

**An archaeological evaluation  
at the  
Garrison Sports Ground,  
Circular Road North, Colchester**

**January 2000**

**on behalf of  
WS Atkins Consultants Ltd**

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**COLCHESTER ARCHAEOLOGICAL TRUST**

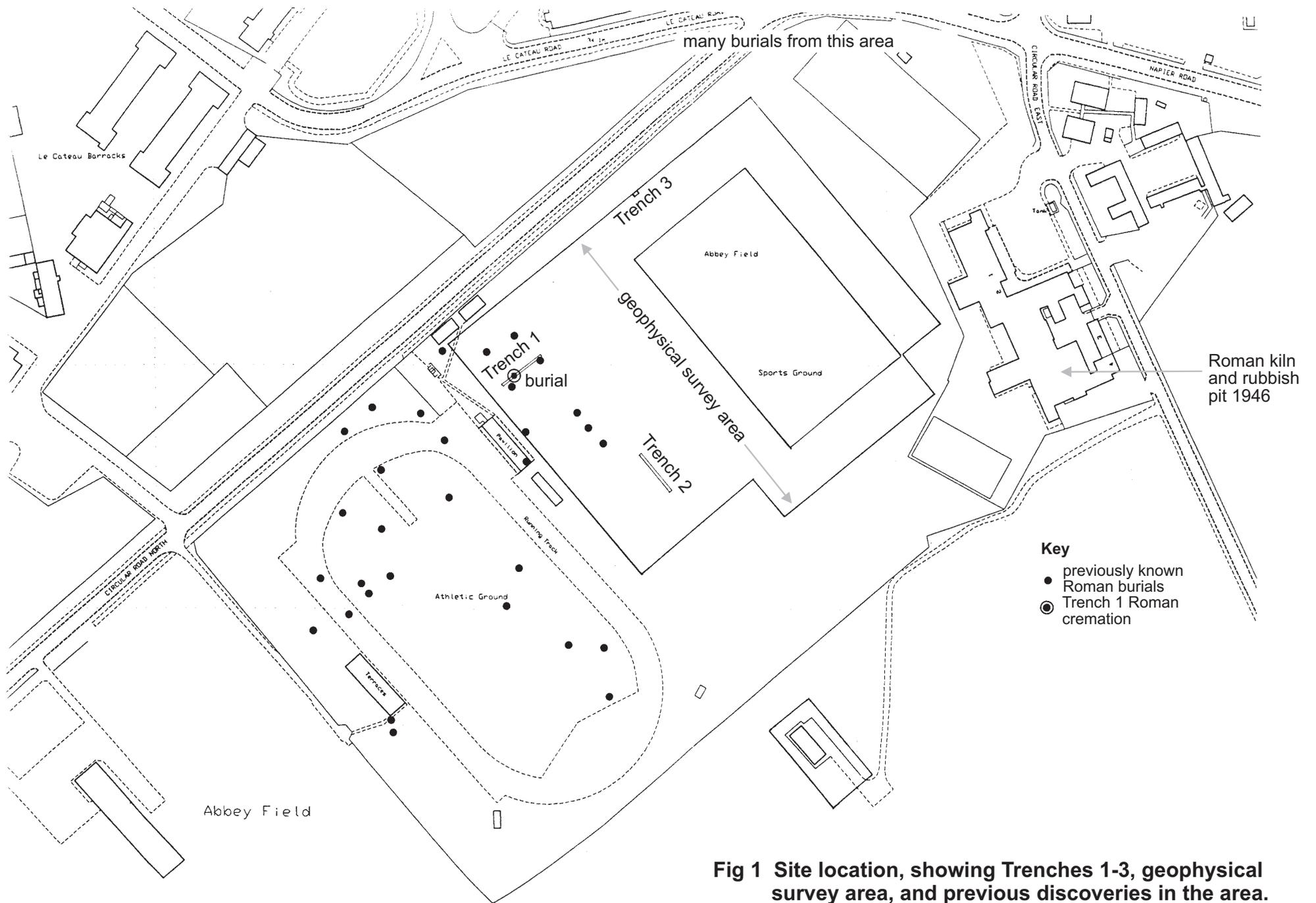


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**Fig 1 Site location, showing Trenches 1-3, geophysical survey area, and previous discoveries in the area.**

# **An archaeological evaluation at the Garrison Sports Ground (Abbey Field), Circular Road North, Colchester, Essex**

## **1 Summary**

*An archaeological evaluation by geophysical survey followed by three trial-trenches has revealed a Roman cremation burial, two medieval or post-medieval features, and several modern cuts, perhaps rugby-pitch drains. The level at which archaeologically significant deposits were found was only 350mm below modern ground-level, though there is reason to believe that in other areas it may be as little as 200mm.*

*The presence of a single cremation burial in a sample of less than 1% of the proposed development area indicates that many more burials could survive here. They will undoubtedly be affected by the proposed development work.*

## **2 Introduction**

- 2.1 This is the archive report on an archaeological evaluation by geophysical survey and trial-trenching on the site of a proposed all-weather sports pitch on land at the Abbey Field sports ground, Circular Road North, Colchester, Essex (centred on TL 9954 2441).
- 2.2 A preliminary geophysical survey was carried out in December 1999 by Peter Cott. Following discussion with the Archaeology Officer of Colchester Borough Council, trial-trenching was carried out on 7th January 2000 by the Colchester Archaeological Trust (CAT). Post-excavation work took place between 10th and 12th January 2000.
- 2.3 All fieldwork was done in accordance with a specification agreed with the Archaeology Officer of Colchester Borough Council.
- 2.4 This report mirrors standards and practices contained in Colchester Borough Council's *Guidelines for the standards and practice of archaeological fieldwork in the Borough of Colchester* (1996).

