



Bury Yard Bassingbourn (SAM 33602) Report

In March and May 2009 Archaeology RheeSearch Group carried out magnetometry and resistivity surveys on this site at the instigation of the owner on the basis of general interest in this moated site.

Site liaison: Roger & Sarah Warboys

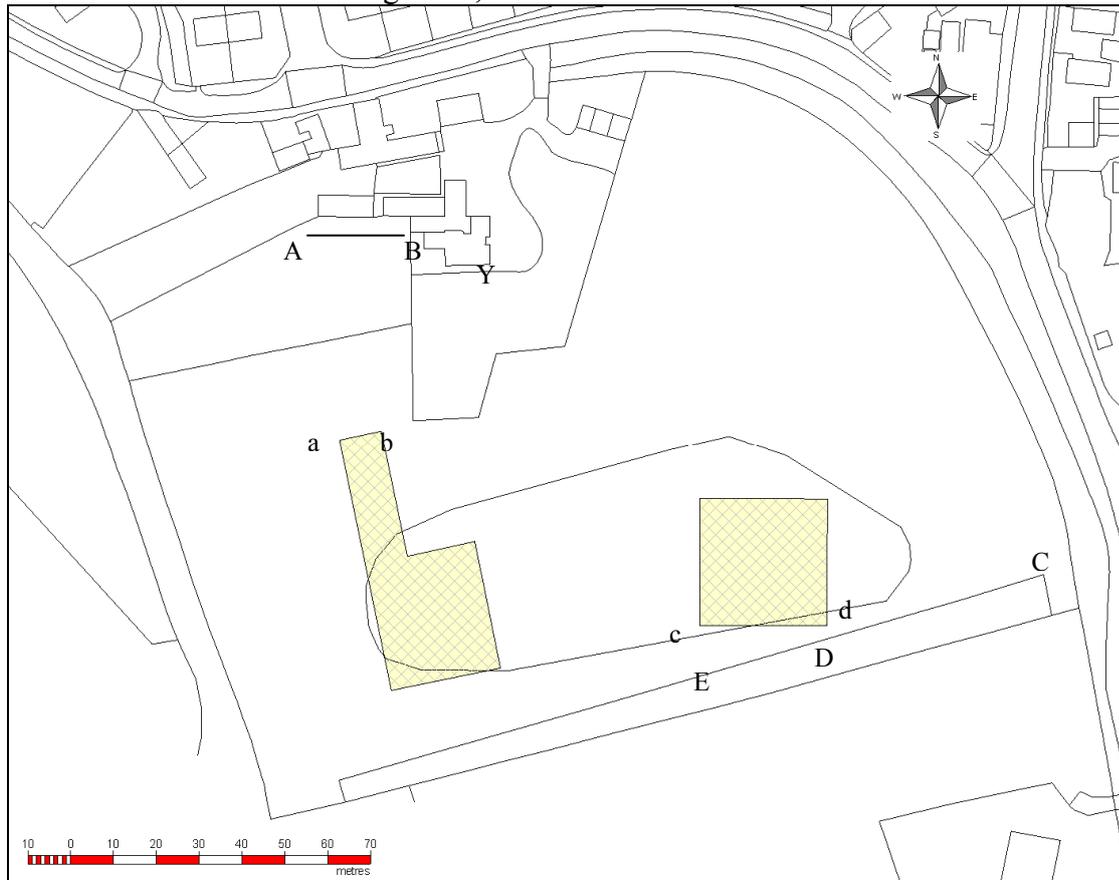
Site conditions: Rough grass with trees. Some undergrowth.

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

Area covered:

Magnetometry	day 1	one 30 m × 30 m grid, two constrained grids
Resistivity	day 1	one 26 m × 30 m grid, one 10 m × 30 m grid
	day 2	one 30 m × 30 m grid

Location: TL329441 Bassingbourn, Cambs.



Location plan: Survey areas.

(resistivity survey area crosshatched, magnetometry area solid).

