy to mitigate the impact of development on the archaeological resource in the area of the Colchester Garrison Alienated Land sites. This strategy has been agreed with Colchester Borough Council and English Heritage (RPS 2004, *Colchester Garrison Alienated Land archaeological project strategy proposal and quality plan*). The proposal was based on guidance set out in Planning Policy Guidance Note 16 Archaeology and Planning, 1990 and followed Colchester Borough Council's *Guidelines on the standards and practice for archaeological fieldwork in the Borough of Colchester* (CM 1999) and the Institute of Field Archaeologists' *Standard and guidance for archaeological field evaluation* (IFA 1994a, revised 1999), *Standard and guidance for an archaeological watching brief* (IFA 1994b, revised 1999), and *Standard and guidance for archaeological excavation* (IFA 1995, revised 1999). There followed a full *Research design for archaeological evaluations, excavations and watching briefs on Alienated Land, New Garrison, Colchester* (RPS and CAT 2004).
- 5.2 The 2004-5 phase of archaeological evaluation consisted of Areas C1, C2, E, J1, O, Q and S1 and the Time Team trenches. RPS then developed mitigation strategies to the satisfaction of CBC to mitigate the impact to significant archaeological remains within Areas C1, C2, J1, O, Q and S1 with a watching briefs for various service works. The RPS/CAT WSIs for these comprised the following documents:
- *Written Scheme of Investigation (WSI) for the archaeological evaluation and excavation of the Alienated Land, Colchester Garrison – Area E – west of Mersea Road* (RPS/CAT March 2004)
  - *Written Scheme of Investigation (WSI) for the archaeological evaluation of the Alienated Land, Colchester Garrison – Area O – south of Abbey Field and South Circular Road* (RPS/CAT March 2004)
  - *Written Scheme of Investigation (WSI) for the archaeological evaluation and excavation of the Alienated Land, Colchester Garrison – Area Q – east of Berechurch Road* (RPS/CAT March 2004)
  - *Written Scheme of Investigation (WSI) for the archaeological evaluation of the Alienated Land, Colchester Garrison – Areas C1 and C2 – within the NW and SE angle of the cross roads of Napier Road with Flagstaff/Circular Road East roads* (RPS/CAT April 2004)
  - *RPS Planning, Transport & Environment summary method Statement for additional Stage 1b trial-trenching within Area S1* (RPS May 2004).
  - *Written Scheme of Investigation (WSI) for the archaeological evaluation and excavation of the Alienated Land, Colchester Garrison – Area J1 – southern half of Le Cateau Barracks* (RPS/CAT July 2004).
  - *Written Scheme of Investigation (WSI) for Additional trial-trenching of the Colchester circus at Abbey Field - trenches for Area H (Sergeants' Mess) Abbey Field and Area B1b (Flagstaff House)* (RPS/CAT January 2005).
  - *Written Scheme of Investigation (WSI) for the archaeological excavation of the Alienated Land, Colchester Garrison – Areas C1 and C2 – within the NW and SE angle of the crossroads of Napier Road with Flagstaff/Circular Road East roads* (RPS/CAT June 2004)
  - *Written Scheme of Investigation (WSI) for the archaeological excavation of the Alienated Land, Colchester Garrison – Area J1 – southern half of Le Cateau Barracks* (RPS/CAT September 2004).
- 5.3 A total of 48 evaluation trenches (at 1432m in length) and 7 areas (at 19,941m<sup>2</sup>) were excavated (see Table 13)

<i>Area</i>	<i>Number of evaluation trenches</i>	<i>Dimensions of evaluation trenches (length x width)</i>	<i>Number of areas excavated</i>	<i>Total area (m<sup>2</sup>) excavated</i>
Area C1	3	T4: 24m x 1.6m + 10m x 3.2m T5: 23.5m x 1.6m T6: 16.5m x 1.6m	1	292
Area C2	3	T1: 38m x 1.6m + 12m x 3.2m T2: 10m x 1.6m T3: 10m x 3.7m	1	1950
Area E	4	T1: 55m x 1.6m T2: 50m x 1.6m T3: 54m x 1.6m T4: 54m x 1.6m	-	-
Area J1	17	T10: 50m x 1.6m T11: 30m x 1.6m T12: 41m x 1.6m T13: 30m x 1.6m T14: 30m x 1.6m T15: 40m x 1.6m T16: 15m x 3.2m T17: 30m x 1.6m T18: 30m x 1.6m T19: 20m x 1.6m T20: 30m x 1.6m T21: 30m x 1.6m T22: 40m x 1.6m T23: 35m x 1.6m T24: 30m x 1.6m T25: 15m x 1.6m T26: 40m x 1.6m	4 (north) (south) (east) (west)	8565 (2871) (3426) (2168) (100)
Area O	1	T1: 50m x 1.8m	-	-
Area Q	4	T5: 50m x 1.8m T6: 50m x 1.8m T7: 50m x 1.8m T8: 50m x 1.8m	1	9134
Area S1	5	T1: 50m x 0.5m T2: 50m x 0.5m T3: 50m x 0.5m T4: 5m x 1.6m T5: 4m x 1.6m	-	-
Time Team trenches	7	T1: 5m x 0.6m T2: 3.5m x 0.6m T3: 14.5x 0.6m T4: 4m x 2m T5: 6.4m x 0.6m T6: 8m x 0.6m T7: 7.6m x 0.6m	-	-
Watching brief	-	T1: 15m x 3m T2: 50m x 0.9m T3: 14m x 4.5m T4: 12m x 1.5m	-	-

Table 13 Evaluation and excavation areas

5.4 The methodology as outlined in the WSIs for each of the areas is as follows:

**5.5 Removal of topsoil and overburden**

A 360-degree tracked mechanical excavator utilising a toothless ditching bucket removed the approximately 0.3m-thick topsoil under the supervision of an EOD Engineer and a CAT archaeologist. The level was scanned by the EOD Engineer for ferrous objects ahead of further reduction. The lower levels of topsoil were removed in spits of no more than 0.15m

to cleanly expose the surface of the natural subsoil. Significant archaeological deposits were not to be removed by machine unless sanctioned by the CBC Archaeological Officer. In circumstances where vertical stratigraphy was found or where the archaeology is vulnerable, the machining was supervised by a senior member of staff. Care was taken to ensure that machines used did not rut, compact or otherwise damage any buried or exposed archaeological features and deposits. Advice of a geoarchaeologist was sought as appropriate. No potentially significant archaeological deposits were removed prior to recording, sampling (if necessary) and an adequate understanding of their character. The sites were securely fenced.

## 5.6 **Surveying**

Following the overburden stripping, temporary bench marks (TBMs) were surveyed with respect to an Ordnance Survey datum and all features and deposits were recorded relative to their OD height. The TBMs will be shown on the site location plans.

The exposed surface of the natural was hand-cleaned sufficiently to define any archaeological features present. This process facilitated accurate planning and allowed for metal-detected finds to be correctly assigned following an initial scan of the site.

Complex areas (areas of intercutting features where features are complex in form and/or where surface finds may be plotted) were planned by hand, usually at a scale of 1:20 (or 1:10 with burials). These plans were located via total station, scanned, vectorised and imported via CAT's CAD programme on the OS grid-based plan. Less complex areas of the site (where features are absent or rare and of simple form) were planned using a total station with the data input directly onto CAD and the OS tiles. There was no site grid on the ground. All site plans show OS grid points and spot levels and were fully indexed and related to adjacent plans. Single context recording was used where appropriate (ie complex sequences of deposits or features). A uniform site plan has been produced showing all site features.

## 5.7 **Sampling strategy**

Archaeological excavation was by hand and will respect the stratigraphy of archaeological layers, features, deposits and structures. Each context was excavated in sequence. Occasionally further use of the mechanical excavator was required. The use of mechanical excavators was only undertaken with agreement from the CBC archaeological officer. Such techniques were considered appropriate for the removal of homogeneous low-grade deposits that give a 'window' into underlying levels. They were not to be used on complex stratigraphy and the deposits removed were properly recorded first. Fast excavation techniques involving (for instance) picks, forks or mattocks were not used on complex stratigraphy.

The following sampling strategy was adopted to ascertain the nature, depth, date and state of preservation of archaeological features as well as the stratigraphical relationships of these deposits and features to one another.

(i) Normally 50% of all pits and other discrete archaeological features were excavated.

Pits were fully excavated if they were particularly rich in environmental and/or artefactual evidence, and where this contributed to the research aims. A sample of tree throw holes/possible natural features (up to 5% of the total number) were excavated to establish the nature of the features and to provide dating evidence.

(ii) 20% of all exposed lengths of ditches, including enclosure ditches, were excavated, in segments of up to 6m in length. The segments were placed to provide adequate coverage of the ditches and included excavation of all terminals and intersections. A flexible approach was adopted to the location of excavation samples so that areas of exposed ditch fill with higher artefact or ecofact content was targeted.

- (iii) 25% to 100% of ring gullies, to include the terminals and sections along each side of the gully, were excavated. Special regard was given to significant stratigraphical relationships and concentrations of artefactual material.
- (iv) Stone structures were excavated in sufficient detail to establish their construction sequence and sequence of repairs or extensions. All stratigraphic associations were recorded. Floor levels were fully excavated.
- (v) *In situ* areas of burning and burnt features were fully excavated (and bulk sampled) to determine their function and any sequence of repairs or replacements.
- (vi) Animal and human burials, including cremations, were fully excavated. A licence from the Home Office was acquired. The discovery of human remains was reported to the local coroner. Other structured or placed deposits (including a coin hoard) were recorded and retained as 'small finds'.
- (vii) Water was used where appropriate to further archaeological investigation in respect of aiding the identification and definition of excavated features or deposits and to assist their recording thereof, particularly by photographic means.
- (viii) Metal detectors were used to scan for metallic finds on spoil heaps, vacated areas, areas of modern disturbance and during the excavation of key archaeological features or deposits.

## 5.8 Recording

The following procedures were always initiated:

- (i) All features will be planned either by means of a total station or hand drawn plans where appropriate.
- (ii) Sections: all sectioned and excavated archaeological features were drawn at a scale of 1:20, 1:10, or at a smaller scale (if appropriate). All sections were levelled to ordnance datum.
- (iii) All archaeological features, layers or deposits were allocated unique context numbers prior to any hand excavation, including contexts for which there is no archaeological interpretation or definition. All archaeological features, layers or deposits were recorded on pro-forma context sheets detailing: character, contextual relationships, a detailed description, associated finds, interpretation and cross referencing to the drawn, photographic and finds records. On-site matrices were compiled during the excavation such that the results of the written stratigraphical records could be fully analysed and phased.
- (iv) An adequate photographic record was made of all archaeological features and deposits. Standard record shots of contexts were taken on a digital camera. Colour transparencies (on 35mm film) were used for all important contexts illustrating both the detail and context of the principal archaeological features and finds discovered. The record included working and promotional shots to illustrate more generally the nature of the archaeological operations. All photographic records included information detailing: site code; date; context(s); section number; a north arrow and a scale. All photographs will be listed and indexed on context record sheets.
- (v) A record of the full extent, in plan, of all archaeological features, deposits or layers encountered has been produced. The detailed hand-drawn plans are related to the site and the OS national grid, and drawn at an appropriate scale, generally 1:20. Where necessary, eg when recording an inhumation, additional plans at 1:10 scale, or where appropriate 1:20, were drawn. The OD height of all principal strata and features has been calculated and indicated on the appropriate plans and sections.
- (vi) A record has been maintained of all site drawings and these will form part of the project archive. All site drawings contain the following information: site name; site number and code; scale; plan or section number; orientation, date and compiler.

## 5.9 Treatment of samples

The environmental sampling policy was as follows. CAT is advised by Peter Murphy (English Heritage Regional Advisor in Archaeological Science). In consultation with Val Fryer, CAT bulk sample any potentially rich environmental layers or features in addition to all reliably dated deposits. These have been assessed by Val Fryer, and sampling policy on excavations areas has followed her advice.

In addition to retrieving environmental evidence (above), bulk sampling has been used to collect charcoal for potential C14 dating and for all cremations and related deposits.

A strategy of pollen analysis was agreed with Patricia Wiltshire. The aim was to identify a number of deep contexts from which soil columns or bulk samples could be extracted for pollen analysis. Only one potentially suitable deposit was encountered. Over the length of the overall project this will enable an assessment to be made of the local environmental background, even if only at a basic level. Based on these test samples, the viability of further sampling on the site will be assessed by Patricia Wiltshire, and her advice will be followed. Clearly, if the test samples are unproductive, there will be no justification for further sampling.

The procedures set in *A guide to sampling deposits for environmental analysis* (Murphy & Wiltshire 1994) and *Environmental archaeology – a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage Centre for Archaeology Guidelines 2002) were consulted. The following procedures were followed unless otherwise amended following consultations between RPS, the English Heritage Advisor in Archaeological Science, the bioarchaeologist and the site director:

- (i) 50-litre bulk samples (or 100% of smaller contexts) of anthropogenic concentrations were taken and of selected deposits where remains are not visible (but may nevertheless occur). These shall include well sealed deposits, floors, hearths, etc.
- (ii) Monoliths for pollen analysis were taken as appropriate to answer specific research questions.
- (iii) Bulk samples were taken from 50% of all ring gully sections.
- (iv) 50-litre bulk samples were taken (if possible) from closely-dated pits. These deposits were sampled regardless of whether or not there are visible macrofossils or molluscs. In practice a large number of similar features and fills, many of which were poorly dated, were encountered and it was necessary to formulate the most suitable method of bulk sampling in the field to avoid production of meaningless data.
- (v) Cremations and other 'special deposits' were 100% sampled.
- (vi) 100% recovery of animal bones was undertaken from the soil samples. 100-litre samples for bone were also necessary in some circumstances.

## 5.10 General methodology

All works were undertaken by a team of professional archaeologists.

All work was conducted according to CAT *Policies and procedures* (2000), and was informed by *Management of archaeological projects* (English Heritage 1991a), and *Guidelines on standards and practices for archaeological fieldwork in the Borough of Colchester* (Colchester Borough Council 1996, revised 1999).

Areas were scanned with a CAT scanner before excavation and (some) areas were avoided during the archaeological investigations.

All finds of potential treasure were removed to a safe place, and the coroner informed 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.

For purposes of deposition of the archive, a museum accession code has been obtained through Colchester Museums. This will be used as the site code.

The *Code of Conduct of the Institute of Field Archaeologists* (IFA) has been followed during all aspects of the archaeological investigation.

#### 5.11 **Dates**

Fieldwork was carried out at the following times:

~	Area C1 and C2:	May 2004 to August 2004
~	Area E:	May 2004
~	Area J1:	October 2004 to February 2005
~	Area O:	May 2004
~	Area Q:	June 2004 to August 2004
~	Area S1:	May 2004 to July 2004
~	Time Team trenches	February and March 2005
~	Watching brief:	February 2005 to January 2006

## **6 Results**

### **6.1 Area C1 (Figs 2-3)**

#### **Introduction**

- 6.1.1 Area C1 comprises a 0.32ha triangular area located within the angle of Flagstaff Road and Napier Road, to the west of Flagstaff House (NGR: TL 9960 2460). The area included tarmac car-parking and grassed areas, and a large Garrison Civil Service Club building which was demolished ahead of the archaeological investigation.
- 6.1.2 As well as contributing to the over-arching research themes (as set out in Section 4 of this assessment), the primary objective for Area C1 was to establish the presence/absence of human burials, to establish whether the site was rural or domestic in character, and to establish whether there were any buildings or other structures on the site (in the form of walls, post-holes, gullies, etc).
- 6.1.3 Archaeological investigation of Area C1 began with a trial-trenching evaluation comprising three trenches totalling 74m in length which led onto the excavation of an area measuring 292m<sup>2</sup>. The three trial-trenches within Area C1 (CAT Report 271) demonstrated that the best-preserved archaeology lay to the east of the demolished Civil Service Club building. The Civil Service Club construction was particularly destructive to archaeology and only the bases of deep ditches survived below its concrete base. The excavation area was centred to encounter a clutch of prehistoric pits and two robbed-out Roman wall lines in the undisturbed eastern area of Area C1.

#### **Results**

##### **6.1.4 Late Neolithic**

Five Late Neolithic pits (CF10, CF11, CF15, CF72, CF75) were recorded in Area C1. The pits were typically shallow with diameters of under 1m and had been neatly cut. They formed a 'cluster' and clearly represent a single phase of activity. They all contained Late Neolithic pottery including Peterborough Ware and Beaker pottery, as well as worked flint, burnt flint and animal bone. Environmental evidence, taken from the fill of two of the pits, revealed that the material contained within them was derived from 'domestic' hearth waste.

Several nearby but undated features (pits CF73, CF76, CF89 and ditch CF69) may also belong to this phase of activity, as may a single Late Neolithic pottery sherd and several pieces of prehistoric worked flint which were recorded residually within later features.

##### **6.1.5 Pre-Roman/early Roman**

Three ditches were recorded within Area C1. None of these ditches contained any datable finds (except for one piece of intrusive peg-tile). However, one of the ditches was truncated by both the Roman structure and metalled surface (see below), which would indicate that they were either pre-Roman or early Roman in date. Two of the ditches (CF77 and CF80) ran north-west to south-east along the same alignment, with an 11m gap between the two in the centre of the site. The third ditch was aligned north-east to south-west, at a right angle to the line of the other two ditches.

## 6.1.6 Roman

### **Roman structure**

The evaluation and excavation of Area C1 was dominated by two medieval robber trenches (CF6 and CF7) which had completely robbed-out two parallel, east-west orientated Roman walls. The larger north wall (CF7) was approximately 0.8m wide and was vertical-sided with a flat base (surviving at a depth of 0.19m). The wall had been supported by two large buttresses, projecting approximately 0.95m out to the north of the wall. The foundation cuts for the buttresses were located 6m apart from each other, and the only complete buttress within the excavation area measured 3.8m wide. The second wall (CF6) was located 4.4m to the south of the north wall and was approximately 0.7m wide. Both walls had been completely robbed-out by the medieval robber trenches (although there is no suggestion that the original foundation cuts had been widened during the robbing). The remains of some Roman structural material (in the form of greensand stone, flint, septaria and Roman coursing tile) was found within the backfill of the robber trenches.

Two other features are believed to be associated with this structure. They are a single post-hole (CF96) identified between the buttresses of the north wall and a second post-hole (CF88) sealed by the medieval robber trench over the south wall.

Both of the Roman walls, and their associated medieval robber trenches, were found to continue beyond the limits of the excavation area.

### **Roman road**

Immediately to the north of the two Roman walls was a patch of highly compacted gravel surfacing. This surface had two distinct phases: 1) an earlier phase of metalling (CF91) which had become patchy, and 2) a second phase of metalling (CF78) which was laid on top of the first. Two parallel shallow grooves (CF87 and CF93) were recorded within the second phase of metalling. At 1.4m apart, these grooves appear to represent wheel-ruts from Roman carts which had run across the surface. This interpretation would imply that the surface was a road which ran parallel to the walls of the Roman structure (see above). Finds associated with the surface included Roman tile and a brooch, and its location with respect to the outer wall leaves no doubt that the two elements were contemporary.

### **Other Roman activity**

Other Roman activity on Area C1 consisted of 11 pits, one ditch, one pit/ditch and a ragstone spread. Few of these features contained good dating evidence and it is uncertain if they were contemporary with the Roman structure or if they were earlier/later in date. Notably there were no burials within Area C1 on either side of the parallel walls.

## 6.1.7 Medieval

Three medieval features were recorded in Area C1. These features consisted of two robber trenches (CF6 and CF7) and a spread of mortar (CF5). The robber trenches had completely robbed-out the two east-west orientated walls of the Roman structure, and the spread of mortar appears to have been associated with this activity.

## 6.1.8 Post-medieval

Post-medieval activity on the site is represented by eight pits and two ditches. The two ditches (CF51 and CF52) appear to be on the same alignment and may actually be a part of the same field boundary ditch.

### 6.1.9 **Modern/military**

The modern/military features recorded on the site included five service trenches, two soakaways, one pit, one ditch, and an area of disturbance. All of these modern/military features were probably associated with the now-demolished building of the Garrison Civil Service Club.

### 6.1.10 **Undated features**

The undated features recorded on the site included four pits (from Trench 4), one slot (from Trench 4), and one hollowed cobble path (from Trench 6).

## **6.2 Area C2 (Figs 2 and 4)**

### **Introduction**

6.2.1 Area C2 comprises of a 0.68ha roughly triangular area in the angle of the crossroads between Napier Road and the Circular Road East, to the south of Flagstaff House (NGR: TL 9975 2447). The area included tarmac parking and grassed areas, single-storey military huts and other facilities which were demolished ahead of the archaeological investigation. Two World War II air-raid bunkers located on the site were also demolished ahead of the investigation (a watching brief was carried out on this work in May 2004; CAT Report 319).

6.2.2 Archaeological investigation of Area C2 began with a trial-trenching evaluation comprising three trenches totalling 70m in length which led onto the excavation of an area measuring 1950m<sup>2</sup>. As well as contributing to the over-arching research themes (as set out in Section 4 of this assessment), the primary objective for Area C2 was to establish the presence/absence of human burials, to establish whether the site was rural or domestic in character, and to establish whether there were any buildings or other structures on the site (in the form of walls, post-holes, gullies, etc).

6.2.3 The Area C2 excavation was informed by three evaluation trenches (CAT Report 271, 2004), two of which produced a total of eight Roman burials (comprising a decapitated inhumation, a lead coffin inhumation, a probable child inhumation and five urned cremations). The southern trench flanked the southern edge of the area and, like the eastern trench (which contained two Roman ditches), was not included within the excavation area due to a client undertaking to provide preservation *in situ* for the archaeology in these locations by raising construction levels for car-parking zones. The excavation area was placed centrally to Area C2 to avoid TPO's and cover the indicative plan for built construction.

### **Results**

#### 6.2.4 **Late Neolithic**

A single Late Neolithic pit (CF223 – approximately 0.80m in diameter and 0.28m deep), along with a small number of residual Late Neolithic pottery sherds and several pieces of prehistoric worked flint, were recorded in Area C2. The pit had been partially cut away by a Roman urned cremation burial (CF162) and was located within the centre of a Roman ring ditch (CF205). It is uncertain if the placement of the Roman barrow burial over this Late Neolithic pit was deliberate or accidental. Several sherds of Peterborough Ware and a Beaker rim were recorded within the pit, and environmental evidence revealed that the fill of the pit was at least partly derived from burnt 'domestic' refuse.

## 6.2.5 Roman

### **Roman burials**

A total of 67 Roman burials and burial related features were recorded in Area C2. These features consisted of 26 inhumation burials (including a lead coffin), 24 cremation burials, 11 urned cremation burials, five burial pits containing pyre debris, and a single boxed cremation burial. The inhumations were the earliest burials recorded on the site dating from the early-mid 2nd to the mid-late 3rd century. The cremations (cremation, urned and boxed) were the later burials dating from the mid-late 3rd to the 4th century. The burials on the site also appeared to be divided into two distinct concentrations, which would indicate the presence of two burial plots.

#### *Burial Plot 1*

The majority of the burials and burial-related features recorded in Area C2 (61 out of 67 in total) were concentrated in the centre of the site – Burial Plot 1. A total of 24 inhumation burials, 23 cremation burials, eight urned cremation burials, one boxed cremation burial and four burial pits containing pyre debris were recorded from this plot. Two east-west orientated ditches (CF106 and CF174) acted as the northern and southern boundaries for the burial plot. The burials began 8.5m south of the northern boundary ditch but were placed right-up against the southern ditch. Neither the eastern nor the western extent of the burial plot was located during the investigation and the burials, presumably, continue in both directions beyond the limits of the site.

Aspects of the burial activity recorded within the plot are highly unusual, if not unique, in the context of Roman town cemeteries. The unusual element is represented by ten ring ditches, of between 4m and 6.5m in diameter, with narrow (approximately 0.60m wide) and usually shallow (approximately 0.14m deep) defining ditches. Six of these ring ditches enclosed a central burial – three enclosed cremation burials, two enclosed urned cremation burials and one enclosed a boxed cremation burial. Of the remaining four ring ditches, three had been disturbed by post-Roman activity which had probably removed all trace of any associated central burials. The last ring ditch was only partially within the excavation area, so any associated burial was outside the limit of the site. Two of these ring ditches also contained a cremation burial within a section of the ditch. These burials could only have been placed within the ditches when they were beginning to silt up and are, therefore, probably slightly later in date than the centrally enclosed burial.

The ring ditches appear to have been dug with respect to one another since there were no intercutting examples. Therefore it is assumed that all were visible, with extant central mounds when the last was constructed, and so were all broadly contemporary with one another. The complete pottery vessels, which accompanied the six central cremations, in addition to several associated coins, may provide clues to the sequence of construction. However, it appears certain at this stage that there is a late Roman (later 4th century) element. All but one of the ring ditches had a clear 'entrance gap', presumably to allow visitors access to the internal mounds – perhaps to place offerings. The one remaining ring ditch had been partially disturbed by a modern feature which may have removed an entrance, although more plausibly the ring ditch was unbroken. If this ditch was unbroken it would be a unique example on the site. This particular ring ditch is also unusual as the ditch was a lot deeper than the other examples (perhaps making the mound more prominent) and it contained the only boxed cremation burial recorded from the whole cemetery. It is possible to speculate that this prominent mound (based on the depth of its associated ditch) represented the 'founder burial' of this group.

The up-cast from these ring ditches would have been used to form barrows over the central burial. So, these ring ditches indicate the presence of at least ten Roman barrow burials within this cemetery. The use of barrow burials is atypical of Roman town cemeteries at Colchester and can possibly be explained as either arising from Continental/Germanic influence perhaps associated with the military or in replication of a local barrow burial tradition (see discussion). The northern side of the E/W boundary ditch separating Plot 1 from Plot 2 was also respected by a group of E/W-orientated inhumation graves along its edge. These included a decapitation grave encountered during evaluation within the western area of C2. The decapitated head had been placed below the ankles of this individual.

### *Burial Plot 2*

Seven burials and burial-related features were recorded to the south of Burial Plot 1. These features consisted of two inhumation burials, three urned cremation burials, one cremation burial and one burial pit containing pyre debris. The southern boundary ditch of Burial Plot 1 became the northern boundary ditch for this plot and a Roman driveway or track (see below) acted as its western boundary. Neither the eastern nor the southern extent of the burial plot were located during the investigation and the burials, presumably, continue in both directions beyond the limits of the site.

Burial Plot 2 also contained the remains of a mausoleum (CF34, CF46/CF54/CF55, CF175 and CL13). The mausoleum was a rectangular stone walled structure measuring 10m (north-south) by 7m (east-west). The wall foundations were 0.75m thick and 0.15m deep. Only about half of the structure was revealed during the investigations and no entrances were located. An inhumation burial within a lead coffin (CF43 – partially excavated during the evaluation but ultimately left *in situ*) was found within the mausoleum and is believed to be the primary burial associated with it. Dating evidence, from the walls of the mausoleum and the burial, date this structure from the 2nd to the mid 3rd century, which would make the mausoleum contemporary with the inhumation burials in Burial Plot 1.

At a later (unknown) date another Roman wall (CF113) was cut through the north wall of the mausoleum (and possibly the south wall as well, although this was hard to define within the rubble spread (CF34) of the evaluation trench). It was not possible to define the full nature of this wall and it is uncertain if it represents the destruction of the mausoleum or is associated with it in some way. However, the wall does butt up against the southern boundary ditch of Burial Plot 1, suggesting that the ditch and the wall may have formed some kind of contemporary boundary. Two other probable walls (CF44 and CF57) were located near to this wall may also be associated with it, but this is also extremely uncertain.

Identified on-top of the remains of wall footing CF113 was a baby inhumation burial buried with a cremation (CF183). It is uncertain if this double burial was buried within the wall footing or on-top of the footing after the wall was demolished. If it was buried within the wall it would seem too perfect a coincidence that the wall was demolished to a depth that did not destroy the burial. However, no separate cut for the burial was located. A cremation burial (CF219) was also located within the north-west corner of the mausoleum, although it was not possible to determine if this burial was actually associated with the mausoleum and/or with the later wall.

### *The burial plot boundary ditches*

Boundary ditch CF106 was a U-shaped, single phased ditch that was recorded for a length of 26.2m. It was approximately 0.80m wide and 0.23m deep. One definite entrance 4.4m wide was identified between the two ditches. A second possible entrance was also identified at the western end of the recorded length of ditch however, modern activity over the area had removed any trace of the ditch continuing in this direction.

Boundary ditch CF174 was a U-shaped, two phased ditch (ditch recut CF226) that was recorded for a length of 33.4m. It was approximately 2.2m wide and 0.61m deep. A single terminal was identified at the eastern edge of the ditch, possibly forming an entrance. However, no corresponding ditch was identified further to the east (although if the entrance was over 6m wide then the second ditch would be located outside of the excavation area).

Both boundary ditches date from the 2nd to the mid-late 3rd century. This would make the two ditches broadly contemporary with the burials from the site.

### **Roman field system**

To the south of Burial Plot 1 and to the west of Burial Plot 2 was a Roman driveway or track. This track was defined by two ditches (CF170 and CF181) which ran north-south before turning east-west just off of the edge of the excavation area. The ditches themselves were single phased, U-shaped ditches, which were on average 1m wide and 0.42m deep. The track was between 1m and 2.5m wide and ran to a length of 30.5m within the excavation area. It terminates approximately 2.5m to the south of the southern east-west boundary ditch for Burial Plot 1 (CF174), which creates an entrance into Burial Plot 2 to the east and a probable agricultural field to the west. The ditches date from the mid 2nd to the late 3rd/4th century which makes the track broadly contemporary with both of the burial plots.

### **Roman structure**

The area to the north of the Roman burials was dominated by two medieval robber trenches (CF107 and CF247) which had partially robbed-out two parallel, east-west orientated, Roman walls. The larger southern wall (CF148) was approximately 0.8m wide and was supported by three large buttresses on its southern side (one of which had been partially cut away by a military communication trench). The buttresses were located approximately 2.4m apart from each other and were 1.9m wide and projected 1.4m out from the outer wall. As with Area C1, the cuts were vertical sided to a flat base and had survived at a depth of 0.47m. The second wall (also numbered CF247) was located 5m to the north of the first and was approximately 0.6m wide and 0.12m deep. Part of the foundations of the southern wall and the buttresses had not been completely robbed-out. Where they had survived they appeared to have been constructed out of courses of greensand stone (with the occasional piece of flint and septaria) set into mortar. The remains of one of the buttresses included a row of neatly-faced greensand stone blocks. Both of the Roman walls, and their associated medieval robber trenches, were found to continue beyond the limits of the excavation area.

During the excavation five further features were recorded that are believed to be associated with the Roman walls. The first feature was located immediately to the south of one of the buttresses and had the appearance of a stone footing (CF158). The remaining features were four stone packed post-holes located between the buttresses.

Immediately to the south of the two Roman walls was two patches of greensand stone chippings (both numbered CF124), a small patch of mortared surface (CF155) and a metallised surface (CF142). It would seem likely that these surfaces represent a road (or man-made surface) to the south of the Roman structure.

Two stray finds – two pieces of column plaster – found within the demolition material over the structure suggests that this structure may included columns or a colonnade.

Part of a single Roman ditch (CF258) was identified between the two walls of the Roman structure. No dating evidence was recorded from the feature to allow for a more specific date and it is uncertain if this ditch is associated with the structure or pre/post dates it.

### **Other Roman activity**

Other Roman activity on Area C2 consisted of 17 pits, seven ditches, three post-holes, two pot scatters, one pit/post-hole, one pit/ditch, one quarry pit and one gully.

#### **6.2.6 Medieval**

Five medieval features were recorded in Area C1. These features consisted of two robber trenches (CF107 and CF247) and three areas of demolition material (CF140, CF157 and CL20), all of which appear to date to the 11th century. The robber trenches had partially robbed-out the two east-west orientated walls of the Roman structure and the demolition material appears to have been associated with this activity.

#### **6.2.7 Post-medieval**

Post-medieval activity on the site is represented by eight pits (CF154, CF156, CF183, CF193, CF195, CF197, CF203 and CF220). This suggests that some small-scale post-medieval activity did occur on the site.

#### **6.2.8 Modern/military features**

The modern/military features recorded on the site included soakaways, service pipes/trenches, drains, pits and eight military features. The military features dated to World War II and consisted of two trenches, four air-raid bunkers (only two of which were numbered), a communication trench which linked three of the bunkers and an unnumbered pit containing a stash of carefully stacked Home Guard petrol bombs ('Molotov cocktails'). These were safely removed by explosive ordnance specialists. The two numbered bunkers were both 9.5m long, 2.5m wide, made with concrete slabs and had stairs at both ends. Both had survived to a depth of approximately 1.22m.

## **6.3 Area E (Figs 5-7)**

### **Introduction**

- 6.3.1 Area E comprises of a 1.32ha area located to the west of Mersea Road and to the east of Circular Road East and the Abbey Field (NGR: TL 9986 2427). A total of six World War II air-raid bunkers are located intact and in a row perpendicular to Mersea Road at the eastern extent of Area E. The remainder of area was a rectangular short-grassed sports field. A terrace runs along the northern side of Area E separating it from another sports field to the north. The terrace drops about 0.5m into Area E which suggests that the area subjected to a degree of levelling at some point in the recent past.
- 6.3.2 As well as contributing to the over-arching research themes (as set out in Section 4 of this assessment) the primary objective for Area E was to establish the presence/absence of human burials, to establish whether the site was rural or domestic in character, and to establish whether there were any buildings or other structures on the site (in the form of walls, post-holes, gullies, etc).
- 6.3.3 The first stage of the archaeological investigation of Area E has consisted of a trial-trenching evaluation. A total of 4 trenches were excavated each 1.6m wide and totalling 213m in length.

## Results

### 6.3.4 Late Bronze Age

No features of a prehistoric date were recorded in Area E. However, a small number of Late Bronze Age pottery sherds were recovered residually within later features, and may indicate Late Bronze Age activity in the area.

### 6.3.5 Roman

#### Boundary ditches

There were no clearly Late Iron Age ditches within the area. However, five boundary ditches (EF1, EF2, EF12, EF23 and EF24) were recorded within the evaluation trenches. These boundary ditches were a part of the Roman field system laid out over the landscape within this period. They contained pottery of early Roman date.

#### The enclosure and associated buildings

A large, rectangular, single ditched enclosure (represented by ditch segments EF9, EF10, EF13, EF22) was also recorded within the evaluation trenches. Three sides of the enclosure were identified along with a series of internal structural features and layers.

The enclosure was north-south and east-west orientated and measured 36.5m north to south by at least 46.5m east to west (the eastern side of the enclosure was not found within the evaluation trenches), giving an internal area of at least 1696m<sup>2</sup>. The enclosure ditches were fairly substantial measuring, on average, 3m in width and 0.65m in depth. As only four small sections of this enclosure were revealed no entrances or entrance features were located.

A number of structural features were recorded in the easternmost trench (ET2), which appear to represent at least two successive phases of a building. The earliest building on the site was represented by a line of three post-holes (EF19, EF20 and EF21). These post-holes were sealed by two robber trenches (EF4 and EF7) which appeared to have robbed-out a Roman wall of later date. This activity suggests that an early timber-framed building was replaced by a building with masonry wall foundations (which was itself robbed-out at a later date). The wall foundations were overlain by a demolition spread (EL4) containing a significant quantity of Roman tile, including box flue tile from a hypocaust, and tegula and imbrex tiles from a collapsed roof. The fragmented remains of a clay floor (EL3) and a metal surface (EF5) were also recorded and appear to have been associated with the later building. The associated ditches produced a substantial number of pottery of the 1st to 3rd century in addition to other domestic debris, including oyster shell suggestive of a domestic site such as a farmstead.

#### Other Roman features

Other Roman features recorded within the evaluation trenches included two pits, a post-hole and a stake hole. Three pottery vessels were recorded from within the fill one of the enclosure ditches (EF22) that, by their completeness, may suggest that they had been disturbed from nearby burials although no definite burials were found.

### 6.3.6 **Post-medieval activity**

Post-medieval activity on the site was represented by a single ditch (EF11).

### 6.3.7 **Modern**

Modern activity on the site consisted of three areas of disturbance.

### 6.3.8 **Undated features**

A single undated post-hole was recorded.

## **6.4 Area J1 (Fig 8)**

### **Introduction**

- 6.4.1 Area J1 comprises a 5.44ha area located between Butt Road, Le Cateau Road, Circular Road North and Cavalry Barracks (NGR: TL 9925 2445). The area covers the southern half of the Le Cateau Barracks, first set out in the 1860s. The original barracks building comprised a central Officers' Mess facing onto the Abbey Field, with two parallel rows of three stable blocks/barracks facing in the same direction and ranked on either side of it. A fourth, slightly shorter, parallel building stood at the rear of each row. Two out of the four blocks to the south of the mess survive and fall within the north-eastern boundary of Area J1. There are a further three buildings to the south-west of these barrack buildings but the area to the north-west and south-east is largely open. The area to the south-east has traditionally been used as paddocks and remains open grass. While the area of the north-west grassed paddocks appear not to have been developed, historic maps in fact indicate the former presence of a water tower and three long, narrow barracks buildings in the centre of the site, as well as smaller buildings in its western and northern corners. Until recently, the surviving buildings and paddocks of the barracks were used by the Garrison Saddle Club.
- 6.4.2 As well as contributing to the over-arching research themes (as set out in Section 4 of this assessment), the primary objective for Area J1 was to characterise the nature of Bronze Age activity, to establish the nature of Iron Age activity, to excavate and record all human burials and associated funerary structures, and to establish whether there were any buildings or other structures on the site (in the form of walls, post-holes, gullies, etc).
- 6.4.3 The archaeological investigation of Area J1 consisted of a Stage 1b trial-trenching evaluation and four Stage 2 area excavations. The trial-trenching evaluation consisted of 17 trenches totalling 536m in length bringing the total evaluated sample up to 3%. The excavation consisted of four separate areas divided into Areas J1 North (JN), J1 South (JS), J1 East (JE) and J1 West (JW), which totalled a maximum excavation area of 0.98ha. Area J1 North consisted of a 0.37ha area of unmanaged grass, tarmac parking and a road in the northern corner of the site. Area J1 South consisted of a 0.4ha area in the southern grassed paddock, Area J1 East consisted of a 0.2ha area in the north-eastern paddock, and Area J1 West consisted of a 100m<sup>2</sup> area within the grassed western area of the site.

## Results

### 6.4.4 Area J1 evaluation (Figs 9-11)

#### 6.4.4.1 Late Bronze Age

No features of a Late Bronze Age date were recorded within the evaluation trenches. However, a small quantity of Late Bronze Age pottery was recorded residually within later features, and may indicate Late Bronze Age activity in the area.

#### 6.4.4.2 Roman

##### **Roman structure**

Three sections of a medieval robber trench (JF2, JF3, JF8), one Roman wall (JF4) and one Late Iron Age/Roman ditch (JF9) were recorded within two of the evaluation trenches – Trenches 23 and 24. These two trenches were located within the excavation area of Area J1 East and the features recorded from them will be fully discussed within the results section of that area (see below).

##### **Roman field boundary ditches**

Four field boundary ditches (JF33, JF35, JF43, JF58) were recorded within two of the evaluation trenches – Trenches 19 and 20. These two trenches were located within the excavation area of Area J1 South and the features recorded from them will be fully discussed within the results section of that area (see below).

A single boundary ditch (JF54) was recorded within one of the evaluation trenches – Trench 18. Trench 18 was located to the west of Area J1 South and the ditch is probably associated with the Roman field system recorded within that area.

##### **Roman burials**

Five inhumation burials (JF11, JF16 (renumbered JNF370), JF17 (renumbered JNF191), JF20 (renumbered JNF95), and JF21), one urned cremation burial (JF7), and one cremation burial (JF13) were recorded within one of the evaluation trenches – Trench 11. This trench was located within the excavation area of Area J1 North and the features recorded from it will be fully discussed within the results section of that area (see below).

Two urned cremation burials (JF51, JF52) were recorded within another evaluation trench – Trench 20. This trench was located within the excavation area of Area J1 South and the features recorded from it will be fully discussed within the results section of that area (see below).

##### **Roman road**

Part of a Roman metalled surface (JF22) was recorded within one of the evaluation trenches – Trench 10. This trench was located within the excavation area of Area J1 North and the features recorded from it will be fully discussed within the results section of that area (see below).

##### **Roman pits, post-holes and small ditches**

One pit (JF18) and one pit/post-hole (JF19) were recorded within one of the evaluation trenches – Trench 11. This trench was located within the excavation area of Area J1 North and the features recorded from it will be fully discussed within the results section of that area (see below).

Four pits (JF39, JF47, JF60, JF61) and one small ditch (JF48) were recorded within two of the evaluation trenches – Trenches 19 and 20. These trenches were located within the excavation area of Area J1 South and the features recorded from them will be fully discussed within the results section of that area (see below).

A single post-hole (JF53) was recorded within one of the evaluation trenches – Trench 18.

#### **6.4.4.3 Medieval**

Three sections of a medieval robber trench (JF2, JF3, JF8) relating to the former Roman walls indicated above were recorded within two of the evaluation trenches – Trenches 23 and 24. These trenches were located within the excavation area of Area J1 East and the features recorded from them will be fully discussed within the results section of that area (see below).

#### **6.4.4.4 Post-medieval**

A post-medieval ditch (JF55) and metal surface (JF42) were recorded within one of the evaluation trenches – Trench 17. This trench was located within the excavation area of Area J1 West and the features recorded from it will be fully discussed within the results section of that area (see below).

A post-medieval, east-west orientated ditch (recorded as JF34 and JF40) was recorded within two of the evaluation trenches – Trenches 18 and 19. Trench 19 was located within the excavation area of Area J1 South and Trench 18 was located further to the west of this trench. The features from these trenches will be fully discussed within the results section for Area J1 South (see below).

A post-medieval pit (JF59) was recorded within one of the evaluation trenches – Trench 20. Trench 20 was located within the excavation area of Area J1 South and the features recorded from it will be fully discussed within the results section of that area (see below).

Two post-medieval quarry pits (JF10, JF15) were recorded within two of the evaluation trenches – Trenches 22 and 25. The trenches were located within these quarry pits and consequently no edges to either of the two features were recorded. These two quarry pits are probably associated with the post-medieval activity recorded within Area J1 South and Area J1 West.

#### **6.4.4.5 Military/modern**

A total of five WWII air-raid shelters, four building foundations, four pits, three service trenches, two ditches and a cobbled road were recorded within 11 of the evaluation trenches (many more military/modern features were planned but not given a feature number (see plans)). All of these military/modern features are probably associated with the military barracks located on Area J1 since the 1860s.

#### **6.4.4.6 Undated features**

One undated pit and one undated ditch were recorded during the evaluation.

#### **6.4.4.7 Summary of Area J1 evaluation**

One of the aims of the Area J1 evaluation was to locate the areas rich in archaeology where later excavations could take place. As a consequence, the majority of the archaeological features recorded within the evaluation trenches are located within the excavation areas of Area J1 North, South, East and West. Rather than refer to these features in isolation, they will be included within the results section for each of the four areas (see below). The

features located outside of the four excavation areas mainly consisted of post-medieval quarry pits and military/modern features. The Stage 1a evaluation supplemented by Stage 1b established that the paddock between excavation Areas J1 East and J1 South was severely truncated by a series of very large post-medieval gravel quarries. These may be associated with the construction of the Garrison or perhaps the urban expansion of Colchester.

## **6.4.5 Area J1 North (Fig 12 and Figs 12a-g)**

### **6.4.5.1 Late Bronze Age**

A total of five Late Bronze Age features were identified within Area J1 North. They were three pits (JNF37, JNF38, JNF93), a post-hole (JNF164), and a small gully (JNF134). Eight other features did not contain any dating evidence but may be associated with this phase of activity. They are seven post-holes associated with JNF164 (JNF158-JNF162, JNF165-JNF166) and a square (0.70m x 0.7m), possible 4-post structure found next to the gully (JNF172, JNF173, JNF175, JNF176). A large quantity of Late Bronze Age pottery was recorded from several of the features (JNF38, JNF93), and a significant quantity was also recorded residually (along with some prehistoric worked flint) in later Roman features. Therefore it appears that there was a Late Bronze Age settlement at this location which was largely removed by the Roman cemetery. The 4-post structure is typical of such sites and may have been associated with storage.

### **6.4.5.2 Roman**

#### **Roman burials**

The excavation of Area J1 North revealed a large number of Roman burials – 356 burials and burial-related features (352 in the excavation and 4 in the evaluation) out of a total of 493 archaeological features recorded on the site. A total of 207 inhumation burials (graves), 70 urned cremation burials, 20 un-urned cremation burials, 37 burial pits containing pyre debris, 13 pyres/*busta*, five pot scatters (possibly from disturbed burials) and four pyre-related features were recorded. The burials were bounded to the south/south-west by a Roman road, defined by large flanking ditches and patchy metallurgy, that ran across the western half of the site (north-west to south-east). The extent of the burial area to the north and east of the site was not recorded during the investigation.

During the excavation of the burials, no distinct burial plots were identified. Five Roman gullies (JNF8, JNF48, JNF120, JNF343, JNF499) were recorded on the site, but it was difficult to ascertain whether they represented the boundaries to burial plots or some other form of activity. These gullies were small and shallow, and most of them were cut by burials, which could indicate that they were not the boundaries to burial plots. However, the Butt Road cemetery (located a few hundred metres to the north of Area J1 North) also contained small, shallow gullies also cut by burials and these gullies were seen to divide the cemetery into rectilinear burial plots. The evidence recovered from the gullies within Area J1 North was too fragmentary to identify any plots but alludes to plots having existed. The cutting of the gullies by later burials suggests they went out of use or were subsumed into larger plots.

Based on the pottery dating evidence alone, a number of points can be identified (further evidence, including complex stratigraphic relationships and dating evidence from other finds, will be taken into account in the final report). The first is that the burials in this area appear to date from the 1st/2nd to the mid/late 3rd century, with most of the burials falling within the 1st- to 2nd-century date range. Unlike the burials within Area C2, there are none

that date to the 4th century. Also unlike Area C2, there is no distinct date range for the use of the inhumation or cremation burial rites on the site. However, a more detailed analysis of the dating and stratigraphic relationships of the burial features will reveal more information about the dating of the burials placed here.

A number of post-holes were recorded on the site and some were even recorded within inhumation burials. These features are likely to represent the use of grave/burial markers. A more detailed analysis of the burials and the post-holes will have to be made before any firm relationship can be identified.

### **Roman road**

A large Roman road ran for 82m, north to south, across the western half of the area. It was defined by two ditches (JNF10 and JNF501) and several patches of metalled surface (JNL3/JNL6/JNL9) which had survived to a height of 34.68m AOD. The metalling was patchy in survival but at least two phases were recorded. A Roman coin was recovered from the metalling and may assist with its dating. The ditches were large, U-shaped, single-phased features. The ditch on the eastern side of the road was approximately 3m wide and 0.99m deep and the ditch on the western side was approximately 6.5m wide and 1.6m deep. The gap between the two ditches was 24m, indicating that the road would have been extremely wide.

Ditch JNF10 acted as the south/south-west boundary for the burials recorded on the site and was found to contain a number of unusual features and finds. Several possible inhumation burials were recorded within one of the sections. Another section contained what was either the debris from a burial pyre or a quantity of cremated animal bone, along with approximately 150 cattle jaws/teeth in a deliberately placed deposit associated with iron fittings. It is possible that the deposit of cattle jaws represents a ritual act but this will need to be analysed in greater detail. The base of ditch JNF501 also contained an unusual find in the form of several inscribed fragments of Purbeck marble. These fragments must also be analysed in greater detail but they may have originated from a roadside gravestone. In addition a Roman coin was found at the base of the 1.6m-deep ditch and should provide a *terminus post quem*.

### **Quarry pits**

A total of 15 Roman quarry pits was recorded on the site (JNF2, JNF23, JNF24, JNF25, JNF72, JNF131, JNF140, JNF194, JNF227, JNF257, JNF341, JNF379, JNF419, JNF420, JNF468). They were generally large, deep features, which were early Roman in date and had probably been dug to quarry sand and gravel. All but one of these quarry pits was located in a line along the east side of the Roman road. This would suggest that the quarry pits had been dug, at least in part, to quarry the gravel used to surface the road.

A number of later Roman burials were dug into the then partially backfilled quarry pits, and indeed most of the large concentrations of burials focus around these pits. This might be explained by the softer ground in these locations. In other words, more burials were placed in these pits because the ground was easier to dig.

### **Other Roman activity**

A total of 43 post-holes, 17 pits and one pit/post-hole were also recorded to the east of the Roman road within Area J1 North. It is uncertain if these features were associated with the burials from the site or if they represented a phase of small-scale domestic activity. It is possible that the post-holes represent burial markers (see above).

#### 6.4.5.3 **Modern/military**

Modern/military activity recorded on the site included ten pits, ten service trenches, two ditches and the foundations of two large late 19th-century barrack buildings.

#### 6.4.5.4 **Undated features**

Ten undated pits were also recorded.

### 6.4.6 **Area J1 South (Fig 13)**

#### 6.4.6.1 **Late Bronze Age**

No features of a Late Bronze Age date were recorded in Area J1 South. However, several sherds of Late Bronze Age pottery were recorded residually within later features, and may indicate Late Bronze Age activity in the area.

#### 6.4.6.2 **Roman**

##### **Roman road**

Area J1 South was dominated by a large Roman road which ran 72m, north to south, across the eastern half of the excavation area. This road was defined by two ditches (JSF5 and JSF19) and by three small patches of metallised surface (JSF8) which had survived to a height of 33.60m AOD. The ditches were large, U-shaped, single-phased features. The western ditch had survived to a width of 3.5m and a depth of 1.31m whilst the eastern ditch had a width of 2.5m and a depth of 2.00m. Again the gap between the two ditches was 24m, with patches of metallising surviving between, suggesting that the road would have been extremely wide.

A total of 43 silver coins were found within ditch JSF5. The coins were not found to be associated with a pottery vessel or purse but appeared to have been scattered over a small area, suggesting that the coins had been lost or deliberately scattered as opposed to deliberately hidden with the intention of being recovered. All of the coins were found within the mid-upper fill of the ditch indicating that the ditch had begun to silt up by the time the coins were lost, which we know from the dating evidence cannot have been before AD 119-122. Eastern ditch JSF19 was also found to contain significant quantities of pyre debris (in the form of charcoal and cremated (possibly faunal) bone), which had probably been dumped from nearby pyres. Once again cattle jaws were found within the ditch fill.

##### **Roman droveway and fields**

To the west of the Roman road was a smaller droveway that measured 3.8m wide and 62m long. The droveway was defined by two ditches (JSF1/JSF6 and JSF2) which ran north to south (from the north-west edge of the excavation to the south-west edge) before turning a 90-degree angle to run from west to east. Ditch JSF1/JSF6 continued into ditch JSF5 but ditch JSF2 terminated before it met the same ditch. This created a 3m entrance into the field immediately to the north (Field 1). Although no evidence was found during the excavation it might be possible to suggest that a bridge existed joining the smaller droveway to the larger road. The ditches themselves were single-phased, U-shaped features which had survived to a width of 1.5m and a depth of 0.67m.

No evidence was recorded during the excavation to reveal the function of the areas to the south and west of the droveway, as well as the area to the east of the road. It is assumed that these areas were used as agricultural fields or paddocks.

### **Roman burials**

A total of four urned cremation burials (JF51, JF52, JSF3, JSF4), two amphora cremation burials (JSF9 and JSF10), and one inhumation burial (JSF12) were recorded within Field 1. The use of this area as a burial ground probably represents a family burial plot within a small field of the family's holding.

### **Other Roman features**

A single pit (JSF13) was also recorded on the site.

#### **6.4.6.3 Post-medieval**

The post-medieval landscape within Area J1 South consisted of three field boundary ditches, a gully and three pits. The Roman field system was completely replaced by the post-medieval ditches which created at least three separate fields (see discussion). The first ditch, JSF17 (also numbered JF34 and JF40), was aligned east to west and ran across the northern edge of the site. Ditch JSF7 was aligned north to south, beginning 5.4m to the south of ditch JSF17, and divided the site almost in two. The final ditch (JSF14) was located in the north-east corner of the site which, although out of alignment with the other post-medieval linear features, appears to belong to this phase. The gully (JSF16) followed the line of ditch JSF7 and the pits (JF59, JSF13, JSF15) were all located to the east of the same ditch.

#### **6.4.6.4 Modern/military features**

During the machine excavation of the subsoil (JSL2), several military concrete pads were planned and then removed. A large multi-lobed quarry pit was also recorded (but not excavated) in the north-eastern side of the site. This quarry pit appeared to cut both the Roman and the post-medieval features so is of relatively late date, and it is possible that this quarrying is related to the construction of the garrison.

### **6.4.7 Area J1 East (Fig 14)**

#### **6.4.7.1 Prehistoric**

No prehistoric features were recorded during the excavation of Area J1 East. However, several sherds of Neolithic, Late Bronze Age and Middle Iron Age pottery (along with some pieces of worked flint) were recorded residually within later features, and may indicate prehistoric activity in the area.

#### **6.4.7.2 Late Iron Age/early Roman**

A single Late Iron Age/Early Roman, east-west orientated ditch (JEF23) was recorded during the excavation. Interestingly, the southern wall of the Roman structure was built almost directly on top of this ditch. It is uncertain if this placement of the wall over the ditch is coincidence or if this ditch formed part of an earlier precursor to the structure.

#### **6.4.7.3 Roman**

##### **Roman structure**

The excavation of Area J1 East was dominated by two medieval robber trenches which had partially robbed out two parallel, east-west orientated Roman walls.

The larger southern wall was recorded for a total length of 93m. This 93m consisted of 15.9m of surviving *in situ* wall (JEF6 (also numbered JF4 in the evaluation)), with the remaining 77.1m consisting of the medieval robber trench (JEF5) and the original Roman construction cut for the footings of the wall (JEF10/JEF27). Where the foundations of the

wall had survived, they were approximately 0.9m wide and appeared to have been constructed out of courses of greensand stone set into mortar. A section of *in situ* wall (JEF64), at the far western extent of the site, appeared to be slightly out of alignment with the rest of the wall and may represent a later phase of building or a phase of rebuilding/repair.

A total of 18 buttresses was recorded along the southern side of the south wall. Some of these buttresses had partially survived *in situ*, but many of them had been completely robbed-out and were only visible via the robber trenches and the original Roman construction cut for the buttresses. The majority of the buttresses were 0.80m wide and were positioned 4m apart from each other, extending 1.6m out from the exterior of the wall. However, along the western half of the wall, three larger buttresses were recorded. These buttresses were 2.8m wide, extending 1m out from the exterior of the wall, and were positioned every third buttress along. These buttresses were located 4m away from the next buttress to the east but only 2m away from the next buttress to the west. We might be able to suggest that the buttresses were originally intended to be 0.80m wide and 4m apart but that, along this particular stretch, the wall needed extra support and consequently every third buttress was enlarged.

A second, smaller wall was located approximately 4m to the north of the southern wall and was recorded for a length of 60m. It had been almost completely robbed out by the medieval robber trench (JEF13/JEF26/JEF47) and only a small section of *in situ* wall footing (JEF48/JEF69 – no more than 1m in length) had survived. The wall was approximately 0.70m wide and also appeared to have been constructed out of courses of greensand stone set into mortar. The foundations of this wall were not cut as deep as the foundations of the first wall and there were no buttresses along its length, suggesting that this wall was not built as high as the first. Seven post-holes were also recorded along both sides of this smaller wall.

Both of the Roman walls, and their associated medieval robber trenches, were found to continue beyond the limits of the excavation area.

A single entrance through the east-west wall lines was recorded in the central area of the exposed structure. This entrance was defined by two north-south orientated, medieval robber trenches (JEF12 and JEF14) which had completely robbed-out two parallel Roman walls. These two cross-walls would have been 7m long, approximately 0.8m wide and would have created an entrance 1.6m wide. Both walls stretched from the northern wall to 1.6m beyond the southern wall, which created two additional buttresses along the south side of the larger southern wall. These two buttresses were approximately 0.9m wide and were located 4m apart from the next buttress along. The partial remains of a gravel metalled floor (JEL7) were recorded between the walls and this is likely to have been part of the original Roman floor of the entrance.

A layer of gravel (JEL14) was also recorded underneath a layer of medieval robbing debris (JEF35). It would seem likely that this surfaces represents part of a track to the south of the Roman structure.

Two stray finds – a piece of *opus signinum* painted wall-plaster and a fragment of marble veneer – found within the demolition material backfilled into the robber trenches suggests that this structure was probably very highly decorated or contained decorative elements.

### **Roman burial-related features**

A total of three burial pits containing pyre debris (JEF1, JEF2, JEF3) were recorded to the south of the Roman circus. All three of the burial pits contained large amounts of burning around the edges of the feature, a charcoal-rich fill and a very small amount of cremated bone scattered throughout the general fill of the pit.

### **Roman quarry pit**

A large probable quarry pit (JEF4 – 7.5m in diameter and 1.4m deep) was recorded within the centre of the site, to the south of the Roman structure. The pit contained Roman tile fragments. One of the Roman burials (JEF2) was cut into the top of this pit indicating that the pit is probably early Roman in date. This pit was probably used to quarry sand and gravel and may be associated with the construction/use of the structure.

### **Other Roman activity**

A single Roman pit (JEF52) was also recorded on the site.

#### **6.4.7.4 Medieval**

Nine medieval features were recorded in Area J1 East. These features consisted of four robber trenches (JEF5, JEF13/JEF26/JEF47, JEF12, JEF14), four layers of demolition debris (JEF35, JEL2, JEL4, JEL8) and a small pit (JEF34). The robber trenches had robbed out four Roman walls and the demolition debris and pit appear to have been associated with this activity.

#### **6.4.7.5 Modern/military**

A total of 30 modern/military features were recorded on the site. These features included 14 post-holes, four pits, four military trenches, three trenches, two service trenches, two ditches and an air-raid shelter/bunker. None of the military features on the site were excavated as they had not been cleared of possible unexploded ordnance. One of the military practice trenches along the extreme eastern edge of the site had a typical plan of a World War I 'fire trench'.

### **6.4.8 Area J1 West (Fig 13)**

#### **6.4.8.1 Post-medieval**

Two post-medieval features were recorded in Area J1 West. They were a metallated surface (JWF1 – 3.5-3.8m wide and 0.51m deep) which was flanked on the west side by a roadside ditch (JWF2). The metallated surface was within a partial hollow way eroded into the gravel. Several phases of metallating represent prolonged or frequent use. The western ditch consisted of two parallel gullies (0.5m wide by 0.12m deep and 0.6m wide by 0.22m deep), suggesting that an earlier ditch was recut by a later one (although it was unclear during the excavation which was the earlier ditch).

#### **6.4.8.2 Modern/military**

A single modern service trench was also recorded on the site.

## **6.5 Area O (Figs 15-16)**

### **Introduction**

- 6.5.1 Area O comprises of a 6.917ha area located to the south of the Abbey Field. It was bordered on its northern and western sides by Circular Road South and on its east by what was Ypres Road (Ypres Road has recently been removed as part of the New Garrison redevelopment; NGR: TL 9953 2389). The site previously contained the extensive buildings of Sobraon Barracks and the Military Hospital both of which were demolished in the later 20th century. The western zone of Area O was largely concreted over while the eastern zone consisted of open areas of mown grass above buried foundations.
- 6.5.2 The site is located on the side of a dry valley which slopes down from south to north from a plateau upon which the hospital was formerly situated. The base of the valley is respected by the South Circular Road, running east-west. The drift geology of the area is predominantly sands and gravel which is occasionally in a clay matrix, and is sometimes capped by cover loam. Colluvial (hillwash) deposits are located at the base of the valley.
- 6.5.3 As well as contributing to the over-arching research themes (as set out in Section 4 of this assessment), the primary objective for Area O was to establish the presence/absence of human burials, to establish whether the site was rural or domestic in character, and to establish whether there were any buildings or other structures on the site (in the form of walls, post-holes, gullies, etc).
- 6.5.4 The archaeological investigation of Area O consisted of a trial-trenching evaluation. A single trench 1.8m wide and 50m long was excavated.

### **Results**

- 6.5.5 **Roman**  
A single Roman boundary ditch (OF1 – dated from the 1st to the 3rd century) and a later undated recut (OF2) was all that was recorded from within the evaluation trench.

## **6.6 Area Q (Figs 17-19)**

### **Introduction**

- 6.6.1 Area Q comprises a 6.845ha area located to the east of Berechurch Road, approximately 400m north of Roman Barracks, and situated on the northern slope of the Roman River valley (NGR: TL 996 244). The land was recently in arable cultivation but has not been worked agriculturally since the 2003 harvest.
- 6.6.2 Previous trial-trenching evaluations in the area revealed a number of prehistoric pits, two Late Iron Age/Roman trackways associated with the field system and numerous other pits, post-holes and features.

- 6.6.3 As well as contributing to the over-arching research themes (as set out in Section 4 of this assessment), the primary objective for Area Q was to establish the date, phasing, and function of the cropmark ditches and any prehistoric features, to establish whether the site was rural or domestic in character, and to establish whether there were any buildings or other structures on the site (in the form of post-holes, gullies, etc).
- 6.6.4 The archaeological investigation of Area Q consisted of Stage 1b trial-trenching evaluation comprising four trenches totalling 200m in length and the excavation of an area of approximately 1ha.

## **Results**

### **6.6.5 Palaeolithic**

No features of Palaeolithic date were recorded within Area Q. However, two pieces of worked flint, dated to the Palaeolithic period (*c* 500,000-10,000 BC), were found during the excavation (within a residual context and a natural feature). These finds are derived from the underlying Pleistocene gravels and suggest some form of intermittent Palaeolithic activity in the area.

### **6.6.6 Neolithic**

A single piece of Late Neolithic pottery, along with several other small and unidentifiable sherds, was recorded from three post-holes. These post-holes formed part of a 4-post structure (made-up of post-holes QF71-QF74) with a possible extension (represented by post-holes QF75 and QF77). The 4-post element measured 2.5m by 2.5m and the additional post-holes were located 1.5m north of the structure (creating an overall measurement of 2.5m by 7m). The Late Neolithic pottery is perhaps unlikely to be residual, given the low density of prehistoric pottery within the area generally, and may therefore provide a date to this building. If so, this would represent a very rare survival of a Neolithic building in this country. Some of the undated tree throw/grubbing-out holes scattered across the area may also date to this phase.

### **6.6.7 Bronze Age**

No features of a Bronze Age date were recorded within Area Q. However, several pieces of pottery dated to the Late Bronze Age were recorded residually from later features. In addition, 70 sherds of 'Late Bronze Age' pottery were recovered from what was originally thought to be a ditch within evaluation trench QT 1. The excavation demonstrated this to be a tree-throw hole and therefore provides an indication of prehistoric tree clearance.

### **6.6.8 Late Iron Age and Roman**

#### **Field boundary ditches**

Two contemporary field boundary ditches were recorded in Area Q dividing the area into at least three fields. The first ditch (QF11/QF29) was orientated north-west to south-east and was recorded for a total length of 160m. The ditch was 1.20m wide and 0.30m deep. One 3m-wide entrance was recorded half way down its length. The second ditch (QF9/QF12/QF109/QF130) was orientated north-east to south-west, and ran at a right angle to the first ditch. This ditch was 1.20m wide, 0.50m deep and was recorded for a length of 150m. A single 11m-wide entrance was also identified. Both of the ditches date from the 1st to the 3rd century, with some 4th-century pottery within the uppermost fills. Some prehistoric pottery was also recovered residually from the ditches.

### **Animal pens/erosion hollows**

Two animal pens or areas of frequent stock use were recorded in Area Q. Both were irregular silt-filled hollows (QF13 and QF83) created through the continuous use of the area as a holding pen, perhaps for the feeding or milking of stock. A series of stake hole/post-holes (QF14-QF22 and QF84-QF85) associated with both of the hollows may also indicate the presence of an enclosure fence around, or barn over, the area.

One piece of prehistoric pottery was recorded from one of these features during the evaluation/excavation. However, this same feature was also recorded in one of the 2002 trial-trenches, where the finds indicated an Iron Age/Roman date. This suggests that the animal erosion areas are likely to be contemporary with the field boundary ditches.

### **Burials**

A total of three north-south orientated, probable inhumation burials (graves) were recorded during the excavation (QF93, QF94, QF99). None of the skeletons had survived and no coffin nails, coffin staining or grave goods were found. It is likely, based on the burial custom, that they were Roman in date. For instance, the approximately 2m length of the graves suggests that the bodies were laid out supine (flat on their backs) rather than in a crouched position, as was customary in the Early Bronze Age. Then cremation and exposure burials were dominant through the remainder of the Bronze Age and Iron Age until the Roman period saw a return to inhumation burials.

The burials recorded in this area are similar to seven Roman inhumation burials identified within Area 6 of the New Garrison. These graves were also found within an agricultural landscape and were positioned adjacent to contemporary field boundaries. These burials are believed to have formed small burial plots used by rural farmers and their families. The Area Q inhumation burials would appear to fit into this tradition.

The presence of two almost complete Roman pottery vessels found within one of the ditches (QF29) may also represent disturbed vessels from burials.

### **Other activity**

Other Roman features included three probable stake holes (QF56-QF58) and two hearths (QF47 and QF121). In addition, a large number of tree-throw holes were identified and sampled across Area Q. These are likely to represent the grubbing out of trees during clearance for agriculture. One of these produced a large assemblage of prehistoric pottery and suggests that at least a phase of clearance was prehistoric (for discussion of tree throws, see New Garrison analysis report – Brooks & Masefield 2005).

#### **6.6.9 Post-medieval**

Two post-medieval pits (QF43 and QF44) were recorded on the site.

#### **6.6.10 Modern**

A single modern pit was also recorded during the excavation.

## 6.7 Area S1 (Figs 20-21)

### Introduction

- 6.7.1 Area S1 comprises a 10.270ha area located on the north side of Berechurch Hall Road and to the east of the perimeter fence of Roman Barracks (NGR: TL 9978 2213). The site is located in an area of arable agricultural land which is currently being used as 'set aside', with areas of woodland to the north and east, and with public footpaths extending around the site to the east, north and west.
- 6.7.2 Virtually the entire Garrison site forms part of the historic landscape dominated by the major Late Iron Age defended settlement (*oppidum*) of Camulodunum. The defences of the *oppidum* were formed by a series of dykes (monumental bank and ditch boundaries). The dyke marking the eastern side of Camulodunum, Berechurch Dyke, runs down the western side of Area S1. As part of the Alienated Land scheme, an undeveloped green 'corridor' is to be left so that the line of Berechurch Dyke can be preserved.
- 6.7.3 As well as contributing to the over-arching research themes (as set out in Section 4 of this assessment), the primary objective for Area S1 was to identify the location and extent of Berechurch Dyke to ensure that it was avoided by both built development and more specifically by a service trench along the east side of Roman Barracks.
- 6.7.4 To identify the location and extent of Berechurch Dyke, three evaluation trenches, totalling 150m in length, were excavated. These trenches located the defensive ditch of the dyke and a previously unknown second ditch. A further two trenches, totalling 9m in length, were placed over this second ditch to determine its nature.

### Results

#### 6.7.5 Berechurch Dyke

Both the ditch (SF1) and part of the surviving rampart (SF7) were recorded in the evaluation trenches. The ditch ran north to south along the eastern side of the rampart and had survived to a width of 6.8m and a depth of 1.4m. A post-medieval ditch was seen to cut part of this ditch in the south of the area.

#### 6.7.6 Post-medieval ditch

A single post-medieval ditch (SF2) was also recorded in the evaluation trenches. The ditch ran north to south along the western side of the rampart between it and the perimeter fence of Roman Barracks. The ditch represents a substantial boundary. It contained 20th-century material in its backfill indicating that it had not fully silted until recently.

#### 6.7.7 Other features

A single post-Roman post-hole was recorded within Trench 4.

## 6.8 Time Team trenches (Figs 8 and 22)

### Introduction

- 6.8.1 The 'Time Team' trenches were located above the Roman structure – on the north-western edge of Area J1 East, in the grounds of the Sergeants' Mess, in the grounds of the Army Education Centre and in the grounds of the Garrison sports pitch (centred on National Grid Reference TL 9949 2453).
- 6.8.2 As well as contributing to the over-arching research themes (as set out in Section 4 of this assessment), the Time Team trenches were placed to further locate the Roman structure seen in Areas C1, C2 and J1 East.

### Results

#### 6.8.3 Roman

##### Roman structure

Trenches 3, 4, 5, 6 and 7 all contained the partial remains of the Roman structure.

*Trench 3* – Trench 3 contained two 0.8m-wide medieval robber trenches (TTF9 and TTF11), which were 0.10m and 0.22m deep respectively. The robber trenches had robbed out two parallel, north-south orientated Roman walls. A spread of medieval robbing debris (TTF10) was also recorded.

*Trench 4* – Trench 4 contained a medieval robber trench (1.1m wide and 0.14m deep) which had partially robbed out a curving Roman wall and the surviving *in situ* foundations of the wall itself (both numbered TTF4). Also recorded was the partial remains of a single buttress (TTF5) along the south side of the Roman wall.

*Trench 5* – Trench 5 contained a medieval robber trench (0.7m wide and 0.04m deep) which had partially robbed out an east-west orientated Roman wall and the surviving *in situ* foundations of the wall itself (both numbered TTF7). Also recorded were the *in situ* remains of a single buttress (TTF6), extending 0.9m out from the north side of the Roman wall, and a layer of medieval robbing debris (TTF6).

*Trench 6* – Trench 6 contained a 0.4m-wide and 0.1m-deep medieval robber trench which had robbed out an east-west orientated Roman wall (both numbered TTF12). Also recorded were two layers of medieval robbing debris (TTF5 and TTF9).

*Trench 7* – Trench 7 contained two medieval robber trenches (TTF2 and TTF3) which had robbed out two parallel, east-west orientated Roman walls. TTF2 was 0.6m wide and 0.16m in deep, whilst the inner wall was 0.8m wide and 0.1m deep.

##### Other Roman features

A single Roman pit (TTF8) was also recorded to the north of the robber trench in Trench 5.

#### 6.8.4 Medieval

Seven medieval robber trenches and four areas of medieval robbing debris were recorded within the trenches (see above). This activity is associated with the medieval robbing of the Roman structure.

#### 6.8.5 Undated features

A single ditch or natural feature (TTF1) was recorded in Trench 1.

## 6.9 Watching brief (Figs 23-24)

### Introduction

- 6.9.1 The Garrison Urban Village watching brief was located along the road lines of Circular Road North, Circular Road East, Flagstaff Road, Napier Road and Le Cateau Road (centred on National Grid Reference TL 99660 24535).
- 6.9.2 The watching brief, to date, has consisted of work undertaken during the excavation of a series of storm drains and service trenches concentrated around the crossroads of Circular Road North, Circular Road East, Flagstaff Road and Napier Road, and along Le Cateau Road. Although these works ran for a considerable length along the roads listed above, the watching brief was only carried out in those areas where the works crossed the Roman structure and/or passed close to the edge of the Area C2 Roman cemetery.
- 6.9.3 As well as contributing to the over-arching research themes (as set out in Section 4 of this assessment), the primary objective for the Alienated Land watching brief was to preserve, by record, any archaeological deposits that were to be removed or disturbed by the modern groundworks.

### Results

#### 6.9.4 Circular Road East (Trench WBT1)

##### 6.9.4.1 Roman

##### **Roman structure**

The archaeology in WBT1 was dominated by the remains of four medieval robber trenches (WBF2, WBF3, WBF4, WBF5), which had almost completely robbed out two parallel, east-west orientated Roman walls, a third cross-wall and a buttress.

A 3m stretch of the two parallel Roman walls were revealed. Both had been almost completely robbed-out by the two robber trenches (WBF2 and WBF4), apart from two small sections of *in situ* wall foundation which had survived (WBF9 and WBF10). The larger southern wall was approximately 1.2m wide and 0.30m deep and the second wall, located 4.7m to the north, was 0.9m wide and 0.17m deep.

The third Roman wall (robbed out by robber trench WBF3) was orientated north-south and located across the two other walls. This wall was 8m long, approximately 1m wide and 0.20m deep, and extended 1.4m beyond the southern wall creating a single buttress along the southern side of this wall. This buttress (robber trench WBF5 with surviving *in situ* buttress foundation WF6) was approximately 1m wide.

A small gully (WBF7) and pit (WBF8) were also recorded immediately to the south of the structure. It is uncertain what this activity represents or if it is associated with the structure.

##### **Roman burials**

A single Roman inhumation burial (WBF1), buried within a lead coffin, was also identified 18.5m to the south of the structure. The coffin was found during machining for the deep stormwater trench, within a grave 3.14m below road level. The lead coffin liner was damaged but most was recorded *in situ*. The inhumation within appeared to be a child.

#### 6.9.4.2 **Medieval**

Four medieval robber trenches (WBF2, WBF3, WBF4, WBF5) were recorded within this trench of the watching brief. They robbed-out three Roman walls and a buttress.

#### 6.9.4.3 **Modern/military**

A small number of modern/military features were identified during the watching brief but were not recorded. These features were likely to be associated with the military buildings and the modern roads located in the area.

### 6.9.5 **Le Cateau Road (WBT2)**

#### 6.9.5.1 **Post-medieval**

A single, north-west to south-east orientated, post-medieval ditch (WBF11) was recorded to the north-east of Area J1 East.

### 6.9.6 **The crossroads of Circular Road North, Circular Road East, Flagstaff Road and Napier Road (WBT3)**

#### 6.9.6.1 **Roman**

##### **Roman structure**

The archaeology in WBT3 was dominated by the partial remains of a large Roman plinth. The plinth would originally have measured 3m by 2.6m (shown by construction cut WBF15) but only a quarter of it had survived *in situ* (WBF12). The surviving cut for the plinth was 0.48m deep in depth. A single post-hole (WBF17), identified to the east of the plinth, may also be associated with this phase of activity.

#### 6.9.6.2 **Medieval**

A single medieval robber trench (WBF16) was recorded. This robber trench had partially robbed-out the Roman plinth.

#### 6.9.6.3 **Post-medieval**

A single post-medieval pit (WBF19) was also recorded. This pit cut into the medieval robber trench.

#### 6.9.6.4 **Modern/military**

Modern/military features included four service trenches.

### 6.9.7 **Flagstaff Road (WBT4)**

#### 6.9.7.1 **Late Bronze Age**

A single small (0.5m in diameter by 0.19m deep) pit containing an assemblage of Late Bronze Age pottery (WBF25) was recorded within this trench.

#### 6.9.7.2 **Undated pre-Roman features**

Two undated pre-Roman pits (WBF24 and WBF27) were also recorded within this trench.

### 6.9.7.3 Roman

#### **Roman structure**

The archaeology in WBT4 was dominated by two medieval robber trenches (WBF20 and WBF21) which had completely robbed-out two parallel, east-west orientated Roman walls. The larger northern Roman wall was approximately 1m wide and 0.29m deep, and the second wall, located 4.2m to the south, was 0.6m wide and 0.09m deep. A small area of medieval robbing (WBF28) was located along the northern edge of the north wall. This feature may have robbed-out part of a Roman buttress.

An area of metalled surface (WBF22) was also recorded immediately to the north of the two walls. This feature is likely to be part of a track/road along the northern side of the Roman structure (also recorded in Area C1).

### 6.9.7.4 Medieval

Three medieval robber trenches (WBF20, WBF21, WBF28) were recorded. These trenches completely robbed-out two Roman walls and possibly a buttress.

### 6.9.7.5 Post-medieval

Two post-medieval pits (WBF23 and WBF26) were also recorded to the north of the Roman structure. They both cut through the Roman metalled surface (WBF22).

## 7 Discussion

### 7.1 Areas C1, C2, E, J1, the Time Team trenches and the watching brief (areas to the north of the dry river valley delineated by Circular Road South)

#### 7.1.1 Late Neolithic

Several features and finds (some residual) of a Late Neolithic date were recorded in Areas C1, C2 and J1. A total of six pits were definitely dated to this phase and another three pits and one ditch are possibly associated with this activity. Most of the features and finds were concentrated in Area C1, with only one small pit and a small number of residual finds being recorded on the rest of the sites.

Where find evidence was available from the features, they appear to have been domestic in nature. However, recent research into the Neolithic period in Britain has suggested that the Neolithic people did not throw away domestic refuse but instead 'ritually' or 'symbolically' disposed of it. This activity would be difficult to separate on our sites, but a more detailed analysis of the environmental evidence from two of the pits may help to clarify this matter. It is also interesting to note that the only Late Neolithic pit within Area C2 is located within the centre of a later Roman barrow burial (and is indeed cut by the centrally placed burial). If the placement of this barrow burial over the earlier pit is not accidental, then it may imply that the pit was ritual in nature and that it had been remembered or marked in some way (perhaps with its own barrow). Therefore, the placement of the Roman burial could be seen as an attempt by the deceased (or the deceased's family) to connect themselves to this ritual/ancestral place.