### **3 Archaeological background (Fig 1)**

- 3.1 There are records of many Roman burials from this area. In 1925, twenty-eight were recorded when the ground was levelled for a sports ground (Essex Sites and Monuments Record or ESMR 12384). This is the area now corresponding with the athletics track and the south-eastern edge of the rugby pitch. Another cremation burial was found in 1931 when the goal-posts were being erected. The top of the burial was found at a depth of about four inches from the surface (Colchester Museum Report 1932). A Roman kiln and rubbish-pit were found at the NAAFI, now the Arena Leisure Centre, in 1946 (ESMR 13232).
- 3.2 Large Roman cemeteries are known from the south and west sides of Colchester, and Roman burials are the commonest archaeological find in the Garrison area. The Colchester cemeteries have recently been discussed (Crummy 1993), so only a few general points will be made here. The density of burials is demonstrated by the very high numbers recorded at the Butt Road police station site (approximately a thousand), at Le Cateau Barracks (several hundreds), and at the Artillery Barracks (100+). Their distribution is clearly shown by the fact that they spread right down over the Abbey Field as far south as the Sobraon Barracks and as far south-east as the modern Colchester Cemetery. The apparent patchiness of the distribution of recorded burials (eg hundreds at Le Cateau, but none at the Cavalry Barracks) may have more to do with the willingness of builders to report discoveries (and the diligence of local antiquarians in chasing up and recording the discoveries) than the actual distribution of burials. If it is true that the Cavalry Barracks, the Sobraon Barracks and the Colchester Cemetery are on the outskirts of the main concentration of Roman burials, then the Abbey Field must be firmly within it.

### **4 Aim**

The aim of the evaluation was to locate, identify and assess the quality and extent of any surviving archaeological remains on the site, with particular reference to the many Roman burials previously recorded from the area.

## **5 The trial-trenches**

**5.1** Two twenty-metre long trial-trenches (Trench or T1, T2) were dug in the locations shown on Figure 1, using a mechanical digger (JCB), with a 1.5m-wide flat-edged ditching bucket. Later, a smaller test-pit (T3) was dug at a distance of 75m from T1 in order to confirm the depth of topsoil or other modern overburden observed in T1 and T2.

### **5.2 Trench 1 (Fig 2)**

Machine clearance started at the SW end of T1. Initially, both the turf/topsoil (Layer or L1) and the subsoil (L2) were removed down to the natural (L3), a total depth of 60cm. In this cleared area, Feature or F1 was exposed. With hindsight, this could be seen in section cutting from a higher level, but it was not at all clear during machining. F1 was a rectangular cut, obliquely aligned to the trench. It was fully excavated, and its fill produced Roman tile, medieval or later peg-tile, and undated animal bone. It is therefore a medieval or post-medieval cut.

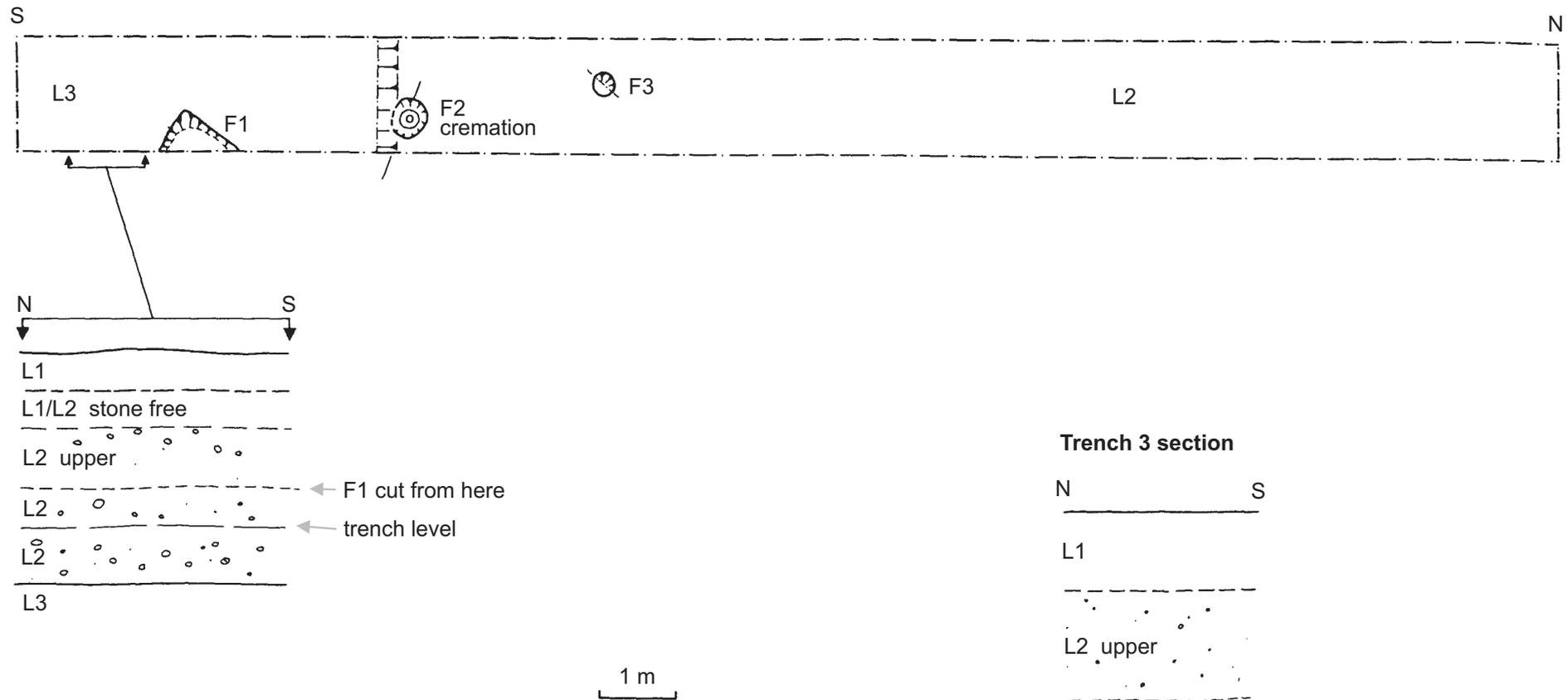
North of F1, the machining level was raised in such a way that the trench bottom was actually within L2 subsoil (Fig 2). A cut containing a pot (F2) was immediately visible at this level. F2 was a bowl-shaped pit 50cm in diameter and 32cm below site level when excavated. However, it must have been at least 40cm deep (if not a little more) to accommodate the whole profile of the contained pot. The cremation pot itself is described below (section 6.2). The fill of the pot produced the expected cremated bone, as well as the broken neck of a flagon and an iron nail. The whole group is dated to the late Roman period (by the flagon neck rather than the cremation pot).

