



Meldreth Church Fields Report

In March 2018 Archaeology RheeSearch Group carried out magnetometry and resistivity surveys on the northern part of this site to complement an earlier survey to the south.

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

Site liaison: Robert Skeen and Kathryn Betts.

Site conditions: Rough grass.

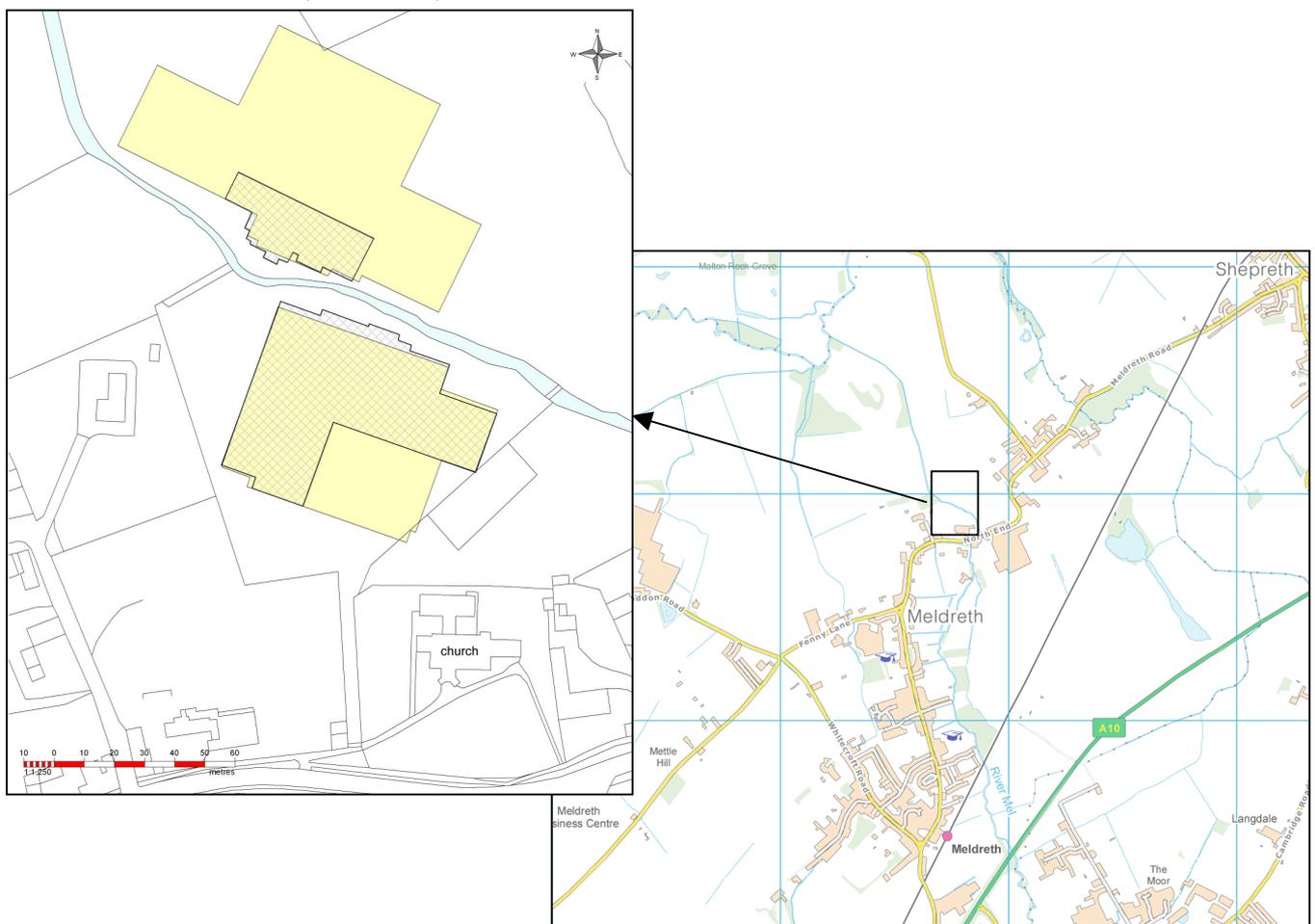
Equipment: Bartington 601 gradiometer; TRCIA 50 cm twin probe.

