



Streetly End Report

In June and July 2016 Archaeology RheeSearch Group carried out magnetometry and resistivity surveys on this site to determine whether any archaeological features were detectable.

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

Site liaison: Janet Morris.

Site conditions: Rough grass.

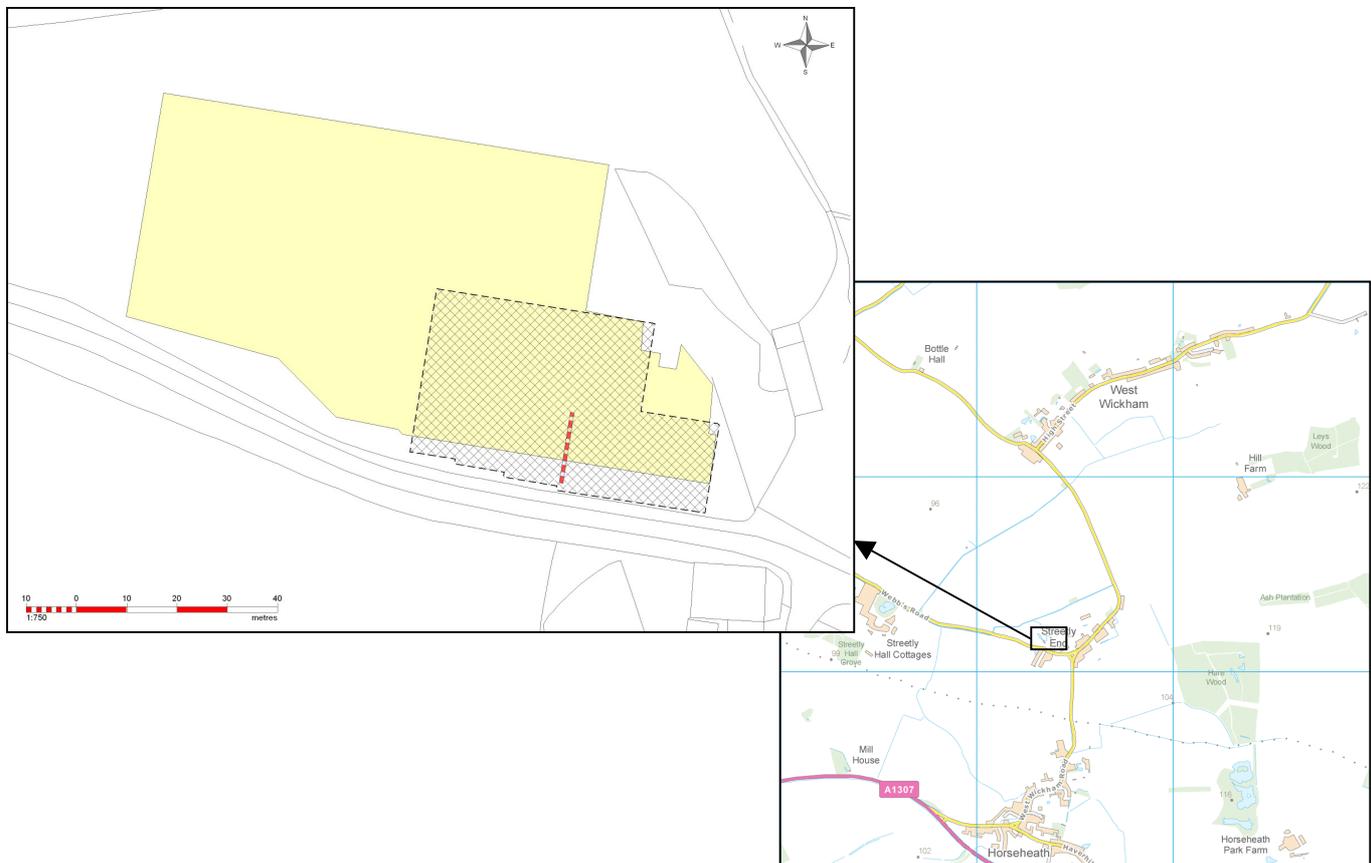
Equipment: Bartington 601 gradiometer; TRCIA 50 cm twin probe.

Magnetometry readings: 8/m, 1 m separation.

Resistivity readings: 1 m interval, 1 m separation.

Raw data available as separate appendices.

