

GEOPHYSICAL SURVEY REPORT

GOSBECK'S IRON AGE and ROMANO BRITISH SITE, COLCHESTER

ESSEX COUNTY MONUMENT NO.57

**"Cunobelin's Farmstead"
(second report)**

by

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Introduction

The trapezoidal ditch structure lying to the south and west of the temple and theatre sites at Gosbecks Archaeological Park (TL968225) was surveyed in winter 2001/2002 using a Fluxgate Magnetometer. A report of the survey of some 4ha was submitted to English Heritage in April 2002.

Crop marks, which located this ditch structure, have also showed an extensive and complex ditch structure to the west and particularly to the south of the trapezoidal structure (fig. 1 by courtesy of Colchester Archaeological Trust).

The site is owned by Tarmac Holdings and farmed by tenant farmers who agreed that over the winter 2002/2003 the geophysical survey by magnetometer could be continued. A licence to do the work was obtained from English Heritage.

There were two objectives of this survey. The first was to survey the south west corner of the trapezoidal structure with a greater sampling density than previously used to see whether evidence could be found for an entrance to the area. The second was to continue the survey of the site as far to the south as possible in the time available, since this is the area in which crop marks have shown the greatest complexity of ditches.

Method

The instrument generally used was the FM18 Fluxgate Magnetometer with datalogger, made by Geoscan, and owned by Colchester Borough Council. For the survey of the south west corner of the trapezium a FM18 Fluxgate Magnetometer owned by the University of Essex was used.

Using the Gosbecks site grid markers the grid was temporarily extended west into the relevant area. Careful measurement indicated that possible error in extending the Gosbecks grid was at the most extreme edge of the grid 0.5m. Survey squares of side 20m were set out. For the survey of the south west corner of the trapezium the operator walked zig-zag in the south/north/south direction along tracks 0.5m apart, taking readings every 0.25m. For the remainder of the survey the tracks were 1m apart and all walked in the south to north direction. The data was downloaded into a laptop computer on site, using InSite software from GeoQuest. The raw data was also stored for subsequent alternative processing off site.

It should be noted that the Gosbecks Grid is orientated ca. 14.5 degrees East of OS grid North.

During winter 2002/2003, when the state of the crop growing in the field was such that the farmer was happy to give access, ca. 4 ha were surveyed.

Results

Fig. 2 shows the data after processing using InSite. The magnetic response varies between - 9.9 (lightest) and + 9.9nT (darkest shading). Fig.3 is a drawing of fig.2. Dr Tim Dennis of Essex University, who carried out the detailed survey of the south west corner of the trapezium, also processed all the raw data using his own software (fig 4). The darker grid lines in fig.4 are 100m apart and are an extension of the permanent 100m grid laid out in the Gosbecks Park. Also shown are the physical features of the site and the location of the temple site in relation to the current survey.

Comments

The higher density plot of the south west corner of the trapezium failed to clarify whether this was the entrance to the farmstead. Instead, the ditch system there appears to have been modified in the Roman era. There appears to have been a somewhat wandering trackway running north-south past this south west corner.

The complexity of the enclosure pattern to the south of the trapezium implies use and re-use of the area over an extended period of time. Whilst much of this enclosure pattern has been seen as cropmarks some is new and adds to knowledge of the area.

It is hoped to extend the survey during winter 2003/2004, preferably to the west and north of the farmstead.

Acknowledgements

I am again grateful to Mr and Mrs R Davidson of Brickhouse Farm, Peldon, for permission to survey the site. I am also again indebted to my husband David and to Tim Dennis who shared the surveying with me and between them did all the data processing, and to Peter Cott for his encouragement.