Analysed as a group, this collection of features and finds would appear to suggest that the high ground at the northern extent of the Abbey Field and to the south of the town centre was an area of settlement/domestic or ritual activity in the Late Neolithic period. The association of Peterborough Ware and Beaker pottery within the Area C1 pits is particularly unusual as these traditions of pottery manufacture are rarely found together. Settlements of Late Neolithic to Early Bronze Age date are not common in comparison with later periods and these are the first assemblages of their type from Colchester. The difficulty in identifying such sites is partly due to their form as scatters of small pits rather than the ditch defined sites of later periods.

#### 7.1.2 Late Bronze Age

Several features and finds (many residual) of a Late Bronze Age date were recorded in Areas E and J1 and during the watching brief. A total of three pits, eight post-holes and a gully were dated to this phase, along with a possible 4-post structure which may also be associated with this phase of activity. Most of the features and finds were concentrated within Area J1 North, with only one pit and a number of residual finds being recorded on the rest of the sites.

The 4-post structure associated with this phase could have had a number of functions. It could have been used either to store food and/or hay (to keep it out of the reach of vermin and protected from the damp), to lay out bodies during exposure burials, or to use as a watchtower. From the evidence available it is difficult to attribute any one function to this structure, although the significant quantity of Late Bronze Age pottery from Area J1 North suggests that both the 4-poster and the other features here were components of a domestic site.

Analysed as a group, this collection of features and finds would appear to suggest that the high ground at the northern extent of Abbey Field and to the south of the town centre was a area of domestic/rural activity in the Late Bronze Age. This is a significant addition to the understanding of the Late Bronze settlement of the Colchester area, since the only other previously known settlement area was located at Sheepen.

### 7.1.3 **Pre-Roman/early Roman**

Three undated field boundary ditches were recorded in Area C1. Although undated, their stratigraphic relationship with other features suggest that they were either pre-Roman or early Roman in date. Similar field boundaries from the Garrison site have been associated with the Late Iron Age *oppidum* and these ditches may represent similar activity.

The layout of the ditches in Area C1 would imply that they formed the boundaries to three fields. Field 1 would be located in the north-west corner of the site, Field 2 along the east edge, and Field 3 in the south-west corner. The gap between the three ditches (in the centre of the site) is likely to have been an entrance into each of the fields.

### 7.1.4 **Roman**

#### **Roman circus (Fig 24)**

Several sections of a large Roman structure were recorded within Areas C1, C2 and J1 East, in the Time Team Trenches, and within the watching brief. From the evidence, this Roman structure is now believed to have been a monumental stone circus. This is a highly significant discovery, because it is the first Roman circus to be positively identified in Britain.

#### **A summary outlining the evaluations, excavations, watching briefs and surveys carried out on the Roman circus since 2000.**

**May 2000** – The outer wall foundation of the south *cavea* was noted during a CAT watching brief for an electricity cable. The foundation was recognised at the time as being Roman. The watching brief followed an earlier area excavation to the south in March 2000 (CAT Report 138), for an all-weather sports pitch, where 72 Roman burials and part of a north-south ditched trackway/road were found.

**Summer 2002** – trial-trenching evaluation, Stage 1a – The outer wall foundation of the south *cavea* was again cut through, this time in one place by one of the evaluation trenches. The inner foundation was not seen.

**July 2004** – evaluation and excavation of Area C1 – A 12m section of the north *cavea* wall foundations were revealed. They were shallow, completely robbed, and cut away in places by later features. A single buttress, and part of a second, were apparent on the north side of the northern foundation. Part of a metallised surface was found along the north side of the outer *cavea* foundation. Several distinct east-west wheel-ruts supported the view that the surface was part of an east-west street. At that time the walls were considered to be possibly part of a building or cemetery wall.

**Summer 2004** – evaluation and excavation of Area C2 – A 13m section of the outer *cavea* wall and a 4m section of the inner *cavea* wall foundations were revealed. The foundation incorporated three substantial buttresses on the south side. One of the buttresses appeared to include part of the lowest course of the wall in the form of a row of neatly-faced greensand blocks. Level with the base of the course was a spread of gravel and greensand chippings

indicating that the ground level was probably around 33.78m AOD when the circus was built. To the immediate south, 68 Roman burials were found. These included the remains of ten barrow burials, the majority taking the form of a single cremation in the centre of a ring ditch. The cluster of barrows seems to have been bounded to the north and south by east-west orientated ditches, which formed two discrete burial plots. The northern boundary ditch was 5-6m from the south *cavea* of the circus.

At this stage it was clear that the juxtaposition of inner and outer walls (with external buttresses) in Areas C1 and C2 were very similar and that they were in mirror image to one another. They were then considered to be part of the same structure, possibly for an approximately 70m square or rectangular precinct.

**September 2004 to February 2005** – evaluation and excavation of Area J1 (specifically Area J1 East) – A 93m section of the south *cavea* wall was revealed. A total of 18 buttresses was recorded along with a single entrance defined by two robbed-out walls with a metalled surface in between. At that stage it was apparent (from surveying) that the walls in Area C2 and the walls in Area J1 east lined up perfectly. This initially caused some confusion since it was unlikely that a precinct would extend so far. It was not until November 2004 that the remains were identified as belonging to a Roman circus. This appeared to be the only explanation for a construction on this scale (the circus being the longest form of Roman building). Critically the parallel walls were interpreted as the inner and outer *cavea* (retaining) walls for the seating tiers. This interpretation also explained the north-south linking walls of the entrance in Area J1 East. This affected the subsequent excavation strategy since the clinching evidence would be curving walls at the end of the structure. A hand-dug extension of Area J1 East to the west followed the outer wall line and proved that the outer wall was indeed curving northwards.

**January to August 2005** – geophysical surveys (resistivity, magnetometry, ground-penetrating radar and microtopology) were undertaken by Dr Tim Dennis of the University of Essex. These were most effective south of the disused tennis courts on Circular Road North where the *cavea* walls were clearly traced by resistivity over a distance of 67m, and in the garden of the Sergeants' Mess where faint indications were noted of the west end of the circus in both resistivity and ground radar.

**February 2005** – Seven narrow trenches were hand-dug by CAT under RPS management for Channel Four's Time Team programme 'Britain's lost Roman circus'.

*Trenches 1-2* – Two trenches were dug in the garden of the Sergeants' Mess in an attempt to locate the west end of the circus. No foundations or other traces of the circus were found.

*Trench 3* – A third trench dug into the garden of the Sergeants' Mess located two robbed-out wall lines. These walls are believed to have been associated with the starting gates of the circus.

*Trench 4* – A trench was excavated by the side of Le Cateau Road to determine the exact location and curve of the west end of the outer foundation of the south *cavea* on Area J1 East. The curve proved to be tighter than expected, suggesting that the west end was not semicircular in shape, but instead incorporated the *carceres* (starting gates).

*Trench 5* – A trench was dug in the garden of the Army Education Centre to establish the exact position northwards of the north *cavea*. A greensand stone foundation and buttress was located within the trench and appear to be part of the outer wall of the *cavea*. The foundation was further south than expected, suggesting that the circus tapered in width to the west.

*Trench 6* – A trench, to the west of the disused tennis courts on the south side of Circular Road North, was dug in the hope of locating the *spina*. However, no foundations or robber trenches were found.

*Trench 7* – A trench to the south of the disused tennis courts on the south side of Circular Road North was dug to confirm the presence and position of the two foundations which were detected during an earlier geophysical survey. These foundations were the remains of the *cavea* walls.

These trenches are included as part of the present project.

**March 2005** – continuation of Time Team Trench 6 – An additional 3m was added to the north end of Time Team Trench 6. Critically part of the foundation of the *spina* (central barrier) was found in this trench.

**June 2005** – Four narrow trenches were hand-dug by CAT on the south side of the Army Headquarters in Flagstaff House on Napier Road (funded by the Friends of CAT).

*Trench 1* – A trench was dug in one of the patches of lawn near the south boundary of Flagstaff House. It cut through only brown sandy loam, the bottom of which was presumably part of the arena.

*Trench 2* – A second trench was excavated through another patch of lawn along the south side of Flagstaff House. This time robber trenches for the northern inner and outer foundations of the *cavea* were found. There was no foundation *in situ*. However, part of an adult inhumation was discovered hard up against the outer edge of the outer wall foundation. The body had been laid on its back parallel to the circus wall and buried without a coffin.

*Trench 3* – A trench was dug close to Trench 2 to confirm (as it did) the curve of the outer wall of this part of the circus. This trench importantly demonstrated the curvature of the eastern (curved) end of the circus allowing the full length of the circus to be calculated.

*Trench 4* – A small hand-dug pit was dug at the base of the short section of the precinct wall of St John's abbey, which still survives in the grounds of Flagstaff House. The purpose of the trench was to determine if the medieval wall had been originated as part of the *spina*. The foundation of the wall included not only fragments of greensand but various kinds of stone as well. The mixture of building materials and the character of the coursing showed that, without doubt, it was of wholly medieval origin.

**June 2005 to January 2006** – Alienated Land watching brief (stormwater drain) – A total of four trenches were excavated over the circus. Trench 1 located part of the south *cavea* wall and one side of an entrance similar to the entrance within J1 East. Trench 3 located a substantial plinth in the centre of the *spina* considered to be the base of a monument and Trench 4 located part of the north *cavea* wall. These excavations, therefore, provided invaluable evidence for further structural details of the circus.

## Discussion of the circus structure

### *Introduction*

Chariot-racing was the oldest and most popular sport in the Roman world and was of Greek origin, coming to Rome via the Etruscans. Circus games (*ludi circenses*) originally consisted of chariot racing and boxing. Athletics and wrestling were added in the 2nd century BC. The circus was the largest of all entertainment buildings in the Roman world and comprised an elongated oval track flanked by tiers of seating (along the two long sides and the curved end), with a low barrier known as a *spina* or *euripus* running down the centre to prevent collisions. Turning-posts known as *metae* were placed at either end of the *spina*, whilst the Circus Maximus in Rome had a central obelisk (recovered from Egypt). The open, non-curved end contained a row of starting bays, the *carceros*. The Circus Maximus was the largest and most monumental of these structures, with sufficient seating space for 250,000 spectators.

Many Roman provinces had monumental stone circuses. Those in France seemingly corresponding closely to the administrative significance of the settlement (ie provincial capitals). The known Gallic examples are at Arles and Vienne (documented in some detail); Lyons, Saintes, and (German) Trier (known to exist from inscriptions, etc). The circus at Arles was 450m in length, by 101m in width, with a triumphal arch at its western end and a monumental façade at the eastern end. There were no other archaeologically attested examples in the north-west provinces of the Empire.

### *Interpretation of structural elements*

The circus measures 448-50m long and approximately 70m wide (the track was 62m wide). It compares well with the circuses known elsewhere, being quite long (at the upper end of the normal range), but narrow. It was located about 400m south of the walled town, on effectively what must have been the nearest area of flat land to the town centre.

Essentially a Roman circus consisted of four elements: the seating area, the central barrier, the starting gates and the track. Each of these elements will be discussed in turn along with evidence relating to the date of the circus, its appearance and the road system around the structure. Evidence relating to a possible earlier precursor to the monumental stone circus will also be discussed

### *The seating area (cavea)*

The circus structure, as identified within Areas C1, C2 and J1 East, the Time Team trenches (TTT) and the watching brief (WB), mainly consisted of two medieval robber trenches which had almost completely robbed-out two parallel, east-west orientated Roman walls. These two Roman walls represented outer and inner walls of the seating area known as the *cavea*. The *cavea* varied slightly at approximately 5.9-6.4m in width (as measured from the outer edges of the foundations of the inner and outer walls). The distance apart between the two foundations is 4.3m in Area C1 and 4.4m in Area J1 East. Allowing for the fact that the wall will be narrower than the foundation, this implies a distance between the inner and outer *cavea* walls of around 4.5m. This is narrow compared with other circuses, but there are parallels, and indeed this is not the narrowest. The distance between the walls suggests four tiers of seats. The capacity of the building is thus likely to have been around 12,500-15,000 people (assuming Humphrey's figure of five spectators for each 2.0-2.3m of seating; Humphrey 1986). The *cavea* would have consisted of tiers of raised wooden benches surrounding three sides of the arena.

The *caveas* of continental examples are usually set on stone substructures. They do not generally incorporate a pair of parallel walls as at Colchester unless, as in the grander ones, they incorporated a colonnaded gallery. Continental circuses mainly have a single *cavea* wall (the inner one), with a series of short walls radiating outwards from it to form vaulted bays with roofs tapering downwards to support (or form) the tiers of seats above. The outer ends of the radiating walls usually terminate in pilasters. The absence of a stone substructure under the seats at Colchester circus suggests that its *cavea* was made of earth or cover loam. This would conform to a practice characteristic of Britain and evident in its amphitheatres and in at least two of its known theatres. This method of construction is not confined to Britain. There are a few theatres in Gaul of the same type, and Humphrey's suggests more modest circuses incorporate an earth embankment for the seating (eg circuses in Portugal and Spain at Luz and Zafra respectively; Humphrey 1986).

Surviving inner and outer *cavea* walls elsewhere suggest that the tops of the walls were generally 2.5m above the surface of the arena. Seats were around 0.3m high. Thus the outer *cavea* wall would be at least 4.0-5.0m high, depending on whether or not the base of the inner tier of seats was level with the top of the inner *cavea* wall (Humphrey has it level in some circuses, but the London amphitheatre has it lower; Humphrey 1986) and if the arena floor was on the same level as ground level outside the building. The projections along the outer *cavea* may have been the foundations for buttresses to help support the outward thrust of the *cavea* mound. However, they may (also) represent the base of blind arcading additionally enhanced with pilasters, one for each projection. In this way, the Colchester circus would have looked externally much like its continental cousins despite being constructed in a different way.

The outer *cavea* wall was the larger buttressed wall identified within each of the areas. Approximately half of the excavated outer wall, and some of the buttresses, contained some form of surviving *in situ* foundation. Where the foundations had survived they measured 0.8m-1.10m in width and were constructed out of courses of greensand stone set into mortar. A characteristic feature of the foundations was the inclusion of many stone chippings, which must have been masons' waste produced as blocks of stone were dressed to make ashlar blocks for the wall faces. Part of the lowest course of the wall proper survived *in situ* in only one place (the middle buttress on Area C2), where a row of small ashlar blocks formed part of the base of one of its faces. A small section of *in situ* foundation, at the far western extent of Area J1 East, was slightly out of alignment with the rest of the wall and may represent a later phase of building or a phase of rebuilding/repair.

From the evidence gathered it would appear as though the *cavea* was built in different sections. Each section had its own distinctive pattern of buttresses and an entrance probably existed where one section joined another, such as the one found on Area J1 East. At least four different patterns of buttress were recorded in total. In the eastern half of Area J1 East (to the east of the entrance), the buttresses were 0.8m wide and were placed 4m apart along the wall. In the western half of the site (to the west of the entrance), the same pattern applies but every third buttress was 2.8m wide and was positioned 4m apart from the nearest buttress to the east but only 2m apart from the nearest buttress to the west. In Area C1, the single complete buttress recorded was 3.8m wide and was positioned 6m apart from the next (partially recorded) buttress. Then, in Area C2, the three buttresses were 1.9m wide and were positioned 2.4m apart. The buttresses recorded in the TTT and the WB were too fragmentary to add further to this picture.

The inner *cavea* wall was the smaller secondary wall identified within each of the areas. This wall had been almost completely robbed out, apart from a very small section of

foundation identified in Area J1 East. This inner wall measured 0.6m-0.9m in width and was also constructed out of courses of greensand stone set into mortar. The ground level in the Roman period was around 0.35m below the level today. This would mean that the inner *cavea* wall was surprisingly shallow – too shallow, it would seem, to support an inner *cavea* wall of normal height (ie approximately 2.3m; Humphrey 1986). If we have fixed the original ground level correctly, then the foundations for the wall could only have been a mere 150mm or so deep.

There is some debate over how the tiered seating benches were supported. A mound of earth, retained in place by the low inner wall and the taller buttressed outer wall, may have been used – a technique also used in the amphitheatres (eg Silchester) and theatres (eg Gosbecks in Colchester) of Britain. However, the depth of the foundation of the inner *cavea* wall does present us with a difficult problem of interpretation, because an earth bank opens up the possibility that the wall could have rolled over onto the surface of the arena. Perhaps, instead of a bank, there was a framework of timbers which not only provided support for the tiers of seats, but crucially tied the two walls together and kept the inner *cavea* wall upright. Yet another possibility is that the inner *cavea* wall itself was timber-framed, and its rubble foundation supported a low plinth which would have kept the ground-plate clear of the ground and help prevent rot.

A series of post-holes was recorded along both the inner and outer walls of the *cavea* in Areas C1, C2 and J1 East. It is possible that these post-holes represent the use of scaffolding during the construction of the walls. A stone footing, found along the edge of a buttress in Area C2, may also have resulted from using scaffolding during construction. However, another theory concerning the stone footing is that it is the base of an arch. An arch would have been a decorative feature along the outside of the walls, but no other footings of a similar nature were recorded anywhere else on the circus site.

Two entrances were also identified leading into the circus. The first, and only complete entrance to be identified was on Area J1 East. This entrance consisted of two robbed-out, north-south orientated Roman walls which crossed the *cavea*. The entrance itself was 7m long and 1.6m wide and included a metalled floor. The second entrance was recorded during the watching brief. This consisted of only one robbed-out, north-south orientated Roman cross-wall (the other wall being outside of the area excavated). These two entrances are approximately 220m apart.

#### *The central barrier and probable monument plinth*

The central barrier (*spina*) was constructed between the two turning posts (*metae*) on the track and would have included monuments of various kinds and lap counters (usually in the form of dolphins and eggs). This *spina*, which should be about 230m in length, was identified twice during the excavations. The first part of the *spina* was recorded in Time Team Trench 6, in the north-west corner of the Abbey Field. This consisted of a 0.4m-wide, east-west orientated robber trench which had robbed out a Roman wall. The second part of the *spina* was recorded in Trench 3 of the watching brief. Although partially robbed-out it consisted of a large 3m by 2.6m foundation constructed out of greensand stone chips set into mortar. This foundation is likely to have been a plinth for a central monument, like an obelisk (apparently ubiquitous to monumental circuses). A stone-packed post-hole located immediately to the east of the plinth may also be associated with the *spina*.

The position of the plinth about midway along the length of the *spina* is certainly consistent with the location of obelisk locations at better-preserved circuses. It may also be significant that the plinth was located within the modern crossroads of Flagstaff Road/Circular Road

East with Napier Road/Circular Road North. Original use of the monument as a centrepiece for the cross-roads would neatly explain the peculiarity of this otherwise coincidental finding. The origins of the roads are therefore critical, although it is likely that Flagstaff Road dates back to the 11th century given its location along the western edge of the St John's abbey precinct wall.

#### *The starting gates*

The starting gates (*carceres*) were located at the east end of the circus structure. The eastern extension of Area J1 East and Time Team Trench 4, dug by the side of Le Cateau Road (at the far western extent of Area J1 East), revealed a tight curve in the outer wall of the *cavea*. This curve was too tight to be the semicircular end of the circus and must therefore have been a part of the starting gates. This finding means that the two robbed-out, north-south orientated Roman walls recorded in Time Team Trench 3 are also part of the starting gates. Geophysical survey anomalies in the grassed garden of the Sergeants' Mess may confirm its alignment.

#### *The semi-circular end*

Limited investigations by CAT within the grounds of Flagstaff House (independent of this project) have located the curve at the eastern end of the circus and have allowed its length to be fixed.

#### *The track*

The racing-track arena measures 62m wide at the east end, tapering to 59m at the west. No evidence for a specially-imported surface was found during the excavations and it appears as though the existing soil was used. Being a sandy loam this soil is free-draining and probably would have been adequate as a surface for the track, provided that there was not any prolonged periods of heavy rain immediately before or during race days.

As regards the level of the arena, the *cavea* of a British amphitheatre was usually made out of soil stripped off the arena. This lowered the surface of the arena and meant that the *cavea* did not have to be as substantial as would otherwise have been necessary. If the *cavea* of the circus at Colchester had been made in the same way, then the surface of the arena would have been about 0.3m lower than the surrounding area. It remains to be seen if the arena at Colchester was indeed lowered.

#### **Dating**

Dating evidence for the circus is extremely limited. The use of greensand is probably the single most important indicator of date available at present. Excavations in the town centre reveal that greensand was not widely used in Roman Colchester until the late 1st or 2nd century, a fact corroborated on a grand scale by the town wall which was built almost entirely of septaria and brick, and is dated to *c* AD 65-80. A base sherd of a BB2 bowl, datable to *c* AD 110/120-300, was securely stratified in the gravel floor of the entrance on Area J1 East. The gravel floor could of course have been replaced during the life of the circus. However, if primary, then it would provide further evidence of a 2nd-century date for the construction of the circus.

There are no clear indications of the terminal date for the use of the building in Roman times. A clue is provided by the distribution of burials in the area as a whole. No burials have as yet been noted within the footprint of the circus, despite the numerous examples which are known from the surrounding area. The absence may be a consequence of the circus being in use until the end of the Roman period, but the evidence is inconclusive.

If the circus survived until the end of the Roman period, then to judge by the fate of other Roman public buildings in the town, such as the Temple of Claudius and the theatre (*CAR 1*), it is likely that it stood as an ever-degrading ruin until the Norman period. The circus may even have survived longer than that. Most of the features and layers of the Roman circus were sealed by medieval robber trenches and robbing debris, which suggests that the circus had survived in some form into the medieval period, at which point all traces of the structure were robbed out. A detailed analysis of the post-Roman pottery (for the final report) will hopefully provide enough evidence to better date this phase of activity.

### ***The appearance of the circus***

Several stray finds from the demolition debris over the circus structure are also worth mentioning. They are two pieces of column plaster found in Area C2, and a piece of painted wall plaster and fragment of marble veneer found in Area J1 East. All these items suggest that the circus structure was highly decorated. The pieces of column plaster may also indicate the presence of a colonnaded gallery along the *cavea*.

The exterior appearance of the circus requires further consideration. The exterior wall was likely to be approximately 5m high based on continental examples and the likely spacing and height of the seating tiers. It is not clear whether the buttresses would have been simple vertical arrangements or would have been connected by arches to form a repeating pattern of arcades. The latter is typical of the external appearance of standing continental amphitheatres. The long section of wall foundations exposed within Area J1 East provided the best opportunity to examine patterns of construction and indicated two distinct patterns with the entrance structure the point of change. The buttresses to the east of the entrance all extended further out from the outer wall (approx 1.6m) than buttresses to the west (approx 1m). If arches linked these elongated buttresses then it is possible that they formed recessed arcades similar to those at the Spanish example at Toledo. It is, perhaps, unlikely that the arches supported an additional tier of seating or a gallery along the back of the seating in this section, as the arrangement could not have continued into the section to the west of the entrance.

### ***A track around the circus and link to the town***

Evidence from outside the circus walls, in Areas C1, C2 and J1 East and Trench WBT4 of the watching brief, suggests that a track existed around the structure. Although patchy, metallised surfaces (and a small section of a stone chipped surface) were recorded in each of the areas mentioned. Two wheel ruts from a Roman cart were even recorded within the metallised surface identified in Area C1. A road leading to, from and around the circus would have been important for moving people, animals and goods. It is also likely that this road was connected to the major routes leading from the town centre (in particular the Temple of Claudius via the south-eastern gate and a route along Mersea Road) to the circus.

### ***A precursor to the monumental stone circus***

During the excavation of Area J1 East, an east-west orientated ditch containing early Roman pottery was recorded. Unusually, the outer wall of the *cavea* was built directly on top of this ditch. The ditch may have simply functioned as a field boundary ditch within the earlier field system laid out over the area. Or, alternatively, it may have formed part of an earlier precursor to the circus (made of earth banks rather than stone walls) which was built by the army to entertain the XX legion, who were stationed in Colchester soon after the Roman invasion of Britain. However, no ditches were recorded under the outer walls in any of the other areas excavated and more archaeological work will need to be done on the circus to fully investigate the nature of the ditch. The date of the early Roman pottery from the ditch is critical as an aid to the dating of the circus.

### ***Discussion***

It is possible (in fact probable) that the circus was still an above-ground ruin when St John's abbey was built *c* AD 1100. Early medieval pottery (still to be confirmed) from the robber trench suggests that standing remains may have been incorporated in the abbey, especially its precinct wall which exhibits some odd angles and bends in the south-west corner of the precinct (the wall appears to be early in the life of the abbey and dates to around *c* AD 1100).

There are two problems which need to be resolved in relation to the track at Colchester. Firstly, was it metalled or sanded, and secondly, was the surface of the track lower than the ground outside the circus? There is some uncertainty generally about the surface treatments of tracks in circuses. Certainly some of the grander circuses did have metalled tracks, but simple dirt tracks are presumed for the very basic circuses which consisted of little more than a flat field and two turning-posts (*metae*) (despite the archaeological evidence for these being non-existent). At Colchester, we have already been digging within the area covered by the track. These places are the southern half of Area C1, the very north edge of Area C2 (in the extra trench at the north end), and the north strip of Area J1 East. No metalling has been observed in any of these places. A review is needed to consider the depths, relative levels and character of the soil on the site of the track and outside the circus. This needs to take into account the base of the topsoil profile which appears to survive under the site of the *cavea* on Area J1 East.

### **Initial comparisons of the Colchester circus with continental examples**

The Colchester circus can be compared to a number of partially surviving continental examples. These provide a sound basis for understanding the superstructure of this poorly preserved example. Initial examples of this approach are provided below.

#### ***Toledo***

This Spanish circus is located near the River Tagus north of the Roman town and has been extensively excavated (see Humphrey 1986). It is well preserved, with most of one side and the entire semicircular end well preserved. Like Colchester, the starting gates were located at the western end although this circus was orientated north-east/south-west rather than east-west. The length, at approximately 423m, is very similar to the Colchester example, but it was considerably wider with a maximum width of 100m indicated in the 1920s. The arena width is now known to have been approximately 86m at the semicircular end but, as at Colchester, it tapers towards the starting gates, to approximately 82-83m. Another similarity to the Colchester circus is the rather different treatment of the *cavea* in different sections. Like most stone circuses, the *cavea* comprised stone vaults for seating, rather than the earthen or wooden (or indeed a combination of the two) at Colchester. These vaults were 2.95m high against the back (outer *cavea*) wall. However, like Colchester, external buttresses ('piers') extended out from the back wall and have been interpreted as supporting a series of arches/arcades (Humphrey 1986, fig 160). Some of the additions to the outer *cavea* wall supported external staircases running parallel against the wall. Although elongated buttresses were also found at Colchester, for example, to the west of the entrance in Area J1 East, it is unlikely that they could have supported such staircases given their comparatively short lengths. The capacity of Toledo and Colchester are likely to have been similar with approximately 13,000 estimated for Toledo. The Toledo *cavea* was wider at 7m wide.

### ***Mérida***

This circus is the most fully excavated in Spain with 1920s' excavations exposing much of the starting gates, *spina* and parts of the *cavea* and monumental arch (Humphrey 1986). The latter element at Colchester has not yet been exposed but should lie within the grounds of Flagstaff House at the eastern end of the structure. There are two significant parallels with Colchester. Firstly, Colchester and Mérida (unusually) share curving walls at both ends of the circus with the starting gates end curving sharply. Secondly, the obelisk/monument at the centre of the *spina* at both is not attached to the *spina* walls but rather stands in isolation on the line of the *spina* which continues either side of it. Interestingly, as at Colchester, the circus was located 400m from the Roman town (this time to the east) and was similarly (virtually) east-west orientated with the starting gates at the west end and the semicircular end at the east end. Like Colchester, this circus was surrounded by the town's (early Roman) cemeteries. The arena was 404m in length, again similar to the Colchester example, and was 96m wide, notably wider than at Colchester. Much of this structure was concrete and rubble built, although cut stone was used for the outer *cavea* wall. The inner *cavea* (podium) wall stood to a height of 1.4m which provides a useful indication for Colchester's robbed example.

As at Toledo, the 6.1m-wide *cavea* included cross-walls creating vaults. These cross-walls were grouped in sets of 9, each 36m long, and, as with the exterior buttresses at Colchester, the pattern changes. This was possibly due to funding of different sections by different wealthy patrons. This ancient form of sponsorship is attested at Luz in Portugal where there are two plaques each recording the gift of a 100-foot length of *cavea* by different local worthies. Similar evidence may come from Lyon except that it is expressed in terms of seats (500 of them) rather than sections of *cavea*. There was a 0.8m-wide corridor along the back of the seating at Mérida and something similar would be expected for the poorly preserved Colchester example. The exterior of the outer *cavea* wall at the western end, but not eastern end, included a series of regularly spaced buttresses each 95cm deep. These provide another parallel for the Colchester examples.

The width of the circus at Colchester, at approximately 70m, is at the narrow end of the range but not far off it. Calahorra is 75m wide, Santiago do Cacém 77m, and Sagunto 73.4m in Spain, and Sétif 77m in North Africa. The width of the arena at Colchester is 62.5m. This would have been made up of the widths of the north track, central barrier (*spina* or *euripus*), and south track. The central barrier would have been up to 5m or so in width depending on its design. Again the width of the arena is at the lower end. A close parallel is Sagunto where the arena was about 64m across. Circuses varied considerably in length although many appear to have been around 400m in length, slightly shorter than at Colchester.

### ***Comparison with the Guildhall Roman amphitheatre in London***

There are certain echoes between the discovery of the circus at Colchester and the long-sought Roman amphitheatre found in 1998 in Guildhall (Bateman 2000). Nick Bateman suggests an early 2nd-century date for the replacement of parts of the wooden superstructure at the Guildhall (including the entranceway and inner *cavea* walls) and considers that its construction may have been associated with visits by the Emperor Hadrian. A possible late 1st-/2nd-century date for the stone building of Colchester at least puts the upgrading of London's amphitheatre and the probable monumentalisation in stone of a putative earlier racing arena at Colchester, in the same broad time frame. A tile found at the London site was stamped PPBRLON, which Bateman (*op cit*, 28) states stands for the Procurator of the Province of Britannia at London. He states: '*Tiles with such stamps are commonly found near large public buildings. This may indicate official sponsorship of the amphitheatre's construction*'. However, no stamped tiles have been recovered from the Colchester site and there is no direct evidence for state sponsorship.

The wall structure at Colchester appears to differ in some respects, although it is difficult to know how similar the walls of the two structures were above ground, since the 1.5m-high surviving arena facing walls at Guildhall are in stark contrast to the largely robbed Colchester circus walls. At Guildhall, the wall base comprised two courses of red tile, rough stonework above, and with walls up to 1.2m thick. There were 3-5 courses of roughly squared but well-laid Kentish ragstone between double layers of tile (*op cit*, 24). The thickness of the Colchester walls is similar and we can expect standing walls to have had a similar ratio of tile to stone courses. Bateman's comment that the amphitheatre was a product of a dynamic tension with '*trade creating wealth; wealth demanding display; and 'public' appropriation of the 'private' monument which resulted*' (*op cit*, 7) can of course be said to be equally true of the Colchester circus – a building on an even larger scale.

The London amphitheatre was originally built in wood in or shortly after AD 70 (many timber beams, post and planks survived and prove felling dates for dendrochronology by Ian Tyers). Although only the eastern end was found, it was possible to calculate that the building was 85m with a 60m-wide arena at its widest point. It was also calculated that the *cavea*, which was considered to have comprised wooden benches on a timber frame, probably had between 10 and 15 tiers (*op cit*, 20). This seating could have held a capacity of about 6,000 spectators according to Bateman (*op cit*, 25). There was a significant variation from the Colchester circus in the construction of the arena. At Colchester there was minimal, if any, ground reduction within the arena, whereas the natural ground level was reduced by almost 2m at Guildhall.

#### *Arena*

As with the better-preserved walls (of the 2nd-century amphitheatre), surviving wooden elements including drains and ground-fast structural elements, the arena surfacing was also well preserved due to the fact that it was sealed by latest Roman and later deposits. The surfacing consisted of rammed gravel mixed with a hard pink mortar above which sand was spread. Bateman states that the entire thickness was only about a hand's width (*op cit*, 29). Whether there was similar surface treatment at Colchester (lost to ploughing) is unknown. Certainly a soft bed would have reduced impacts from falls whilst the underlying layer could have prevented rutting and hooves sinking and provided purchase. On balance (as stated above), it is perhaps more likely that rammed earth was used.

Another potential parallel is the partial surviving presence of a thick layer of pinkish mortar used to face the arena wall at the Guildhall amphitheatre (*op cit*, 28). This is common to other British amphitheatres (Chichester, Chester, Caerleon) and suggests that arena walls were usually plastered. Pink mortar from Colchester, within demolition deposits and robbed wall foundations, suggests that at least some walls at Colchester were similarly treated, with the probability that these were the arena facing walls or *spina* walls.

A possible hint at the relative expense of the Colchester circus may be suggested by the fact that it was afforded inner as well as outer stone walls rather than the simple inner stone *cavea* and entranceways' walls, with the remainder wooden superstructure, as found at all the British amphitheatres with the exception of Chester and Caerleon. It is interesting to note that the examples with inner and outer stone walls were located at the amphitheatres adjacent to important legionary fortresses. Bateman notes (*op cit*, 38) that only the stone-built amphitheatres and the example at Silchester have been extensively investigated which makes the extensive investigation of the circus at Colchester all the more important. He also suggests that theatres could also have served amphitheatre functions and Gosbecks was probably such a hybrid.

### *Abandonment of Guildhall amphitheatre*

Bateman suggests abandonment of the Guildhall amphitheatre some time in the 4th century when a layer of silt containing pottery of this date accumulated over the arena (again a dating mechanism not available at Colchester). Pottery of AD 300-400 was also recovered from demolition deposits from the collapse of the walls. It will be interesting to see whether demolition at Colchester can be dated. A coin from robbing of masonry at the London amphitheatre dates to AD 367 and so robbing did not begin before that date (*op cit*, 41). This is common to Roman London generally with robbing mainly in the late 4th century in response to the Empire-wide collapse of Roman authority. With regard to the Anglo-Saxon attitude to monumental remains, Nick Bateman quoted an Old English poem that relates how 'cities are visible from afar, the cunning work of giants', whilst another notes how 'the old works of giants stood desolate' (*op cit*, 41). It is perhaps no surprise that the interior of the Colchester circus is (as far as we can tell) devoid of Anglo-Saxon activity.

### **List of Roman public entertainment buildings in Britain (after Bateman 2000, 38)**

The circus – Colchester (claim for London not substantiated).

True theatres – Colchester.

Theatre-amphitheatres – Gosbecks (Colchester), West Heselton, Peturia, Caistor St Edmund, Frilford, St Albans, Canterbury.

Amphitheatres - Newstead, York, Chester, Tomen-y-Mur, Caerleon, Caerwent, Cirencester, Dorchester, Silchester, Chichester, London and Richborough.

It is striking from the list that Colchester (with Gosbecks) now has the greatest variety of public entertainment buildings, which is surely a reflection of its early Roman status and military presence.

### **Roman cemeteries and burial plots**

A total of 436 Roman burials was recorded in Areas C2 and J1 and during the watching brief. These areas are known to be located within a part of Roman Colchester (to the south and west of the walled town) that was densely occupied by Roman burials. A description and summary of all of the burials and cemeteries recorded before 1988 is presented in *Colchester Archaeological Report 9*. In previous years, many of the concentrations of burials were grouped into separate cemeteries. However, in this summary, P Crummy suggests that this may be too simple an interpretation. The evidence rarely reveals a separate and distinct (in time and space) 'cemetery' as we would define the term today. Instead the evidence reveals wide tracts of land that contained many isolated burials, burial plots and concentrations of burials that are all multi-phased with complex layouts. He suggests that, instead of thinking in terms of distinct 'cemeteries', we should instead think of 'cemetery areas'. So, instead of defining the concentration of burials in Area C2 and Area J1 North as separate cemeteries, we should instead think of them as 'cemetery areas' (areas which contain a concentration of burials).

### ***Area C2 cemetery area (Area C2 and the watching brief)***

A total of 67 Roman burials and burial-related features were recorded in Area C2, along

with a single Roman burial that was recorded immediately to the west of Area C2 during the watching brief. The evidence from both Area C2 and the watching brief indicates the presence of a large late Roman cemetery area, which was divided into at least two distinct burial plots.

*Dating* – Pottery dating evidence from the Roman burials indicate that this cemetery area was in use from the mid 2nd to the 4th century. Furthermore, the 27 inhumation burials date from the mid 2nd to the mid-late 3rd century and the 41 cremation burials (cremation, boxed and urned and pits containing pyre debris) from the mid-late 3rd to the 4th century, revealing that cremation replaced inhumation as the dominant burial rite in this cemetery in the late Roman period. This evidence is at direct odds with the commonly held tradition that, in Colchester, inhumation replaced cremation in the 3rd century. This burial ground also provides firm evidence for the continued occupation of the town well into the 4th century, evidence for which is otherwise slight.

*Boundaries and burial plots* – The Area C2 cemetery area was divided into two distinct burial plots. Burial Plot 1 was located in the middle of the site. An east-west ditch, 4.5m to the south of the circus, acted as both the northern boundary of Burial Plot 1 and the northern boundary for the whole cemetery area. Further to the south, a second east-west orientated ditch, 32m to the south of the first, acted as the southern boundary for Burial Plot 1 and the northern boundary for Burial Plot 2. Both ditches dated from the 2nd to the mid-late 3rd century, making them broadly contemporary with the burials on the site.

Below the second ditch, a north-south Roman driveway cut the bottom half of the site into two. The western half was an agricultural field, while Burial Plot 2 was located in the eastern half. Neither the eastern or western boundary of Burial Plot 1 nor the eastern and southern boundary of Burial Plot 2 were identified on the site.

The discovery of an inhumation burial in Circular Road East, located immediately to the west of Burial Plot 1, would suggest that either this burial plot or a different burial plot within the same cemetery area, continued further to the west. However, excavations on the NAAFI site in 1946 (now the Arena Leisure Centre and located across the road from Area C2) identified a Roman kiln and rubbish pit but no burials (Hull 1958). This would suggest that the western boundary of the burial plot/cemetery area probably does not continue too much further to the west. Similarly, the excavation of Area E (to the south of Area C2) produced no burials. Therefore, the southern extent of Burial Plot 2 is probably located somewhere between the two areas. Also, a large Roman road ran north to south from the south-east gate of the walled town, along the line of the modern day Mersea Road. Therefore, the eastern extent of both burial plots/the cemetery area must lie somewhere between Area C2 and this road.

*Types of burial* – A total of 27 inhumation burials, 24 cremation burials, 11 urned cremation burials, five burial pits containing pyre debris and a single boxed cremation were recorded within the cemetery area. From a total of 68 burials, 61 were located within Burial Plot 1 with only seven in Burial Plot 2 (although this is probably due to the fact that only a very small part of Burial Plot 2 was actually excavated).

*Inhumation burials* – With a few exceptions, most of the inhumation burials contained either a coffin, associated grave goods (hobnail shoes, one or two pottery vessels and/or occasionally a coin) or both, but most appeared to be of relatively low status. However, two of the inhumation burials from this cemetery area were buried within lead coffins, one of which was also buried within a mausoleum. In contrast to the other relatively poor inhumations, these burials are very wealthy in appearance and could signify the burial of people of importance.

*Cremation burials* – The cremation burials (cremation, urned and boxed) appear to have varied in status. Some contained no associated burial goods while many others contained numerous pottery vessels and small finds, several of which were extremely high status. These high-status burials included two child burials, each containing a large number of very fine and unusual small finds (including a jet bear amulet), and the boxed cremation burial. On comparison it seems that the cremation burials were of a much higher status than the inhumation burials. This statement is especially true in relation to the use of burial markers, as ten Roman barrows (see below) were constructed over at least six of the cremation burials (three cremation, two urned and one boxed).

*Barrow burials and Burial Plot 1* – The identification of ten Roman barrow burials within Burial Plot 1 is of particular interest as the use of barrows (especially combined with the cremation rite) is atypical of Roman town cemeteries at Colchester and elsewhere. The following areas of potential are explored further:

1 – Replication of a local barrow building tradition. The question of whether the Roman barrows represented an attempt to reconnect with past burial tradition is worth exploring. Several possible levelled barrow sites may be suggested by past finds of collared urn cremations in the vicinity. The remarkable coincidence of one of the Roman barrows with a Late Neolithic to Early Bronze Age pit could suggest that a prehistoric barrow had previously overlaid the feature. This then may have been used as a reference for the Roman burial. Thus, if the Late Neolithic pit in Area C2 is interpreted as ritual rather than domestic (see above), it is possible that it was a part of an earlier barrow tradition that the Romans sought to emulate. However, the lack of a prehistoric ring ditch makes this unlikely. Along the same lines, barrow building may have been considered as part of the cultural heritage of the Catuvellanui aristocracy at Colchester, exemplified by the 'kingly' burial beneath Lexden tumulus. As the tumulus remained extant through the Roman period it is possible, though unlikely, that it retained spiritual significance to some occupants of the Roman town and that these people chose to resurrect barrow building. Roman barrows are known elsewhere in Essex, although not in the context of a Roman town cemetery and they are considerably larger. It is plausible that the barrow building at Area C2 was simply part of a poorly represented British tradition.

2 – Continental/Germanic influence. The barrows, including those with entrance gaps, closely resemble Early Saxon (5th-/6th-century) barrows, for example, a series at the Early Saxon cemetery at Morning Thorpe, Norfolk, which produced 365 inhumations (Green *et al* 1987). Despite the superficial resemblance of the Early Saxon barrow burials to the Area C2 ring ditches, the latter clearly pre-date the collapse of Roman rule around AD 410. Another significant difference is that the Anglo-Saxon examples usually contained inhumations and Anglo-Saxon grave goods, whereas the Area C2 examples all contained fully Romanised cremations. Previously popular suggestions that significant numbers of Germanic mercenaries were hired by Roman town authorities to protect vulnerable locations from Saxon raiders, and that these federate settlements are archaeologically visible, are less popular at present (see below). In this case, there appears to be no evidence to directly link the graves with a federate settlement (there are no military style artefacts or weapons, whilst the pottery and cremation style is wholly Roman). It does, however, appear likely that the burials belonged to, at least partially, Romanised Germanic citizens living in late Roman Colchester who preferred to bury their dead in accordance with their custom. In this sense it is possible that the families represented were indeed linked to mercenaries – a possibility which might help to explain the previously known location of Early Saxon graves adjacent to Mersea Road, as a later generation of federate settlers (see below for further discussion). There may be supporting artefactual evidence for this theory in the form of the jet bear from

one of the child graves. The bear may represent a Germanic family's guardian spirit or totem (Richard North pers comm). If so, it may provide a link between the Area C2 cemetery to the belief systems of the Germanic region. Research of late Roman burial practices in central/northern Europe (particularly in the region inhabited by the Almanni tribe) may provide actual examples of similar continental cemeteries.

The first possible explanation above is considered unlikely. However, although Roman town cemeteries lack similar burial rites, ring ditch barrow burials containing central cremations are known in areas adjacent to the northern frontier forts. It is in this military context to which the Colchester barrows may belong. The most informative site is that of Petty Knowes 400m south of the outpost fort of High Rochester (*Bremenium* – north of Hadrian's Wall) in Northumberland (Charlton & Mitcheson 1981). The cemetery was located in 1975 adjacent to Dere Street and comprised of a major cluster of 75 (mainly) still visible low barrows and several smaller outlying clusters. Of the sample of 16 that were excavated, twelve had standing mounds, six had external ditches, five had external banks (as well as internal mounds), eight contained internal cremations, eight contained inhumations or had no bone surviving, 14 contained nails (eight with hobnails), three contained coins and five had marker posts (*op cit*, 6). The barrows ranged from 1.2m to 7m in diameter, very similar to the Colchester Area C2 diameters, but unlike Colchester the barrows were still standing up to 0.5m in height. In terms of grave goods there were also similarities in the use of BB1 vessels at Area C2 and Petty Knowes. At Petty Knowes, two separate burials contained cremations with BB1 vessels, one dated to the late 3rd/early 4th century and the other to the mid 2nd century. The burial group itself is dated from the early 2nd to the late 3rd/early 4th century, with the abandonment of the associated fort postulated by AD 314 when Constantine was withdrawing frontier troops (*op cit*, 16).

Interestingly, with respect to the Area J1North burial ground's burnt burial pits, there was evidence at High Rochester that cremation pyres were constructed directly above some of the burial pits. These pits were burnt around their edges with the draught through the pits creating higher pyre temperatures. Within the Petty Knowes (High Rochester) burial site, two adult males, three other adults, one juvenile/female and one 5-10 year old were identified. Thus a cross-section of individuals associated with the running of the fort were identified. Nearby the tombstones of a fort commander, a common soldier, a freedman and a tribune's foster child had been found previously. The excavators believed that the cemetery may have been for lower ranks or that the fort was impoverished, based on the rather poor grave goods (*op cit*, 18). The lack of weaponry or military equipment within the Petty Knowes graves is explained by the authors (citing the theory of D J Breeze that on death or retirement a soldier's equipment was retained by the unit. Therefore, although the identity of the individuals, whether soldiers, families of the soldiers or others, could not be ascertained, '*almost certainly the occupants of Petty Knowes would be part of the garrison at High Rochester or closely associated with it*' (*op cit*, 19). The troops would most likely have been auxiliary unit(s) although the precise units are unknown.

Other similar barrows have been found outside the Hadrian's Wall forts of South Shields, Great Chesters (two groups), and near Halton Chesters. Therefore, given the lack of such burials in civilian areas, it seems likely that the low barrow cremations are associated with the Roman army (and their families). With the similarity in size of individual barrows, of the form of the barrow ring ditches (many with entrances as at Colchester), of the unusual use of cremations in the late Roman period, of the similar types of grave goods and burial containers, and of the density and form of the burial grounds, it seems quite possible that the burials at Petty Knowes and Area C2 all conform to a common origin associated with the military. At Colchester, the existence of a late Roman garrison is unknown. However, the

Area C2 evidence strongly implies the existence of at least a temporary garrison in the late 3rd/4th century. The presence of such troops is to be expected from the late 3rd century onwards due to either (or both) civil wars (the Gallic Wars and the rebellion of Carausius and Allectus) and the continuing threat of Saxon and other barbarian raiders. The latter threat was of course sufficient to warrant the construction of the Saxon Shore Forts. The theme of declining fortunes at Colchester from the late 3rd century is also demonstrated by the New Garrison archaeological findings, where the ditches connected to Roman field systems went into disuse before the 4th century. The town defences were also strengthened in the late 3rd century, with the widening of the town ditch and its extension across the Balkerne Gate entrance. A 3rd-century coin hoard, found near Balkerne Gate, also charts the instability of the times. At the same time the town suburbs were abandoned and the late cemeteries were located closer to the town. The abandonment of the residences in the countryside and the suburbs implies that people in the country were relocating inside the town walls for protection. It is within this context that we might understand the presence of late Roman auxiliary troops, their families and their support staff. The use of barrows might imply that these people were of Germanic origin. This would be in accordance with the recorded heavy reliance on soldiers of Germanic stock in the north-west provinces in the late Roman period.

If Burial Plot 1 can be connected to Germanic people burying their dead in a Germanic style, then it might explain why the cremation burial rite replaced inhumation in this cemetery area. Especially as in typical Roman cemeteries in Colchester the inhumation burial rite replaced cremation during the 3rd century. However, in 2000, 72 cremation burials (cremation, urned and boxed) were recorded in the Abbey Field (to the west of Area C2 and to the south of Area J1). Like the Area C2 cremation burials, these burials dated mainly to the 3rd and 4th centuries (with some possible 2nd-century activity) and contained high-status burials including wealthy child burials. Of particular interest is the two jet bear amulets that were recorded from a child's burial in the Abbey Field and a similar jet bear amulet found in a child's burial in Area C2. The discovery of jet bear amulets is so rare across Roman Britain that the occurrence of two burials containing these items in so close a proximity must be significant. If the interpretation of these jet bears as 'Germanic guardian spirits or totems' is correct, then the cemetery located within the Abbey Field may also be Germanic in origin. This may also explain why we have two late Roman cemetery areas where cremation is the dominant burial rite (and not inhumation).

For a discussion of which military units might be represented we need first to define what is meant by the terms *foederati*, *laeti* and regular troops:

*Foederati* have been described as 'free barbarians under their own rule, who were allowed to settle under treaty in return for military duties' (Frere 1987, p 226).

*Laeti* or *gentiles* were 'settlements of barbarian irregulars perhaps from abroad' (*op cit*, 224).

Regular troops were permanent units of Roman soldiers derived from a number of different nationalities.

The presence of *foederati* before the end of the 4th century is difficult to prove. It has been claimed that a cemetery at Caister by Norwich might represent a settlement of Barbarians by the end of the 3rd century. However, this date is disputed and may be significantly later (*op cit*, 226). Again, much of the debate centres around the term *litus Saxonium* (Saxon Shore). Did the reference to the late 3rd- to 4th-century shore fort line around the eastern

and southern coasts mean the shore defended against Saxons or the shore settled by Saxon *foederati* or *laeti*? Frere suggests that there is little to support either category's settlement along the coasts, mainly because regular troops are known to have garrisoned the shore forts whilst the evidence for Romano-Saxon pottery (as has been claimed) is unconvincing.

Frere (1987, p 344) does however, state that detachments of *laeti* or *foederati* could have been dispatched to Hadrian's Wall from Germany in the later 4th century and these would have been independent of the Duke (and therefore would not have been mentioned in Chapter x1 of the *Notitia Dignitatum* – a list of military commands probably compiled at the end of the 4th century). In potential support he cites possible Rhineland style coarse wares found at Birdoswald. It is clear, however, that the ring ditches at Petty Knowes, High Rochester date from the 2nd century onwards and would probably not represent *foederati* at such an early date at the frontier.

The notion that Germanic troops were serving in Britain as regular soldiers is known due to the writing of Ammiunus Marcellinus (XXIX, 4, 7). Frere's interpretation of this AD 372 text led him to conclude that '*after the virtual annihilation of the Buanobantes (the division of the (Germanic) Alamunni of which he (Fraomar) had been made King. Fraomar was transferred to Britain with the rank of tribune to take command of a numerus of Alamanni which was already part of the garrison*' (Frere 1987).

The clear implication is that numerous troops of Germanic descent (the Alamanni) were serving in Britain before 372 and that Fraomar's transfer at the rank of tribune means that these were regular Roman formations (neither *laeti* or *foederati*). It is these troops which might have been responsible for the barrow burials at Hadrian's Wall and frontier forts such as South Shields and High Rochester but also, as seems likely, at the town of Colchester. The *Notitia* does not record town garrisons in Britain although certain military belt plates and buckles of the late 4th century and later in several Roman towns suggests town garrisons did exist (*op cit*, 346). Indeed, a buckle from Mersea Road, very close to the Area C2 cemetery, is just such an item. Frere states that these were part of the uniform of regular troops transferred to Britain by Theodosius, because they are also found within some of the Saxon Shore forts.

Such 'small detachments' would fit the burial evidence for Area C2 and possibly late Roman cremations excavated in 2000 at the nearby Abbey Field (also just south of the circus). The fact that such city garrison troops are not listed in the Duke's list is, according to Frere, an indication that they were controlled by the Vicar of Britain, hence castellated enclosures (towns?) are shown at the head of Chapter xxiii of the *Notitia*. According to Frere, these troops gave the towns a means by which to defend themselves and allowed them to hold out into the 5th century in some cases (eg at Verulamium where 5th-century rebuilding is evidenced).

In summary, the evidence of the ring gully cremations at Area C2 could indicate a detachment of regular troops of Germanic origin. Further analysis should concentrate on determining whether families of troops were normally settled with regular troops in late Roman Western Europe or whether the families potentially represented at Colchester would be more appropriate for irregular *laeti*. It is very unlikely that these were not barbarian *foederati* since the grave goods are fully Romanised.

*The mausoleum and Burial Plot 2* – The Roman rectangular structure in Burial Plot 2, containing at least one inhumation burial buried within a lead coffin, has to be interpreted as a mausoleum. Although not common, mausolea have been identified in Colchester. This is the first to be discovered on the Garrison site. This burial would have been of high status

and is likely to have been associated with someone of wealth. It is uncertain if this high-status mausoleum burial was a precursor to the high-status cremation burials under barrows, although the fact that no mausoleums were found in Burial Plot 1 and no barrows were found on Burial Plot 2 would suggest that the two different plots contained different groups of people. However, the discovery of a second lead coffin during the watching brief, within an unusually deep burial pit, may indicate that a high-status inhumation burial of similar type was located within Burial Plot 1. The juxtaposition of the two plots requires further consideration.

#### ***Area J1 North cemetery area***

A total of 356 Roman burials and burial-related features was recorded in Area J1 North to the west of the western end of the Roman circus. This evidence would suggest the presence of a large Roman cemetery area on the site.

*Dating* – Dating evidence from the Roman burials indicates cemetery use from the 1st to the mid-late 3rd century. Compared to the Area C2 cemetery area, the burials on this site begin much earlier in date and there is no absolute evidence of burials continuing into the 4th century. A preliminary analysis of the dating also reveals that, unusually, there was no clear break between the use of the inhumation and cremation burial rite. In fact, both burial rites appear to have been used throughout the period when the cemetery area was in use. However, the dating of the cemetery area and the burials within it will have to be analysed in much greater detail before this can be confirmed.

*Boundaries* – The Area J1 North cemetery area was bounded on its south/south-west edge by the large Roman road which ran through the middle of Area J1. Roads are often the focus of Roman burial and this road was clearly a factor in the placement of the Area J1 cemetery. None of the cemetery's other boundaries were located within the excavation area, but it is possible to estimate where they might be.

*Eastern/south-eastern boundary* – All of the burials so far recorded within the Alienated Land sites have respected the line of the Roman circus. No (certainly Roman) burial has been recorded nearer than 4m away from the outer wall of the circus, and indeed a gap of 15m existed between the circus and cemetery area within Area C2. So, it is likely that the east/south-eastern boundary of the cemetery area was located somewhere between the edge of Area J1 North and the circus, and that the burials continued in this direction beyond the edge of the site. It has been suggested that a Roman road existed from the Head Gate to the Roman circus. It is possible that, if this road did exist, then it may have connected the road identified in Area J1. If this hypothesis is correct then the eastern/south-eastern boundary for the Area J1 North cemetery area is likely to have been this road.

*Northern boundary* – In an overview of Colchester's cemeteries (*CAR 9*) an area of burial activity is identified immediately to the north of Area J1 North (this burial activity is called 'Area F' within the overview). This evidence may suggest that the northern extent of the cemetery area is located much further to the north. This would have implications for the archaeological investigation of Area H, located within the next phase of Alienated Land development, as the cemetery could continue into this site. Alternatively there could be a gap between the two burial clusters with each relating to its adjacent routeway.

*North-western boundary* – In the same overview (see above), Roman burials have been identified in the area immediately to the north-west of Area J1 North. This evidence would suggest that this north-western boundary is located much further to the north-west.

*Burial plots* – No burial plots were readily identified within the Area J1 North cemetery area. However, five fragmentary gullies were recorded on the site. Although fragmentary, these gullies appeared to run either north-west to south-east or north-east to south-west. The gullies could have formed elements of a series of rectilinear burial plots, similar to those seen in the Butt Road cemetery further to the north. These gullies will have to be analysed in much greater detail before the use of burial plots within the cemetery area can be confirmed.

*Types of burial* – A total of 207 inhumation burials, 144 cremation burials (70 urned cremation burials, 20 cremation burials, 37 burial pits containing pyre debris and 13 pyres/*busta*) and 5 pot scatters (possibly from disturbed burials) were recorded in the cemetery. The inhumations generally consisted of either an empty grave or a grave with coffin. Occasionally hobnail shoes, pottery vessels and a number of small finds (coins, rings, beads, brooches, cosmetic set) were also recorded. Cremation burials were either urned or un-urned, and other burial goods included secondary pottery vessels, glass vessels and a number of small finds. Similarly pyres/*busta* contained a range of burial goods and the burial pits containing pyre debris also revealed a wide range of associated goods. This evidence would suggest that the burials within the cemetery appeared to be of varying status, with many completely empty of burial goods while others contained many vessels and small finds. However, very wealthy graves (such as those found within Area C2) were absent.

The *bustum* cremation practice involved cremating the body on a pyre directly above a prepared grave into which the cremated remains fell and collected. The grave-shaped pits associated with this process are consequently burnt around their edges. This is a very different procedure from the far more common practice of selecting material from a separate pyre and depositing within a pit. The identification of a significant number of these at the Area J1 North cemetery is of particular interest and Jackie McKinley has suggested a possible association of *busta* with the military (McKinley in Charlton & Mitcheson 1981).

*Markers* – The large number of post-holes recorded within the cemetery area may provide evidence for burial markers. However, the post-holes and their relationship to the burials will have to be analysed in greater detail before the use of burial markers can be confirmed.

#### ***Area J1 South burial plot***

A total of seven Roman burials were recorded in Area J1 South. The evidence from this site would suggest the presence of a small Roman burial plot in the area.

*Dating* – Dating evidence from the Roman burials indicate that this burial plot was in use from the 2nd to the late 3rd/early 4th century. Compared to the Area J1 North cemetery area, this burial plot appears to be broadly similar in date; it starts slightly later but ends in the 3rd century, with no absolute evidence for burials continuing into the 4th century. As the only inhumation burial recorded from the plot contained no dating evidence, we are unable to comment on the chronological use of the two different burial rites.

*Boundaries* – The burial plot in Area J1 South appears to have been located within an agricultural field or paddock. This field was defined by the wide Roman road to the east and the Roman driveway to the west and south. The northern extent of the plot was outside of the excavation area and it is possible that more burials are located beyond the northern edge of the site. The tradition of burial within agricultural fields has been widely documented across the Garrison – on Area Q of Alienated Land sites and Area 6 of New Garrison redevelopment. It is usually associated with families or distinct groups of people who lived

and worked on the land, and buried their dead in a symbolic relationship to that land. The existence of enclosed land with ancestral burials implies that the settlers regarded their land as private and as a resource not to be shared with neighbours.

*Types of burial* – A total of six cremation burials (four urned and two in amphoras) and one inhumation burial were recorded in the burial plot. The majority of the burials appear to have been of relatively low status. The inhumation burial was completely empty of finds, three of the four urned cremation burials contained no other associated burial goods, and the fourth only contained a flagon. However, the amphora cremation burials are completely different. The first burial contained two amphoras, four pottery vessels (three jars and a bowl), a copper-alloy open lamp, two frit melon beads and two bone beads. The copper-alloy open lamp had strong visual associations to horses and it is tempting to suggest that the individual buried here was connected to the circus (located a few metres to the east of the burial plot). Unfortunately, the second amphora cremation burial was extremely disturbed, but even this contained evidence of at least one amphora, a flagon and a pipe clay figurine. The fact that no other amphora cremation burials were recorded on the Alienated Land sites suggests that these burials are fairly unique.

*Burial markers* – The identification of two amphora cremation burials is extremely important as it is likely that all of the amphoras would have been buried with their necks above ground level. This practice meant that the burials would have been obviously marked and that offerings could be placed into the vessels after burial. Also, if the open lamp (placed inside one of the amphoras) was lit on burial, family and friends could have looked into the amphora and seen the shadows cast by the flame and the reflective back plate. No evidence for burial markers was associated with any of the other burials.

#### ***Area J1 East burial-related features***

A total of three Roman burial pits containing pyre debris was recorded in Area J1 East.

*Dating* – Unfortunately only one of the burial pits contained a substantial amount of dating evidence and provided a date from the early-mid 2nd to the early 3rd century. Of the other two pits, one contained four sherds of pottery dated from the 1st to the 2nd/3rd century and the other contained no dating evidence.

*Boundaries* – No boundaries for these burial pits were found during the excavation of Area J1 East, although it is likely that the Roman circus acted as a northern boundary. It is possible that these burial-related features represent a burial plot similar to that identified within Area J1 South (see above). However, it is perhaps more likely that they are outliers of the Abbey Field cremation cemetery area identified in 2000. This cemetery area consisted of 72 burial features – cremation burials (cremation, urned and boxed) and a number of features identified as cremation burials but that fit into our definition of a 'burial pit containing pyre debris'. The burials in this cemetery dated mainly from the 3rd to 4th centuries (with some possible 2nd-century activity), which would mean that the three burial pits could fit into this phase of activity. If these burial pits are a part of the larger Abbey Field cemetery area, then it must have continued further north than previously recorded, and the circus probably acted as its northern boundary.

*Types of burial* – A total of three Roman burial pits containing pyre debris were recorded in Area J1 East. All contained extremely small amounts of cremated bone which was scattered throughout a burnt and charcoal rich fill. Usually, one of the pits contained the broken remains of most of a jar and stamped samian bowl. None of the pottery sherds were burnt; so they had probably not been placed on the pyre with the body but must have been added to the pyre debris at a later date.

## **Roman roads**

Parts of two Roman roads were identified on the Alienated Land sites. The first road was recorded in Area J1 (in both the Area J1 North and Area J1 South excavations) and the second was recorded around the Roman circus.

### ***The Area J1 road***

The road identified in the excavations of Area J1 North and Area J1 South was recorded for a distance of 254m and it ran in a sweeping arch from a north-west to south-west direction across the middle of Area J1. It consisted of two substantial roadside ditches (particularly large on the western side) flanking a 24m-wide section of road that was at least partially metalled. The scale of the route would suggest that it was of some importance. The manner in which the road curves westwards away from the circus may imply that the circus was already in existence when the road was conceived or that the two elements were part of a planned landscape.

From the direction of the road, as plotted in Area J1, it has been possible to theorise where this road was leading from and to. If the road continues in a north-westerly direction it is likely to have linked up to a major Roman road junction. This junction stood at the point where the main road leading out of Balkerne Gate joined with roads leading to Gosbecks, Sheepen, London and possibly also the Hythe waterfront. If it continued in a south/south-westerly direction, then it is likely to have been a part of the road leading past the Roman villa/farmstead in Kirkee McMunn Barracks, and towards the Musket Club cropmark enclosure. The extent of this road to the south of the Abbey Field has been well documented (as cropmarks and in the 2002 evaluation trenches); however, the line of the road through the Abbey Field can only be estimated. If this road does continue north-west and south-west along this projected line, then it would have been part of a major route leading into the agricultural hinterland of the town, which would presumably have played a part in moving agricultural produce and people around the landscape. A 2nd-century Roman coin was recovered from the very base of the western roadside ditch in Area J1 North which will assist its dating.

### ***The track around the circus***

As already mentioned above, several areas of metalled surface were recorded around the outside of the circus in Areas C1, C2 and J1 East and trench WBT4 of the watching brief. This evidence suggests the presence of a track around the outside of the circus' *cavea* walls, which must have been important for moving people, animals and goods around the structure.

It is possible that this track was linked up to several of the main routes leading out of the walled town. A direct route between the walled town (in particular the Temple of Claudius) and the circus would have been important during the processions that signalled the start of the games. A road leading south out of the Head Gate would have led to the west end of the circus and the road leading out of the south-east gate (and down the line of the modern day Mersea Road) may have linked up the east-west roads discovered on both sides of the structure. It is also possible that the road leading to the circus from the Head Gate joined up to the road recorded in Area J1. If so, the two roads would have met somewhere in the heavily truncated area between Area J1 North and Area J1 South (and may have acted as a boundary for the Area J1 North cemetery area).

## **Roman quarry pits**

A total of 17 gravel quarry pits was recorded on Area J1 (15 from Area J1 North, one from

Area J1 East and one from Area C2). In Area J1 North, all of the quarry pits were located close to the eastern edge of the Roman road, which would suggest that they were dug to quarry the gravel used to create the metallated road surface. Similarly, in Areas C2 and J1 East, the proximity of the quarry pits to the Roman circus would suggest that they were used to quarry the raw materials (sand and gravel) associated with the construction of the structure.

### **Roman field system**

A number of fields, field boundary ditches and droveways, potentially contemporary with the circus, were recorded on the Alienated Land sites reported in this section. The first field to be identified was in Area C2 and was located immediately to the south of Burial Plot 1 and the west of Burial Plot 2. This field appeared to have been accessed by a right-angled droveway, which ran around the southern and eastern sides of the field. A second field was identified within Area J1 South and was located immediately to the west of the Area J1 road. The field was accessed by a similar right-angled droveway, which ran around the western and southern sides of the field. This field had also been used as a burial plot and contained at least seven Roman burials, but it is uncertain if the area was used as both a burial plot and field concurrently or whether it was first used for one purpose then another. Similar field boundary ditches were also recorded within the evaluation trenches on Area E, indicating that the Roman field system continued southwards.

The evidence from these sites would suggest that the land south of the circus and the areas between the cemeteries/burial plots, was farmed. As droveways were usually added to the landscape to aid with the movement of livestock, the presence of two droveways would indicate that the fields had been predominately used to keep such animals. The presence of these fields also indicate that the large agricultural field system, known to have been laid out to the south of the walled town, probably started just beyond the walls of the circus.

Given the proximity of the two fields to the circus, the lamp stand with horse feet within the Area J1 South paddock, and the fact that they are relatively small fields, it might be tempting to suggest that they were used as paddocks to hold horses on race days. Alternatively it is possible that they were elements of permanent stud farms for the circus although this possibility cannot be overstated on the basis of the evidence.

### **Roman villa/farmstead**

Further evidence for a Roman agricultural field system was recorded from Area E in the form of a modest status villa/farmstead, located within a rectilinear ditched enclosure and placed within its field system. This villa/farmstead is the only Roman settlement activity to be recorded on any of the Alienated Land sites and is the nearest settlement building, so far identified, to the south of the Roman town.

Evidence from the ditched enclosure and villa/farmstead appears to indicate that they were placed within a pre-existing field system, as they cut away two field boundary ditches. However, the evidence also revealed that the building existed in two distinct phases – an earlier timber-framed structure that was replaced by a building with masonry wall foundations. Therefore the earlier phase of ditches may have been associated with the earlier building. A detailed analysis of the pottery, from both the enclosure ditches and the features of the building, may provide dates for the development of the villa/farmstead for the final report.

Only one other Roman settlement has been discovered on the Garrison site. This building, located within the south-east corner of the Kirkee McMunn Barracks, interestingly also

appears to have been a moderate-status, simple Roman villa/farmstead. The presence of two similar villas/farmsteads within the agricultural hinterland of the Roman town would suggest that these buildings acted as the administrative centres for the agricultural land which they were located in. This is supported by the fact that both villas/farmsteads were connected to the walled town by two major Roman roads. As mentioned above, the road recorded within Area J1 is believed to have passed close to the Kirkee McMunn building and the road leading south from the south-east Gate of the town (down the line of the modern day Mersea Road) would have passed immediately to the east of Area E. If these two buildings did act as administrative centres, then being able to transport people, goods and animals from them to the town centre would have been of primary importance.

The ancestry of the owners of these two farms lies at the heart of the debate as to whether or not this land was confiscated for veterans following AD 43. The fact that the owners 'Romanised' these otherwise rather moderate-status farms is of interest, but the reasons for this are not clear. It is interesting to note, however, that Sealey (below) suspects that the paucity of Late Iron Age pottery combined with the freshness of the Bronze Age pottery (not abraded by Iron Age ploughing) found residually in Roman graves, indicates that the landscape of the northern Garrison areas was potentially wooded prior to the Roman invasion. The reality of forest clearance across the area to the south of the Roman town is likely to be complex since certain areas of the New Garrison area were clearly farmed in the Late Iron Age.

#### 7.1.5 **Medieval**

Evidence for medieval activity on the Alienated Land sites is directly associated with the fate of the Roman circus. After the end of the Roman period many of the public buildings in and around the town were left standing, as ever-degrading ruins. The excavation of the circus revealed a number of medieval robber trenches (and associated features) that sealed all surviving Roman foundations, features and layers. This activity is significant since it suggests that the circus had at least partially survived up to this date and then had been almost completely robbed out.

In the centuries after the Roman period a number of building works took place within the town that required a large amount of building material. Surviving Roman structures were robbed of any and all usable stone, brick and tile, which was then reused during the construction of other buildings. The Norman castle and the medieval St John's abbey are just two examples of post-Roman buildings being constructed out of Roman building material. From the evidence it would appear as though in the medieval period the last remains of the circus also succumbed to this fate.

A detailed analysis of the post-Roman pottery (for the final report) may provide enough evidence to securely date this phase of activity.

#### 7.1.6 **Post-medieval**

Evidence for post-medieval activity on the Alienated Land sites is rare. Aside from a small number of features identified on Areas C1 and C2 and during the watching brief, the bulk of the evidence was recorded on Area J1. Evidence from Area J1 included a metalled road/trackway with roadside ditch (Area J1 West), a series of field boundary ditches (Area J1 South), at least two quarry pits (J1 evaluation), and a number of other small pits.

The four post-medieval field boundary ditches in Area J1 South appear to have formed at least three separate fields. Field 1 was located to the north of ditch JSF17, Field 2 was located to the east of ditch JSF7 and Field 3 to the west of the same ditch. A 5m-wide gap

between ditches JSF17 and JSF7 may have acted as an entrance between Fields 2 and 3. A fourth ditch (JSF14) could also be related to this activity and may have further subdivided Field 1. The location of a series of fields on this site would suggest that the area was at least partially used for agriculture in the post-medieval period. Similar ditches, recorded on Area C1 and during the watching brief, probably also acted as field boundaries.

The quarry pits recorded in the Area J1 evaluation are likely to have had a function similar to the Roman quarry pits also recorded on the site. This function was the quarrying of sand and gravel for building works within the town, including possibly the metalling of the road/trackway recorded in Area J1 West. Although it is at present uncertain where this road leads to or from, it is likely that it acted as a route connecting the post-medieval town to the agricultural land further to the south.

The area around the Colchester Garrison is known to have been associated with the English Civil War. The St John's abbey precinct (located immediately to the north of Area C2) was used as a fortified Royalist stronghold during the Parliamentary siege of Colchester in 1648, and a Royalist defensive network is thought to run east-west through the Abbey Field. During the siege, the Parliamentarians also built a string of forts around the town linked by a substantial ditch and bank. Although the precise line of these fortifications has never been established, the 1648 siege map (Siege map booklet) shows that some of these are located along the northern ridge of the Garrison PFI site. So, some of the post-medieval features recorded on the Alienated Land sites may be associated with the Civil War. First, the road/trackway in Area J1 West may have been connected to the Royalist defensive network running through the Abbey Field, and may have been used to transport men and provisions. Second, the post-medieval ditch recorded in Area E may be part of the 'lager' (ditch and bank), which connected most of the various Parliamentary forts and gun emplacements that surrounded Colchester during the siege. In particular, this ditch may be associated with Fort Needham, which is thought to have been located on Mersea Road.

#### 7.1.7 **Modern/military**

A number of modern/military features were recorded across the Alienated Land sites. The vast majority of these features were associated with the activities of the Colchester Garrison, which has been present on the sites since the late 18th century.

The largest number of features recorded included building foundations (Area J1), service trenches (Area C1, C2 and J1), and associated features (soakaways, cobbled surfaces), most of which were associated with the Garrison buildings which used to exist on the sites (the Garrison Civil Service Club in Area C1 and the stables and barrack blocks in Area J1). Area C2 also contained many features related to the defence of Colchester during World War II. This included four air-raid bunkers, a communication trench connecting at least three of the bunkers and a pit containing a stash of 'Molotov cocktails' which would have been used by the Home Guard had Britain ever been invaded. A number of air-raid bunkers were also located in Area J1 along with a number of World War I fire trenches. The fire trenches consisted of a series of 'zigzag' trenches along the eastern side of Area J1 East and were similar to the trenches recorded in Area F of the 2002 evaluation (CAT Report 246). Trenches of this kind are dated to World War I (1914-1918) and are mock-ups of front line fire trenches used to train troops before their deployment to France. The 'zigzag' construction of the trench system would prevent an enemy from firing a machine gun down the length of the trench.

## **7.2 Areas O, Q and S1**

(areas to the south of the dry river valley delineated by Circular Road South)

### **7.2.1 Palaeolithic**

Two pieces of flint, dated to the Palaeolithic period, were recorded residually on Area Q. This evidence would suggest that some form of activity did occur on Area Q in the Palaeolithic period. The handaxe fragment is dated to the middle Palaeolithic, at which date Neanderthals were the dominant hominid species in Europe. Presumably the material has been ploughed out of the underlying gravel Pleistocene terrace.

### **7.2.2 Late Neolithic**

A single piece of datable Late Neolithic pottery was recovered from the 4-post structure (with annexe or wind break) within Area Q. Evidence relating to Late Neolithic land-use is very rare across the Garrison PFI site, especially in those sites to the south of the dry river valley. It is possible that the pottery sherd is residual, especially as other pottery sherds were recovered from the structure but proved too small to be identified. However, as the only identifiable sherd of Late Neolithic pottery from Area Q, it would seem unlikely that residual material found its way into a single post-hole but not into any of the other features from the site. If the date for the structure is correct, then it would imply that the area had been partially cleared of trees (see below) and that some form of Late Neolithic activity had occurred on the site. The conventional interpretation is that 4-post structures supported raised floors (above ground level) that could have been used to store food and hay (which was out of the reach of vermin and protected from the damp), to lay out bodies during exposure burials, or to use as watchtowers. Similar structures have been located within Area J1 North of the Alienated Land and Area 10 of the New Garrison, dated to the Late Bronze Age and Early Iron Age periods respectively. However, the potential Neolithic date of the structure, combined with the possible annexe that would make it 7m long, suggests the possibility that this was actually a small rectangular hut or shelter. A Late Neolithic house or shelter would constitute a major discovery given their extreme rarity in the archaeological record for England. Unfortunately, since the dating evidence is scant the identification as such would be controversial.

### **7.2.3 Late Bronze Age/Early Iron Age**

Several pieces of Late Bronze Age pottery were recorded residually on Area Q, suggesting that some form of activity did occur on the area in the Late Bronze Age period. Furthermore, a large number of tree-throw holes or grubbing-out pits (pits dug in order to remove stumps so cleared plots could be ploughed) were identified on the site. Most produced no evidence of their date, but a feature identified in the 2002 evaluation produced 70 sherds of Late Bronze Age/Early Iron Age pottery. In the light of the excavation, this feature is now considered to have been a tree bowl or grubbing-out hole, which was used as a repository for the pottery. Therefore, there is a small amount of evidence to suggest that the landscape on Area Q was at least partially wooded before the Late Bronze Age/Early Iron Age period and that part/all of this land was cleared for agriculture at this time.

### **7.2.4 Roman**

#### **Roman field system**

The area to the south of the dry river valley is known (through previous archaeological investigations, such as the New Garrison excavations of Areas 2, 6 and 10) to have been dominated by a series of fields, field boundary ditches and droveways, which created a large Roman agricultural field system. The features recorded during the investigation of Areas O and Q fit nicely into this landscape.

Area O produced a single field boundary ditch and Area Q produced two large field boundary ditches (dated from the 1st to 3rd century) that formed three separate fields. Field 1 was located within the north and eastern part of the excavation area, and it was bounded along its south-east edge by QF9 and along its south-west edge by QF11. Field 2 was located within the south-west corner of the excavation area. It was bounded along its north-east edge by QF11 and, probably, along its south-west edge by the droveway (revealed by two cropmarks) in the far south-west corner of Area Q. Lastly, Field 3 was located within the south-east corner of the excavation area. It was bounded along its north-west edge by QF9, along its south-west edge by QF11 and, probably, along its south-east edge by another droveway (also revealed by two cropmarks). The location of both of the cropmark droweways was confirmed during the 2003 excavation of Area 10 (immediately to the south of Area Q). Furthermore, the two recorded entrances appear to have been located for easy movement between the three fields.

The Area Q ditches must be viewed in the context of the wider contemporary landscape. Several phases of ditch cutting were identified within the New Garrison Areas 6 and 10, including a probable pre-conquest Late Iron Age phase (probable in the case of Area 10 and possible in the case of Areas 2 and 6) and several 1st- to 3rd-century Roman phases. This information is extremely valuable for the purposes of defining the nature of the pre-Roman (Trinovantian and later the Catuvellaunian) landscapes within the Camulodunum *oppidum* and the degree of impact that the new Roman town had on its hinterland. The New Garrison excavations have suggested the possibility that a Middle Iron Age landscape (of the Trinovantes until *c* AD 10) was in existence on much the same orientation as the better-defined (although still very fragmentary) remnants of a Late Iron Age landscape (on the basis that the alignment of a Middle Iron Age enclosure in Area 2 was followed by ditches dated to the early Roman period. This would imply that the orientation of the landscape had been maintained since the Middle Iron Age through the Late Iron Age). The fragments of the Late Iron Age landscape which can be discerned are fully respected and indeed recut by the 1st- to 3rd-century Roman landscape ditches (notably within Area 6 but also within Area 10 on the basis that a Late Iron Age cremation in Area 6 was located next to a early Roman ditch that may therefore have had a contemporary precursor, and that ditches in Area 10 were recut in the *c* AD 40-60 period). Therefore it appears that there was already a defined coaxial landscape of fields before the Roman invasion and that the existing field system was simply incorporated into the Roman version (which appears to have included the addition of double ditches to form 'droveways' for stock). This finding is important as it suggests that there was no aggressive wholesale reorganisation of the landscape to the south of the new Roman town after AD 43 (eg 'centuriation' – the creation of rigidly coaxial imperial estates). However, the ditches from Areas O and Q (and Areas C2, E and J1) appear to be solely Roman in date, and if they did replace a Late Iron Age field system then no trace of it was found within the archaeological investigations. As indicated above, it is therefore possible that certain areas were still wooded in the Late Iron Age and were not cleared until after AD 43.

