



## Stretham Tiled House Farm (SAM257) Report

In September 2007 Archaeology RheeSearch Group carried out a magnetometry and resistivity survey on this site at the instigation of Mike Young on the basis of a concentration of Roman material discovered during field walking, and an anomalous mound in the centre of the site.

**Members participating:** Brian Bridgland, Pat Davies, Liz Livingstone, Bruce Milner, Maureen Storey, Tony Storey.

**Site Liaison:** Mike Young.

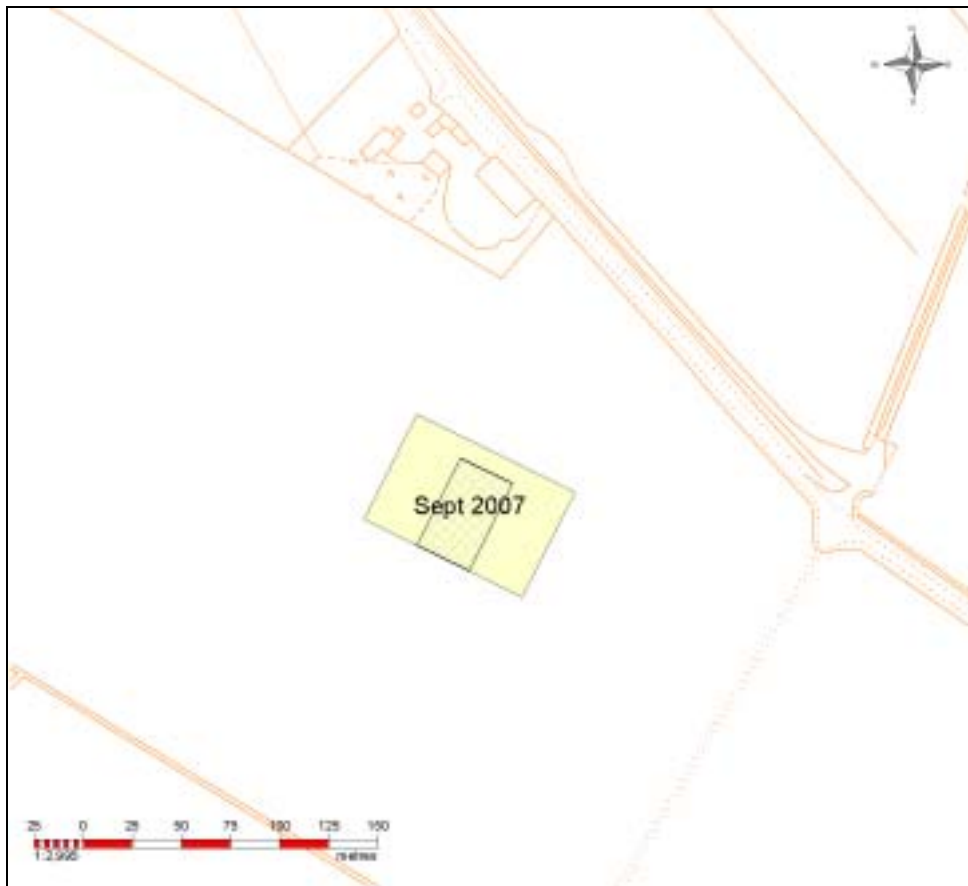
**Site conditions:** Stubble. Access from Newmarket Road to the east of the site.

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

**Area covered:** Magnetometry six 30 m × 30 m grids  
Resistivity one 20 m × 30 m grid, one 30 m × 30 m grid

**Location:** TL 523 732, 120m west of Newmarket Road, Stretham.

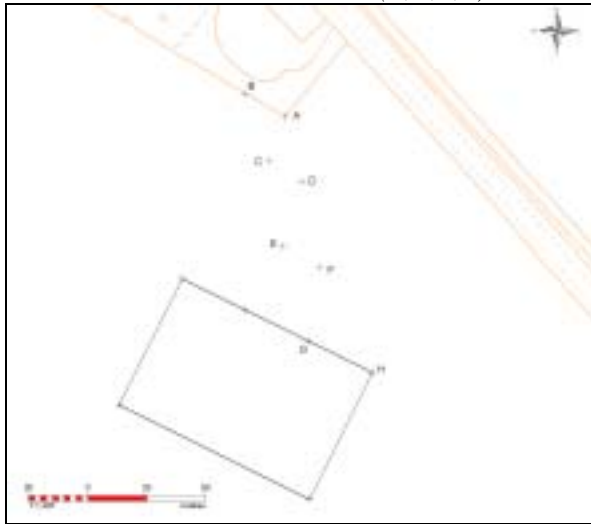
*Images are orientated with north to the top of the page except where stated otherwise.*



