Duddenhoe Report

In August 2007 Archaeology RheeSearch Group carried out magnetometry and resistivity surveys on this site at the suggestion of Olive Harvey on the basis that it might be the location of one of the Duddenhoe manor houses.

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

Site liaison: Peggy Foster, Ian Foster.

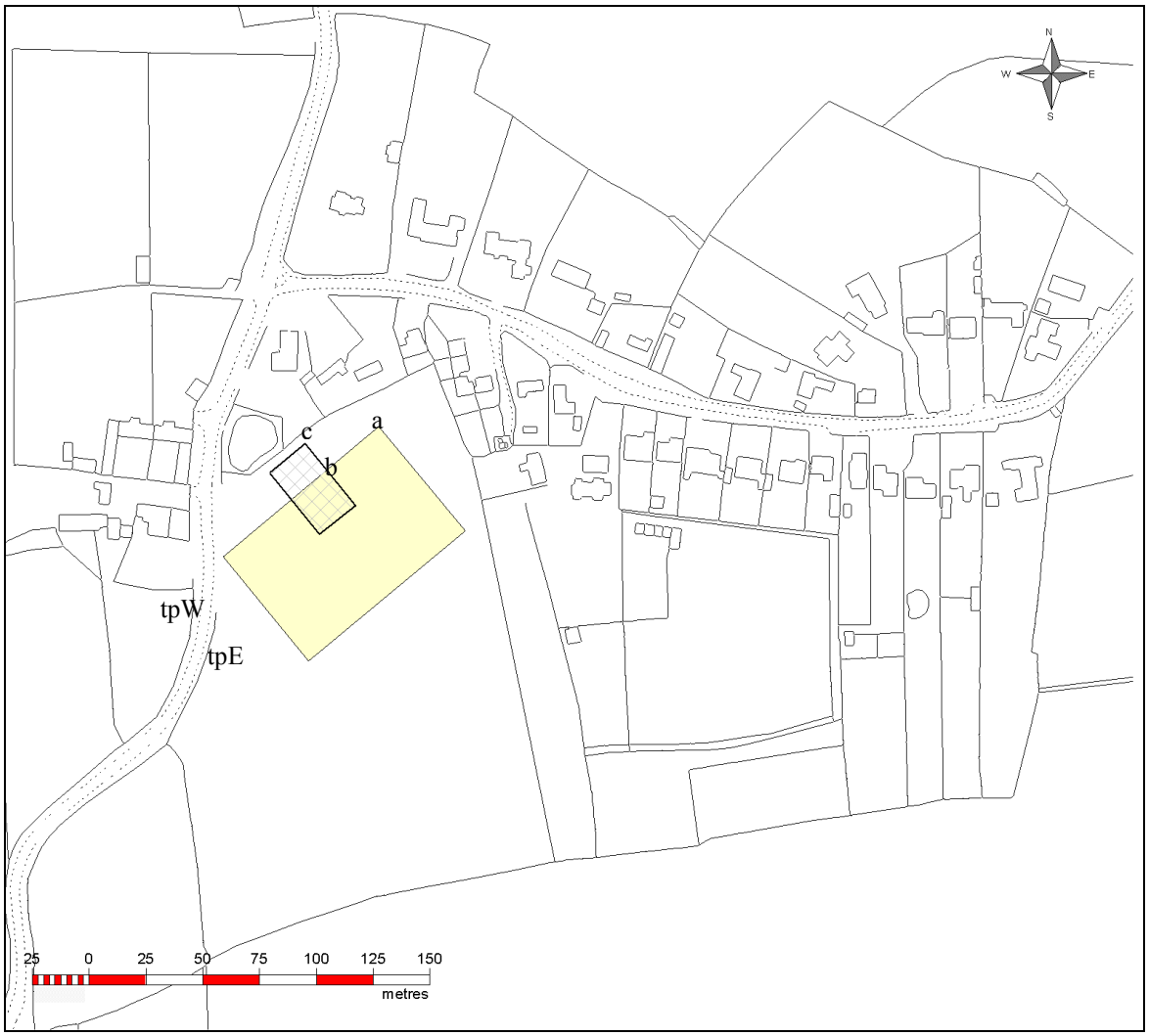
Site conditions: Old stubble, some surface water. Access from road to NW

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

Area covered:	Magnetometry	six 30 m × 30 m grids
	Resistivity	one 20 m × 35 m grid