The excavation of two possible Roman animal pens via erosion hollows and stake holes and a fence line in the Area Q fields, and the close proximity of two droveway ditches to those same fields, suggests that livestock was being kept and farmed on the site (possibly for meat, milk, wool, etc). The evidence from this site is paralleled on Area 6 of the New Garrison, where a larger animal pen was also found within a series of fields, which were connected by three droveways. Cumulatively, this evidence indicates that much of the field system laid out over the south of the walled town was used to keep domestic stock. The presence of two hearths on Area Q may also be associated with the people who kept and farmed the animals.

### **Roman burials**

Three Roman inhumation burials were recorded within Area Q. The tradition of burial within agricultural fields has been widely documented across the Garrison – on Area J1 South of the Alienated Land sites and Area 6 of New Garrison redevelopment. It is usually associated with families or distinct groups of people who lived and worked on the land, and buried their dead in a symbolic relationship to that land. The existence of enclosed land with ancestral burials also implies that the settlers regarded their land as private and as a resource not to be shared with neighbours.

### **Berechurch Dyke**

The entire Garrison PFI site is located within the major Late Iron Age defended settlement (*oppidum*) of Camulodunum. This *oppidum* was defended by a series of dykes – monumental bank and ditch boundaries – which have been recorded across Colchester. Berechurch Dyke formed part of the eastern boundary of this *oppidum*, and is located along the western edge of Area S1.

Berechurch Dyke was successfully located in Area S1, where most of the ditch and part of the rampart had survived. It was hoped that enough dating evidence would be recovered from the surviving features to date the construction and use of the dyke, but very few datable finds were recorded.

#### **7.2.5 Post-medieval**

Very few post-medieval features were recorded on the Alienated Land sites to the south of the dry river valley. These features consisted of two pits in Area Q and a ditch in Area S1. The ditch in Area S1 followed the alignment of Berechurch Dyke, and actually cut away part of the ditch to the south of the site. It is likely that this ditch forms part of an estate boundary ditch, possibly associated with Berechurch Hall. The ditch is not apparent on aerial photographs from 1944 (CAT Report 97) and is likely to have been backfilled prior to the establishment of Roman Way Camp and the later Roman Barracks.

## 8 Assessment of finds and environmental analysis

### 8.1 Prehistoric pottery – assessment by Paul R Sealey

#### Summary

The excavations produced 8.75 kilos of prehistoric pottery, distributed very unevenly across the excavated area. Eighty per cent by weight is a Late Bronze Age plain ware assemblage of regional importance for Essex and East Anglia dated *c* 1000-800 BC. Most of it came from Area J1 North. Pit JNF38 produced 3.25 kilos; three other Bronze Age pits produced another 0.25 kilos. Another 3.75 kilos was residual in Roman period contexts in the same area. The sherd size of this residual pottery was large; coupled with an almost complete absence of later prehistoric pottery, it is clear that this tract of land was not under cultivation or occupied between *c* 800 BC and the creation of the circus and Roman cemeteries in the vicinity. Only tiny quantities of prehistoric pottery were recovered from Area E, the Area J1 evaluation, Area J1 South and Area Q. Nearly all of it was the same Late Bronze Age plain ware so well represented in Area J1 North. Areas C1 and C2 produced 0.75 kilos of Late Neolithic Peterborough ware and a Beaker rim. A Peterborough ware rim was also recovered from Area Q. Area J1 East had one Middle Bronze Age body sherd. The dearth of Iron Age pottery from all sites is remarkable and shows that these parts of the Late Iron Age *oppidum* of Camulodunum were only sparsely populated and were by and large uncultivated.

#### Quantification and distribution of the prehistoric pottery by sites

Pottery was weighed in its bags before examination, so the weights given here will be marginally higher than the final figure. The provisional sherd weight of prehistoric pottery from all areas is 8.756 kilos. Table 14 shows that it was distributed very unevenly across with excavated areas. 82.9% by weight came from Area J1 North and consists entirely of Late Bronze Age plain ware.

<i>Area</i>	<i>Weight (g)</i>	<i>Comments</i>
Area C1	357	Late Neolithic Peterborough ware (Mortlake style, and some Ebbsfleet)
Area C2	400	Pit CF223 has Peterborough ware (Mortlake style) and a Beaker rim
Area E	22	Late Bronze Age plain ware
Area J1 evaluation	96	Late Bronze Age plain ware
Area J1 East	353	Late Bronze Age, some Neolithic, Deverel-Rimbury and Middle Iron age
Area J1 North	3204	Late Bronze Age plain ware assemblage from Pit JNF38
Area J1 North	242	Late Bronze Age plain ware assemblage from Pits JNF93, JNF134 and JNF503
Area J1 North	3814	Late Bronze Age plain ware residual in Roman and later contexts
Area J1 South	128	Late Bronze Age plain ware residual in Roman and later contexts
Area Q	140	Late Bronze Age plain ware, one Late Neolithic Peterborough ware rim
<b>Total Sherd Weight</b>	<b>8756</b>	

Table 14 Summary of the prehistoric pottery.

#### Sherds for illustration

Fifty-one sherds have been selected for illustration. Details are given in Table 15.

<i>Period</i>	<i>Area</i>	<i>Rims</i>	<i>Bases</i>	<i>Body sherds</i>
Late Neolithic	C1, C2, J1 East and Q	6	1	5
Beaker	C2	1		
Middle Bronze Age	J1 East			1
Late Bronze Age	J1 North	33	3	1

Table 15 Prehistoric pottery selected for illustration.

### **Late Neolithic and Beaker pottery**

Areas C1 and C2 produced a small but interesting group of Late Neolithic and Beaker pottery weighing 757 grammes. This pottery came from five Late Neolithic pits in Area C1 and a single pit (CF223) in Area C2. Pit CF223 produced 400 grammes of Neolithic pottery and a Beaker rim.

Most of the later Neolithic pottery is oxidised flint-tempered Peterborough ware of Mortlake type with impressed decoration, including finger-nail and finger-tip impressions. The prevalence of finger-tip and finger-nail decoration recalls the Mortlake style pottery at the Springfield (Essex) cursus (Brown 2001, 123). Finger impressions also dominated the Peterborough ware from another Essex site, Elms Farm at Heybridge (Brown 2002a, 60).

Other sherds have a fine clay matrix with grog, apparently Peterborough ware of Ebbsfleet type, bearing in mind that the Ebbsfleet ware from the Springfield cursus had the same fabric.

Oxidised surfaces with unoxidised cores in conspicuously flint-tempered fabrics with some sand have been found in Peterborough ware Mortlake assemblages further afield in eastern England, as at Hunstanton (Norfolk) (Cleal 1993, 53).

Some of the Peterborough ware sherds from the Alienated Land sites have close-set stamped lines that look at first site like finger-nail decoration but which were made instead by a tool with a concave edge. Another sherd is decorated with small circular stamps.

Area Q produced another Peterborough Ware rim, from the 4-post structure. Otherwise the pottery from this structure was tiny abraded sherds of flint, sand and sand-with-flint tempered pottery. Area J1 North had a flat base sherd tempered with flint and red and black grog that might also be Neolithic. The base sherd had a burnt food residue on the interior, the only instance of this phenomenon from the Alienated Land sites.

### **Beaker pottery**

The Beaker from CF223 in Area C2 is represented by joining rim sherds in a coarse flint-tempered fabric, with the crushed burnt flint visible on the surface. The pot has a scheme of incised linear decoration consisting of a double zigzag of tramlines set within horizontal lines based on a decorative motif found in the East Anglian Beaker group defined by Clarke (1970, 146-52). The decoration is a variation on Motif 7 in the scheme proposed by Clarke (1970, 425). Broadly similar decoration is present on the Beaker from Ardleigh, just outside Colchester (Brown 2002b). At the Alienated Land sites the decoration was carelessly executed and looks as if it should be late in the sequence (Bamford 1982, 58). Beaker pottery was current *c* 2500-1700 cal BC (Needham 2005, 171) and this dates the Peterborough ware in the same pit.

### **Late Bronze Age pottery**

At least 85% of the prehistoric pottery is Late Bronze Age plain ware, current *c* 1000-800 BC. Most came from Area J1 North. Pit JNF38 alone produced 3.204 kilos, while a further 242 grammes was retrieved from pits JNF93, JNF134 and JNF503. Roman period contexts in the same area produced another 3.814 kilos.

At least 13 vessels are present in pit JNF38. Sherd sizes are large and the pottery represents freshly broken vessels in an undisturbed context without contamination from earlier or later pottery.

It is noteworthy that although it was residual in Roman contexts, the other Late Bronze Age pottery from Area J1 North includes many groups with large sherds of unabraded pottery. One gains the impression that Roman activity disturbed Bronze Age features that had remained undisturbed since their formation.

Late Bronze Age plain ware also came from Area E, the Area J1 evaluation, Area J1 South and Area Q. The quantity recovered was less than 0.75 kilos and most was residual in later contexts.

Most of the Late Bronze Age plain ware is tempered exclusively with flint; flint-and-sand is also present. The flint ranges from well-sorted fine inclusions to poorly-sorted coarse grains up to 5 millimetres across. Many of the base sherds have the flint rough-casting diagnostic of Late Bronze Age wares. Much of this pottery has red or light brown (oxidised) surfaces, typically Munsell 2.5YR 6/8.

With the exception of a rim sherd, from the Roman inhumation grave JNF133, with straight incised lines set obliquely across the top of the rim, none of the pottery is decorated. It can be characterised as a classic Late Bronze Age plain ware assemblage of the kind defined by Barrett (1980).

The pottery has a definite fine ware and coarse ware component. Coarser vessels are tempered with large flint inclusions visible on the surfaces and the finer vessels have well-sorted, fine flint with polished surfaces.

Typologically there is a diversity of form so typical of Late Bronze Age ceramics. At one end of the spectrum are thin-walled, fragile cups and bowls, and at the other end are the sturdy storage vessels with corrugated, finger-wiped exteriors.

### **Significance and research potential of the prehistoric pottery**

Peterborough ware is rare in Essex (Court & Mephem 2004, 29); this makes the Late Neolithic pottery from Areas C1 and C2 of some interest. The only other Neolithic pottery from Colchester is the large Grooved Ware assemblage from a pit in the town centre at Culver Street, and a few Early Neolithic plain bowls (Brown 1992).

It is the Late Bronze Age pottery that is of particular interest and importance. There are still few large assemblages of prehistoric pottery from East Anglia and Essex to document developments after the end of Deverel-Rimbury pottery at the end of the 2nd millennium BC (Needham 1995, 164; Needham 1996, 254), although one might exonerate south and central Essex from that assessment (Brown & Murphy 2000, 9). In north-east Essex there is a positive dearth of Late Bronze Age pottery. Frog Hall Farm at Fingringhoe produced 6.25 kilos; only six vessels were illustrated (Brown 2002c). In Colchester town it has been

reported from New Kiln Road but the quantity was meagre (Crummy 1995, 132-2, fig 6.23 no 1). The Late Bronze Age pottery from the 1930-39 excavations at Sheepen remains unpublished (Hawkes & Hull 1947, 4). So, the Late Bronze Age pottery from the Alienated Land sites provides the first real opportunity to clarify developments in ceramics in the region after Deverel-Rimbury, with particular attention being paid to JNF38. This is a large sealed group and would repay thorough analysis. It is recommended that an attempt be made to establish a minimum vessel number count to gain an insight such questions as the relative incidence of coarse and fine wares.

It is remarkable that the Alienated Land sites have produced so little prehistoric pottery of Iron Age date. Area J1 East had a few fine, sand-tempered, black sherds (including a plain, rounded rim) of Middle Iron Age type and a further scrap was recovered from Area J1 North. Some of the residual pottery tempered with flint and sand-with-flint could of course be Iron Age, but it was noticeable that sherds with oxidised surfaces (a Late Bronze Age trait, rare in succeeding periods) were still common in residual groups of pottery tempered with flint and sand-with-flint. Comparisons of the incidence of oxidised sherds in Bronze Age and later contexts should give an objective indication of the extent (if any) to which Late Bronze Age pottery in later contexts has been mixed and contaminated with later, Iron Age wares.

There are important implications here for landscape history. The methodology employed is much like that used by Jones (2005). It is evident that after the Late Bronze Age, occupation and activity in the areas examined came to an end until the Roman period. Had the areas examined been under cultivation throughout the Iron Age they would have produced the small, abraded sherds of such pottery found elsewhere on the Garrison sites, most clearly in Area 6 (New Garrison) where an agrarian landscape of fields and driveways was explored. Manuring of such a landscape would have further comminuted the Bronze Age pottery already present – but one knows that did not happen because the sherd weights of residual pottery are high. The areas examined on the Alienated Land were not manured fields after the Late Bronze Age. It would seem that – by accident or design – they had reverted to woodland, be it unmanaged or managed. This woodland remained uncleared at the time of the Roman invasion. As such, the Alienated Land sites were thinly populated when the Late Iron Age *oppidum* was created in the 1st century BC. This adds to the scant evidence for human settlement in the *oppidum* and contributes to the conundrum of how a major political centre could have evolved in such a sparsely populated landscape.

## **8.2 Late Iron Age and Roman pottery – assessment by Stephen Benfield**

### **Introduction**

This report is an assessment of the Roman pottery recovered from the archaeological investigations of Areas C1, C2, E, J1, O, Q and S1, including the Time Team trenches and the Alienated Land watching brief.

The assemblages of Roman pottery can be described broadly as originating from several types of context. These are pottery from burials (both cremations and inhumations) together with the pottery from funerary-related features (pits with pyre debris/*busta*); pottery associated with the Roman circus; pottery from a settlement site with a ditched enclosure and building; and pottery from features which are part of the wider Roman landscape (primarily ditches and pits).

### **Work completed to date**

For all of the Alienated Land sites the pottery has been quantified. For each numbered finds bag the weight, number of sherds, eve (estimated vessel equivalents), types of pottery vessels present (pottery form types) and date have been recorded for each fabric type. The fabrics follow the Roman pottery fabric types devised for *CAR 10*. The pottery form types referred to are those of the *Camulodunum* (Cam) numbered Roman pottery type series (Hawkes & Hull 1947; Hull 1958). Dates are recorded as a general date range based on the currency of the fabric type itself, or are assigned a more closely-dated range if dated pottery form types could be recognised. The quantity by weight of pottery for each of the sites/areas is listed in Table 16. Overall there is a total of approximately 160 kg of Roman pottery from the Alienated Land sites covered by this assessment report.

Short reports or summaries on the Roman pottery, relating to earlier requirements for pottery reports from individual areas, have been written for Areas E, J1 and Q. In addition, pots from the burials on Area C2 (27 burials with pottery vessels) and Area J1 North (112 burials with pottery vessels), have been listed and described separately as individually numbered vessels from each burial. The pottery from all burials should be illustrated for publication, and toward this end a number of the pots have already been drawn.

<i>Garrison area</i>	<i>principal feature types associated with Roman pottery</i>	<i>quantity of Roman pottery by weight (g)</i>
Area C1	part of the Roman circus and Roman landscape features	2,579
Area C2	part of the Roman circus, Roman burials and Roman landscape features	49,827
Area E	Roman settlement enclosure	21,302
Area J1 Eval	part of the Roman circus, Roman burials and landscape features	5,678
Area J1 North	Roman cemetery, (cremation burials, pits with pyre debris/busta, inhumations) and Roman landscape feature (Roman road)	60,102
Area J1 South	landscape features and a small number of Roman burials	14,810
Area J1 East	part of the Roman circus, a small number of Roman burials and landscape features	4,763
Area J1 West	post-medieval landscape features only	0
Area O	Roman landscape feature (ditch)	49
Area Q	landscape features and a small number of Roman burials	1,206
Area S1	Late Iron Age dyke ditch and post-medieval ditch	0
Time Team	on site of the Roman circus	34
watching brief areas	part of the Roman circus and one Roman inhumation burial	36
	total weight (g)	160,386

Table 16 Quantity of Roman pottery and summary of feature types associated with Roman pottery from the archaeological areas.

### **Proposed further work**

The single largest contribution of the pottery is dating. For all of the Alienated Land sites covered by this assessment, the dates resulting from the quantification of the pottery fabrics need to be compiled into a list for each site giving an overall date for each numbered find bag. This will enable an overall date for the pottery from each context, or phase within contexts (such as phases of ditch fill) to be compiled.

For each Alienated Land site a report on the pottery, incorporating the pottery context dating, should be completed. Also an overall report or discussion of the pottery, bringing together the pottery from similar types of archaeological features that occur over several different areas, should be produced as part of wider view. The feature types identified are pottery from burials and burial-related features, pottery associated with the circus, pottery which can be directly associated with a settlement site, and pottery from other contexts which are part of the wider Roman landscape.

#### *- pottery from burials and associated with burial*

In addition to the substantial numbers of burials from Areas C2 and J1 North (between them a total of 139 burials accompanied by pottery vessels), there are 4 burials with pots from Area J1 South, 2 burials with pots from Area J1 East, and 3 burials with pots from the Area J1 evaluation. Altogether this makes a total of 148 excavated burials accompanied by pottery vessels (Table 17).

<b>number of pots in each burial</b>	<b>number of corresponding burials for Area C2</b>	<b>number of corresponding burials for Area J1 North</b>	<b>all other Areas (J1 South, J1 East and J1 evaluation)</b>	<b>number of pots represented</b>
1	14	74	5	92
2	9	19	3	62
3	3	11	-	42
4	-	1	1	8
5	1	3	-	20
6	-	2	-	12
7	-	1	-	7
8	-	1	-	8
<b>TOTALS</b>	<b>27</b>	<b>112</b>	<b>9</b>	<b>251</b>

Table 17 Number of burials with pots corresponding to numbers of pots with burials.

The existing list and description of pots from each burial will need to be finalised. Also any necessary overview of particular grave groups, where more than one pot is present, will need to be completed. An overall comment and date will be required for groups of pots from burials, especially in relation to any other dating evidence for the burial. Comment on the pottery may also be required if any other particularly interesting finds are associated with the burial. Any dating evidence from burials, which is independent of the pottery dating, should be considered in relation to the pot types that are present.

Many of the pottery vessels from burials (approximately 250 pots in total (Table 17)) will need to be illustrated. Although a substantial quantity of Roman pottery from Colchester has been illustrated previously, most recently in *CAR 10*, there remains a requirement (where possible) to illustrate pottery from burials. The need for these pots to be illustrated is for

several reasons. Burial pots are commonly whole examples, as opposed to the parts of broken pots usually recovered from settlement areas, which was the case with most of the pottery illustrated in *CAR 10*. The pots are also of some interest in themselves, having been selected for inclusion with the burial, and allied to this they may also form part of a group of selected items, including other pots or objects deposited as part of a funeral. The pots are also an important element in the dating of the burials. It is therefore desirable to see all of the objects from the grave, including the pottery, illustrated together as a group.

The pottery from features associated with the burials (pits with pyre debris and/or *busta*), has been quantified. However, as yet there is no definitive listing of recognised individual pots associated with these features. This listing and a description of the pots will need to be compiled. Illustration of pottery from pyre debris/*bustum* features should be undertaken, where possible, to show the range and condition of pottery included with them. These features are far less numerous than the burials, so the potential number of illustrations is not large. Also the pottery from the pyre debris is commonly very fragmented with only parts of pots present, so that the opportunity for illustration will be limited.

*- pottery associated with the circus*

The pottery which can be associated with the circus structure has not previously been considered in detail. This is primarily that associated with the foundations, from layers or features cutting or sealing the foundations, or from surfaces associated with the period of use of the circus. Though the exact amount of this pottery (across all the Alienated Land sites) has not been calculated, the quantity is not thought to be large. The most important information these finds are likely to provide is evidence for dating the circus. Though quantified as part of the assemblage from several different sites, this pottery will need to be drawn together and will need a separate section within the report.

*- pottery associated with a Roman settlement site*

Only one of the Alienated Land sites can be directly associated with a Roman settlement. This is Area E where evaluation trenches revealed part of a ditched enclosure containing the remains of the foundations of a building. The quantity of pottery from this area, at just over 21kg, is one of the larger assemblages from the excavations (Table 16), which reflects the intense use and discard of pottery around the immediate settlement area. Most of the pottery recovered from the area came from the enclosure ditch, with some pottery associated with the demolition of the building and some from the robbed foundation trenches. Pottery was also recovered from features (ditches and pits) outside of the enclosure. A short summary of the pottery from the area has been completed. However, the summary only deals generally with the pottery itself, and does not consider the pottery in relation to the date of the enclosure and the building. As with all of the other sites, a list needs to be compiled giving a date for each context by numbered find bag, and an overall pottery date for each context needs to be compiled (to provide a clearer dating frame work for the site features). It is not proposed that any illustration of pottery is required for this area.

*- pottery from other contexts*

Pottery from other contexts simply refers to all of the contexts which are not directly part of the other feature groups (burials, settlement or part of the circus). However, they can be seen more homogeneously as features of the Roman landscape, commonly field and boundary ditches, but also other features such as pits, post-holes and surfaces. These features were encountered on almost all of the Alienated Land sites and pottery was recovered from most of them. Pottery was also recovered from soil layers which, while often not directly associated with datable Roman contexts, relate to the overall chronology and density of Roman activity. Probably the most important aspect of this pottery will be in helping to

provide a dating framework. The features from the individual sites form part of a wider landscape encompassing all of the areas (including the areas dominated by burials, settlement and the circus) and the pottery data should be viewed both for the individual areas and for all of the areas together. A few reports or summaries have been completed for some of the individual evaluations and excavations (see above). However most of this pottery has not been drawn into a report, and there is no over view of the pottery from the wider landscape features as a whole. Dates for the pottery by numbered find bag, and an overall date of the pottery from each context, need to be compiled for all areas. Reports for individual areas and an over view of the pottery will also need to be undertaken. It is not proposed that any illustration is required for any of this pottery.

### 8.3 Post-Roman pottery – assessment by Howard Brooks

#### Method

The pottery has been rapidly scanned. Fabric types and total weight by area are given in Table 18 (below). Fabrics have been identified according to *CAR 10* and *CAR 7*.

Area	No of contexts	Total weight (g)	Fabrics present
Area C1	4	90	40, 48d, 48W? (Whieldon?)
Area C2	5	150	20?, 48d
Area E	1	225	40
Area J1 evaluation	4	20	13 (early medieval sandy ware) 20 (medieval sandy greyware), 21a (Colchester-type ware), 40, 45
Area J1 North	2	30	40, 48d (ironstone), unidentified.
Area J1 South	3	440	40 (post-medieval red earthenware, 45 (German stoneware), 21 (sandy orange ware)
Area J1 East	82	1,100	13, 20, 21a, 40, 45, 47? (Staffs stoneware), 48d
Area J1 West	1	390	40, 45, 48d,
Area Q	2	20	40, 42 (Border ware), 48d
Time Team trenches	1	65	40
Watching brief	1	3	40?
<b>Totals</b>	<b>106</b>	<b>2,533</b>	

Table 18 Medieval and later pottery, fabric types and weights by area.

#### Comment

Given the size and extent of the Colchester Garrison excavations, this may be considered a small group of material (106 contexts, approximately 2.5kg). The usual medieval and post-medieval fabric types found in and around Colchester are present here: early medieval grey ware, medieval sandy grey ware, Colchester-type ware, post-medieval red earthenware, and modern ironstone. There is perhaps a little less Colchester-type ware than one would normally find in a town-centre excavation.

Study of the medieval and post-medieval pottery does not come within the parameters of the **Over-arching Research Aim 1** of the Colchester Garrison Project:

*To characterise the nature of landscape utilisation and change from the Neolithic (or earlier) to the Romano-British period.*

But it does come within the parameters of the **Over-arching Research Aim 2:**

*To characterise the Roman, Anglo-Saxon, medieval and post-medieval extramural suburbs of Colchester, their relationships to one another, the town and the countryside.*

In terms of the importance of the material, three groups can be identified:

- 1) pottery from contexts associated with the robbing of the circus (pottery may help to date the robbing)
- 2) pottery from post-medieval ditches (pottery may help to date the ditches)
- 3) other material

### **Recommendations**

- All pottery should be weighed, counted, classified and tabulated, according to fabric types.
- Only the material from the circus robbing contexts and the post-medieval ditches should be reported on in detail (especially the former).
- Other material – basic reporting only

### **Resources**

Two days of specialist time should be allowed for the recommended work

## **8.4 The small finds, daub, clay pipe and metal-working debris – assessment by Nina Crummy**

### **Assessment of small finds and bulk metalwork**

#### **Summary**

This assessment covers the registered small finds, many from Roman burials, and a large quantity of bulk ironwork, mainly consisting of nails from funerary pyres and from coffins. A hoard of Roman silver coins is also included. The objects are catalogued in Appendix 2 (Parts A and B) and discussed by Area below. Recommendations for the published report and for the numbers of items requiring conservation, X-radiography and illustration are given at the end of this assessment.

The silver objects have in general already been dealt with under the Portable Antiquities Scheme. It is recommended that the remainder are dealt with as a block following conservation, which inevitably produces more than are immediately recognised before cleaning.

#### **Condition**

~ Most of the copper-alloy objects are in stable condition but quite heavily encrusted with corrosion, though many of the late Roman coins and other objects have considerably less surface corrosion. However, a significant proportion of objects, early Roman coins in particular, are in less stable condition.

- ∨ The lead(-alloy) objects are mainly post-Roman and in good condition. The exception is a Roman lead liner from a coffin, which is fragmentary and friable.
- ∨ The iron objects are in general heavily encrusted with a thick layer of corrosion mixed with sand grains, obscuring all details of form. Most of the iron objects from inhumations are presumed to be nails from their position within the grave pit, but this cannot always be confirmed by visual observation.
- ∨ The non-metal objects are in stable condition, apart from two ivory dice, which show slight signs of delamination.

The objects are packed to a good standard of storage in either polythene bags or small crystal boxes supported by acid-free tissue. The bags and boxes are stored in airtight Stewart boxes with silica gel where appropriate, or in museum standard cardboard boxes.

### **The assemblage**

Each area assemblage is briefly summarised below by material. Full lists of the small finds are given in Appendix 2 (Part A). The bulk ironwork is similarly listed in Appendix 2 (Part B).

#### Area C1

1. *Coins*: 4, 3 Roman, 1 modern. Of the three Roman coins only one is stratified. The earliest is late 3rd century, the latest is a silver issue of Honorius, AD 393-423.
2. *Copper-alloy*: 6. They include two brooches from Roman trample L19; one dates to AD 50-70, the other is probably 2nd century. A small dress or sewing pin is medieval or post-medieval.
3. *Lead(-alloy)*: 4, all unstratified. Two are probably weights, one probably a cloth seal.
4. *Iron (SFs)*: 6, at least 3 are Roman, including part of a brooch spring.
5. *Iron (Bulk)*: 14 nails or contextual groups of nails, most stratified in Roman contexts.
6. *Stone*: 1, Roman, lava quern fragments.

#### Area C2

1. *Coins*: 28, all Roman. Twenty come from nine graves or other funerary features, and the remaining eight from other contexts. They range in date from Claudius I, AD 43-54, to the House of Valentinian, AD 364-78. Of those from graves some were used as Charon's obol, others for the amuletic importance of their reverse images.
2. *Silver*: 3. All are items of amuletic jewellery from a boxed cremation (F166). They have already been conserved and have been dealt with under the Portable Antiquities Scheme.
3. *Copper-alloy*: 18. Three or four are post-medieval or modern, the rest Roman. Seven objects come from funerary features, including the lock-plate and other fittings from a box containing a cremation (F163) and other box fittings from cremation F173. Two armlets came from cremation F164, and two tweezers from cremation F165.
4. *Lead(-alloy)*: 3, all probably Roman.
5. *Iron (SFs)*: 11, including the fittings from the box in burial F163 (see *Copper-alloy*, above).
6. *Iron (Bulk)*: 77 contextual groups of nails, ranging from one to 40+, and 8 groups of hobnails from footwear. Most are from Roman funerary features.
7. *Wood*: 2, Roman. Fragments of wood survive from the box in burial F163 and from another box in F173.
8. *Bone*: 8, all Roman. Some are ivory. Three are grave deposits, including two dice from cremation F206.

9. *Glass/frit*: a maximum of 37, all but two are beads. Thirty-two beads form a necklace in burial F164, while Burial F163 contained three beads. A piece of glass in cremation F206 may be from a brooch.
10. *Stone/jet/amber*: 1 jet pendant, 2 amber beads, 7 stone. The pendant came from burial F166, the amber beads and a ?curated fossil from cremation F206. The other objects are small fragments from lava querns and some pieces of veneer.

#### Area E

1. *Copper-alloy*: 1, from a Roman enclosure ditch.
2. *Iron (Bulk)*: 32 nails in 6 contextual groups, mainly from Roman ditches.
3. *Bone*: 1, from a Roman enclosure ditch.
4. *Stone*: 4, from Roman enclosure and field ditches, including part of an inscribed Purbeck marble slab.

#### Area J

1. *Coins*: 5, all unstratified. Two are jettons that may be contemporary with the occupation of St John's Abbey. Two are silver.
2. *Copper-alloy*: 23, all but 1 unstratified. Most are modern and many relate to military activity in the area. The exceptions are two fragments of medieval vessels and part of a post-medieval animal bell.
3. *Lead(-alloy)*: 4, all post-Roman.
4. *Iron (SFs)*: 1, fragment.
5. *Iron (Bulk)*: 4 contextual groups of nails from burials, and 1 group of hobnails from a burial.

#### Area JE

1. *Coins*: 2, 1 Roman, 1 modern. The latter is from an evaluation trench of 2002.
2. *Copper-alloy*: 8, at least 2 Roman. Both Roman objects are of types used by auxiliary troops.
3. *Lead(-alloy)*: 5, all probably post-Roman.
4. *Iron (SFs)*: 47, most from medieval robbing. The many hobnails are Roman, as may be many of the other objects. A tanged chisel from L2 is more likely to be medieval, and, though an inappropriate tool for the job, may have been used to break up the Roman foundations (*cf* a bolster chisel from a robber trench at Culver Street). Some modern objects are also present.
5. *Iron (Bulk)*: 20 contextual groups of nails, ranging from one to 30, most from medieval robbing.
6. *Stone*: 6, most from medieval robbing. Most are probably Roman, apart from a post-medieval stone marble.

#### Area JN

1. *Coins*: 16, all Roman. Sixteen come from thirteen burials and other funerary features, ten are from other contexts. Most appear to have been used as Charon's obol. They range in date from early 1st century to 4th century.
2. *Copper-alloy*: 34, all Roman. Most come from burials or other funerary features, including the fittings from a 1st- or very early 2nd-century jewellery box in pyre-bustum F61. This appears to have been undisturbed, and should be reconstructable. A fragment of leather was preserved with the largest part of the lock-plate. The box contained, or was fitted with, a mirror. A cosmetic set came from inhumation F439, part of a mirror from inhumation F241, and an armband or anklet from inhumation F346. Inhumation F285 produced unusual fragments of ?silver foil held together by tin-solder.

3. *Lead(-alloy)*: 1, from a Roman inhumation.
4. *Iron (SFs)*: a minimum of 32, most Roman. A large number of nails or nail shanks from pyre/bustum F61 probably come from the jewellery box (see *Copper-alloy* above) and have therefore been counted as one object, though some may come from other wooden funerary deposits or from the wood used to form the pyre itself. Other objects of note include a finger-ring with carnelian intaglio, a brooch from inhumation F453, a tripod candlestick from inhumation F487, and some iron strips associated with the horse jaws found in ditch F10. Until X-radiography takes place, perhaps revealing attachment fittings, the function of these strips is far from certain.
5. *Iron (Bulk)*: 174 contextual groups of nails, ranging from one to 50+, and 50 groups of hobnails from footwear. Most are from Roman funerary features.
6. *Bone*: 3, all from cremation F103. One is part of a hairpin in the form of a female bust retaining traces of gilding.
7. *Glass*: a maximum of 16 beads, most are from burials. Thirteen form a necklace in inhumation F241/F351.
8. *Stone*: 5, one Roman, one Late Iron Age or Roman, the rest possibly modern. One fragment is part of an inscribed Purbeck marble slab.
9. *Ceramic*: 16, all lamps. Three come from pyre/bustum F61 and four from burial pit F252. All but two of the rest are also from burials (some disturbed).

#### Area JS

1. *Coin hoard*, composed of 43 *denarii*, ranging in date from the Republic to Hadrian (AD 117-38). They have been conserved at the British Museum and a report identifying the individual coins, but not dealing with the overall character and stratigraphic importance of the hoard, was prepared by the British Museum for Her Majesty's Coroner.
2. *Other coins*: 4, all from Roman features.
3. *Copper-alloy*: 6, all from Roman features. A small deposit of an iron key with copper-alloy handle and a pair of toilet shears with iron blades and copper-alloy spring-loop found in ditch F2 is probably votive. A brooch from ditch F5 dates to the mid 1st century. A miniature candelabrum of rare 2nd-century form came from amphora burial F9.
4. *Lead(-alloy)*: 1, unstratified.
5. *Iron (SFs)*: 3, at least 1 is Roman.
6. *Iron (Bulk)*: 5 contextual groups of nails, 3 stratified Roman.
7. *Bone*: 2, both beads from amphora burial F9.
8. *Frit*: 2, both beads from amphora burial F9.
9. *Stone*: 3, two from quernstones, one possibly from an architectural feature.
10. *Ceramic*: 1, fragment of a late or post-medieval pipeclay figurine, probably of a priest.

#### Area JW

1. *Iron (Bulk)*: 1 nail from a post-medieval feature.

#### Area Q

1. *Copper-alloy*: 8, all modern, all but one unstratified.
2. *Lead(-alloy)*: 5, all post-Roman, probably mainly modern.
3. *Iron (SF)*: 1, post-Roman.
4. *Stone*: 3, one natural, one from a Late Iron Age or Roman quernstone, one part of a tile.

### Watching brief (WB)

1. *Copper-alloy*: 1 fragment.
2. *Lead(-alloy)*: 1, a fragmentary sheet lead coffin liner.
3. *Iron (SF)*: 1, post-medieval or modern.
4. *Iron (Bulk)*: 2 contextual groups of nails, both Roman.
5. *Stone*: 1, quernstone fragment.
6. *Ceramic*: 3. Fragments of at least one loomweight and a perforated cylinder are probably Iron Age. The third object is a Roman pottery counter in a medieval context.

### Other items

1. A group of 19 coins recovered by metal-detector were examined. All are modern, ranging in date from 1883 to 1977, and all are United Kingdom issues except for one, a German 10 pfennig piece dated to 1908.

## **Recommendations**

### Report

The objects consist primarily of three groups: 1) objects from burials and other funerary features in a number of discrete cemetery areas; 2) objects, including the coin hoard, from contexts relating to the Roman circus and the medieval robbing that removed its foundations; and 3) objects from two more rural areas to the south. The funerary assemblage adds considerably to the information available about funerary practice in the southern cemetery, and the variations in deposition rites between cemetery areas point to its division into plots owned by families or other social groups.

∨ A publication standard report should be prepared for the funerary assemblages, with internal subdivisions by site area as deemed advisable by Colchester Archaeological Trust. Comparisons should be made between the depositional rites demonstrated at the Butt Road cemetery and other excavated areas within the southern cemetery, and set in the wider context of burial practice within the Roman province (*CAR 9*). A representative sample of coffin nails should be X-rayed and the construction of the coffins compared with the norm established at Butt Road. Giving due emphasis to intrinsically or stratigraphically important elements, the report should consist of:

- 1) a catalogue-level description of each item, other than coffin nails, by funerary feature,
- 2) reconstructions of composite objects where feasible (eg. jewellery box in JNF61, box in C2F163),
- 3) a summary of coffin construction,
- 4) overviews by object type, and
- 5) overviews by cemetery area.

∨ A publication standard report should be prepared for the circus-related material, including a sample of the medieval and post-medieval items that demonstrate post-Roman activity in the area. Giving due emphasis to intrinsically or stratigraphically important elements, this report should consist of:

- 1) a catalogue-level description of each item,
- 2) an overview of the objects by broad functional groups and by site phase,
- 3) a full discussion of the coin hoard that covers its stratigraphic importance and overall character, and sets it in the wider context of coin hoards from both the Roman town and the province as a whole.

- ~ A publication standard report should be prepared for the objects from each rural area.

This report should give:

- 1) a catalogue-level description of each item,
- 2) an overview of the objects by broad functional groups and by site phase.

### Archive

- ~ Brief descriptive lists based on Appendix 2 (Part A and B) should be prepared for all objects whether included in the published reports or not, and should form part of the site archive on deposition in the receiving institution.

### Associated specialist work

- ~ Residue analysis – Burnt residues from eight lamps from Area JN should be analysed to establish the fuel used and to identify the material used for any surviving wicks.
- ~ Conservation and X-radiography – To enable the identification of objects encrusted by corrosion and the compilation of accurate descriptions of all objects, as well as allowing illustrations to be prepared to publication standard, a programme of illustration, analysis, conservation and X-radiography should be carried out on selected objects.

The number of objects requiring cleaning and stabilisation to allow preparation of the reports and archive lists is:

Coins	62
Copper-alloy	81
Lead	8
Iron	5
Bone/ivory	4
Glass (burnt)	<u>1</u>
<b>TOTAL</b>	<b>161</b>

The number of iron objects in individual bags varies, but the minimum number requiring X-radiography is:

Small finds	139
Bulk finds	<u>147</u>
<b>TOTAL</b>	<b>286</b>

- ~ Wood analysis – Samples of surviving wood from two boxes should be identified to species.
- ~ Leather analysis – A fragment of leather cladding from a jewellery box should be identified to species and examined for traces of coloured pigment.
- ~ Illustration – To accompany the published report an estimated number of objects requiring illustration is:

Coins (photographs)	
hoard	43
grave deposits	32
Copper-alloy	51
Lead	6
Ironwork	29
Bone	6
Glass/frit	12
Stone/mineral	6
Ceramic	<u>14</u>
<b>TOTAL</b>	<b>199</b>

In addition, a minimum of 3 reconstruction drawings will be needed to accompany discussions of composite objects (box C2F163, box JNF61, sample coffin).

### **Assessment of daub**

#### **The assemblage**

A single small piece of daub from a medieval robber trench was noted. It is listed in Appendix 2 (Part B).

#### **Recommendations for report**

The assemblage does not merit publication and no further action need be taken.

### **Assessment of clay tobacco pipe**

#### **The assemblage**

Clay tobacco pipe fragments came from Areas C1, C2, J, JE, JN, JS and Q. They are listed in Appendix 2 (Part B).

Most are small pieces of stems, but two complete bowls of Colchester Type 6, dated *c* 1660-80, were found, one on Area JE and one on Area Q. Parts of two other bowls were also found, both on Area JE. One is small and is probably a Colchester Type 4, dated *c* 1640-60, the other is larger and is probably a Colchester Type 9, dated *c* 1700-40.

Several of the fragments come from contexts dated as either Roman or medieval, and this dating consequently needs to be revised, either by rephrasing the context, or by removing the find numbers containing tobacco pipe fragments from those features or layers, or by checking the possibility of intrusive material entering the contexts from the topsoil.

Details of context type and date were not available for all the contexts containing tobacco pipes, and it is possible that the problem outlined above will affect more contexts than now apparent.

#### **Recommendations for report**

The assemblage does not merit publication and no further action need be taken.

### **Assessment of the metal-working debris**

#### **The assemblage**

The material is listed in Appendix 2 (Part B).

#### *Iron-working debris*

A very small amount of iron-working debris was recovered from Areas C2, J and JE. Most of it comes from medieval, post-medieval or modern contexts, but some pieces are from Roman features.

On Area C2 fragments were found in cremation F237 and inhumation F235. The former may therefore be pyre debris rather than genuine iron-working debris.

A piece of furnace hearth bottom was recovered from Area J, and more came from Area JE, along with tap slag and cindery fragments. Most of the JE assemblage comes from robber trench F5, but only one small piece of slag from pit F4 on that site need necessarily be Roman.

The quantities in all cases are small and the sources are likely to be small-scale iron-working activities somewhere in the general area.

*Copper-alloy-working debris*

A single small piece of copper-alloy debris was found on Area JS. It may be from copper-alloy-working or from a severely burnt object.

**Recommendations for report**

The assemblage does not merit publication and no further action need be taken.

**8.5 The human bone – assessment  
by Francesca Boghi**

**Introduction**

This analysis considered a sub-sample of inhumated and cremated human skeletal remains.

**Aims and methodology**

This assessment was carried out according to the BABAO/IFA guidelines for the preparation of assessment documents (Mays, Brickley & Dodwell 2002). The sample was analysed to assess its quantity, nature, condition and potential for further analysis.

**The material**

**Quantity**

A sub-sample comprising a total of 176 contexts containing human skeletal remains was considered for assessment purposes. The sub-sample of inhumated bone included 65 contexts, ie 69.8% of the contexts containing inhumated bone (total number – 93). The sub-sample of cremated bone included 111 features (30,011g) corresponding to 57.2% of the total number of features containing cremated bone (total number – 194) and to 45.8% of the total weight of recovered cremated bone (65,473g).

**Inhumated human skeletal remains**

**Condition**

The contexts considered in this sub-sample were mostly in a poor state of preservation with over 90% of contexts comprising less than 25% of the expected bone (Table 19) and generally showing high levels of fragmentation and cortical damage (Table 20). Good and very good levels of preservation were however noted within the juvenile sample.

	> 75%	~ 75%	~50%	<25%	Total
N (%)	0	3 (4.7%)	1 (1.5%)	61 (93.8%)	65

Table 19 Skeletal completeness.

	<b>None/minimal</b>	<b>Medium</b>	<b>Severe</b>
Fragmentation	5 (7.7%)	14 (21.5)	46 (70.8%)
Cortical damage	11 (16.9%)	16 (24.6%)	38 (58.5%)

Table 20 Degree of fragmentation and cortical damage (number of burials and %).  
Total number 65.

The relative representation of individual skeletal elements showed a low representation of dentitions, vertebrae, ribs, hand and feet available for study in this sample which will impact on the amount of information that could be achieved with further analysis. However, on the basis of the rates of skeletal preservation of the skull, pelvis and long bones it is estimated that it will be possible to determine the sex of at least 14 skeletons and the stature of at least 1 skeleton.

### **Nature**

A basic assessment of the nature of the assemblage showed that juveniles were present and that both genders were represented.

The material was rapidly scanned and a small number of pathological conditions were noticed. The types of pathologies observed include non-specific infection, trauma, joint disease as well as spinal, metabolic and dental disease.

### **Cremated bone**

The total weight ranged from 1 to 3,283g with an average of 270.4g. The maximum fragment size ranged from 13mm to 109mm with an average of 49.9mm. An assessment of the degree of fragmentation showed that an of 71.9% features were formed by fragments > 10mm (Table 21).

	<b>Features with bone &gt;10mm (%)</b>	<b>Maximum fragment size (mm)</b>	<b>Total weight (g)</b>
Range	0-100	13-109	1-3,283
Average	71.9	49.9	270.4

Table 21 Cremated bone (111 features)

An assessment of the overall size of the cremation indicated that over fifty per cent (52.2%) of the cremations in the sub-sample was formed by medium and large cremations (>100g) (Table 22).

<b>Size</b>	<b>Number</b>	<b>%</b>
<100g	53	47.8
100-399	30	27
>400g	28	25.2
Total	111	100

Table 22 Cremation size

## **Potential of the assemblage and proposals for further study**

**Cremated human bone** – The quantity and quality of information that can be retrieved by analysing an assemblage of cremated bone depends on the degree of fragmentation and the level of skeletal recovery. On the Alienated Land sites, both the average size of the cremations and the high occurrence of large fragments in the sub-sample indicate that valuable demographic and pathological information could be achieved by proceeding with further analysis.

**Inhumated human skeletal remains** – Despite a certain level of fragmentation and cortical damage, it is estimated that valuable information would be gained by proceeding with further analysis. The analysis will focus on the better preserved skeletons but will catalogue all individuals.

The proposed analytical work include will follow recommendations in Brickley and McKinley (2004), Buikstra and Ubelaker (1994), and the report will follow Mays, Brickley and Dodwell (2002).

The full analysis will include an assessment of:

### **Inhumated human skeletal remains:**

- *Quantity and condition of the material* (inventory, assessment of preservation including completeness, fragmentation and bone cortex condition)
- *Population structure* (minimum number of individuals, determination of sex , age at death)
- *Population variability* (19 cranial non-metric traits, 8 post-cranial non-metric traits, 22 cranial measurements, 10 cranial and post-cranial indices, 11 bilateral post-cranial measurements, determination of stature)
- *Health status* (pathological conditions, type and prevalence rates; skeletal indicators of stress; cause and manner of death; abnormality of size and development; parturition scars; evidence of health care)
- *Dental health status* (dental pathology, type and prevalence rates, diet, dental care)
- *Discussion and comparison of the results* with contemporary material and a comment on temporal trends

### **Cremated bone:**

- *Processing* (dry-sieving through a stack of sieves with 10mm, 5mm and 2mm mesh size, manual separation of pyre debris and bone fragments > 5mm)
- Analysis of the bone to ascertain the presence of human remains, record and interpret them as well as retrieve any information on pyre technology and funerary practice. The analysis will include an assessment of the quantity, colour, surface changes, degree of fragmentation, identification, anatomical representation of bones, minimum number of individuals, determination of age at death, pathological changes, discussion of the results and comparison with contemporary material.

## **8.6 The animal bone – assessment by Julie Curl**

### **Introduction**

An assessment was carried out on a faunal assemblage recovered from a variety of evaluations, excavations and watching briefs. Animal bone was produced from many types of contexts, including pits, ditches (including ring-ditches), walls and surfaces. In addition, animal bone may have been recovered from cremation and inhumation burials. The dating for the bone in this assemblage covers many periods from the Prehistoric, through the Roman and into the medieval and post-medieval. The assessment of this assemblage has identified several species of animal and butchering waste, including wild species such as Roe Deer. Possible hornworking waste was also observed.

### **Methodology**

The aim of this assessment was to scan all of the assemblage to determine quality and potential for further analysis.

While all of the assemblage was scanned, random contexts were chosen to examine in more detail. The bone selected for assessment was examined and recorded using a modified version of a system devised by Simon Davis' for recording faunal assemblages (Davis 1992). Each bag was scanned and a randomly selected context was sorted into immediately identifiable species. Contexts totals were recorded for each species and the number of measurable and countable elements present were also recorded. A note was also made of any other useful information such as types of elements present, butchering or other modifications, pathologies or bone/antler/hornworking. All information was recorded on the faunal remains recording and assessment sheets along with total weights for each context.

### **Quantities recovered and assessed**

A total of thirteen boxes of faunal remains were recovered from the whole site. The whole assemblage (all thirteen boxes) was briefly scanned to assess condition and to gauge the range of species and elements present. Approximately 20% of the assemblage was examined in more detail to determine the level of butchering, working and pathologies in the assemblage.

### **Observations during assessment and discussion**

It appears that the bulk of the faunal assemblage is comprised of the main domestic food species – cattle, sheep/goat and pig – all of which show extensive butchering, which includes possible hornworking evidence. Adult and juvenile remains were recorded; the juveniles could indicate local breeding and a possible autumn cull of young animals. Equid bones were frequently recorded and at least one element assessed showed a pathological condition.

Some of the pig remains may possibly be from Wild Boar, these would need further examination and measurements to determine their origin. Further evidence of hunting wild species was recorded with a Roe Deer mandible from a Roman inhumation burial (Grave 25) on Area C2. Further deer remains were suspected, but would need proper comparison with reference material for a full identification to be made.

Some pathologies were noted during the assessment and further study of these and any others that may arise, should give an indication to the health and husbandry of the animals at this site.

Butchering was extensive and the assemblage was highly fragmented; however, numerous measurable and ageable elements were present that should provide information on ages at death and stature of the animals.

### **Recommendations for further work**

It is recommended that the whole assemblage, from all areas, is examined. Bone should be recorded to species where possible and ages of animals determined. Recording of elements and butchering locations and methods is needed to determine presence of primary and secondary butchering waste. Full identification of the wild species present should provide information on how much hunting contributed to the diet at the site.

No small mammal, bird or fish was noted during the assessment, however, these small bones can be difficult to identify during a rapid scan and should be evident, if present, during a full analysis.

Distribution of elements needs to be analysed, particularly the presence of animal bone buried with the human remains; these bones could indicate feasting, often associated with early human burials, or meat buried with the deceased as 'food for the afterlife'. Results from the analysis of this assemblage should be compared to similar sites, both locally and nationally.

### **Extra note**

Any faunal remains identified within the human bone assemblage and/or the environmental samples will be incorporated into the final analysis and report.

## **8.7 Ceramic building materials – assessment by Laura Pooley**

### **Introduction**

This is an assessment report on the ceramic building material recorded on the Alienated Land site, in the Time Team trenches and during the watching brief. All of the Roman and post-Roman CBM has been identified, weighed and measured, and a summary of the results is presented here.

### **Summary of results**

#### **Roman Ceramic Building Material (CBM)**

A total of 2,893 pieces of Roman CBM, at 323,826g, was recorded from 216 different contexts. This material included a large quantity of tile (1,165 pieces of tile, 102 of which positively identified as *tegula* with flange), with smaller quantities of brick (127 pieces), imbrex (135), flue tile (22), and some *tessera* cubes (23). The total number of pieces also included 1,421 unidentifiable fragments.

#### *CBM from the Roman circus*

Just under half (at 1,350 pieces) of the total quantity of Roman CBM recorded on the Alienated Land sites was recovered from the Roman and medieval features directly associated with the Roman circus. This is to be expected as the starting gates would have been roofed and brick was probably used in the construction of the walls. However, given that 100% of the circus was excavated in Areas C1, C2 and J1 East, the total quantity of

recognisable pieces is actually very small. The large number of unidentifiable fragments, as well as the fact that the identifiable pieces were often small and broken, would suggest that the CBM (as well as the building stone) was robbed and reused within the medieval period.

The identification of the CBM from the circus has also proved to be problematic. As mentioned above, only the starting gates would have been roofed, which means we would expect to find a relatively small amount of roof tile compared to the brick which would have been used in the walls. However, the majority of the recorded pieces have been identified as roof tile. Two possibilities emerge. First, that many of the pieces identified as tile are actually brick used for wall coursing as would be expected. If this has happened then the ratio of brick to tile (pieces definitely identified as *tegula* with flange) would be of the expected order. Second, if the identification is correct, then brick may not have been used in the walls of the circus. Instead the high quantity of tile (most of which were small, fragmentary pieces) may represent 'waste' pieces being used as rubble infill between the facing stones of the circus walls, a practice which was also used during the construction of the town walls. This problem will hopefully be addressed when the Roman CBM is more thoroughly analysed.

#### *Roman villa/farmstead*

A second, but much smaller concentration of material was associated with the Roman villa/farmstead located within Area E. This material confirms that a building with a tiled roof and hypocaust stood on the site. The eleven *tessera* cubes recorded during the evaluation may also indicate that the building had at least one tessellated pavement.

#### **Post-Roman ceramic building material**

A total of 451 pieces of post-Roman CBM, at 18,103g, were recorded from 57 different contexts. This material included a large quantity of peg tile (425 pieces) with a smaller amount of tile (15) and brick (11). Most of this material was recorded from post-Roman contexts with some being recorded intrusively within Roman features. The material appears to have been scattered across the Alienated Land sites, with a slight concentration in the areas situated along the northern edge of the Abbey Field. This might indicate an area of increased activity in the post-Roman period.

#### **Recommendations for further work**

##### **Roman ceramic building material**

It is clear from this assessment that the Roman ceramic building material has the potential to answer a number of questions about the construction of the circus. For example: what type of material was used during the construction of the circus structure? how was that material used? and why was it used? As this assessment involved only an initial identification and discussion, it is recommended that a full analysis of the recorded material is carried out for the final report. During this analysis it may also be possible to source some of the material.

##### **Post-Roman ceramic building material**

The post-Roman ceramic building material has been fully identified, weighed and measured and no further work is recommended.

## **8.8 Worked flint - assessment by Hazel Martingell**

### **Areas C1, C2 and J1**

A total of 122 worked flints were studied from three areas within the Alienated Land archaeological investigation. A total of 35 were recorded from Area C1, 17 from Area C2 and 70 from Area J1 (45 from Area J1 North, 3 from J1 South and 22 from J1 East). Out of the total of 122 artefacts, 17 (13%) were retouched and diagnostic of periods from the Mesolithic to the Later Prehistoric.

Amongst the earliest artefacts are the 23 blades and blade cores. Some of these are punch struck from the core and therefore should be of Mesolithic date. The three scrapers could be Early Bronze Age in date. As would be expected, there are a number of pieces that might be described as 'recent', for example the flint from JEL5 (JE245) is probably a home-made gunflint.

From the worked flint aspect there are three important areas of interest and significance to pursue:

- 1) The Bronze Age – As the pottery from Area C2 appears to be supported by Bronze Age worked flints (for example the scraper from CF174 (C473, small find number 247)), can this be taken further, i.e to consider the possibility of Bronze Age habitation or burial?
- 2) The Roman burials – Can the worked flint, found within the burials in Areas C2 and J1 North, have been deliberately, rather than accidentally, buried at the same time as the inhumations?
- 3) Recent – With the disturbed nature of this landscape, can some of these pieces be attributed to medieval or later periods, for example gunflints and strike-a-lights?

### **Area Q**

A total of 21 worked flints were studied from Area Q – 12 were simple flakes fragments, 2 were blade fragments (one of which was notched), there was a 'core on a flake' and a 'flaked flake', and five were modified in some way.

The earliest artefacts are Palaeolithic in date (a hand-axe and a retouched flake), the three scrapers date to the later prehistoric period, and most of the others date to the early prehistoric era.

From the worked flint aspect there are two important areas of interest and significance to pursue:

- 1) The Palaeolithic flint – A detailed analysis should be made of palaeolithic pieces.
- 2) The prehistoric flint – A detailed analysis should be made of all of the prehistoric pieces, emphasising date and comparing them with other worked flint from the Garrison sites.

The archaeological investigations on the Alienated Land sites afford an excellent opportunity to study the worked flint of this area. It is especially important when they can be considered with the worked flints from other Garrison sites, increasing our perception of life in the Roman river valley during the prehistoric era.

### **Illustrations**

It is recommended that 22 pieces of worked flint be illustrated for the final report.

## 8.9 Glass - assessment by Hilary Cool

### Factual information

Roman vessel glass was recovered from 16 burial-related contexts and nine other contexts during the excavations. Modern glass was recovered from 15 contexts.

Where datable, the majority of the Roman glass in the burial-related features relates to mid 1st-century activity, but one vessel is of very late 4th-century date. The glass from the burial-related features appears to have been used as both pyre goods and grave goods. Melted vessels came from six cremation-related features (cremation burials, pyre and pyre debris deposits, etc) and in the fill of two inhumations. Vessels that were deliberately placed as grave goods came from two cremation burials (one urned) and one inhumation. Glass fragments were also found in five cremation-related features and two inhumations. In many cases these seem likely to be chance inclusions in the fill.

### Potential

Study of the glass will clearly contribute to understanding the burial rituals on the sites, and the late 4th-century vessel is of particular importance as it shows that the cremation rite continued until the end of the Roman period at Colchester. This adds to the growing body of evidence that the cremation rite was not replaced by the inhumation rite uniformly in the south of Britain. The regular occurrence of the distinctive tubular unguent bottles in the burial-related deposits will provide valuable dating evidence as any funeral which featured these cannot be expected to have taken place after *c* AD 75-85. One of these unguent bottles also appears to retain information about the content of the bottle which is currently unique in Britain.

Of the glass from the other contexts, two pieces are of particular interest. One is indicative of occupation in the immediate post-conquest period. The other consists of large fragments of an uncommon, probably 2nd-century, bowl whose deposition may be indicative of structured deposition

### Recommendations

It is recommended that the Roman vessel glass be taken forward to analysis and that a brief report be prepared. The modern glass may be discarded. Approximately 50 catalogue entries will need to be prepared, six items will need to be drawn and two items would benefit from being illustrated by a photograph, but only if they can be reproduced in colour. Two days will be required to produce the report.

## 8.10 Environmental evidence – assessment by Val Fryer

### Introduction

Excavations within the Alienated Land, Colchester Garrison were undertaken by the Colchester Archaeological Trust in 2004-2005. The work revealed features of Bronze Age to medieval/post-medieval date, although the most significant discoveries were Roman, and included two large late Roman (2nd-4th century) cemeteries and part of a circus. Samples for the extraction of the plant macrofossil assemblages were taken from all excavated areas, and 23 were submitted for assessment. A further 27 samples were taken as spits within the fills of four cremation urns.

### Method

The samples were processed by manual water flotation/washover, and the flots were collected in a 500-micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x16, and the plant macrofossils and other remains recorded are listed on Tables 23-29. Nomenclature within the tables follows Stace (1997). With the exception of a single fragment of mineral-replaced wood, all plant remains were charred. Modern contaminants, including fibrous and woody roots, seeds and arthropods, were present throughout.

The non-floating residues were collected in a 1mm-mesh sieve and sorted when dry. All artefacts/ecofacts were removed for further specialist analysis.

### Results of assessment

#### **Plant macrofossils**

With the exception of charcoal fragments, plant macrofossils were rare within most of the assemblages studied. Cereal grains, seeds and nutshell fragments were recorded, but at a low density, and most were very poorly preserved, with frequent puffing and distortion of the specimens, probably as a result of combustion at high temperatures.

Wheat (*Triticum* sp.) grains were recorded from sample 8, from the fill of pit CF126 which contained pyre debris. Elongated ‘drop-form’ grains typical of spelt (*T. spelta*) occurred most frequently, although a small number of more rounded hexaploid-type grains were also noted. A single possible barley (*Hordeum* sp.) grain was recorded from sample 69, from the fill of prehistoric pit JNF200.

Weed seeds were extremely rare, occurring in only seven assemblages. A small number of legume (Fabaceae) seeds with elliptical cross-sections were recovered from sample 9, from a pyre or *bustum* context (JNF34). Similar seeds, some of which were identified as gorse (*Ulex europaeus*), were also recorded from cremation contexts at the Handford House site, Colchester (Fryer 2004). Hazel (*Corylus avellana*) nutshell fragments were recorded from all four of the prehistoric contexts sampled (samples 1 and 2 from Area C1, sample 40 from Area C2 and sample 69 from Area J1 North), and a single fragment was noted within sample 79, from pit JNF118.

Charcoal fragments were common or abundant within most assemblages. Other plant macrofossils occurred less frequently, although pieces of charred root/stem were recorded along with indeterminate buds, fruit stone fragments and tubers.

### **Other materials**

While some fragments of the black porous and tarry material recorded may be derived from the combustion of plant remains at very high temperatures, other pieces are almost certainly more closely related to cremation residues. Further fragments have the appearance of modern industrial or fuel residues (namely coke). Bone fragments, many of which were burnt, occurred in a total of 33 samples. Other remains were rare, but did include small fragments of pottery and glass, vitrified concretions, ferrous globules and small pieces of coal.

### **Discussion**

#### **Area C1 (Table 23)**

Samples are from fills within two Late Neolithic pits (features CF72 and CF75). Both assemblages are primarily composed of charcoal, although charred hazel nutshell fragments are also recorded, possibly indicating that at least some of the material is derived from 'domestic' hearth waste.

#### **Area C2 (Table 24)**

Of the eight samples taken from Area C2, one (40) is from the fill of a prehistoric pit (feature CF223). The assemblage is essentially similar to those from the Area C1 features (see above), and it is probably reasonable to assume that this, too, is at least partly derived from burnt 'domestic' refuse. The remaining seven assemblages are all from features of Roman date. Although sample 8, from the fill of a pit containing pyre debris (feature CF126), is of particular interest, being the only assemblage containing a moderate density of cereal grains, the source of this material is, unfortunately, unknown. The grain may have been placed within a pyre as an offering to the deceased, although it may equally have formed part of the kindling/fuel used for the cremation process. The remaining assemblages contain little of particular note, although a small piece of mineral preserved wood within sample 61 may be derived from the box which held the cremation within pit CF163.

The fill within cremation urn C191 was removed in twelve small spits (sample 13 – Table 25). With the exception of a small number of charcoal fragments and a single possible poorly preserved cereal grain, plant macrofossils are entirely absent. Other material types are also exceedingly rare, although small fragments of burnt bone do occur within the bottom five spits. Similarly, cremation urn C672 was also excavated in spits (sample 72 – Table 26), and here again the recovered assemblages are extremely sparse.

#### **Area J1 North (Table 27)**

Sample 69 is from the fill of prehistoric pit JNF 200. The assemblage is extremely small, but may contain a very low density of burnt cereal processing and/or domestic waste. The remaining eight assemblages are all from features associated with Roman cremation deposits. Although wood/charcoal would appear to have been the principal fuel used for the cremations, there does appear to be minimal evidence for other materials which may have been used as kindling. These include possible heath land plants (cf gorse – see above) and macrofossils derived from damp grassland habitats including sedge (*Carex* sp.) and blinks (*Montia fontana*).

The fills within cremation urns JN181 and JN386 were again excavated in small spits, five from each vessel (Table 28). The assemblages are all extremely small (considerably less than 0.1 litres in volume) and contain little apart from charcoal fragments, black porous and tarry residues and bone fragments, most of the latter being in the form of vesicular material.

### **Area JI East (Table 29)**

Four samples were taken from Area JI East, three (samples 179, 188 and 189) from fills within Roman quarry pit JEF4, and one (sample 159) from a medieval to post-medieval robber trench which dismantled the walls of the Roman circus. Plant macrofossils are rare within this latter assemblage, but mollusc shells are relatively common. However, at the time of writing, it is not known whether these are contemporary with either the robber pit or circus, or whether they are intrusive from overlying deposits. All four of Evans (1972) ecological groups of terrestrial taxa are represented, with open country species (including *Pupilla muscorum* and *Vallonia costata*) being especially common. The three assemblages from quarry pit JEF4 are very sparse, and all would appear to be derived from small quantities of charred refuse which were either dumped within the pit or accidentally incorporated within the fills in the form of wind-blown detritus.

### **Conclusions and recommendations for further work**

In summary, with very few exceptions, the recovered assemblages are very small and most contain very low densities of plant macrofossils. Of the 50 samples studied, 42 (84%) are cremation linked, and these appear to indicate that wood/charcoal were the preferred fuels for the cremation processes. In only three instances is there peripheral evidence for an additional fuel source, and only one sample contains possible evidence for additional materials being placed with the deceased. However, it should be noted that the high temperatures of combustion which appear to have been achieved during cremation may have destroyed any less robust remains of other fuels, etc. The samples taken from the prehistoric contexts appear to be indicative of a limited range of 'domestic' activities, but little more can be deduced from the assemblages.

It is recommended that:

- this report will be updated to include a small selection of early and late Roman cremations which will be fully analysed
- any charcoal removed from these samples will be sent to a specialist for identification, with the purpose of identifying fuels used for cremation pyres,

### **Key to tables**

x = 1 – 10 specimens

xx = 10 – 100 specimens

xxx = 100+ specimens

pmc = possible modern contaminant

b = burnt

ss = sub-sample

Crem = cremation

Urned/U. Crem = urned cremation

Boxed Crem = boxed cremation

PPD = pit with pyre debris

P/B = pyre/*bustum*

Sample number	1	2
Feature number	CF75	CF72
Finds number	C155	C171
Feature type	Pit	Pit
Date	Bronze Age	Bronze Age
<b>Tree/shrub macrofossils</b>		
<i>Corylus avellana</i> L.	xx	x
<b>Other plant macrofossils</b>		
Charcoal <2mm	xxx	xx
Charcoal >2mm	xx	xx
<b>Other materials</b>		
Black porous 'cokey' material	x	x
Black tarry material	x	x
Burnt/fired clay	x	
Pottery	xcf	
Small coal fragments	x	x
Small mammal/amphibian bone	xpmc	
Vitrified material	x	
<b>Sample volume (litres)</b>	<b>10ss</b>	<b>20</b>
<b>Volume of flot (litres)</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>
<b>% flot sorted</b>	<b>100%</b>	<b>100%</b>

Table 23 Charred plant macrofossils and other remains from Area C1.

Sample number	13 CF99 C2 304 Cremation urn Roman											
Feature number												
Finds number												
Feature type												
Date												
Spit number	1	2	3	4	5	6	7	8	9	10	11	12
<b>Cereals</b>												
Cereal indet. (grains)	xcffg											
<b>Other plant macrofossils</b>												
Charcoal <2mm	x	xx	x	x	x	x	x	x	x	x	x	x
Charcoal >2mm							x		x		x	
<b>Other materials</b>												
Black porous 'cokey' material	x	xx	x	x	x	x	x	x	x	x		
Black tarry material	x	xx	x	x	x			x	x		x	
Bone								xb	xb	xxb	xxb	xxb
Burnt/fired clay									x			
Vitrified material											x	x
<b>Sample volume (litres)</b>	<b>0.5</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0.5</b>							
<b>Volume of flot (litres)</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>
<b>% flot sorted</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Table 24 Charred plant macrofossils and other remains from the fill of cremation urn C2 304, Area C2.

Sample number	<b>72</b>				
Feature number	<b>CF238</b>				
Finds number	<b>C2 771</b>				
Feature type	<b>Cremation urn</b>				
Date	<b>Roman</b>				
Spit number	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Other plant macrofossils</b>					
Charcoal <2mm	x	x	x	x	
Charcoal >2mm					x
<b>Other materials</b>					
Black porous 'cokey' material	x				x
Black tarry material	x			x	x
Bone	xxb	xxb	xxb	xb	xb
Small coal fragments					x
<b>Sample volume (litres)</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>
<b>Volume of flot (litres)</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>
<b>% flot sorted</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Table 25 Charred plant macrofossils and other remains from the fill of cremation urn C2 771, Area C2.

Sample number	<b>4</b>	<b>7</b>	<b>8</b>	<b>40</b>	<b>46</b>	<b>47</b>	<b>59</b>	<b>61</b>
<b>Feature number</b>	<b>CF99</b>	<b>CF112</b>	<b>CF 126</b>	<b>CF223</b>	<b>CF206</b>	<b>CF164</b>	<b>CF213</b>	<b>CF163</b>
<b>Finds number</b>	<b>C2 203</b>	<b>C2 215</b>	<b>C2 307</b>	<b>C2 552</b>	<b>C2 600</b>	<b>C2 527</b>	<b>C2 625</b>	<b>C2 637</b>
<b>Feature type</b>	<b>Urned Crem</b>	<b>Crem</b>	<b>PPD</b>	<b>Pit</b>	<b>Crem</b>	<b>Crem</b>	<b>Crem</b>	<b>Boxed Crem</b>
<b>Date</b>	<b>Roman</b>	<b>Roman</b>	<b>Roman</b>	<b>Prehistoric</b>	<b>Roman</b>	<b>Roman</b>	<b>Roman</b>	<b>Roman</b>
<b>Cereals</b>								
<i>Triticum</i> sp. (grains)			xx					
Cereal indet. (grains)			xx	x	x			
<b>Herbs</b>								
<i>Vicia/Lathyrus</i> sp.			x					
<b>Tree/shrub macrofossils</b>								
<i>Corylus avellana</i> L.				xx				
<b>Other plant macrofossils</b>								
Charcoal <2mm	xx	x	xxx	xxx	xx	xxx	xxx	xx
Charcoal >2mm		x	xxx	xx	x	xx	xxx	xx
Charcoal >5mm			x					
Charred root/stem							x	x

Indet.bud			x					
Indet.seeds			x					
Mineral replaced wood								x
<b>Other materials</b>								
Black porous 'cokey' material	xx		xx	x	x	x	x	x
Black tarry material	x		xx		x	x		
Bone			xxb		xb	x xb	x xb	xb
Burnt/fired clay					x	x		x
Fish bone					x			
Glass					xcf			
Mineralised concretions					x			
Pottery						x		
Small coal fragments	x	x			x	x	x	
Vitrified material		x						x
<b>Sample volume (litres)</b>	<b>20ss</b>	<b>20ss</b>	<b>20ss</b>	<b>20</b>	<b>20</b>	<b>30</b>	<b>10</b>	<b>10</b>
<b>Volume of flot (litres)</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>0.3</b>	<b>0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>
<b>% flot sorted</b>	<b>100%</b>	<b>100%</b>	<b>50%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Table 26 Charred plant macrofossils and other remains from Area C2.

Sample number	206					246				
	JNF88					JNF154				
	JN1135					JN1354				
	Cremation urn					Cremation urn				
	Roman					Roman				
Feature number										
Finds number										
Feature type										
Date										
Spit	1	2	3	4	5	1	2	3	4	5
<b>Other plant macrofossils</b>										
Charcoal <2mm	xxx	xxx	xxx	xx	x	xx	x	x	x	x
Charcoal >2mm		x	x	xx						x
Charred root/stem		x								
Indet. seeds			x							
<b>Other materials</b>										
Black porous 'cokey' material	x			x	x		x			x
Black tarry material	x	x		x	x	x	x			x
Bone			x xb	x xb		xxb	x xb	xx xb	xx xb	xx
Small coal frags		x	x	x	x	x				x
Vitrified material			x	x	x			x	x	
<b>Sample volume (litres)</b>	<b>1</b>									
<b>Volume of flot (litres)</b>	<b>&lt;0.1</b>									
<b>% flot sorted</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>25%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Table 27 Charred plant macrofossils and other remains from fills within cremation urns JN181 and JN386, Area J1 North.

Sample number	2	9	59	69	79	88	100	98	210
Feature number	JNF4	JNF34	JNF155	JNF200	JNF118	JNF248	JNF298	JNF287	JNF482
Finds number	JN15	JN56	JN365	JN455	JN491	JN536	JN637	JN635	JN1169
Feature type	P/B	P/B	Crem	PPD	PPD	P/B	Crem	PPD	U. Crem
Date	Roman	Roman	Roman	Roman	Roman	Roman	Roman	Roman	Roman
<b>Cereals</b>									
<i>Hordeum</i> sp.				xcf					
<b>Herbs</b>									
Fabaceae indet.		x		x					
<i>Polygonum aviculare</i> L.							x		
Polygonaceae indet.				x					
<b>Wetland plant macrofossils</b>									
<i>Carex</i> sp.						x			
<i>Montia fontana</i> L.			x						
<b>Tree/shrub macrofossils</b>									
<i>Corylus avellana</i> L.				x		x			
<b>Other plant macrofossils</b>									
Charcoal <2mm	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Charcoal >2mm	xxx	xxx	xx	xx	xxx	xx		xxx	x
Charcoal >5mm				x	xx				
Charred root/stem		x	x			x	x		
Indet. fruit stone frags							x		
Indet. seeds			x			x			
<b>Other materials</b>									
Black porous 'cokey' material		x		xx		x	x	x	x
Black tarry material	xxx	x	x	xx		x	xx	xx	x
Bone	xb	xb	xb	xb	xxb	xxx xb	x xb	xb	xxx xb
Burnt/fired clay		x			x				
Ferrous globules			x	x					
Fish bone						x			
Small coal frags		x	x	xx	x	x	xx		
Small mammal/ amphibian bone		xpmc							
Vitrified material		x	x	x					xx
<b>Sample volume (litres)</b>	<b>10</b>	<b>30</b>	<b>10</b>	<b>40</b>	<b>20</b>	<b>20</b>	<b>30</b>	<b>20</b>	<b>4</b>
<b>Volume of flot (litres)</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>0.4</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>	<b>&lt;0.1</b>
<b>% flot sorted</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>25%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Table 28 Charred plant macrofossils and other remains from Area J1 North.

Sample number	159	179	188	189
Feature number	JEF5	JEF4	JEF4	JEF4
Finds number	JE239	JE347	JE347	JE359
Feature type	Robber Trench	Quarry Pit	Quarry Pit	Quarry Pit
Date	Medieval	Roman	Roman	Roman
<b>Cereals</b>				
Cereal indet. (grains)			xcffg	
<b>Herbs</b>				
Fabaceae indet.	x			
<b>Other plant macrofossils</b>				
Charcoal <2mm	xx	xxx	xx	xxx
Charcoal >2mm		xxx	x	xxx
Charred root/stem		x	x	x
Indet fruit stone frags		x		
Indet. tuber		x		
<b>Other materials</b>				
Black porous 'cokey' material	x	x	x	
Black tarry material	x	x	x	x
Bone		x		x
Burnt/fired clay		x		x
Mineralised concretions			xx	x
Small coal frags	xx	x		x
Vitrified material	xx	x		
<b>Sample volume (litres)</b>	<b>20</b>	<b>10</b>	<b>20</b>	<b>10</b>
<b>Volume of flot (litres)</b>	<b>&lt;0.1</b>	<b>0.1</b>	<b>&lt;0.1</b>	<b>0.1</b>
<b>% flot sorted</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Table 29 Charred plant macrofossils and other remains from Area J1 East.

## 8.11 Miscellaneous material – assessment by Laura Pooley

**Burnt flint** – A total of 312 pieces of burnt flint, at 16,908g, was recorded from 69 different contexts. Of particular interest were the four pieces recovered from two Late Neolithic pits in Area C1, the small number recorded from cremation burial features (particularly pyres/busta), and the large quantity recorded from the quarry pits in Area J1 North. All of the burnt flint has been fully recorded and quantified and no further analysis of this material will be carried out.

**Charcoal** – A total of 75 pieces of charcoal, at 125.8g, were recorded from ten contexts (including four inhumation burials and a boundary ditch). It is also likely that many more charcoal samples survive within the bulk soil samples taken for environmental analysis. Some of these charcoal samples (especially those taken from the prehistoric features and the cremation burials) will be sent for analysis; however, it was not possible to have any of the samples analysed for this assessment. Also, if any suitable pieces of charcoal are identified within the bulk samples taken from prehistoric features, they may be sent for C14 dating.

**Mosaic cubes** – A total of five very degraded white mosaic cubes (all set into a single piece of *opus signinum*) were recorded from a post-medieval ditch in Area J1 South. Although recovered from a post-medieval feature, these mosaic cubes are likely to have been Roman in date and may have been associated with the Roman circus, located a few metres further to the east. These mosaic cubes have been fully recorded and no further analysis (beyond reference in the final report) will be carried out.

**Non-worked stone** – A total of 168 pieces of non-worked stone, at 42,803g, was recorded from 45 different contexts. The non-worked stone included pieces of chalk, flint, greensand stone, sandstone, septaria and tufa, many of which were used as building stone in the Roman circus. All of the non-worked stone has been fully recorded and quantified and no further analysis of this material will be carried out. However, a section within the final report will include description of the material used for the construction of the circus and the likely quarry derivation. Sources for the greensand stone will be investigated and incorporated into the final report.

**Opus signinum and mortar** – A total of 138 pieces of *opus signinum*, at 11,146g, was recorded from 21 different contexts and a total of 75 pieces of mortar, at 11,450g, were recorded from 12 different contexts. Most of this material was recorded from the medieval features/layers which were associated with the robbing of the Roman circus, which indicates that this material was originally part of the circus structure. All of the *opus signinum* and mortar has been fully recorded and quantified and no further analysis of this material will be carried out. However, the assemblage will be considered further in the context of the functional and decorative treatment of the Roman circus at analysis.

**Painted column plaster** – A total of two pieces of painted (red) column plaster, measuring 165cm<sup>2</sup>, were recorded from a single demolition layer (CL20) on Area C2. The layer was associated with the demolition of the Roman circus and the column plaster is likely to have come from this structure, suggesting that the circus included at least some plastered and painted columns. These pieces of column plaster have been fully recorded and no further analysis will be carried out. However, the find will be illustrated and considered further in the context of the decorative treatment of the Roman circus at analysis.

**Painted wall plaster** – A single piece of painted (red) wall plaster, measuring 63cm<sup>2</sup>, was recorded from a medieval robber trench (JEF5) on Area J1 East. This robber trench removed the outer wall of Roman circus, and the wall plaster is likely to have come from this section of the structure, suggesting that at least some of the walls of the circus were plastered and painted. This piece of wall plaster has been fully recorded and no further analysis will be carried out. However, the find will be photographed for the final report and considered further in the context of the decorative treatment of the Roman circus at analysis.

