



**Northamptonshire
County Council**

Northamptonshire Archaeology

**A Geophysical Survey
on land at Weston Favell Upper School,
Northampton,
Northamptonshire
September 2005**

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Report 05/116

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NORTHAMPTONSHIRE ARCHAEOLOGY
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A GEOPHYSICAL SURVEY
ON LAND AT WESTON FAVELL UPPER SCHOOL,
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ABSTRACT

Northamptonshire Archaeology conducted a geophysical survey, on behalf of GallifordTry Construction, on land with an area of approximately 0.5ha at Weston Favell Upper School, Booth Lane South, Northampton, Northamptonshire. The survey revealed the location of a buried linear pipe.

1 INTRODUCTION

Northamptonshire Archaeology conducted geophysical survey in August 2005 on land with an area of approximately 0.5ha at Weston Favell Upper School, Booth Lane South, Northampton, Northamptonshire (NGR SP 7884 6300, Fig 1), designated for the demolition of the existing school buildings and erection of new 1, 2, & 3-storey school buildings, associated works and facilities. The work was undertaken on behalf of GallifordTry Construction, at the request of Myk Flitcroft, Archaeological Planning Officer NCC, for a programme of works to investigate the archaeological resource of the site prior to development. The survey forms part of an ongoing programme of archaeological assessment and will be followed by trial excavation.

2 TOPOGRAPHY AND GEOLOGY

The proposed site is located on a small parcel of land in the south-east corner of the school playing field. The survey area is bounded by a metal fence to the north-east, tennis courts and hardstanding to the south-east and carparking to the south-west. Visual inspection of the site suggests that it has been graded flat in the past.

A conversation with a geotechnician monitoring ground methane levels revealed the likely existence of infilled ponds and buried sewer pipelines on site.

The solid geology of the site comprises Northampton Sand & Ironstone (Geological Survey of Great Britain (England & Wales) Solid & Drift Sheet 185, 1990).

3 ARCHAEOLOGICAL BACKGROUND

The proposed development is in an area of archaeological interest. Archaeological remains of Roman date have been identified on the site in the 1970s with further evidence for Roman period activity existing on other sites in the immediate vicinity. A possible ring ditch or circular enclosure (SMR ref 5164/0/1) was identified within the eastern part of the school.

4 METHODOLOGY

Gradiometer Survey

All magnetometer survey was undertaken using Bartington Grad601-2 fluxgate gradiometers. The Grad601-2 is constructed as a dual-sensor instrument with two vertical gradiometers separated on a yoke to enable two lines of survey to be recorded in tandem.

A total of six separate 30m x 30m grid-squares, totalling *c* 0.5ha, were surveyed in detail. Each grid square was traversed at rapid walking pace in zigzag traverses spaced at 1m intervals. To increase the information retrieval from this possibly compromised site, eight readings were automatically recorded every metre (every 0.125m) along the traverse. All fieldwork was carried out in accordance with English Heritage and the Institute of Field Archaeologists Guidelines (EH 1995 & Gaffney, Gater and Ovendon 2002).

The data was analysed using Geoplot 3.00p software. Low (negative) magnetism is shown as white and high (positive) magnetism as black in the resultant greyscale plots. To avoid the introduction of bias, minimal processing was carried out on the data. The 'Zero Mean Traverse' function was applied in order to bring the average level of each line of data into a balanced zero.

The processed data is presented here in the form of greyscale highlighting the weaker magnetic anomalies (-10nT / +10nT scale, Fig 2) and interpretive plots (Fig 3) and are referred to directly in the following Survey Results section.

5 SURVEY RESULTS

A number of magnetic anomalies were detected on the site (Fig 2 & 3). The most apparent is the highly magnetic, north-east to south-west linear anomaly which represents a buried pipeline. Intensely positive and negative magnetic regions on the north-eastern and south-eastern margins of the area were magnetic interference from modern iron fences.

Sporadic high intensity anomalies detected throughout the remainder of the area are likely to reflect

buried ferrous and brick debris.