Location: TL613481, Streetly End, West Wickham Cambs.



Location plan: Survey areas

(resistivity survey areas hatched, magnetometry areas solid
resistance tomography line dashed red)

Purpose of survey: The purpose of this survey was to determine if any subsurface features could be detected relating to buildings shown on the Inclosure map. This map shows a range of buildings along the road side and one of a group of buildings which was estimated to be in the eastern part of the survey area. The georeferencing of the map to modern features was problematic.

Site topography:

Grass paddock with scrub hedging bordering a road to the south. Gentle slope down towards north and west. Hedging bordering garden and buildings to the east.

Results:

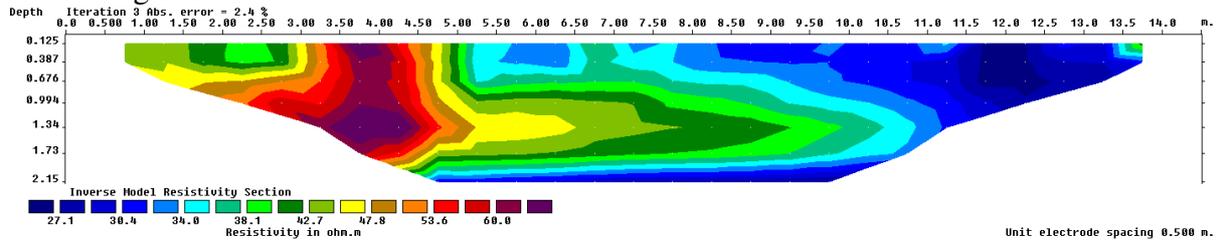
The images in this section are orientated for presentation. The images are not to a common scale.

Resistivity survey, 36 m x 60 m

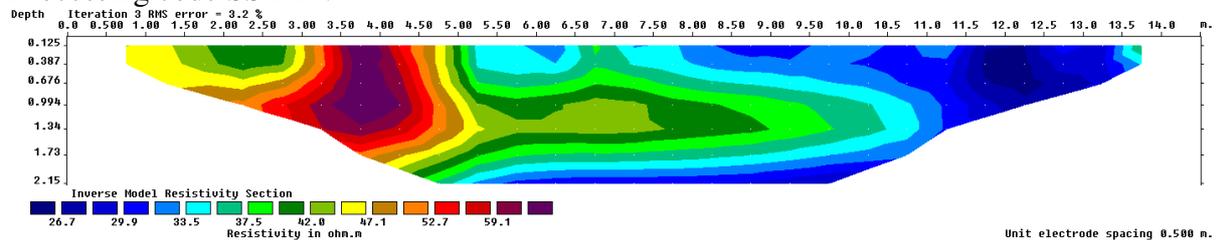
		<p>Resistivity</p> <p>Raw data</p> <p style="text-align: center;">N ↑</p>
		<p>High pass filter 5</p> <p style="text-align: center;">N ↑</p>
<p>(black – low, white – high, red – null)</p>	<p>(purple/blue – low, red – high, white – null)</p>	

