MAGNETOMETER SURVEY AT DODDERHILL, DROITWICH

Survey no. 33/81

Dates of fieldwork: 24-5 Nov 198

NG: SO 900637

This survey covered an area to the N and W of the Dodderhill Roman fort including a section of the presumed line of the rampart and a small part of the ground within. An additional area at the foot of the hill to the W where a cropmark has been reported was also surveyed. The wooded area E of the churchyard which also lies within the probable perimeter of the fort was also inspected, but found to be too obstructed and subject to interference to be surveyed.

The survey was based on a 30m grid located as shown on plan 1 and measured to the fences where indicated on plan 2. Traverses were surveyed at 1m intervals using a fluxgate magnetometer with direct plotting on a chart recorder. Plan 2 shows the plots reduced to half size with magnetic anomalies outlined.

Not all Midlands sandstone-based soils are magnetically responsive, but here on New Red Sandstone the topsoil gave a magnetic susceptibility reading of 29×10^{-0} SI units/kg. This is quite high enough for good survey results to be obtainable, although the response from any particular feature will depend on local contrast between the fill and subsoil. Only a small number of features were in fact detected:

In the area below the hill (squares 1-5) there are two strong linear anomalies which appear to be ditches. They do not align with the ridge-and-furrow and lack the strong negative anomalies to be expected from iron pipes, but are not necessarily archaeologically significant. The one through squares 4 and 5 follows the footpath marked on the map, although it is unlikely that the path itself could account for the anomaly. The one through squares 2 and 3 follows a slight visible hollow. The cropmark itself probably falls in square 3 where there is an area partly enclosed by three very weak linear features. These features are too ill-defined to be clearly interpreted; they could be superficial and insignificant, or could indicate the presence of barely detectable ditches of possible archaeological significance.

The remains of any earthwork which surrounds the fort should cut through squares 6-10 at the top of the hill. A bank is unlikely to respond but a ditch would usually be detectable. Nothing in fact was found except an alignment of very weak anomalies through squares 6 and 8. If this apparent alignment is not spurious it could represent a small ditch, but it does not lie parallel to the expected line of the defences. The very strong anomaly outlined at the edge of square 7 is probably caused by interference from buried iron near the corner of the fence.

Of the magnetic anomalies detected in the survey those most likely to be of archaeological origin are the ones outlined in squares 11 and 13. They lie close to the perimeter of the fort and could fall within it or immediately to the N. The two anomalies in square 13 could well represent pits; those in square 11 are weaker and could be significant or not. None of them are very strong or clearly defined compared with the anomalies often associated with occupation on Roman sites. Squares 14-16 suffer from interference from the iron fence to their S.

CONCLUSIONS

The site was not completely unresponsive but nothing of demonstrable archaeological significance was found. Negative results from a magnetometer survey are rarely conclusive, and limited tests on the features detected (eg in squares 3 and 13) could be of help in evaluating the findings. The anomalies are weak, and so if substantial archaeological features are shown to occur then others could have gone undetected. If nothing very definite is found then the apparent lack of activity might be confirmed.

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Date of report: 1 March 1982