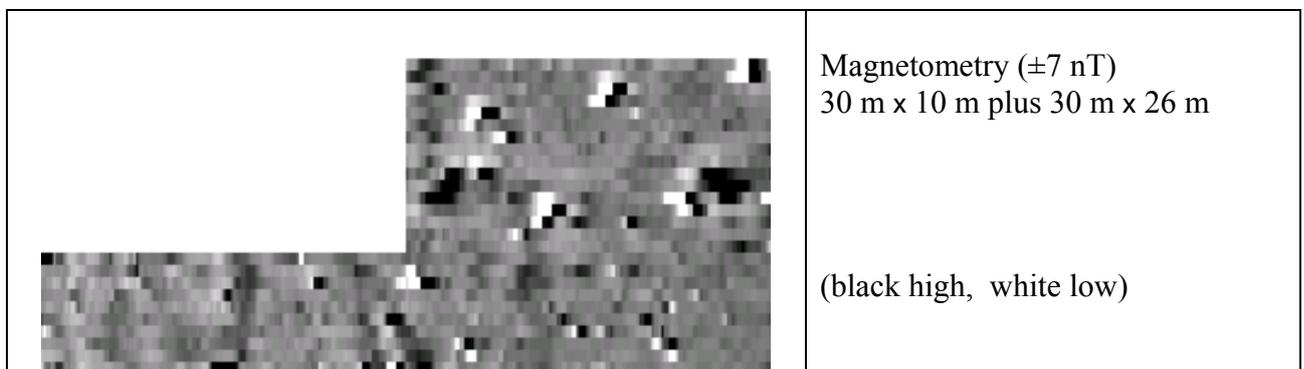
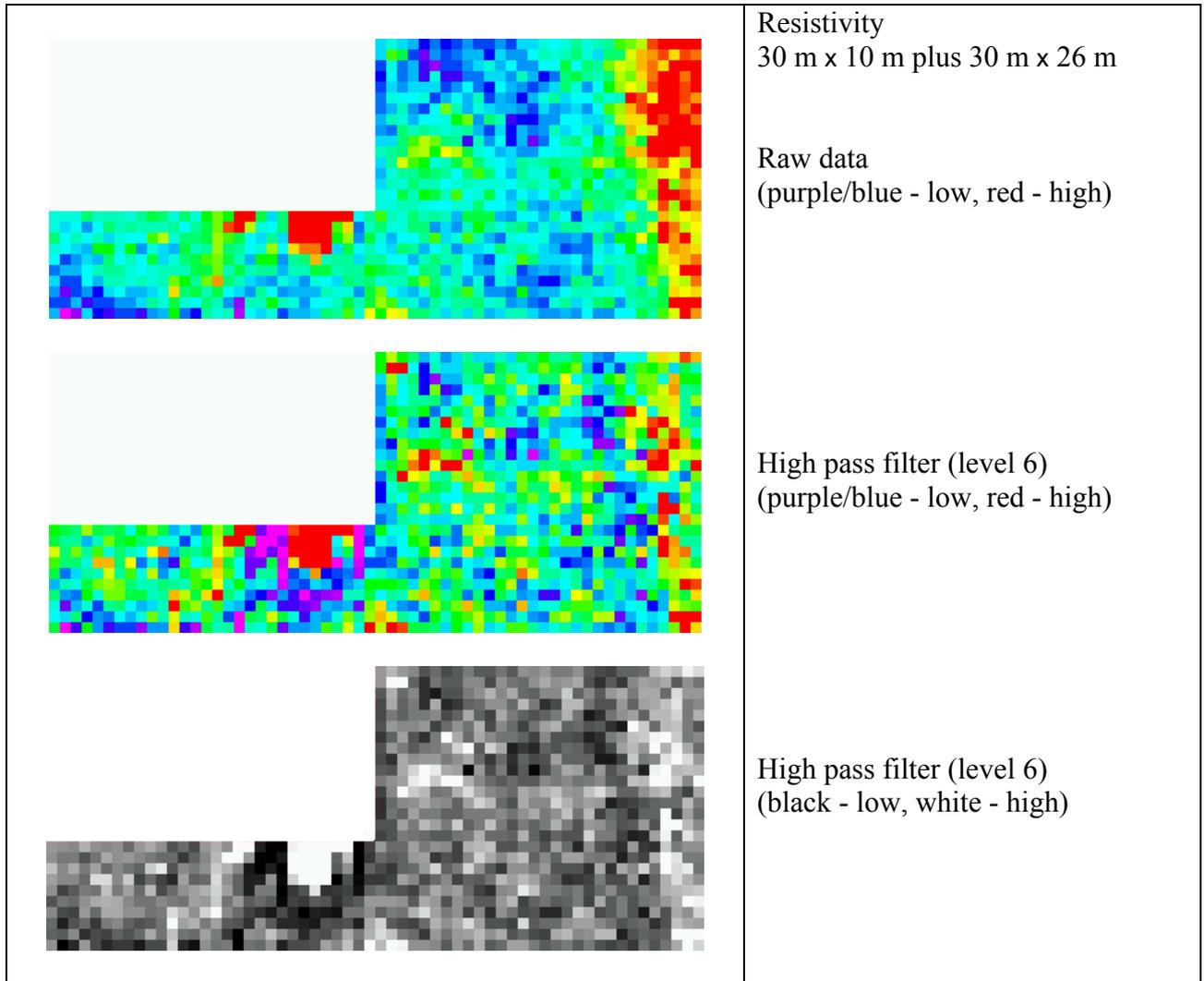
Survey areas were severely constrained by the presence of trees, ditches and other garden features.