**Shell** – A total of 339 pieces of shell (oyster, snail, mussel, cockle and whelk), at 3,192g, was recorded from 36 different contexts. Of particular interest were the 50+ pieces of oyster

and mussel shell (851g) recorded from a single Roman pit in Area C2. Due to its context within the cemetery, it is entirely possible that this feature represents a food offering. Over half of the total quantity and weight of shell (230 pieces at 1822.5g) was recorded from the robber trenches on Area J1 East; however, it is uncertain if these pieces of shell were Roman or medieval in date. All of the shell has been fully recorded and quantified and no further analysis of this material will be carried out.

**Slate** – A total of 19 pieces of slate, at 105g, were recorded from 11 different contexts. All of the slate has been fully recorded and quantified and no further analysis of this material will be carried out.

## 9 Assessment results and recommendations for further work

- 9.1 The following assessment is a necessary component of an archaeological investigation as defined in Management of Archaeological Projects (English Heritage 1991a) in order to identify the potential of the data to contribute to archaeological knowledge.
- 9.2 Aims of the assessment can be defined as follows:
- ~ to highlight those elements which require further work,
  - ~ to assess the potential of each category of the data to contribute to the research themes,
  - ~ to review the research themes themselves and to identify new research aims arising from the assessment.
- 9.3 The following research themes and project aims (RPS and CAT 2004) are addressed here:

**Over-arching Research Theme – Aim 1:** To characterise the nature of landscape utilisation and change from the Neolithic (or earlier) to the Romano-British period.

**Over-arching Research Theme – Aim 2:** To characterise the Roman, Anglo-Saxon, medieval and post-medieval extramural suburbs of Colchester, their relationships to one another, the town and the countryside.

**Project Aim 1:** What was the nature of small-scale agricultural Neolithic and Early-Middle Bronze Age activities within the site, and in particular can ritual and/or settlement areas be identified?

**Project Aim 2:** What was the nature of later Bronze Age/Early Iron Age activities and in particular is there evidence of the emergence of more permanent settlements and field systems within the proposal site?

**Project Aim 3:** What was the nature of the Middle Iron Age settlement within the area of the later *oppidum* and are there indications of landscape division and settlement which might allude to the origins of the communities responsible for the later construction of the *oppidum*?

**Project Aim 4:** To elucidate the nature of spatial organization within the *oppidum*, establish how this relates to general agricultural settlement expansion at this time and establish what inferences can be made from the distribution of coins.

**Project Aim 5:** To clarify the form/function and duration of the trackways with respect to the *oppidum* and to establish which elements of the social landscape they connected.

**Project Aim 6:** To place Berechurch Dyke within a detailed chronology of the layout of other internal *oppida* features such as the curvilinear trackways and the coaxial track/field systems.

**Project Aim 7:** To establish whether there are any surviving remains of the rectilinear enclosure at the Musket Club or associated external features within the proposal site footprint, and to characterise the function of the enclosure within the *oppidum* complex (not applicable to the Alienated Land project).

**Project Aim 8:** To clarify the date, form and function of the coaxial field system, to establish the nature of its development within the *oppidum* and/or the Roman town's southern cemeteries/suburbs.

**Project Aim 9:** To define the extent and character of the southern suburbs of Colchester at successive periods of the Roman administration of Britain.

**Project Aim 10:** To achieve a better understanding of the distribution, chronology and morphology of the southern cemeteries of Roman Colchester.

**Project Aim 11:** Through study of the Roman cremations and inhumations, to analyse trends and variations in the health, wealth, culture and social status of the individuals buried in Colchester's Roman cemeteries, as well as of burial ritual itself.

**Project Aim 12:** What was the nature of Anglo-Saxon landscape within the development site and what was the relationship of the landscape to Anglo-Saxon Colchester?

**Project Aim 13:** To reach a clearer understanding of the layout and development of the precinct of St John's abbey.

**Project Aim 14:** If possible, to locate the abbey church and establish its basic form and structural development.

**Project Aim 15:** To trace the development of St John's abbey and its precincts after it was dissolved in 1538.

**Project Aim 16:** To reach a clearer understanding of the layout and nature of the Civil War landscape.

**Project Aim 17:** To record and contextualise any modern military features within the Alienated Land site for which there are insufficient current records.

#### **9.4 Over-arching Research Theme – Aim 1**

*To characterise the nature of landscape utilisation and change from the Neolithic (or earlier) to the Romano-British period.*

The excavation has **good** potential for addressing this aim. The information relevant to this aim will be discussed within the relevant period specific aims in the following sections. The following sub-headings will be discussed:

**The landscape within the Palaeolithic, Mesolithic and Early-Middle Neolithic periods (see project aim 1)**

**Late Neolithic settlement/domestic or ritual activity (see project aim 1)**

**Late Bronze Age settlement/domestic activity (see project aim 2)**

**The pre-*oppidum* phase – the Middle Iron Age (see project aim 3)**

**Creation of the *oppidum* (see project aims 4-6)**

**The effect of the establishment of the Roman town on the agricultural hinterland (see project aims 8 & 9)**

**Forest clearance, managed woodland (relevant to all project aims)**

**Assessment of local patterns of settlement interdependence, including shared and exclusive resource areas and symbolic places. (see project aims 10 & 11)**

**Structural and spatial information on the size and location of fields and tracks (see project aims 5 and 8)**

**Palaeo-environmental studies, an 'agrarian link' and the role of plant remains (see project aims 5 and 8)**

## **9.5 Over-arching Research Theme – Aim 2**

*To characterise the Roman, Anglo-Saxon, medieval and post-medieval extramural suburbs of Colchester, their relationships to one another, the town and the countryside.*

The excavation has a **very good** potential for addressing parts of this aim. Within this broad aim the following headings are discussed:

**The Roman suburbs (see project aims 9-11)**

**The Anglo-Saxon suburbs (see project aim 12)**

**The medieval suburbs (see project aim 13)**

**The post-medieval suburbs (see project aim 15)**

## **9.6 Project Aim 1**

*What was the nature of small-scale agricultural Neolithic and Early-Middle Bronze Age activities within the sites, and in particular can ritual and/or settlement areas be identified?*

### **Introduction**

The archaeological investigations and assessed data have a **moderate** potential to address this aim. No features or finds of an Early-Middle Neolithic or an Early-Middle Bronze Age date were recorded on any of the Alienated Land sites. However, a total of six pits on Areas C1 and C2 (along with three other possible pits and a ditch), a single 4-post structure on Area Q and a number of residual pottery sherds (Areas C1, C2 and J1) were all dated to the Late Neolithic period and suggest a settlement area (however transient).

### **Background to Project Aim 1**

The current state of understanding of settlement of the period suggests shifting agricultural practices with short-term or even seasonal settlement cycles. Wild plants and cereals may have been of equal importance, although the main economic resource appears to have been domesticated stock. The most common expressions of Neolithic activity are flint artefact scatters within modern ploughsoils, in most cases suggesting that shallow features or Neolithic landsurfaces have been ploughed out. The extensive fieldwalking programme at the Colchester Garrison PFI produced no such scatters, although this may in part relate to a

lack of local raw material and consequently local flint-working. The next most common category of Neolithic site are scatters of small pits, usually on high ground and often implying seasonal use of the location. Numerous isolated and groups of pits are commonly encountered in plateau locations in Southern Britain and Essex (Brown & Murphy 1997, p12; Healy 1992; Brown 1988) (similar to the location of a probable Neolithic feature within Area M). The Stage 1a evaluation provided no evidence for Neolithic ritual landscape features such as cursus monuments (Hedges & Buckley 1981) or long barrows which are rarely found in East Anglia (Ashbee 1970).

A lack of alluvial sediments, and of peat in particular, on the Alienated Land sites, combined with the low-grade inorganic nature of the few Neolithic deposits that have been found in the area to date, may unfortunately preclude detailed environmental study. Such studies can characterise the scale of Neolithic forest clearance and therefore the intensity and nature of local human activity. The discovery of scattered Late Neolithic and Middle Bronze Age finds along the east-west ridge at the northern end of the site hints at a possible burial tradition – and, presumably, contemporary settlement - in this area.

### **Discussion of Project Aim 1**

No features of a Palaeolithic, Mesolithic or Early-Middle Neolithic date were recorded on the Alienated Land sites. However, several residual pieces of worked flint (from Areas C2, J1 North and Q) dated to these periods were recovered. This evidence would suggest that some low-level pre-Late Neolithic activity did occur within Areas C2, J1 North and Q. The low density of flintwork has potential to further the research aim via identification of activity areas (and conversely negative information on lack of exploitation) however there is low potential for further information via detailed study.

The lack of earlier Neolithic and Early-Middle Bronze Age features or finds is of interest in itself since it implies little exploitation of the areas concerned during these periods. This is broadly in tune with the information from the New Garrison, although a possible Neolithic pit in Area M and a very low density of flintwork of this date suggest some potential small-scale clearances for farming and/or hunting and gathering within a wooded environment.

The earliest features recorded on the Alienated Land sites date to the Late Neolithic period. This activity comprises of a small number of pits containing 'domestic waste' (Areas C1 and C2), a ditch (Area C1), a structure which may date to the Late Neolithic (Area Q) and several sherds of residual pottery (Areas C1, C2 and J1). It is interesting to note that the Late Neolithic evidence from Areas C1, C2 and Q already exceeds the total evidence for the period within the New Garrison redevelopment area.

Although many of the pits in Areas C1 and C2 contained domestic waste material it is possible that the Neolithic people did not throw away domestic refuse but instead 'ritually' disposed of it. Similarly, the function of the 4-post structure and 'annexe' in Area Q could be domestic or ritual, although the sherd of pottery used to tentatively suggest a date could be intrusive with the style of feature being more typical of the Iron Age. The evidence would suggest that the high ground at the northern extent of the Abbey Field (and possibly the landscape around Area Q) was an area of settlement/domestic or ritual activity in the Late Neolithic period. Detailed analysis of the Beakers in Area C1 will determine whether the pits there could date as late as *c* 2000-1700 BC and the Early Bronze Age. The significance of the uncommon association of Peterborough ware with Beakers will also be investigated further in the context of group identity.

We have little hard evidence for when forest clearance or managed woodland began within any of the northern Alienated Land sites (ie was it forested prior to the instigation of the town). The existence of a Late Neolithic settlement area on the ridge above the modern town suggests local areas that were at least cleared for a time. However, Late Neolithic settlements are known to have been transitory and intermittent (even seasonal), and these areas are likely to have reverted to woodland again.

### **Scale of contribution to project aim**

The information consolidated within this report has moderate potential to contribute to the aim. There is a **moderate** potential for further analysis of the data beyond the assessment stage. The features and finds dated to the Late Neolithic period will be fully analysed and placed within the context of the Late Neolithic landscape of Colchester. The environmental data has good potential to contribute to the interpretation of the Area C1/C2 features as domestic but has low potential for further analysis. Comparison will be made of similar published and unpublished sites within the wider region.

## **9.7 Project Aim 2**

*What was the nature of later Bronze Age/Early Iron Age activities and in particular is there evidence of the emergence of more permanent settlements and field systems within the proposal site?*

### **Introduction**

The archaeological investigations have a **moderate** potential to address this aim. A number of Late Bronze Age features and finds were recorded across several of the Alienated Land sites. This included a total of thirteen features (eight post-holes, three pits, a small gully and possibly a 4-post structure) in Area J1, a single pit in WBT4 of the watching brief and a number of residual pottery sherds from Areas E and J1. A single feature identified in Area Q was also dated to the Late Bronze Age/Early Iron Age and provides evidence for the clearance/partial clearance of the landscape in this period.

### **Background to Project Aim 2**

The New Garrison project provided only slight evidence for local settlement during the Middle Bronze Age period, but there were indications that by the Late Bronze Age settlements and fields had been established in localised areas. The evidence for these activities came from the southern area of Roman Barracks (Area S) and a 'field boundary' (now known to have been an elongated tree-throw hole) and pit to the north of Roman Barracks (within Area Q). Such features within localised areas of the New Garrison site suggest the presence of a minor Late Bronze Age/Early Iron Age unenclosed settlement probably attached to small-scale field systems. Artefact assemblages have suggested limited survival of a restricted range of material culture typical of the period. These remains complement existing knowledge of late prehistoric settlement form, distribution and agricultural practices.

These archaeological remains are further (though slight) evidence for the widespread and diverse forms of Late Bronze Age/Early Iron Age settlement known throughout south Essex (Brown & Murphy 1997, p18), particularly on gravel terraces.

The laying out of extensive, long-lived field systems and settlements implies the concept of land ownership and is a characteristic of the later Bronze Age in southern and eastern England. Settlements of this period are regionally much more extensively known than those of the preceding Early-Middle Bronze Age (Brown 1996) and will provide the basis for comparisons with Alienated Land evidence. These include striking circular ditched

enclosures such as Mucking North Ring/South Ring, Springfield Lyons and other ditched enclosures such as at Lofts Farm (Brown 1988), all potentially of relatively high status. More commonly found unenclosed sites comprise wide scatters of pits and post-holes such as at Moor Hall, Harlow (Robertson 1975) and North Shoebury (Wymer & Brown 1995). The evidence from Area J1 North may be added as an example of unenclosed settlement. These usually occur on the lighter terrace gravels and brickearths, but have now also been identified on heavy clays such as the Boulder Clay of western Essex (eg Stansted), probably indicating high levels of competition for the more easily worked soils by this time. Further evidence for agricultural intensification at this time is derived from environmental studies and is particularly suggestive of the primary importance of pastoralism (Murphy 1996). Brown (1996, 33), with regard to priorities for future work in the period in Essex, notes that fieldwork in the county has concentrated on enclosed sites, and the extensive controlled excavation of open settlements is required. Whilst the Late Bronze Age/Early Iron Age remains at the Alienated Land site appear to be very fragmentary they may contribute to this priority.

Recent work by Yates (1999 and 2001) on the Late Bronze Age/Early Iron Age evidence for the Thames Valley was mainly based on the results of extensive evaluations. Yates was able to suggest that zones of intensive field systems were associated with concentrations of votive metalwork in the adjacent River Thames. As a result of more recent work, Yates has gone on to suggest that a pattern of intensive Late Bronze Age rural exploitation, focused on the main river valleys, is repeated across central and south-eastern Britain (Yates pers comm). Associated major settlements potentially acted as redistribution centres involved in trade. These settlement areas were commonly abandoned in the Early Iron Age, potentially due to climatic deterioration, a situation mirrored at many other locations in southern and eastern England. It is interesting to note that the extensive evaluation at Colchester Garrison produced relatively poor survival of Late Bronze Age/Early Iron Age field systems and only scattered evidence of settlement. As such the majority of the area may represent a peripheral area. It is possible that a major Late Bronze Age settlement site at Sheepen (*CAR 11*, 131-6) close to the River Colne was the dominant settlement in the region, and may fit the pattern suggested by Yates.

### **Discussion of Project Aim 2**

After the Late Neolithic, the next period represented on the Alienated Land sites is the Late Bronze Age. If real, the gap between the Late Neolithic and Late Bronze Age represents a significant hiatus in occupation. This sporadic activity is mainly concentrated around Area J1 and comprised a small number of domestic pits, post-holes, a gully and a 4-post structure in Area J1 North, and a large quantity of residual pottery sherds in J1 evaluation, North, South and East. A Late Bronze Age pit was also recorded in trench WBT4 of the watching brief and a small number of Late Bronze Age pottery sherds was recorded residually within Area E. All of this evidence would suggest that the high ground at the northern extent of the Abbey Field was an area of settlement/domestic activity in the Late Bronze Age period. The evidence presented here has good potential to contribute to the project aim in its present form and further structural, finds and environmental analysis have good potential to further promote the project aim.

It is interesting to note that the Late Bronze Age evidence from Areas E, J1 and the watching brief already exceeds the total evidence for the period within the New Garrison redevelopment area. Therefore we can confirm that the high ground at the northern extent of the Abbey Field was a relative focus of domestic/rural activity in the Late Bronze Age period. With the Sheepen site, the inference is that the major areas of settlement and cleared agricultural landscape were probably close to the River Colne and on the valley sides and terraces overlooking it.

A single feature containing pottery dated to the Late Bronze Age/Early Iron Age period was also recorded from Area Q. This feature was a tree-throw hole or grubbing-out pit (pits dug in order to remove stumps which allowed cleared plots to be ploughed) which had been used as a convenient hole in which to dump the pottery. Therefore, the clearance or partial clearance of Area Q from a wooded landscape to one which could be used for agriculture can be dated to this period. This activity would also suggest that by this period the landscape was beginning to be turned into fields and 'owned' in this area, even if there is no evidence for a planned landscape. There is little potential for further analysis of this data.

By the Late Bronze Age, the normal pattern is for relatively long-lived 'permanent' settlement; these were commonly abandoned by the Early Iron Age, and the evidence suggests that the landscape reverted to woodland here (no Early-Middle Iron Age features/finds).

### **Scale of contribution to project aim**

There is a **moderate** potential for further analysis of the data beyond the assessment stage. The features and finds dated to the Late Bronze Age and the Late Bronze Age/Early Iron Age will be fully analysed and placed within the context of the Late Bronze Age/Early Iron Age landscape of Colchester and the wider region (via bibliographical research). The information will be compared to the evidence from Sheepen and in particular it is hoped that pottery fabric comparisons can be made that may enable us to establish whether the two sites were contemporary. Publication of the pottery assemblage is of particular importance since it will comprise the largest published assemblage from Colchester and the surrounding landscape (the Late Bronze Age assemblage from Sheepen was not published).

## **9.8 Project Aim 3**

*What was the nature of the Middle Iron Age settlement within the area of the later oppidum? Are there indications of landscape division and settlement which might allude to the origins of the communities responsible for the later construction of the oppidum?*

### **Introduction**

The archaeological investigations have a **very poor** potential to address this aim. No features or finds of a Middle Iron Age date were recorded in any of the Alienated Land sites.

### **Background to Project Aim 3**

One significant Middle Iron Age enclosure – not previously observed on aerial photographs – was identified and excavated ahead of the on-going New Garrison redevelopment (CAT Report 292). A round-house with a ditched enclosure in Area 2, south of Ypres Road, produced pottery that has provisionally been dated c100 BC to 75-50 BC, the very end of the Middle Iron Age. It was cut across by ditches belonging to the SW/NE system of Late Iron Age/Roman coaxial fields. This remains the only significant area of Middle Iron Age activity known on either the New Garrison or Alienated Land areas to date.

The chronological sub-division between the Late Bronze/Early Iron Age and the Middle Iron Age sites at the Garrison is based on very limited artefact assemblages and should be

regarded as tentative. The nature of the archaeological transition between the earlier and Middle Iron Age (*c* 500 to 200 BC) requires particular attention. In most regards the Middle Iron Age remains are consistent in scale and character with the preceding Late Bronze Age/Early Iron Age unenclosed settlements attached to small-scale field systems.

Middle Iron Age field systems are rarely studied in detail in Essex, a factor highlighted by a lack of focus upon landscape features of the period within the '*The archaeology of Essex - proceedings of the Writtle conference*' (Sealey 1996, pp 46-68) and *Research and archaeology: a framework for the Eastern Counties* (Glazebrook 1997). The scope of the excavations were intended to address the issues of landscape form and change, in order to complement recent wide area excavations at Stansted and Heathrow. The landscape-scale approach has produced invaluable data regarding the development of the New Garrison landscape from the Neolithic to the present day. It was hoped that the further investigations would reveal more about continuity and change between the Early and Middle Iron Age.

Sealey (in Bedwin 1996, p 50) notes that at least 175 round-houses are known from Essex (110 of which were found in at Mucking) and, although not all are of Middle Iron Age date, there appears to have been substantial population growth at this time. The majority of settlements of the period are likely to have been no more than hamlet sized, as at Wendens Ambo in Essex (Hodder 1982, 4-10, 24-9, 64; Halstead 1982b, 61-2; Halstead *et al* 1978; Halstead 1982), Asheldam Camp (Bedwin 1991) and the defended site at the Airport Catering Site (ACS) at Stansted (Brooks 1987, 45-6; Brooks 1989a; Brooks 1989b, 6-7; Brooks 1993, 47-50; Brooks & Bedwin 1989, 8-11; Brooks & Wall 1994, 22, fig 5.5). The New Garrison (Ypres Road) Area 2 enclosure is perhaps more typical of a single family unit. Larger 'village sized' settlements have also been found, such as Period II at Little Waltham (Drury 1978). The ACS Stansted site was occupied from *c* 75 BC to *c* 25 BC, the period immediately prior to and during the construction of the *oppidum*, and contemporary with the occupation of the Area 2 settlement enclosure at Colchester Garrison. These, and other Essex sites with well-stratified Middle Iron Age ceramics, may provide the basis for the establishment of a relative chronological sequence for the Colchester Garrison pottery assemblage.

At present, it is hard to place the start of Camulodunum much before *c* 25 BC, although the recent excavations of Stanway, Abbotstone and the New Garrison Area 2 (Ypres Road) enclosure have produced some grounds for pushing this date back into the first half of the 1st century BC. The study of the earliest material within the Garrison site is of especial value in relation to the question of, whether or not, Colchester had been a major regional focus before the emergence of Camulodunum. There was certainly a major settlement in the Late Bronze Age at Sheepen (*CAR* 11, 131-6), and there are records of Deverel-Rimbury cremations in the area suggesting significant Middle Bronze Age activity. The evidence from the north Garrison ridge also suggests some activity of this date (see Area J1 North above). However, the Area 2 enclosure is the only settlement so far recorded within the *oppidum* area that could date immediately prior to, or at the beginning of its use. Indeed the fact that this farm went out of use before *c* 50/25 BC may fit better with the notion that the *oppidum* was imposed on an area that was sparsely inhabited (that sparse occupation including the Area 2 enclosure) and that when Camulodunum was imposed it was not intended to be densely occupied, much as is the case with modern Royal estates such as Sandringham.

### **Discussion of Project Aim 3**

No evidence was recorded from the Alienated Land sites that date to the Middle Iron Age period. This may suggest a low density of occupation at that time. This negative evidence is

itself useful as an indication of the very low density of occupation of that period within the area of the later *oppidum*, and has moderate potential to contribute to the project aim. There is, however, low potential for further information from analysis. Although none of the features and finds recorded on the Alienated Land sites date to the Middle Iron Age period there is some evidence, mainly from the New Garrison sites, to suggest that at least some of the Roman field boundary ditches originated within the later prehistoric period. The evidence suggested the possibility that a Middle Iron Age landscape (of the Trinovantes until c AD 10) was in existence on much the same orientation as the much better-defined (although still fragmentary) remnants of the Late Iron Age landscape. This was based on the fact that an early Roman (and possibly earlier in original use) ditch-defined driveway cut through the Area 2 late Middle Iron Age enclosure on precisely the same alignment. The implication being that that alignment was sufficiently imbedded that its form could be followed in the Late Iron Age. The features of a very fragmentary Late Iron Age landscape (notably within Area 10 but potentially also within Area 6) were then fully respected and indeed recut by the 1st- to 3rd-century Roman landscape ditches. This slight evidence may indicate that coaxial landscape of fields existed before the Roman invasion south of the Abbey Field and that this field system was simply incorporated and in places re-aligned into the Roman version. So, some of the landscape orientation and perhaps the individual ditches identified as part of the Roman field system on the Alienated Land sites may actually have originated within the Middle Iron Age. However, it must be remembered that no trace of either Middle or Late Iron Age ditches were found on any of the Alienated Land sites and, on balance, this hypothetical argument for the earliest manifestation of an *oppidum* landscape in the Abbey Field area is at present weak.

#### **Scale of contribution to project aim**

There is a **poor** potential for further analysis of the data beyond the assessment stage. The features of the Roman field system, and the finds recorded from them, must be analysed in greater detail to determine if any of them may have originated as early as the Middle Iron Age period. However, this is thought to be highly unlikely.

### **9.9 Project Aims 4 and 5**

*To elucidate the nature of spatial organisation within the oppidum, establish how this relates to general agricultural settlement expansion at this time and establish what inferences can be made from the distribution of coins.*

*To clarify the form/function and duration of the driveways/trackways with respect to the oppidum and to establish which elements of the social landscape they connected.*

#### **Introduction**

The archaeological investigations have a **poor** potential to address these aims. Only three field boundary ditches (identified on Area C1) appear to date to the Iron Age *oppidum*, and no finds were recorded on any of the Alienated Land sites that date to this period.

#### **Background to Project Aims 4 and 5**

The two centuries before the Claudian conquest saw dramatic changes in south-eastern Britain with the comparatively rapid enhancement of strong trading links with the adjacent Continent probably associated with the Romanisation of Gaul. The period saw the abandonment of hillforts, the establishment of lowland *oppida* and the rise of so-called 'Belgic'-influenced activities including the use of cremation rites, coinage, the potter's wheel, and the acquisition of exotic goods derived from the Mediterranean. The nature of

the transition from the Late Iron Age period to the early Roman period has been allocated a high priority in recent years; indeed, 'Briton into Roman *c* 300 BC-AD 200' was a major theme of *Exploring our past* (English Heritage 1991b, 36). More recently, a series of priorities have been forwarded for the period in *Understanding the British Iron Age* (Haselgrove *et al* 2001, 28-31). These include the following general points, which will be considered throughout the duration of this project:

More precise chronologies are required to understand the rate, scale and cause of economic and social changes during the later Iron Age.

The increased abundance of material on many later Iron Age sites needs quantification and explanation.

The cause and consequences of settlement expansion in different parts of Britain after *c* 300 BC requires further research.

Contemporary changes in the organisation, intensity and scale of agricultural and craft production require detailed local investigation and inter-regional comparison.

New models need to be developed to explain the archaeological changes in southern and eastern England during the last two centuries of the period.

South-eastern Britain has been regarded as a core zone of major transition in the period from *c* 150 BC including the emergence of *oppida* in the 1st century BC, as at Colchester. Territorial *oppida* are large sprawling riverine sites with extensive dyke defences over many hectares and are perceived to have been chieftains' strongholds, with diverse functions including manufacturing and the redistribution of goods (Cunliffe 1995). They frequently encompassed a number of substantial Late Iron Age settlement enclosures (Bryant & Niblett 1997). The scale of such defences (Camulodunum covers some 31 square km) implies centralisation or coercive leadership. It has been suggested (eg Cunliffe 1995) that *oppida* were developed in direct response to Caesar's incursions of 55-54 BC as 'economic ports of trade'. It is of interest, with regard to the prominence of the *oppidum* of Camulodunum, that Caesar had established alliances with the Trinovantes. Cunliffe has suggested that these links could explain the re-orientation of trade from southern to eastern Britain around this time, as the pro-Roman tribes of Britain were given a virtual monopoly of trade from Roman Gaul.

Haselgrove *et al* (2001, 30) note that the roles of territorial *oppidum* are still poorly understood. For example: how did they relate to the general trend of settlement expansion in the later Iron Age? What role did they play in changes in the distribution, imagery and form of coinage? and how did they relate to the development of 'kingdoms' in the South-East?

Such questions have been hampered by a general lack of detailed archaeological investigation within *oppida*, although the Colchester *oppidum* offers some exceptions to this general rule, with important work undertaken at Sheepen and Gosbecks. Excavations at Sheepen have demonstrated trade with Gaul and metal-working evidence including the probable location of a mint, whilst at Gosbecks a probable religious complex has been identified. The Gosbecks site is likely to have been a particularly important focal centre. Further sites at Lexden and Stanway have produced very wealthy burials, indicative of the tribal aristocracy. The remains identified at the Garrison site offer contemporary data from an area of the *oppidum* utilised for agricultural production.

**Coinage** at Colchester reflects the significant change of political leadership as the Trinovantes were subjugated by the Catuvellauni before about AD 5-10. The vast majority of Iron Age coins have been recovered by metal-detectorists from poorly-provenanced locations. No Iron Age coins were recovered during the evaluation or excavations at the New Garrison or Alienated Land sites to date, despite intensive and extensive metal-detecting as a requirement of the both archaeological and munitions surveys. This negative evidence contributes to the understanding of zones of activity within the *oppidum* and reinforces the current agricultural interpretation of this area.

Coaxial ditches and double-ditched trackways appear to be landscape elements which demonstrate the intensification of land-use which is characteristic of the later Iron Age to early Romano-British period. At Colchester, this process also involved the initial construction of the *oppidum* earthworks to the west of the Garrison site at Gosbecks and Sheepen. The precise relationship between the appearance of the trackways and the construction of Berechurch Dyke, immediately to the east, is unclear. Dating evidence from the coaxial trackways identified during the New Garrison project (south of the Abbey Field) confirmed that they were in use in the early Roman period, with some evidence implying a possible Late Iron Age origin for at least some of them, and more critically for the orientation of the landscape. The tracks were probably contemporary with Berechurch Dyke, which may have been a late addition to the earthwork defences, constructed by the Romano-British people (P Crummy pers comm).

The trackways enabled local communities to achieve greater mobility across the farmed landscape to the east of Camulodunum's western defences, which was subsequently protected with an eastern defensive earthwork. They were therefore a significant part of the local *oppidum* infrastructure and demonstrate a departure, in terms of scale, form and organisation, from the relatively small-scale structure of the preceding Late Bronze Age/Early Iron Age and Middle Iron Age landscape. Unmetalled double-ditched trackways are known from both enclosed and unenclosed Late Iron Age and early Romano-British rural landscapes throughout southern Britain. Numerous examples occur locally within the *oppidum*, revealed by cropmarks and geophysical surveys at Sheepen and Gosbecks.

Given the *colonia* status of the Roman town, one might expect the laying-out of field systems beside it to have been carried out using military surveying techniques which normally produce regular centuriated grids. If the tracks and fields at the Abbey Field and adjacent areas can be shown to be of solely Roman date, then it would provide an interesting insight into the agrarian processes taking place immediately after the conquest.

An aim of the project is to determine the extent to which the roads and trackways within the garrison site, and specifically the northern Alienated Land areas, belonged to one system and also to determine its period of evolution and use. These are particularly important issues because the trackways within the Alienated Land site are a small part of a much bigger network of trackways covering the whole of the *oppidum* and probably beyond. The trackways at Gosbecks represent a focal point for this system – probably the main one, since they converge there on a single large enclosure (our so-called 'farmstead enclosure'). Dating evidence for the trackways at Gosbecks is slim because of limited excavations, but work in 1995-6 (CAT Report 138) did not provide evidence for use before the late Augustan period. The date of the field systems associated with the trackways also requires clarification.

## Discussion of Project Aims 4 and 5

The archaeological investigation of the Alienated Land sites produced a large number of features associated with the Roman coaxial field system – including a large road (Area J1), two droveways (Area C2 and J1), and a series of field boundary ditches (Areas C2, E, J1, O and Q). However, only one set of boundary ditches (recorded within Area C1) may actually date to the *oppidum* of the Late Iron Age period (based on the fact that they were cut by the circus and were not aligned with the early Roman landscape indicated by a ditch in Area J1 East underlying the circus walls). These could, in theory, relate to the *oppidum* but might equally pre-date it. No Iron Age pottery or coins were identified on any of the Alienated Land sites.

However, although the majority of the features associated with the coaxial field system were Roman in date, there was some evidence, mainly from the New Garrison sites, to suggest that many of the Roman boundary ditches originated within the prehistoric period. The evidence indicated that a Middle Iron Age landscape (of the Trinovantes until *c* AD 10) was in existence on much the same orientation as the much better-defined (although still fragmentary) remnants of the Late Iron Age landscape. The features of this Late Iron Age landscape (notably within Area 6 but also within Area 10) were then fully respected and indeed recut by the 1st- to 3rd-century Roman landscape ditches. Therefore, it would appear as though there was already a highly-defined coaxial landscape of fields before the Roman invasion and that the existing field system was simply incorporated into the Roman version. This suggests that some of the features identified as part of the Roman field system may actually have originated within the pre-Roman period and could provide important information on the layout of the *oppidum*. However, it must be remembered that, if the Roman boundary ditches did originate within the earlier Iron Age period, no trace of this was found during the archaeological investigation of the Alienated Land sites.

Fields, field boundary ditches and droveways were identified within Areas C1, C2, E, J1, O and Q. The presence of field boundary ditches in Areas C1 and Q revealed three Roman fields on both sites (possibly with Late Iron Age origins). The fields on Area Q were particularly large, with Field 2 measuring at least 24,800m<sup>2</sup> and Field 3 18,000m<sup>2</sup> (based on estimated sizes). Droveways leading to small fields or paddocks (measuring at least 6,800m<sup>2</sup> (Area C2) and 900m<sup>2</sup> (Area J1 South)) were recorded in both Areas C2 and J1 South. These may be more consistent with paddocks, and further analysis of the data has good potential to establish whether they were contemporary with the Roman circus and whether they were associated with horses. Fragmentary field boundary ditches were also recorded in Areas E and O.

A large Roman road, running through the middle of Area J1, was also identified. This road appears to have linked up with the main routes leading from the town centre (via Balcerne Gate) to Gosbecks, to Sheepen and to London. Its main function appears to have been connecting the town to its agricultural hinterland and to at least one villa/farmstead, located further to the south. Partial roads/road surfaces were also recorded around the circus in Areas C1, C2 and J1 and around the villa/farmstead in Area E. The more ephemeral tracks around the circus were probably established to aid movement to, from and around this important centre. The road next to the villa/farmstead in Area E, most probably, linked the site to the main Roman road leading from the south-east gate of the town.

The occurrence of fields, droveways leading to fields and animal pens (Area Q) are a good indication of the importance of livestock to the Late Iron Age/Roman occupants of the area. Faunal analysis has the potential to identify some of the domestic species present and comment on the role they played in the landscape. The analysis of the large number of cattle jaws may be of particular importance.

The identification of the role of plant remains in the provision of fodder for stock, fuel, thatch and bedding, in addition to the basic role of crops as provision of staple food for human consumption, is a theme dependent on the results of environmental sampling. On the whole, the results of the environmental sampling have been disappointing, but perhaps this should not be surprising given that most of the areas excavated had a dominantly non-agrarian function (circus and cemetery areas).

### **Scale of contribution to project aim**

A full analysis of the Roman features, and the finds from them, will have to be completed to confirm if they are wholly Roman in date or if they were originally cut within the Late Iron Age period. The ditch of Berechurch Dyke was also identified during these investigations (Area S1), but due to a lack of good dating evidence it was not possible to place the construction of this dyke within either the Late Iron Age or the Early Roman periods. The evidence for *oppidum* features and finds is (apparently) largely negative and therefore the potential of additional study to contribute to the aim will largely focus on the significance of this finding. Of particular interest will be the final dating of the lower levels of the large ditches flanking the Roman road within Area J1. There is a **poor-moderate** potential for further analysis of the data beyond the assessment stage. Landscape features will be placed within the context of the wider landscape to contribute to our understanding of the form, function and layout of the Late Iron Age *oppidum*. The alternative to a Late Iron Age field system in the northern Alienated Land areas is that the area remained wooded until the Roman invasion, and finds data in particular will be important to assess this possibility.

## **9.10 Project Aim 6**

*To place Berechurch Dyke within a detailed chronology of the layout of other internal oppida features such as the curvilinear trackways and the coaxial track/field systems.*

### **Introduction**

The archaeological investigations have a **poor** potential to address this aim. The line and extent of Berechurch Dyke was successfully identified along the western edge of Area S1. However, no dating evidence was recorded to allow the dyke to be placed into the chronology of the *oppidum*.

### **Background to Project Aim 6**

Berechurch Dyke is a major feature of the Late Iron Age and early Romano-British landscape, forming Camulodunum's eastern defences. The dyke appears to have been intended to define the eastern extent of the *oppidum* and its line partially runs between Alienated Land Areas S1 and S2, after which it continues north for a further approximately 600m before turning, at the modern municipal cemetery, north-eastward along the 'Barnhall Dyke'. P Crummy (pers comm) suggests that Berechurch Dyke might be a late addition to the defences, possibly constructed by the Romans shortly after the conquest. It has been suggested, although it has largely been discounted in recent times, that it may have formed part of a road line connecting with that which runs from the south gate of the town (CAR 11, 24). The surviving remains of Berechurch Dyke are of national importance, not simply because *oppida* are an important monument class, but also because it highlights a potentially significant aspect of a historic narrative which is specific to Camulodunum and the founding of *Colonia Victricensis*. The *oppidum* at Camulodunum is one of six monuments found in southern Britain, which are described by English Heritage as

Territorial *oppida* (English Heritage 1989c). Berechurch Dyke is, therefore, a defining component of a rare monument class. The upstanding earthwork section of the dyke, classified as a Scheduled Ancient Monument, stops immediately south of the boundary of the Alienated Land developments.

### **Discussion of Project Aim 6**

The archaeological investigation of Area S1 successfully located the line and extent of the ditch of Berechurch Dyke. However, a lack of dating evidence and associated features meant that this feature could not be placed within either the Late Iron Age or the Roman coaxial field system. Future investigations may permit a much more precise understanding of the chronology of the dyke's form, development and date of construction. An important negative finding is that there was no evidence for an associated road running adjacent to the dyke (as has been suggested).

### **Scale of contribution to project aim**

There is **poor** potential for further analysis of the data beyond the assessment stage. Although the line and extent of the dyke was found, no supporting evidence was discovered to fully place it within either the Late Iron Age or Roman coaxial landscape.

## **9.11 Project Aim 7**

*To establish whether there are any surviving remains of the rectilinear enclosure at the Musket Club or associated external features within the proposal site footprint, and to characterise the function of the enclosure within the oppidum complex.*

**Not applicable to Alienated Land project**

## **9.12 Project Aim 8**

*To clarify the date, form and function of the coaxial field system, to establish the nature of its development within the oppidum and/or the Roman town's southern cemeteries/suburbs.*

### **Introduction**

The archaeological investigations have a **moderate-good** potential to address this aim. Part of the early Roman coaxial field system was recorded within Areas C1, C2, E, J1, O and Q. There is presently no definite evidence for a Late Iron Age phase in these areas.

### **Background to Project Aim 8**

The Roman conquest of Claudius inevitably had a significant effect on the settlement pattern of Britain and it is unlikely to be coincidental that a large number of Late Iron Age sites were abandoned at around this time. This need not always have been as a result of land confiscation or conflict, as relocation of sites may equally have been stimulated by a need of more suitable locations to take advantage of the new Roman roads/market centres. Despite this apparent disruption, in many cases there appears to have been continuity of occupation at sites from before to well after the invasion. It is clear from historical sources that some land was indeed confiscated from the Iron Age inhabitants of Camulodunum and its

surrounding farmlands, for reallocation to citizens of Rome. The following questions may be contributed to by the Alienated Land sites:

What was the immediate and longer-term effect of the establishment of the Roman fortress and subsequently of the *colonia* on the infrastructure of the Iron Age *oppidum*?

It is clear from the excavations at Sheepen, to the north-west, that elements of the *oppidum* continued in use into the Roman period. Was there continuity of occupation of settlements within the proposal site from the Late Iron Age to the early Roman period and, if so, how did the form and obligations of these settlements alter?

What effect did the establishment of the legionary fortress of legion XX Valeria have on lands within the *oppidum*, and is there any evidence to support the notion that the agricultural land within the proposal site was used to supply the military garrison with produce?

Where did the northern edge of the agricultural landscape lie after the Roman conquest? How was this boundary marked? How did it develop? Did it vary through time?

How did the coaxial agricultural landscape connect with the road network to the north of Circular Road South?

Woodland clearance on a large scale is also conceivable. A study of the fortress at Inchtuthil (Shirley 2001) has emphasised the very large quantities of timber and wood of various sorts needed to construct fortresses such as the one built at Colchester in the AD 40s. The subsequent town at Colchester would also have placed similar great pressure on the woodlands in north-east Essex – and again when it was rebuilt following the Boudican revolt. It would thus not be surprising to find a marked reduction in woodland within the *oppidum* c AD 43-70. What evidence is there for woodland clearance at the Alienated Land sites during this period?

### **Discussion of Project Aim 8**

The establishment of the Roman town was seen to have had a number of effects on the agricultural hinterland of the Late Iron Age *oppidum*. The most striking changes are located along the northern ridge of the Abbey Field, on the high ground overlooking the Roman town. These changes included the establishment of a large, monumental stone circus (and presumably related ancillary buildings); a road system leading from the town into the agricultural landscape; and several large cemetery areas and smaller burial plots. Further to the south, the changes were not necessarily so pronounced. The landscape continued to be farmed but included the addition of a number of droveways and at least one Roman villa/farmstead, which presumably acted as an estate centre.

There is no direct evidence for the effects, if any, that all this activity had on the native population. The analysis will further consider the so far ambiguous evidence for continuity of occupation by the former Iron Age inhabitants within this landscape. There is very good potential for the data to contribute to the aim in its present form and particularly if analysed further. Of particular interest will be placement of the circus within its landscape setting. The date attributed to the large ditches flanking the ‘Roman road’ in Area J1 and the ditch below the outer *cavea* wall of the circus in Area J1 East will be significant with regard to potential Late Iron Age landscapes pre-dating the town and the related issue of whether the Roman authorities chose a wooded location for the town and its immediate surrounds rather than impose it upon an inhabited area.

All but one of the areas (Area S1) investigated during the Alienated Land project contained part of the Roman coaxial field system which was laid out over the Late Iron Age *oppidum* and the agricultural hinterland of the Roman town. This field system included Roman field boundary ditches, two Roman droveways and the establishment of a Roman road system.

The earliest set of boundary ditches identified were located within Area C1. Although no dating evidence was recovered from these ditches, they were cut by the early Roman circus discovered on the site. This could suggest that these ditches were Late Iron Age (or earlier) in date and that they were parts of boundaries for three fields within the *oppidum* (or earlier) field system.

All of the remaining features identified within the coaxial field system were dated to the Roman period. This field system included field boundary ditches for agricultural land (identified in Areas C2, E, J1, O and Q), droveways to aid the movement of agricultural goods and animals (Areas C2 and J1), and a road system to enable the better movement of people, animals and goods around the landscape of the Roman town. Also located within this agricultural hinterland were two Roman villas/farmsteads (within Area E and Kirkee McMunn Barracks (identified in 1998)), which appear to have been connected to the town by the road system, and three animal pens (Area Q and Area 6 in the New Garrison redevelopment).

Although the majority of the features associated with the coaxial field system were Roman in date, there was some evidence, from the New Garrison sites, to suggest that at least several of these Roman boundary ditches originated within the prehistoric period. The evidence indicated that a Middle Iron Age landscape (probably of the Trinovantes until c AD 10) was in existence on much the same orientation as the much better-defined (although still fragmentary) remnants of the Late Iron Age landscape. The features of this possible Late Iron Age landscape (notably within Area 6 but also within Area 10) were then fully respected and indeed recut by the 1st- to 3rd-century Roman landscape ditches. Therefore, from the New Garrison project it appears that there was already a ditch-defined landscape of fields before the Roman invasion, at least in the area to the south of the Abbey Field. This existing field system was simply incorporated into the Roman version, which appears to have included the addition of double ditches to form 'droveways' for stock (as in Area C2 and Area J1 South). This finding is important, as it suggests that there was not necessarily an aggressive or complete reorganisation of the landscape to the south of the new Roman town after AD 43 (eg 'centuration' – the creation of rigidly coaxial imperial estates). However, if the field boundary ditches of Alienated Land Areas C2, E, J1, O and Q also originated within the Iron Age period, no trace of the earlier landscape was found during these archaeological investigations.

The question therefore remains as to whether the northern area of the garrison was wooded at the time of the Roman invasion. The data has low to moderate potential to address this problem. The finds information will be one form of evidence since currently there appears to be little finds data to support Late Iron Age activity within this area of the *oppidum* immediately prior to the early Roman phases. Sealey (above) has suggested that the landscape was forested after the Late Bronze Age until the Roman period based on pottery data. Structural data from early phases of ditches, as indicated above, will also be of primary importance to further contribute to the aim. Given that many of the Roman ditches (including the ditch directly below the southern outer *cavea* wall of the circus) conform to the east-west orientation of the Roman town, the possibility that the landscape to the south town as far as the Circular Road South was part of a Roman reorganisation of the landscape following instigation of the fort, and later the town, requires further attention.

### **Scale of contribution to project aim**

There is **moderate-good** potential for further analysis of the data beyond the assessment stage. The components of the Roman coaxial field system with any evidence for earlier forms will be fully analysed and placed within the context of the Late Iron Age *oppidum* and the southern agricultural hinterland of the Roman town.

## **9.13 Project Aims 9, 10 and 11 and New Project Aims 18-20**

*To define the extent and character of the southern suburbs of Colchester at successive periods of the Roman administration of Britain.*

*To achieve a better understanding of the distribution, chronology and morphology of the southern cemeteries of Roman Colchester.*

*Through study of the Roman cremations and inhumations, to analyse trends and variations in the health, wealth, culture and social status of the individuals buried in Colchester's Roman cemeteries, as well as of burial ritual itself.*

In addition, a new set of updated project aims is provided here with regard to the exceptional discovery of the monumental Roman circus as follows:

### **New Project Aim 18 – The form of the Roman circus structure**

*To recreate the original ground plan and understand in three dimensions the form and capacity of the structure and the functions of the component parts, utilising accounts of standing remains of European circuses.*

### **New Project Aim 19 – The role of the Colchester circus**

*To establish the likely recreational and religious uses of the circus and place the Roman circus in its social context at Colchester.*

### **New Project Aim 20 – The evidence for British circuses**

*To place the structure within the context of Roman Britain and review the evidence for both Roman circus racing and other circus structures in Britain.*

#### **9.13.1 Introduction**

The archaeological investigations have a **very good** potential to address these aims. A wealth of information relevant to the southern suburbs of Colchester during the Roman period was recorded. The first known Roman circus in Britain was discovered during these investigations, located on the high ground overlooking the Roman town (Areas C1, C2, J1, the Time Team trenches and during the watching brief). Two large late Roman cemetery areas and three smaller burial plots, totalling 436 burials, were also recorded (Areas C2, J1 and Q). These include possible evidence for late Roman military presence at the town. Then further to the south, a rural villa/farmstead was recorded (Area E) within an extensive agricultural field system (Areas C2, E, J1, O and Q).

#### **9.13.2 Background to Project Aims 9, 10, 11, 18, 19 and 20**

Legion XX withdrew from Colchester to campaign in the west in AD 48 following which the colony town (*Colonia Victriciensis*) was established. In response to the devastating

effect on the early colony during the Boudican revolt, 43 hectares were walled in the period AD 65-80. The northern Alienated Land sites (Group I as identified in Paragraph 3.11.2) fall within the suburbs of the new town, an area dominated largely by cemeteries but also containing tile kilns (possibly associated with the construction of the circus).

To what extent were the Roman suburbs dominated by cemeteries? What additional activities can be inferred from the evidence in these areas? One approach to answering such questions would be to analyse, with particular care, the fills of non-funerary features, eg roadside ditches and pits.

How far did the suburbs extend? Did these boundaries vary at different times? Is it possible to identify, for example, shrinkage of the suburbs towards the core of the settlement during the late Roman contraction of the town?

### **The Roman cemeteries**

It is clear from many historical observations as well as more recent archaeological investigations that some of the main cemeteries of Roman Colchester fall within the northern part of the Garrison site. The main concentrations observed so far have been in the north-eastern half of Le Cateau Barracks (Alienated Land Areas H and J1), on the Garrison sports ground (immediately south-east of Area J1), and in Areas C1 and particularly C2. The conditions in which these observations were made, with the exception of recent excavations at the Garrison sports field (CAT Report 138), have not permitted observations to be made on the morphology and distribution of the burials. Excavations such as those at the sports ground and others nearby, such as those at Butt Road (*CAR 9*), have clearly shown distinct groupings often defined by ditched plot-boundaries, which very likely relate to family groups.

A fundamental objective has been, and continues to be, to identify the main areas of Roman burial that fall within the Garrison and Alienated Land sites. The distribution of these cemeteries requires understanding within the context of the surrounding suburban and rural topography.

How do the cemeteries relate to contemporary road alignments, fields and property boundaries? are the boundaries of the cemeteries marked? and if so, how? and, are there distinct areas of funerary, industrial and settlement activity or are these functions allowed to mix?

The study of other cemeteries such as that at Butt Road have previously indicated that the same sites were often used for extended periods. Therefore can long-term cultural traditions be identified as persisting through burials of different periods? ie is it possible to identify the existence of long-term burial traditions, including through the cremation/inhumation interface in the 3rd century AD?

The survival of both human remains and well-preserved and often high-quality grave goods in these burials, particularly in statistically significant numbers, can reveal much about the human population of Colchester. A long-term question surrounds the date and nature of the change from cremation to inhumation burial, which has generally been dated to the 3rd century AD.

The following questions are relevant; can different cultural and socio-economic groups be identified within or between different areas of burial? wWhat can we say about the health, diet, living conditions and life expectancy of different groups of the population? and is there significant variation in these factors between different areas of burial?

What do the grave goods reveal about the religious beliefs and superstitions of the population of Roman Colchester? is there any evidence relating to the specific rituals of burial and cremations? can *busta* or pyre locations be identified?

In addition, is it possible to identify monumental structures/memorials within the cemeteries? are there significant concentrations of such structures?

Clearly the monumental circus played a pivotal role in dictating the placement of burials and unsurprisingly there are, to date, no examples of burials within the circus.

### **Industry**

A number of tile and pottery kilns have been found in the vicinity of the southern cemeteries including one found during the construction of the NAAFI Club immediately west of Area C2. If such installations are found during the Alienated Land investigations, consideration should be given to the nature of the contemporary suburban landscape. If they stand in areas of burial, are they broadly contemporary with these burials or significantly later? Do they disturb any earlier burials? Are the positions of such production centres avoided by cemetery areas?

### **Settlement**

Prior to the present works, no areas of Roman settlement (with the exception of 2nd-century pitting within the Flagstaff House compound) had been identified within the Alienated Land sites.

Were farms established by Roman colonists within the proposal site area of the *oppidum* following confiscations from the native landowners? If so, what was their relationship to the colony and its inhabitants?

### **9.13.3 Discussion of Project Aims 9-11 and 18-20**

The archaeological investigation of the Alienated Land sites produced a wealth of information about the southern suburbs of the Roman town. Along the northernmost extent of the site, nearest to the town walls, Britain's first known Roman circus and a number of cemeteries and burial plots were identified. Further to the south, the rural agricultural hinterland of the Roman town was investigated and a Roman villa/farmstead was located.

In its present form, the data relating to the original project aims 9-11 (particularly the cemetery data) has very good potential to address the project aims (this report). There is good potential for further analysis of the data to further address these aims via detailed analysis of structural information and finds.

#### **The circus**

The identification of Britain's first Roman circus was an unexpected but extremely important discovery for Colchester and Roman Britain. The circus was recorded across several of the Alienated Land sites (Areas C1, C2 and J1 East, and during the Time Team trenches and the watching brief). The circus was a large, stone-built, monumental structure, that probably dated from the late 1st/2nd century to the late Roman period. It was located about 400m south of the walled town, on effectively what must have been the nearest area of flat land to the south of the town centre. It is thought that the circus would have held approximately 12-15,000 spectators as teams of charioteers raced around the track. The

potential of the circus to contribute to archaeological knowledge will be considered further in the new research aims, below.

Colchester was founded in *c* AD 49 as the first Roman colony (*Colonia Victricensis*) in the new province of *Britannia*. The discovery in the 19th and 20th centuries of glass and pottery vessels decorated with scenes from chariot races (*CAR 8*; Toynbee 1955) showed that the people of Roman Colchester knew about circuses and were interested in what happened in them, but, despite much archaeological work in the town over a long period, nothing structural had been found which hinted at the presence of such a building. All this changed late in 2004 when the archaeological investigations carried out on the Alienated Land sites had cumulatively produced sufficient remains of a Roman monumental stone circus to enable its identification. This is a significant discovery, because it is the first circus to be positively identified in Britain.

The circus was 448-50m long and 70m wide. These structures are known across southern Europe, North Africa and the Roman Empire within the Middle East, and the Colchester example compares well with these, being quite long (at the upper end of the normal range) but narrow. It was located about 400m south of the walled town, on effectively what must have been the nearest area of flat, well-drained land to the town centre. Its foundation and use must have been intimately tied in with the Imperial Cult. Although not physically connected with the Temple of Claudius via a direct road link, the configuration of streets was such that a suitably direct processional route existed between the two (Hull 1958).

The circus appears to be poorly preserved. All that survives of its walls are foundations, and most of these appear to have been robbed out in the medieval period. During the archaeological investigations, floors and other horizontally-bedded layers, which might have provided stratified material, proved to be almost non-existent.

### **Tasks and questions for analysis:**

#### **New Project Aim 18 – the form of the Roman circus structure**

*To recreate the original ground plan and understand in three dimensions the form and capacity of the structure and the functions of the component parts, utilising accounts of standing remains of European circuses.*

#### ***Comparative analysis***

Despite some clear differences between the remains found at Colchester and the standard canon of circus architecture (as described in Humphrey 1986), these can probably be accounted for by the cultural context of the Colchester discoveries. Complex stone structures did not exist in Britain before the coming of the Romans. Buildings such as circuses and amphitheatres were alien in their form, design and materials. As a result, there is a distinctive Romano-British school of monumental architecture, which used a minimum of cut-stone masonry (unlike those in other parts of the empire). Theatres, such as those at Caerleon, Verulamium and Silchester, as well as many fortification walls, used a combination of earth banks and stone retaining walls, often buttressed, to achieve the necessary structural strength. The provision of a circus to the capital of a new Roman province, such as Colchester, would have been largely a symbolic act. The spectators would, initially at least, largely have been Romans. The circus therefore would not have needed to be large and minimalist construction techniques such as those seen in the Colchester remains are to be expected.

Each of the following construction components will be described in detail in terms of surviving form at foundation level and in 3-dimensional terms as suggested by both the specific Colchester remains and surviving counterparts from well-preserved examples of the circuses:

#### *The cavea*

The key issue is whether an earthen bank or a wooden superstructure, or a combination of the two, supported the seating at Colchester. It is logical that the walls retained an earth bank, as did the buttressed outer retaining wall of Verulamium's Roman theatre, whose earth banks supported tiers of seating. The theatre at Gosbecks, Colchester, demonstrates a similar construction technique utilising external buttresses. The theatre also exhibits entrance corridors through the seating superstructure which resemble the walled entrance structure and corridor within Area J1. The lack of other Roman features between the C1/C2 and J1 walls further demonstrates the probability that there was an earth bank or sloping wooden superstructure, the greater bulk and weight of which would be retained by the buttressed (outer) wall. A wooden superstructure for seating could have been built on a raft of horizontal beams set into the stone walls close to ground level with vertical timbers supporting seating set into beam slots. The low (inner) wall in this sense would have been a simple retaining wall at the front (low) edge of the bank/superstructure.

It is unlikely that a solely wooden construction would have been used since a greater number of post-holes for securing the structure might be expected than was found within the *cavea* space. On the other hand, the shallow foundation of the inner *cavea* wall means that it is unlikely to have been high enough to support the weight of a large bank. In reality, a combination of earth and wooden frame may have been used. Further analysis of the form of the *cavea* and the number of rows of seats (and their height and width) will be undertaken for analysis. Surviving seating examples at examples such as Lepcis Magna will be used to assist reconstruction. The identification of two entranceways in concert with the long length of exposed *cavea* walls in Area J1 East may be used to estimate lengths of segments of the *cavea*. The *cavea* of partially surviving circus structures elsewhere demonstrate some potential segment dimensions and these may be compared to the information at Colchester.

#### *The starting gates*

The starting gates were usually (although not universally) at the western end. Generally, in 2nd-century or later North African examples, the main public entrance was at the curved end, usually closest to the town. The Arles circus is NE-SW with starting gates at the SW end, towards the town. The evidence for the sharp curving western end of the circus at the western end of Area J1 East, and foundations which may be associated with herms in the Sergeants' Mess garden, strongly support the location of the starting gates at the western end. This information will be reviewed at analysis with further research based upon bibliographical and contemporary sources for their likely form and upon standing remains as surviving examples such as Lepcis Magna in Libya.

#### *The semi-circular end*

There is good evidence that the semi-circular end was at the east end (based on the above and the CAT trench in the grounds of Flagstaff House). Is this end likely to have included a monumental arch, and if so what form is it likely to have taken based on analogy with surviving circuses and representations of monumental circuses?

#### *External appearance (buttresses)*

The spacing of the buttresses has led to internal debate within the team as to whether or not there were functional/decorative reasons or whether variations relate to different sections

being built by different commissioning individuals. Alternative reconstructions will be considered for analysis.

*Likely position of finishing line and judges' box, the pulvinar and other structures normally associated with circuses.*

These aspects require some deliberation although they are relatively standardised.

#### *The track*

At the present time it is considered most likely that the track was bare earth, since the cover loam that caps the terrace gravel here is well drained and would compact well to form a firm base for racing in all but very wet weather. The excavations have found no evidence of any special treatment with layers of sand and other materials; however, there remains a possibility that such layers were removed by later ploughing. This issue will be revisited in analysis with regard to known surfacing elsewhere and further consideration of the suitability of the loam.

#### *The spina and plinth*

The *spina* is represented by the footing within TT trench 6 (extension), but most interestingly it was represented by the approximately 3m-square footing found during the watching brief under the crossroads of Napier Road/Circular Road North with Flagstaff Road/Circular Road East. The plinth base can only be interpreted as the footing for a substantial monument, most plausibly the ubiquitous obelisk or an equivalent of it. The fact that the footing did not link to any *spina* footings on the east and west sides is interesting. This implies that the *spina* was broken into at least two sections on either side of the monument, an arrangement paralleled at the circus at Merida in Spain, where the obelisk was a stand-alone structure at the centre of the *spina*.

The location of the plinth within the modern crossroads is of particular interest. It is likely that Flagstaff Road was of medieval origin since it is located flush against the western precinct wall of St John's abbey, but was the crossroads associated then? The analysis will further consider, with the aid of map regression, the possibility that the crossroads was deliberately focused on the monument location. This would of course imply its post-Roman survival in some form and would be of considerable interest in terms of the later treatment of the decaying structure.

#### *Building materials including likely origin*

A full inventory and analysis of the brick, tile, *opus signinum*, stone rubble, faced stone and other architectural indicators such as the painted column plaster from Area C2, painted wall plaster from Area J1 East and the mosaic pieces from Area J1 South, will be used to provide additional comments on the appearance of the structure. The origin of the stone used for the construction and the likely route that was used to deliver it to the building site will be considered (the interim possibility being that it was shipped in via the River Blackwater estuary and River Colne from Kent).

#### *Capacity*

Alternative means of calculating the crowd capacity will be forwarded to give an estimate range.

#### *Location*

What is the significance of the topographical location of the circus and what role did it play in the location of roads and cemeteries? Certainly a flat, well-drained location, accessible to the town, was chosen. The distance from the town will be compared with other circuses as

will the suitability of the location for such a huge building. Circuses were often built laterally along a slope to make use of natural ground formation (ie one side on a bank and the other built on a stone substructure); however, this did not happen at Colchester. The topography will be critically reviewed at analysis to determine whether any levelling took place ahead of circus construction.

#### *Construction phases*

How many phases of construction can be identified? There are indications from at least two locations, the curved end at the western extent of Area J1 East and the surviving buttress foundations of Area C2, that there were phases of construction and/or repairs. A section of the final report will provide a detailed account of the meagre evidence for such phases.

#### *When was the circus first constructed and was there a demarked track prior to its construction in stone?*

The issue of the earlier track will depend upon the final interpretation of the use of the ditch underlying the circus back wall in Area J1 East. This difficult question of dating will be dealt with using the residual dating material recovered from the earlier ditch underlying the outer *cavea* wall, the robber trench (although clearly this is not reliable), *in situ* material from layers contemporary with its use (ie the gravel floor in the entrance way in J1 East and the track metalling in C1 and C2) and from apparent demolition layers and features cutting the circus (ie the ditch in Area C2). At the present time, the use of Greensand stone is considered likely to indicate that the stone structure post-dates the construction of the town wall (where greensand stone is not used) and therefore could date it to the late 1st-2nd century.

It is of some comparative interest that the better-known North African examples were generally monumentalised in stone from the 2nd century or later while the North-West European examples start early. Humphrey (1986) draws a distinction between those in the Mediterranean world (ie with known Graeco-Roman heritage) with those in the north-west empire where they were established as symbols of Roman power in regional capitals soon after their foundation (a number are certainly 1st century AD). These often used minimal material (stone only used where absolutely necessary and around the tribunal two-thirds of the way along the south side).

#### *Was the width of the track so narrow that 12-chariot racing was impractical?*

The Colchester circus is at the narrow end of the scale and further attention will be paid to the possibility that a reduced number of chariots raced here.

### **New Project Aim 19 – the role of the Colchester circus**

*To establish the likely recreational and religious uses of the circus and place the Roman circus in its social context at Colchester.*

The choice of Colchester for a monumental circus must be related to its early status as a colony of Roman citizens. It makes sense that the colonies of Roman citizens, as the most Romanised inhabitants of British towns, would be most likely to indulge in circus games. As such, if a permanent circus were to be found anywhere, Colchester is the logical candidate. The monumental public buildings of Roman Colchester confirm this level of Romanisation. For example only Colchester's theatre was made of stone in the true classical form (possible others were located at Cirencester and London whilst Canterbury's was only built in stone in the 3rd century).

A description of the rules of chariot racing and a typical race day will be provided in the analysis. This will be based upon the contemporary literature, scenes of chariot racing on mosaics and on portable objects, and experimental archaeology, including the chariot-racing trial conducted for the Time Team programme. For example, we know that the chariots were lightweight and were pulled by two or four horses.

*Who were the chariot racers?*

What status did they have prior to becoming charioteers and subsequently as a result of their exploits? Further research into these aspects will also help bring the remains to life.

*Who commissioned the circus, private individual or state?*

A study of continental written sources and mosaics is likely to add further depth to the understanding of these issues. It is already apparent that private individuals were responsible for commissioning sections of one circus whilst, like modern football stadiums, seats were apparently bought by private individuals. However, what is less clear is whether all circuses were privately funded or if, in some examples, there is a case to be made for state intervention as part of the Romans' Romanising policy. For example, Hadrian was responsible for a spate of public building in Britain and elsewhere.

*Who was the architect or architects?*

Given the specialised nature of the monumental circus, were there architects who specialised in their construction and could such an individual(s) have been responsible for advising on, designing and/or overseeing the construction at Colchester? A related question is, who was the labour force likely to have been? Is it possible that the army was used, for example?

*Who ran the races?*

Were they run by private firms or individuals or was there state funding for games? Bibliographical and documentary research should provide additional insights into these areas. The circuses were run for profit by private enterprises and were expensive to organise and stage. Successful charioteers obtained great wealth and prestige, although this was offset by the risk since there were frequent deaths. The dangerous nature of chariot racing added to the excitement of the spectators who would probably have come from both the town and much further afield to witness the spectacle.

*Who were the crowd and from what social backgrounds are they likely to have derived?*

This question will include comment on whether the local populace of the town was likely to provide the basis of the entire crowd, or whether games days were so significant that people flocked from far and wide to attend. Again this will be largely based on contemporary Roman sources.

*Stud farms?*

A particular point of interest is the possibility that some of the agricultural land and associated farms identified by the project, and by the New Garrison project, might have been associated with stud farms supplying horses to the circus. Again the literature, including Roman accounts, will be used to provide information on supply of horses and stud farms, and specifically whether these were often based in the immediate vicinity (naturally competitors from outside the region are likely to have brought their own horses). The chariot-racing horse was given sufficient importance to warrant mention in Roman texts and burial with honours in some cases. The probable type of horse used for chariot racing in Britain, and any remains of horses from the project that may have been associated, will be discussed in the final report.

### *Imperial Cult and Sun Cult*

The spiritual associations of circuses will be considered especially with regard to the Imperial Cult of Claudius. The foundation and use of the circus may have been intimately tied in with the Imperial Cult – although it is not physically connected with the Temple of Claudius, the configuration of streets was such that a suitably direct processional route existed between the two. This potential link will be fully explored via further academic research for the analysis. Does the east-west orientation of the circus carry any significance in terms of the Imperial Cult? What are the likely ceremonial processes that might have occurred at the circus, including possible processions from the Temple of Claudius? Circuses were also associated with the sun and moon (which is why obelisks – Egyptian sun god symbols - were commonly associated). In Roman mythology, the sun-god Apollo was the twin of Diana (Luna), the moon goddess. Apollo was also the god of sport. The link with chariot racing was particularly strong since in mythology the sun and the moon were pulled across the sky on their daily cycle by the chariots of these gods. The links between the Imperial Cult and the sun and moon deities will be further explored with particular regard to the possibility of associated temples at the Colchester circus.

*Are any of the artefacts from the area of the circus directly related to race days?*

For example were coins, brooches and other finds lost at such time and in particular is it possible that the silver coin hoard from Area J1 South was deposited in such an unusual (scattered) manner because of some association with racing? A decorative piece of horse furniture may also be associated with a chariot-racing horse.

### **New Project Aim 20 – the evidence for British circuses**

*To place the structure within the context of Roman Britain and review the evidence for both Roman circus racing and other circus structures in Britain.*

#### *British mosaics*

Guy de la Bédoyère (1992, 50-52) has commented that 'the third form of public entertainment building (after the amphitheatre and theatre), the circus was apparently absent from Roman Britain at least as a permanent feature of town life. None are known at all though this does not mean that some form of chariot races did not take place.' De la Bédoyère cites a mosaic at Horkstow in Lincolnshire (now in the British Museum) as evidence for the presence of chariot racing in Britain. The villa mosaic shows four chariots each with a pair of horses racing around a circus spina. He states 'whoever laid the mosaic was clearly familiar with the sport and the comparatively remote situation of the house suggests that therefore it must have been well known elsewhere in Britain unless the owner had a specialist interest.' Wachter (1974, 59) cites further evidence for the sport in Britain in the form of a relief of a young charioteer from the *colonia* at Lincoln and a similar depiction from the *colonia* of York. These latter depictions from Roman colony towns have particular relevance to Colchester given its *colonia* status.

Given the lack of structural evidence to date, the consensus amongst Roman Britain scholars appears to be that if towns did have circuses that these would have been located just outside the towns, but may have been temporary and thus left little trace. De la Bédoyère also makes the point that 'on the continent circuses, unlike theatres, were not a universal addition to a town, so the situation in Britain is hardly surprising' (1992, 50-52). L & R Adkins (1991, 74) stated that 'No circuses have been positively identified in Britain, but chariot racing would take place wherever there was a flat area with a nearby hill for spectators.'

### *British and Colchester circus-related finds*

Cornelia Ewingleban provided a caption for a jar at Colchester for the British Museum exhibition – ‘Gladiators and Caesars: The power and spectacle in Ancient Rome’ (Ewingleban 2000). In the section entitled ‘What these women love is the sword – the performers and their audiences’, she stated that ‘no circus has yet been found in Britain, but the spirited rendering of the race shown on this locally made pot indicates a familiarity with the sport in the province’ (*ibid*, fig 114; see also fig 101). In her view, many of the circus-related artefacts functioned as the equivalent of modern souvenirs. Colchester has other depictions (mainly glassware) showing scenes of chariot racing.

Humphrey on Colchester circus-related artefacts states (1986, p189): ‘Excluding the turning posts, nine different monuments appear on the Colchester cup which is the most complete of the series. After the *metae* comes the following sequence: pedimented building, columned statue, large square altar, eggs, pavilion/aedicula (?), small altar or statue, columned statue; after the second *metae*, rather than the identical sequence (as one might have expected), we (*ibid*, p191) find: dolphins, columned statue, small altar or statue, pedimented building, large square altar, obelisk, and feline on high pedestal. Thus obelisk, eggs, dolphins, feline on pedestal, and pavilion/aedicula (?) appear once, the rest twice (at least on the Colchester cup)’. He adds (*ibid*, p 436): ‘Possibly more indicative of some British interest in the sport during the later Roman period are the locally-produced Nene Valley and Colchester wares, on which scenes from the circus and amphitheatre become popular during the 2nd century (Toynbee 1964, 413-14). The best-preserved example decorated with this subject is the beaker from Colchester (Humphrey 1986, fig 204), now in the British Museum, on which four *quadrigae* gallop around on the body of the vessel, the charioteers dressed in long-sleeved jerkins and close-fitting trousers, and holding whip and reins. It is a vivid if somewhat schematised rendering of a race. Other examples of the same subject have been found on fragments from Colchester, Wroxeter and London. Some vessels (*ibid*, p 437) show combined scenes from the circus and other entertainments. The glass cups seem to depend upon an Italian pattern and their distribution in the northern part of the north-western provinces can hardly be taken as evidence that chariot racing had reached these areas so soon after the conquest. Such finds are now of far greater significance for Roman archaeology in Britain and these and other examples will be considered further at analysis.

### *London circus*

Although there are no other confirmed circuses in Britain, it may be possible to resurrect a possible candidate in London due to the precedent set by the Colchester circus. This tentative suggestion of a circus is for the south-west corner of Londinium at Knightrider Street (Fuentes in *the London Archaeologist* 5:6, 1986): the evidence there was inconclusive, comprising a paired wall alignment running for 124m with a curve at one end. The walls here were around 10m apart. The possible circus is mentioned by J H Humphrey, the excavator of the circus at Carthage, in the definitive book on the subject, *Roman circuses: arenas for chariot racing* (1986). The Knightrider Street site is considered by Tim Williams (1993) in ‘The archaeology of Roman London, Volume 3: Public buildings in the south-west quarter of Roman London’. He dismisses it because the Fleet seems to be too close to the west end. Tim Williams is also dubious about the Knightrider Street circus because recent archaeological work in the area between the long wall and St Paul’s cathedral has failed to turn anything else up, although he noted that extensive truncation in the area which could have led to walls being missed. The most serious problems for this identification are, however, the presence of 2nd-century rubbish pits in the area which seem unlikely inside a circus, whilst there are also a few rogue walls which do not conform. Mr Humphrey (1986, p 437): stated that ‘If any town in Britain possessed a monumental circus, the capital is the best candidate’, which might mean Colchester but more probably means London. However, the

lack of structural information for London, with which to compare with Colchester, will probably preclude a positive reassessment of its function.

Further consideration will be given to all the above categories.

### **Cemetery areas and burial plots**

#### *The cemetery areas and burial plots*

Two large cemetery areas and three smaller burial plots (one of which may actually be a part of the Abbey Field cemetery area) were located within the Alienated Land sites (Areas C2, J1 North, J1 South, J1 East and Q and during the watching brief). The majority of the burials were located within the large cemetery areas (Area C2 and Area J1 North), but some of them were in smaller burial plots. Some of these plots were located within agricultural fields and were, most probably, connected to families/groups who worked on the land. As these burials were placed close to boundaries, they could also be interpreted as having a symbolic relationship with the controlled landscape.

A total of 438 burial-related features was recorded. The burials ranged from inhumations to cremations, urned cremations, boxed cremations, amphora cremations, pyres/*busta*, and included a number of burial pits containing pyre debris and pot scatters (from disturbed burials). Most of the burials were simple with no burial goods, while others contained a wide range of goods and were fairly wealthy in appearance. The burials spanned the Roman period from the 1st to the 4th century, and can be analysed to provide information on the use of different burial rites over time and on the population of the Roman town. The burial data has good potential to contribute to the project aims if studied further.

#### **Area C2 and the watching brief**

The cemetery area within Area C2 consisted of 67 burials divided into two burial plots (plus another inhumation burial identified during the watching brief). A total of 27 inhumation burials, dated from the early-mid 2nd to the mid-late 3rd century, were recorded along with 41 cremation burials (including cremation, urned, boxed and five pits containing pyre debris) dating from the mid-late 3rd to the 4th century. The dating evidence from these features indicates that, contrary to the popular tradition that inhumation replaced cremation in about the 3rd century, within this cemetery area cremation burial replaced inhumation as the dominant burial rite in the later Roman period.

This cemetery area is unusual because it produced a number of rich cremation burials, the only mausoleum recorded on the Alienated Land sites, two lead coffins and ten barrow burials. The significance of these barrow burials has been fully discussed above but, in summary, this burial tradition may represent Germanic mercenaries/soldiers and their families living in Colchester within this period. These Germanic-style burials may also explain the unusual replacement of inhumation with cremation (rather than vice versa) in the later Roman period.

#### **Area J1**

A large cemetery area and two smaller burial plots were recorded within Area J1. The cemetery area within Area J1 North consisted of 207 inhumation burials and 149 cremation burials (including cremation, urned, pyres/*busta*, pits containing pyre debris, pot scatters and pyre-related features). It appears to have dated from the 1st/2nd to the mid-late 3rd (possibly 4th) century, making it slightly earlier in date (although broadly contemporary) with the cemetery area in Area C2. A small number of fairly rich burials was recorded, although most were of a basic type, and no barrow burials, lead coffins, mausolea or burial plots were identified.

The small burial plot recorded within Area J1 South consisted of seven burials (one inhumation burial and six cremation burials). These burials appear to have been contemporary with the Area J1 North cemetery area but were buried within a separate agricultural field.

The third group of burials, located within Area J1 East, consisted of three burial pits containing pyre debris. As no distinct boundaries were found for these burials they could be seen as either part of a separate burial plot or part of the Abbey Field cremation cemetery identified in 2000. If they are a part of the Abbey Field cemetery then this cemetery area appears to have been bounded on its northern edge by the Roman circus.

### **Area Q**

A total of three inhumation burials was recorded from Area Q. The identification of similar burial plots within the New Garrison redevelopment (Area 6) has revealed an agricultural landscape in which those who worked the land were buried in family burial plots on that land, a practice which was also identified in the burial plot within Area J1 South.

### **In summary**

The list above is a very brief summary of the burials found within each area investigated. However, a complete analysis of all cemetery areas, burial plots, individual burials, dating and find evidence recorded on the Alienated Land sites will need to be completed for the final report. A comparison of the current sites with similar cemeteries and burials located near to and around the garrison site (eg the Abbey Field cemetery) will also be of great importance. These analyses have the potential to contribute greatly to our understanding of burial practices and the population of Colchester during the Roman period. The cemetery data has good potential to contribute to the project aims via detailed analysis of spatial dynamics, chronology of development, grave goods analysis relative to status, and possible military associations. Further academic research will be required to place the cemeteries within the context of both the Colchester cemeteries and town cemeteries of Roman Britain. The possible *busta* within Area J1 North will also require further research and consideration relative to the claim that such burial types were associated with the military.

### **The villas/farmsteads and the coaxial field system**

To the south of the circus and the cemetery areas/burial plots was an extensive area of agricultural land. This agricultural hinterland was laid out in a series of coaxial field systems defined by boundary ditches and droveways. The importance of stock within this landscape is confirmed by the frequency of droveways (to aid the movement of animals between fields) and the inclusion of a number of animal pens (in Area Q and Area 6 of the New Garrison). At least two small villas/farmsteads were located within this agricultural hinterland, on Area E and in Kirkee McMunn Barracks (identified in 1998), where they probably acted as farm houses or estate centres. An interesting issue derived from the identification of the circus was whether some of the land was devoted to stud farms to supply horses for the games. The issue requires further research via bone data.

An analysis of the fields, field boundary ditches and droveways recorded on the Alienated Land sites confirms that the land to the south of the circus and the cemetery areas was part of the agricultural hinterland of the Roman town. This hinterland was divided up into a coaxial field system and farmed, droveways were added to aid the movement of livestock around the landscape, and a small number of villas/farmsteads were established (in Area E and in the south-east corner of Kirkee McMunn Barracks) probably to act as estate centres.

As indicated above it is difficult to be sure based on archaeological evidence who owned the farms, whether the ancestors of the Late Iron Age inhabitants of the countryside or veterans or other newcomers. There is moderate potential for the settlement data to provide further archaeological knowledge via academic research including comparison with the Kirkee McMunn farmstead. This will include comparisons of the finds assemblages and dating evidence.

### **Roman roads**

The circus, the cemetery areas/burial plots, the villas/farmsteads and the agricultural hinterland all appear to have been connected by at least three Roman roads. The road identified running across Area J1 is now believed to have continued southwards towards the Roman villa/farmstead located in Kirkee McMunn Barracks (identified through cropmarks). This road is likely to have linked up to a major Roman road junction which stood at the point where the main road leading out of Balkerne Gate joined with roads leading to Gosbecks, Sheepen, London and possibly the Hythe waterfront. The other road is believed to have run from the south-east gate of the town and down the line of the modern day Mersea Road. The road surface recorded in Area E is believed to have linked the villa/farmstead located there to this second road line. Smaller roads/road surfaces were also recorded around the outside of the circus in Areas C1, C2 and J1. These roads would, presumably, have aided movement to, from and around this important structure.

Another track or road was identified around the outside the Roman circus. This road is likely to have been connected to both of the roads mentioned above, and would have been important for moving people, animals and goods to, from and around the circus.

Further study of the routeway data is crucial to establish its origin, whether within the Late Iron Age or at the beginning of the Roman period. The data has good potential to address the aim.