There were no further features in the remaining part of the trench.

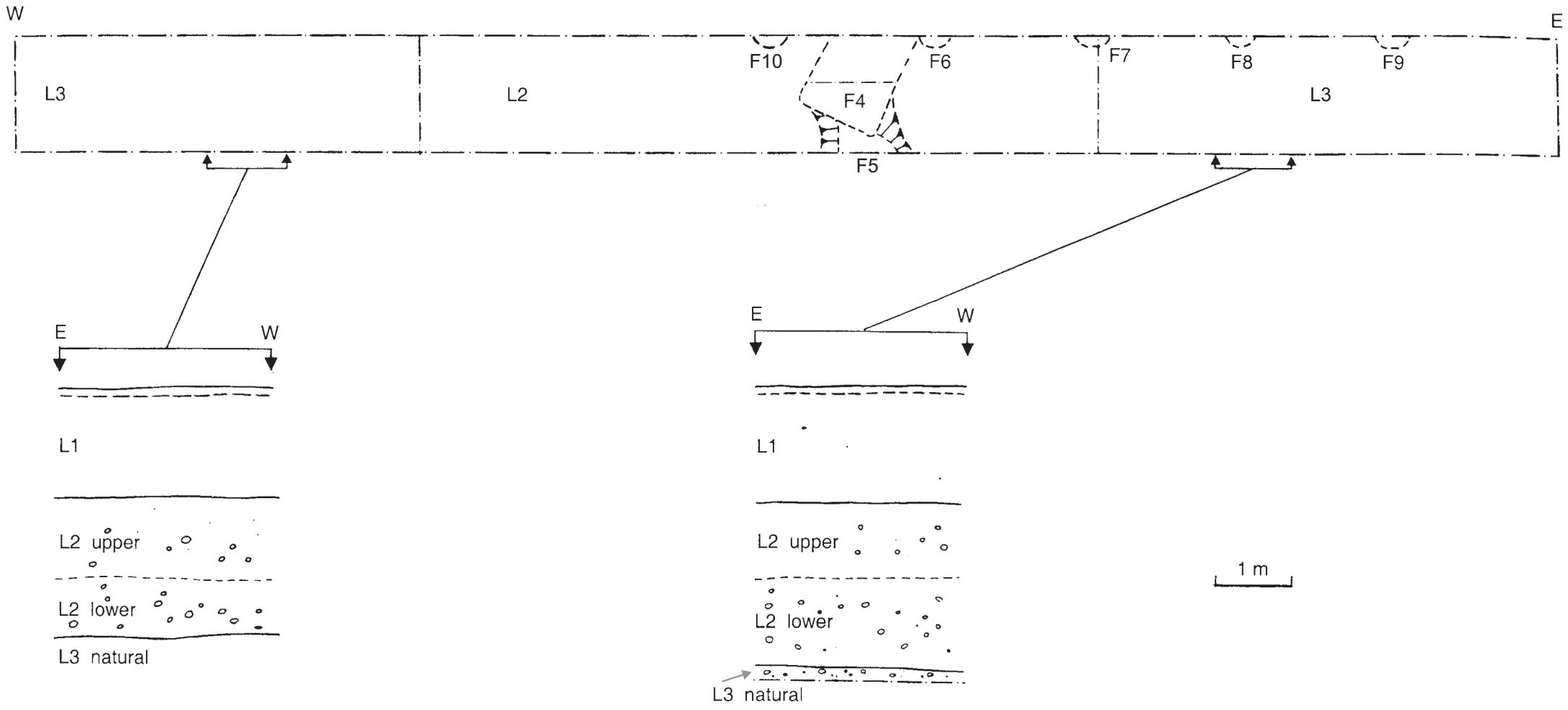
### **5.3 Trench 2 (Fig 3)**

With the knowledge of the depth at which archaeological material was found in T1, this trench was initially machined down to 55cm below ground-level (within L2). At this level, F4-F9 were visible. F4 was a steep-sided rectangular cut, in some ways similar to F1 in T1. It was excavated down to 1m below modern ground, where excavation was abandoned. Its fill produced slate, coal, slag, peg-tile and post-medieval pottery, thereby dating it to post-medieval or modern.

F5 was a shallow feature cut by F4. It shared the same dark brown loamy fill. It is unclear whether it is associated with F4, but this is quite likely.



