



Manuden Petty Croft Report

In November 2015 Archaeology RheeSearch Group carried out magnetometry and resistivity surveys on this site.

Members participating: Brian Bridgland, Pat Davies, Elizabeth Livingstone, Ian Sanderson, Gill Shapland, Maureen Storey and Tony Storey.

Site liaison: Richard Gibson.

Site conditions: Rough grass.

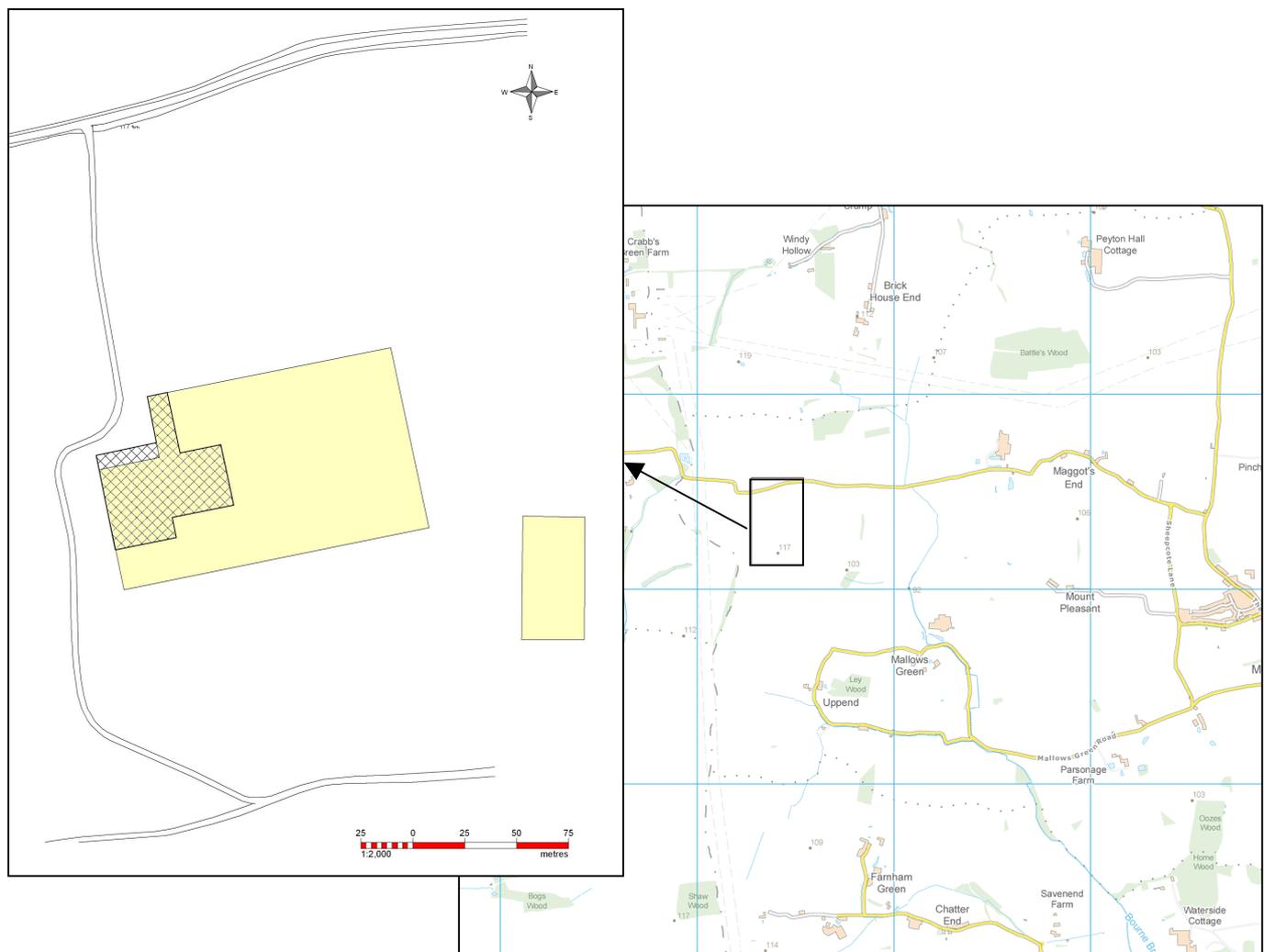
Equipment: Bartington 601 gradiometer; TRCIA 50 cm twin probe.

Magnetometry readings: 8/m, 1 m separation.

Resistivity readings: 1 m interval, 1 m separation.

Raw data are available as separate appendices.

Location: TL463 273, Manuden, Essex.



Location plan: Survey areas

(resistivity survey area hatched, magnetometry area solid)

Purpose of survey: The purpose of this survey was to determine if any subsurface features could be detected.

Site topography: A ploughed field with hedge and ditch to the west, level around the site then sloping down to the east. Bounded on the north by a minor road and a farm track on the south.

Results:

The images in this section are orientated for presentation. The images are not to a common scale.