On the ground location points: *For the W survey area reference points were built structures not shown on available maps, on the ground accuracy is therefore of the order of 20 cm but grid reference accuracy is of the order of 3 m. There were no accessible reference points for the E survey area. For this survey area location accuracy is no better than 5 m with respect to grid references, on the ground accuracy is of the order of 2 m and resistivity and magnetometry surveys were not carried out on identical grids. Lengths in metres: Aa=49.3; Ab=47.9 ;Ba=52.1 ;Bb=67.6 ; Ya=47.7; Yb=43.7; CD=56.80; DE=33.20; Ec=8.24; Ed=33.36; Dd=1.0; Cc=86.20.*

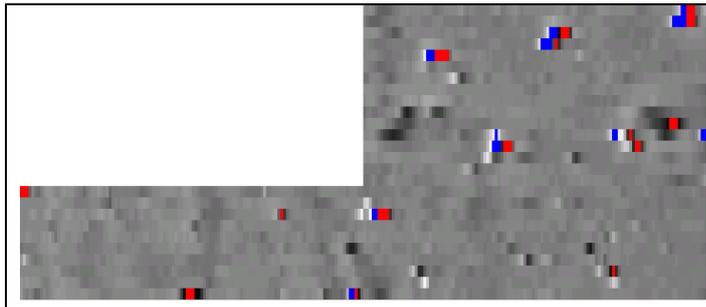
Purpose of survey: To determine if any sub surface features could be detected which would aid in clarifying site usage.

Results:

The images following in this section are orientated for presentation. They are not to a common scale. Grid north may be determined by reference to the diagrams above.



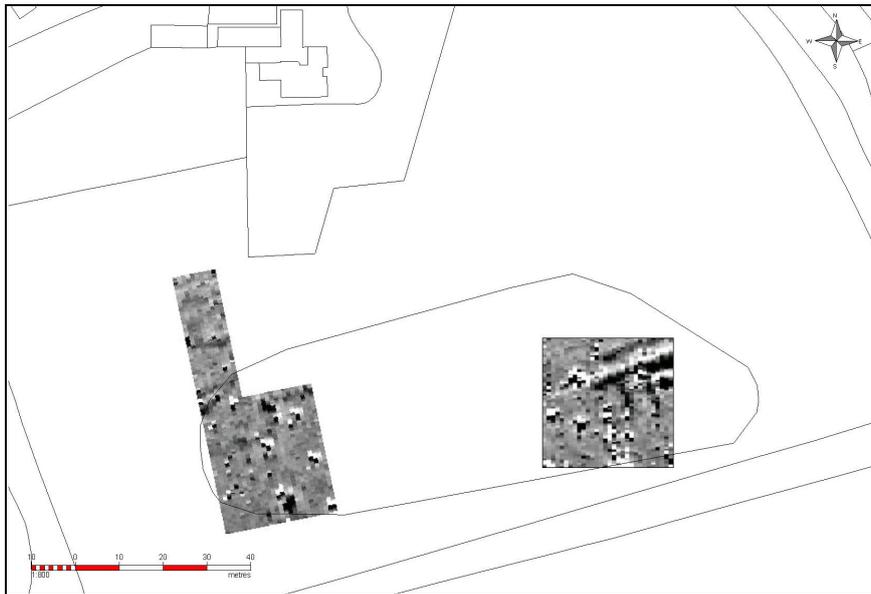
	<p>N ↑</p>	<p>Resistivity 30 m x 30 m Raw data (purple/blue - low, red - high, null - white)</p>
	<p>N ↑</p>	<p>High pass filter (level 8) (purple/blue - low, red - high, null white)</p>
	<p>N ↑</p>	<p>High pass filter (level 8) (black - low, white - high, null - red)</p>
	<p>N ↑</p>	<p>Magnetometry (±5 nT) 30 m x 30 m (black high, white low)</p>