**Fig 2 Trench 1 plan and section (top): Trench 3 section (bottom).**



**Fig 3 Trench 2 plan and sections.**

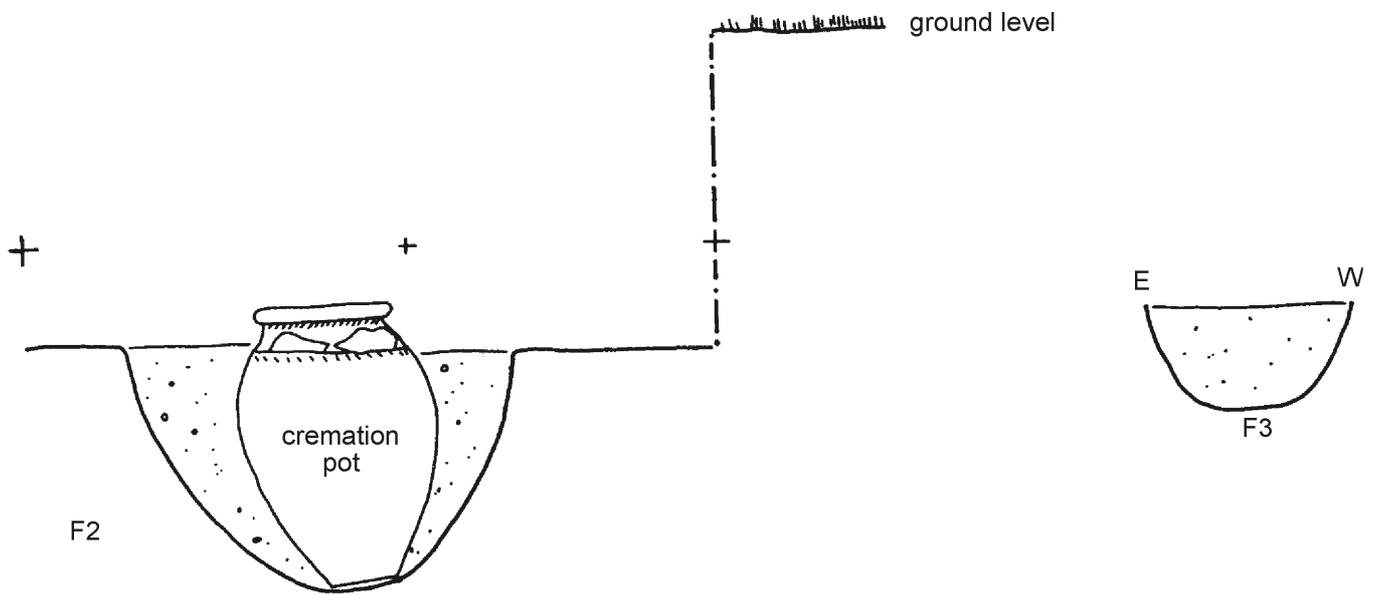
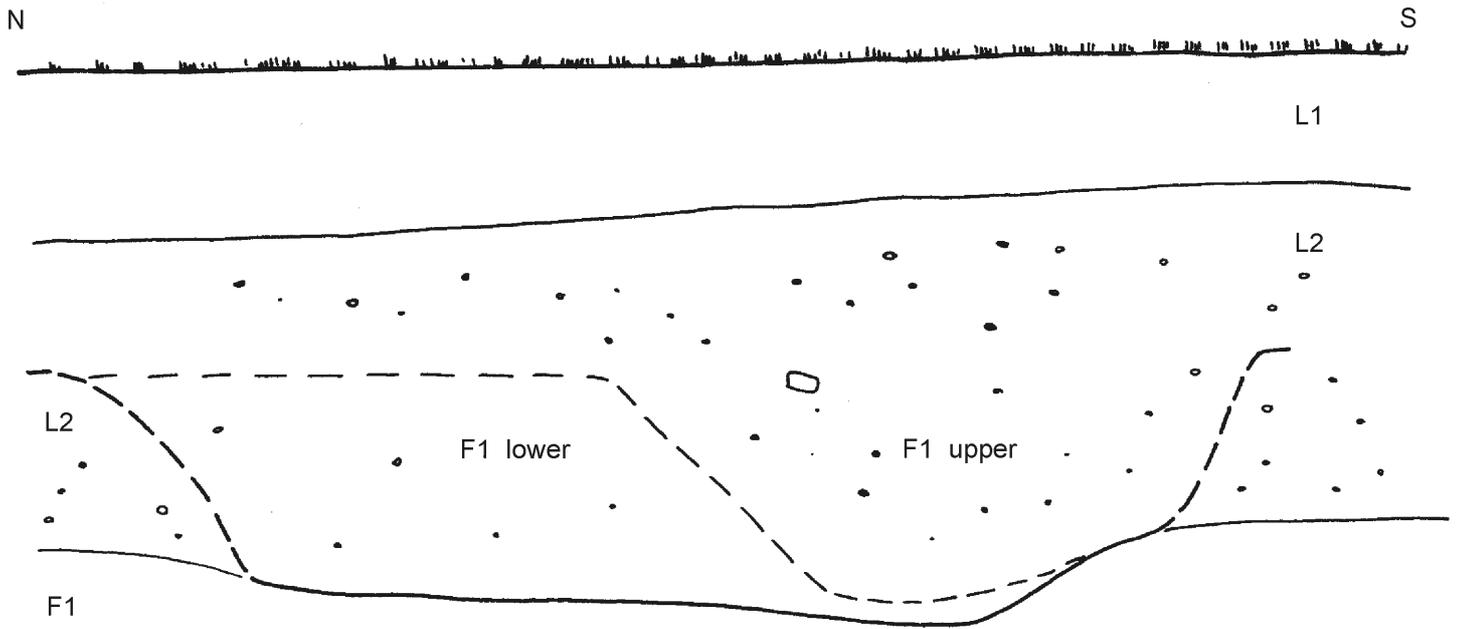


Fig 4 Feature sections.