Resistivity survey 70 m x 60 m

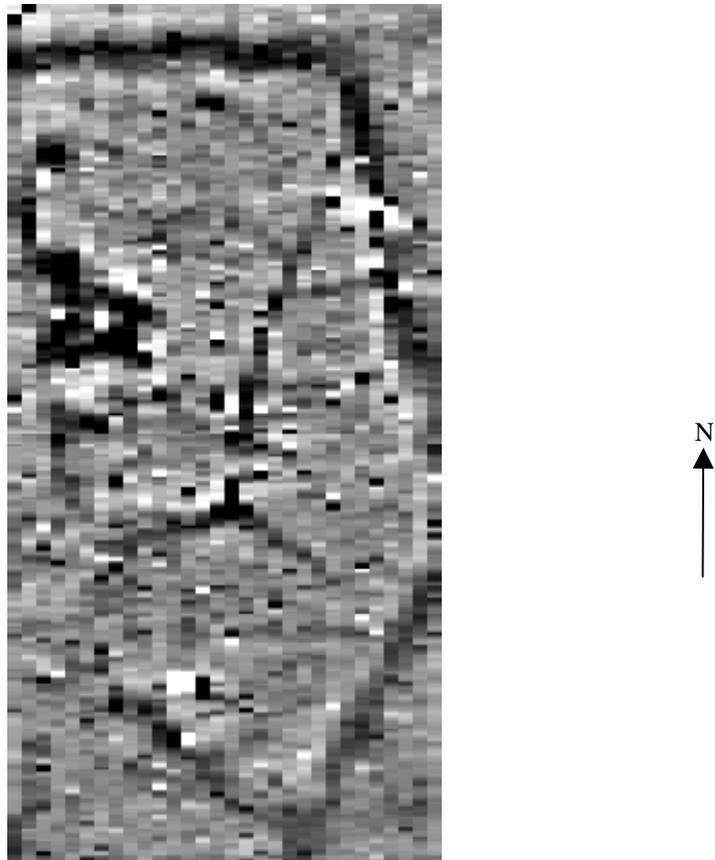
		<p>Raw data</p> <p>N</p>
		<p>High pass filter 6</p> <p>N</p>
<p>(black – low, white – high, red – null)</p>	<p>(red – high, purple/blue – low, white – null)</p>	



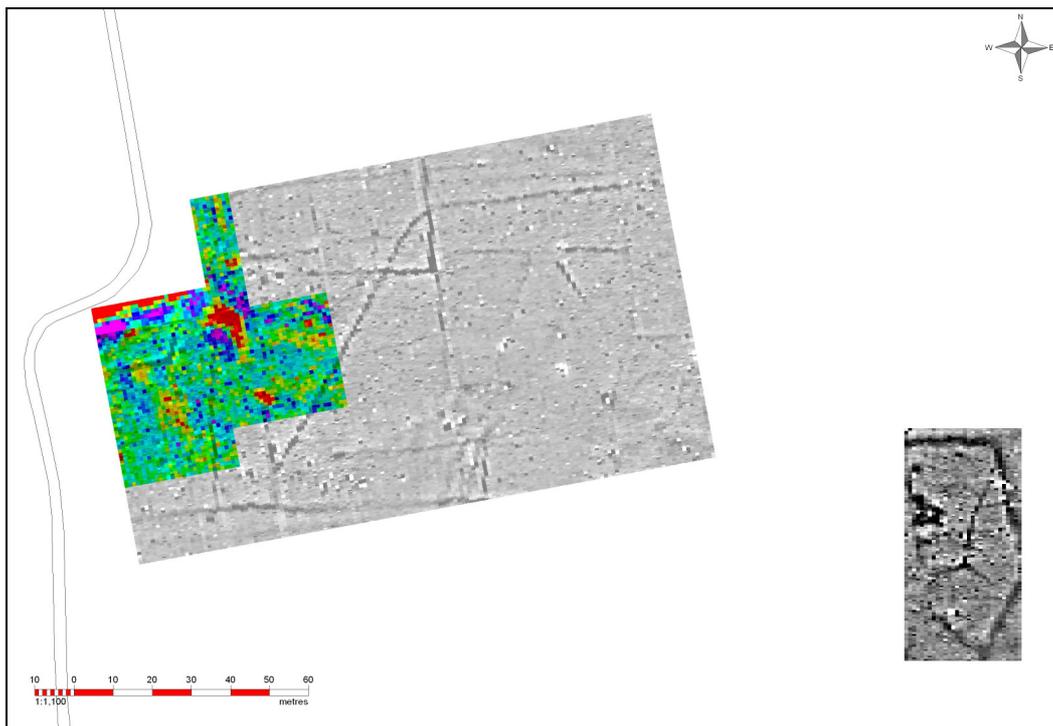
Magnetometry 120 m x 90 m range +3 to -3 nT



Magnetometry 30 m x 60 m range +3 to -3 nT



Superimposition of resistivity and magnetometry results



Magnetometry survey features in red discussed below

Discussion:

The E site was surveyed on the basis of cropmarks which had tentatively been interpreted as indicating a moated site. Although only a relatively small area was covered, the results suggest that this site is more complex than a simple moated site.

The magnetometry results from the W site are equally complex. Along the N edge of the survey there are linear features suggesting a track which might make a right angle turn to the S at its W end. The general alignment of these linear features is the same as that of a field boundary shown on 1887 and earlier maps which is shown as terminating further to the E. There are two unusual features in the magnetometry, a ditch line running NE then curving to run W—E and a series of ditch lines forming a funnel shape pointing to the N. The NE line crosses the SE corner of the resistivity survey but produced no clear resistance response.



None of the other magnetic linear features produced clear corresponding responses in the resistivity data. However it is noticeable that the N termination of one N—S magnetic line is coincident with the block of high resistance values in the S part of the resistance survey. The weak magnetic line running N—S within the N extension of the resistivity survey and its possible continuation S through the main resistivity area is also interrupted by a block of high resistance values with adjacent blocks of low values. The large central block of high resistance values with adjacent blocks of low values has a rectilinear form which suggests building foundations. The low values to its N and S are probably the result of interrupted subsurface drainage. No other identifiable features were apparent within the resistivity results, the lines of high and low values along the NW edge of the survey area being attributable to hedging.

Report by Dr I Sanderson for Archaeology RheeSearch