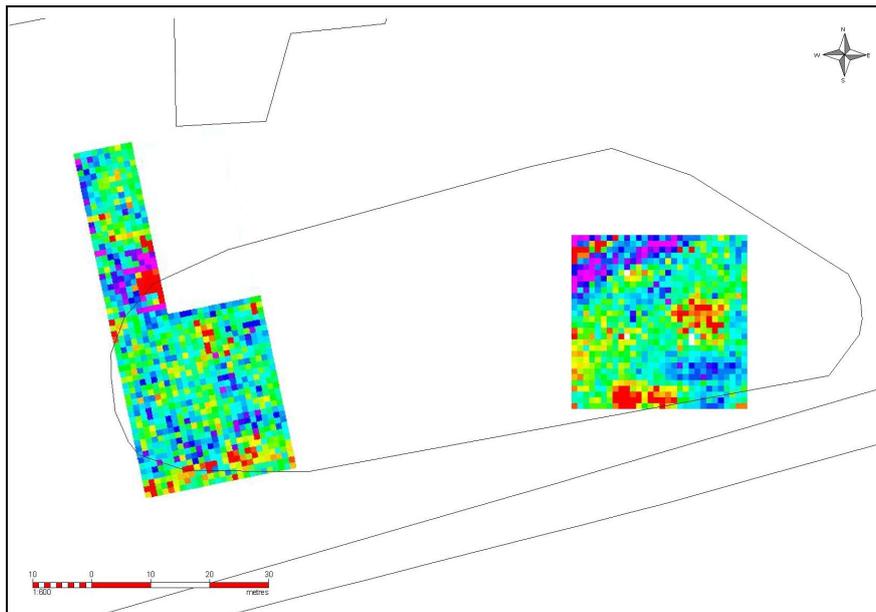
Signals 99 nT (red) or -99 nT (blue)



Signals 99 nT (red) or below range -3000 nT (green)



Magnetometry results in context



Resistivity results in context



The areas covered in this survey were severely constrained by obstacles on the site and are only sufficient to form a very limited impression of any remaining features.

Resistivity

The western resistivity results do not show any clear features. There was an interrupted band of higher resistance values running approximately EW across the survey area, paralleled by a similar low resistance line to the N. A small linear section of high resistance occurred to the N of the main survey area, and a large block of high resistance values was recorded at the junction between the main survey area and the spur to the N.

The eastern resistivity survey recorded three areas of high values with either a pronounced rectilinear form (E of centre) or suggestive of a rectilinear form (S edge). No structural form was discernable in the other high resistance areas. A broad band of low resistivity runs from NE to W and may be paralleled by less distinct band to the S.

Magnetometry

The magnetometry results in the western survey area show a regular pattern of responses around 100 nT in the main part with some suggestions of linear features across the narrow part.

The magnetometry results in the eastern survey area shows a linear parallel set of response running SW from the NE corner terminating about half way across the survey area. There is a set of rectilinear signals which run S from the end of the NE- SW responses.

Discussion:

The W resistivity results do not show any features that could be interpreted as building foundation remains. The block of high resistance values at the junction of the two parts was attributable to an adjacent tree. The high and low band across the S edge, whilst not precisely aligned, may be related to the bands across the E survey area suggesting a trackway between the two areas. The magnetometry results have a similarly aligned anomaly running part way across the E survey area, before abruptly terminating. Unfortunately vegetative cover precluded joining the survey areas or forming a good impression of the landform, but this could represent an access trackway which has been ditched for drainage only as far as needed at the time. This hypothesis is supported by the position of the central area of high resistivity and associated magnetic responses, which are almost certainly building foundations, just overlooking the end of this trackway. Having made a case for an approach trackway from the NE, the resistivity responses on the S edge suggest two adjacent building foundations which might represent a gatehouse. The alternative entrances may represent changes in use with time or the foundations on the S edge of the survey may just be adjacent structures. The magnetometry results, but not the resistivity results, suggest some sort of link from these structures to the N. It is not clear whether this link represents two tracks or the edges of one track. Interestingly this N aisle intersects with the termination of the NE to W track. The regular pattern of magnetometer responses around 100nT in the E survey area suggests the residues of stump burning.

Raw data are available as separate appendices.

Magnetometry readings: 4/m, 1 m separation.

Resistivity readings: 1 m interval, 1 m separation.