Magnetometry readings: 8/m, 1 m separation.

Resistivity readings: 1 m interval, 1 m separation.

Raw data are available as separate appendices.

Location: TL377469, Meldreth, Cambs.



Location plan: Survey areas

(resistivity survey areas hatched, magnetometry areas solid)

Purpose of survey: The purpose of this survey was to determine if any subsurface features could be detected that indicated the presence or position of a mill.

Site topography:

Fairly level paddocks with a stream lined with scrub running southeast to northwest between the two parts. The southern area had a hollow way running north-south. The northern area had ridge and furrow features to the east which were not apparent in the survey area.

Results:

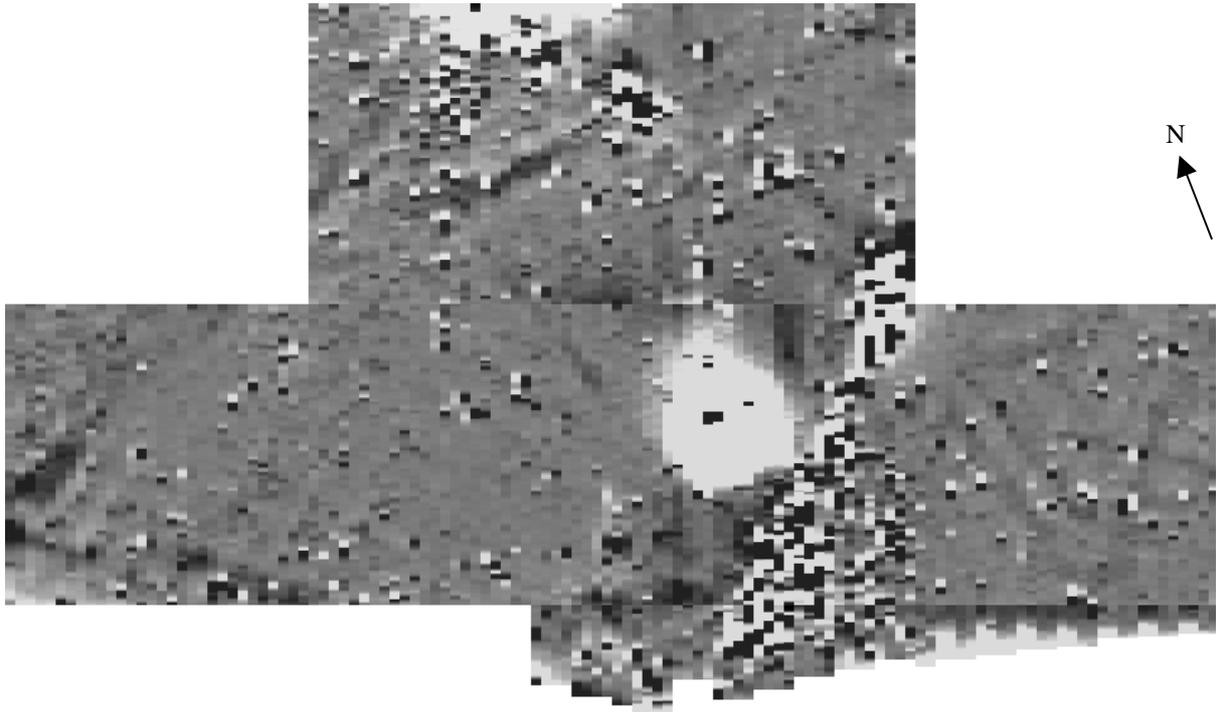
The images in this section are orientated for presentation. The images are not to a common scale.