### **Symbolic places**

Symbolic places on the Alienated Land sites include all of the cemetery areas, the burial plots and the circus (which was probably connected to the Imperial Cult). It is clear that, by the Roman period, the landscape had been divided into symbolic and domestic/agricultural areas, although the two could overlap (for example the burial plots within agricultural fields in Areas J1 South and Q).

The Roman burials located within agricultural fields may have been placed there in a symbolic relationship to the controlled landscape. The very existence of enclosed land with ancestral burials presumably implies that the settlers here regarded their land as private, and not a resource to be shared with neighbours. Likewise, the use of burial plots within cemetery areas (in particular the 'Germanic' burial plot within the Area C2) would appear to suggest that these plots were considered as private family/group burial sites. The presence of a villa/farmstead on Area E (and another in Kirkee McMunn Barracks) would also imply that the agricultural land had been divided into parcels which were administered by separate groups of people.

The shared resources identified on the Alienated Land include some of the symbolic places. This is most obvious in the case of the circus and the cemetery on Area J1 North where evidence of family/group burial plots is slight.

#### 9.13.4 Scale of contribution to project aim

There is **very good** potential for further analysis of the data beyond the assessment stage. A full analysis of the circus, the cemetery areas and burial plots, the settlement and field system, and the roads, will contribute greatly to our understanding of the Roman town and its population.

### 9.14 Project Aim 12

*What was the nature of the Anglo-Saxon landscape within the development site and what was the relationship of that landscape to Anglo-Saxon Colchester?*

#### **Introduction**

The excavation has **poor-moderate** potential to address this aim. No evidence was recorded on any of the Alienated Land sites that dates to the Anglo-Saxon period. However, the identification of ten barrow burials in Area C2 can be placed within the context of Romanised Germanic citizens and their families settling within Colchester during the late Roman period. These should not be confused with Anglo-Saxon settlers after the abandonment of the Roman town despite similarities of the ring gullies to Early Saxon barrows.

#### **Background to Project Aim 12**

The most significant Anglo-Saxon-period activity in the vicinity of the Alienated Land sites is the Late Saxon church of St John, excavated in 1972 just outside the north-eastern corner of Area B2 (*CAR 9*). Apart from occasional stray sherds of Anglo-Saxon pottery, no other activity of this date has been observed within the later St John's abbey precinct. Nevertheless, these sherds and the nearby presence of the church do leave the possibility that significant Anglo-Saxon activity/settlement may have occurred in this area.

There is evidence to the east of Mersea Road and to the east of the medieval precinct of St John's abbey and running south into Area A1 of Early Saxon burials, both cremations and inhumations. None of these were found as the result of controlled archaeological excavation. Observations of further burials of this period would therefore be extremely important in improving our understanding not only of burial practice during this period, but also provide a rare opportunity to gain insights into the culture and lifestyle of the Early Saxon population.

#### **Discussion of Project Aim 12**

The discovery of ten Roman barrow burials in Area C2 is extremely unique in Colchester. A number of explanations were discussed including the possibility that they represented the replication of a local barrow-building tradition. However, it is believed that these barrows represent a group of Romanised Germanic citizens or Germanic mercenaries and their families who lived in Colchester in the late Roman period but buried their dead in accordance with their custom.

Similar barrow burials have been identified in areas adjacent to the northern frontier forts, such as Petty Knowes in Northumberland and outside the Hadrian's Wall forts of South Shields, Great Chesters and near Halton Chesters. Therefore it has appeared as though these types of burials were associated with the Roman army. At Colchester, the existence of a late Roman garrison is unknown. However, the evidence from Area C2 strongly implies the

existence of at least a temporary garrison in the late 3rd/4th century. The presence of such troops is to be expected from the late 3rd century onwards due to the civil wars and the continuing threat of Saxon and other barbarian raiders, and the declining fortunes of Colchester at this time is well represented. It is within this context that we might understand the presence of late Roman auxiliary troops, their families and support staff. Therefore, the use of barrow burials in Colchester might imply that these people were of Germanic origin. This would be in accordance with the recorded heavy reliance on soldiers of Germanic stock in the north-west provinces in the late Roman period.

The occurrence of Germanic burials within Area C2 might help to explain the location of Early Saxon graves, adjacent to Mersea Road, as a later generation of federate settlers, although it is perhaps as likely that the episodes are not directly linked. The subtle differences between Roman soldiers of Germanic origin (who adopted many Roman customs) and Germanic mercenaries (who appear later and were less inclined towards Romanisation) will be further investigated with special attention to the detail of Roman fort cemeteries such as High Rochester and South Shields. A comparison of the Area C2 cemetery area with the cemetery identified in the Abbey Field may also be of importance in identifying Germanic settlers in late Roman Britain.

#### **Scale of contribution to project aim**

There is **moderate** potential for further analysis of the data beyond the assessment stage. The barrow burials, and the finds recorded from them, will be fully analysed and compared to similar burials identified along the northern frontier forts. The barrows will be placed within the context of Germanic mercenaries/soldiers and their families living, and burying their dead, within Colchester during the late Roman period.

### **9.15 Project Aims 13 and 14**

*To reach a clearer understanding of the layout and development of the precinct of St John's abbey*

*If possible, to locate the abbey church and establish its basic form and structural development*

#### **Introduction**

The archaeological investigations have a **very poor** potential to address these aims. The archaeological investigation of the Alienated Land did not include the area of St John's abbey or its precincts.

#### **Background to Project Aims 13 and 14**

With the exception of a series of investigations carried out in the north-eastern corner of St John's abbey between 1972 and 1985, there has been little archaeological exploration of the former Benedictine abbey precinct (*CAR 9*, 203-235). As a result, only the most basic facts are known about the abbey and its extensive complex of subsidiary buildings, which must have included a cloister, chapter house, monastic dormitory, workshops and a variety of other buildings. It has been suggested upon the basis of documentary evidence (*CAR 1*, 28-32) that the cloisters and other main monastic buildings were originally constructed to the north of the church, following its foundation in 1086, and only moved to the south after

the fire of 1033. This has yet to be proved archaeologically. However, the excavations in the north-eastern corner of the precinct have found evidence to substantiate the substantial terracing said to have accompanied this redevelopment, involving the flattening of the ridge to the south of the church and the dumping of resulting material to the north of the church.

Much of the former abbey precinct – those portions which fall within the Officers' Club (Alienated Land Areas B1a, B2 and the north-eastern part of B1b) - is a Scheduled Ancient Monument. No work will be permitted in, adjacent to or within the setting of the defined area without written consent from the Secretary of State. The western two-thirds of Area B1b may encroach on the south-western part of the cloistral buildings on the south side of the abbey church, as well as ancillary buildings in the south-western part of the precinct.

Can the line of the precinct wall be identified in the non-scheduled area?

What was the character and function of the buildings in this portion of the abbey precinct?

### **Discussion of Project Aims 13 and 14**

Medieval activity on the Alienated Land sites consisted of a series of robber trenches (and associated features) which had almost completely robbed-out the features of the Roman circus. This activity is probably connected to the construction of a large number of buildings within the medieval town. The construction of these new buildings required a large amount of building material and many surviving Roman structures were robbed out and their stone/brick/tile reused. The date of this robbing also indicates that the circus was at least still partially standing (probably as a ruin) into the medieval period. Another aspect highlighted above is the possibility that the Roman monument on the line of the *spina* was later used as the focus of a crossroads at the south-west corner of the abbey precinct. The kink in the south-east area of the precinct wall could also relate to still standing or partially standing elements of the circus. The archaeological investigation of the Alienated Land sites did not provide any evidence relating to St John's abbey or the abbey church.

### **Scale of contribution to project aims**

There is a **poor** potential for further analysis of the data beyond the assessment stage.

## **9.16 Project Aims 15 and 16**

*To trace the development of St John's abbey and its precinct after it was dissolved in 1538*

*To reach a clearer understanding of the layout and nature of the Civil War landscape*

### **Introduction**

The archaeological investigations have a **poor** potential to address aim 15. The archaeological investigation of the Alienated Land did not include the area of St John's abbey or its precincts.

The archaeological investigations have a **moderate** potential to address aim 16. Two features recorded on the Alienated Land sites may be associated with the Civil War.

### **Background to Project Aims 15 and 16**

Following the dissolution of the monasteries, the abbey precinct was owned by a series of different families including the Lucas family. It is probable that the successive residents and owners of the site maintained some of the old monastic buildings and converted them to domestic uses. Perhaps partly as a result of this, 17th-century maps show parts of the abbey church and other ecclesiastical buildings still standing. Development of the precinct will provide an opportunity to gain a better understanding of what happened to the former ecclesiastical buildings, ie which were retained and which demolished.

The abbey precinct was briefly used as a Royalist stronghold in 1648, suggesting that its walls were largely intact at this time. Is it possible to identify Civil War-period additions to the fortifications? Is it possible to identify damage caused to the defensive circuit during the siege (perhaps in the now-missing south-western portion of the walls)?

The Parliamentary siegeworks were situated approximately 1500m south of St John's abbey. The area between the two was the scene of fighting during this period and traces of this – in the form of musket and cannon balls and other military equipment – are to be expected although none have so far been found.

### **Discussion of Project Aims 15 and 16**

Post-medieval activity on the Alienated Land sites was mainly confined to the northern edge of the Abbey Field. On the whole, the evidence consisted of a number of fields, field boundary ditches and pits associated with a largely rural landscape (Areas C1, C2 and J1). At least two large quarry pits, probably associated with building works in and around the town, were also recorded (Area J1) along with a road which was recorded in Area J1 West. Both this road and a ditch recorded in Area E may also have been associated with the English Civil War.

A ditch identified in Area E may be a surviving fragment of part of the 'lager', which connected most of the various Parliamentary forts and gun emplacements that surrounded Colchester during the siege of 1648. If this ditch is correctly identified, it suggests that the fortifications ran approximately 300m south of the southern wall of St John's abbey, and on this basis it is likely that Fort Needham (straddling Mersea Road) lies in the south-western corner of Area A1 and may partially encroach into it.

It also is possible that the post-medieval road/trackway identified during the archaeological excavations of Area J1 West was also used during the Civil War. This road is heading in the direction of the Abbey Field and the Royalist defensive network thought to run east-west through this area. So, the road may have been used to transport men and provisions through this network.

### **Scale of contribution to project aims**

There is a **poor-moderate** potential for further analysis of the data beyond the assessment phase. The ditch and road/trackway will be illustrated and placed within the Civil War landscape of Colchester.

## 9.17 **Project Aim 17**

*To record and contextualise any modern military features within the Alienated Land site for which there are insufficient current records.*

### **Introduction**

The archaeological investigations have a **moderate-good** potential to address this aim, as a number of modern military features were recorded. However, due to a risk of unexploded ordnance, few of these features were excavated.

### **Background to Project Aim 17**

Two World War II air-raid shelters in Area C2 have already been recorded ahead of demolition. In addition, there are a number of buried bunkers/air-raid shelters within the barracks that may extend into the period post-dating World War II. These military remains are relatively marginal aspects, which are secondary to the primary military function provided by the Garrison itself. Obtaining comprehensive information on the distribution of temporary defences associated with major military installations is problematic. However, temporary defences and training facilities are likely to be associated with all major permanent military facilities such as the Garrison.

### **Discussion of Project Aim 17**

A number of modern/military features were recorded during the archaeological investigation of the Alienated Land sites. All of these features were confined to the northern extent of the Garrison and close to the town centre. The majority of the features consisted of building foundations and services/service trenches associated with the range of garrison buildings/barracks which had existed on the sites. These buildings included the Garrison Civil Service Club, the Garrison Radio and the Cavalry/Le Cateau Barracks.

Other modern/military features included several features dated to World War II. A total of ten air-raid shelters were identified – four on Area C2, three of which were connected by a communication trench, and six on Area J1. However, only two of the air-raid shelters (within Area C2) were fully excavated and recorded. Also identified within Area C2 was a square pit which contained a stash of Home Guard petrol bombs ('Molotov cocktails'). This was identified and covered over in accordance with specialist EOD advice and then emptied and removed by specialist contractors following completion of the archaeological works. A single empty glass bottle was retained from this pit for further study.

A series of trenches dated to World War I was also recorded within Area J1 East. These 'zig-zag' trenches were mock-ups of front-line fire trenches which were used to train troops before their deployment to France. The 'zig-zag' construction of the trenches prevented an enemy from firing a machine gun down the length of the trench. Similar trenches were identified within Area F of the New Garrison during the 2002 trial-trenching evaluation.

### **Scale of contribution to project aims**

There is a **moderate** potential for further analysis of the data beyond assessment stage. The two air-raid shelters that were fully excavated within Area C2 will be illustrated and all the features will be placed within their WWI/WWII defence of Britain context.

## 9.18 Summary of requirements for further work

9.18.1 The various specialists have detailed their recommendations for further work in their own reports (above). This is a summary, with additional recommendations by CAT.

### 9.18.2 Prehistoric pottery

It is recommended that all of the prehistoric pottery should be analysed in full. The relative rarity of Late Neolithic and Late Bronze Age features and finds to Colchester (and Essex) means that this pottery assemblage has good research potential. A total of 51 sherds should be illustrated.

### 9.18.3 Late Iron Age and Roman pottery

It is recommended that all of the Late Iron Age and Roman pottery should be analysed in full. Special attention should be paid to the pottery from the Roman burials, the circus, the villa/farmstead and the landscape features. An estimated 250 burial-related vessels should be illustrated.

### 9.18.4 Post-Roman pottery

It is recommended that all of the post-Roman pottery should be analysed in full. Special attention should be paid to the pottery associated with the medieval robbing of the Roman circus and the post-medieval field boundary ditches and associated features.

### 9.18.5 Small finds

**Small finds and bulk finds** – It is recommended that all of the small finds and bulk finds should be analysed and reported on in full. A number of finds should also be sent for conservation (161), x-radiography (286), and for residue (8), wood (2) and leather (1) analysis. Many of the finds will need to be illustrated and photographed (199) and at least three reconstruction drawings should be made.

**Daub, clay pipe and metal-working debris** – It is recommended that no further work should be completed on these items.

### 9.18.6 Human bone

It is recommended that all of the human bone, both inhumated and cremated, should be analysed in full.

**Cremated human bone** – The average size of the cremations and the high occurrence of large fragments in the sub-sample indicate that valuable demographic and pathological information could be achieved by proceeding with further analysis. All of the cremated human bone should be fully processed and then analysed. The analysis will include an assessment of the quantity, colour, surface changes, degree of fragmentation, identification, anatomical representation of bones, minimum number of individuals, determination of age at death, pathological changes, discussion of the results and comparison with contemporary material).

**Inhumated human skeletal remains** – Despite a certain level of fragmentation and cortical damage, it is estimated that valuable information would be gained by proceeding with further analysis. All of the inhumated human bone (but especially the better-preserved skeletons) should be fully processed and then analysed. The analysis will include an assessment of the quantity and condition of the material, the population structure, the population variability, the health status and dental health status of the individuals and will also include a discussion and comparison of the results.

### 9.18.7 Animal bone

It is recommended that all of animal bone assemblage should be analysed in full. Analysis

should include an identification of species (domestic and wild) and age at death, and all elements related to butchering locations and methods should be recorded. The distribution of the bone also needs to be analysed, particularly the presence of animal bone buried with the human remains; these bones could indicate feasting, often associated with early human burials, or meat buried with the deceased as 'food for the afterlife'. Results from the analysis of this assemblage should be compared to similar sites, both locally and nationally.

#### 9.18.8 **Ceramic and stone building material**

It is recommended that the Roman ceramic building material should be analysed further. In particular the material associated with the circus has the potential to answer a number of questions about the construction of the structure. For example:

- What type of ceramic building material was used during the construction of the circus?
- How was that material used? eg is there evidence that whole bricks were used in the walls and/or that whole tiles were used to roof parts of the structure. Or, do the fragmentary pieces of CBM, recorded on the sites, represent rubble in-fill between the facing blocks of the walls.

The greensand stone used in the construction of the circus also requires petrological examination for its source.

#### 9.18.9 **Glass**

It is recommended that all of the Roman vessel glass should be analysed in full.

#### 9.18.10 **Worked flint**

It is recommended that all of the worked flint should be analysed in full. Important areas of interest and significance include the worked flint dated to the Palaeolithic and the worked flint recorded from prehistoric, Bronze Age and Roman burial contexts. The worked flint from the Alienated Land sites must also be looked at with regard to the flints from other Garrison sites, which will increase our perception of life in the Roman River valley during the prehistoric era. Any worked flints attributed to the medieval or later periods will also be of interest.

#### 9.18.11 **Environmental analysis**

It has been recommended that only very limited further work will be completed on the bulk samples taken for environmental analysis. This will concentrate on incorporating the results of charcoal identification and snail-shell evidence into the reporting. However, a single column sample was taken during the archaeological work. This has not yet been analysed and will be sent to John Daniells for analysis.

#### 9.18.12 **Pollen analysis**

A human skull removed in a block, and samples taken from the stomach and intestinal areas of a different skeleton, may be sent to John Daniells for pollen analysis. The column sample from the Roman quarry in Area J1 East will also be examined for pollen.

#### 9.18.13 **Residue analysis**

Five pottery vessels, recorded from Roman burial contexts, will be sent to John Daniells for residue analysis. If this analysis proves to be successful more vessels may be analysed at a later date.

#### 9.18.14 **Charcoal analysis**

Unfortunately, we were unable to send the charcoal samples for assessment. However, the charcoal samples recorded from archaeological contexts will be sent to Anne-Maria Bojko

(Colchester Museums) for analysis. If this analysis proves to be successful some of the charcoal contained within the bulk samples may also be analysed at a later date. Any suitable charcoal pieces from prehistoric features may also be sent for C14 dating.

#### 9.18.15 **No further work recommended** (other than incorporation into final report)

Burnt flint  
Clay pipe  
Daub  
Metal-working debris  
Mosaic cubes  
Non-worked stone  
*Opus signinum* and mortar  
Painted column plaster  
Painted wall plaster  
Post-Roman ceramic building material  
Post-Roman and modern glass  
Shell  
Slate

#### 9.18.16 **Structural analysis**

There is very considerable scope, after receipt of the specialist input (above) for a detailed and through exposition of the site chronology and phasing, and a detailed discussion of the principal themes as outlined in the *Project Aims*. This assemblage of finds and site data offers an opportunity for a detailed description of part of the country's most important Iron Age and Roman sites (especially in light of the discovery of Britain's first known Roman circus).

#### 9.18.17 **Reporting and publication**

The results of the recommended work will be fully reported within the analysis report which will also form the basis of the publication text. The final report will be published within the CAT in-house journal. Shorter versions will be placed in national and international journals.

Provision has been made for the completion of all recommended elements, including all specialist reports, conservation, cleaning and ultimate storage of the finds, and all appropriate publication and archiving.

#### 9.18.18 **Suggested drawings and plates for final analysis report**

Plans showing all features for each area

Phased plans for each area to include:

- Prehistoric features
  - Plan focused on the cluster of Late Neolithic pits in C1 and single pit in C2
  - Sections of the Late Neolithic pits and ?prehistoric ditch in C1
  - Plan showing detail of prehistoric structure in Area Q and Bronze Age tree throw
  - Sections of individual post-holes of the Area Q structure and tree throw
  - Plan focused on the Late Bronze Age features in J1 and pit from watching brief.
  - Sections of the Late Bronze Age pits and post-holes including the 4-post structure
- Roman burial features
  - Detail showing the cluster of ring gullies in C2 in comparison with Petty Knowes
  - Sections of the C2 ring gullies
  - Detailed plans of intercutting clusters of graves emphasising phasing
  - Detail of individual burials showing location of grave goods (and with inset of grave

- goods illustrations)
  - Sections showing the two lead coffins and selected other graves/sequences
- Other Roman features
  - Plan emphasising ditch below outer *cavea* wall in Area J1 East
  - Section of the ditch below outer *cavea* wall
  - Plan showing road ditches in Area J1
  - Detailed plan of cattle jaws deposit in J1 North roadside ditch
  - Detail of coin hoard scatter in roadside ditch in J1 South
  - Sections of the roadside ditches
  - Plan showing the Roman context of the Colchester Garrison roads/tracks (ie assessment Fig 25)
  - Area E structure and compound showing detail of structural elements
  - Sections of Area E features
  - Selected sections of other Roman and later features (including ditches) within all areas
- Roman circus
  - Overall plan of the circus showing excavated and assumed foundations (ie assessment Fig 24)
  - Detail plans of foundations and associated features for each area showing extent of *in situ* footings and robbing
  - Blow up plans of selected details (eg entranceways, buttresses and phases, plinth)
  - Reconstruction drawings of *cavea* including possible seating arrangements, entrance and treatment of exterior wall
  - Sections illustrating both foundation cuts and robber trenches
  - Reconstruction drawing of structure showing possible form of monument (if available)
  - Comparative plans of continental circuses
- Finds illustrations
  - Prehistoric flint
  - Selected Late Neolithic pottery (including Peterborough ware from Area Q)
  - Selected Late Bronze Age pottery
  - Illustration of finds potentially associated with the circus including horse furniture, column fragment, painted wall fragment, tile/brick (if appropriate) and example of ashlar block
  - All burial goods
  - Selected pottery from Roman non-burial contexts
  - Selected medieval pottery from circus robbing
- Photographs
  - Working shots of circus excavation
  - Overhead shots of circus including monument plinth
  - Selected details of circus
  - Selected burials
  - Selected coins, including coin hoard
  - Selected grave goods including jet bear, glass vessel and tripod lamp

## 9.19 Overall contribution to Project Aims

9.19.1 The overall contribution of the existing data to contribute to the project aims without further analysis is **moderate/very good** with **very good** potential for further analysis to provide advances in archaeological knowledge. The prehistoric sites on the Alienated Land areas so far investigated include a Late Neolithic domestic site in Areas C1 and C2 and a Late Bronze Age settlement area in Area J1, an isolated prehistoric structure in Area Q and evidence for Bronze Age tree clearance also in Area Q. These are not unexpected discoveries, given the scale of the development area and suggest localised areas of settlement in these periods. Other prehistoric periods are, however, poorly represented by the works to date and these gaps in the data, particularly for the Iron Age, may themselves be significant with regard to activity within the *oppidum*. The Roman cemeteries investigated in Areas C2 and J1 together appear to span the entire Roman period and, therefore, provide a valuable data set with which to examine changes in burial practice over time. The possible evidence of the military within the cemeteries requires further study. However, it is the unexpected discovery of the internationally significant Roman circus that has provided the greatest overall contribution to archaeological knowledge. The detailed final report will fully address all aspects pertinent to its existence at Colchester and place it within the context of Roman Britain and the Roman Empire.

## 10 Acknowledgements

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Fieldwork was directed by Ben Holloway (Area C1 and C2 excavations, Areas E, J1, O and S1, the Time Team trenches and the watching brief), Mariusz Gorniak (Area Q), and Kate Orr (Area C1 and C2 evaluations). Field assistants were Chris Lister, Laura Pooley, Don Shimmin and Emma Spurgeon. Fieldwork was carried out by CAT team members.

Principal site planners were Chris Lister, Laura Pooley, Emma Spurgeon and Tom Woolhouse. The finds officer was Laura Pooley. The authors would like to thank all the staff and volunteers at CAT for their assistance with all phases of the post-excavation analysis.

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# 11 Glossary and burial terminologies

## 11.1 Glossary

Bronze Age	2500 BC to <i>c</i> 700BC
CAT	Colchester Archaeological Trust
CBC	Colchester Borough Council
circus	an arena in which chariot racing was held
DBA	Desk-Based Assessment
DoE	Department of the Environment
dyke	defensive earthwork, originally with ditch on outer side, and usually topped by a timber pallisade
EOD	Explosive Ordnance Disposal, part of the Ministry of Defence
hypocaust	Roman under-floor heating system
IFA	Institute of Field Archaeologists
intrusive	a late find in an earlier context (e.g a modern coin in a medieval feature)
Iron Age	<i>c</i> 700 BC to AD 43
medieval	<i>c</i> AD 1066 to <i>c</i> AD 1500
Mesolithic	the Middle Stone Age, ie <i>c</i> 8000 BC to <i>c</i> 4000 BC
modern	<i>c</i> 1800 to the present day
Neolithic	the New Stone Age, ie the period of the first farmers <i>c</i> 4000 BC to <i>c</i> 2500BC
NGR	National Grid Reference
Palaeolithic	the Old Stone Age, the period of the last Ice Age, ie before <i>c</i> 8000 BC
post-medieval	<i>c</i> AD 1500 to AD 1800
prehistoric	in Britain, before the Roman period, ie most of the years BC
residual	an early find in a late context (eg a Roman coin in a Victorian pit)
Roman	AD 43 to <i>c</i> AD 410
Romano-British	a feature or find belonging to the Roman period but displaying native British (ie Celtic) influences
SAM	Scheduled Ancient Monumental
Anglo-Saxon	Anglo-Saxon, ie post-Roman AD 410 to <i>c</i> AD 1066
SMR	Sites and Monuments Record, maintained by Essex County Council and now known as the 'Essex Historic Environment Record'
TBM	Temporary Bench Mark
UAD	Urban Archaeological Database, maintained by Colchester Borough Council

## 11.2 Burial terminologies

### Inhumation burials

In inhumation burials the body of the deceased is deliberately placed within a grave. The body can sometimes be buried within a wooden coffin (indicated by a large number of iron nails in a rectangular coffin shape and/or by wood staining) or a lead coffin. Inhumation burials can contain burial goods deliberately placed within the grave or within the coffin if a coffin is present.

### Cremation burials

In cremation burials, the cremated remains of the deceased are deliberately placed within a bag or other organic container, or wrapped in a cloth, and then placed within a burial pit. These bags, organic containers and pieces of cloth leave little or no trace within the archaeological record, so usually the only evidence which survives of this type of burial is a distinct concentration of cremated bone within the bottom of the burial pit. Cremation burials can contain other burial goods deliberately placed either within the

bag/container/cloth (indicated by finds located on top of or within the concentration of cremated bone) or within the burial pit next to/around the cremated bone.

### **Urned cremation burials**

In urned cremation burials, the cremated remains of the deceased were deliberately placed within a pottery vessel (which becomes known as a cremation urn). The cremation urn was then placed within a burial pit. Urned cremation burials can contain other burial goods deliberately placed either within the urn or within the burial pit next to/around the urn.

### **Amphora cremation burials**

In amphora cremation burials, the cremated remains of the deceased were deliberately placed within an amphora. The amphora was then placed within a burial pit. Amphora cremation burials can contain other burial goods placed either within the amphora or within the burial pit next to/around the amphora.

### **Boxed cremation burials**

In boxed cremation burials, the cremated remains of the deceased were deliberately placed within a wooden box. The box was then placed within a burial pit. Boxed cremation burials can contain other burial goods deliberately placed either within the box or within the burial pit next to/around the box.

### **Burial pits containing pyre debris**

Some burial pits contain pyre debris. When the body of the deceased was cremated on a pyre, the cremated remains were usually collected and buried elsewhere (probably as cremation burials or urned, amphora and boxed cremation burials). The remains of the pyre were then swept up and dumped within a pit. Burial pits containing pyre debris are indicated by high levels of charcoal, burning (including burnt grave goods) and cremated bone, all of which are scattered throughout the fill of the burial pit. There is no deliberate placement of cremated bone. Burial goods can be found within burial pits containing pyre debris but these are usually burnt, broken and were not deliberately placed within the feature (like the cremated bone they are often scattered throughout the fill of the pit).

### **Pyre/*bustum* burials**

Pyres/*busta* are grave-shaped features. When the body of the deceased was cremated, it was cremated either within the grave-shaped pit or raised slightly above it on a wooden plank/platform. In pyre burials, the cremated remains of the deceased were usually collected and buried elsewhere (as in the 'cremation' burial traditions stated above). The remains of the pyre were then buried *in situ*, as opposed to being collected and dumped elsewhere (as in burial pits containing pyre debris). In *bustum* burials, the cremated remains of the deceased were not collected but buried *in situ*. Pyres/*bustum* burials are indicated by high levels of burning (especially around the edge of the feature) and charcoal. In pyre burials, there is usually little cremated bone (as it has been collected) and it is scattered throughout the fill of the feature. In *bustum* burials there is a high quantity of cremated bone, sometimes laid out in a recognisable 'skeletal' form. Burial goods can be found within both pyres and *busta*; these are usually burnt, broken and do not show deliberate placement within the feature (they are buried where they fell during burning).

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# Appendix 1 Feature and layer lists (by area)

## Features

### Area C1

<i>Feature (F) and Trench (T) number</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
CF1 T4	Pit	undated	
CF2 T4	Pit	Roman	
CF3 T4	Land drain	modern	
CF4 T4	Pit	?Roman	
CF5 T4	Surface spread of mortar	medieval	Associated with the medieval robbing of the circus
CF6 T4	Robber trench	medieval	Trench which robbed inner wall of the Roman circus
CF7 T4	Robber trench	medieval	Trench which robbed outer wall of the Roman circus
CF8 T4	Pit	post-medieval	
CF9 T4	Pit	post-medieval	
CF10 T4	Pit	Late Neolithic	
CF11 T4	Pit	Late Neolithic	
CF12 T4	Ditch	Roman	
CF13 T4	Pit	post-medieval	
CF14 T4	Pit	Roman	
CF15 T4	Pit	Late Neolithic	
CF16 T4	Slot	undated	
CF17 T4	Pit	Roman	
CF18 T4	Tree throw hole	natural	
CF19 T4	Pit	Roman	
CF20 T4	Pit	modern	
CF21 T4	Pit	undated	
CF22 T4	Pit	undated	
CF23 T4	Pit	undated	
CF47 T5	Pit/ditch	Roman	
CF48 T6	Ditch	modern	
CF49 T6	Darker fill covering CF60	undated	
CF50 T6	Spread of Ragstone	Roman	
CF51 T6	Ditch	post-medieval	Part of CF52?
CF52 T5	Ditch	post-medieval	Part of CF51?
CF58 T6	Pit	Roman	
CF59 T5	Modern disturbance	modern	
CF60 T6	Hollowed cobbled path	undated	
CF61 T6	Metal pipe	modern	
CF62 T6	Metal pipe	modern	
CF63 T5	Metal pipe	modern	
CF64	Pit	post-medieval	
CF65	Pit	post-medieval	
CF66	Pit	post-medieval	
CF67	Pit	Roman	
CF68	Soakaway	modern	
CF69	Ditch	Late Neolithic	

<i>Feature (F) and Trench (T) number</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
CF70	Ditch	LIA/early Roman	Part of ditch CF94
CF71	Soakaway	modern	
CF72	Pit	Late Neolithic	
CF73	Pit	Late Neolithic	
CF74	Service trench	modern	
CF75	Pit	Late Neolithic	
CF76	Pit	Late Neolithic	
CF77	Ditch	LIA/Early Roman	
CF78	Compacted gravel surface	Roman	Part of the Roman road
CF79	Natural	natural	
CF80	Ditch	LIA/early Roman	
CF81	Pit	post-medieval	
CF82	Pit	post-medieval	
CF83	Natural	natural	
CF84	Natural	natural	
CF85	Pit	Roman	
CF86	Pit	Roman	
CF87	Wheel rut	Roman	Wheel rut within the Roman road
CF88	Post-hole	Roman	Part of the Roman circus
CF89	Pit	Late Neolithic	
CF90	Natural	natural	
CF91	Compacted gravel surface	Roman	Part of the Roman road
CF92	Natural	natural	
CF93	Wheel rut	Roman	Wheel rut within the Roman road
CF94	Ditch	LIA/early Roman	Part of ditch CF70
CF95	Pit	Roman	
CF96	Post-hole	Roman	Part of the Roman circus
CF97	Natural	natural	
CF98	Pit	Roman?	

## Area C2

<i>Feature (F) and Trench (T) number</i>	<i>Feature also known as</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
CF24 T3		Cremation burial	Roman	
CF25 T3		Pit	Roman	
CF26 T3		Service trench	modern	
CF27 Grave 1 T3		Inhumation burial (grave)	Roman	
CF28 T3		Slot	modern	
CF29 T3		Service trench	modern	
CF30 T1		Urned cremation burial	Roman	
CF31 T1		Urned cremation burial	Roman	
CF32 Grave 29 T3		Inhumation burial (Grave)	Roman	
CF33 T1		Urned cremation burial	Roman	
CF34 T1		Spread of building material/ demolition debris	Roman	Part of Mausoleum
CF35		VOID		

<i>Feature (F) and Trench (T) number</i>	<i>Feature also known as</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
CF36 T2		Ditch	Roman	
CF37 T1		Pot scatter	Roman	
CF38 T1		Urned cremation burial	Roman	
CF39 T2		Ditch	Roman	
CF40 T2		Military trench	modern	
CF41 T2		Military trench	modern	
CF42 T1		Natural		
CF43 Grave 2 T1		Inhumation burial (grave) with lead coffin	Roman	Within mausoleum
CF44 T1		Wall foundation	Roman	
CF45 T1		Ditch	Roman	
CF46 T1	CF54, CF55	Wall foundation	Roman	Part of mausoleum
CF53 T1		Ditch	Roman	
CF56 T1		Posthole	Roman	
CF57 T1		Wall Foundation?	Roman	
CF58 - CF98		<b>AREA C1</b>		
CF99		Urned cremation burial	Roman	
CF100		Urned cremation burial	Roman	
CF101		Cremation burial	Roman	
CF102 Grave 3		Inhumation burial (grave)	Roman	
CF103		Air raid shelter	modern – World War II	
CF104		Air raid shelter	modern – World War II	
CF105		Cremation burial	Roman	Within ring ditch CF108
CF106		Ditch	Roman	Boundary ditch for Burial plot 1
CF107		Robber trench	medieval	Robbed outer wall of circus
CF108		Ring Ditch	Roman	Enclosing burial CF105
CF109		Soakaway	modern	
CF110		Pit	Roman	
CF111		Cremation burial	Roman	
CF112		Cremation burial	Roman	
CF113		Wall foundation	Roman	Cuts mausoleum
CF114 Grave 4		Inhumation burial (grave)	Roman	
CF115		Burial pit containing pyre debris	Roman	
CF116		Water main	modern	
CF117		Gas main	modern	
CF118	CF125	Communication trench	modern	
CF119		Pit	modern	
CF120		Cremation burial	Roman	
CF121 Grave 5		Inhumation burial (grave)	Roman	
CF122		Ring ditch	Roman	Enclosing burial CF127
CF123		Ring ditch	Roman	
CF124		Stone chipped surface	Roman	Associated with circus
CF126		Burial pit containing pyre debris	Roman	
CF127		Cremation burial	Roman	Within ring ditch CF122
CF128		Pit	Roman	
CF129		Ditch	Roman	
CF130		Natural	natural	

<i>Feature (F) and Trench (T) number</i>	<i>Feature also known as</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
CF131		Cremation burial	Roman	
CF132		Pit	modern	
CF133		Service pipe	modern	
CF134		Pit	Roman	
CF135		Pit	modern	
CF136		Natural	natural	
CF137		Natural	natural	
CF138		Natural	natural	
CF139a	CF222	Ring ditch	Roman	Enclosing burial CF242
CF139b		Natural	natural	
CF140		Demolition spread	medieval	Associated with circus
CF141		Natural	natural	
CF142	CF159	Metalled surface	Roman	Associated with circus
CF143		Ditch/pit?	Roman	
CF144		Natural	natural	
CF145		Urned cremation burial	Roman	
CF146		Burial pit containing pyre debris	Roman	
CF147		Cremation burial	Roman	
CF148		Wall foundation	Roman	Outer wall of circus
CF149		Natural	natural	
CF150		Post-hole	Roman	Associated with circus
CF151		Post-hole	Roman	Associated with circus
CF152		Post-hole	Roman	Associated with circus
CF153		Post-hole	Roman	Associated with circus
CF154		Pit	post-medieval	
CF155		Floor ?	Roman	Associated with circus
CF156		Pit	post-medieval	
CF157		Demolition spread	medieval	Associated with circus
CF158		Stone Footing	Roman	Associated with circus
CF160		Posthole	Roman	
CF161		Pit	modern	
CF162		Urned cremation burial	Roman	Within ring ditch CF205
CF163		Boxed cremation burial	Roman	Within ring ditch CF231
CF164		Cremation burial	Roman	
CF165		Urned cremation burial	Roman	
CF166		Cremation burial	Roman	
CF167		Cremation burial??	Roman	
CF168		Inspection pit	modern	
CF169		Sand quarry pit	Roman	
CF170	CF199, CF221	Ditch	Roman	Droeway Ditch
CF171		Pit	Roman?	
CF172		Pit/post-hole	Roman	
CF173		Cremation burial	Roman	
CF174	CF226 (recut)	Ditch	Roman	Boundary ditch for Burial plot 1 and Field 1
CF175		Wall foundation	Roman	Part of mausoleum
CF176		Pit	Roman	

<i>Feature (F) and Trench (T) number</i>	<i>Feature also known as</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
CF177		Cremation burial	Roman	
CF178		Pit	Roman	
CF179		Pit	Roman	
CF180		Pit	modern	
CF181	CF201	Ditch	Roman	Droeway ditch
CF182 Grave 9		Inhumation burial (Grave)	Roman	
CF183		Pit	post-medieval	
CF184		Pit	Roman	
CF185		Pit	Roman	
CF186		Pit	modern	
CF187		Ditch	Roman	
CF188		Drain	modern	
CF189		Ring ditch	modern	
CF190		Pit	Roman	
CF191		Drain	modern	
CF192		Pit	Roman	
CF193		Pit	post-medieval	
CF194		Natural	natural	
CF195		Pit	post-medieval	
CF196		Pit	Roman	
CF197		Pit	post-medieval	
CF198		Post-hole	Roman	
CF200		Natural	natural	
CF202		Pit	Roman?	
CF203		Pit	post-medieval	
CF204		Natural	natural	
CF205		Ring ditch	Roman	Enclosing burial CF162
CF206		Cremation burial	Roman	
CF207		Ring ditch with a	Roman	
		cremation burial within Sx1	Roman	
CF208		VOID		
CF209		Ring ditch	Roman	
CF210		Cremation burial	Roman	
CF211		Pit	modern	
CF212		Pit	modern	
CF213		Cremation Burial	Roman	
CF214		Pit	Roman	
CF215		Pit	modern	
CF216		Pit	modern	
CF217		Pit	modern	
CF218		Pit	Roman	
CF219		Cremation Burial	Roman	
CF220		Pit	post-medieval	
CF223		Pit	Late Neolithic	
CF224 Grave 10		Inhumation burial (Grave)	Roman	
CF225		Ring ditch	Roman	Enclosing burial CF163

<i>Feature (F) and Trench (T) number</i>	<i>Feature also known as</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
CF227		Burial pit containing pyre debris	Roman	
CF228		Pit	Roman	
CF229		Ring ditch	Roman	
CF230		Pot scatter	Roman	
CF231		Ring ditch with a	Roman	
		cremation burial within Sx1	Roman	
CF232		Pit	modern	
CF233 Grave 11		Inhumation Burial (Grave)	Roman	
CF234		Gully	Roman	
CF235 Grave 13		Inhumation burial (Grave)	Roman	
CF236 Grave 12		Inhumation burial (Grave)	Roman	
CF237		Cremation burial	Roman	
CF238		Urned cremation burial	Roman	
CF239		Cremation burial	Roman	
CF240		Burial pit containing pyre debris	Roman	
CF241		Urned cremation burial	Roman	Within ring ditch CF225
CF242		Cremation burial	Roman	Within ring ditch CF139a
CF243		Pit	Roman	
CF244 Grave 14		Inhumation burial (Grave)	Roman	
CF245 Grave 15		Inhumation burial (Grave)	Roman	
CF246 Grave 25		Inhumation burial (Grave)	Roman	
CF247		Robber trench	Roman	Robbed the inner wall of the circus
CF248 Grave 16		Inhumation burial (Grave)	Roman	
CF249 Grave 26		Inhumation burial (Grave)	Roman	
CF250 Grave 27		Inhumation burial (Grave)	Roman	
CF251 Grave 19		Inhumation burial (Grave)	Roman	
CF252 Grave 21		Inhumation burial (Grave)	Roman	
CF253 Grave 17		Inhumation burial (Grave)	Roman	
CF254 Grave 18		Inhumation burial (Grave)	Roman	
CF255 Grave 20		Inhumation burial (Grave)	Roman	
CF256		Pit	modern	
CF257 Grave 23		Inhumation burial (Grave)	Roman	
CF258		Ditch	Roman	
CF259 Grave 24		Inhumation burial (Grave)	Roman	
CF260 Grave 22		Inhumation burial (Grave)	Roman	
CF261 Grave 28		Inhumation burial (Grave)	Roman	
CF262		VOID		
CF263		Cremation burial	Roman	

## Area E

<i>Feature (F) and Trench (T) number</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
EF1 T1	Field boundary ditch	Roman	
EF2 T1	Field boundary ditch	Roman	
EF3 T1	Post-hole	undated	
EF4 T2	Robber trench	Roman	Robbed part of Roman villa/farmstead

<i>Feature (F) and Trench (T) number</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
EF5 T2	Metalled surface	Roman	Associated with Roman villa/farmstead
EF6 T2	Modern disturbance	modern	
EF7 T2	Robber trench	Roman	Robbed part of Roman villa/farmstead
EF8 T2	Stake hole	Roman	
EF9 T1	Enclosure ditch	Roman	Encloses Roman villa/farmstead
EF10 T1	Enclosure ditch	Roman	Encloses Roman villa/farmstead
EF11 T4	Ditch	post-medieval	Associated with Civil War siegeworks
EF12 T3	Field boundary ditch	Roman	
EF13 T2	Enclosure ditch	Roman	Encloses Roman villa/farmstead
EF14 T4	Pit	Roman	
EF15 T1	Modern disturbance	modern	
EF16 T4	Post-hole	Roman	
EF17 T3	Modern disturbance	modern	
EF18 T2	Natural	natural	
EF19 T2	Post-hole	Roman	Part of Roman villa/farmstead
EF20 T2	Post-hole	Roman	Part of Roman villa/farmstead
EF21 T2	Post-hole	Roman	Part of Roman villa/farmstead
EF22 T2	Enclosure ditch	Roman	Encloses Roman villa/farmstead
EF23 T2	Field boundary ditch	Roman	
EF24 T4	Field boundary ditch	Roman	
EF25 T3	Pit	Roman	

## Area J1 evaluation

<i>Feature number</i>	<i>Trench number</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
JF1	T24	Air-raid shelter/bunker	modern/military	Within J1 East – part of JEF40
JF2	T23+T24	Robber trench	medieval	Within J1 East – Trench which robbed outer wall of Circus – Part of JEF5
JF3	T23	Robber trench	medieval	Within J1 East – Trench which robbed outer wall of Circus – Part of JEF5
JF4	T23	Wall foundation	Roman	Within J1 East – wall of Circus – part of JEF6
JF5	T23	Pit	modern	Within J1 East
JF6	T23	Pit	modern	Within J1 East
JF7	T11	Urned cremation burial	Roman	Within J1 North
JF8	T24	Robber trench	medieval	Within J1 East – Trench which robbed outer wall of Circus - Part of JEF5
JF9	T24	Ditch	LIA/early Roman	Within J1 East – Ditch under Circus – Part of JEF23
JF10	T25	Quarry pit	post-medieval	
JF11	T11	Inhumation burial (Grave)	Roman	Within J1 North
JF12	T11	Robbed-out footings	modern/military	Within J1 North
JF13	T11	Disturbed cremation burial	Roman	Within J1 North
JF14	T21	Service trench	modern	
JF15	T22	Quarry pit	post-medieval	
JF16	T11	Inhumation burial (Grave)	Roman	Within J1 North – part of JNF370
JF17	T11	Inhumation burial (Grave)	Roman	Within J1 North – part of JNF191
JF18	T11	Pit	Roman	Within J1 North
JF19	T11	Pit/post-hole	Roman	Within J1 North

<i>Feature number</i>	<i>Trench number</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
JF20	T11	Inhumation burial (Grave)	Roman	Within J1 North – same as JNF95
JF21	T11	Inhumation burial (Grave)	Roman	Within J1 North
JF22	T10	Compacted gravel surface	Roman	Within J1 North – part of Roman road (JEL3)
JF23	T10	Service trench	modern	Within J1 North
JF24	T10	Foundations	modern/military	Within J1 North
JF25	T14	Air-raid shelter/bunker	modern/military	
JF26	T12	Air-raid shelter/bunker	modern/military	
JF27	T13	Foundations	modern/military	
JF28/JF32	T11	Pit	modern	Within J1 North
JF29	T16	Cobbled roadway	modern/military	
JF30	T18	Ditch	undated	
JF31	T18	Natural	natural	
JF33	T19	Field boundary ditch	Roman	Within J1 South – part of JSF1/6
JF34	T19	Ditch (part of JF40)	post-medieval	Within J1 South
JF35	T19	Field boundary ditch	Roman	Within J1 South – part of JSF2
JF36	T26	Foundations	modern	
JF37	T26	Pit	modern	
JF38	T18	Pit	undated	
JF39	T19	Pit	Roman	Within J1 South
JF40	T18	Ditch (part of JF34)	post-medieval	
JF41	T17	Ditch	modern	
JF42	T17	Metalled surface	post-medieval	Within J1 West – part of JWF1
JF43	T20	Field boundary ditch	Roman	Within J1 South – part of JSF2
JF44	T13	Natural	natural	
JF45	T14	Natural	natural	
JF46	T17	Ditch	modern	
JF47	T20	Pit	Roman	Within J1 South
JF48	T20	Ditch	Roman	Within J1 South
JF49	T14	Natural	natural	
JF50	T12	Air-raid shelter/bunker	modern/military	
JF51	T20	Urned cremation burial	Roman	Within J1 South – within Burial Plot
JF52	T20	Urned cremation burial	Roman	Within J1 South – within Burial Plot
JF53	T18	Post-hole	Roman	
JF54	T18	Field boundary ditch	Roman	
JF55	T17	Ditch	post-medieval	Within J1 West – part of JWF2
JF56	T17	Air-raid shelter/bunker	modern/military	
JF57	T12	Culvert	modern	
JF58	T20	Field boundary ditch	Roman	Within J1 South – part of JSF1/6
JF59	T20	Pit	post-medieval	Within J1 South
JF60	T20	Pit	Roman	Within J1 South
JF61	T20	Pit	undated (Roman?)	Within J1 South

### Area J1 North

<i>Feature number</i>	<i>Feature also known as</i>	<i>Feature type</i>	<i>Phase</i>	<i>Comments</i>
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<i>Feature number</i>	<i>Feature also known as</i>	<i>Feature type</i>	<i>Phase</i>	<i>Comments</i>
JNF1		Urned cremation burial	Roman	
JNF2		Quarry pit	Roman	
JNF3a	JNF122	Inhumation burial (Grave)	Roman	
JNF3b		Natural	natural	
JNF4		Pyre/bustum	Roman	
JNF5		Pyre/bustum	Roman	
JNF6		Inhumation burial (Grave)	Roman	
JNF7		Pit	Roman	
JNF8		Gully	Roman	Possible burial plot boundary
JNF9		Pit	Roman	
JNF10	JNF89	Ditch	Roman	Associated with Roman road
JNF11		Cremation burial	Roman	
JNF12		Inhumation burial (Grave)	Roman	
JNF13		Pit	modern	
JNF14		Pit	modern	
JNF15		Pipe trench	modern	
JNF16		Pipe trench	modern	
JNF17		Pipe trench	modern	
JNF18		Pit	modern	
JNF19		Pipe trench	modern	
JNF20		Pit	Roman	
JNF21		Cremation burial	Roman	
JNF22		Urned cremation burial	Roman	
JNF23		Quarry pit	Roman	
JNF24	JNF55, JNF80	Quarry pit	Roman	
JNF25		Quarry pit	Roman	
JNF26		Urned cremation burial	Roman	
JNF27		Urned cremation burial	Roman	
JNF28		Cremation burial	Roman	
JNF29		Pit	Roman	
JNF30		Burial pit containing pyre debris	Roman	
JNF31		Burial pit containing pyre debris	Roman	
JNF32		Urned cremation burial	Roman	
JNF33		Urned cremation burial	Roman	
JNF34		Pyre/bustum	Roman	
JNF35		Cremation burial	Roman	
JNF36		Post hole	Roman	
JNF37		Pit	Late Bronze Age	
JNF38		Pit	Late Bronze Age	
JNF39		Burial pit containing pyre debris	Roman	
JNF40		Foundations	modern	
JNF41		Urned cremation burial	Roman	
JNF42		Cremation burial	Roman	
JNF43		Foundations	modern	
JNF44		Foundations	modern	
JNF45		Inhumation burial (Grave)	Roman	

<i>Feature number</i>	<i>Feature also known as</i>	<i>Feature type</i>	<i>Phase</i>	<i>Comments</i>
JNF46		Pit	undated	
JNF47		Cremation burial	Roman	
JNF48		Gully	Roman	Possible burial plot boundary
JNF49		Post-hole	undated	
JNF50		Inhumation burial (Grave)	Roman	
JNF51		Ditch	modern	
JNF52		Ditch	modern	
JNF53		Pit	undated	
JNF54		Pit	modern	
JNF56		Inhumation burial (Grave)	Roman	
JNF57		Pit	undated	
JNF58		Urned cremation burial	Roman	
JNF59		Burial pit containing pyre debris	Roman	
JNF60		Pit	undated	
JNF61		<i>Pyre/bustum</i>	Roman	
JNF62		Inhumation burial (Grave)	Roman	
JNF63		Inhumation burial (Grave)	Roman	
JNF64		Inhumation burial (Grave)	Roman	
JNF65		Burial pit containing pyre debris	Roman	
JNF66		Service trench	Modern	
JNF67		Cremation burial	Roman	
JNF68		Urned cremation burial	Roman	
JNF69		Inhumation burial (Grave)	Roman	
JNF70		Pot scatter within JNF69 – from a disturbed cremation?	Roman	
JNF71		Natural	natural	
JNF72	JNF484	Quarry pit	Roman	
JNF73		Burial pit containing pyre debris	Roman	
JNF74		Service trench	Modern	
JNF75		Inhumation burial (Grave)	Roman	
JNF76		Inhumation burial (Grave)	Roman	
JNF77		Urned cremation burial	Roman	
JNF78		Burial pit containing pyre debris	Roman	
JNF79		Burial pit containing pyre debris	Roman	
JNF81		Post-hole	Roman	
JNF82		Urned cremation burial	Roman	
JNF83		Inhumation burial (Grave)	Roman	
JNF84		Urned cremation burial	Roman	
JNF85		Inhumation burial (Grave)	Roman	
JNF86		Inhumation burial (Grave)	Roman	
JNF87		Urned cremation burial	Roman	
JNF88		Urned cremation burial	Roman	
JNF90		Inhumation burial (Grave)	Roman	
JNF91		Burial pit containing pyre debris	Roman	
JNF92		Post-hole	Roman	
JNF93		Pit	Late Bronze Age	
JNF94		Cremation burial	Roman	

<i>Feature number</i>	<i>Feature also known as</i>	<i>Feature type</i>	<i>Phase</i>	<i>Comments</i>
JNF95		Inhumation burial (Grave)	Roman	
JNF96		Inhumation burial (Grave)	Roman	
JNF97		Inhumation burial (Grave)	Roman	
JNF98		Pit	Roman	
JNF99		Cremation burial	Roman	
JNF100		Inhumation burial (Grave)	Roman	
JNF101		Post-hole	Roman?	
JNF102		Post-hole	Roman?	
JNF103		Cremation burial	Roman	
JNF104		Burial pit containing pyre debris	Roman	
JNF105		Urned cremation burial	Roman	
JNF106		Urned cremation burial	Roman	
JNF107		Pit	undated	
JNF108		Pit	Roman	
JNF109		Inhumation burial (Grave)	Roman	
JNF110		Pit	modern	
JNF111		Inhumation burial (Grave)	Roman	
JNF112		<i>Pyre/bustum</i>	Roman	
JNF113		Pit	undated	
JNF114		Burial pit containing pyre debris	Roman	
JNF115		Inhumation burial (Grave)	Roman	
JNF116		Urned cremation burial	Roman	
JNF117		Inhumation burial (Grave)	Roman	
JNF118		Burial pit containing pyre debris	Roman	
JNF119		Inhumation burial (Grave)	Roman	
JNF120	JF18 in eval	Gully	Roman	Possible burial plot boundary
JNF121		Urned cremation burial	Roman	
JNF123		Burial pit containing pyre debris	Roman	
JNF124		Inhumation burial (Grave)	Roman	
JNF125		Urned cremation burial	Roman	
JNF126		Urned cremation burial	Roman	
JNF127		Urned cremation burial	Roman	
JNF128		Urned cremation burial	Roman	
JNF129		Urned cremation burial	Roman	
JNF130		VOID	VOID	
JNF131		Quarry pit	Roman	
JNF132		Pit	modern	
JNF133		Inhumation burial (Grave)	Roman	
JNF134		Gully	Late Bronze Age	
JNF135		Inhumation burial (Grave)	Roman	
JNF136		Pit	modern	
JNF137		Inhumation burial (Grave)	Roman	
JNF138		Urned cremation burial	Roman	
JNF139		Urned cremation burial	Roman	
JNF140		Quarry pit	Roman	
JNF141		Inhumation burial (Grave)	Roman	

<i>Feature number</i>	<i>Feature also known as</i>	<i>Feature type</i>	<i>Phase</i>	<i>Comments</i>
JNF142		Inhumation burial (Grave)	Roman	
JNF143		Pit	Roman	
JNF144		Inhumation burial (Grave)	Roman	
JNF145		Urned cremation burial	Roman	
JNF146		Urned cremation burial	Roman	
JNF147		Urned cremation burial	Roman	
JNF148		Inhumation burial (Grave)	Roman	
JNF149		Inhumation burial (Grave)	Roman	
JNF150		Post-hole	Roman?	
JNF151		Pit	Roman	
JNF152		Post-hole	Roman?	
JNF153		Burial pit containing pyre debris	Roman	
JNF154		Urned cremation burial	Roman	
JNF155		Burial pit containing pyre debris	Roman	
JNF156		Burial pit containing pyre debris	Roman	
JNF157		Pit	undated	
JNF158		Post-hole	Late Bronze Age??	Beneath Roman road
JNF159		Post-hole	Late Bronze Age??	Beneath Roman road
JNF160		Post-hole	Late Bronze Age??	Beneath Roman road
JNF161		Post-hole	Late Bronze Age??	Beneath Roman road
JNF162		Post-hole	Late Bronze Age??	Beneath Roman road
JNF163		VOID	VOID	-
JNF164		Post-hole	Late Bronze Age	Beneath Roman road
JNF165		Post-hole	Late Bronze Age??	Beneath Roman road
JNF166		Post-hole	Late Bronze Age??	Beneath Roman road
JNF167		Post-hole	prehistoric/Roman ??	
JNF168		Pit	prehistoric/Roman ??	
JNF169		Post-hole	prehistoric/Roman ??	
JNF170		Post-hole	prehistoric/Roman ??	
JNF171		Natural	natural	
JNF172		Post-hole	Late Bronze Age??	4-post structure
JNF173		Post-hole	Late Bronze Age??	4-post structure
JNF174		Inhumation burial (Grave)	Roman	
JNF175		Post-hole	Late Bronze Age??	4-post structure
JNF176		Post-hole	Late Bronze Age??	4-post structure
JNF177		Burial pit containing pyre debris	Roman	
JNF178		Burial pit containing pyre debris	Roman	
JNF179		Inhumation burial (Grave)	Roman	
JNF180		Inhumation burial (Grave)	Roman	
JNF181		Inhumation burial (Grave)	Roman	
JNF182		VOID	VOID	
JNF183		<i>Pyre/bustum</i>	Roman	
JNF184		Pit	undated	
JNF185		Post-hole	Roman?	
JNF186		Cremation burial	Roman	
JNF187		Inhumation burial (Grave)	Roman	

<i>Feature number</i>	<i>Feature also known as</i>	<i>Feature type</i>	<i>Phase</i>	<i>Comments</i>
JNF188		Inhumation burial (Grave)	Roman	
JNF189		Post-hole	Roman?	
JNF190		Cremation burial	Roman	
JNF191		Inhumation burial (Grave)	Roman	
JNF192		Cremation burial	Roman	
JNF193		Inhumation burial (Grave)	Roman	
JNF194		Quarry pit	Roman	
JNF195		Inhumation burial (Grave)	Roman	
JNF196		Burial pit containing pyre debris	Roman	
JNF197		Post-hole	Roman	
JNF198		Post-hole/small pit	Roman?	
JNF199		Pyre/bustum	Roman	
JNF200		Pit – pyre-related feature	Roman	
JNF201		Pit – pyre-related feature	Roman	
JNF202		Inhumation burial (Grave)	Roman	
JNF203		Pyre/bustum	Roman	
JNF204		Pyre/bustum	Roman	
JNF205		Cremation burial	Roman	
JNF206		Service trench	modern	
JNF207		Service trench	modern	
JNF208		Inhumation burial (Grave)	Roman	
JNF209		Pot Scatter	Roman	
JNF210		Post-hole	Roman?	
JNF211		Pit	modern	
JNF212		Inhumation burial (Grave)	Roman	
JNF213		Burial Pit containing Pyre debris	Roman	
JNF214		Burial Pit containing Pyre debris	Roman	
JNF215		Pit – pyre-related feature	Roman	
JNF216		Inhumation burial (Grave)	Roman	
JNF217		Urned Cremation burial	Roman	
JNF218		Inhumation burial (Grave)	Roman	
JNF219		Post-hole	Roman?	
JNF220		Post-hole	Roman?	
JNF221		Inhumation burial (Grave)	Roman	
JNF222		Cremation burial	Roman	
JNF223		Burial pit containing pyre debris	Roman	
JNF224		Inhumation burial (Grave)	Roman	
JNF225		Inhumation burial (Grave)	Roman	
JNF226		Cremation burial	Roman	
JNF227		Quarry pit	Roman	
JNF228		VOID	VOID	
JNF229		Inhumation burial (Grave)	Roman	
JNF230		Inhumation burial (Grave)	Roman	
JNF231		Pit	modern	
JNF232		Service trench	modern	
JNF233		Post-hole	Roman?	

<i>Feature number</i>	<i>Feature also known as</i>	<i>Feature type</i>	<i>Phase</i>	<i>Comments</i>
JNF234		Post-hole	Roman?	
JNF235		Inhumation burial (Grave)	Roman	
JNF236		Inhumation burial (Grave)	Roman	
JNF237		Pit	Roman	
JNF238		Inhumation burial (Grave)	Roman	
JNF239		Urned cremation burial	Roman	
JNF240		Service trench	modern	
JNF241		Inhumation burial (Grave)	Roman	
JNF242		Urned cremation burial	Roman	
JNF243		Urned cremation burial	Roman	
JNF244		Urned cremation burial	Roman	
JNF245		Urned cremation burial	Roman	
JNF246		Inhumation burial (Grave)	Roman	
JNF247		Inhumation burial (Grave)	Roman	
JNF248		<i>Pyre/bustum</i>	Roman	
JNF249		VOID	VOID	
JNF250		Urned cremation burial	Roman	
JNF251		Pit	Roman	
JNF252		Burial pit containing pyre debris	Roman	
JNF253		Pot scatter – from a disturbed cremation?	Roman	
JNF254		Inhumation burial (Grave)	Roman	
JNF255		Inhumation burial (Grave)	Roman	
JNF256		Inhumation burial (Grave)	Roman	
JNF257		Quarry pit	Roman	
JNF258		Inhumation burial (Grave)	Roman	
JNF259		Inhumation burial (Grave)	Roman	
JNF260		Urned cremation burial	Roman	
JNF261		Inhumation burial (Grave)	Roman	
JNF262		Urned cremation burial	Roman	
JNF263		Burial pit containing pyre debris	Roman	
JNF264		Urned cremation burial	Roman	
JNF265		Inhumation burial (Grave)	Roman	
JNF266		Burial pit containing pyre debris	Roman	
JNF267a		Post-hole	Roman?	
JNF267b		Pot scatter	Roman?	
JNF268		Burial pit containing pyre debris	Roman	
JNF269	JNF429	Inhumation burial (Grave)	Roman	
JNF270		Inhumation burial (Grave)	Roman	
JNF271		Inhumation burial (Grave)	Roman	
JNF272		Inhumation burial (Grave)	Roman	
JNF273		Inhumation burial (Grave)	Roman	
JNF274		VOID	VOID	
JNF275		Inhumation burial (Grave)	Roman	
JNF276		Pot scatter	Roman	
JNF277		<i>Pyre/bustum</i>	Roman	
JNF278		Pit – pyre-related feature	Roman	

<i>Feature number</i>	<i>Feature also known as</i>	<i>Feature type</i>	<i>Phase</i>	<i>Comments</i>
JNF279		Pyre/bustum	Roman	
JNF280	JNF490	Inhumation burial (grave)	Roman	
JNF281		Urned cremation burial	Roman	
JNF282		Urned cremation burial	Roman	
JNF283		Burial pit containing pyre debris	Roman	
JNF284		Burial pit containing pyre debris	Roman	
JNF285		Inhumation burial (Grave)	Roman	
JNF286	JNF300	Inhumation burial (Grave)	Roman	
JNF287		Burial pit containing pyre debris	Roman	
JNF288		Inhumation burial (Grave)	Roman	
JNF289		Inhumation burial (Grave)	Roman	
JNF290		Post-hole	undated	
JNF291		Inhumation burial (Grave)	Roman	
JNF292		Inhumation burial (Grave)	Roman	
JNF293		Inhumation burial (Grave)	Roman	
JNF294		Inhumation burial (Grave)	Roman	
JNF295		Inhumation burial (Grave)	Roman	
JNF296	JNF297	Inhumation burial (Grave)	Roman	
JNF298		Burial pit containing pyre debris	Roman	
JNF299		Burial pit containing pyre debris	Roman	
JNF301		Inhumation burial (Grave)	Roman	
JNF302		Urned cremation burial	Roman	
JNF303		Cremation burial	Roman	
JNF304		Post-hole	Roman	
JNF305		Post-hole	Roman	
JNF306		Post-hole	Roman	
JNF307		Post-hole	Roman	
JNF308		Inhumation burial (Grave)	Roman	
JNF309		Urned cremation burial	Roman	
JNF310		Urned cremation burial	Roman	
JNF311		Urned cremation burial	Roman	
JNF312	JNF315	Inhumation burial (Grave)	Roman	
JNF313		Inhumation burial (Grave)	Roman	
JNF314		Inhumation burial (Grave)	Roman	
JNF316		Inhumation burial (Grave)	Roman	
JNF317		Inhumation burial (Grave)	Roman	
JNF318		Inhumation burial (Grave)	Roman	
JNF319		Inhumation burial (Grave)	Roman	
JNF320		Inhumation burial (Grave)	Roman	
JNF321		Inhumation burial (Grave)	Roman	
JNF322		Inhumation burial (Grave)	Roman	
JNF323		Urned cremation burial	Roman	
JNF324		Urned cremation burial	Roman	
JNF325		Urned cremation burial	Roman	
JNF326		Urned cremation burial	Roman	
JNF327		Urned cremation burial	Roman	

<i>Feature number</i>	<i>Feature also known as</i>	<i>Feature type</i>	<i>Phase</i>	<i>Comments</i>
JNF328		Inhumation burial (Grave)	Roman	
JNF329		Inhumation burial (Grave)	Roman	
JNF330		Cremation burial	Roman	
JNF331		Inhumation burial (Grave)	Roman	
JNF332		Burial pit containing pyre debris	Roman	
JNF333		Urned cremation burial	Roman	
JNF334		Inhumation burial (Grave)	Roman	
JNF335	JNF409	Inhumation burial (Grave)	Roman	
JNF336		Inhumation burial (Grave)	Roman	
JNF337		Post-hole	Roman	
JNF338		Post-hole	Roman	
JNF339		Post-hole	Roman	
JNF340		Post-hole	Roman	
JNF341	JNF494	Quarry pit	Roman	
JNF342		Inhumation burial (Grave)	Roman	
JNF343		Gully	Roman	Possible burial plot boundary
JNF344		Post-hole	Roman	
JNF345		Inhumation burial (Grave)	Roman	
JNF346		Inhumation burial (Grave)	Roman	
JNF347		Foundation	modern	
JNF348		Urned cremation burial	Roman	
JNF349		Inhumation burial (Grave)	Roman	
JNF350		Urned cremation burial	Roman	
JNF351		Inhumation burial (Grave)	Roman	
JNF352		Urned cremation burial	Roman	
JNF353		Pit	Roman	
JNF354		Inhumation burial (Grave)	Roman	
JNF355		Inhumation burial (Grave)	Roman	
JNF356		Urned cremation burial	Roman	
JNF357		Inhumation burial (Grave)	Roman	
JNF358		Post-hole	Roman	
JNF359		Pit	modern	
JNF360		Inhumation burial (Grave)	Roman	
JNF361		Inhumation Burial (Grave)	Roman	
JNF362		Post-hole	Roman?	
JNF363		Post-hole	Roman?	
JNF364		Inhumation burial (Grave)	Roman	
JNF365		Inhumation burial (Grave)	Roman	
JNF366		Inhumation burial (Grave)	Roman	
JNF367		Inhumation burial (Grave)	Roman	
JNF368		Urned cremation burial	Roman	
JNF369		VOID	VOID	
JNF370		Inhumation burial (Grave)	Roman	
JNF371		Urned cremation burial	Roman	
JNF372		Urned cremation burial	Roman	
JNF373		Burial pit containing pyre debris	Roman	

<i>Feature number</i>	<i>Feature also known as</i>	<i>Feature type</i>	<i>Phase</i>	<i>Comments</i>
JNF374		Inhumation burial (Grave)	Roman	
JNF375		Inhumation burial (Grave)	Roman	
JNF376		Post-hole	Roman?	
JNF377		Urned cremation burial	Roman	
JNF378		Inhumation burial (Grave)	Roman	
JNF379		Quarry pit	Roman	
JNF380		Urned cremation burial	Roman	
JNF381		Inhumation burial (Grave)	Roman	
JNF382		Inhumation burial (Grave)	Roman	
JNF383		Inhumation burial (Grave)	Roman	
JNF384		Inhumation burial (Grave)	Roman	
JNF385		Inhumation burial (Grave)	Roman	
JNF386		VOID	VOID	
JNF387		Inhumation burial (Grave)	Roman	
JNF388		Inhumation burial (Grave)	Roman	
JNF389		Inhumation burial (Grave)	Roman	
JNF390		Post-hole	Roman	
JNF391		Pit	undated	
JNF392		Inhumation burial (Grave)	Roman	
JNF393		Inhumation burial (Grave)	Roman	
JNF394		Inhumation burial (Grave)	Roman	
JNF395		Inhumation burial (Grave) (part of JF21)	Roman	
JNF396		Inhumation burial (Grave)	Roman	
JNF397		Inhumation burial (Grave)	Roman	
JNF398		Post-hole	Roman	
JNF399		Inhumation burial (Grave)	Roman	
JNF400		Inhumation burial (Grave)	Roman	
JNF401		Inhumation burial (Grave)	Roman	
JNF402		Inhumation burial (Grave)	Roman	
JNF403		Urned cremation burial	Roman	
JNF404		Inhumation burial (Grave)	Roman	
JNF405		Inhumation burial (Grave)	Roman	
JNF406		Pit	Roman	
JNF407		Inhumation burial (Grave)	Roman	
JNF408		Inhumation burial (Grave)	Roman	
JNF410		Inhumation burial (Grave)	Roman	
JNF411		Urned cremation burial	Roman	
JNF412		Natural	natural	
JNF413		Post-hole	undated	
JNF414		Post-hole	undated	
JNF415		Post-hole	undated	
JNF416		Post-hole	undated	
JNF417		Burial pit containing pyre debris	Roman	
JNF418		Inhumation burial (Grave)	Roman	
JNF419		Quarry pit	Roman	
JNF420		Quarry pit	Roman	

<i>Feature number</i>	<i>Feature also known as</i>	<i>Feature type</i>	<i>Phase</i>	<i>Comments</i>
JNF421		Inhumation burial (Grave)	Roman	
JNF422		Post-hole	Roman?	
JNF423		Inhumation burial (Grave)	Roman	
JNF424		Inhumation burial (Grave)	Roman	
JNF425		Inhumation burial (Grave)	Roman	
JNF426		Inhumation burial (Grave)	Roman	
JNF427		Inhumation burial (Grave)	Roman	
JNF428		Inhumation burial (Grave)	Roman	
JNF430		Inhumation burial (Grave)	Roman	
JNF431		Urned cremation burial	Roman	
JNF432		Inhumation burial (Grave)	Roman	
JNF433		Inhumation burial (Grave) - UNEXCAVATED	Roman	
JNF434		Inhumation burial (Grave) - UNEXCAVATED	Roman	
JNF435		Inhumation burial (Grave) - UNEXCAVATED	Roman	
JNF436		Inhumation burial (Grave) - UNEXCAVATED	Roman	
JNF437		Inhumation burial (Grave) - UNEXCAVATED	Roman	
JNF438		Inhumation burial (Grave) - UNEXCAVATED	Roman	
JNF439		Inhumation burial (Grave)	Roman	
JNF440		Urned cremation burial	Roman	
JNF441		VOID	VOID	
JNF442		Inhumation burial (Grave)	Roman	
JNF443		Post-hole	Roman	
JNF444		Inhumation burial (Grave)	Roman	
JNF445		Post-hole	Roman?	
JNF446		Post-hole	Roman	
JNF447		Inhumation burial (Grave)	Roman	
JNF448		Inhumation burial (Grave)	Roman	
JNF449		Inhumation burial (Grave)	Roman	
JNF450		Urned cremation burial	Roman	
JNF451		Burial pit containing pyre debris	Roman	
JNF452		Inhumation burial (Grave)	Roman	
JNF453		Inhumation burial (Grave)	Roman	
JNF454		Inhumation burial (Grave)	Roman	
JNF455		Inhumation burial (Grave)	Roman	
JNF456		Inhumation burial (Grave)	Roman	
JNF457		Inhumation burial (Grave)	Roman	
JNF458		Inhumation burial (Grave)	Roman	
JNF459		Inhumation burial (Grave)	Roman	
JNF460		Post-hole	Roman	
JNF461		Urned cremation burial	Roman	
JNF462		Inhumation burial (Grave)	Roman	
JNF463		Inhumation burial (Grave)	Roman	
JNF464		Inhumation burial (Grave)	Roman	
JNF465		Pyre/bustum - UNEXCAVATED	Roman	
JNF466		Inhumation burial (Grave)	Roman	
JNF467		Inhumation burial (Grave)	Roman	

<i>Feature number</i>	<i>Feature also known as</i>	<i>Feature type</i>	<i>Phase</i>	<i>Comments</i>
JNF468		Quarry pit	Roman	
JNF469		Inhumation burial (Grave)	Roman	
JNF470		Inhumation burial (Grave)	Roman	
JNF471		Inhumation burial (Grave)	Roman	
JNF472		Urned cremation burial	Roman	
JNF473		Inhumation burial (Grave)	Roman	
JNF474		Inhumation burial (Grave)	Roman	
JNF475		Post-hole	Roman?	
JNF476		Post-hole	Roman?	
JNF477		Inhumation burial (Grave)	Roman	
JNF478		Inhumation burial (Grave)	Roman	
JNF479		Inhumation burial (Grave)	Roman	
JNF480		Inhumation burial (Grave)	Roman	
JNF481		Urned cremation burial	Roman	
JNF482		Urned cremation burial	Roman	
JNF483		Inhumation burial (Grave)	Roman	
JNF485		Pit	late/post-Roman	
JNF486		Burial pit containing pyre debris	Roman	
JNF487		Inhumation burial (Grave)	Roman	
JNF488		Inhumation burial (Grave)	Roman	
JNF489		Inhumation burial (Grave)	Roman	
JNF491		Inhumation burial (Grave)	Roman	
JNF492		Burial pit containing pyre debris	Roman	
JNF493		Inhumation burial (Grave)	Roman	
JNF495		VOID	VOID	
JNF496		Cremation burial	Roman	
JNF497		Inhumation burial (Grave)	Roman	
JNF498		Inhumation burial (Grave)	Roman	
JNF499		Gully	Roman	Possible burial plot boundary
JNF500		Inhumation burial (Grave)	Roman	
JNF501		Ditch	Roman	Associated with Roman road
JNF502		Pit	Roman	
JNF503		Pit	Roman	
JNF504		Inhumation burial (Grave)	Roman	
JNF505		Inhumation burial (Grave)	Roman	
JNF506		Inhumation burial (Grave)	Roman	
JNF507		Inhumation burial (Grave) - UNEXCAVATED	Roman	
JNF508		Pit?	Roman	
JNF509		Inhumation burial (Grave)	Roman	
JNF510		Inhumation burial (Grave)	Roman	
JNF511		Inhumation burial (Grave)	Roman	
JNF512		Inhumation burial (Grave)	Roman	
JNF513		Inhumation burial (Grave)	Roman	
JNF514		Post-hole	Roman	
JNF515		Inhumation burial (Grave)	Roman	
JNF516		Inhumation burial (Grave)	Roman	

## Area J1 South

<i>Feature Number</i>	<i>Feature Also Known As</i>	<i>Feature Type</i>	<i>Phase</i>	<i>Comments</i>
JSF1	JSF6	Droeway ditch	Roman	
JSF2		Droeway ditch	Roman	
JSF3		Urned cremation burial	Roman	
JSF4		Urned cremation burial	Roman	
JSF5		Ditch	Roman	Ditch associated with Roman road
JSF7		Field boundary ditch	post-medieval	
JSF8		Metalled surface	Roman	Roman road
JSF9		Amphora cremation burial	Roman	
JSF10		Amphora cremation burial	Roman	
JSF11		Pit	Post-medieval	
JSF12		Inhumation burial (Grave)	Roman	
JSF13		Pit	Roman?	
JSF14		Field boundary ditch	post-medieval	
JSF15		Pit	post-medieval	
JSF16		Gully	post-medieval	
JSF17		Field boundary ditch	post-medieval	
JSF19	JSF18	Ditch	Roman	Ditch associated with Roman road

## Area J1 East

<i>Feature number</i>	<i>Feature also known as</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
JEF1		Cremation burial	Roman	
JEF2		Cremation burial	Roman	
JEF3		Cremation burial	Roman	
JEF4		Quarry pit	Roman	
JEF5		Robber trench	medieval	Trench that robbed the outer wall of the circus
JEF6		Wall foundation	Roman	Part of the outer wall of the circus
JEF7		Buttress	Roman	Buttress on outer wall of circus
JEF8		Buttress	Roman	Buttress on outer wall of circus
JEF9		Buttress (completely robbed)	Roman	Buttress on outer wall of circus
JEF10	JEF27	Foundation trench/construction cut	Roman	Construction cut for the outer wall of the circus
JEF11		Ditch	modern	
JEF12		Robber trench	medieval	Trench that robbed the western entrance wall of the circus
JEF13	JEF26, JEF47	Robber trench	medieval	Trench that robbed the inner wall of the circus
JEF14		Robber trench	medieval	Trench that robbed the eastern entrance wall of the circus
JEF15		Trench	modern	
JEF16		2004 CAT evaluation trench	modern	
JEF17		Pit	modern	
JEF18		Pit	modern	
JEF19		Post-hole	modern	
JEF20		Buttress	Roman	Buttress on outer wall of circus
JEF21		Buttress	Roman	Buttress on outer wall of circus

<i>Feature number</i>	<i>Feature also known as</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
JEF22		Buttress (completely robbed)	Roman	Buttress on outer wall of circus
JEF23		Ditch	LIA/Roman	Found under the outer wall of the circus
JEF24		Buttress	Roman	Buttress on outer wall of circus
JEF25		Post-hole	modern	
JEF28		Buttress	Roman	Buttress on outer wall of circus
JEF29		2002 CAT evaluation trench	modern	
JEF30		Buttress (completely robbed)	Roman	Buttress on outer wall of circus
JEF31		Buttress	Roman	Buttress on outer wall of circus
JEF32		Buttress	Roman	Buttress on outer wall of circus
JEF33		Post-hole	modern	
JEF34		Pit or part of robber trench JEF14	medieval	
JEF35		Robber trench or rubble spread	medieval	
JEF36		Buttress	Roman	Buttress on outer wall of circus
JEF37		Military trench	modern	
JEF38		Military trench	modern	
JEF39		Post-hole	modern	
JEF40		Air-raid shelter	modern	
JEF41		Military trench	modern	
JEF42		Post-hole	modern	
JEF43		Military trench	modern	
JEF44		Pit	modern	
JEF45		Post-hole	modern	
JEF46		Pit	modern	
JEF48	JEF69	Wall foundation	Roman	Part of the inner wall of the circus
JEF49		Buttress	Roman	Buttress on outer wall of circus
JEF50		Post-hole	modern	
JEF51		Buttress	Roman	Buttress on outer wall of circus
JEF52		Pit	Roman	
JEF53		Service trench	modern	
JEF54		Post-hole	modern	
JEF55		Buttress (completely robbed)	Roman	Buttress on outer wall of circus
JEF56		Post-hole	modern	
JEF57		Post-hole	modern	
JEF58		Ditch	modern	
JEF59		Post-hole	modern	
JEF60		Buttress	Roman	Buttress on outer wall of circus
JEF61		Service trench	modern	
JEF62		Buttress (completely robbed)	Roman	Buttress on outer wall of circus
JEF63		Buttress	Roman	Buttress on outer wall of circus
JEF64		Surviving wall	Roman	A later phase of (re)building along the outer wall of the circus
JEF65		Post-hole	modern	
JEF66		Post-hole	modern	
JEF67		Post-hole	modern	
JEF68		Natural	natural	
JEF70		Post-hole	Roman	Associated with circus
JEF71		Post-hole	Roman	Associated with circus