F6-F10 were seen cutting down from modern ground, typically to 0.7 or 0.9m below modern ground. They were filled with sand, and are most likely to be infilled post settings from a recent tattoo or similar event.

In order to test for the presence of features under L2, each end of the trench was machined down to natural (ie by removing L2 and exposing L3). No features were visible.

#### **5.4 Trench 3 (Fig 2)**

This trench, measuring 1.5m wide by 2m long, was positioned at a distance of 75m from T1 and T2 to confirm the general depth of soil cover over the site. In fact, the soil profile was the same as T1 and T2, with 20cm of topsoil (L1) over 50cm of dark brown subsoil (L2), over natural sandy gravel (L3).

No archaeological features or finds were seen.

## 6 The finds

### 6.1 Finds list

Weights are grammes. Medieval and later fabrics are after Cunningham (1985), and Cotter (forthcoming). U/s = unstratified.

Trench	Context	bag no	Quant	Weight	Description	Date
1	F1	2	3	140	Peg tile (1: 95 kept)	
1	F1	2	10	230	Proximal radius frags from large quadriped ( <i>Bos, Equus?</i> )	
1	F1	2	2	35	indeterminate tile scraps (discarded)	
1	F2	5	4	55	Hadham ware flagon neck frags	mid-late 3rd or later
1	F2	6	1		cremation pot	
1	F2	7	1		iron nail	
1	F2	8			cremated bone	
2	F4	4	2	5	Coal	probably post-med
2	F4	4	1	15	Slag	?
2	F4	4	1	20	slate	medieval/post-med
2	F4	4	6	135	Peg tile (1: 55 kept)	medieval/post-med
2	F4	4	2	12	medieval pottery	
2	F4	4	3	15	Roman pottery	
2	F4	4	1	25	Roman tile	
2	F4	4	3	10	clay tobacco-pipe stem fragments	17th century or later
1	u/s	1	2	145	Burnt Roman brick (discarded)	
1	u/s	1	1	25	Wine bottle neck	18th-19th century
1	u/s	1	3	130	Peg-tile (discarded)	med/post-medieval
1	u/s	1	2	95	Medieval pot: 1 fabric 21a, 1 fab 20?	14th-16th century
1	u/s	1	4	390	Roman tile (1: 80 kept)	Roman
1	u/s	1	15	215	Roman pottery	Roman
1	u/s	1	1	5	Samian ware	Roman
1	u/s	1	2	70	Quern	Roman
1	u/s	1	5	50	Indeterminate animal bone frags (discard)	-
1	u/s	1	1	35	Iron object: bent nail, or hook?	?
2	u/s	3	1	1150	Greensand lump	
2	u/s	3	2	645	Tegula flange pieces	Roman
2	u/s	3	1	190	Tegula flat piece (discard)	Roman
2	u/s	3	5	535	Roman brick (1:135 kept)	Roman
2	u/s	3	2	100	Imbrex (1: 60 kept)	Roman
2	u/s	3	3	60	other Roman tile	Roman
2	u/s	3	5	225	Peg tile (1: 40 kept)	med/post-medieval
2	u/s	3	1	15	Burnt flint	possibly prehistoric
2	u/s	3	9	200	Roman pottery	Roman
2	u/s	3	2	50	Post-medieval pottery fabric 40 type	16th-19th cent
2	u/s	3	1	65	septaria	probably Roman

## 6.2 The Roman cremation pot by Stephen Benfield

### Description

The pot from the cremation at the Garrison sports ground on the Abbey Field is a large coarse grey ware jar (*CAR 10*<sup>1</sup> fabric group GX: other coarse wares, principally locally produced grey ware), 34 cm tall with a maximum diameter of 28 cm. It is fractured around the rim and neck, but this clearly occurred during discovery and the pot until that point was intact. Immediately below the rim is a notched rather than frilled band, with a countersunk cordon at the base of the neck which is burnished. There is a further countersunk cordon below, and between these two cordons is a combed wave band. Just below the lower cordon on the shoulder of the vessel is a band of angle stab decoration above two burnished zones which alternate with a burnished wave pattern. The lowest part of the pot is burnished to approximately 9 cm above the base which has a small protruding footring. There is no clear *Camulodunum* (*CAM*<sup>2</sup>) Roman pottery type series form number, though jars with notched or frilled rims in fabric group GX are placed under *CAM* form 287-290 in *CAR 10* (Symonds & Wade forthcoming).

### Discussion

The pottery form group *CAM* 287-290, which includes face pots as well as plain examples, is partly based on a decoration style and has a very broadly dated range, from the early Roman period to the 3rd century (*CAR 10*, pp 480-81), though the example here is clearly of mid-later Roman date. A very similar vessel to that from the Abbey Field sports ground is illustrated in *Roman Colchester* (Hull 1958, fig 65, no 63) and which came from the large group of pottery excavated from the fill of the 'mithraeum' in Castle Park, Colchester. Hull does not attribute it to any specific *CAM* form in his notes, describing it simply as a 'large urn' (Hull 1958, 137). The 'mithraeum' pottery deposit dates to the mid 4th century, though much of the pottery is residual and of 3rd-century date (*CAR 10*, 479). The top of a flagon from the Hadham kilns (*CAR 10*, fabric CH: oxidised Hadham ware) of *CAM* form 360/368 (flagon with a ledged rim) also came from the fill of the cremation feature. Oxidised Hadham products are recorded in small quantities from Colchester from the early-mid 3rd century, though it is most common in the 4th century, and several Hadham vessels of this form are also illustrated from the 'mithraeum' deposit (Hull 1958, fig 62). In respect of the dating evidence above, the cremation should probably date from the mid-late 3rd century.