Resistivity northern area

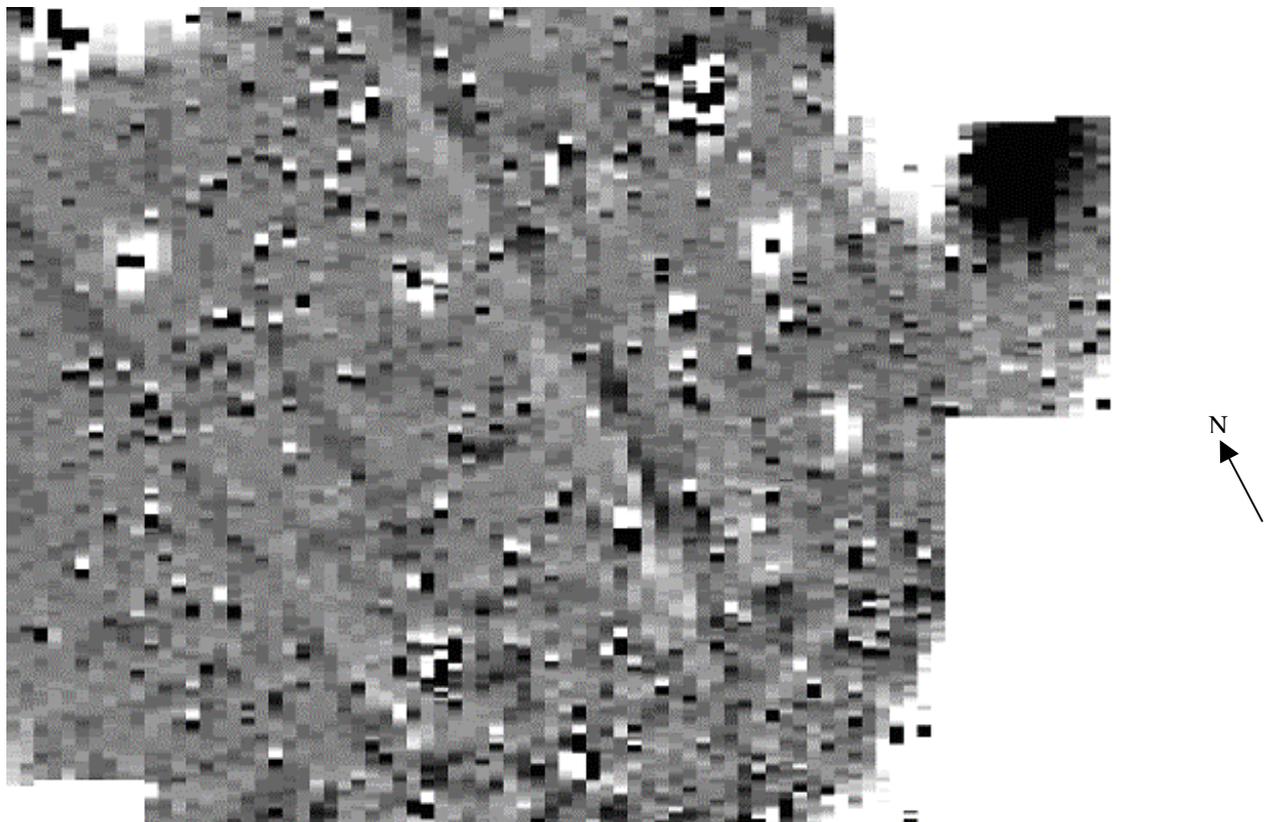
		<p>Resistivity 105 m x 90 m Raw data</p>	
		<p>High pass filter 6</p>	
<p>(black - low, white - high)</p>	<p>(purple/blue - low, red - high)</p>		