6 CONCLUSION

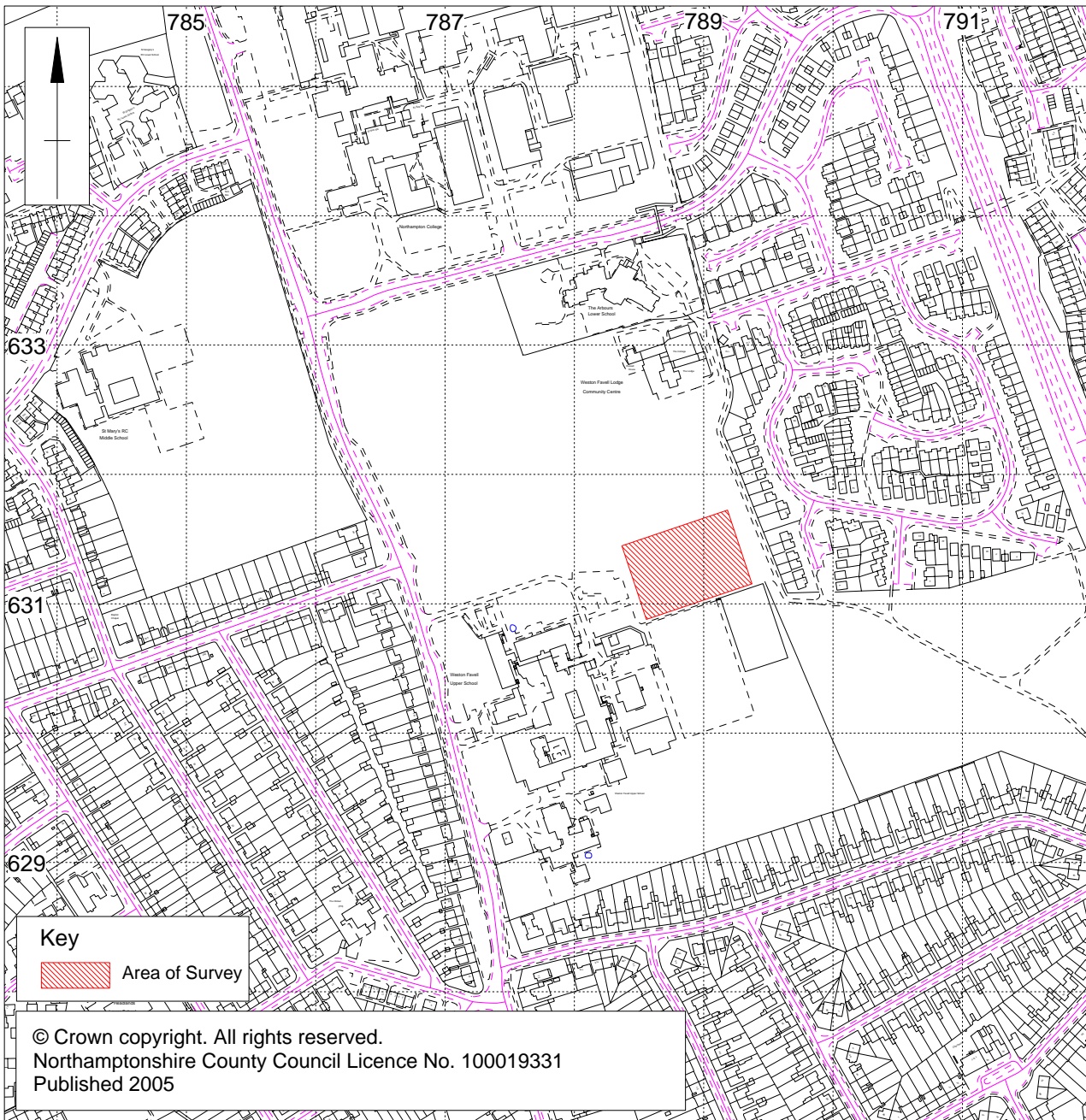
Magnetic survey of land at Weston Favell Upper School revealed the location of a pipeline. The survey did not reveal any significant archaeological remains. The absence of archaeological features may be due to the survey area being landscaped to provide a flat playing field.

BIBLIOGRAPHY

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English Heritage 1995 *Geophysical Survey in Archaeological Field Evaluation*, Research and Professional Services Guideline, **1**

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Scale 1:5000

Fig 1



Fig 2 Detailed Gradiometer Survey Results



Fig 3 Detailed Gradiometer Survey Results with Interpretation