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<sup>1</sup> *CAR 10* refers to descriptions in Symonds & Wade 1999  
<sup>2</sup> *CAM* refers to descriptions in Hull 1958



Fig 5 F2 Roman cremation pot.

### 6.3 The cremated bone by Alec Wade

The urned Romano-British cremation was found to contain the remains of an adult of small stature and undetermined sex weighing 1078 grams. Most parts of the body were present in the deposit from the head and arms to the lower legs, but no sets of paired limbs could be reliably identified (such as both a left and right humerus or femur for example). This fact, in conjunction with the low weight of the cremation, may suggest that the deposit does not represent a complete individual. Extremities such as the hands and feet were also poorly represented with only a couple of fragments being identified. A single fragment of animal bone (part of a pig's ulna) may also have been present in the deposit.

The age of the individual is partly suggested by the mature epiphyseal union noted on a fragment of a distal humerus and a proximal radius. This union usually occurs as a young adult. Although fragments of two teeth were recovered these were too damaged to provide information regarding the subjects age. It was not possible to establish the sex of the individual.

The colour of the bone was mid to light brownish white with some fragments displaying a charred black to bluish grey centre or cortex. Moderate to severe fissuring and distortion (related to extreme heat) was also noted in a small amount of the material. These conditions were most apparent in the bones of the upper arms, hips and legs.

The average size of the identifiable fragments is estimated at 30-40mm with a couple of exceptional femur and tibia fragments measuring up to 78 mm. The majority of the remaining fragments were in the 10-20mm or smaller range.

The identifiable fragments included:

<u>Skull</u>	Thirty pieces of skull ranging in size up to 42mm. Three pieces displayed open suture lines.
<u>Teeth</u>	Four fragments belonging to two teeth, a small molar and a pre-molar.
<u>Mandible</u>	A single fragment of mandible measuring 22mm.
<u>Vertebrae</u>	Twenty-eight fragments measuring up to 46mm in size. The cortex of two pieces was bluish-grey in colour. Three cervical vertebrae appeared to be unusually small in size compared with the other fragments recovered. However it was not clear if this variation was natural (perhaps exaggerated by shrinkage caused by the cremation activity) or evidence of a second individual represented in the deposit.
<u>Scapula</u>	Four pieces all from the right scapula measuring up to 38mm in size.
<u>Humerus</u>	Eight fragments of humerus ranging in size up to 34mm including part of a distal right articular joint. Several pieces were distorted or heavily fissured. The centres of two other pieces had bluish grey centres.
<u>Radius</u>	Two pieces including part of the fused proximal joint. The largest piece measured 40mm.
<u>Ulna</u>	A single possible fragment measuring 25mm.
<u>Ribs</u>	Two fragments of rib measuring up to 40mm. One piece was heavily fissured and distorted.
<u>Pelvis</u>	Four fragments of pelvis including part of the acetabulum. One piece was charred bluish-grey and another was heavily fissured and distorted.
<u>Femur</u>	At least fifteen fragments of diaphysis ranging up to 73mm in size. One piece identifiable as being from the left femur. Several pieces are charred black to bluish grey in their centres.
<u>Fibula</u>	Eleven pieces of diaphysis ranging in size up to 43mm. Three pieces were distorted and had bluish-grey centres.
<u>Tibia</u>	Five fragments of diaphysis, the largest of which was 78mm long. Most of the fragments were distorted and one piece was heavily fissured.
<u>Phalanges</u>	Two small pieces including an articular end.

## 7 Discussion and interpretation

The discovery of an intact Roman burial confirms that Roman cremation burials still survive here despite a number of them having been lifted (in 1925 and later) and despite the levelling of the ground for the sports pitch.

The burial is, of course, located in a previously known Roman cemetery. It belongs to Crummy's <sup>3</sup> Area H, and Rex Hull's <sup>4</sup> Abbey Field Cemetery, which together form the largest and most important cemetery area in Roman Colchester <sup>5</sup>. Figure 1 of this report plots this burial against the previously known burials from the sports ground.

The circumstances of the discovery of the cremation pot (where the cut was not visible in the top of L2) would suggest that the original burial was made from higher up in L2, but subsequent disturbance has removed traces of the cut at that height. Whether this disturbance is due to agriculture, or the construction of the sports field is unclear.

Apart from the cremation burial, the presence on this site of Roman domestic debris (including pottery, bone, tile, brick and quernstone) is interesting. There are two ways to explain this - either there was some domestic activity here (perhaps before the area became a cemetery), or waste debris was dumped here from adjacent areas. It would perhaps be unusual to dump debris into an active cemetery area, so the idea that there was domestic activity here before the plot was taken over as a cemetery is the more attractive idea.

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<sup>3</sup> Crummy 1993, 259-60  
<sup>4</sup> Hull 1958, 255  
<sup>5</sup> Crummy 1993, 262

## 8 Acknowledgements

The geophysical survey was carried out by Peter Cott. Site work was supervised by Stephen Benfield, assisted by Colin Austin, Nigel Rayner and Philip Lomas. The project was monitored by Martin Winter for Colchester Borough Council. Report text and Figures by Howard Brooks. Thanks to:

- WS Atkins Consultants Ltd for commissioning the work
- Colchester Garrison for access and other assistance.