Resistance tomography 30 probes 0.5 m spacing

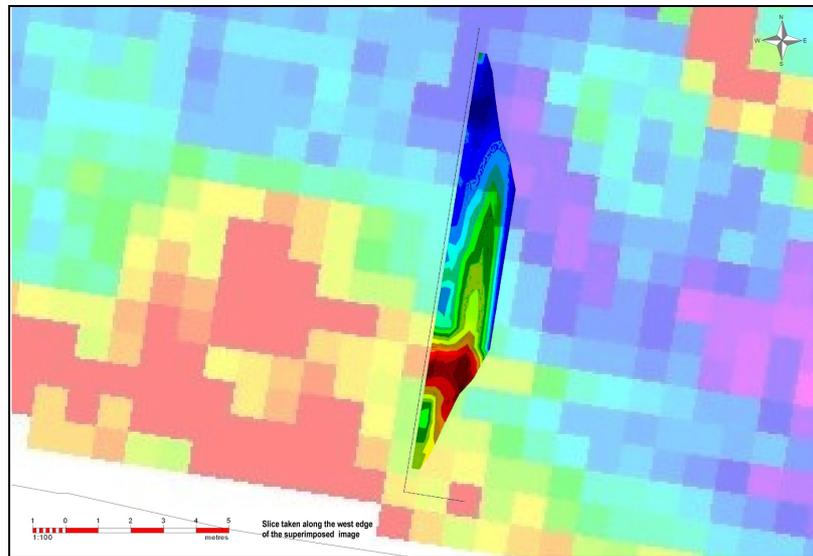
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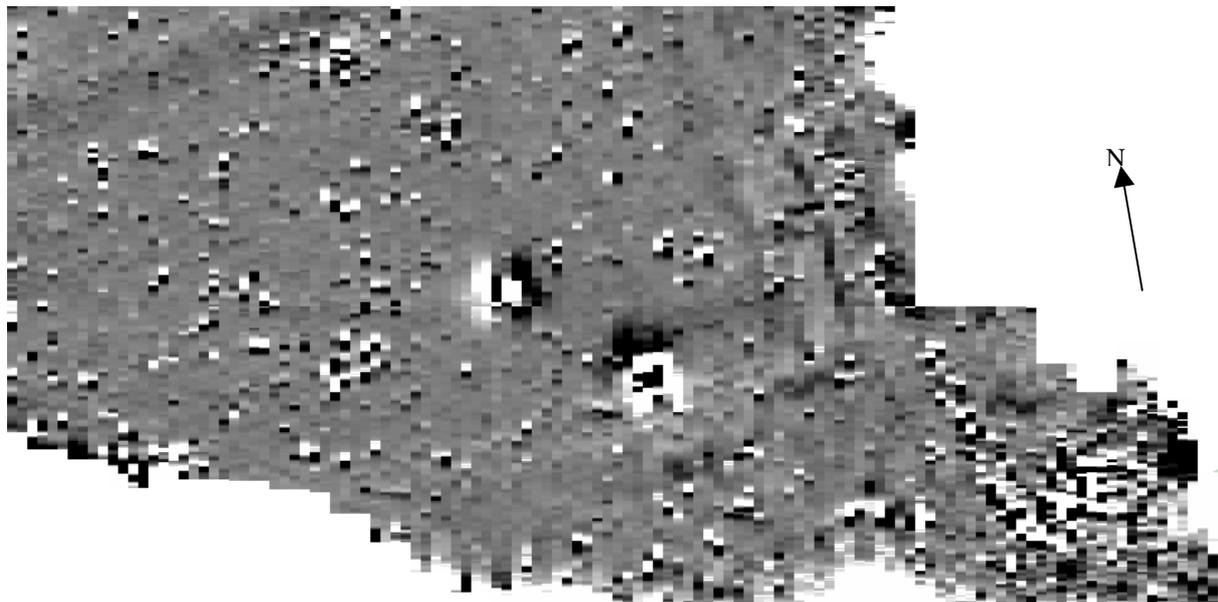
Processing code SSYYN