Location plan: Survey areas with Newmarket Road to the east.  
(Resistivity survey area crosshatched, Magnetometry area solid)



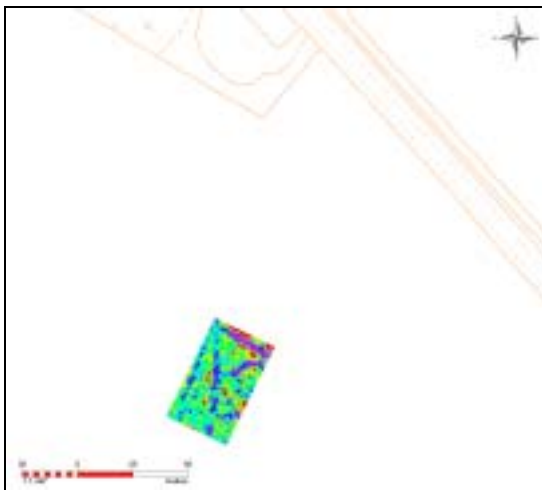
24  
 26 On the ground location points – *There were no good reference points within 100 m.*  
 28 *Interim locations were established (C,D,E,F) to locate the survey area.*



*distances (m)*  
 AB 20.0  
 AC 20.0 AD 28.5 BC 31.0 BD 45.0  
 CE 37.0 CF 50.0 DE 29.0 DF 37.5  
 EG 41.6 EH 65.4 FG 31.6 FH 50.0

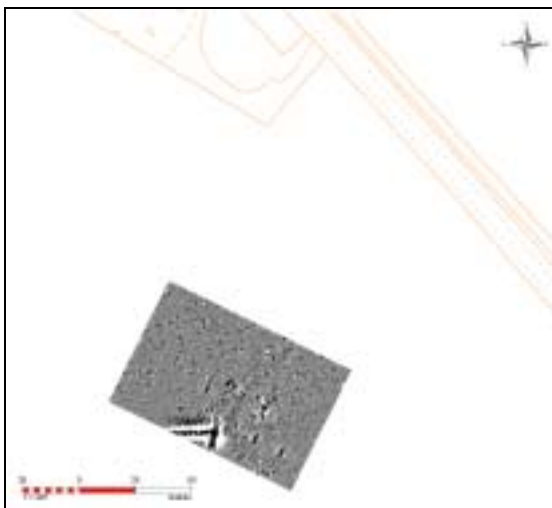
29  
 30 **Purpose of survey:** To determine if any sub surface structures were detectable which would  
 31 account for a concentration of Roman material discovered during field walking, substantiate  
 32 crop marks or explain a rise in the ground.

33  
 34 **Results:**



Resistivity  
 30 m x 50 m

(purple blue low, red high)



Magnetometry  
 60 m x 90 m

(black high, white low)