<i>Feature number</i>	<i>Feature also known as</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
JEF72		Post-hole	Roman	Associated with circus
JEF73		Post-hole	Roman	Associated with circus
JEF74		Post-hole	Roman	Associated with circus
JEF75		Post-hole	Roman	Associated with circus
JEF76		Post-hole	Roman	Associated with circus

### Area J1 West

<i>Feature Number</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
JWF1	Metalled surface	post-medieval	Post-medieval road
JWF2	Ditch	post-medieval	Ditch associated with road
JWF3	Service trench	modern	

### Area O

<i>Feature Number</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
OF1	Field boundary ditch	Roman	
OF2	Recut of OF1	Roman	
OF3	Natural	natural	

### Area Q

<i>Feature (F) and Trench (T) number</i>	<i>Feature also known as</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
QF1 T5		Tree throw hole or grubbing out pit	natural	
QF2 T5		Tree throw hole or grubbing out pit	natural	
QF3 T5		Tree throw hole or grubbing out pit	natural	
QF4 T5		Tree throw hole or grubbing out pit	natural	
QF5		VOID	VOID	
QF6 T6		Tree throw hole or grubbing out pit	natural	
QF7 T6		Tree throw hole or grubbing out pit	natural	
QF8 T6		Tree throw hole or grubbing out pit	natural	
QF9 T6	QF12 T7, QF109, QF130	Field boundary ditch	LIA/Roman	
QF10 T6		Tree throw hole or grubbing out pit	natural	
QF11 T8	QF29	Field boundary ditch	LIA/Roman	
QF13 T7		Animal pen	Roman	Animal pen 1
QF14 T7		Stake hole	Roman	Associated with Animal pen 1
QF15 T7		Stake hole	Roman	Associated with Animal pen 1
QF16 T7		Stake hole	Roman	Associated with Animal pen 1
QF17 T7		Stake hole	Roman	Associated with Animal pen 1
QF18 T7		Stake hole	Roman	Associated with Animal pen 1
QF19 T7		Stake hole	Roman	Associated with Animal pen 1
QF20 T7		Stake hole	Roman	Associated with Animal pen 1
QF21 T7		Stake hole	Roman	Associated with Animal pen 1
QF22 T7		Stake hole	Roman	Associated with Animal pen 1
QF23 T8		Tree throw hole or grubbing out pit	Natural	

<i>Feature (F) and Trench (T) number</i>	<i>Feature also known as</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
QF24 T8		Tree throw hole or grubbing out pit	natural	
QF25 T8		Tree throw hole or grubbing out pit	natural	
QF26 T8		Tree throw hole or grubbing out pit	natural	
QF27 T8		Tree throw hole or grubbing out pit	natural	
QF28		Tree throw hole or grubbing out pit	natural	
QF30		Tree throw hole or grubbing out pit	natural	
QF31		Tree throw hole or grubbing out pit	natural	
QF32		Tree throw hole or grubbing out pit	natural	
QF33		Tree throw hole or grubbing out pit	natural	
QF34		Tree throw hole or grubbing out pit	natural	
QF35		Tree throw hole or grubbing out pit	natural	
QF36		Tree throw hole or grubbing out pit	natural	
QF37		Tree throw hole or grubbing out pit	natural	
QF38		Tree throw hole or grubbing out pit	natural	
QF39		Tree throw hole or grubbing out pit	natural	
QF40		Tree throw hole or grubbing out pit	natural	
QF41		Tree throw hole or grubbing out pit	natural	
QF42		Tree throw hole or grubbing out pit	natural	
QF43		Pit	post-medieval	
QF44		Pit	post-medieval	
QF45		Tree throw hole or grubbing out pit	natural	
QF46		Tree throw hole or grubbing out pit	natural	
QF47		Hearth	undated	Probably Roman
QF48		Tree throw hole or grubbing out pit	natural	
QF49		Tree throw hole or grubbing out pit	natural	
QF50		Tree throw hole or grubbing out pit	natural	
QF51		Tree throw hole or grubbing out pit	natural	
QF52		Tree throw hole or grubbing out pit	natural	
QF53		Tree throw hole or grubbing out pit	natural	
QF54		Tree throw hole or grubbing out pit	natural	
QF55		Tree throw hole or grubbing out pit	Natural	
QF56		Stake hole??	Roman	
QF57		Stake hole??	Roman	
QF58		Stake hole??	Roman	
QF59		Tree throw hole or grubbing out pit	natural	
QF60		Tree throw hole or grubbing out pit	natural	
QF61		Tree throw hole or grubbing out pit	natural	
QF62		Tree throw hole or grubbing out pit	natural	
QF63		Tree throw hole or grubbing out pit	natural	
QF64		Tree throw hole or grubbing out pit	natural	
QF65		Tree throw hole or grubbing out pit	natural	
QF66		Tree throw hole or grubbing out pit	natural	
QF67		Tree throw hole or grubbing out pit	natural	
QF68		Tree throw hole or grubbing out pit	natural	
QF69		Tree throw hole or grubbing out pit	natural	
QF70		Tree throw hole or grubbing out pit	natural	

<i>Feature (F) and Trench (T) number</i>	<i>Feature also known as</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
QF71		Post-hole	Middle Iron Age ?	4-post structure
QF72		Post-hole	Middle Iron Age ?	4-post structure
QF73		Post-hole	Middle Iron Age ?	4-post structure
QF74		Post-hole	Middle Iron Age ?	4-post structure
QF75		Post-hole	Middle Iron Age ?	4-post structure
QF76		Tree throw hole or grubbing out pit	natural	
QF77		Post-hole	Middle Iron Age ?	4-post structure
QF78		Tree throw hole or grubbing out pit	natural	
QF79		Tree throw hole or grubbing out pit	natural	
QF80		Tree throw hole or grubbing out pit	natural	
QF81		Tree throw hole or grubbing out pit	natural	
QF82		VOID	VOID	
QF83		Animal pen	Roman	Animal pen 2
QF84		Post-hole	Roman	Associated with Animal pen 2
QF85		Post-hole	Roman	Associated with Animal pen 2
QF86		Tree throw hole or grubbing out pit	natural	
QF87		Tree throw hole or grubbing out pit	natural	
QF88		Tree throw hole or grubbing out pit	natural	
QF89		Tree throw hole or grubbing out pit	natural	
QF90		Tree throw hole or grubbing out pit	natural	
QF91		Tree throw hole or grubbing out pit	natural	
QF92		Tree throw hole or grubbing out pit	natural	
QF93		Inhumation burial (Grave)	Roman	
QF94		Inhumation burial (Grave)	Roman	
QF95		Tree throw hole or grubbing out pit	natural	
QF96		Tree throw hole or grubbing out pit	natural	
QF97		Tree throw hole or grubbing out pit	natural	
QF98		Tree throw hole or grubbing out pit	natural	
QF99		Inhumation burial (Grave)	Roman	
QF100		Tree throw hole or grubbing out pit	natural	
QF101		Tree throw hole or grubbing out pit	natural	
QF102		Tree throw hole or grubbing out pit	natural	
QF103		Tree throw hole or grubbing out pit	natural	
QF104		Tree throw hole or grubbing out pit	Roman	
QF105		Tree throw hole or grubbing out pit	natural	
QF106		Tree throw hole or grubbing out pit	natural	
QF107		Tree throw hole or grubbing out pit	natural	
QF108		Tree throw hole or grubbing out pit	natural	
QF110		Tree throw hole or grubbing out pit	natural	
QF111		Tree throw hole or grubbing out pit	natural	
QF112		Tree throw hole or grubbing out pit	natural	
QF113		Tree throw hole or grubbing out pit	natural	
QF114		Tree throw hole or grubbing out pit	natural	
QF115		Tree throw hole or grubbing out pit	natural	
QF116		Tree throw hole or grubbing out pit	natural	
QF117		Tree throw hole or grubbing out pit	natural	

<i>Feature (F) and Trench (T) number</i>	<i>Feature also known as</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
QF118		Tree throw hole or grubbing out pit	natural	
QF119		Tree throw hole or grubbing out pit	natural	
QF120		Tree throw hole or grubbing out pit	natural	
QF121		Hearth	Roman	
QF122		Tree throw hole or grubbing out pit	natural	
QF123		Tree throw hole or grubbing out pit	natural	
QF124		Tree throw hole or grubbing out pit	natural	
QF125		Tree throw hole or grubbing out pit	natural	
QF126		Tree throw hole or grubbing out pit	natural	
QF127		Tree throw hole or grubbing out pit	natural	
QF128		Tree throw hole or grubbing out pit	natural	
QF129		Tree throw hole or grubbing out pit	natural	

## Area S1

<i>Feature number</i>	<i>Feature also known as</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
SF1	SF3	Ditch	LIA/Roman	Ditch of Berechurch Dyke
SF2	SF5, SF6	Ditch	post-medieval	
SF4		Post-hole?	post-Roman	
SF7		Rampart	LIA/Roman	Remains of the rampart of Berechurch Dyke

## Time Team trenches

<i>Feature Number</i>	<i>Trench Number</i>	<i>Feature Type</i>	<i>Phase</i>	<i>Comments</i>
TTF1	T1	Linear or natural	undated	
TTF2	T7	Robber trench	medieval	Trench which robbed the outer wall of the circus
TTF3	T7	Robber trench	medieval	Trench which robbed the inner wall of the circus
TTF4	T4	Robber trench and foundation	Roman + medieval	Along outer wall of circus
TTF5	T4	Buttress	Roman + medieval	Consists of both <i>in situ</i> foundations and robber trench
TTF6	T5	Buttress	Roman	Consists of <i>in situ</i> foundations
TTF7	T5	Robber trench and foundation	Roman + medieval	Along outer wall of circus
TTF8	T5	Pit	Roman?	
TTF9	T3	Robber trench	medieval	Trench which robbed out a section of the starting gates (outer wall)
TTF10	T3	Area of robbing debris	medieval	
TTF11	T3	Robber trench	medieval	Trench which robbed out a section of the starting gates (inner wall)
TTF12	T6	Robber trench and foundation	Roman + medieval	Remains of the spina
TTF13	T6	Service pipe	modern	

## Watching brief

<i>Feature number</i>	<i>Trench number</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
WBF1	WBT1	Inhumation burial (Grave) within a lead coffin	Roman	
WBF2	WBT1	Robber trench	medieval	Trench that robbed inner wall of the circus
WBF3	WBT1	Robber trench	medieval	Trench that robbed an entrance wall of the circus
WBF4	WBT1	Robber trench	medieval	Trench that robbed the outer wall of the circus

<i>Feature number</i>	<i>Trench number</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
WBF5	WBT1	Robber trench	medieval	Robbed out buttress along outer wall of circus and also continuation of the robbed-out entrance wall.
WBF6	WBT1	Buttress foundation	Roman	Surviving circus wall foundation in buttress WBF5
WBF7	WBT1	Gully	Roman	
WBF8	WBT1	Pit	Roman	
WBF9	WBT1	Wall foundation	Roman	Surviving circus wall foundation in WBF2 and WBF3
WBF10	WBT1	Wall foundation	Roman	Surviving circus wall foundation in WBF4
WBF11	WBT2	Ditch	post-medieval	
WBF12	WBT3	Plinth foundation	Roman	Located within line of spina – is a foundation plinth for an obelisk or similar large decorative piece
WBF13	WBT3	Service trench	modern	
WBF14	WBT3	Service trench	modern	
WBF15	WBT3	Construction cut for WBF12	Roman	
WBF16	WBT3	Robber trench	medieval	Trench that robbed out the plinth (WBF12)
WBF17	WBT3	Post-hole ??	Roman	Stone-packed, next to plinth
WBF18	WBT3	Service Trench		
WBF19	WBT3	Pit	med/post-med	Cuts WBF16
WBF20	WBT4	Robber trench	medieval	Trench that robbed the inner wall of the circus
WBF21	WBT4	Robber trench	medieval	Trench that robbed the outer wall of the circus
WBF22	WBT4	Metalled surface	Roman	Same road surface as seen in Area C1
WBF23	WBT4	Pit	med/post-med	
WBF24	WBT4	Pit	prehistoric	
WBF25	WBT4	Pit	prehistoric	
WBF26	WBT4	Pit	post-Roman	
WBF27	WBT4	Pit	prehistoric	
WBF28	WBT4	Robber trench	medieval	Trench that robbed out a probable buttress
WBF29	WBT3	Service trench	modern	

## Layers

### Area C1

<i>Feature (F) and Layer (L) number</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
CL1/CL17	Turf and topsoil	modern	
CL2/CL15	Subsoil	post-medieval to modern	
CL3/CL16	Natural	natural	
CL14	Demolition debris	modern	
CL18	Demolition material	Roman	
CL19	Roman trample	Roman	

### Area C2

<i>Layer number</i>	<i>Layer also known as</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
CL1	CL4/CL7/CL10/CL17	Topsoil	modern	
CL2	CL5/CL8/CL11/CL15	Subsoil	modern	
CL3	CL6/CL9/CL12/CL16	Natural	natural	

<i>Layer number</i>	<i>Layer also known as</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
CL13		Crushed floor under CF34	Roman	Part of mausoleum
CL14		Rubble	modern	
CL20		Demolition material	medieval	Associated with CF107
CL21		Occupation layer	Roman	Part of circus
CL22		Accumulation layer	Roman	Associated with circus
CL23		VOID	VOID	
CL24		Demolition material	Roman	Associated with mausoleum
CL25		Tarmac	modern	
CL26		Hardcore	modern	
CL27		Dump layer	Roman	Mound over CF231/CF163

### Area E

<i>Feature (F) and Trench (T) number</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
EL1 All	Turf/topsoil	modern	
EL2 All	Subsoil	Roman	
EL3 T2	Clay floor	Roman	Part of Roman villa/farmstead
EL4 T2	Building demolition	Roman	Part of Roman villa/farmstead
EL5 T2	Plough Soil	Roman	
EL6 T2	Crushed asphalt/clinker	modern	

### Area J1 evaluation

<i>Layer number</i>	<i>Layer also known as</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
JL1 All		Turf/topsoil	modern	
JL2 All		Subsoil	post-medieval/modern	
JL3 T11		Demolition layer	modern	
JL4 T11	JL8	Subsoil	post-medieval/modern	
JL5 T25		Tarmac	modern	
JL6 T25		Hogging	modern	
JL7 T25		Demolition layer	modern	
JL9 All		Natural	natural	

### Area J1 North

<i>Layer Number</i>	<i>Layer Also Known As</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
JNL1		Modern disturbance	modern	
JNL2		Subsoil	post-medieval	
JNL3	JNL6, JNL9	Metalled surface	Roman	Roman road
JNL4		Turf/topsoil	Modern	
JNL5		Hardstanding	Modern	
JNL7		Base layer	Modern	Base layer for JNL5
JNL8		Natural	Natural	

### Area J1 South

<i>Layer number</i>	<i>Layer also known as</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
JSL1		Turf/topsoil	modern	
JSL2		Subsoil	modern	
JSL3		Hardcore/make-up layer	modern	
JSL4		Natural	natural	
JSL5		Sand	modern	

### Area J1 East

<i>Layer number</i>	<i>Layer also known as</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
JEL1		Topsoil	modern	
JEL2	JEL9, JEL10, JEL11, JEL15	Robbing/demolition debris	medieval	Over outer wall
JEL3		Stony layer	medieval	
JEL4		Robbing/demolition debris	medieval	Demolition debris within entrance
JEL5	JEL12	Subsoil	post-Roman	
JEL6		Natural	natural	
JEL7		Metalled surface	Roman	Surface within entrance
JEL8		Robbing/demolition debris	medieval	Over inner wall
JEL13		Rubble spread	Roman	Possible construction level for circus foundations
JEL14		Gravel spread/surface	Roman	Under JEF35
JEL15		Working surface	Roman	

### Area J1 West

<i>Layer number</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
JWL1	Turf/topsoil	modern	
JWL2	Subsoil	post-nedieval/modern	
JWL3	Natural	natural	

### Area O

<i>Layer Number</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
OL1	Turf/topsoil	modern	
OL2	Subsoil	post-Roman	
OL3	Natural	natural	

### Area Q

<i>Layer number</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
QL1	Topsoil	modern	
QL2	Subsoil	post-Roman	
QL3	Natural	natural	

## Area S1

<i>Layer number</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
SL1	Topsoil	modern	
SL2	Subsoil	post-medieval/modern	
SL3	Natural	natural	

## Time Team trenches

<i>Feature number</i>	<i>Trench number</i>	<i>Feature Type</i>	<i>Phase</i>	<i>Comments</i>
TTL1	All	Turf and topsoil	modern	
TTL2	All	Subsoil	modern	
TTL3	All	Natural	natural	
TTL4	T2 + T3	Hogging	modern	Seals TTL2 in T2 and T3
TTL5	T6	Robbing debris	medieval	Associated with medieval robbing of the circus
TTL6	T5	Robbing debris (mason's waste)	medieval	Associated with medieval robbing of the circus
TTL7	T5	Redeposited natural	Roman?	Sealed by TTL6
TTL8	T4	Concrete	modern	Modern path – seals TTL2 in T4
TTL9	T6	Demolition layer	medieval	Associated with medieval robbing of the circus

## Watching brief

<i>Layer number</i>	<i>Description</i>	<i>Phase</i>	<i>Comments</i>
WBL1	Topsoil	modern	
WBL2	Subsoil	post-medieval/modern	
WBL3	Natural	natural	
WBL4	Road make-up	modern	

## APPENDIX 2 Part A

### CATALOGUE OF SMALL FINDS

- The coins are listed first, into two sections: a hoard from Area JS, and then the general site finds by Area and Feature/Layer number.
- The other objects are listed by material and within material by Area and Feature/Layer number.
- A few items of different materials that were found in close association in graves are here listed under each material and cross-referenced.
- Where several objects from one grave form part of a larger object that would itself class as a small find, they are counted as one object for drawing purposes, but individual objects for conservation (*ie* box fittings).
- Coffin nails and nails from general pyre debris are counted as separate items.
- A small number of nails from burials were allocated a small find number on site but are stored with the bulk metalwork; they are consequently listed with the bulk metalwork in Appendix 2.
- A small number of objects other than nails were **not** allocated a small find number on site and are stored with the bulk metalwork; they are also listed in Appendix 2 and remain in their original storage boxes.

Coins

a) hoard, all silver

SF	Area	Find	Feature	Identification	Ref	No in PAS report to HM Coroner	Conserve	Photo
248	JS	11	F5, roadside ditch, Roman	Republican <i>denarius</i> : Q Curtius, obv head of Roma, rev Jupiter in quadriga	RRC 285/2	1	done	y
276				Republican ; Postumius Albinus, obv head of Hispana, rev togate figure between standard and <i>fascces</i>	RRC 372/2	2	done	y
281				Republican <i>denarius</i> : C Julius Caesar, obv priestly implements, rev elephant	RRC 443/1	3	done	y
286				Republican <i>denarius</i> : C Julius Caesar, obv head of Venus, rev Aeneas carrying Anchises	RRC 458/1	4	done	y
278				Republican <i>denarius</i> : M Antonius, obv galley, rev eagle and standards (legion uncertain)	RRC 544/?	5	done	y
296				Republican <i>denarius</i> : Octavian Caesar, obv bust of Victory, rev CAESAR DIVI F. Neptune with foot on globe	RIC 256	6	done	y
268				Nero, <i>denarius</i> , rev SALVS, Salus seated right	RIC 72	7	done	y
301				Galba, <i>denarius</i> , rev DIVA AVGVSTA, Livia standing left, holding patera and sceptre	RIC 186	8	done	y
285				Vespasian, <i>denarius</i> , rev COS ITER TR POT, Pax seated left holding branch and caduceus	RIC 10	9	done	y
269				Vespasian, <i>denarius</i> , rev COS VIII in field, eagle on cippius, head left	RIC 89/99	10	done	y
297				Titus(?), <i>denarius</i> , rev ANN(ONA) AVG, Amona seated left	RIC as 218	11	done	y
266				Domitian, <i>denarius</i> , IMP XIII COS III CENS P P P, Minerva on prow, right, with javelin and shield	RIC 108a	12	done	y
284				Domitian, <i>denarius</i> , rev [IMP] XIX COS XIII CENS P [P P], Minerva standing left	RIC 145?	13	done	y
260				Domitian, <i>denarius</i> , rev IMP XXII COS XVII CENS P P P, Minerva, right, with javelin and shield	RIC 186	14	done	y
277				Nerva, <i>denarius</i> , rev FORTVNA AGVST, Fortuna standing left, holding rudder and cornucopia	RIC 4	15	done	y
264				Nerva, <i>denarius</i> , rev FORTVNA AGVST, Fortuna standing left, holding rudder and cornucopia	RIC 28	16	done	y
265				Trajan, <i>denarius</i> , PONT MAX TR POT COS II, Victory seated left holding patera and palm	RIC 22	17	done	y
258				Trajan, <i>denarius</i> , PONT MAX TR POT COS II, Victory seated left holding patera and palm	RIC 12	18	done	y
273				Trajan, <i>denarius</i> , PM TR P COS III P P, Victory facing, wings spread, holding wreath and palm	RIC 58	19	done	y
267				Trajan, <i>denarius</i> , COS V P P S P Q R OPTIMO PRINC, Aequitas standing left holding scales and cornucopiae	RIC 118 variant	20	done	y
270				Trajan, <i>denarius</i> , COS V P P S P Q R OPTIMO PRINC / DAC CAP in exergue, Dacia seated left on pile of arms	RIC 96	21	done	y
298				Trajan, <i>denarius</i> , S P Q R OPTIMO PRINCIP, Aequitas standing left holding scales and cornucopiae	RIC 169	22	done	y
280				Trajan, <i>denarius</i> , COS V P P S P Q R OPTIMO PRINC, Roma seated left	RIC 116	23	done	y
274				Trajan, <i>denarius</i> , S P Q R OPTIMO PRINCIP, Aequitas standing left holding scales and cornucopiae	RIC 174	24	done	y
282				Trajan, <i>denarius</i> , COS V P P S P Q R OPTIMO PRINC, Roma seated left	RIC 121	25	done	y
283				Trajan, <i>denarius</i> , [C]O[S] V P P S P Q R OPTIMO PRINC, Felicitas standing left	RIC 116	26	done	y
252				Trajan, <i>denarius</i> , COS V P P S P Q R OPTIMO PRINC, seated female, probably Aequitas	RIC as 119	27	done	y
257				Trajan, <i>denarius</i> , COS V P P S P Q R OPTIMO PRINC, Aequitas standing left holding scales and cornucopiae	RIC 118 variant	28	done	y
253				Trajan, <i>denarius</i> , COS IV[?] P P [S P Q R OPTIMO PRINC], Victory standing left	RIC as 128 etc	29	done	y
272				Trajan, <i>denarius</i> , S P Q R OPTIMO PRINCIP, reclining woman	RIC 266	30	done	y
249				Trajan, <i>denarius</i> , S P Q R OPTIMO PRINCIP, standing female holding cornucopiae, possibly Felicitas	RIC ?271	31	done	y
300				Trajan, <i>denarius</i> , S P Q R OPTIMO PRINCIP / ARAB ADQ, Arabia holding branch, camel at feet	RIC 245	32	done	y
263				Trajan, <i>denarius</i> , PM TR P COS VI P P S P Q R, Genius standing facing with patera and corn-ears	RIC 347	33	done	y
254				Trajan, <i>denarius</i> , PARTHICO PM TR P COS VI P P S P Q R, Felicitas standing left	RIC 332	34	done	y
279				Hadrian, <i>denarius</i> , PM TR P COS II / CONCORD, Concordia seated left holding patera	RIC 396	35	done	y
299				Hadrian, <i>denarius</i> , PM TR P COS II / IVSTITIA, Justitia seated left holding patera and sceptre	RIC 42	36	done	y
251				Hadrian, <i>denarius</i> , PM TR P COS III, Aeternitas standing holding heads of sun and moon	RIC 81	37	done	y
256				Hadrian, <i>denarius</i> , PM TR P COS III, Roma seated left holding Victory and spear	RIC 78	38	done	y
259				Hadrian, <i>denarius</i> , PM TR P COS III, Roma seated left holding Victory and spear, shield behind	RIC 77	39	done	y
250				Hadrian, <i>denarius</i> , PM TR P COS III / LIB PVB, Libertas seated left	RIC 127b	40	done	y
255				Hadrian, <i>denarius</i> , PM TR P COS III, Fortuna standing left holding rudder and cornucopiae, leaning on column	RIC 86	41	done	y
271				Hadrian, <i>denarius</i> , PM TR P COS III / SALVS AVG in exergue, Salus seated left feeding snake rising from altar	RIC 137c	42	done	y
275				Hadrian, <i>denarius</i> , PM TR P COS III, Roma seated left holding Victory and spear	RIC 78	43	done	y

b) other coins

SF	Area	Find	Layer/ Feature	Context type	Context date	Identification	Conserve	Draw
<b>C1</b>								
2	C1	13	F6	demolished wall (part of circus)	Roman	coin, Tetricus II, 270-3; barbarous	y	-
1	C1	5	u/s	unstratified	-	silver coin, Honorius, 393-423	y	-
4	C1	37	u/s	unstratified	-	silver coin, Postumus, 259-268	y	-
25	C1	129	u/s	unstratified	-	halfpenny, modern	-	-
<b>C2</b>								
6	C2	43	F24	cremation	C 1st to C2nd/3rd	coin, Claudius II (Divus), 270	y	-
52	C2	206	F107	robbed wall (part of circus)	mid C3rd-C4th	coin, probably C2nd	y	-
53	C2	210				coin, C3rd century radiate	y	-
76	C2	277				silver coin, C3rd-C4th	y	-
91	C2	332	F143	ditch/pit?	early C2nd-C4th	coin, Claudius, 43-54	y	-
128	C2	404	F163	boxed cremation	late C3rd to C4th (prob C4th)	coin, ?silver, C3rd	y	?photo
127	C2	405				coin, C2nd	y	?photo
174	C2	653				coin, C2nd	y	?photo
134	C2	420	F166	cremation	late Roman	coin, Faustina II, <i>sestertius</i> , rev ?Venus, 146-61	done	photo
136	C2	422				coin, Faustina II, <i>sestertius</i> , rev Cybele, 146-61	done	photo
131	C2	417				a) coin, Claudius II, rev. Genius Exerci, 268-70	done	photo
						b) coin, Claudius II, rev Virtus Aug, 268-70	done	photo
132	C2	418				coin, Gallienus, rev Marti Pacifero, 260-8	done	photo

145	C2	457	F179	pit	Roman	coin, ?C3rd	y	-
173	C2	580	F206	cremation	C4th	2 coins	y	-
168	C2	573	F207	ring ditch with cremation within sx1	C4th	coin, C2nd	y	?photo
219	C2	588				coin	y	?photo
220	C2	589				coin	y	?photo
215	C2	622	F213	cremation	Roman	coin, very worn, scratches on reverse	y	?photo
214	C2	623				coin, C2nd-C3rd	y	?photo
166	C2	569	F224	inhumation (Grave 10)	late C3rd-C4th	coin, C2nd	y	?photo
164	C2	609				coin, C2nd	y	?photo
213	C2	712	F237	cremation	late C2nd-mid C3rd	coin, C3rd	y	?photo
210	C2	711	F249	inhumation (Grave 26)	C3rd	coin, C2nd	y	?photo
51	C2	184	L2	subsoil	modern	coin, C2nd	y	-
77	C2	278	u/s	unstratified	mid C3rd to C4th	half coin, 364 - 78	y	-
212	C2	668	u/s	unstratified	-	coin	y	-
<b>Area J</b>								
504	J	J	u/s md	unstratified	-	jettons x 2	y	-
505	J	J	u/s md	unstratified	-	2 silver coins	y	-
506	J	J	u/s md	unstratified	-	coin	y	-
<b>Area JE</b>								
421	JE	142	F5	robber trench (of outer circus wall)	medieval	coin, C3rd radiate	y	-
456	JE	23	F16	evaluation trench	2002	penny, modern	-	-
<b>Area JN</b>								
321	JN	283	F2	quarry pit	Roman	coin, silver, C1st-C2nd	y	-
542	JN	1458	F5	pyre/bustum	Roman	coin	y	?photo
314	JN	572	F10	ditch	Roman	silver coin	y	-
305	JN	86	F47	cremation	Roman	coin	y	?photo
337	JN	1118	F96	inhumation	Roman	coin, pierced, C1st-C2nd	y	?photo
528	JN	215	F111	inhumation	Roman	coin	y	?photo
334	JN	215				coin, ?Hadrian, 117-38	y	?photo
523	JN	1367	F125	urned cremation	Roman	coin, Trajan, 98-117	y	?photo
361	JN	1006	F207	service trench	modern	coin	y	-
322	JN	604	F257	quarry pit	Roman	coin, 330-5	y	-
328	JN	590	F270	inhumation	Roman	coin, 340-60	y	?photo
320	JN	617	F285	inhumation	Roman	coin + iron	y	?photo
352	JN	977				coin	y	?photo
318	JN	622	F287	burial pit containing pyre debris	Roman	coin	y	-
262	JN	515	F351	inhumation	Roman	coin, Germanicus	done	photo
344	JN	900	F400	inhumation	Roman	coin, Constantinopolis, 330-41	y	?photo
342	JN	1119				coin	y	?photo
325	JN	985	F419	quarry pit	Roman	coin, C2nd	y	-
317	JN	986	F420	quarry pit	Roman	coin, ?Hadrian	y	-
350	JN	1004	F427	inhumation	Roman	coin, ?1st	y	?photo
343	JN	1122	F434	inhumation	Roman	coin, C2nd	y	?photo
348	JN	1013	F452	inhumation	Roman	coin, Vespasian, 69-79	y	?photo
576	JN	1093	F501	road ditch	Roman	coin, C2nd	y	-
340	JN	27	L2	subsoil	modern	coin	y	-
339	JN	739				coin	y	-
336	JN	1117	u/s	unstratified	-	coin, C3rd-C4th	y	-
<b>Area JS</b>								
398	JS	1	F2	ditch	Roman	coin	y	-
400	JS	56	F5	ditch	Roman	coin	y	-
399	JS	60				coin	y	-
397	JS	69				coin	y	-
<b>Area Q</b>								
47	Q T6	3	unstratified	-	-	coin, p-med/modern	-	-
<b>Other</b>								
		u/s	unstratified	-	-	modern coins x 19: penny, 1913 penny, 1920 penny, 1883 penny, 1914 penny, 1921 halfpenny, 1916 halfpenny, 1956 halfpenny, 1920 halfpenny, 1948 halfpenny, 1942 halfpenny, 1950 halfpenny, 1915 two shillings, 1943 ten pence, 1977 10 pence, 1908 threepenny bit, 1966 sixpence, 1958	-	-

Silver

SF	Area	Find	Layer/ Feature	Context type	Period	Identification	Conserve	Draw
133	C2	419	F166	cremation	late Roman	finger-ring set with intaglio with animal design	done	y
135	C2	421				small ring with frit melon bead (also listed under Glass/Frit)	done	y
137	C2	425				lunula pendant	done	y

## Copper alloy and composite metal

SF	Area	Find	Layer/ Feature	Context type	Context date	Identification	Conserve	Draw
<b>Area C1</b>								
11	C1	117	F47	pit/ditch	early C2nd-early C3rd	nail	y	-
29	C1	158	L18	demolition material	late C2nd-late C3rd/4th	stud	y	y
28	C1	174	L19	Roman trample	late C2nd-late C3rd/4th	brooch with inlay, C2nd	y	y
36	C1	183				brooch, Colchester B derivative, AD 50-70	y	y
26	C1	130	u/s	unstratified	-	boss	y	?
27	C1	172	u/s	unstratified	-	small dress pin, medieval/post-medieval	-	-
<b>Area C2</b>								
80	C2	297	F126	burial pit containing pyre debris	later C3rd-C4th	fragments	-	-
90	C2	321	F143	ditch/pit?	early C2nd-C4th century	hairpin	y	y
126 a	C2	406	F163	boxed cremation	Late C3rd-4th (probably 4th)	sheet ?lock plate fragment	y	y x 2 (lock-plate + box reconstruction)
126 b						sheet ?lock plate fragment	y	
126 c						sheet ?lock plate fragment	y	
126 d						sheet ?lock plate fragment	y	
126 e						sheet ?lock plate fragment	y	
126 f						f lock plate with composite studs for attachment + iron fragments	y	
126 g	C2	654				sheet ?lock plate fragment	y	
176	C2	655				stud	y	
152	C2	520	F164	cremation	late C3rd-C4th (probably C4th)	stud head + fragments	y	
153	C2	521				small armlet	y	y
159	C2	564	F165	urned cremation	C3rd	tweezers	y	y
160	C2	565				tweezers	y	y
146	C2	461	F173	cremation	late C3rd-C4th (probably C4th)	iron sheet with copper alloy sheet at right angles, box fitting	y	y
147	C2	464				nail with copper alloy coating on head + wood, box fitting	y	y
157	C2	511	F178	pit	C2nd-mid/late C3rd	2 shafts, ?pins	y	?
158	C2	510	F181	ditch	late C2nd to mid/late C3rd/4th	long handled toilet spoon	y	y
150	C2	494	F192	pit	mid C3rd-C4th	hairpin	y	y
162	C2	542	F193	pit	post-medieval	fitting, washer	-	-
225	C2	662	F231	ring ditch with cremation within sxl	C4th	furniture nail	y	-
56	C2	189	L2	subsoil	modern	?silver ?stud	y	?
57	C2	190	u/s	unstratified	mid C3rd-C4th	ferule, modern	-	-
58	C2	211	u/s	unstratified	-	fragment with scalloped edge	-	-
<b>Area E</b>								
2	E	9	F13	enclosure ditch	Roman	hooked copper alloy strip	y	-
<b>Area J</b>								
245	J	29	F46 T17	ditch	modern	military fitting	-	-
246	J	21	u/s T16	unstratified	-	button ?modern	-	-
503	J	J	u/s md	unstratified	-	sight for an artillery gun, modern	-	-
510	J	J	u/s md	unstratified	-	5 buttons, one with ?military decoration, modern	-	-
511	J	J	u/s md	unstratified	-	buttons x 3 - modern	-	-
512	J	J	u/s md	unstratified	-	fitting	-	-
513	J	J	u/s md	unstratified	-	2 fittings decorated with terrier dogs, military, modern	-	-
514	J	J	u/s md	unstratified	-	fragments	-	-
516	J	J	u/s md	unstratified	-	3 fittings	-	-
515	J	J	u/s md	unstratified	-	fitting fragment	-	-
517	J	J	u/s md	unstratified	-	fitting	-	-
518	J	J	u/s md	unstratified	-	buckle, modern	-	-
519	J	J	u/s md	unstratified	-	buckle + strap guide	-	-
520	J	J	u/s md	unstratified	-	fragment of rumbler bell, post-medieval	-	-
521	J	J	u/s md	unstratified	-	vessel foot; ?vessel handle; medieval	y	y
<b>Area JE</b>								
261	JE	60	F5 (F47)	robber trench (of outer circus wall)	medieval	harness fitting	done	y
407	JE	295	F5	robber trench (of outer circus wall)	medieval	stud	-	-
417	JE	313				ribbed shaft	y	-
410	JE	346				sheet fragment	y	-
425	JE	227	L1	topsoil	modern	eyelet binding, ?from tent	-	-
409	JE	286	L2	robbing debris	medieval	auxiliary military fitting, C2nd-C3rd	y	y
419	JE	61	L5	subsoil	modern	tip of bullet, modern	-	-
413	JE	126	u/s	-	-	fitting modern	-	-
<b>Area JN</b>								
345	JN	147	F10	ditch	Roman	bell fragment, ?white-metal-plated, post-medieval	y	?
346	JN	500				burnt debris	y	-
316	JN	503				escutcheon, post-medieval	y	-
315	JN	505				curved fragment	y	-
313	JN	506				strip fragment	y	-
302	JN	48	F47	cremation	Roman	ring handle with fragment of iron split-spike loop for attachment	y	y
303	JN	49				ring handle with fragment of iron split-spike loop	y	y
304	JN	72				ring handle with iron split-spike loop	y	y
370d	JN	1125	F61	pyre/bustum	Roman	ring handle with iron split-spike loop + copper-alloy stud	y	y x 3 (box, mirror and reconstruction)
370c	JN					mirror	y	
370m	JN					ring handle and 2 iron split-spike loops + 2 copper-alloy studs	y	
370p	JN					ring handle with iron split-spike loop + copper-alloy stud	y + X-ray	
370q	JN					ring handle with iron split-spike loop + copper-alloy stud	y	
370z	JN					ring handle with iron split-spike loop + copper-alloy stud	y	
370aa	JN					lock plate, studs, wood, leather and lock bolt	y, analyse leather	
370ab	JN					hasp	y	
370ac	JN					ring handle with iron split-spike loop + copper-alloy stud	y	
370ae	JN					ring handle with 2 iron split-spike loops + 2 copper-alloy studs;	y	
370ad	JN					ring handle with 1 iron split-spike loop + copper-alloy stud	y	
370ah	JN					copper alloy split-spike loop, from mirror case?	y	
370	JN					mirror fragment	y	
						ring handle with iron split-spike loop + copper alloy stud; see note on back of label	y	

324	JN	170	F86	inhumation	Roman	finger-ring/earring, part of loop missing	y	y
312	JN	278	F103	cremation	Roman	burnt debris	y	-
541	JN	1457	F118	burial pit containing pyre debris	Roman	shank fragment	y	-
326	JN	302	F137	inhumation	Roman	shank	y	-
327	JN	359	F149	inhumation	Roman	ring fragments	y	?
319	JN	355	F177	burial pit containing pyre debris	Roman	burnt debris	y	-
330	JN	385	F205/ F216	burial, ?cremation/inhumation	Roman	lock plate	y	y
333	JN	514	F241	inhumation	Roman	decorated mirror fragment + 2 small fragments	y	y
306	JN	548	F252	burial pit containing pyre debris	Roman	stud	y	-
307	JN	1111				shank fragments	y	-
308	JN	1112				small fragments	y	-
309	JN	1113				stud	y	y
310	JN	1114				stud	y	y
353	JN	1123				stud fragments	y	-
351	JN	978	F285	inhumation	Roman	composite 2 objects, ?silver foil discs held together by lead tin solder	y	-
355	JN	782	F346	inhumation	Roman	armlet/anklet of twisted wire	y	y
362	JN	983	F357	grave	Roman	small fragments	y	-
349	JN	809	F361	inhumation	Roman	silver foil	y	y
354	JN	814	F366	inhumation	Roman	?part of lamp	y	y
347	JN	899	F395	inhumation	Roman	brooch head fragment	y	y
295	JN	976	F439	inhumation	Roman	cosmetic set, pestle and mortar	y	y
385	JN	1327	F500	inhumation	Roman	ring	y	y
341	JN	740	L2	subsoil	modern	stud	y	y
<b>Area JS</b>								
396	JS	15	F1	ditch	Roman	stud	y	y
464	JS	42	F2	ditch	Roman	composite shears, copper-alloy loop and iron blades, most of which are missing	y	y
463	JS	43				iron tumbler lock key with copper-alloy handle	y	y
395	JS	12	F5	ditch	Roman	brooch, Bagenden/Aucissa	y	y
401	JS	27				?stud	y	?
289	JS	34	F9	amphora cremation	Roman	candelabrum reflector	done	y
287	JS	54				candelabrum reservoir	done	done
288	JS	55				candelabrum stand	done	done
<b>Area Q</b>								
236	Q	27	F29	ditch	Roman	ring, broken, ?modern	-	-
43	Q	2	T5	unstratified	-	2 buttons, modern	-	-
48	Q	7		unstratified	-	3 buttons, modern	-	-
49	Q	8	T7	unstratified	-	ring, p-med/modern	-	-
46	Q	9	T7	unstratified	-	sheet fragment, modern	-	-
<b>Watching brief</b>								
583	WB	21	F25	pit	prehistoric	?ring fragment	y	-

### Lead and lead-alloy

SF	Area	Find	Layer/ Feature	Context type	Context date	Identification	Conserve	Draw
<b>Area C1</b>								
5	C1	38	u/s	unstratified	-	?offcut	-	-
9	C1	112	u/s	unstratified	-	?weight	-	-
22	C1	131	u/s	unstratified	-	weight	y	y
10	C1	1113	u/s	unstratified	-	?cloth seal	y	?
<b>Area C2</b>								
7	C2	105	F43	inhumation	late C2nd-mid C3rd	boss, bead and reel moulding	y	?
161	C2	536	F192	pit	mid C3rd-C4th	plug	y	y
79	C2	292	u/s	unstratified	-	token	y	y
<b>Area J</b>								
508	J	J	u/s md	unstratified	-	shot x 2	-	-
509	J	J	u/s md	unstratified	-	weight/spindlewhorl	y	-
507	J	J	u/s md	unstratified	-	refrozen drip	-	-
<b>Area JE</b>								
420	JE	53	F5	robber trench (of outer circus wall)	medieval	disc fragment	y	-
408	JE	296				dribble	-	-
415	JE	220				fragment	-	-
454	JE	68	u/s	unstratified	-	shot	-	-
418	JE	213	u/s	unstratified	-	sheet fragment	-	-
<b>Area JN</b>								
335	JN	1116	F56	inhumation	Roman	small fragments	-	-
<b>Area JS</b>								
402	JS	JS28	u/s	unstratified	-	shot	-	-
<b>Area Q</b>								
42	Q	Q1	u/s md	unstratified	-	strip fragment, post-med/modern	-	-
50	Q	Q4	u/s md	unstratified	-	weight, p-med/modern	-	-
44	Q	Q5	u/s md	unstratified	-	plug and strip fragments	-	-
45	Q	Q6	u/s md	unstratified	-	shot	-	-
<b>Watching Brief</b>								
567	WB	1	F1	inhumation	Roman	lead coffin liner	-	y

*Ironwork, other than bulk nails*

SF	Area	Find	Layer/ Feature	Context type	Context date	Identification	X-ray	Draw
<b>Area C1</b>								
24	C1	142	F6	demolished wall (part of circus)	Roman	sheet fragments	y	-
23	C1	137	F66	pit	post-medieval	small nail shank	y	-
30	C1	177	F78	compacted gravel surface	Roman	?bolt	y	-
35	C1	179	F95	pit	late/post-Roman	slightly curved fragment	y	-
21	C1	128	u/s	unstratified	-	long shank	y	-
3	C1	36	u/s	unstratified	-	brooch spring	y	-
<b>Area C2</b>								
59	C2	229	F115	burial pit containing pyre debris	Roman	nail	y	-
123	C2	274	F125	ditch	modern	object	y	-
154	C2	?	F159	metalled surface (part of circus)	modern	sheet fragment	y	-
230	C2	423	F161	pit	modern	lump	y	-
574	C2	407	F163	boxed cremation	late C3rd-C4th (probably C4th)	nail	y	y x 3 conserved fragments, plus a reconstruction
130	C2	408				?strap from box with transverse wood grain visible; lend recent break	conserve	
129	C2	409				box fitting + wood	conserve	
177	C2	633				box fitting	y	
198a	C2	634				box fitting fragment a	y	
199b	C2					box fitting fragment b	y	
200c	C2					box fitting fragment c	y	
201d	C2					stud box fitting fragment d	y	
202e	C2					box fitting fragment e	y	
203f	C2					box fitting fragment f	y	
204g	C2					box fitting fragment g	y	
205h	C2					nail box fitting fragment h	y	
206i	C2					nail box fitting fragment i	y	
575	C2	641				fragment	y	
178 a	C2	656				box fitting fragment a	y	
179 b	C2					box fitting fragment b	y	
180 c	C2					box fitting fragment c	y	
181 d	C2					box fitting fragment d	y	
182 e	C2					box fitting fragment e	y	
183 f	C2					box fitting fragment f	y	
184 g	C2					box fitting fragment g	y	
185 h	C2					box fitting fragment h	y	
186 i	C2					box fitting fragment i	y	
187 j	C2					box fitting fragment j	y	
188 k	C2					box fitting fragments k	y	
189 l	C2					nail box fitting fragment l	y	
190 m	C2					box fitting fragment m	y	
191 n	C2					shank box fitting fragment n	y	
192 o	C2					box fitting fragment o	y	
193 p	C2					box fitting fragment p	y	
194 q	C2					box fitting fragment q	y	
195 r	C2					box fitting fragments r	y	
196 s	C2					stud, box fitting fragment s	y	
197 t	C2					box fitting fragment t	y	
126	C2	780				box fitting fragments	y	
148	C2	453	F173	cremation	late C3rd-C4th (probably C4th)	sheet fragment	y	-
156	C2	497	F178	pit	2nd-mid/late C3rd	sheet object +- nail shanks	y	-
149	C2	492	F187	ditch	C1st -C3rd	lump	y	-
209	C2	C659	F235	inhumation (Grave 3)	early C2nd-mid C3rd	fragment	y	-
211	C2	674	F242	cremation	Roman	strip fragment	y	-
124	C2	267	L20	demolition material	mid/late C3rd-C4th	strip fragment	y	-
<b>Area J</b>								
244	J	J18	F34 T	ditch	Roman	object	y	-
<b>Area JE</b>								

563	JE	54	F5	robber trench (for outer wall of the circus)	medieval	hobnail stylus	-	-
457	JE	77				fragment	y	y
416	JE	116				fragment	-	-
423	JE	120				nail	y	-
556	JE	182				sheet fragment	-	-
424	JE	183				hobnails x 38	y	-
453	JE	185				curved strip	-	-
444	JE	187				hobnail	y	?
452	JE	188				sheet fragment	-	-
427	JE	193				hobnail	y	-
449	JE	200				hobnail	-	-
451	JE	204				fragments	-	-
438	JE	205				curved sheet	y	-
442	JE	216				strip fragment	y	-
437	JE	221				boss	y	-
414	JE	229				hobnail	-	-
554	JE	231				fragment	y	-
411	JE	232				hobnails x 2	-	-
448	JE	235				nail head	-	-
412	JE	252				fitting	-	-
428	JE	272				nail head	-	-
429	JE	303				?nail head	y	-
430	JE	306				object	y	?
433	JE	319				chain	y	-
426	JE	322				strip fragment	y	-
434	JE	326				tapering strip + lump	y	-
443	JE	354				hobnails x 2	-	-
560	JE	358				hobnail	-	-
446	JE	370				tin, modern	-	-
555	JE	199	F11	ditch	modern	object	-	-
441	JE	25	F13	robber trench (of outer circus wall)	medieval	curved strip, modern	y	?
440	JE	153	F16	evaluation trench	2002	fitting	-	-
552	JE	225	L1	topsoil	modern	handle with screw thread	-	-
553	JE	225				strip fragment	-	-
435	JE	315				tanged chisel	-	-
439	JE	107	L2	robbing debris	medieval	hobnail	y	y
450	JE	226				hobnails x 3	-	-
557	JE	275				hobnails x 3	-	-
558	JE	279				hobnails x 10	-	-
445	JE	284				fragment	-	-
432	JE	285				hobnail	-	-
447	JE	290				fragment	-	-
561	JE	376				hobnail	-	-
431	JE	124	L5	subsoil	modern	fragment	-	-
436	JE	333				fragment	-	-
562	JE	375	L12	make-up layer	undated	hobnail	-	-
559	JE	389	L16	surface	Roman	hobnail	-	-
Area JN								
475	JN	380	F10	ditch	Roman	not seen	y	-
476	JN	381				animal jaw bone with iron objects	y	?
474	JN	409				?punch	y	?
359	JN	571				sheet fragment	y	-
370 a	JN	1125	F61	pyre/bustum	Roman	nail shank and object a	y	-
370 e	JN					nail shank e	y	-
370 f	JN					nail shank f	y	-
370 h	JN					nail shank h	y	-
370 i	JN					nail shank fragment i	y	-
370 j	JN					nail shank fragment j	y	-
370 k	JN					nail shank fragment k	y	-
370 l	JN					nail shank fragment l	y	-
370 r	JN					nail shank fragment r	y	-
370 s	JN					composite stud fragments s	conserve	y
370 t	JN					?nail shank fragment t	y	-
370 u	JN					nail shank fragment u	y	-
370 v	JN					strip fragment v	y	-
370 w	JN					nail shank fragment w	y	-
370 x	JN					nail shank fragment x	y	-
370 y	JN					nail y	y	-
370 B1	JN					nail B1	y	-
370 B2	JN					strip fragment, ?from lock B2	y	-
370 B3	JN					nail B3	y	-
370 ag	JN					nail ag	y	-
370 af	JN					nail fragment af	y	-
370 ai	JN					L-shaped fitting, ?part of lock	y	y
370 aj	JN					nail aj	y	-
370 ak	JN					nail shank fragment ak	y	-
370 al	JN					nail shank fragment al	y	-
370 an	JN					nail shank fragment an	y	-
370 ao	JN					?nail or part of lock ao	y	?
370 ap	JN					nail ap	y	-
370 aq	JN					nail aq	y	-
370 ar	JN					nail shank fragment ar	y	-
370 as	JN					nail as	y	-
370 at	JN					?nail at	y	-
370 au	JN					nail au	y	-
370 av	JN					?nail av	y	-
370 aw	JN					amorphous lump aw	y	-
370 bb	JN					nail shank fragment bb	y	-
370 bc	JN					amorphous lump bc	y	-
370 bd	JN					nail bd	y	-
370 be	JN					tiny fragments be	y	-
370 bf	JN					?nail bf	y	-
370 bh	JN					nail/stud bh	y	-
370	JN					nail shank fragment	y	-
370	JN					nail shank fragment	y	-
370	JN					amorphous lump	y	-
356	JN	231	F103	cremation	Roman	sheet fragment	y	?
311	JN	256				sheet fragment	y	?
494	JN	1318				sheet fragment + nail	y	-
365	JN	1124	F114	burial pit containing pyre debris	Roman	burnt debris	y	-
524	JN	1368	F125	urned cremation	Roman	tool + fragments	y	-
501	JN	1315	F145	urned cremation	Roman	sheet fragment	y	-
332 a	JN	615	F205	cremation	Roman	nail a	y	-
332 b	JN					nail shank fragment b	y	-
332 d	JN					nail d	y	-
332 e	JN					nail e	y	-
332 c	JN					?lock fitting c	y	y

332 f	JN								box fitting fragment f	y	?
332 g	JN								curved object g	y	?
331	JN	412	F216 (F205)	burial, ?cremation/inhumation	Roman	Roman			sheet fragments	y	?
357	JN	384	F222	cremation	Roman	Roman			collar?	y	?
363	JN	524	F248	pyre/bustum	Roman	Roman			sheet	y	?
367	JN	525							curved object	y	-
366	JN	526							object in 2 pieces	y	?
364	JN	527							object	y	?
502	JN	1326	F252	burial pit containing pyre debris	Roman	Roman			brooch fragment	y	?
358	JN	781	F346	inhumation	Roman	Roman			?knife	y	?
294	JN	980	F357	grave	Roman	Roman			ring with carmelian intaglio of figure with goat	done	y
368	JN	1075	F366	inhumation	Roman	Roman			sheet fragment with studs	y	?
577	JN	885	F373	burial pit containing pyre debris	Roman	Roman			nail	y	-
360	JN	1007	F453	inhumation	Roman	Roman			brooch	y, clean	y
369	JN	1235	F487	inhumation	Roman	Roman			tripod candlestick	y, clean	y
338	JN	278	L2	subsoil	modern	modern			strip fragment	y	-
323	JN	333	u/s	unstratified	-	-			shank	-	-
<b>Area JS</b>											
564	JS	JS44	F2	ditch	Roman	Roman			tang	y	-
545	JS	JS52	F7	ditch	medieval	medieval			strip fragment	-	-
565	JS	JS30	F11	pit	post-medieval	post-medieval			fragment	-	-
<b>Area Q</b>											
-	Q	Q17	F44	pit	post-medieval	post-medieval			nail shank fragment	-	-
235	Q	Q10	u/s T8	-	-	-			square-headed stud, post-medieval/modern	-	-

### Wood

SF	Area	Find	Layer/Feature	Context type	Context date	Identification	Conserve	Draw
570	C2	631	F163	boxed cremation	late C3rd-C4th (probably C4th)	wood/iron fragments, see also SF 569	-	-
572	C2	632				fragments	ID wood	-
573	C2	784				fragments	ID wood	-
569	C2	785				fragments	ID wood	-
						wood/iron fragments, see also SF 570	ID wood	-
571	C2	466	F173	cremation	late C3rd-C4th (probably C4th)	fragments	ID wood	-

### Bone

SF	Area	Find	Layer/Feature	Context type	Context date	Identification	Conserve	Draw
<b>Area C2</b>								
54	C2	225	F110	pit	Roman – early 2nd to early 3rd century	pin fragment, Type 1	-	-
140	C2	429	F166	cremation	late Roman	finger-ring fragments (ivory?)	done	y
172	C2	574	F206	cremation	C4th century	ivory die, stained green by contact with copper alloy	y	y
171	C2	579				ivory die in fragments, stained green by contact with copper alloy	y	y
163	C2	608	F263	cremation	late Roman	bone pin fragments, Type 1	-	-
89	C2	320	L21	occupation layer	mid C3rd-C4th	shaft fragment	-	-
165	C2	593	L27	dump layer	mid C3rd-C4th	2 shaft fragments	-	-
<b>Area E</b>								
1	E	312	F13	enclosure ditch	Roman	shaft fragment	-	-
<b>Area JN</b>								
391	JN	259	F103	cremation	Roman	hairpin, tip missing; head is a female bust with traces of gold on hair and shoulder	done	y
390	JN	260				burnt shaft fragments, ?pin	-	-
543	JN	1459				bone/ivory cylinder (?head) with mouldings	-	-
<b>Area JS</b>								
291	JS	35	F9	amphora cremation	Roman	tapering cylinder bead with ?iron shaft passing through it	y	y
293	JS	33				semicircular ivory bead, stained with copper alloy	y	y

Glass/Frit

SF	Area	Find	Layer/ Feature	Context type	Context date	Identification	Conserve	Draw
<b>Area C2</b>								
538	C2	802	F164	cremation	late C3rd-C4th (probably C4th)	32 small square cylinder beads	-	y (1)
135	C2	421	F166	cremation	late Roman	frit melon bead + small silver ring (also listed under Silver)	done	y
138	C2	426				blue bead with white zigzag trail, + small cu-alloy ring & iron fragments (also listed under Copper alloy)	done	y
139	C2	427				frit melon bead	done	y
170	C2	581	F206	cremation	C4th	oval ?dark green glass ?brooch setting	-	y
78	C2	286	L20	demolition material	mid/late C3rd-C4th	glass counter, turquoise opaque glass	-	y
<b>Area JN</b>								
386	JN	668	F4	pyre/busyrum	Roman	tiny fragment of opaque blue glass cylinder bead	-	-
387	JN	507	F10	ditch	Roman	?opaque blue glass conical bead	-	-
329	JN	JN564	F147	urned cremation	Roman	?bead, burnt	y	y
388	JN	475	F241/F351	inhumation	Roman	annular bead of translucent blue glass with white zigzag trail	-	y x 3
389a	JN	476				hexagonal section bead of turquoise opaque glass	-	(y, see above)
389b	JN					opaque glass circular section cylinder bead	-	(y, see above)
389c	JN					opaque glass circular section cylinder bead	-	
389d	JN					hexagonal section bead of turquoise opaque glass	-	
389e	JN					opaque glass circular section cylinder bead	-	
389f	JN					opaque glass circular section cylinder bead	-	
389g	JN					opaque glass circular section cylinder bead	-	
389h	JN					opaque glass circular section cylinder bead, in fragments	-	
389i	JN					opaque glass circular section cylinder bead	-	
389j	JN					opaque glass circular section cylinder bead	-	
389k	JN					opaque glass circular section cylinder bead	-	
389l	JN					opaque glass circular section cylinder bead	-	
<b>Area JS</b>								
292	JS	36	F9	amphora cremation	Roman	turquoise frit melon bead	-	y
290	JS	37				turquoise frit melon bead	-	y

Stone, Jet, Amber

SF	Area	Find	Layer/ Feature	Context type	Context date	Identification	Conserve	Draw
<b>Area C1</b>								
31	C1	165	L18	demolition material	late C2nd-late C3rd/4th	lava quern fragments	-	-
<b>Area C2</b>								
140	C2	428	F166	cremation	late Roman	bear figurine, late Roman	done	y
144	C2	462	F175	wall foundation (part of mausoleum)	C2nd	marble veneer strip	-	y
229	C2	470	F178	pit	C2nd-mid/late C3rd	comminuted lava quern fragments	-	-
151	C2	471				2 fragments of lava quern & some comminuted fragments	-	-
228	C2	516	F201 (F181)	ditch	Late C2nd to mid-late C3rd/early C4th	lava quern fragments	-	-
169	C2	582	F206	cremation	C4th	fossil, ?curated	-	y
167	C2	575	F206			2 amber beads	-	y
231	C2	604	F224/F228	grave/pit	late C3rd-C4th century/C2nd-mid/late C3rd	very weathered Purbeck marble fragment, ?vener	-	-
234	C2	675	F239	cremation	late C3rd-C4th (probably C4th)	lava quern fragment	-	-
<b>Area E</b>								
5	E	40	F10	enclosure ditch	Roman	weathered Purbeck marble inscription fragment	-	y
-	E	8	F13	enclosure ditch	Roman	tufa fragment, unworked	-	-
4	E	46	F22	enclosure ditch	Roman	sandstone hone fragment	-	-
6	E	38	F24	field boundary ditch	Roman	comminuted lava quern fragments	-	-
<b>Area JE</b>								
462	JE	45	F5	robber trench (of outer circus wall)	medieval	stone strip, schist/marble; one surface painted purple	-	-
460	JE	241				lava quern fragment	-	-
459	JE	292				comminuted lava quern fragments	-	-
458	JE	368				lava quern fragment	-	-
461	JE	327	F61	trench	modern	stone disc, ?counter	-	-
455	JE	330				stone marble; post-medieval	-	-
<b>Area JN</b>								
550	JN	216	F110	pit	post-medieval/ modern	limestone fragment with fine grooving on one surface, ?modern	-	-
394	JN	561	F207	service trench	modern	limestone fragment, one worked surface	-	-
581	JN	1008	F453	inhumation burial (grave)	Roman	Puddingstone quern fragment	-	-
473	JN	1070	F502	pit	Roman	Purbeck marble inscription fragment	-	y
393	JN	24	L2	subsoil	modern	mudstone, ?hone fragment	-	-
<b>Area JS</b>								
405	JS	25	F5	ditch	Roman	?millstone grit quern fragment; reused, straight edges	-	-
406	JS	84				weathered sandstone fragment, ?architectural	-	-
403	JS	53	F7	ditch	medieval	lava ?quern fragment with odd grooves on ?grinding surface, ?reused	-	-
<b>Area Q</b>								
237	Q	34	F29	ditch	Roman	Puddingstone quernstone fragment	-	-
579	Q	71				tile fragment with rounded corner	-	-
578	Q	77	F118	tree throw or grubbing-out pit	natural	water-worn pebble, ?cobble	-	-
<b>Watching brief</b>								
582	WB	17	F19	pit	medieval/post-medieval	lava quern fragment	-	-

Ceramic

SF	Area	Find	Layer/ Feature	Context type	Context date	Identification	Conserve/ Analyse	Draw
Area JN								
580	JN	499	F10	ditch	Roman	picture lamp, wall/base fragment	-	-
374	JN	431	F61	pyre/bustum	Roman	7 sherds from factory lamp, discus, wall and base; see SF 373	-	y
373	JN	1127				3 fragments of factory lamp; part of SF 374; discus and nozzle with burnt debris	analysis	
372	JN	479				miniature factory lamp	analysis	y
371	JN	1126				miniature factory lamp with charred residue	analysis	y
375	JN	195		pit	Roman	factory lamp; discus, nozzle and handle fragment	-	y
384	JN	258	F103	cremation	Roman	?factory lamp, comminuted	-	-
522	JN	1366	F125	urned cremation	Roman	factory lamp, ?theatrical mask in centre; residue	analysis	y
392	JN	310				ceramic sherd, ?counter (?partly rounded)	-	-
568	JN	1082		pyre/bustum or service trench	Roman/modern	?open lamp, wall/base fragment	-	-
377	JN	663	F203/F206	pyre/bustum or service trench	Roman/modern	miniature lamp, complete	-	y
383	JN	629	F226	cremation	Roman	picture lamp discus fragment in 2 pieces	-	-
381	JN	549	F252	burial pit containing pyre debris	Roman	nozzle from SF 378 with burnt residue	analysis	y
378	JN	580				picture lamp in fragments, scene of defeated gladiator, ?Central Gaulish	-	
379	JN	665				factory lamp fragments	analysis	y
380	JN	666				picture lamp; ?theatrical mask on discus; burnt residue	analysis	y
382	JN	579				double spouted factory lamp in fragments	analysis	y
376	JN	704	F323	urned cremation	Roman	complete factory lamp	analysis	y
Area JS								
404	JS	32	F10	pit	Roman	pipeclay figurine, ?priest; post-medieval	-	y
Watching brief								
566	WB	12	F2	robber trench (of circus wall)	medieval	grey ware pottery counter	-	-
584	WB	20	F25	pit	prehistoric	a) small fragments of 1 or more loomweights b) fragment of a cylinder with small central perforation	-	-
							-	y

## **APPENDIX 2 Part B**

### **CATALOGUE OF BULK FINDS**

- The groups of finds are listed by material and within material by Area and Feature/Layer number.
- The ironwork includes those nails that were not allocated a small find number on site, as well as a small number that were given one but were stored with the bulk ironwork.
- The ironwork also includes a small number of objects not recognised as not being nails on site and consequently stored with them.
- Where more than one bag had the same find number, each is given a separate entry.
- The majority of the ironwork is in very poor condition and heavily encrusted with a mix of corrosion products and sand grains. Identifications are therefore tentative, and in general those given on site have been used here. A large proportion of identifications will inevitably have to be refined, and some completely changed, after the ironwork selected for X-radiography has been re-examined.

*Ironwork*

SF	Area	Find	Layer/ Feature	Context type	Period	Identification, N=nail(s) H=hobnail(s)	X-ray	Draw
<b>Area C1</b>								
-	C1	3	CF2 T4	pit	Roman	N	-	-
-	C1	33	CF19 T4	pit	C1st-late C3rd	N	-	-
-	C1	120	CF50 T6	spread of ragstone	later C2nd-early C4th	N	-	-
-	C1	124	CF51 T6	ditch	post-medieval	N	-	-
-	C1	141	F6 sxl	demolished wall (part of circus)	Roman wall with medieval robbing	N	y	-
-	C1	138	F67	pit	Roman	N	-	-
-	C1	175	F78	compacted gravel surface	Roman	N	-	-
-	C1	181	F91	compacted gravel surface	Roman	N	-	-
-	C1	179	F95	pit	late/post-Roman	N	-	-
-	C1	180	F98	pit	Roman?	N	-	-
-	C1	148	L18	demolition material	late C2nd-late C3rd/C4th	N	-	-
-	C1	156	L18	demolition material	late C2nd-late C3rd/C4th	N	-	-
-	C1	167	L18	demolition material	late C2nd-late C3rd/C4th	N	-	-
-	C1	176	L19	Roman trample	later C2nd-C3rd/C4th	N	-	-
<b>Area C2</b>								
-	C2	42	F24 T3	cremation	1st-C2nd/C3rd	N	y	-
-	C2	44	F25 T3	pit	mid C2nd-early C3rd	N	-	-
-	C2	50	F29 T3	service trench	modern	N	-	-
-	C2	58	F32 T3	inhumation (Grave 29)	1st-C2nd/C3rd	N	-	-
12	C2	73	F33 T1	urned cremation	late C2nd-mid/late C3rd	H, from inside urn 73	y	-
-	C2	115	F34 T1	spread of building material/demolition debris	later C3rd-C4th	N	-	-
-	C2	75	F41 T2	military trench	modern	N	-	-
-	C2	53	F53 T1	ditch	Roman	N	-	-
-	C2	301	F99	urned cremation	early C2nd-C4th	N 1, form urn 191	y	-
-	C2	302				N 2, from urn 191	y	-
-	C2	317	F100	urned cremation	late C2nd-C4th	N, from urn 193	y	-
-	C2	195	F101	cremation	(mid) C3rd-C4th	N	y	-
-	C2	196-201 207-209 216-218	F102	inhumation (Grave 3)	Roman	N	-	-
-	C2	271	F105	cremation	C4th	N	y	-
-	C2	242-243	F106 sx3	ditch	Roman – mid C3rd-C4th	N	-	-
-	C2	220	F107	robbed wall (part of circus)	Roman wall + medieval Robbing	N	-	-
-	C2	223	F110	pit	C2nd-early C3rd	N	-	-
-	C2	230	F115	burial pit containing pyre debris	Roman	N	y	-
75	C2	244	F121	inhumation (Grave 5)	later C3rd-C4th	N (object?)	y	-
-		245-246				N	y	-
61-65		247-251				H	-	-
66-74		254-262				H	-	-
		265				N	y	-

-	C2	434	F124	stone chipped surface	mid C2nd-early C4th	N	-	-
-	C2	274	F125	ditch	modern	N	-	-
-	C2	288-290	F126	burial pit containing pyre debris	later C3rd-C4th	N	-	-
-	C2	226	F129	ditch	Roman	N	y	-
-	C2	280	F131	cremation	Roman	N	y	-
-	C2	310	F134	pit	Roman	N	-	-
-	C2	549	F139/F222 sx2	ring ditch	mid C3rd-C4th (probably C4th)	N	-	-
-	C2	680	F139a/F222 sx5			N	-	-
-	C2	364	F143	ditch/pit	C2nd-C4th	N	-	-
84-85	C2	322-323	F147	cremation	early C2nd-C4th	H	-	-
86-88		324				N	y	-
		325-327				H	-	-
92-93		328				N	y	-
		329-330				H	-	-
		331				N	y	-
94-99		333-338				H	-	-
99-102		339-340				N	y	-
105		341-343				H	-	-
103		344				H	-	-
104		345				H	-	-
		347				H	-	-
106-108		348-349				N	y	-
		350-352				H	-	-
109-114		353				N	y	-
		354-359				H	-	-
		365				N	y	-
116		368				H	-	-
117		369-370				N	y	-
119		371				H	-	-
		372				N	y	-
		373-374				H	-	-
		375				N	y	-
		385				N	y	-
		389				N	y	-
-	C2	602	F159	metalled surface	Roman	N	-	-
121		398				H (x 60)		
155		?				H (x 10)		
-	C2	400-403	F161	pit	modern	N	-	-
		424				N	-	-
-	C2	496 +	F170/F199	ditch	mid C2nd-C3rd	N	-	-
		518				N	-	-
-	C2	535 +	F170/F221			N	-	-
		546				N	-	-
-	C2	445	F173	cremation	late C3rd-4th (probably 4th) century	N	y	-
		452				N	y	-
		455				N	y	-
		460				N	y	-
		463				N	y	-









-	JN	87	F50		inhumation	Roman	N a-w, aa-af, ah-aj, bw, by, ca-ci	y	-
470	JN	89	F56		inhumation	Roman	H x-z, ag, ak-bv, bz, ch-hd	y	-
497	JN	477	F61		pyre/bustum	Roman	H c-g	y	-
-	JN	1216	F62		inhumation	Roman	N a-d, f-m	y	-
469	JN	69	F63		inhumation	Roman	H e	-	-
-	JN	1143	F64		inhumation	Roman	N a-h	-	-
-	JN	74	F65		burial pit containing pyre debris	Roman	N	y	-
-	JN	1196	F67		cremation	Roman	N a-b	y	-
532	JN	91	F69		inhumation	Roman	H c-d	-	-
-	JN	114					N	y	y
-	JN	1187					N a-o	y	y
-	JN	1377	F73		burial pit containing pyre debris	Roman	N a	y	-
-	JN	1189	F76		inhumation	Roman	N c, e-o	y	-
531	JN	163	F77		urned cremation	Roman	H a-b, d	-	-
-	JN	1198	F83		inhumation	Roman	N	y	-
-	JN	1184	F85		inhumation	Roman	N a-ak	y	-
-	JN	1186	F88		urned cremation	Roman	N a-s	y	-
-	JN	230	F90		inhumation	Roman	N a	y	-
-	JN	1185					N a	-	-
530	JN	229	F91		burial pit containing pyre debris	Roman	H b-c	-	-
-	JN	1157					N	y	-
-	JN	400	F94		cremation	Roman	N a-i	y	-
-	JN	1156					N	y	-
-	JN	1306	F95		inhumation	Roman	N a-c	y	-
489							N a, c, e, h-i, k, s, u, ad, ag-ah, au-aw, ba, bc, bg, bl-bp, br, bu, bw-cc, cg-co	y	-
							H b, d, f-g, j, l-r, t, v-ac, ae-af, ai-at, ax-az, bb, bd-bf, bh-bk, bq, bs-bt, bv, cd-f, shoe 1 + 2	-	-
-	JN	1275	F99		cremation	Roman	N a	y	-
-	JN	1197	F100		inhumation	Roman	N a, c, e, h-i	y	-
533	JN	225	F103		cremation	Roman	H b, d, f-g	-	-
-	JN	1318					N	y	-
495	JN	61	F105		urned cremation	Roman	N a-bs, bu, bw-by, ca-cc, ce-end	-	-
534	JN	813	F106		urned cremation	Roman	H bt, bv, bz, cd, l bag	-	-
496	JN	1320	F109		inhumation	Roman	N l	y	-
-	JN	1217	F114		burial pit containing pyre debris	Roman	H a	-	-
535	JN	1154	F125		urned cremation	Roman	H h-t, v-bk, bm-bz	-	-
-	JN	1365					N a-d	y	-
							N d, f	y	-
							H a-c, e, g-i	-	-
	JN						N a-b	y	-

-	JN	1188	F127	urned cremation	Roman	N a	y	-
-	JN	293	F133	inhumation	Roman	N	-	-
-	JN	1204				N a-c	-	-
526	JN	1053-1054				H left + right shoe	-	-
-	JN	1314	F145	urned cremation	Roman	N	y	-
-	JN	1190	F148	inhumation	Roman	N a-h	-	-
-	JN	1153	F149	inhumation	Roman	N a-c	-	-
-	JN	1192	F153	burial pit containing pyre debris	Roman	N a-c	y	-
-	JN	427	F154	urned cremation	Roman	N	y	-
482	JN	1292				N h, j-k, n-p, r, ak-al, bc	Y	-
-	JN	1356				H a-g, i, l-m, q, s-aj, am-bb, bd-bg	-	-
-	JN	1146	F156	burial pit containing pyre debris	Roman	N c-e, h, l, o, r-t	y	-
536	JN	1196	F167	posthole	Roman	H a-b, f-g, i-k, m-n, p-q, u-v	-	-
-	JN	1191	F177	burial pit containing pyre debris	Roman	N a-d	-	-
-	JN	1144	F178	burial pit containing pyre debris	Roman	N a-d	y	-
-	JN	1195	F179	inhumation	Roman	N a-h	y	-
-	JN	958	F183	pyre/bustum	Roman	N a	-	-
-	JN	1274				N a	y	-
-	JN	1155	F188	inhumation	Roman	N a	-	-
-	JN	421	F190	cremation	Roman	N a	-	-
-	JN	1152				N	y	-
-	JN	1313	F191	inhumation	Roman	N a-r	y	-
493						N c, e, h-j, m-n, r-y, aa-ab, ad-aj, al-am, ao-ap, ar	y	-
-	JN	1313	F191/F228			H a-b, d, f-g, k-l, o-q, z, ac, ak, aq	-	-
-	JN	483	F192	cremation	Roman	N ao-ap	y	-
-	JN	372	F195	inhumation	Roman	N	-	-
-	JN	1239				N	-	-
-	JN	1145	F196	burial pit containing pyre debris	Roman	N a	-	-
537	JN	1250	F199	pyre/bustum	Roman	N b, f-h	y	-
477	JN	1149	F200	pit – pyre related feature	Roman	H a, c-e	-	-
465	JN	1082	F203	pyre/bustum	Roman	N a-d	y	-
	JN	1142	F214	burial pit containing pyre debris	Roman	H e-h	-	-
	JN	1150	F216	inhumation	Roman	N a-f	-	-
	JN	1159	F218	inhumation	Roman	-	y	-
-	JN	1310	F222	cremation	Roman	H a-r	-	-
491	JN	1168	F224	inhumation	Roman	N a-q	-	-
	JN	1276	F225	inhumation	Roman	N a-ar	-	-
-	JN	1313	F228	pit	Roman	N a-f, i-j, n, p-ak	y	-
540						H g-h, k-m, o	-	-
						N a-v	-	-
						N a	-	-
						N as, bb-bf, bh-bj, bl-bm, bw	-	-
						H an, at-av, bg, bk	-	-

-	JN	1313	F228/ F229	pit/inhumation	Roman	N aw-ay	-	-
-	JN	1313	F229	inhumation	Roman	N az, bn-bv, bx-ca	-	-
-	JN	1140	F236	inhumation	Roman	N i, p, r, w, ad-ae, ah-ai, aq, ax-ay	y	-
498	JN	573	F238	inhumation	Roman	H a-h, j-o, q, s-y, x-ac, af-ag, aj-ap, ar-aw	-	-
483	JN	553-554	F241	inhumation	Roman	H (2 bags)	-	-
-	JN	555				H right + left shoes	-	-
-	JN	1296				N	-	-
-	JN	751	F244	urned cremation	Roman	N a-y	-	-
-	JN	1151	F246	inhumation	Roman	N	y	-
-	JN	616	F247	inhumation	Roman	N a-k	-	-
-	JN	1158				N	-	-
-	JN	1164	F248	pyre/bustum	Roman	N a-j	-	-
488	JN	1305	F252	burial pit containing pyre debris	Roman	N k-v	y	-
-	JN	559	F253	pot scatter	Roman	N a-c, f, i-k, m-n, p-r, u-ab	y	-
-	JN	1174	F256	inhumation	Roman	H d-e, g-h, l, o, s	-	-
-	JN	1351	F260	urned cremation	Roman	N	-	-
-	JN	1287	F265	inhumation	Roman	N a	-	-
-	JN	593	F267	posthole or pot scatter (two features with same number)	Roman	N a-d	y	-
486	JN	1301	F268	burial pit containing pyre debris	Roman	N	-	-
490	JN	1277	F272	inhumation	Roman	N a-b, h, x, aa, af-ag	y	-
-	JN	1309	F273	inhumation	Roman	H c-g, i-w, y-z, ab-ae, ah-ai	-	-
-	JN	627	F275	inhumation	Roman	N a-b	-	-
-	JN	1165				N a, c-f, j, o, s-t, v-w	y	-
-	JN	1167	F279	pyre/bustum	Roman	H b, g-i, k-n, p-r, u	-	-
-	JN	1229	F282	urned cremation	Roman	N a-af	-	-
466	JN	1173	F284	burial pit containing pyre debris	Roman	N a-b	y	-
-	JN	1298	F285	inhumation	Roman	N b-e	y	-
472	JN	1225	F286	inhumation	Roman	H a	-	-
-	JN	1172	F288	inhumation	Roman	N a-p	-	-
-	JN	1270	F289	inhumation	Roman	N a-b, f-g, l-m, o	y	-
-	JN	1272	F291	inhumation	Roman	H c-e, h-k	-	-
-	JN	1281	F294	inhumation	Roman	N a-bx	-	-
-	JN	777	F302	urned cremation	Roman	N a-j	-	-
-	JN	1271	F308	inhumation	Roman	N a-g	-	-
-	JN	697	F309	urned cremation	Roman	N a-b	-	-
-	JN	1181	F313	inhumation	Roman	N a-l	y	-
-	JN	1259	F316	inhumation	Roman	N a-h	-	-
-	JN	1228	F318	inhumation	Roman	N	y	-
-	JN	1221	F322	inhumation	Roman	N a	-	-
-	JN	1221	F322	inhumation	Roman	N a-s	-	-
-	JN	1221	F322	inhumation	Roman	N a-d	-	-
-	JN	1221	F322	inhumation	Roman	N c-d	-	-

471	JN	1280	F323	urned cremation	Roman	H a-b		
	JN	1240	F324	urned cremation	Roman	N a	y	-
468	JN	922	F325	urned cremation	Roman	N a-c	y	-
-	JN	964				H a-g	-	-
-	JN	1273				N	y	-
	JN	1324	F326	urned cremation	Roman	N a	y	-
480	JN	1288	F328	inhumation	Roman	N	y	-
	JN	741	F329	inhumation	Roman	H a-u, right +left shoe	-	-
	JN	1246				N a-k	-	-
	JN	706	F334	inhumation	Roman	N	-	-
	JN	950	F341	quarry pit	Roman	N	-	-
-	JN	1220	F345	inhumation	Roman	N a-g, j-m	-	-
546						H h-i	-	-
	JN	1226	F346	inhumation	Roman	N a	-	-
	JN	1269	F352	urned cremation	Roman	N a	y	-
	JN	804	F355	inhumation	Roman	N	-	-
-	JN	1205	F357	inhumation	Roman	N	-	-
-	JN	1303				N h, bo-bp, bs-bw, by-cd, cg-cv	-	-
487						H a-g, i-bn, bq-br, bx, ce-F + 5 bags	-	-
	JN	1208	F359	pit	modern	N a	-	-
	JN	1183	F360	inhumation	Roman	N a	-	-
	JN	1410				N	-	-
-	JN	968	F361	inhumation	Roman	N	-	-
492	JN	1312				N a-r, x-ag	-	-
						H s-w + 4 bags	-	-
	JN	1075	F366	inhumation	Roman	N	-	-
	JN	1252	F367	inhumation	Roman	N a-i	-	-
	JN	1255	F368	urned cremation	Roman	N a-k	y	-
	JN	1251	F372	urned cremation	Roman	N a-d	y	-
-	JN	1256	F373	burial pit containing pyre debris	Roman	N b, i-j, l-m, q, w, z, ab-ac	y	-
478						H a, c-h, k, n, o-p, r-v, x-y, aa, ad-af	-	-
	JN	1222	F374	inhumation	Roman	N a-c	-	-
	JN	1209	F377	urned cremation	Roman	N a	y	-
	JN	1241	F380	urned cremation	Roman	N a	y	-
	JN	1254	F383	inhumation	Roman	N a-c	-	-
	JN	855	F387	inhumation	Roman	N	-	-
	JN	1227	F394	inhumation	Roman	N a-c	-	-
525	JN	1016-	F395	inhumation	Roman	H shoes 1 + 2	-	-
	JN	1017					-	-
-	JN	1283				N a-n	-	-
484	JN	1248	F397	inhumation	Roman	H a-v	-	-
	JN	1247	F399	inhumation	Roman	N a-d	-	-
	JN	1249	F400	inhumation	Roman	N a-g	-	-
-	JN	1223	F402	inhumation	Roman	N a-c	-	-
-	JN	1258	F403	urned cremation	Roman	N	y	-

-	JN	1284	F408		inhumation	Roman	N a-o	-	-
-	JN	1268	F417		burial pit containing pyre debris	Roman	N a-i	y	-
-	JN	1224	F418		inhumation	Roman	N a-e	-	-
-	JN	1037	F419		quarry pit	Roman	N	-	-
-	JN	1064	F420		quarry pit	Roman	H	-	-
-	JN	1065					N	-	-
-	JN	1175					N a-o	-	-
-	JN	1176					H P	-	-
-	JN	1176					H I bag (x 24 hobnails)	-	-
527	JN	946-947	F424		inhumation	Roman	H right + left shoes	-	-
549	JN	1242	F427		inhumation	Roman	H a-o	-	-
-	JN	1262	F430		inhumation	Roman	N a-h	-	-
500	JN	949	F431		urned cremation	Roman	H	-	-
-	JN	1263	F433		inhumation	Roman	N a-c	-	-
-	JN	1210	F440		urned cremation	Roman	N a	y	-
-	JN	973	F444		inhumation	Roman	N	-	-
-	JN	1211					N a-b	-	-
-	JN	1257	F452		inhumation	Roman	N a-am	-	-
-	JN	1177	F453		inhumation	Roman	N a-c	-	-
-	JN	1203	F455		inhumation	Roman	N a-e	-	-
-	JN	1206	F457		inhumation	Roman	N a-b	-	-
499	JN	1098	F461		urned cremation	Roman	H	-	-
-	JN	1201	F462		inhumation	Roman	N a	-	-
-	JN	1215	F463		inhumation	Roman	N a-f, i-j, l, n-w, y-ah	-	-
551							H g-h, k, m, x	-	-
-	JN	1212	F466		inhumation	Roman	N a-f	-	-
-	JN	1207	F470		inhumation	Roman	N a-e	-	-
-	JN	1289	F473		inhumation	Roman	N a-m	-	-
481							H n-aa	-	-
-	JN	1180	F474		inhumation	Roman	N a	-	-
-	JN	1060	F477		inhumation	Roman	N	-	-
-	JN	1213	F478		inhumation	Roman	N a-f	-	-
-	JN	1214	F479		inhumation	Roman	N a	-	-
-	JN	1193	F481		urned cremation	Roman	N a-b	y	-
-	JN	1338					N	y	-
-	JN	1171	F482		urned cremation	Roman	N	y	-
-	JN	1044	F486		burial pit containing pyre debris	Roman	N	y	-
-	JN	1084	F487		inhumation	Roman	N	-	-
-	JN	1286	F488		inhumation	Roman	N c-h, k, m-o	-	-
479							H a-b, i-j, l, p-q + 1 bag	-	-
-	JN	1245	F500		inhumation	Roman	N a-e	-	-
-	JN	1088	F505		inhumation	Roman	N	-	-
-	JN	1311	F506		inhumation	Roman	N al-aw	-	-
-	JN	1459	F510		inhumation	Roman	N a(x2)-c	-	-
-	JN	25	L1		topsoil	modern	N	-	-

Area JS								
-	JS	5	F2 sx1	ditch	Roman	N	-	-
-	JS	90	F3	urned cremation; from urn	Roman	N	-	-
-	JS	66	F14 sx1	ditch	post-medieval	N	-	y
-	JS	68	F15	pit	post-medieval	N	-	-
-	JS	81	F19 sx1	ditch	Roman	N	-	-
-	JS	91	F19/F18			N	-	-
Area JW								
-	JW	1	F1	metalled trackway	post-medieval	1 N	-	-
Watching brief								
-	WB	3	F1	burial within a lead coffin	Roman	N	-	-
-	WB	6	F5	buttress	Roman	N	-	-

*Iron-working debris  
(includes some general fire debris)*

Area	Find	Layer/ Feature	Context type	Period	Identification	Weight (g)	Draw
Area C2							
C2	560	F193	pit	post-medieval	coke	14	-
C2	669	F174 (F226)	ditch	C2nd to mid-late C3rd	tap slag	160	-
C2	660	F235	inhumation (grave 13)	early C2nd-mid C3rd	iron-working debris	151	-
C2	665	F237	cremation	late C2nd-mid C3rd	iron-working slag	240	-
C2	204	u/s	unstratified	-	tap slag	9	-
Area J							
J	4	F10	Quarry Pit	post-medieval	furnace hearth bottom iron-working	55	-
Area JE							
JE	338	F4	pit	Roman	iron slag	33	-
JE	82	F5	robber trench (of outer wall of the circus)	medieval	iron slag	18	-
JE	113				tap slag	50	-
JE	117				iron-working slag	58	-
JE	144				furnace hearth bottom	282	-
JE	162				iron-working tap slag	47	-
JE	323				iron slag	24	-
JE	369				?iron slag and limestone	92	-
JE	130	F29	evaluation trench	2002	iron slag	14	-
JE	131	F4	military trench	modern/military	cindery/slaggy lump	67	-
JE	224	L2	robbing debris	medieval	iron slag	21	-
JE	279				?iron slag and limestone	28	-
JE	390	L5	subsoil	modern	tap slag fragment	21	-
JE	305	L9	robbing debris	medieval	tap slag	93	-

*Copper-alloy-working debris*

Area	Find	Layer/ Feature	Context type	Period	Identification	Weight (g)	Draw
Area JS							
JS	64	F13	Pit	Roman	copper alloy melted debris, ?slag	1	-

*Daub*

Area	Find	Layer/ Feature	Context type	Period	Identification	Draw
JE	97	F5	robber trench (of outer circus wall)	medieval	small fragment	-

*Clay Tobacco Pipe*

Area	Find	Layer/ Feature	Context type	Period	Identification	Draw
<b>Area C1</b>						
C1	166	L18	demolition material	late C2nd-late C3rd/4th	stem fragment	-
C1	156				stem fragment	-
C1	147				stem fragment	-
<b>Area C2</b>						
C2	274	F125	ditch	modern	stem fragment	-
C2	501	F195	pit	post-medieval	stem fragment	-
C2	534	F220	pit	post-medieval	stem fragment	-
<b>Area J</b>						
J	45	F40	ditch	post-medieval	stem fragment	-
<b>Area JE</b>						
JE	71	F5	robber trench (of outer circus wall)	medieval	stem fragment	-
JE	22				stem fragment	-
JE	314				stem fragment	-
JE	27	F15	trench	modern	bowl, Type 6, rouletted rim	-
JE	32	F17	pit	modern	stem fragment	-
JE	310	F58	ditch	modern	stem fragment	-
JE	341	F61	trench	modern	2 stem fragments	-
JE	331				stem fragment	-
JE	225	L1	topsoil	modern	stem fragment	-
JE	297				3 stem fragments; bowl fragment, ?Type 9	-
JE	336				stem fragment	-
JE	343				3 stem fragments; bowl fragment, ?Type 4	-
JE	352				stem fragments	-
JE	282	L2	robbing	medieval	stem fragment, part of foot, line across foot	-
JE	390	L5	subsoil	modern	stem fragment	-
JE	31	u/s	unstratified	-	stem fragment	-
<b>Area JN</b>						
JN	66	F23	quarry pit	Roman	stem fragment	-
JN	57	F23	quarry pit	Roman	stem fragment	-
JN	216	F110	pit	modern	stem fragment	-
<b>Area JS</b>						
JS	19	F5	ditch	Roman	2 stem fragments	-
JS	66	F14	ditch	post-medieval	stem fragment	-
<b>Area Q</b>						
Q	17	F44	pit	post-medieval	3 stem fragments	-
Q	67	F109	ditch	Roman	bowl, Type 6, rouletted rim	-
Q	39	L1-2	topsoil/subsoil	modern	2 stem fragments	-
Q	25	u/s	unstratified	-	14 stem fragments, 1 with very base of bowl	-

## Appendix 3

# An archaeological evaluation at the attenuation pond site (the south-east corner of the Abbey Field), Colchester, Essex April 2005

report prepared  
by Howard Brooks

on behalf of  
Taylor Woodrow



CAT project code: 05/4d  
Colchester Museums accession code: 2005.50  
NGR: TL 9974 2403



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**CAT Report 320**  
June 2005

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EHER summary sheet

## **List of plate and figures**

Front cover: T2, view east; the two Roman  
ditches have been half-sectioned.