Resistivity southern area

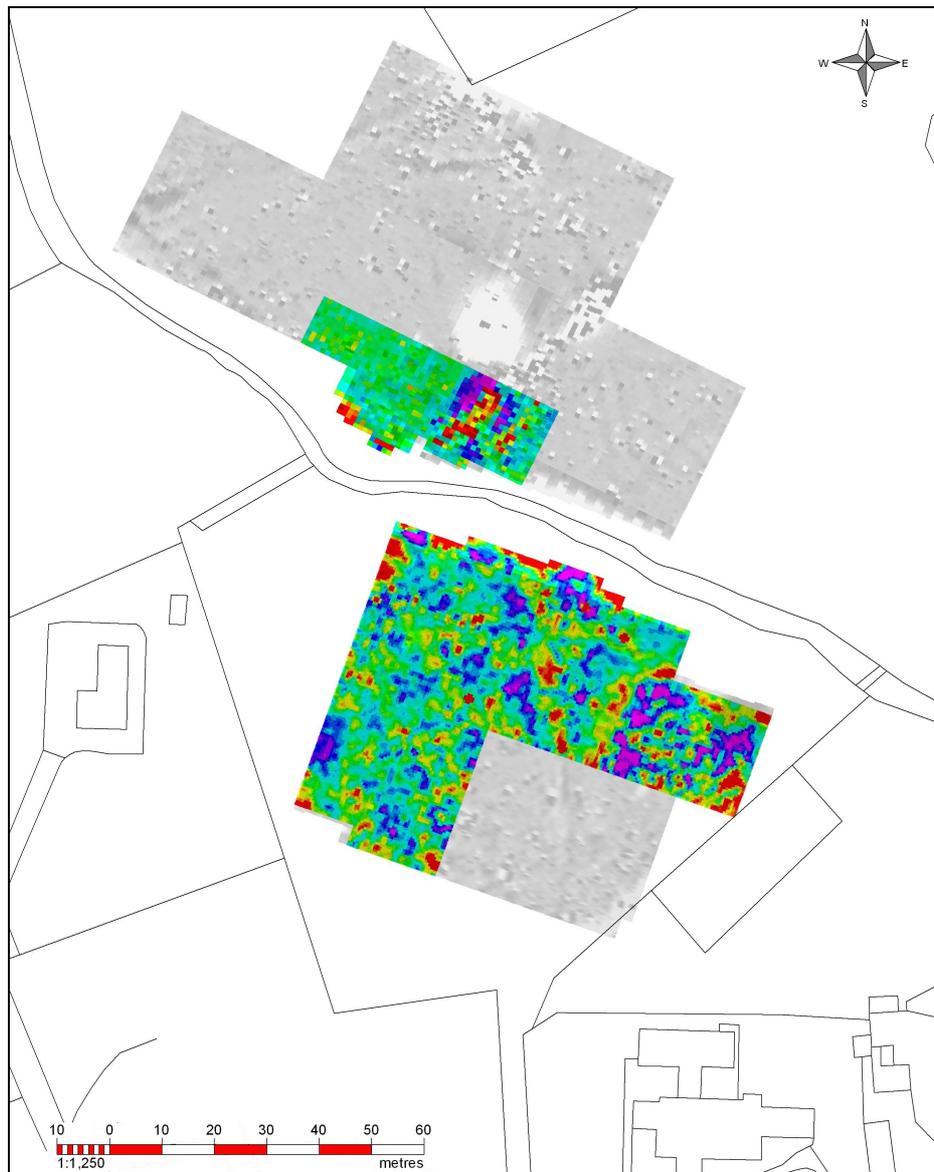
		<p>Resistivity 105 m x 90 m Raw data</p>	
		<p>High pass filter 6</p>	
<p>(black - low, white - high)</p>	<p>(purple/blue - low, red - high)</p>		