36  
38  
39



Aerial photograph of the site

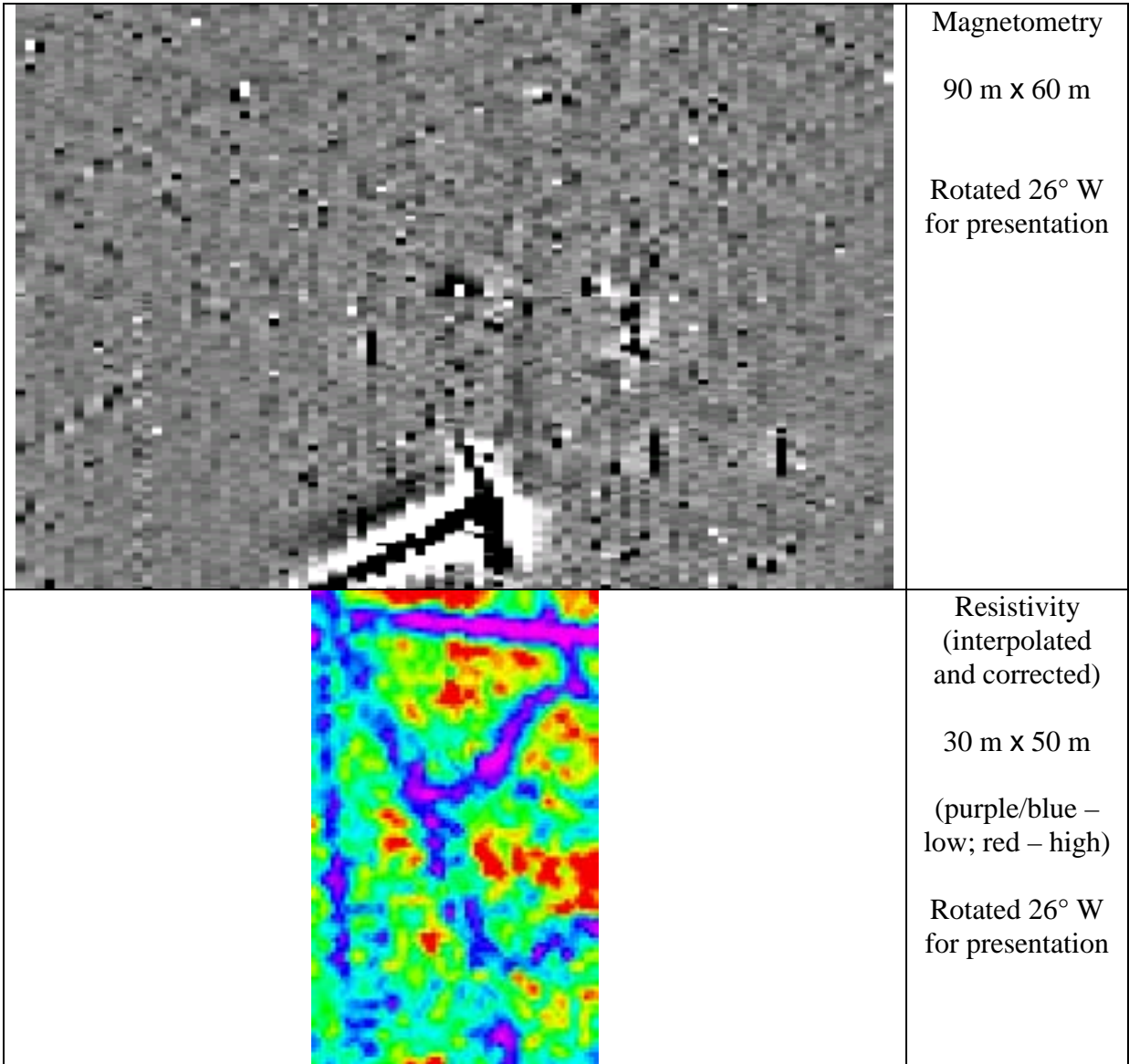
40  
41  
42



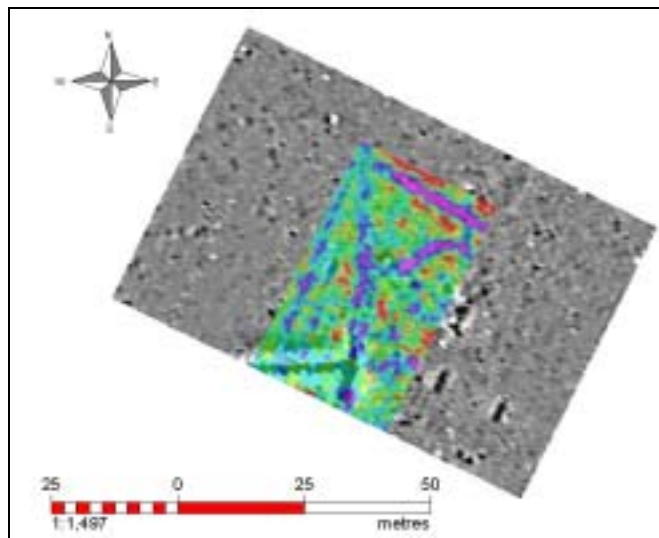
Survey areas shown on an aerial photograph and a cropmark record of the site  
(cropmark record from HER Office Cambs County Council)