Location: TL 459 365, Duddenhoe End, Essex

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



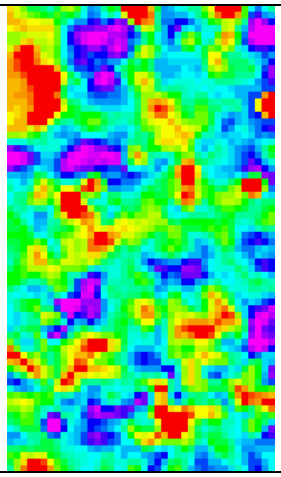
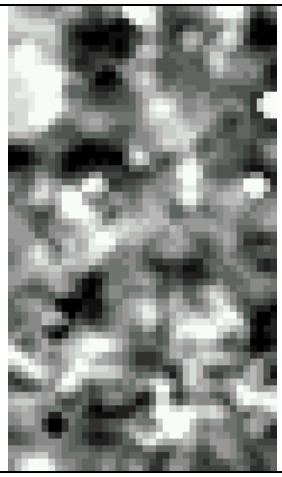
Location plan: Survey areas with Duddenhoe End Farm to the west

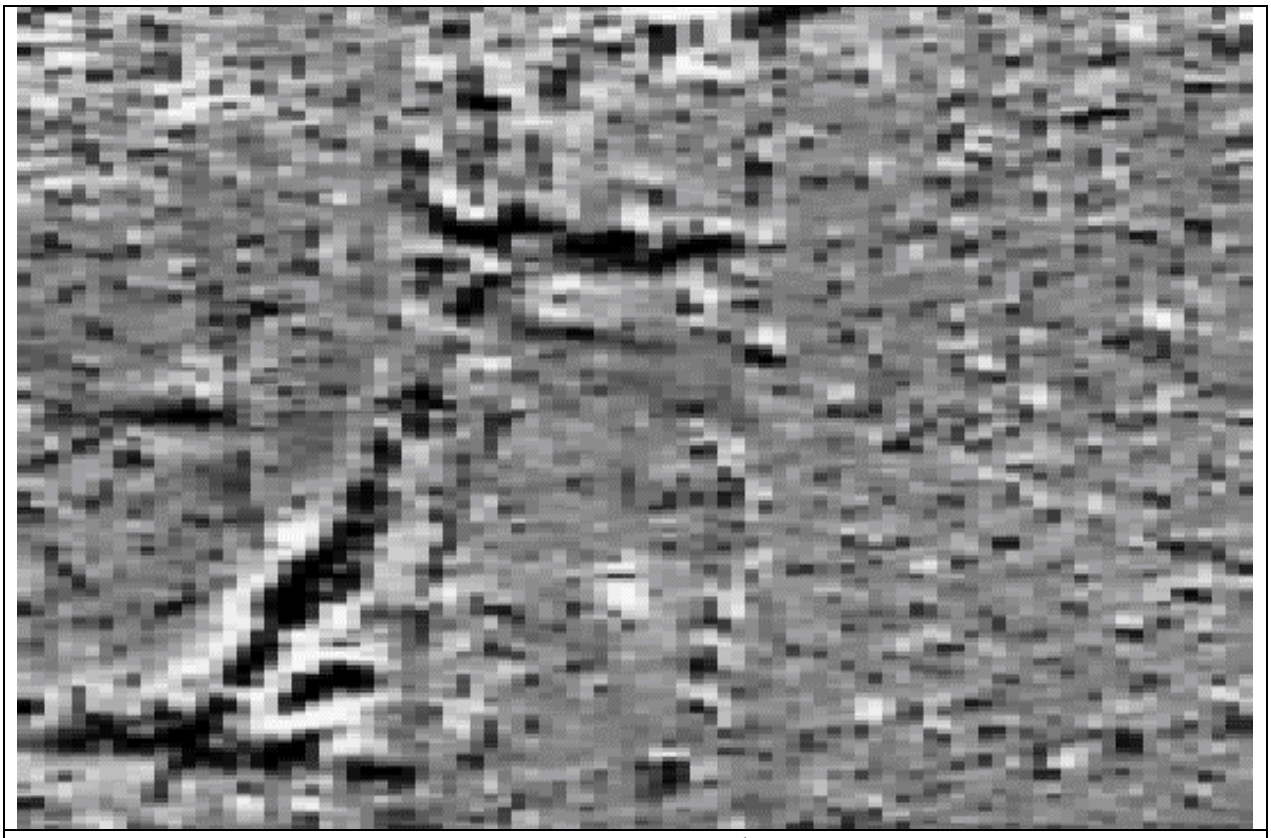
(resistivity survey area crosshatched, magnetometry area solid).