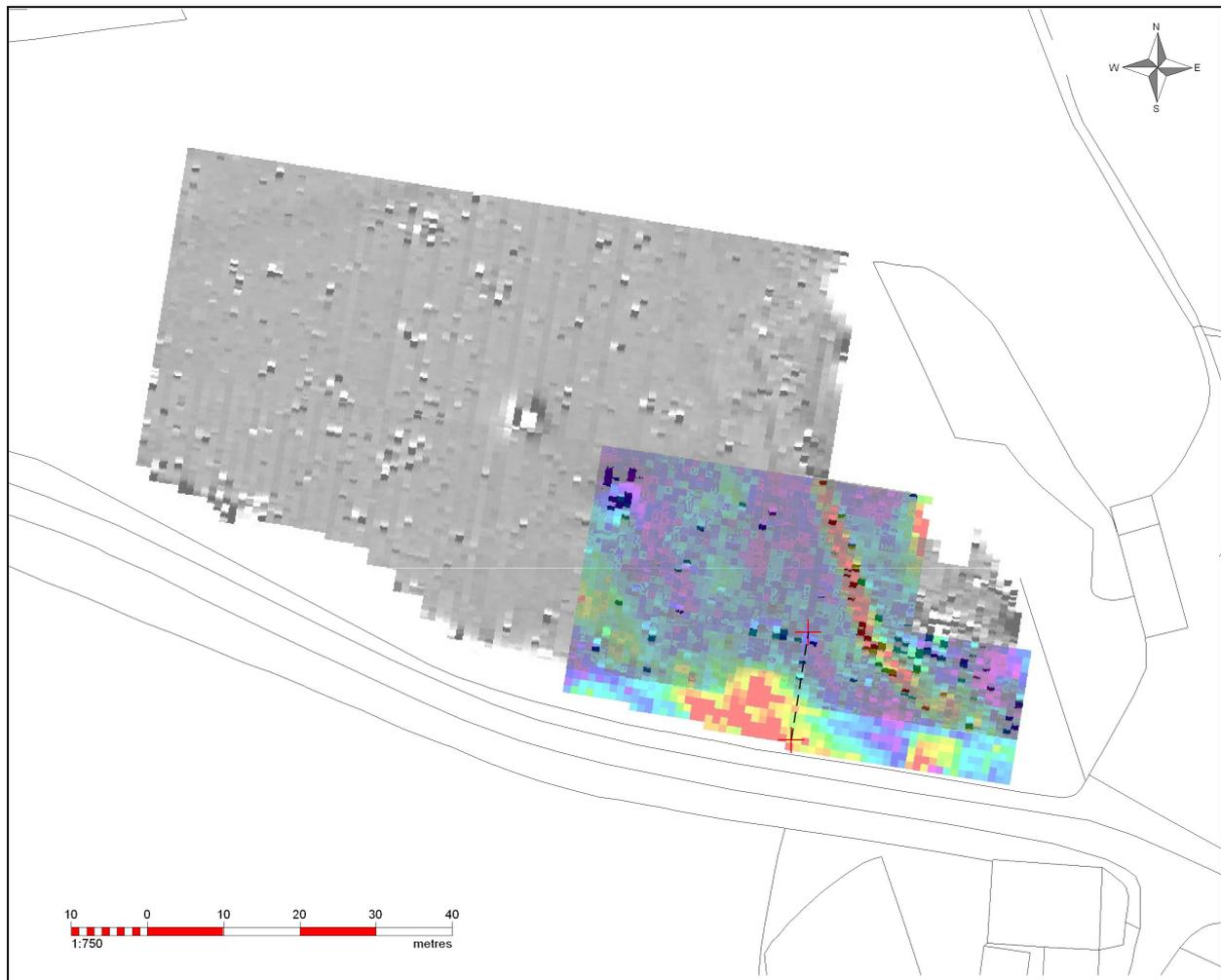


Superimposition of resistance tomography on planar resistivity survey



Magnetometry survey 120 m x 60 m range +6 to -7 nT





Superimposed magnetometry and resistivity results

Discussion:

The magnetometry survey shows a cluster of noise in the SE corner which often indicates a scatter due to building demolition. This noise becomes a line running NNW which might suggest building debris was used to metal a track. It should be noted that the current access to this field is in the SE corner. Running parallel to the N part of the noise line is a stronger magnetic signal which may continue as a much weaker signal in the S part. Around this stronger linear signal there is a subtle difference in the magnetic responses which manifests as a pale band which turns to the W where the strong linear feature terminates to the S. This W running band passes the S large anomaly, one of two in the middle of the survey. An indistinct band runs across the NW corner of the magnetometry survey. The road side edge of the survey was adversely affected by a telegraph pole and wire in the hedging which would have obscured any building demolition noise in that area.

The raw data resistivity survey shows an area of high resistance values along the road side to the S. On applying a high pass filter to the data this is almost removed, leaving a small area of high values in the N part and some patches in the S. This was all fairly close to a telegraph pole and along the road side is probably related to soil discarded on the pole's installation. The high resistivity values remaining after applying the high pass filter are unlikely to relate to the telegraph pole, being about 6 m away and could be attributable to road side buildings. Unfortunately there is little in the way of rectilinear forms of high resistance values which



would indicate building foundations. There is a line of medium and high resistance values running E from the vicinity of the patch in question, across which a Wenner array or resistance tomography survey was carried out. This shows a narrow vertical line of high resistance which would suggest a foundation. The main feature in the resistivity survey is a line of high resistance values running NNW. This follows the line of magnetic noise described above suggesting the metalling of a track with brick or tile debris. Although there are low resistance values on either side of this track as might be expected there is nothing to distinguish the short portion of the line of stronger magnetic responses in the overlap of the two types of survey. The bend of the magnetic band to the W of the metallated track corresponds to a band of medium resistance values between strong low values.

Report by Dr I Sanderson for Archaeology RheeSearch