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## 10 Glossary

context	specific location on an archaeological site, especially one where finds are made
ESMR	Essex Sites and Monuments Record
feature	an identifiable thing like a pit, a wall, a drain, a floor; can contain 'contexts'
<i>imbrex</i>	Roman roof tile, fits over <i>tegula</i>
intrusive	early material out of place in a later context (eg a Coke bottle in a Roman pit)
medieval	from AD 1066 to Henry VIII
NGR	National Grid Reference
natural	geological deposit undisturbed by human activity
post-medieval	after Henry VIII and up to Victorian
prehistoric	the years BC, before Roman
quernstone	stone on which cereal grain is ground into flour
residual	an earlier object out of place in a later context (e.g. a Roman coin in a Victorian pit)
Roman	period from AD 43 to around AD 430
septaria	argillaceous sandstone used by Romans as the principal local building stone
<i>tegula</i>	Roman ceramic roof-tile
u/s	unstratified (no context)

## 11 Archive deposition

The finds and paper archive are held at Colchester Archaeological Trust, 12 Lexden Road, Colchester, Essex CO3 3NF, but both will be permanently deposited at Colchester Museum, under accession code 2000.1.

## 12 Site data

### 12.1 Site context list

Trench	Context	Description	Finds date	Context date
1	L1	topsoil	none	modern
1	L2	subsoil	Roman	Roman, disturbed later?
1	L3	natural sand / gravel	-	-
1	F1	rectangular cut	post-medieval	post-medieval
1	F2	cremation pot in cut	later Roman	later Roman
1	F3	small cut	none	unknown
2	L1	topsoil	none	modern
2	L2	subsoil	Roman	Roman, disturbed later?
2	L3	natural sand / gravel	-	-
2	F4	rectangular cut	post-med/modern	post-med/modern
2	F5	shallow cut	none	post-med/modern?
2	F6	sand-filled drain-hole	none	modern
2	F7	sand-filled drain-hole	none	modern
2	F8	sand-filled drain-hole	none	modern
2	F9	sand-filled drain-hole	none	modern
2	F10	sand-filled drain-hole	none	modern

## 12.2 Soil descriptions

Trench	Context	Description
1-3	L1	Turf over mid-dark grey brown slightly sandy loam. Occasional small/medium tile flecks.
1-3	L2	Dark brown sandy loam, common small and medium pebbles. Becomes sandier and orange towards the bottom, bottom 15cm are particularly sandy and orange. In some sections, this layer is split into the zones described.
1-3	L3	Clean natural sandy gravel.
1	F1 upper fill	10 yr 3/3 dark brown sandy loam with pebbles.
1	F1 lower fill	10 yr 5/4 yellowish brown sandy loam.
1	F2 fill	10 yr 4/4 dark yellowish brown sandy loam, occasional small pebble.
1	F3 fill	10 yr 4/4 dark yellowish brown sandy loam, occasional small pebble.
2	F4 fill	Dark brown sandy loam
2	F5 fill	Dark brown sandy loam
2	F6-10 fill	clean sand

10th-19th January 2000

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### Colchester Archaeological Trust

12 Lexden Road,  
Colchester,  
Essex CO3 3NF

tel/fax: (01206) 541051  
email: [archaeologists@cat.ndo.co.uk](mailto:archaeologists@cat.ndo.co.uk)

## **Appendix**

### **Geophysical survey** *by Peter Cott*

**GEOPHYSICS SURVEY REPORT**

**COLCHESTER BARRACKS SPORTS FIELD**

**Peter J. Cott**

**12<sup>th</sup> January 2000**

## **Introduction.**

A magnetometer survey was carried out on the Colchester Barracks Sports Field in December 1999 and January 2000 at the request of the Colchester Archaeological Trust.

The objective was to identify, if possible, any archaeological anomalies, particularly cremation burials, which would be subject to further investigation by the Trust before the area was redeveloped.

## **Site Description.**

An area of about 1.5 hectares was marked out by the Trust. This area covered the whole of the Rugby pitch, and the edges of the football pitch. The Sports Field adjoins the south side of Circular Road North within the Colchester Barracks complex. The site plan is shown in Figure 1.

It was immediately obvious that the site contained a considerable quantity of modern iron objects, ranging from metal sockets set into the ground to metal circles and manhole covers. Some of these items are marked as small circles in Figure 1.

## **Method Employed.**

The instrument used was a Geoscan FM18 Fluxgate Magnetometer, set to its most sensitive scale which allows readings down to 0.1 nanoTesla.

This instrument detects the minute changes in the earth's magnetic field close to the surface of the soil caused by the presence of certain artefacts. These include man-made ditches, kilns, fired pottery and ferromagnetic items of an archaeological nature. A response is also registered from other ferromagnetic materials such as drainage systems, agricultural iron and modern iron materials such as nails.

The area to be surveyed was divided into thirty-seven squares, each with sides of 20m. Readings were taken with the FM18 instrument at 0.5m intervals in the North-South direction, and at 1m intervals in the East-West direction. There were thus 800 readings per square.

The readings were downloaded into a laptop computer on site, and finally processed in a desktop computer at base. The computer program employed was InSite, from GeoQuest of Durham. This permits the operator to change the contrast of the plot, to match the gain of each square to its neighbours, and to produce a final plot of the complete survey.

The survey result is shown in Figure 2.

## **Discussion of the results.**

From an inspection of Figure 2 it can be seen that there are four major drainage routes across the survey area, three of which were identified on the plan of services. The large black and white responses, such as those in squares 31 and 32 are caused by the modern iron artefacts referred to above. These large responses effectively blot out much of the area around them, so that any responses due small archaeological anomalies can be lost.