On the ground location points (m): a-b 30,b-c 15, Telegraph poles W & E side of the road (tpE, tpW).
From S corner of NW grid to tpE 22.15, tpW 29.85. From W corner of NW grid to tpE 27.66, tpW 15.41

Purpose of survey: To determine if any subsurface structures were detectable which would indicate the site of a building.

Results:
The individual results have been rotated to the E for presentation

	
Resistivity results, 20 m x 35 m (purple/blue – low, red – high)	Resistivity results, 20 m x 35 m (black – low, white – high)



Magnetometry results,
90 m x 60 m (black – high 1.3 nT, white – low –1.1 nT)

Results in context with the same orientation but with different scales.

Resistivity

The resistivity measurements show a broken line of low resistance values running along the NE edge of the survey area, with a rectilinear low resistance feature in the NW corner. There are indications of rectilinear high resistance features in the SE corner of the survey area. The majority of the low resistance signals match the visible soil marks.

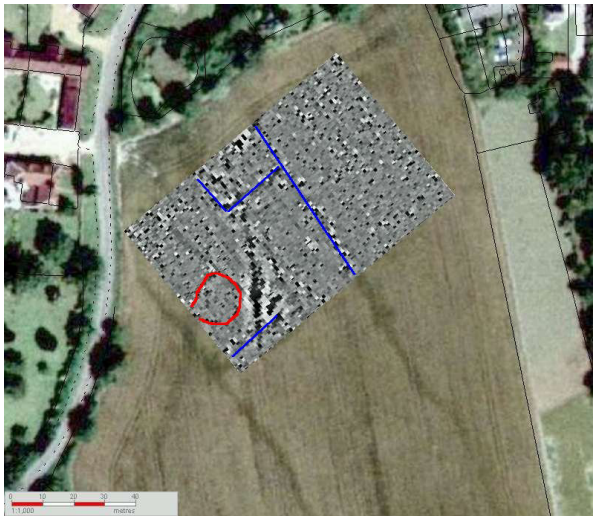
Magnetometry

The magnetometry results show a broken line running NW-SE across the survey area which matches both the soil mark and the broken line of low resistance values along the NE edge of the resistivity survey. There is another faint line to the W on a similar course. The strongest line runs N-S across the survey area. This line is not continuous and does not appear to extend to either edge of the survey area. At the northern end it seems to bend sharply to the E inside a rectilinear feature. Just before the southern termination it is crossed by a short but strong line running NE-SW, the crossing point being confused by a region with particularly strong signals corresponding to a distinct area of soil marks. The short strong line corresponds to a soil mark at a right angle to, and not extending beyond, the linear soil mark

immediately to the W of the survey area. There are also indications of a circular feature about 14 m in diameter immediately to the W of this region. Again the line is not continuous and could be interpreted as a series of possibly unrelated linear segments.

Discussion:

This site is similar to another site to the W of Cogmore in Duddenhoe End, in that the degree of magnetic background noise, probably as a result of the area's geology, makes the elucidation of archaeological traces difficult. This has resulted mainly in discontinuities within lines which might be expected to be continuous. That the resistivity results also show a broken line along one edge where it might be expected to be continuous suggests that these problems might have been exacerbated by plough damage to the sub-surface features.



The soil mark immediately to the W of the survey area corresponds to a field boundary shown on the Inclosure map. Nearby features parallel, or at right angles, to this feature might therefore be assumed to be related in some way. The magnetometry survey detected four such features (blue) which might therefore reasonably be classified as pre-Inclosure or medieval boundary ditches, with traces of one and possibly some others being detected by resistivity.

The circular feature, (red), with a diameter of about 14 m, is somewhat small and had a poor signal definition but is suggestive of a barrow.

The strongest magnetometry response, running NS, does not seem to be related to the other features and may in fact be better considered as separated parts rather than a continuous line. The strongest signal is at the southern end in association with an isolated strong signal and defined by a diffuse area of soil marking. No interpretive suggestions are made for this area, which will probably only be clarified by digging a trench from the circular feature to the E termination of the suggested Inclosure feature.

There are a number of other possible alignments discernible in the magnetic survey, but given the background noise they remain speculative.

No distinct evidence of significant building remains was found within the areas surveyed. However, the high resistance area in W corner of the resistivity survey could be due to building debris. This might represent a single structure in the corner of a small close whose S and E boundaries are given by the magnetometry results, but the area surveyed was insufficient for the results to be conclusive.