Fig 1 Site location.

Fig 2 Trench locations.

Fig 3 Trench plans.

Fig 4 F3 and F4: sections.

Fig 5 Representative sections of T1 and T2.

## 1 Summary

*This site lies inside the oppidum of Camulodunum, and on the southern fringe of the Abbey Field Roman cemetery. Two parallel ditches were observed, one Roman and a second which was undated but probably Roman. They are interpreted as being the west and east ditches of a north-south-aligned Roman trackway.*

## 2 Introduction

- 2.1 This is the archive report on an archaeological evaluation by trial-trenching at the attenuation pond site, on the south-east corner of the Abbey Field, Colchester, Essex (Fig 1).
- 2.2 The immediate vicinity of the site is open grassland, with a small car-parking area accessed off Circular Road South. However, recent Ordnance Survey sheet TL 92 SE<sup>1</sup> shows a long narrow building along the south edge of the car park, and a second similar building to its east, aligned south-west to north-east and pointing towards the junction of Berechurch Road and Merrick Road. The 1991 edition of the same sheet shows that those buildings had been demolished and replaced by trees. The trees were no longer there in 2005.
- 2.3 The evaluation trenches were located at (centre point) NGR TL 9974 2403 (Fig 2).
- 2.4 Fieldwork was undertaken in April 2005 on behalf of Taylor Woodrow by the Colchester Archaeological Trust (CAT), in association with RPS Planning, Transport and Environment. Post-excavation work was done in May 2005.
- 2.5 All fieldwork and reporting was done in accordance with Colchester Borough Council's *Guidelines on standards and practices for archaeological fieldwork in the Borough of Colchester* (CM 2002) and *Guidelines on the preparation and transfer of archaeological archives to Colchester Museums* (CM 2003), English Heritage's *Management of archaeological projects* (MAP 2), and the Institute of Field Archaeologists' *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (IFA 2001) and *Standard and guidance for archaeological field evaluation* (IFA 1999). The guidance contained in the documents *Research and archaeology: a framework for the Eastern Counties 1. Resource assessment* (EAA 3), *Research and archaeology: a framework for the Eastern Counties 2. Research agenda and strategy* (EAA 8), and *Standards for field archaeology in the East of England* (EAA 14) was also followed.

## 3 Archaeological background

### 3.1 Prehistoric and pre-oppidum

A Deverel-Rimbury-type burial<sup>2</sup> with calcined (cremated) bone is reported from the west side of the Abbey Field, 500m west of this site (Essex Historic Environment Record or EHER no 11876). A picture of the landscape of this period is beginning to emerge, based on recent excavations and evaluations associated with the new garrison project<sup>3</sup>. A fully ditched-and-hedged farming landscape had not yet developed; instead, one would expect to find evidence of isolated settlements and burials. The Abbey Field Deverel-Rimbury-type burial is exactly in keeping with this general picture.

### 3.2 The pre-Roman oppidum of Camulodunum

During the late Iron Age (probably by c AD 5), a defended territory or 'oppidum' had been established at Camulodunum<sup>4</sup>. The current site lies within the area of the oppidum. In simple form, this was a series of defensive earthworks (dykes) defining an area of some 20 square kilometres.

Within the area enclosed by the dykes, three main centres of occupation or

---

1 undated, but probably early 1970s

2 dating to c 1400-1000 BC

3 CAT Report 292

4 CAR 11, 174-8

activity have been identified: a trading centre at Sheepen (near the Colchester Institute); a 'homestead' at Gosbecks Farm (near the Borough refuse dump); and pre-Roman activity on the later Roman farmstead site at Kirkee McMunn Barracks.

In the open areas of the *oppidum* between Gosbecks, Sheepen and Kirkee McMunn Barracks, cropmark photographs show enclosures and small fields, sometimes linked by trackways. The best surviving cropmarks have been seen around the Gosbecks site, but a lesser group of cropmarks in the central and eastern parts of the *oppidum* is to be found on either side of Berechurch Road, within a triangle the corners of which are defined by Earlswood Road, the Army Driving School and Maypole Green. There are no known cropmarks in the area of the current site.

However, two isolated cremation burials are recorded close to the current site. The first is a find reported 100m north of the current site in 1905 as a 'Celtic' cinerary urn. This is probably a Late Iron Age burial (EHER no 11878). The second is a group of two Late Iron Age vessels (probably a burial), recorded 300m west-south-west of the current site (EHER no 11877).

### **3.3 The Roman period – town and country**

The current site lies 900m south of the walls of the Roman town, too far out to be in the Roman suburbs. However, it is within the area of the Roman cemetery defined by Rex Hull as the 'Abbey Field Cemetery' (CAR 9, 262). The recent discovery of large numbers of Roman burials at the athletics track on the north edge of the Abbey Field and at the adjacent sports pitch in 2001 (CAT Report 138) has greatly added to the number of known burials here.

The Abbey Field cemetery is centred on the north edge of the Abbey Field, but outlying burials are known as far south as the current site. Roman cremations are recorded at the (now-demolished) Garrison hospital site, which is only 250m away to the west-south-west (EHER no 11893) and also 100m west of the current site (EHER no 11894). As well as the purely Roman burials, there are also Late Iron Age burials within a few hundred metres of this site.

### **3.4 Medieval**

The site is 700m south of the site of St John's abbey. No medieval structural remains would be expected this far south, although the name 'Abbey Field' denotes a connection with the abbey at one time.

## **4 Aim**

The aim of the evaluation was to establish the nature, condition, date and importance of any archaeological remains on the site. Any information recovered will be taken into account in formulation of development plans and any appropriate mitigation.

## **5 The trial-trenches (Figs 2-5)**

Two evaluation trenches were dug by machine under archaeological supervision (Trench or T1 and T2). Trench positions were designed to assess the archaeological remains in the area to be impacted by the proposed attenuation pond.

Both trenches were 40m long and 1.6m wide. T2 was dug along the north edge of the car park (east-west through the west side of the proposed pond), and T1 was dug 15m to its east edge (north-south through the east edge of the proposed pond).

Both trenches were machined to the archaeological level (where features were visible). This was the top of natural sand Layer or L6, at 2.00m in T1, and at 0.45m in T2 (see Fig 5 for representative sections). The presence of 'made ground' with modern brick fragments overlying natural in both trenches demonstrates recent disturbance here. The principal difference is that the made ground is much deeper in T1.

### Trench 1 (Figs 2-4)

In T1, a number of modern service-trenches (Feature or F1) were uncovered and recorded, but not excavated. They all contained ceramic pipes of recent origin. They were grouped as if radiating away from a point somewhere to the east.

### Trench 2 (Figs 2-4)

In T2, two north-south-aligned ditches (F3, F4) were observed. They were 6.5m apart (inner edge to inner edge), and, as far as it was possible to judge from a narrow trench, they appeared to be running parallel to one another. Allowing for erosion of the ditches by plough action and/or other post-Roman agencies, both ditches were similar in dimensions: F3 was 1.95m wide and 0.42m deep; F4 was 1.98m wide and 0.57m deep (Fig 4).

A series of modern trenches (F2) was also uncovered. They were filled with dark grey soil with modern building materials, and their shape is so strongly reminiscent of the practice trenches excavated west of Berechurch Road in 2002<sup>5</sup> (CAT Report 246) that there can be very little doubt that they are also modern military practice trenches. They were not excavated.

## 6 Finds

Trench	Context	Bag no	Qt	Weight (grammes)	Detail
T2	F4	2	5	339	Roman brick/tile fragments
T2	F4	2	1	35	Brick fragment, sandier and more open texture than above fragments; possibly intrusive
T2	F4	2	1	24	Animal bone; medium-sized quadruped, otherwise unidentified

## 7 Discussion and interpretation

One of the two ditches revealed by this evaluation is dated by Roman brick, but the other is undated. It is argued here that they are contemporary parallel ditches, and represent the side ditches of a Roman trackway of the type excavated recently at the Colchester new garrison PFI project site (CAT Report 292). The trackways excavated at Areas 6 (north of Earlswood Way) and Area 10 (south of the Driving School site, Berechurch Road) show a system of approximately WNW-ESE tracks heading into a SW-NW track which sweeps up to the north (towards the Roman town). Therefore a track heading approximately north on the south edge of the Abbey Field is in keeping with the expected direction of trackways in this area.

The series of modern, unexcavated zig-zag trenches F2 is an Army practice trench, very similar to those excavated west of Berechurch Road in 2002 (CAT Report 246), 900m south-west of this site. It is presumably of WWI date.

## 8 Acknowledgements

The Trust would like to thank Taylor Woodrow for commissioning the work, via RPS Planning, Transport and Environment.

The project was managed by Philip Crummy, and the site work was carried out by Chris Lister, Laura Pooley and David Ross; the original digital survey was also by Chris Lister. The project was monitored by Martin Winter (Colchester Museums Archaeology Officer) for Colchester Borough Council and by RPS for Taylor Woodrow.

<sup>5</sup> Colchester Garrison PFI project Area F east, particularly trench B2

## 9 References

- |                |         |  |
|----------------|---------|--|
| CAR 9          | 1993    | <i>Colchester Archaeological Report 9: Excavations of Roman and later cemeteries, churches and monastic sites in Colchester, 1971-88</i> , by P Crummy, N Crummy, and C Crossan    |
| CAR 11         | 1995    | <i>Colchester Archaeological Report 11: Camulodunum 2</i> , by C F C Hawkes and P Crummy   |
| CAT Report 138 | 2001    | Archaeological excavations at the Garrison sports pitch, Circular Road North, Colchester, Essex (Abbey Field), unpublished CAT archive report, by Carl Crossan, 2001               |
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| CM             | 2002    | Guidelines on standards and practices for archaeological fieldwork in the Borough of Colchester  |
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| EAA 3          | 1997    | <i>Research and archaeology: a framework for the Eastern Counties 1. Resource assessment</i> , ed by J Glazebrook  |
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| Hull, M R      | 1958    | <i>Roman Colchester</i> , RRCSAL, <b>20</b>  |
| IFA            | 1999    | Standard and guidance for archaeological field evaluation  |
| IFA            | 2001    | Standard and guidance for the collection, documentation, conservation and research of archaeological materials   |
| MAP 2          | 1991    | <i>Management of archaeological projects</i> , 2nd edition (English Heritage)  |

## 10 Glossary

context	specific location on an archaeological site, especially one where finds are made
EHHER	Essex Historic Environment Record
feature	an identifiable thing like a pit, a wall, a drain, a floor; can contain 'contexts'
natural	geological deposit undisturbed by human activity
NGR	National Grid Reference
Roman	the period from AD 43 to around AD 430

## 11 Archive deposition

The paper and digital archive are held by Colchester Archaeological Trust at 12 Lexden Road, Colchester, Essex CO3 3NF, but both will be permanently deposited with Colchester Museums under accession code 2005.50.

**12 Site data**  
**12.1 Site context list**

Trench	Context	Description	Context date
T1	F1	ceramic pipes	modern
T2	F2	Army practice trench	WWI?
T2	F3	ditch	Roman?
T2	F4	ditch	Roman
T1, T2	L1	topsoil	modern
T1, T2	L2	dumped soil	modern
T1, T2	L3	dumped soil	modern
T1	L4	black silt with modern debris	modern
T1	L5	old topsoil?	post-medieval
T1, T2	L6	natural	-

**12.2 Soil descriptions**

Trench	Context	Description
T1	F1	ceramic pipes in trenches filled with firm, dry, medium brown silt with modern building debris
T2	F2	firm, dry, dark greyish-brown silt with modern building debris
T2	F3	soft, moist, medium brown silt with brick inclusions (presumably Roman)
T2	F4	soft, moist, medium brown sandy silt with brick and tile inclusions (Roman)
T1	L1	moist, mid to dark brown silty topsoil
T1	L2	firm, dry, mid greyish-brown silty subsoil with modern building debris
T1	L3	firm, dry, light yellow sand with abundant modern building debris
T1	L4	firm, dry, burnt black silt with modern building debris
T1	L5	firm, moist, mid brown silt with infrequent brick and tile fragments
T1	L6	soft, moist, light, yellow sand

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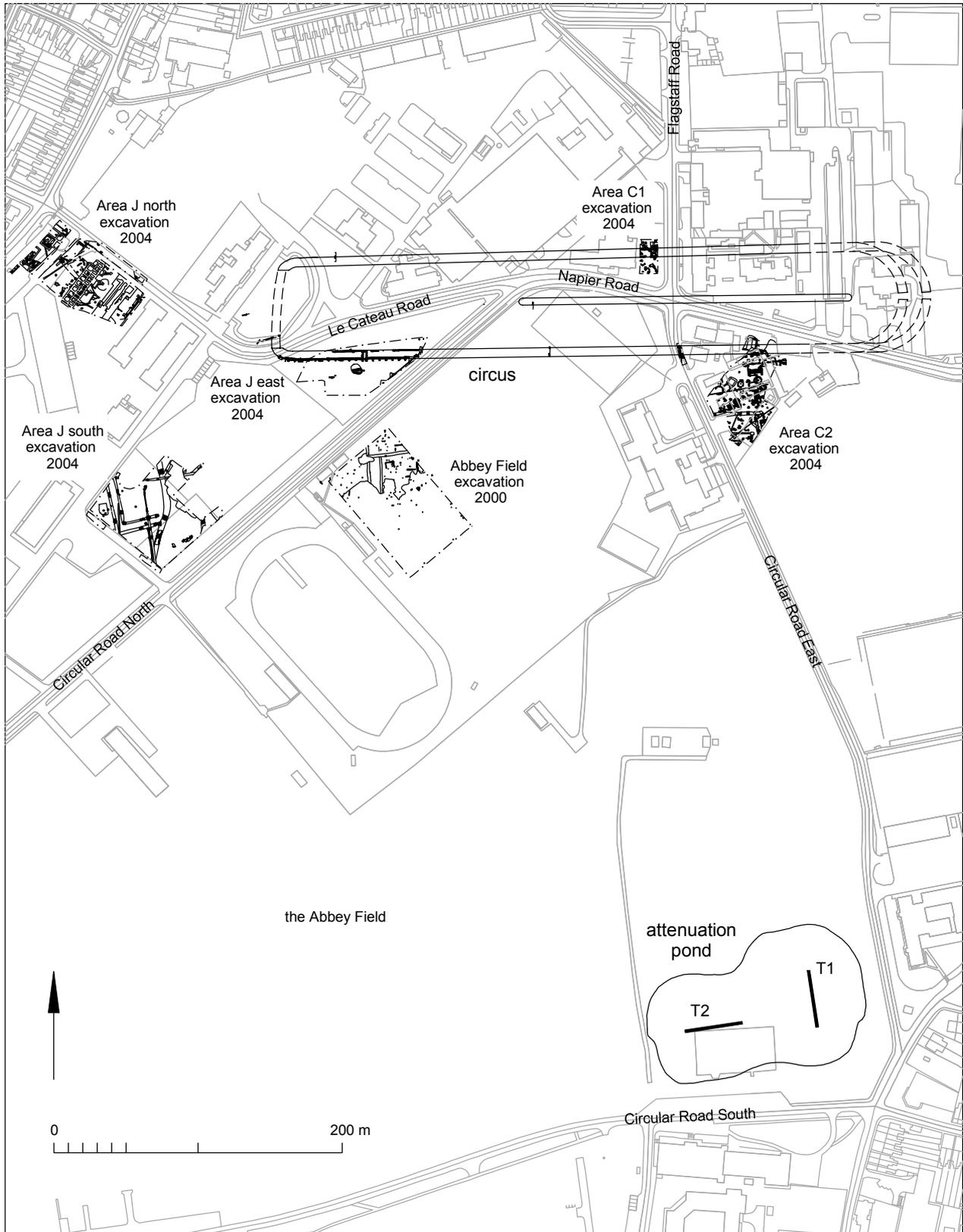


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*Adams c:/reports05/attenuation pond/report320.doc*



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Fig 1 Site location.

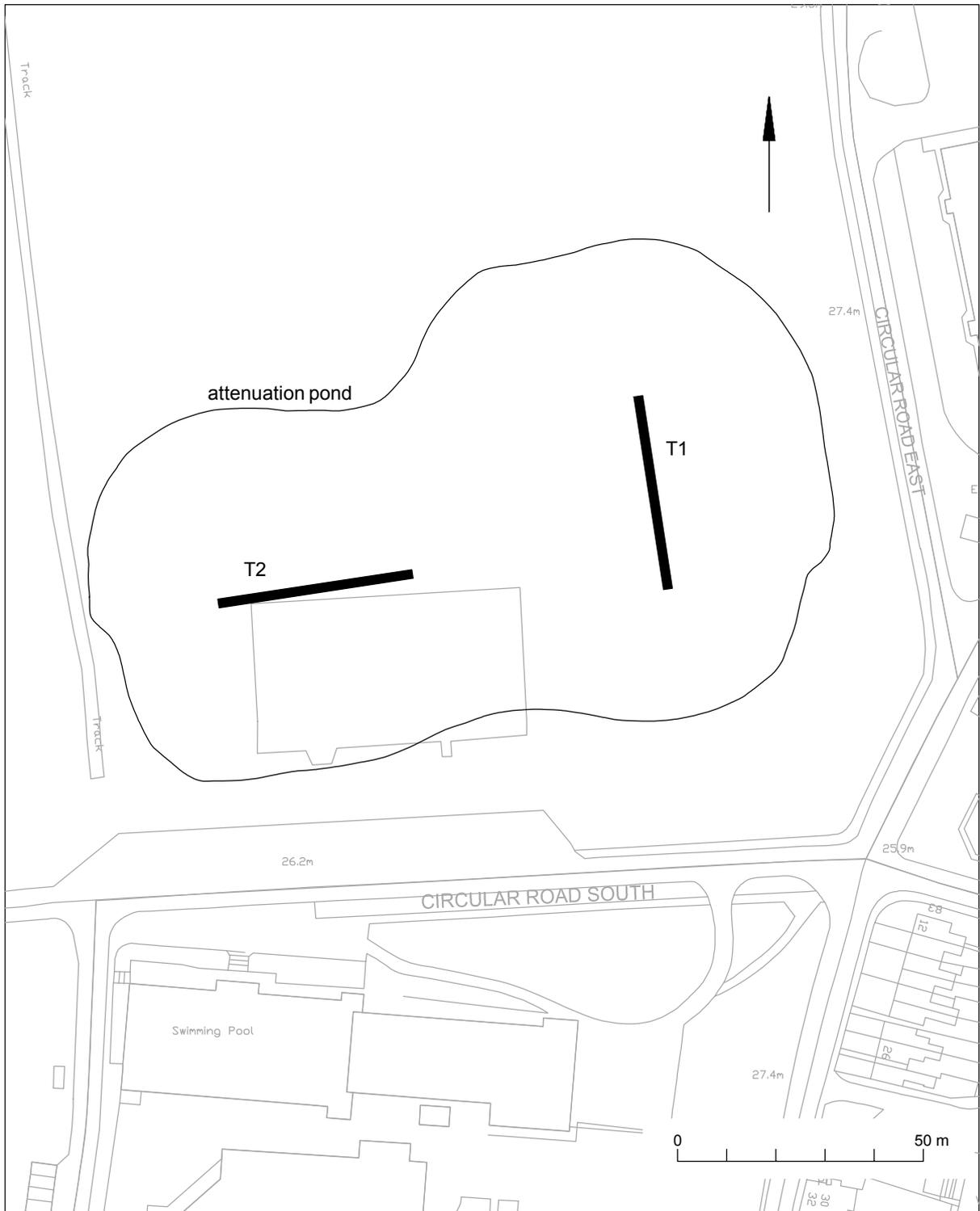


Fig 2 Trench locations.

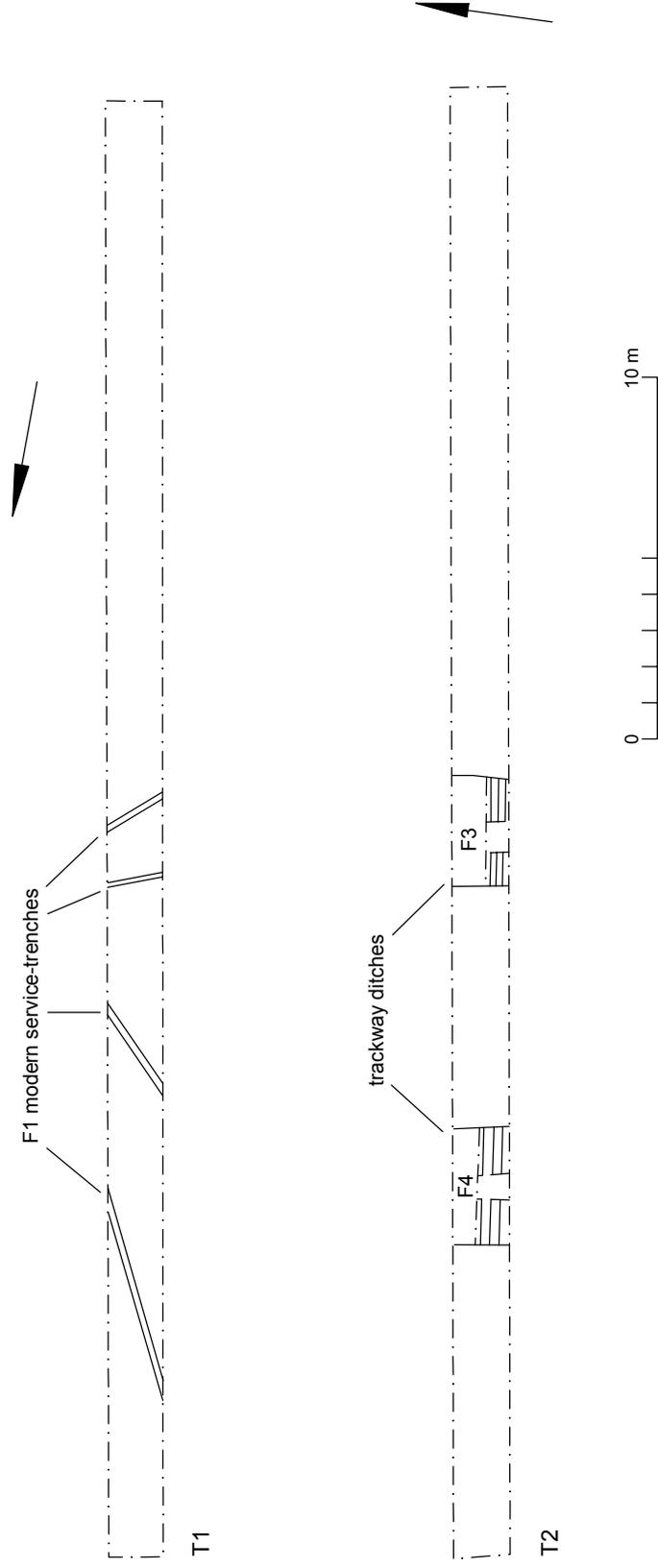


Fig 3 Trench plans.

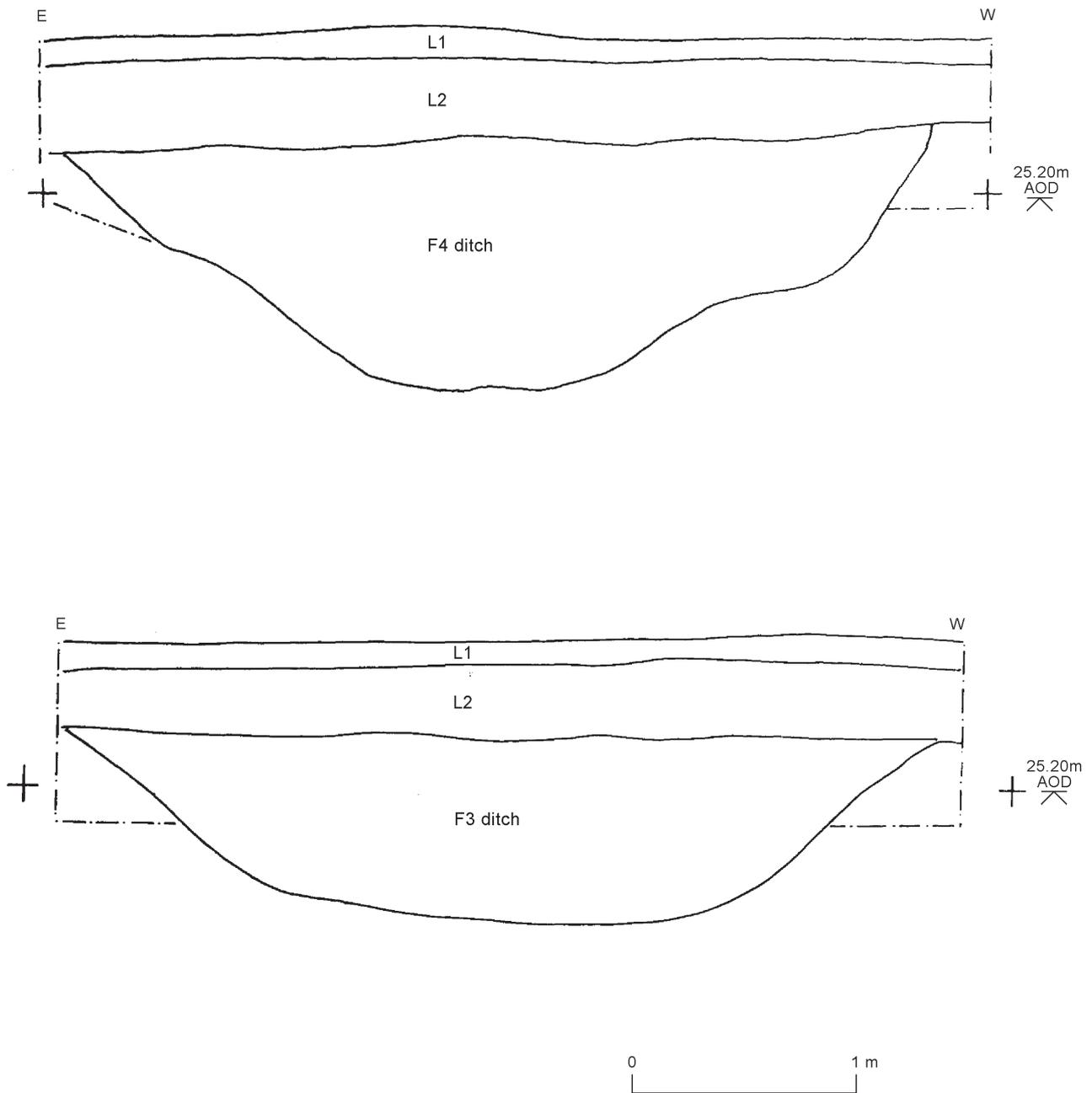


Fig 4 Sections of ditch F3, ditch F4.

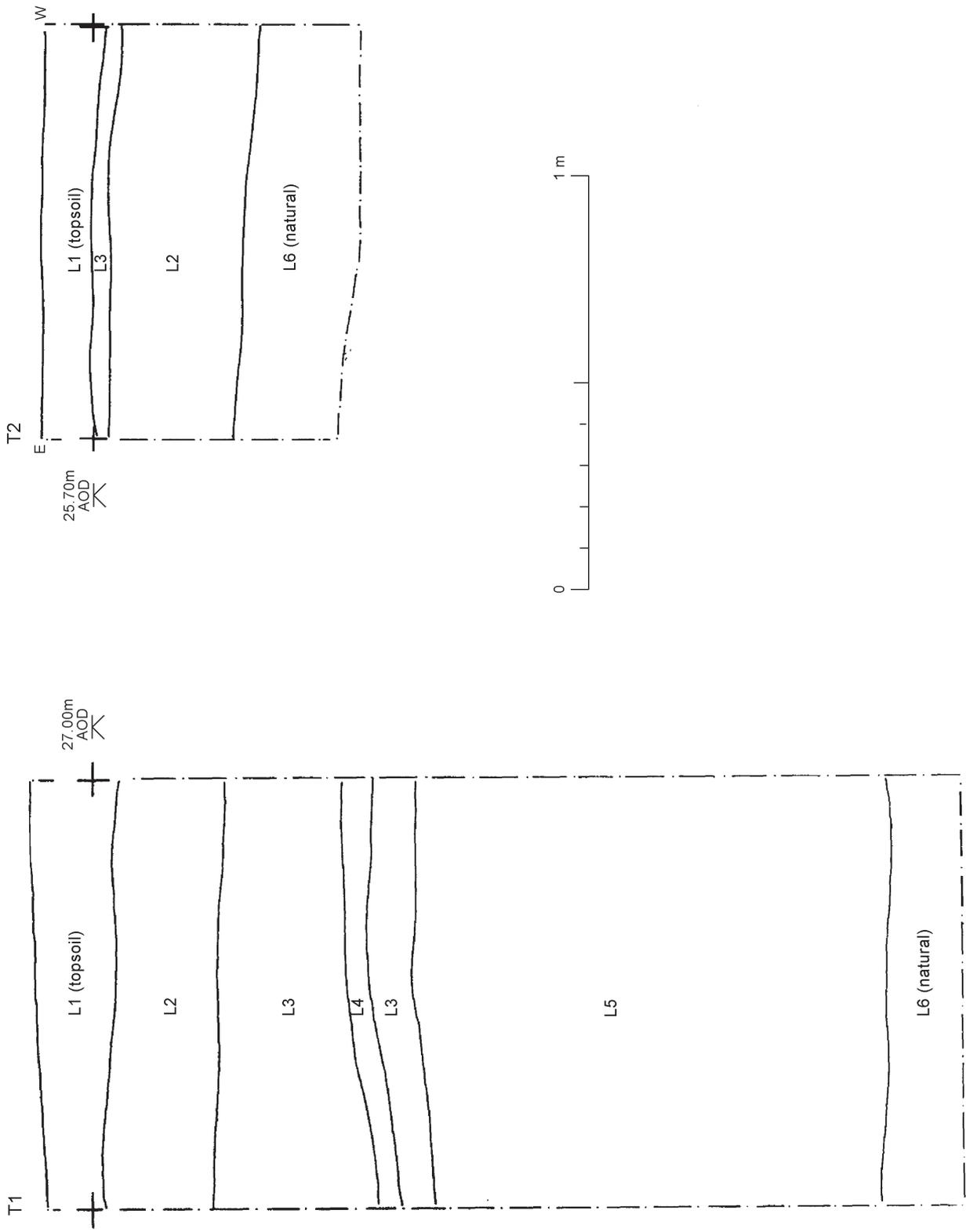


Fig 5 Representative sections of T1 and T2.

**Essex Historic Environment Record/  
Essex Archaeology and History**

**Summary sheet**

<b>Site address:</b> attenuation pond site (south-east corner of the Abbey Field), Colchester, Essex	
<b>Parish:</b> Colchester	<b>District:</b> Colchester
<b>NGR:</b> TL 9974 2403	<b>Site code:</b> Museum accession code 2005.50
<b>Type of work:</b> Evaluation	<b>Site director/group:</b> Colchester Archaeological Trust
<b>Date of work:</b> April 2005	<b>Size of area investigated:</b> 2 trenches
<b>Location of finds/curating museum:</b> Colchester Museums	<b>Funding source:</b> Developer
<b>Further seasons anticipated?</b> No	<b>Related EHER nos:</b> 11876-11878, 11893-11894
<b>Final report:</b> CAT Report 320 and summary in <i>EAH</i>	
<b>Periods represented:</b> Roman	
<b>Summary of fieldwork results:</b> <i>This site lies inside the oppidum of Camulodunum, and on the southern fringe of the Abbey Field Roman cemetery. Two parallel ditches were observed, one Roman and a second which was undated but probably Roman. They are interpreted as being the west and east ditches of a north-south-aligned Roman trackway.</i>	
<b>Previous summaries/reports:</b> None	
<b>Author of summary:</b> Howard Brooks	<b>Date of summary:</b> June 2005

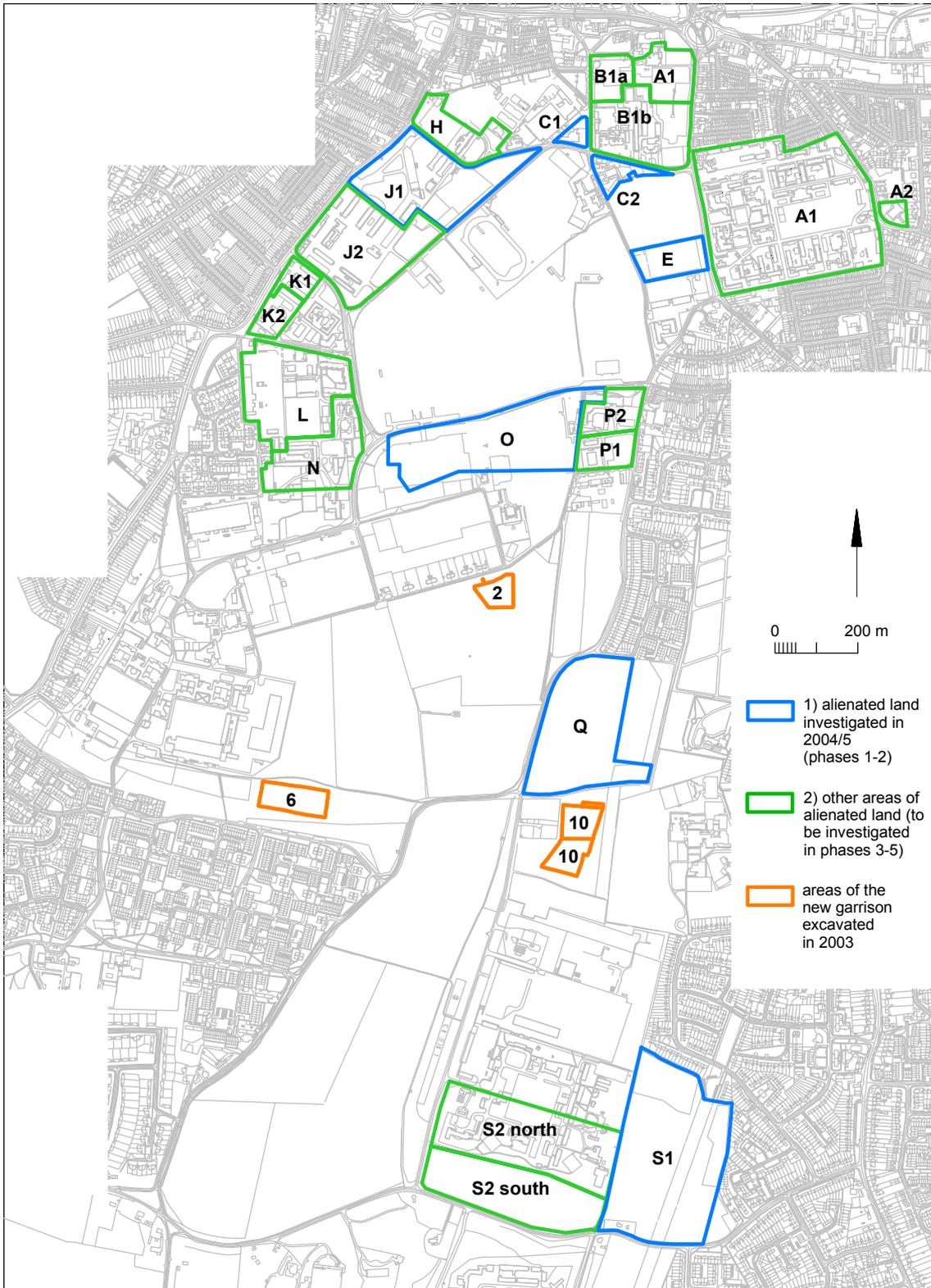
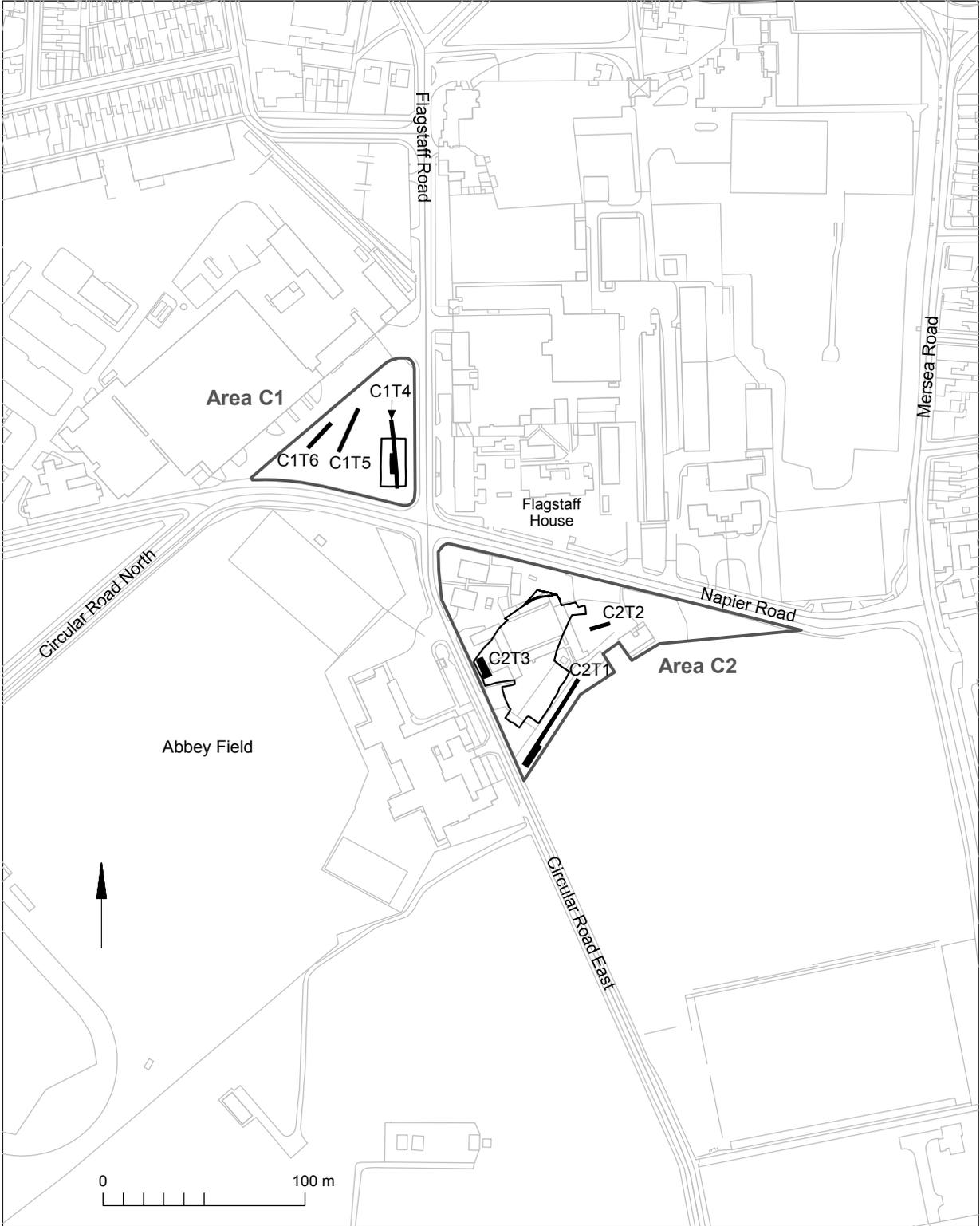


Fig 1 Colchester Garrison, showing location of alienated land.



□ edge of excavation

Fig 2 Location of evaluation trenches C1T4-C1T6 and C2T1-C2T3, and excavation areas, Areas C1 and C2.

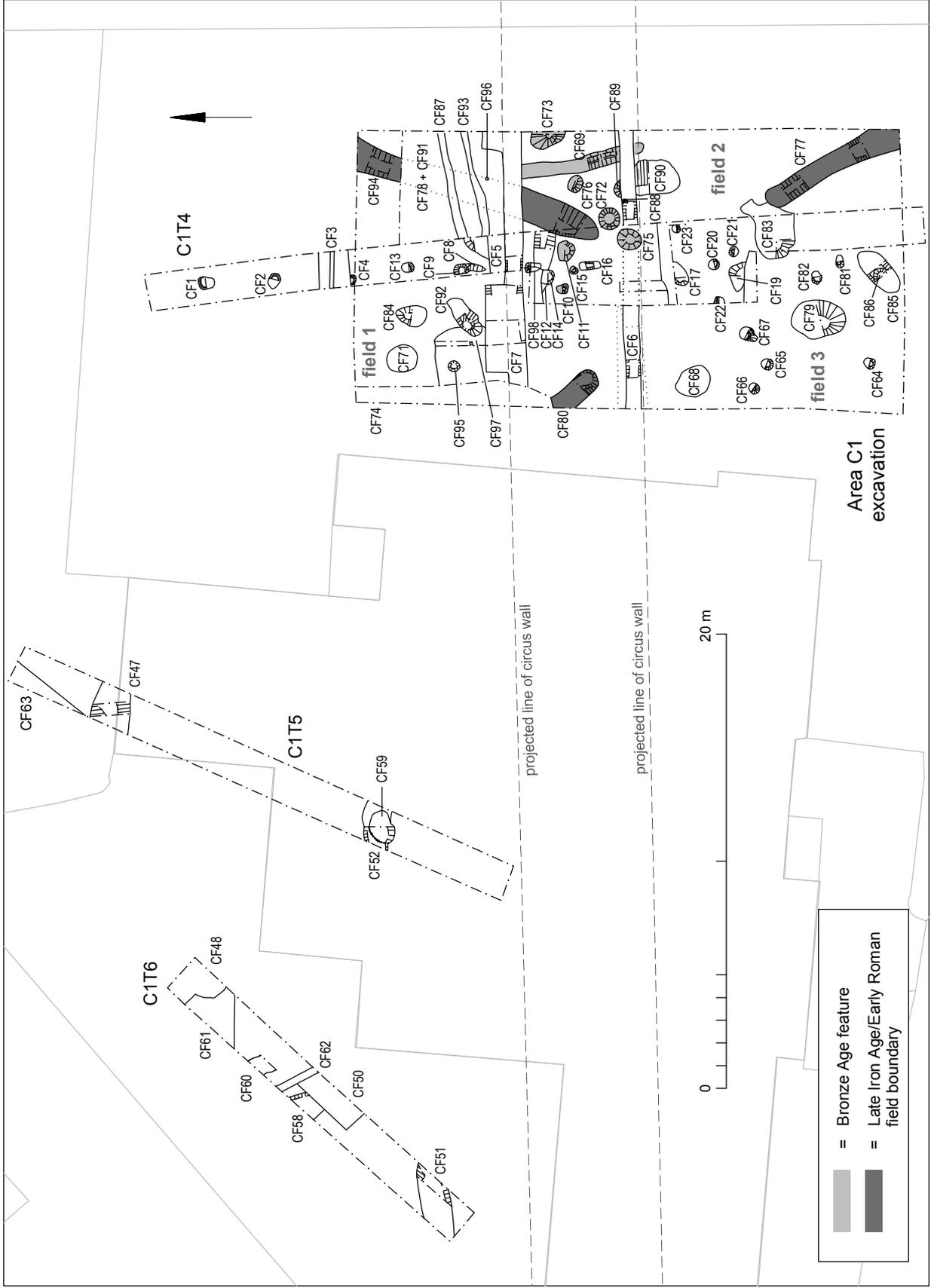


Fig 3 Plan of evaluation trenches C1T4-C1T6 and excavation area, Area C1.

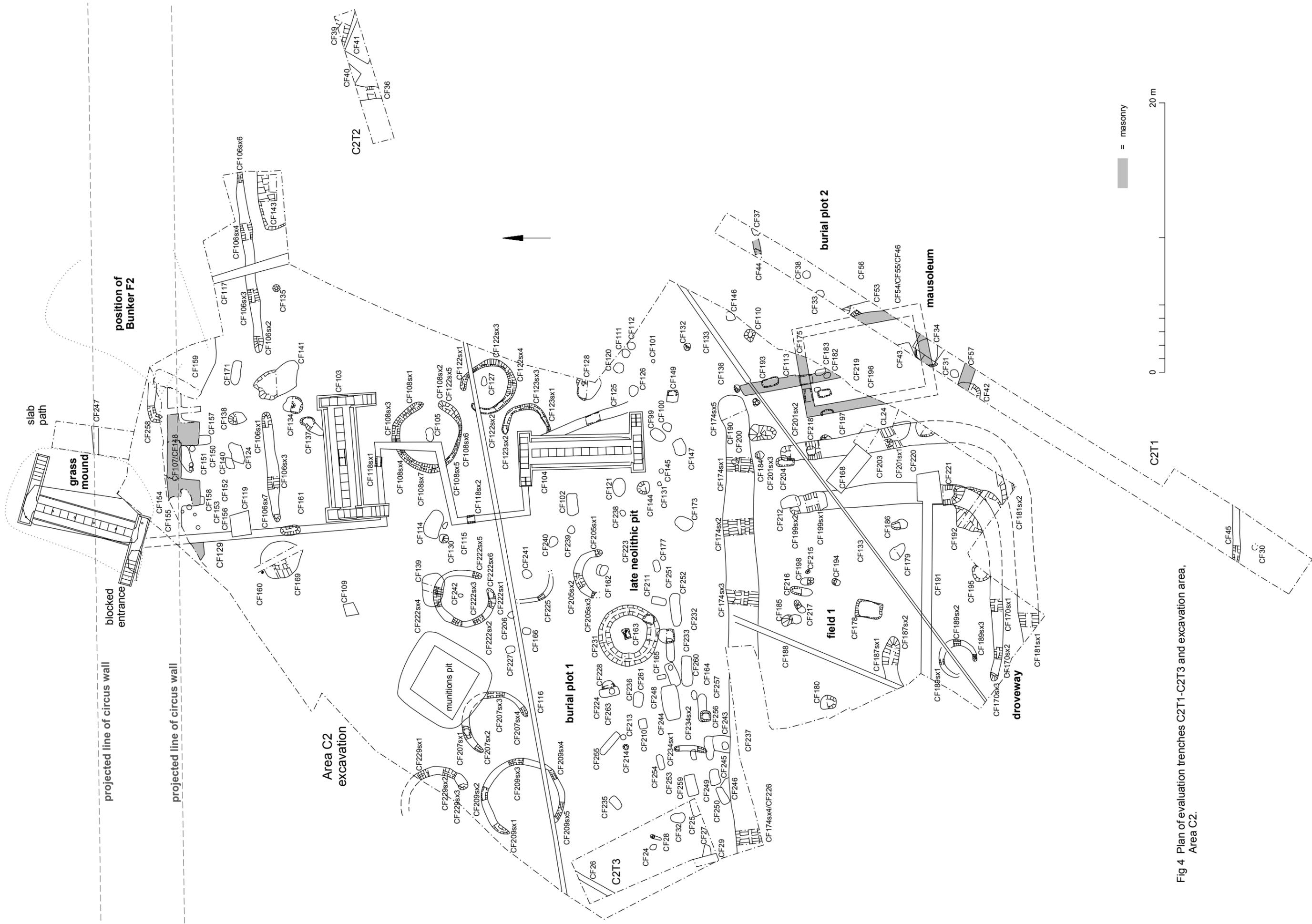


Fig 4 Plan of evaluation trenches C2T1-C2T3 and excavation area, Area C2.

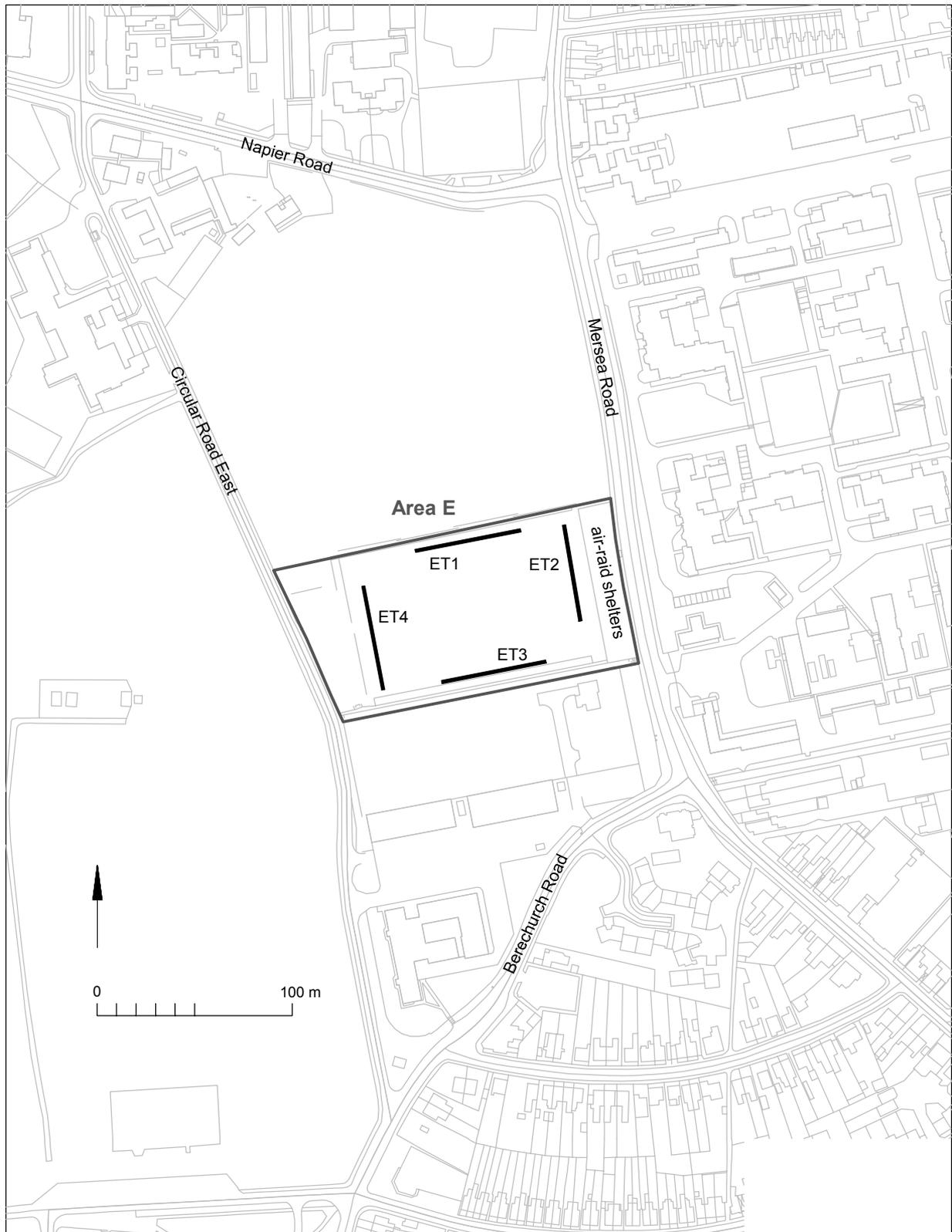


Fig 5 Location of evaluation trenches ET1-ET4, Area E.

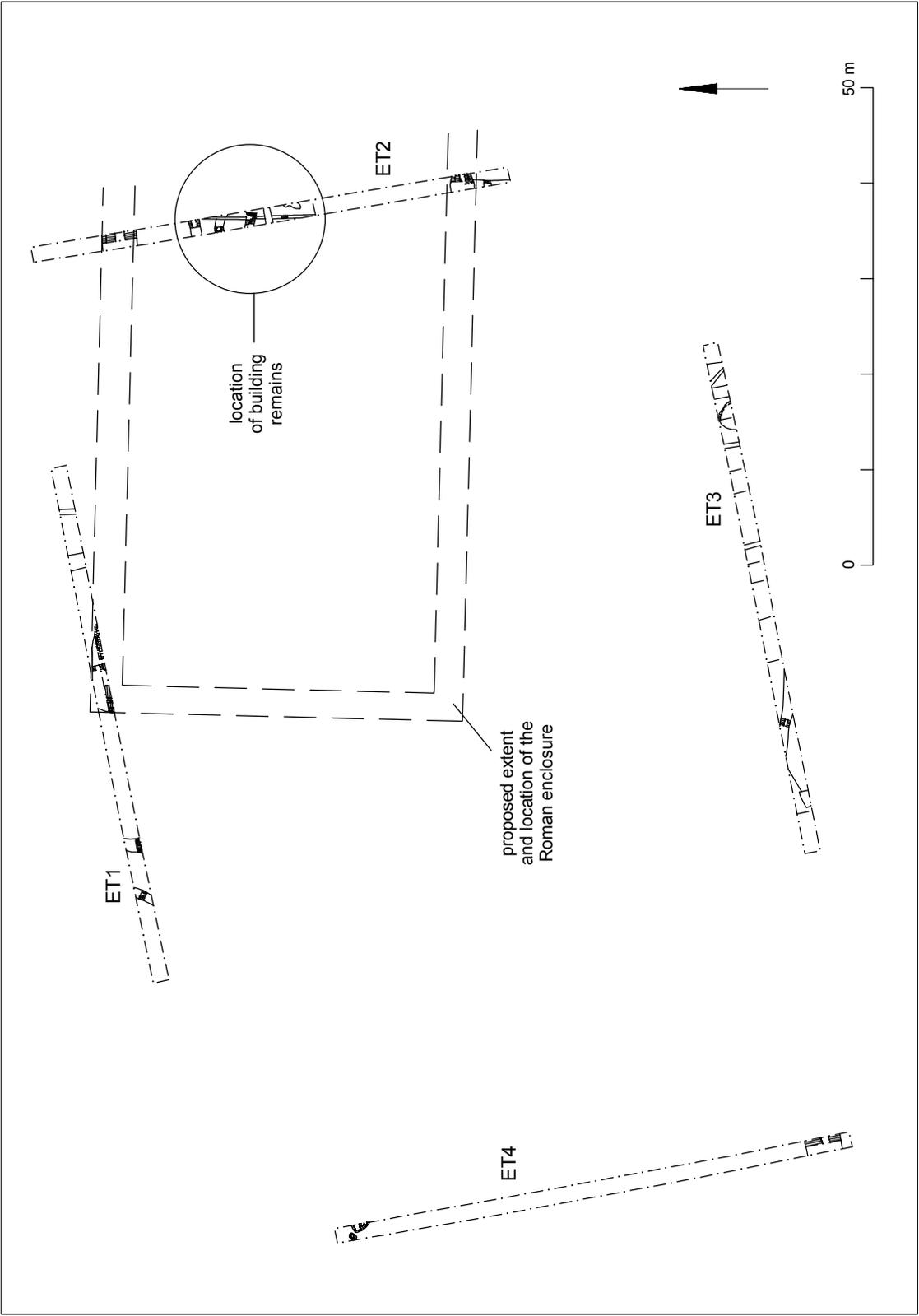


Fig 6 Proposed extent and location of the Roman enclosure, Area E.

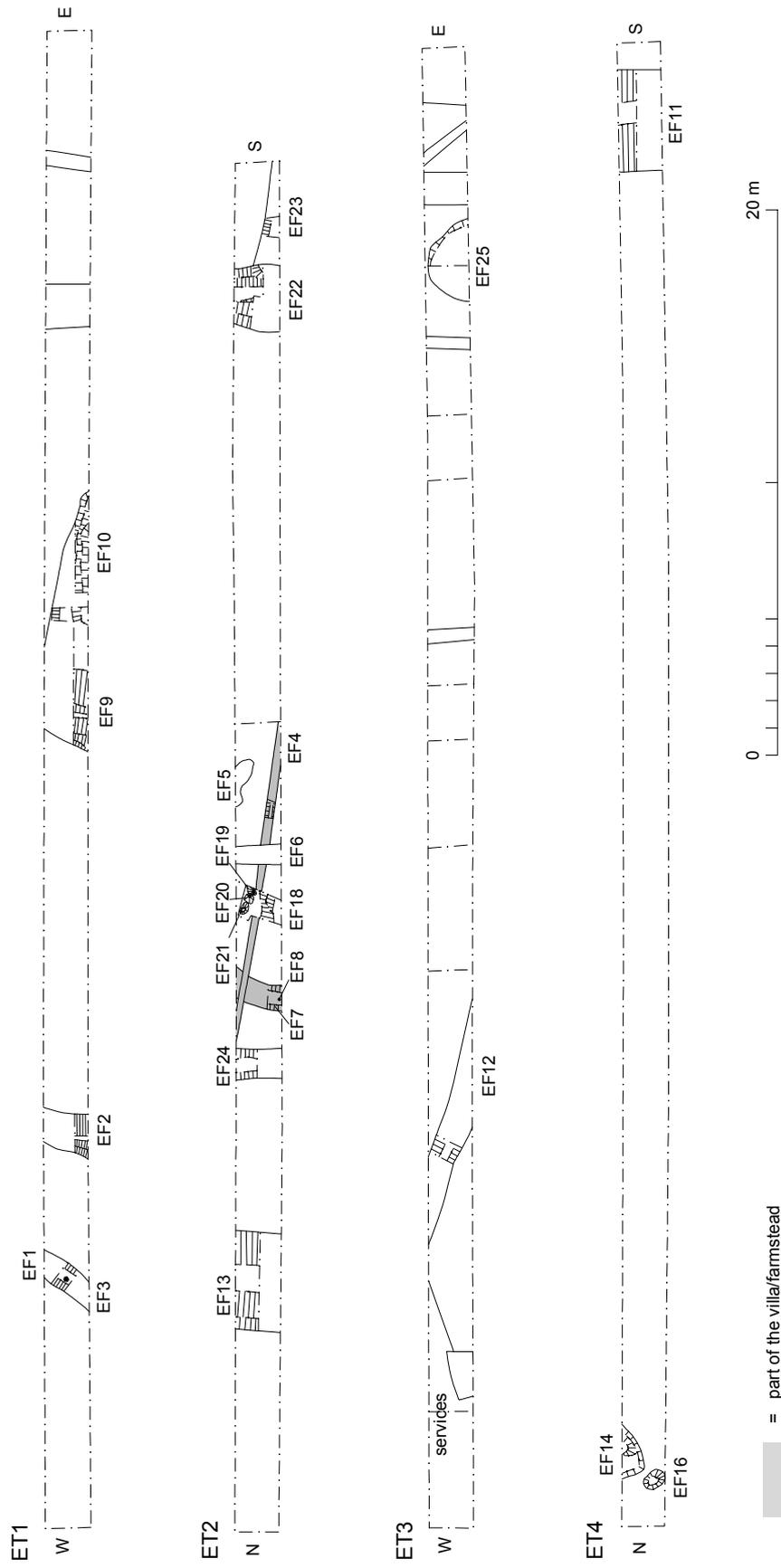
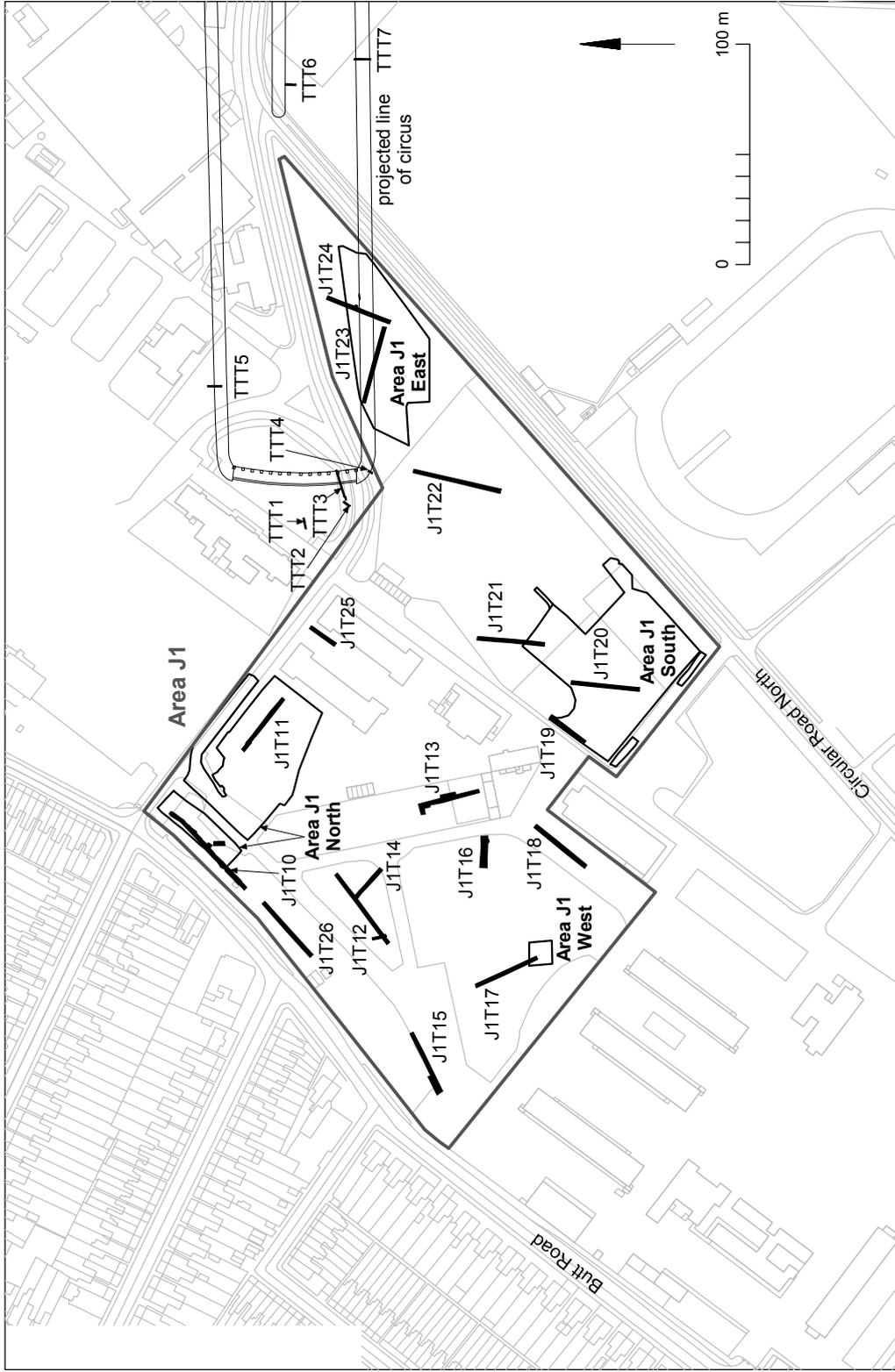


Fig 7 Plan of evaluation trenches ET1-ET4, Area E.



— edge of excavation

Fig 8 Location of evaluation trenches J1T10-J1T26 and excavation Areas J1 North, J1 South, J1 East, and J1 West, Area J1, and location of Time Team Trenches TTT1-TTT7.

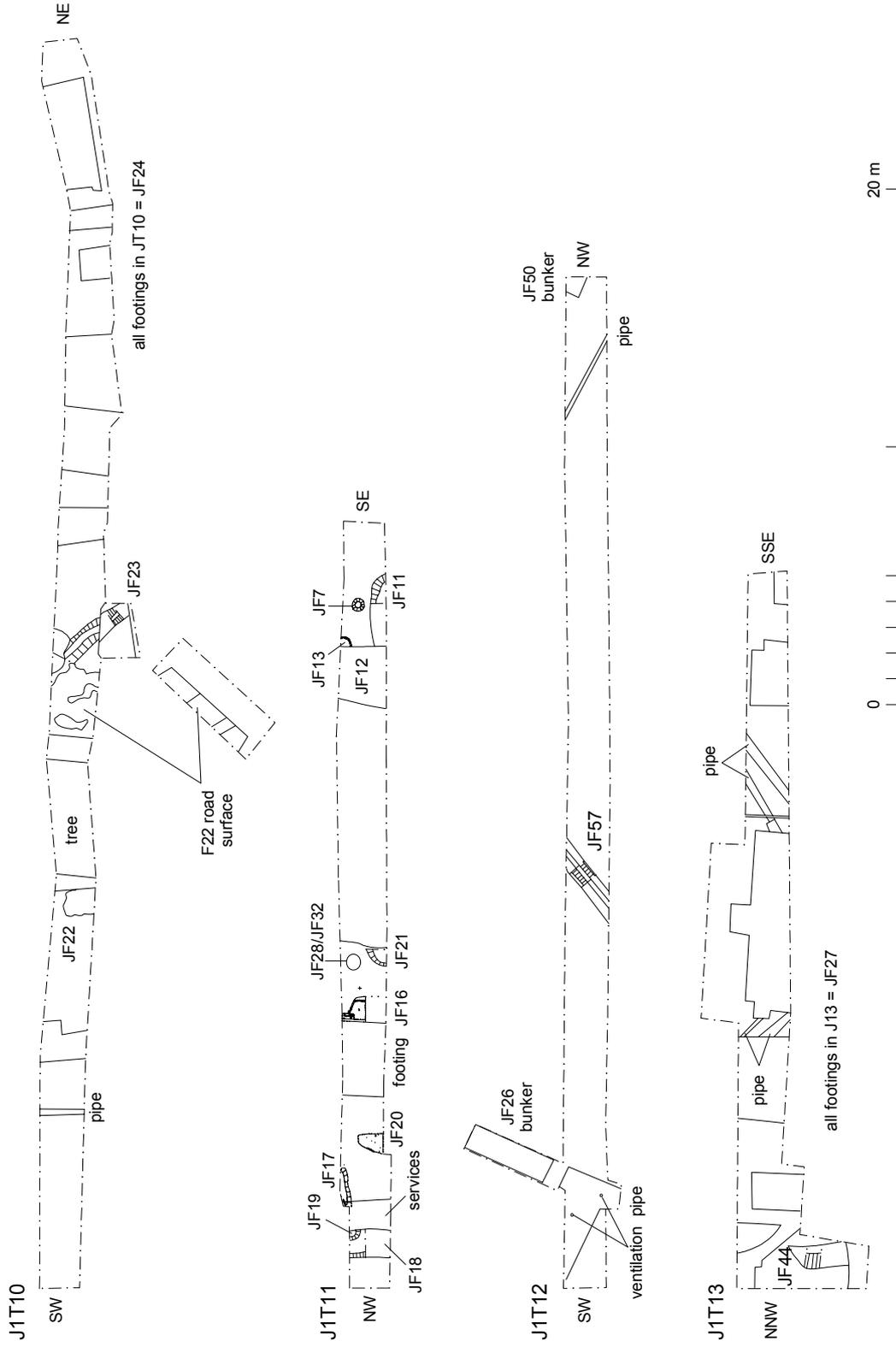


Fig 9 Plan of evaluation trenches J1T10~J1T13, Area J1.

