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Ancient Monuments Laboratory
Report 103/91

BEDE HOUSE LYDDINGTON, LEICESTERSHIRE: REPORT ON GEOPHYSICIAL SURVEY, 1991

Neil Linford

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Summary

The aim of this resistivity survey was to locate buried features associated with the early history of Lyddington Bede House and, if possible, to correlate these with the findings of previous trail excavations. Results were disappointing on account of the depth of burial of the features and the restricted area of the survey.

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BEDE HOUSE LYDDINGTON, Leicestershire

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Introduction

Lyddington Bede House (County No. : Leics 180) , stands in the centre of the village of Lyddington and became the ecclesiastical seat of the Bishops of Lincoln from the 12th - century until the sequestration of episcopal property by the Crown in 1547. The full extent of the original palace was not realised until drainage trenches dug in 1976 prompted an archaeological assessment of the site (Woodfield 1981-82; Woodfield 1989 pers. comm.). This led to the excavation of a 14th-century hall running from the face of the building eastwards, to Bluecoat Lane and the identification of an earlier moat, as well as wall and clay floor features in the southern walled garden. The aim of the survey was to determine the geophysical response of the latter features and to attempt to determine their location and extent within the site.

The underlying soil parent material (SP 8758 9701) is clay overlying Marlstone bed rock. However a substantial accumulation of anthropogenic stratigraphy should be expected from the enclosed nature of the site.

Method

Consideration of the site conditions and the nature of the features observed in the trial trenches suggested that resistivity survey would be the most appropriate technique to adopt.

The survey was conducted over two areas (see plan) corresponding to the northern and southern walled gardens. Base lines were established within each area approximately parallel to the eastern boundary fence and instrument traverses were orientated normal to these base lines at 1m intervals. Access to part of the requested survey area in the southern walled garden proved impossible due to the overgrown vegetation.

Resistivity readings were recorded at 1m intervals along each successive traverse using a Geoscan RM4 resistivity meter and a DL10 datalogger. The Twin Electrode probe array was used with a mobile probe spacing of 0.5m and the recorded data was transferred to a microcomputer in the field. The data in this report is presented as a grey-tone image superimposed on a large scale location plan.

Results

Northern walled garden

No clear spatial orientation or patterning can be discerned from the raw data here. A disturbed area of high readings (A on plan) in part follows the approximate location of one of the 1980 excavation trenches around the northern wall of the present day building. The significance of the low resistance anomalies to the north of this area is impossible to determine, although their amorphous nature suggests that they represent natural variations in water retention by the clay subsoil.

Southern walled garden

Again the incoherent nature of the data precludes any association between the geophysical anomalies and excavated features. Three areas of high readings (B), (C) and (D) could represent the accumulation of building material or rubble from the former structures but there is little correlation with the excavation data. An area of low resistance (E), could represent a backfilled ditch or moat in approximately the location suggested for the 12th-century moat; however, the evidence for this interpretation is far from convincing.

Conclusion

The survey has failed to define buried archaeological features confidently, due mainly to the limited area suitable for surveying and the depth of burial (over 1m from the ground surface) of the features. The Twin Electrode probe configuration employed - whilst attaining excellent spatial resolution can only provide limited penetration depth which in this case appears to have been insufficient to detect the suspected archaeological features.

Surveyed by: G Fookes
N Linford

Date of survey: 22-26/7/91

Reported by: N Linford

Date of report: 4/11/91

Archaeometry Branch
Ancient Monuments Laboratory

References

Woodfield, C C, 1981-82 *Transactions of the Leicestershire Archaeological Society* **57**

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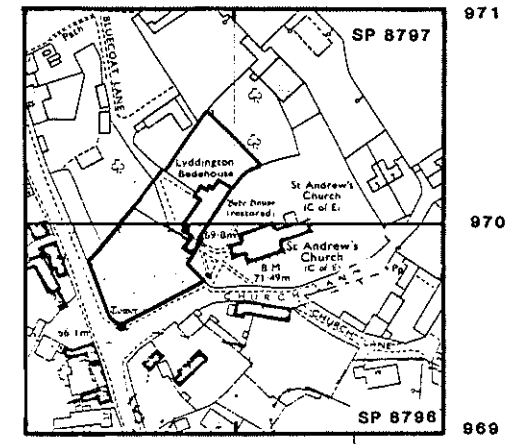
Raw data



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Resistivity survey July 1991