English Heritage
Colchester Archaeological Trust
Colchester Museum
Essex County Sites and Monuments Record
Mr and Mrs R Davidson
Tim Dennis
Peter Cott

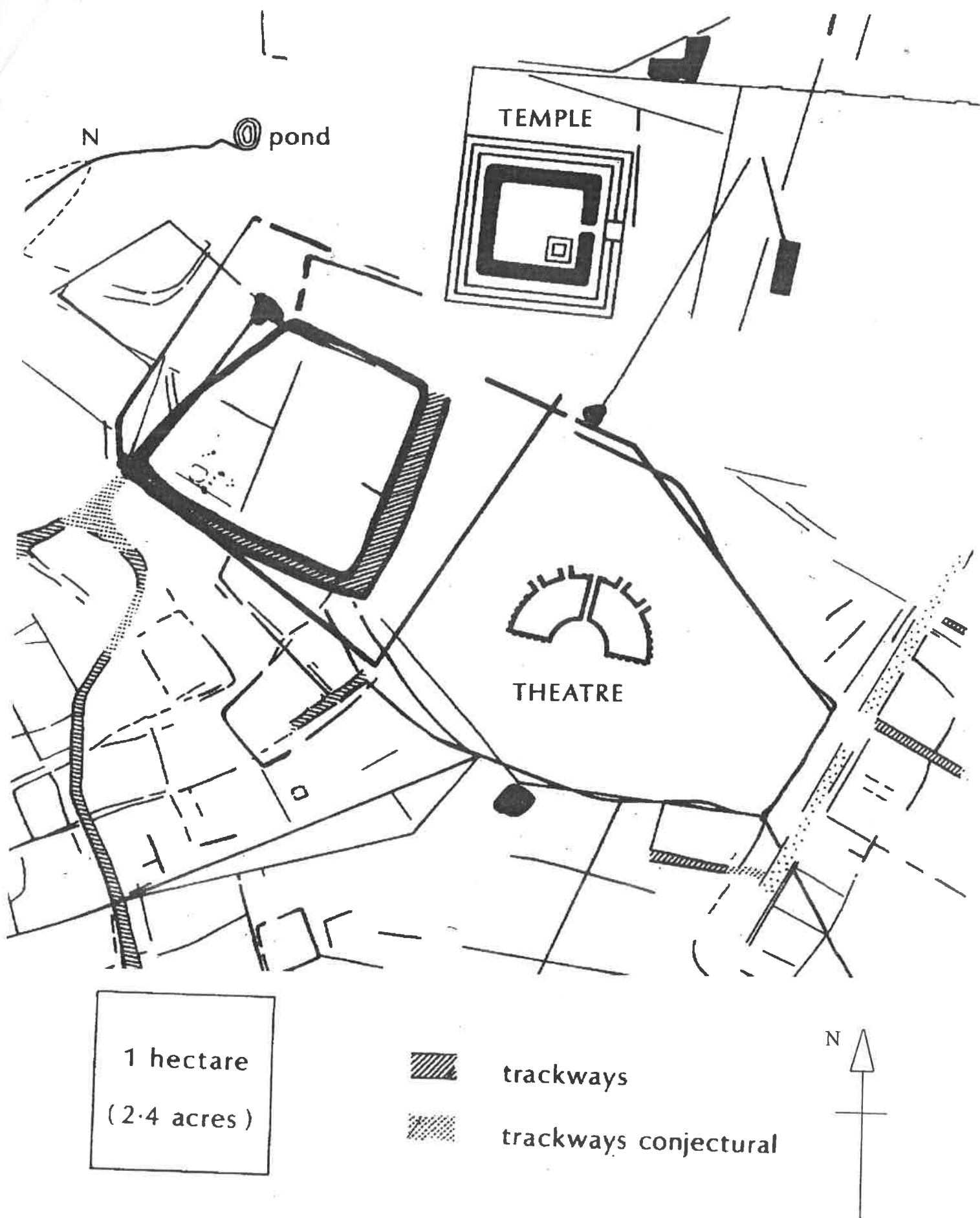


Fig. 1



Fig. 2

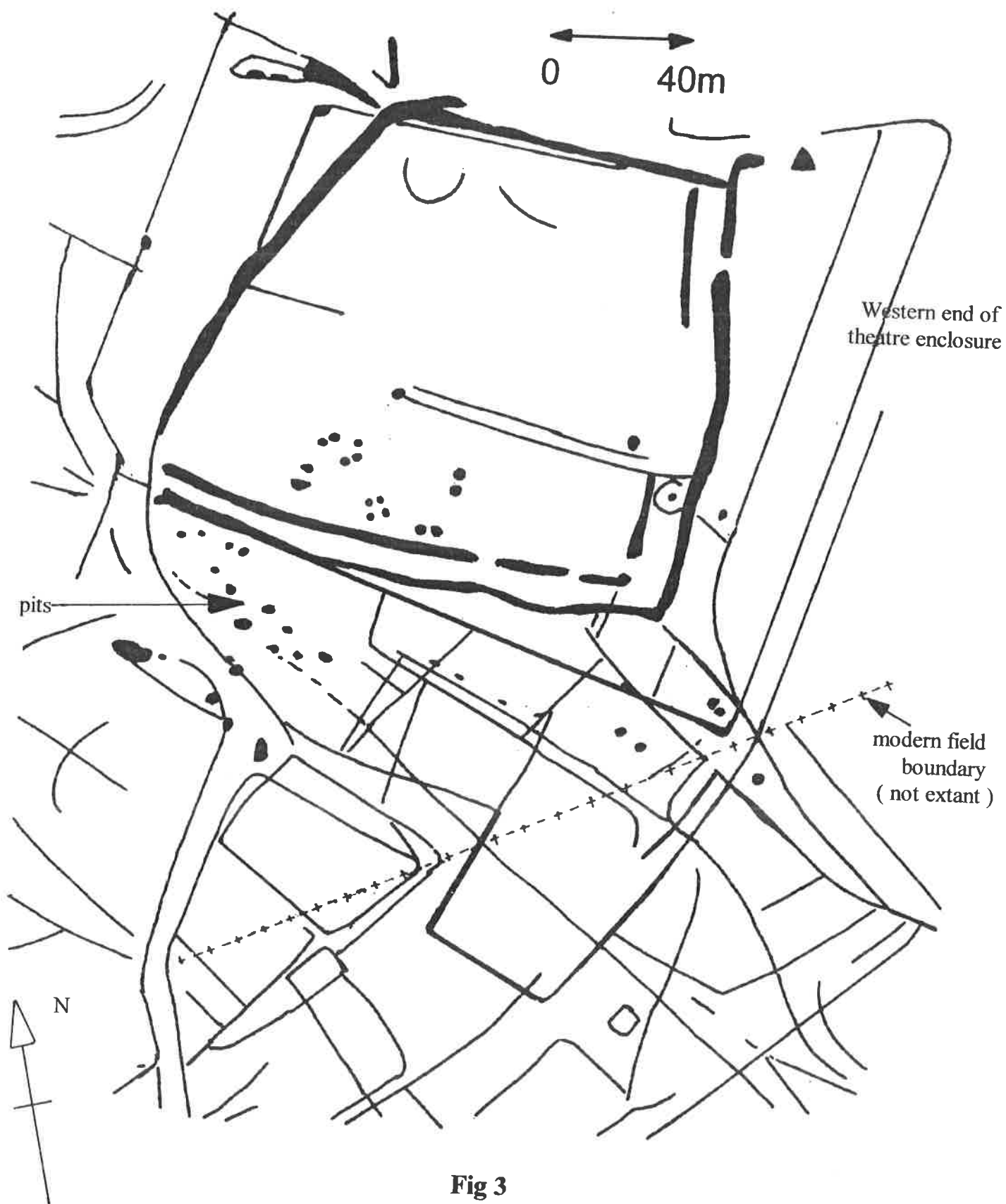


Fig 3