43  
44  
45

46  
48



49



50  
51

Superimposition of resistivity and magnetometry results



53

#### 55 Resistivity

56 The resistivity measurements show three low value lines radiating from the northern corner  
57 of the survey area, with a sigmoid feature joining two of them. The latter feature could  
58 equally be interpreted as semi circular with short linear segments to the radial lines. The  
59 middle line is not complete, having two or three interruptions in its course. The high  
60 resistance areas showed no discernable structural pattern.

61

#### 62 Magnetometry

63 The magnetometry results clearly show only one feature at the centre of the SW edge of the  
64 survey area. This had values in the range  $-30$  nT to  $+97$  nT. There is a suggestion of a line  
65 running from the inflexion point of the main feature in a curve to the NE, but the signal  
66 contrast is too low to be convincing.

67

#### 68 Aerial photographs.

69 The aerial photograph included above shows a marked colour differentiation across the  
70 survey area. It also suggests a linear inflexion point matching that shown in the  
71 magnetometry results.

72

#### 73 Correlations

74 Magnetometry and resistivity detect different aspects of subsurface structures and should not  
75 therefore be expected to show the same features. The differences and coincidences in what is  
76 detected can sometimes add further information about those structures.

77 Superimposing the resistivity and magnetometry results shows that the inflexion point is in  
78 one of the interruptions in one of the low resistivity lines. The east side of the magnetometry  
79 feature is aligned with the remainder of this radial line, with the remainder of the  
80 magnetometry line to the edge of the survey area having a coincident low resistivity value.

81 The north side of the magnetometry feature shows no particular relationship to the resistivity  
82 results, but a segment of low resistance values may extend this magnetometry line.

83

#### 84 **Discussion:**

85 The magnetometry results, particularly combined with the aerial photograph, suggest that the  
86 main feature may be a pottery field drain, with leakage causing the coincident low resistivity  
88 signal.

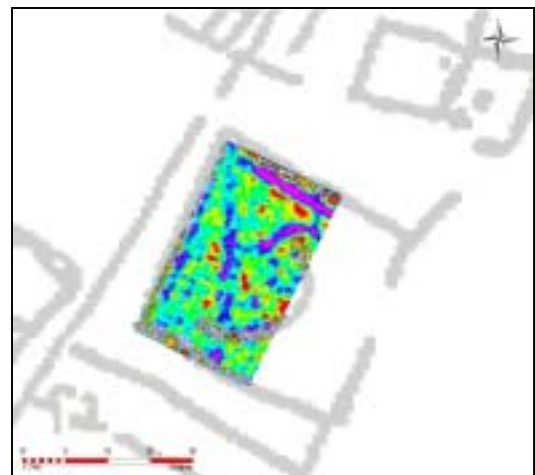
90 The NE edge low resistance line is very close to one of  
92 the recorded crop marks, as is that on the SW edge.

94 The S portion of a semi circular crop mark is  
96 coincident with a segment of low resistivity, but the N  
98 part is not. None of these features were detected with  
100 magnetometry.

102 Overall the limited magnetometry response suggests  
104 that, on this site, close to a river, the normal indicators  
106 have been dispersed into Fenland and alluvial soil, or  
108 covered too deeply to be detected. Moisture retention  
110 due to ditching remains detectable by resistivity and in  
112 this survey, the line parallel to the NE edge and the  
114 curved feature just to the south probably represent

115 chronological different ditching. The middle linear feature may represent non-fired recent

116 drainage. The low resistance line on the NW edge, although, given the positional inaccuracy





118 intrinsic in crop mark locations, associated with a crop mark is not as  
120 strong as that on the NE edge.

121 It is unfortunate that the designated survey location did not encompass rather than abut the  
122 recorded cropmarks. No explanation for the slight rise in the ground, which determined the  
123 survey site, was apparent.

124

125

126

127 Raw data are available as separate appendices.

128 Magnetometry readings: 4/m, 1 m separation.

129 Resistivity readings: 1 m interval, 1 m separation.

130