Magnetometry northern area 120 m x 70 m range +7 to -7 nT



Magnetometry southern area 80 m x 60 m range +6 to -6 nT

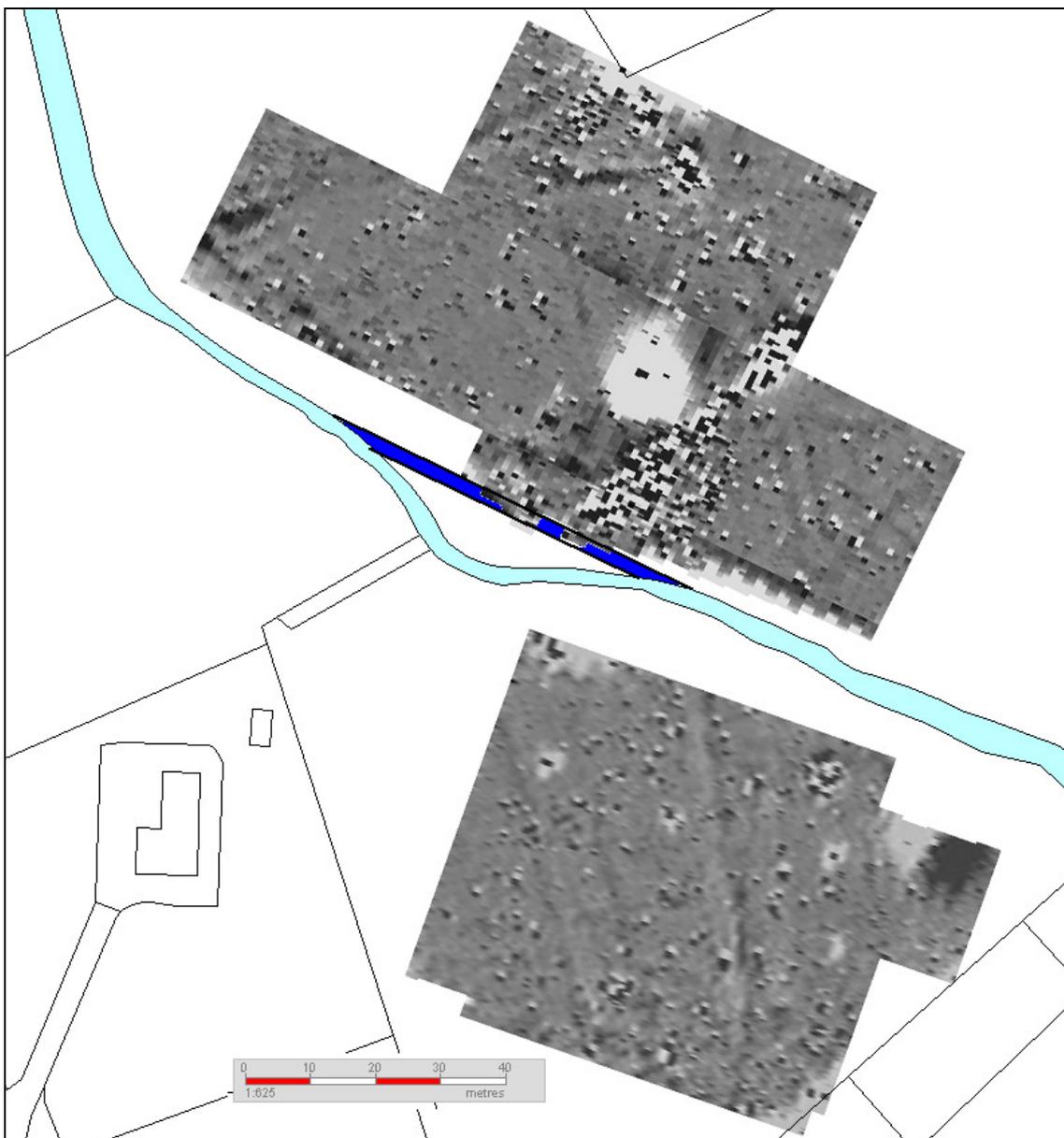


Superimposition of resistivity and magnetometry results.

Discussion:

There is no direct evidence of a mill building within the survey results, but it should be noted that it was not possible to collect data close to the river banks. The magnetometry surveys show the clearest indications of activity around the site. The southern survey shows two parallel lines about 9 m apart running almost N—S and one line running broadly N—S on a slightly different alignment to the parallel lines. The single line is coincident with a visible hollow way and curves at its S end. This curvature means that the parallel lines, which probably represent trackside ditches, and the single line are all orientated towards the field entrance which is the end of a track running along the church boundary. This track is shown on the Inclosure map. The resistivity results indicate the route of the hollow way as parallel interrupted lines of high and low values. The northern magnetic survey shows a well defined narrow band of noisy responses running to the NE from a distinct bend in the line of the river on the S side of a large circular anomaly associated with a power cable pole. This band

widens nearer to the river. On the N edge of this survey there is evidence that the field boundary once extended to the bend where the river line turns N. There is also a complex of linear magnetic responses on the S side of the distinct band. The resistivity results in this area show a line of high values coincident with the noisy magnetic band with low values on either side. The key feature with regard to a possible mill site seems to be the bend in the river. The noisy magnetic band in the northern survey combined with the high resistance values suggest a metalled track leading to the river bend. The hollow way and its magnetic and resistance responses suggest an approach route to the S end of the same river bend, possibly to the area where the noisy band expands to the S. The parallel magnetic lines are aligned towards the river bend itself. If evidence were to be found of a channel straightening the river line (dark blue in the plan below) then this channel could be a mill leat. If the leat became blocked then the overflow channel would become the main course with a bend around the (then disused) mill. Auger samples or an excavation across the hypothetical leat should clarify the hypothesis.



Magnetometer surveys with the present river shown in light blue and a speculative mill leat in dark blue



Aerial photograph of the site

Report by Dr I Sanderson for Archaeology RheeSearch