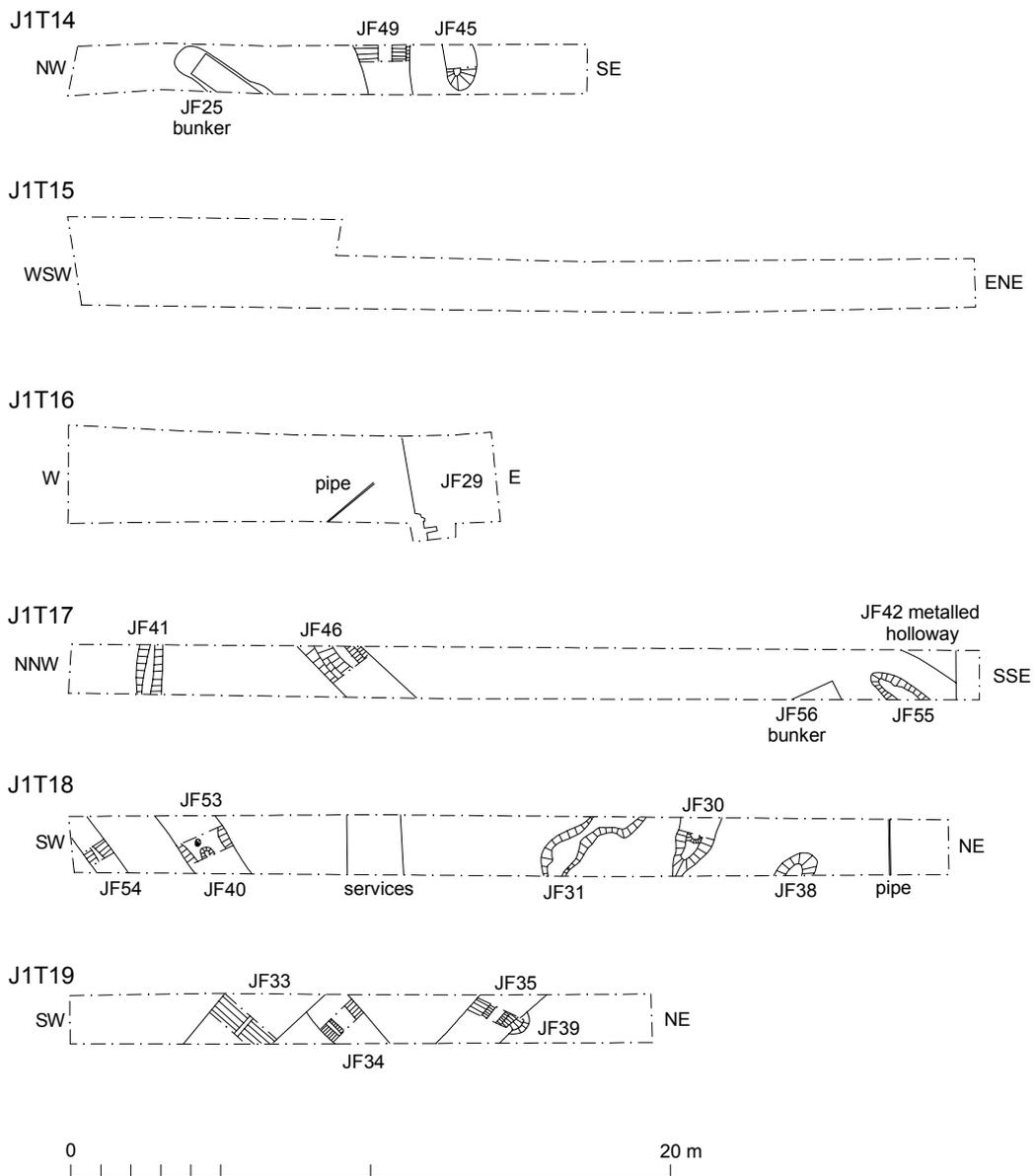


Fig 10 Plan of evaluation trenches J1T14- J1T19, Area J1.

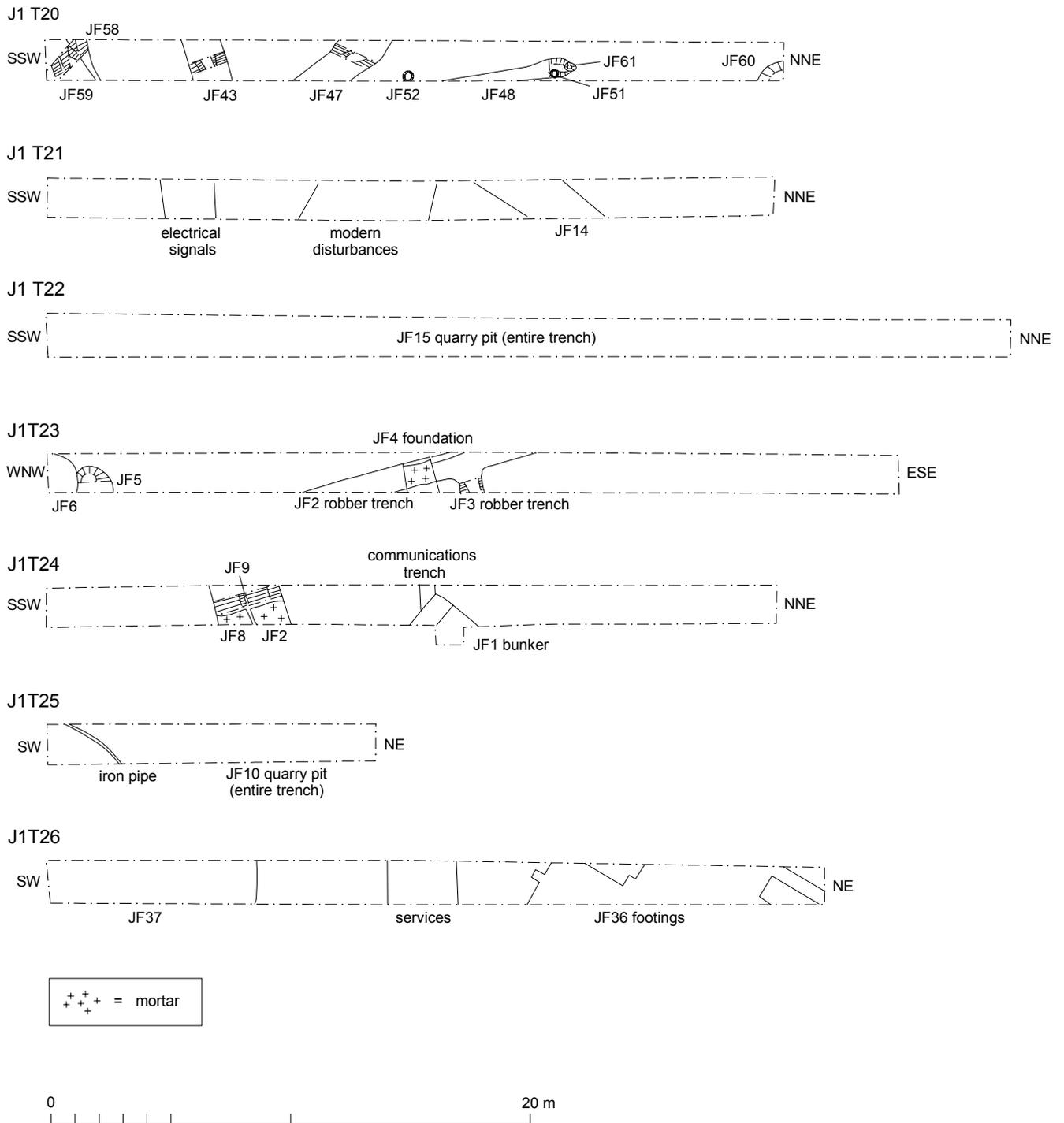


Fig 11 Plan of evaluation trenches J1T20- J1T26, Area J1.

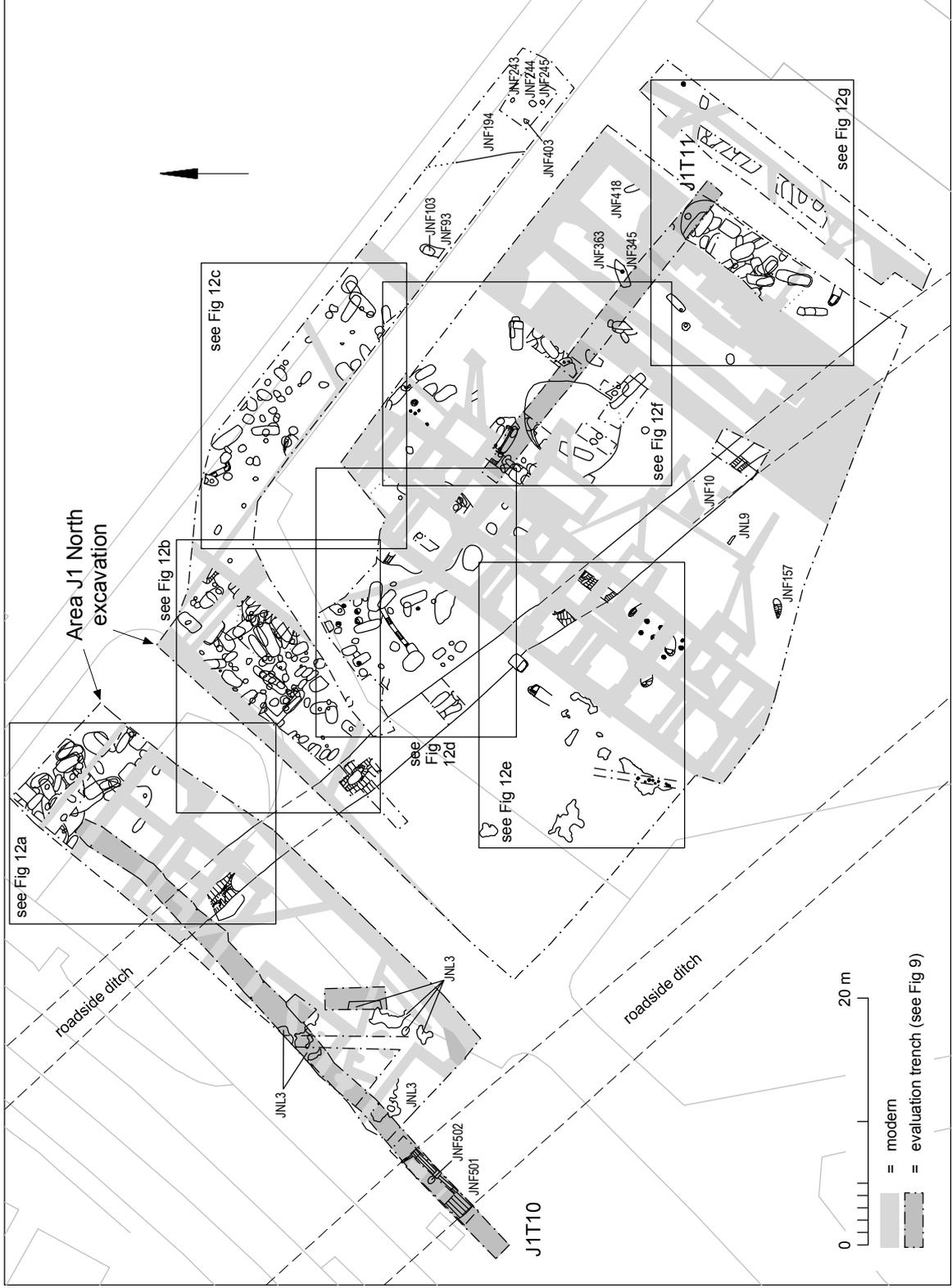


Fig 12 Plan of excavation Area J1 North, Area J1.

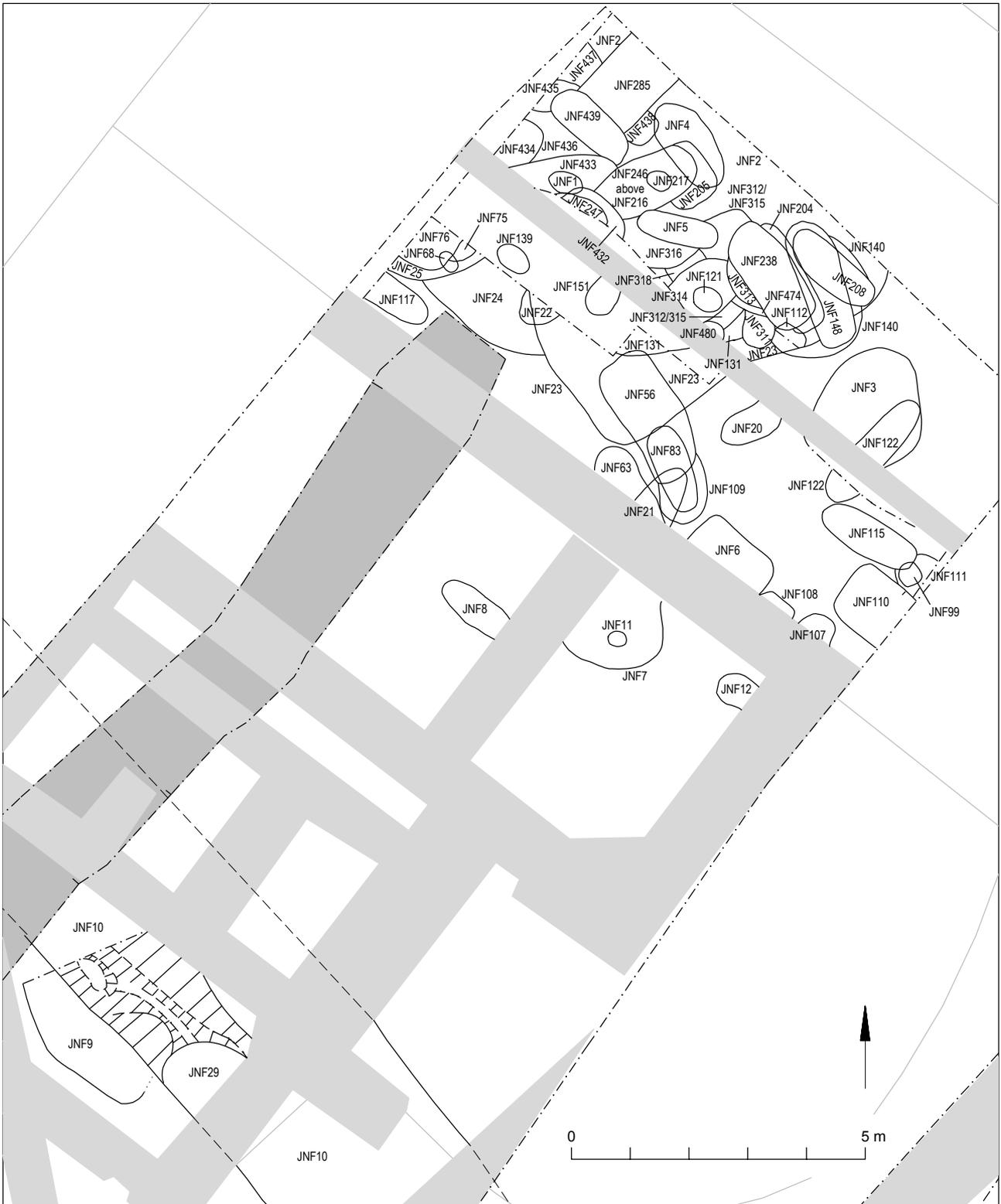


Fig 12a Insert to Fig 12.

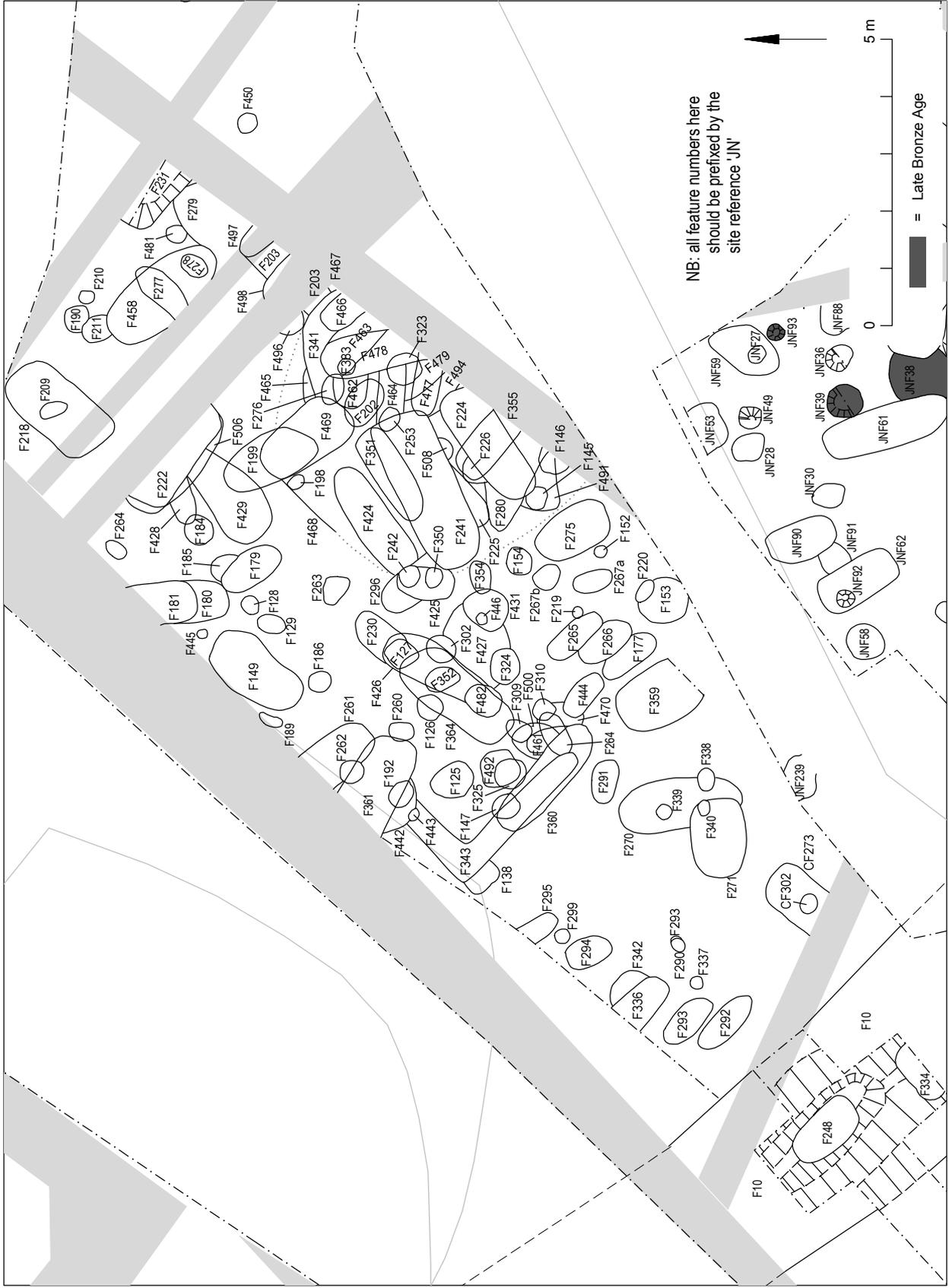


Fig 12b Insert to Fig 12.

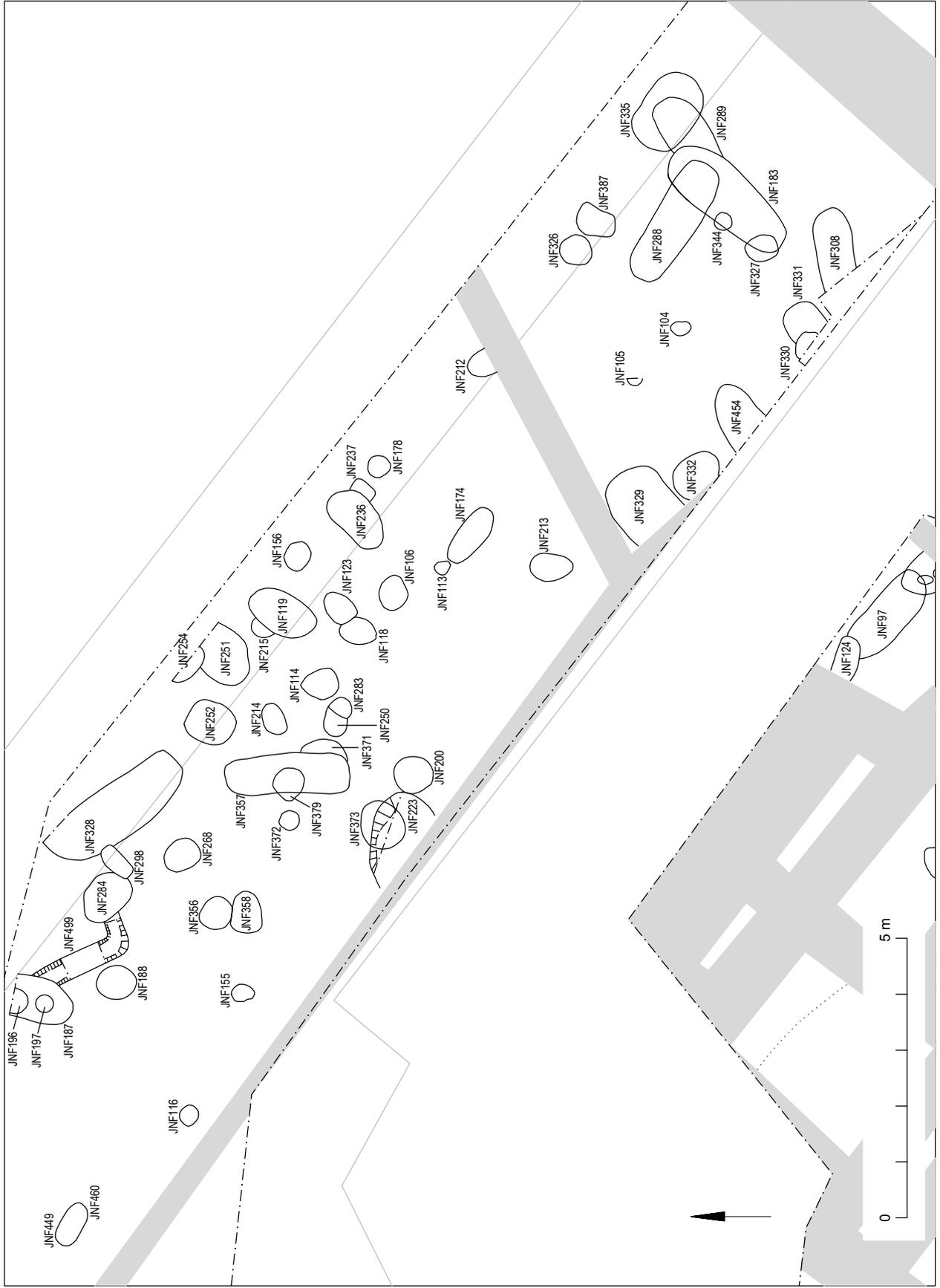


Fig 12c Insert to Fig 12.

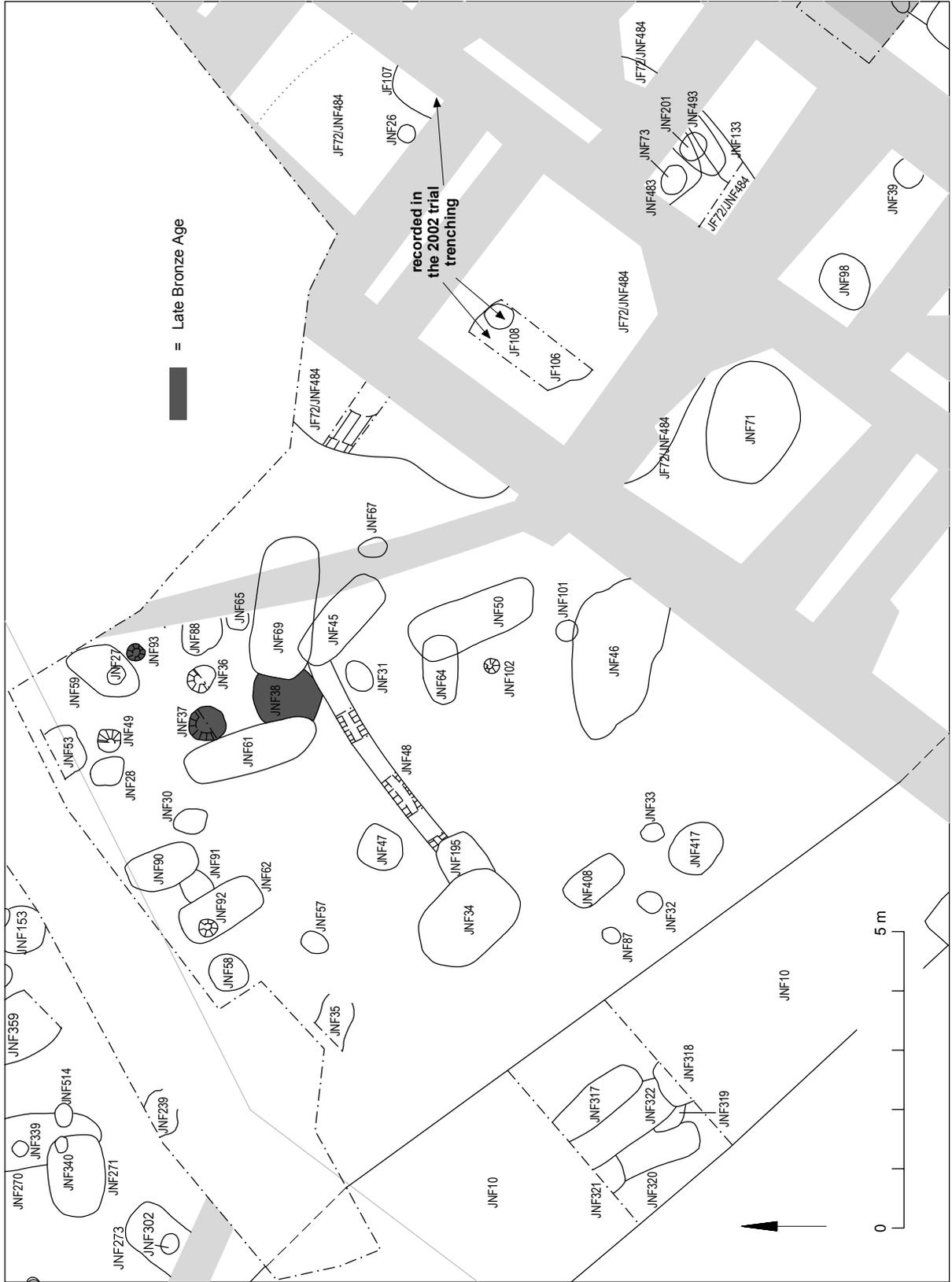


Fig 12d Insert to Fig 12.



Fig 12e Insert to Fig 12.

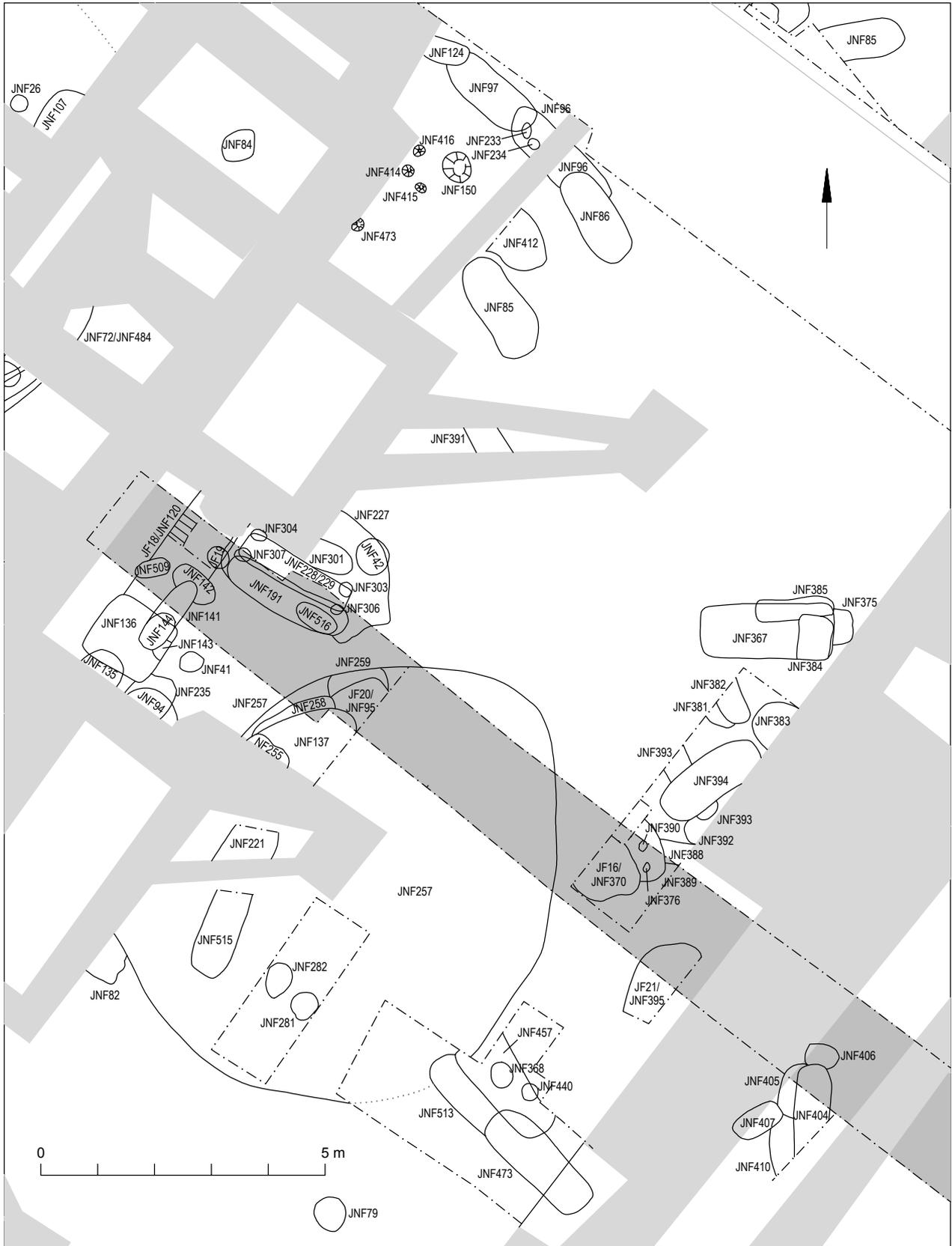


Fig 12f Insert to Fig 12.



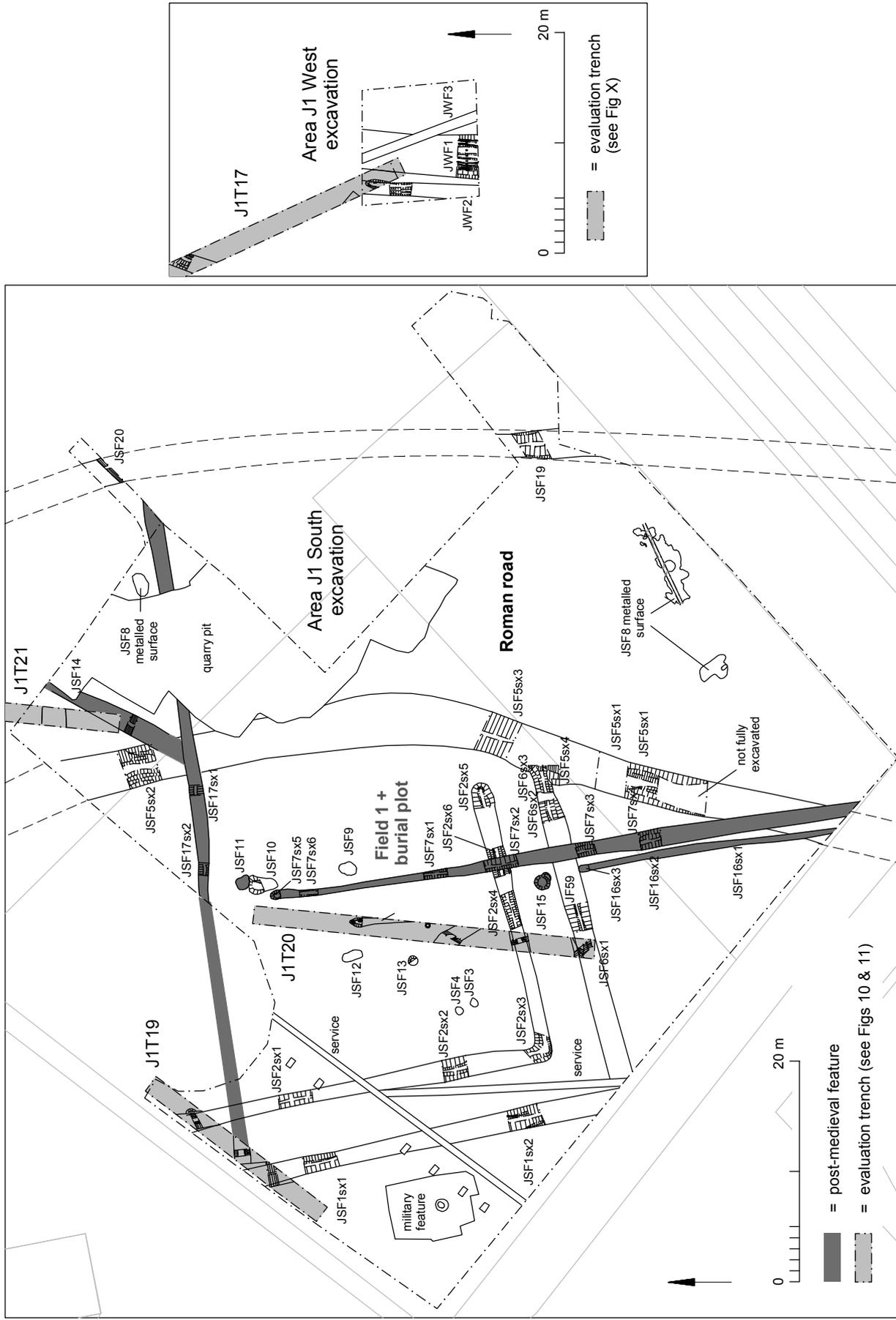


Fig 13 Left: Plan of excavation Area J1 South, Area J1. Right: Plan of excavation Area J1 West, Area J1.

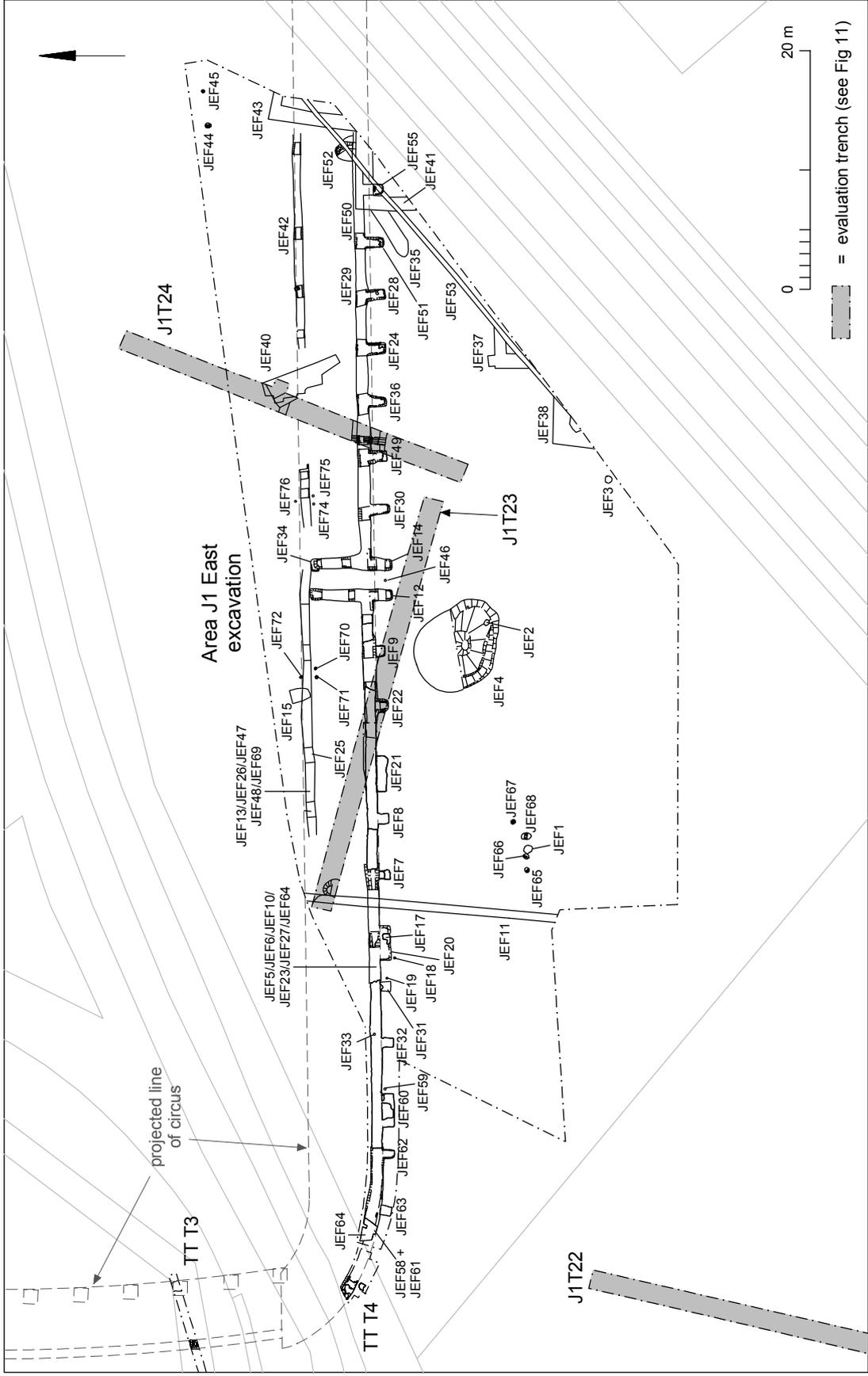


Fig 14 Plan of excavation Area J1 East, Area J1.

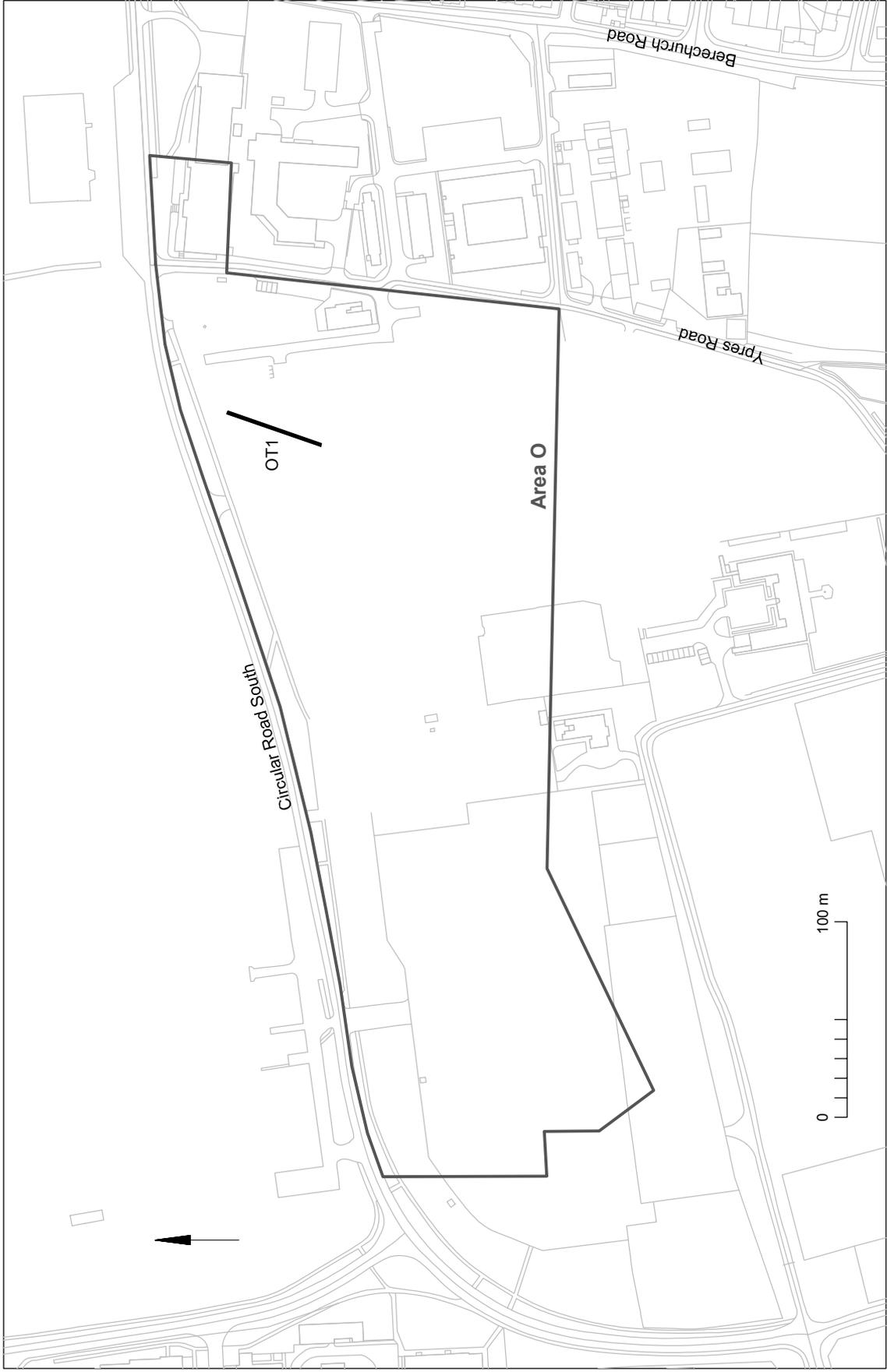
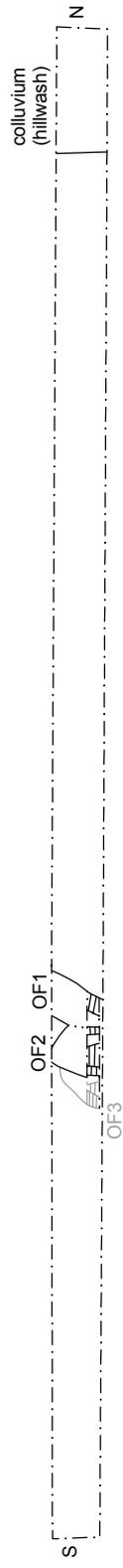
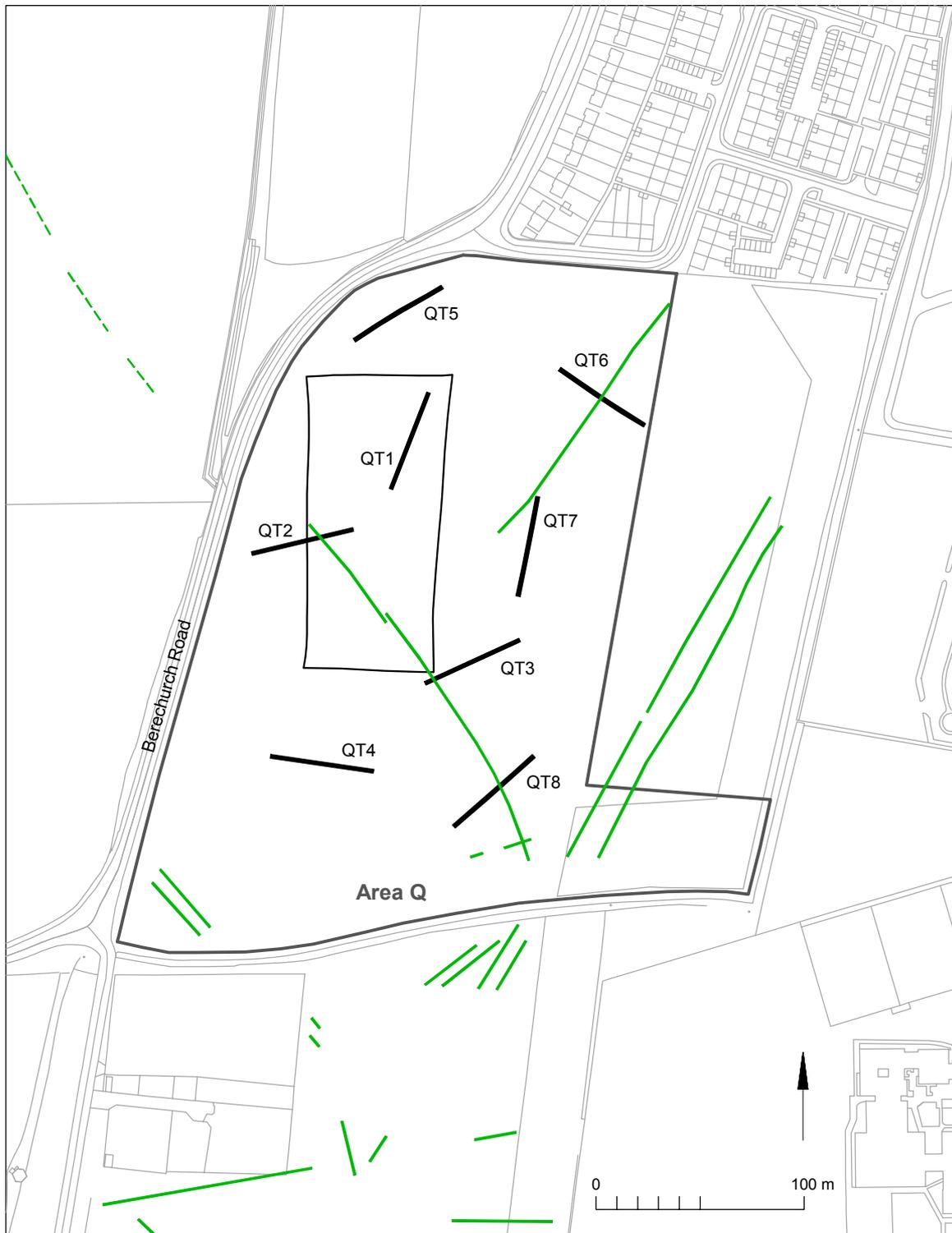


Fig 15 Location of evaluation trench OT1, Area O.



 = natural feature

Fig 16 Plan of evaluation trench OT1, Area O.



- |   |                              |         |                        |
|---|------------------------------|---------|------------------------|
|  | edge of excavation           | QT1-QT4 | 2002 evaluation trench |
|  | cropmark/geophysical anomaly | QT5-QT8 | evaluation trench      |

Fig 17 Location of evaluation trenches QT1-QT8 and excavation area, Area Q.

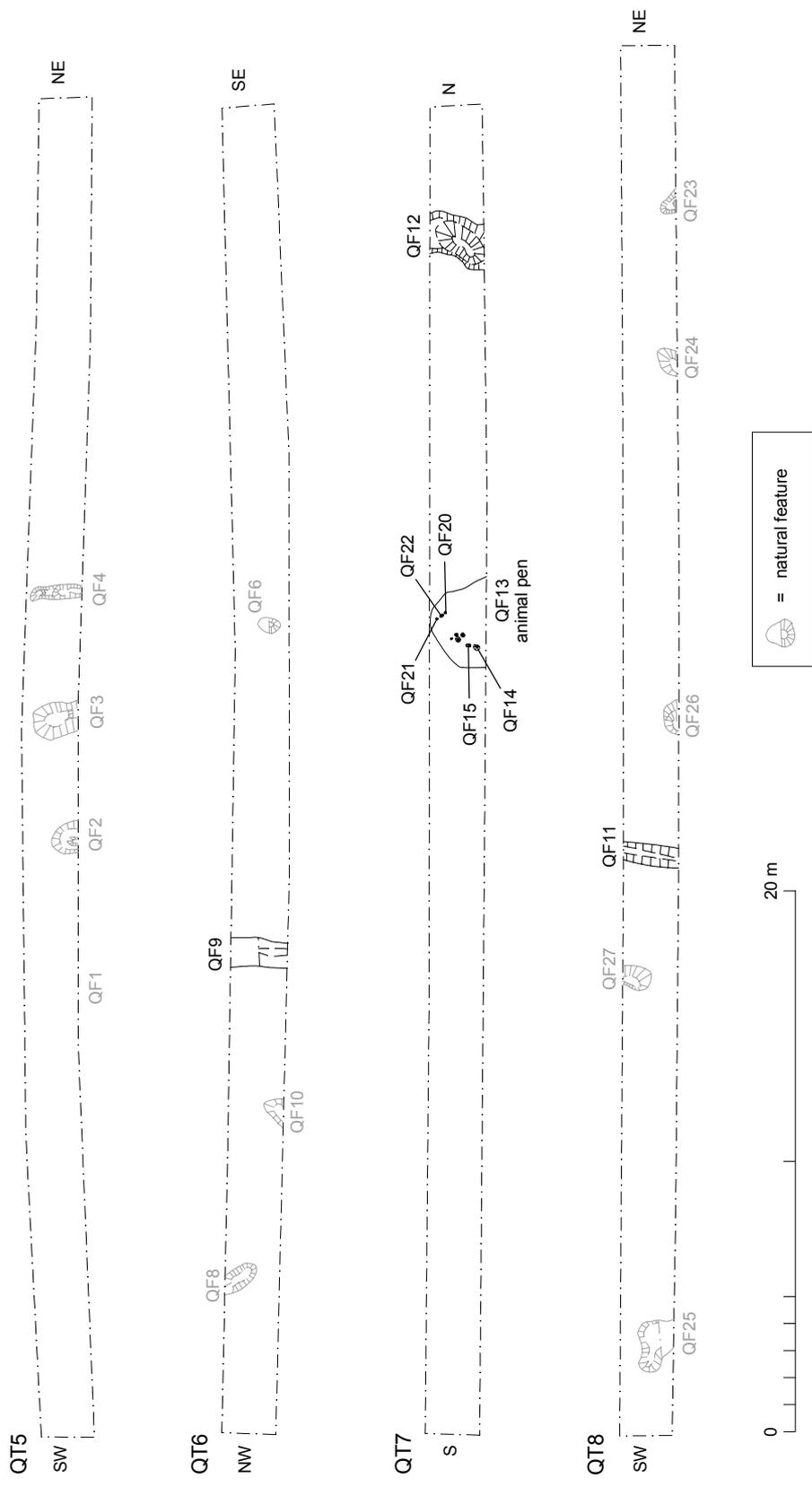


Fig 18 Plan of evaluation trenches QT5-QT8, Area Q.

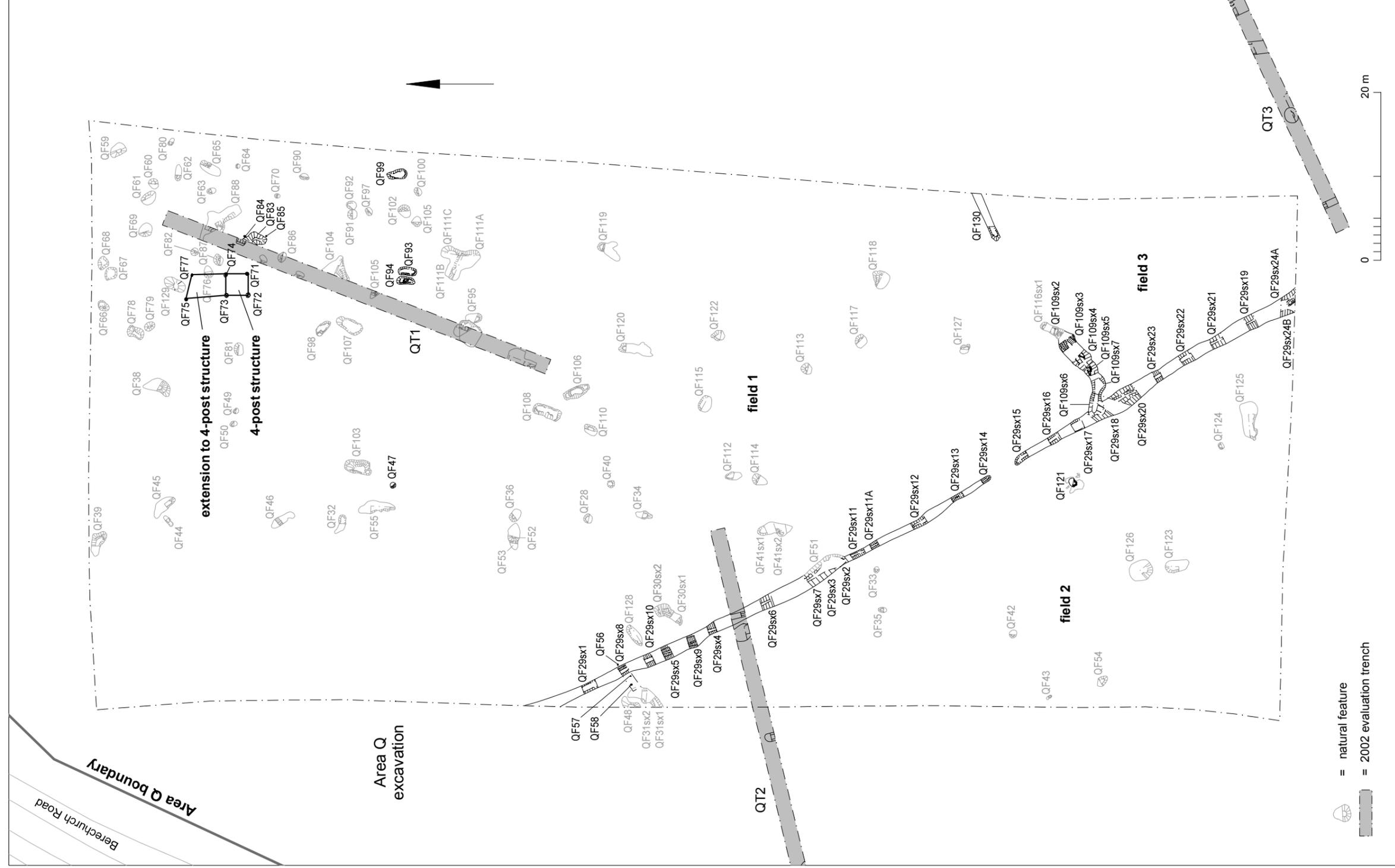


Fig 19 Plan of excavation Area Q, with distinction between natural and archaeological features.

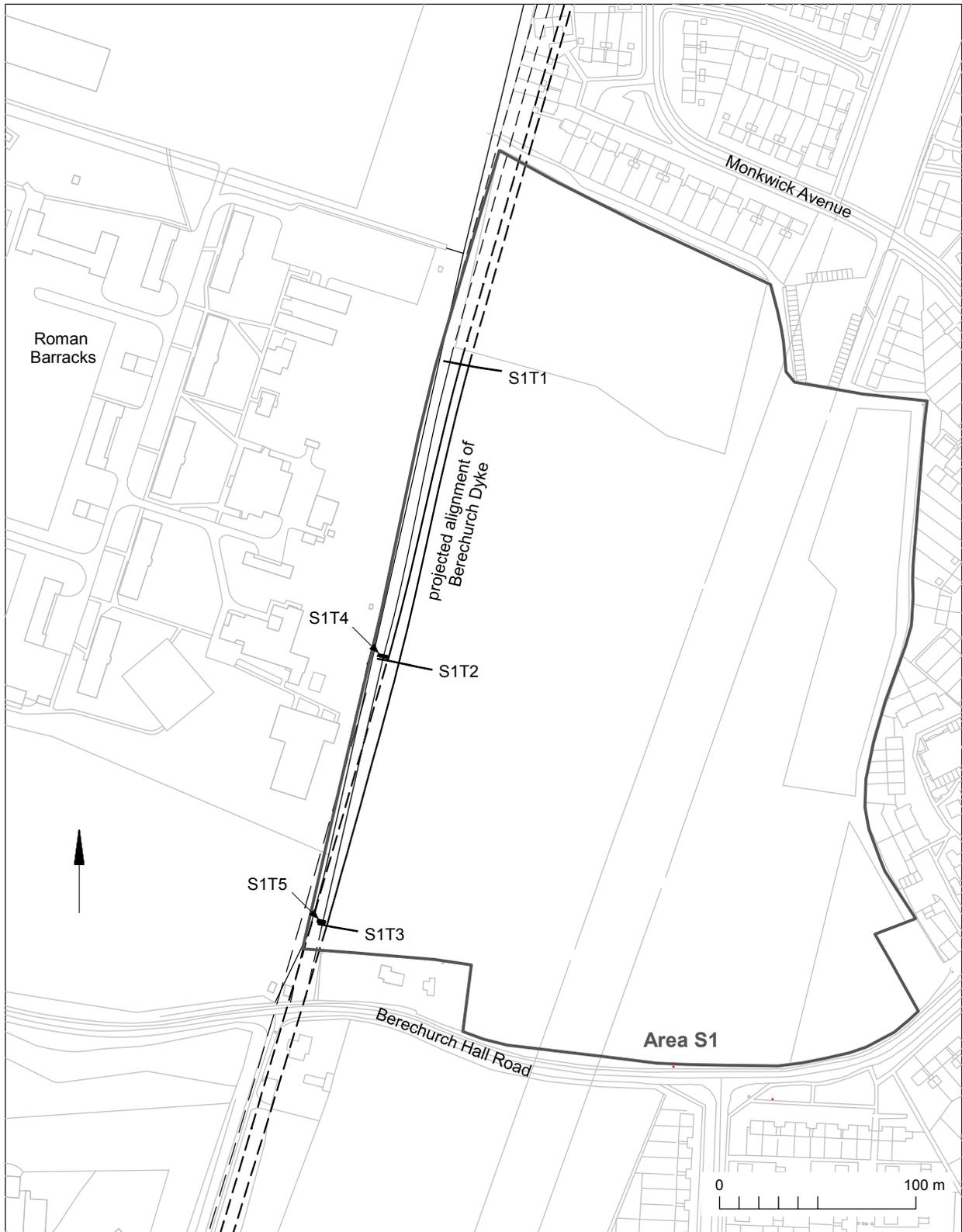


Fig 20 Location of evaluation trenches S1T1-S1T5, Area S1. Also showing the projected alignment of Berechurch Dyke.

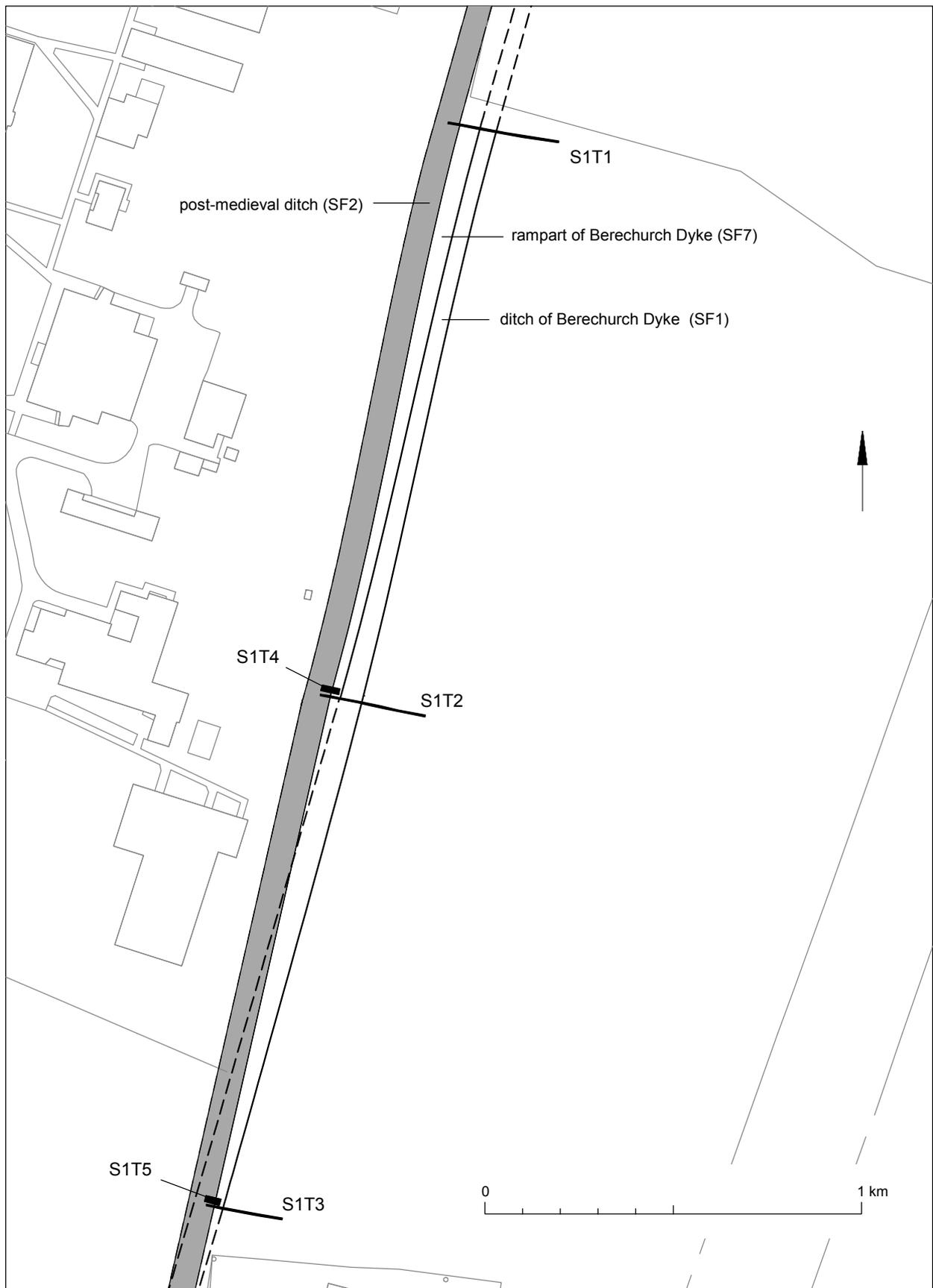


Fig 21 Plan showing location of evaluation trenches S1T1-S1T5 and features SF1, SF2 and SF7, Area S1.

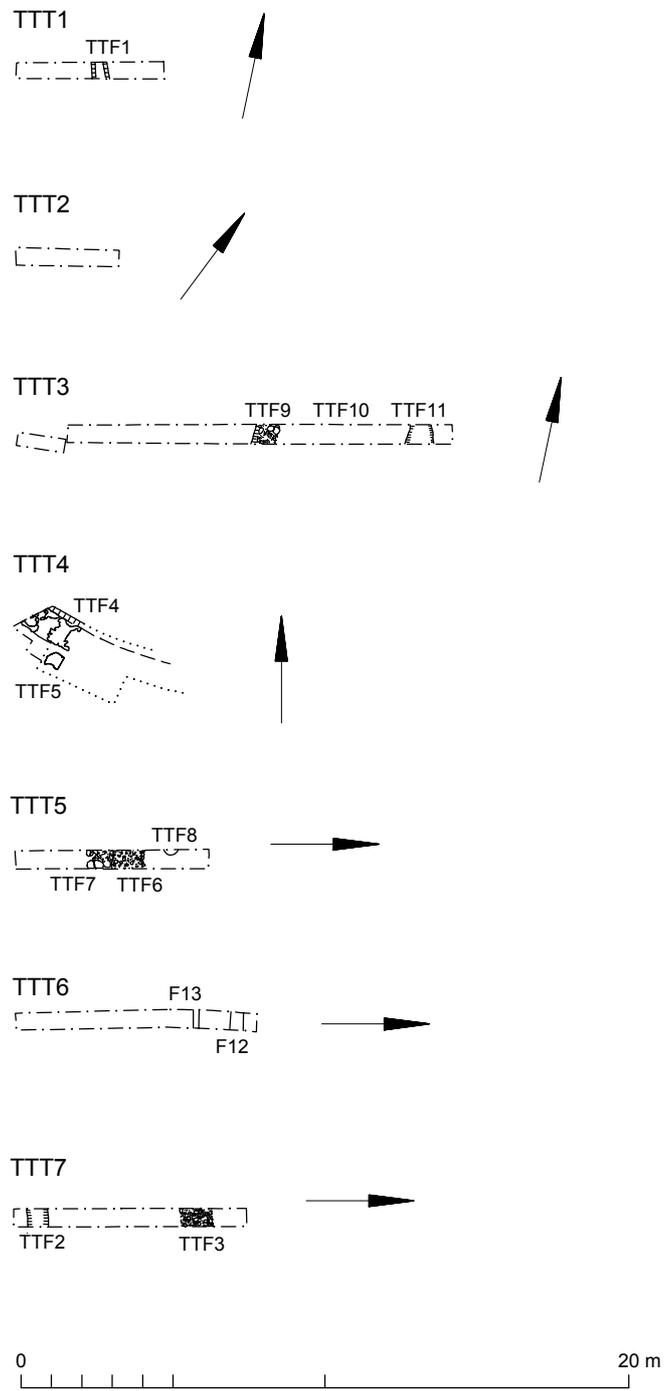


Fig 22 Plan of Time Team trenches TTT1-TTT7.

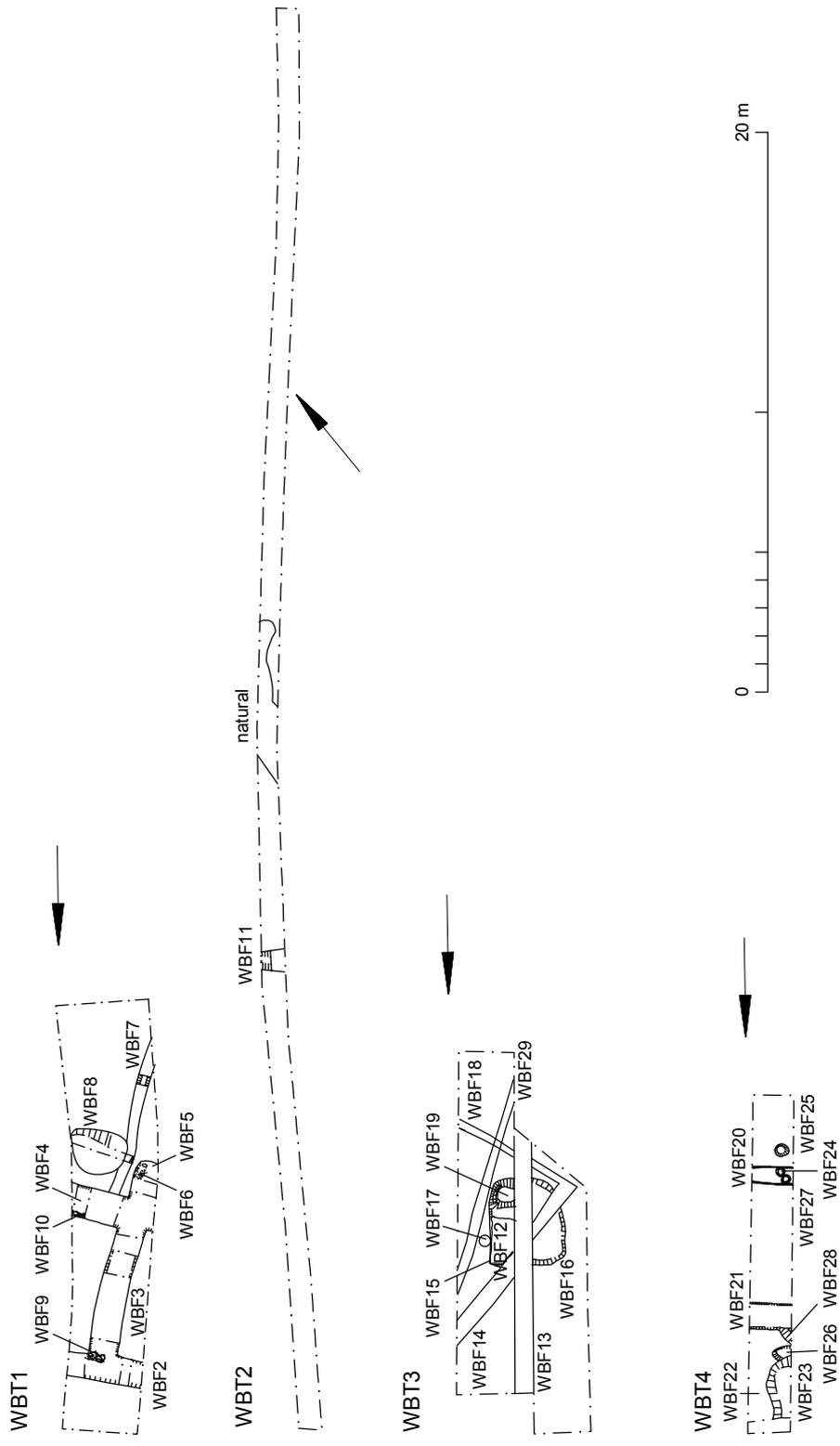


Fig 23 Plan of watching brief trenches WBT1-WBT4.

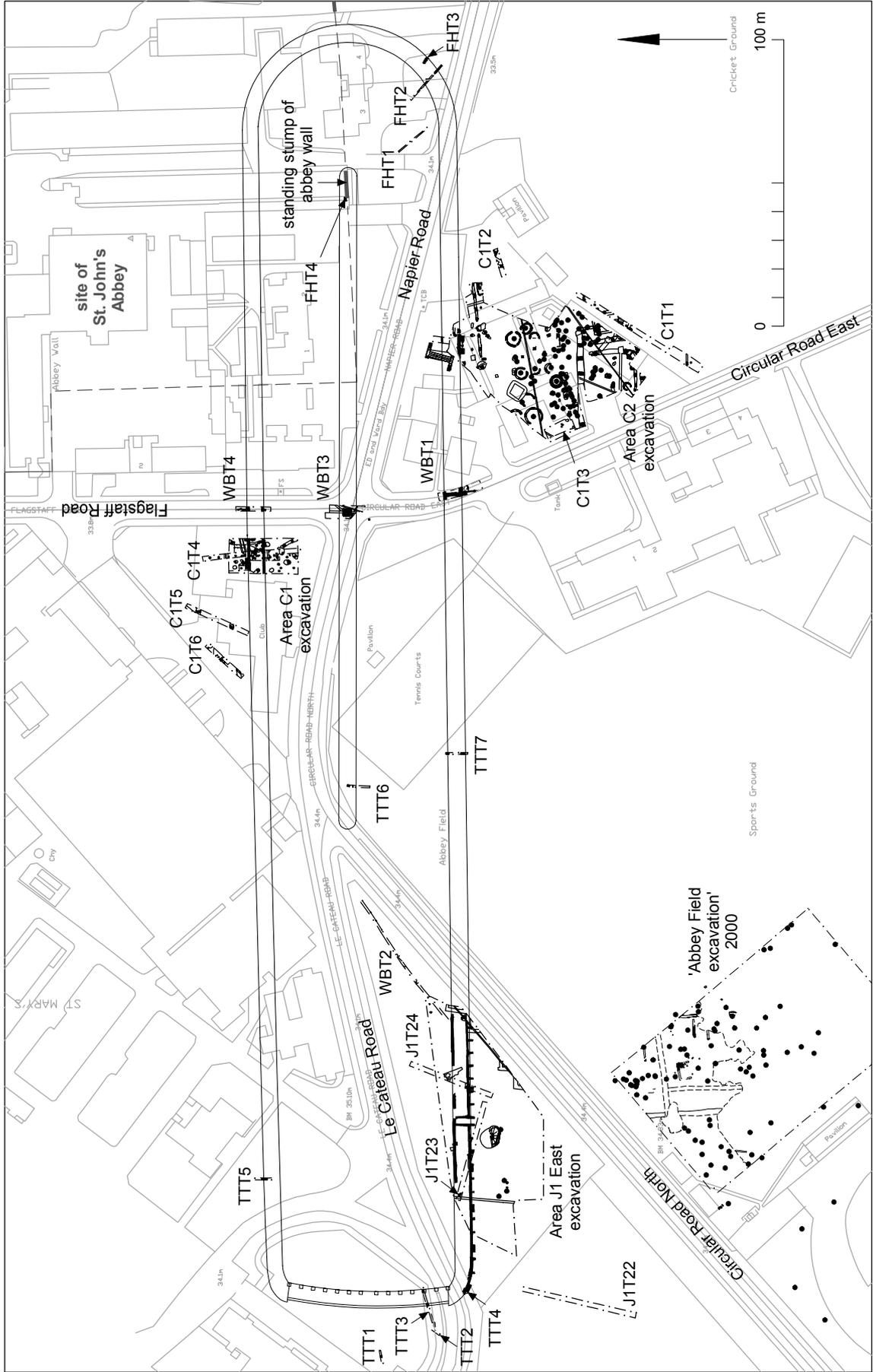
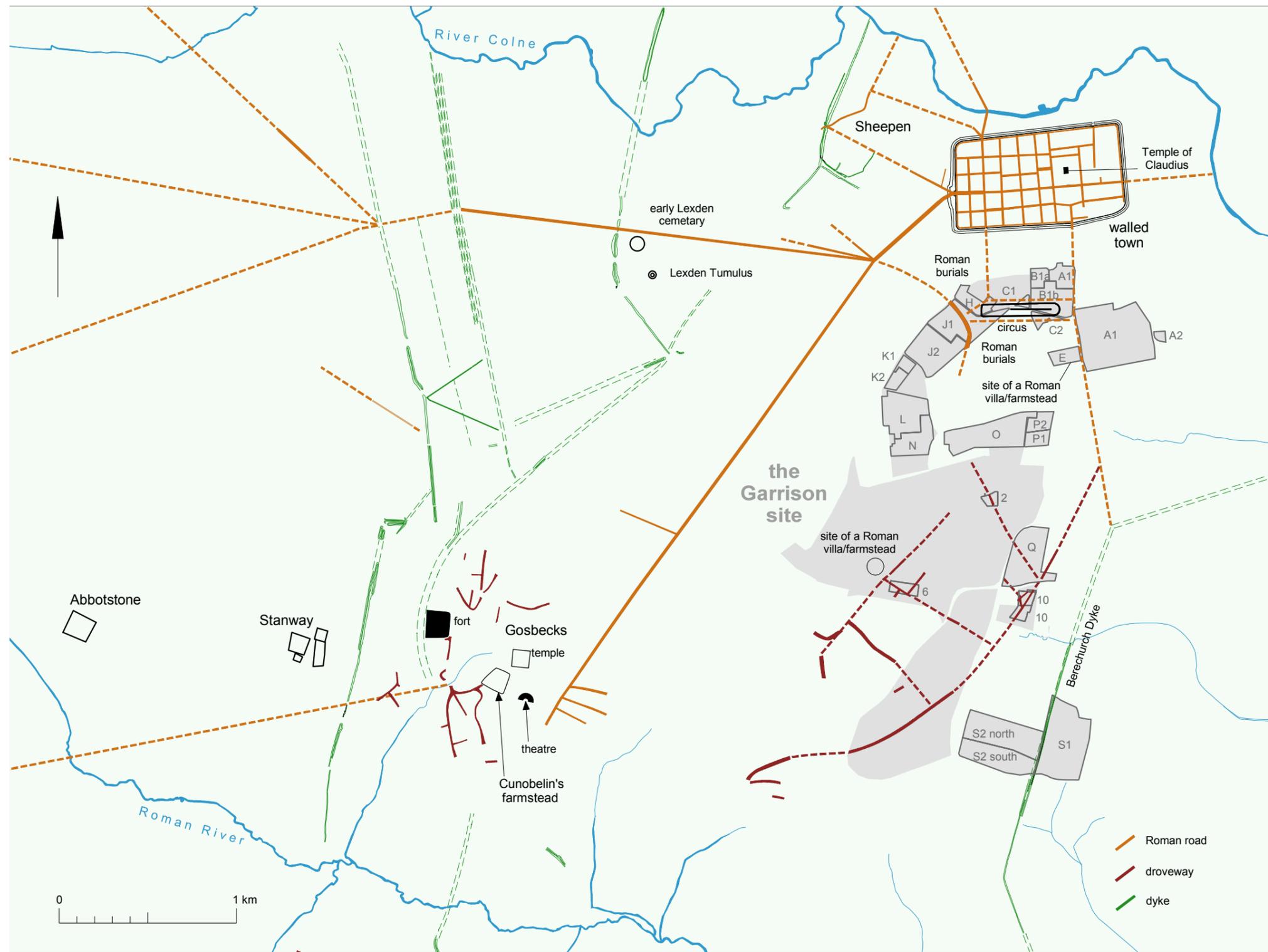


Fig 24 Projected line of circus walls.



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Fig 25 Plan of the Colchester garrison and the alienated land sites in relation to the walled town, Sheepen, Gosbecks and the dyke system.