Much of the north-west corner of the plot is affected in this way, and this includes the magnetic response due to the metal fence around the pavilion on the west side of the ground. The fence on the south-east side of the field also produces a large response.

The small black line running through squares 8, 17 and 20 may represent a ditch.

In square 21 there is a double linear response running north-south, and this is associated with a much "busier" set of responses in this area than in the rest of the plot. This could be represent part of the foundations of a building, or a trackway with ditches either side.

There are four large irregularly-shaped responses in squares 29 and 30. Whist these seem to have the response due to metal, they are not the usual point source responses, and should be investigated.

To the north of the pipeline in square 30 there is a line of responses running north-south, but broadside to the alignment, which does not appear to have the appearance of a drainage pipe.

In square 33 there is the faint outline of an oval feature.

In many parts of the plot there are concentrations of small responses – squares 27 and 29 are examples of this. As the magnetic signature of a cremation burial is usually very small and localised, it is possible that some of these responses are archaeologically significant.

## **5. Conclusions.**

No large archaeological feature has been identified in the survey results. However, a number of small anomalies have been mentioned in section 4, and these should be investigated further. The use of a metal detector would eliminate quickly those anomalies caused by modern iron fragments.

## **6. Acknowledgements.**

Thanks are due to the Garrison Authorities for permission to survey the Sports Field, to the Colchester Archaeological Trust for marking out the survey area, and to Mr. M. Matthews for invaluable help during the survey.

**END**

# Barracks Sports Field

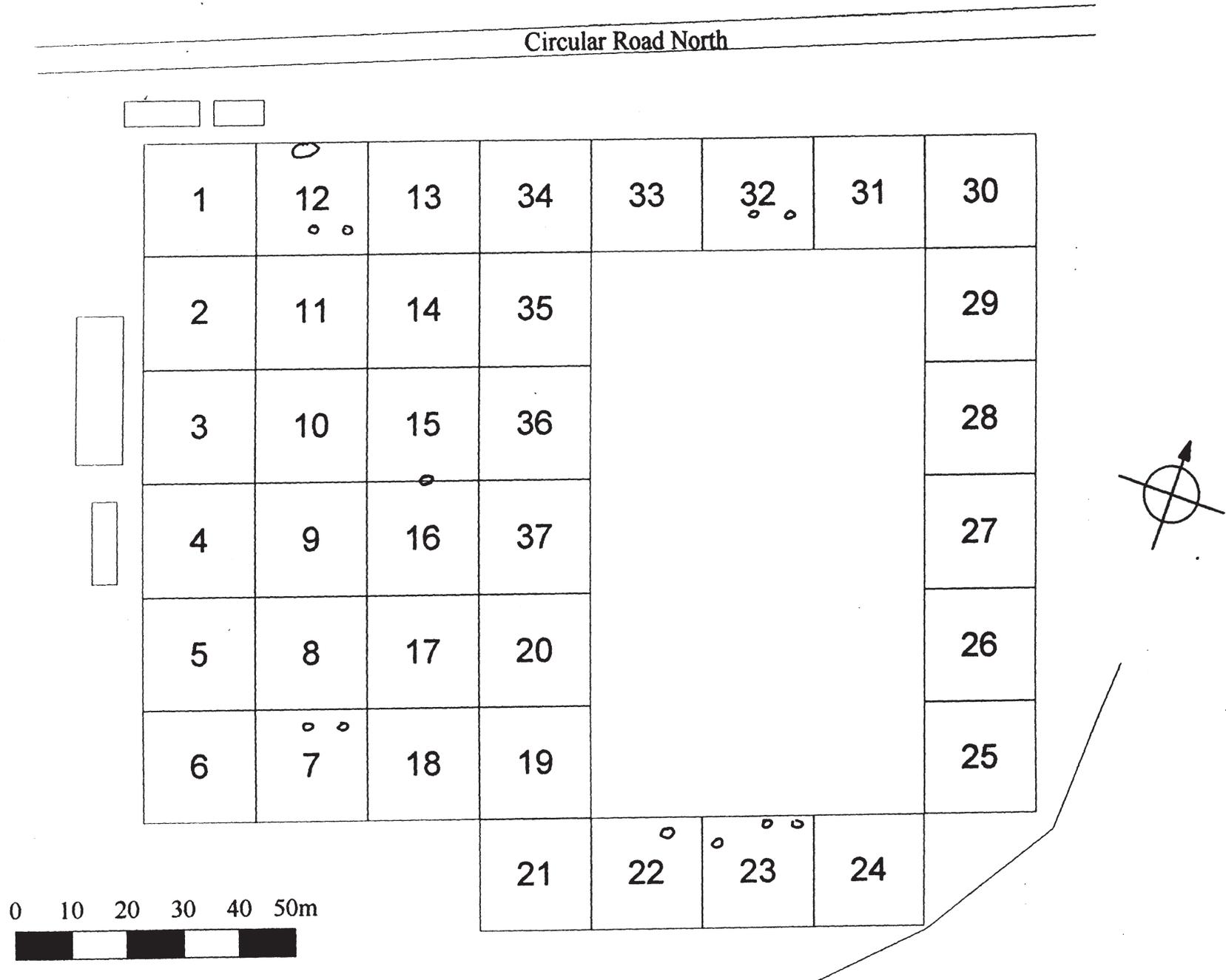


Figure 1

Circular Road North



Figure 2 RAW DATA

# Barracks Sports Field

Circular Road North



Figure 2 SMOOTHED DATA