

Crop-marks at Stanwell, near Heathrow Airport

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THE PURPOSE OF THIS NOTE is to discuss a range of crop-marks seen on aerial photographs of a large field north of Park Road, Stanwell and just south of Heathrow airport. A number of important sites have been excavated in the vicinity. These include the causewayed camp near Staines¹, the Iron Age temple and village at Heathrow, and the early Anglo-Saxon cemetery at Shepperton². The wide variety of evidence for activity in most archaeological periods has recently been catalogued by Longley³. In view of this, and the fact that the site is now the subject of a permission for gravel extraction, it is the intention of the Surrey Archaeological Society, through its professional team, to mount a major excavation in the near future.

The photograph shown here (Fig. 1) was taken in 1962 by Aerofilms Ltd., (HSL/UK/62/230). The information on this is confirmed and supplemented by another Aerofilms photograph (HAS/UK/49/219) and a number of photographs taken by John Hampton of the National Monuments Record on a recent early morning flight up the Thames Valley (NMR: SF1141/62 to SF1141/84). The plan (Fig. 2) combines the information from these photographs.

A number of different types of crop-mark are revealed by the photograph. Foremost amongst these is what appears to be a field system, on a totally different alignment to the modern fields. The fields are defined by ditches. Occasionally two of the ditches are very close to each other, so that the space between them would probably have functioned as a trackway. This field system is superficially similar to many "Celtic" field systems⁴.

These trackways continue either over or under the ditches of a Roman road which travels roughly north-south across the field. Its identification as a road is assured by the fact that it also appears as

a parch mark further to the north on HAS/UK/49/219. The ditches of the road are some 20 metres apart, which should mean that it is an important if not major route⁵. It has been suggested that this road is heading for a junction with the London-Silchester road at Ashford, to the south⁶.

Another interesting feature is the "avenue" of closely spaced pairs of pits in the west central section of the field. These almost certainly represent the remains of an avenue of trees which is marked on John Rocque's 1754 map of Middlesex⁷. Similar, though apparently randomly distributed crop-marks are frequent on Fig. 1, especially in the north-west area. Obviously these may also represent tree holes but could equally well be pits belonging to early settlement.

There are many more possible features on the photographs; only the most definite have been drawn on Fig. 2. These include the two ditches which weave an unsteady line east-west across the centre of the field and a possible old stream course in the south-west part of the field. None of these features bears any obvious relationship to those already described. In December 1977 a small trial excavation was carried out on the site — its position is marked "E" on Fig. 2. In this two groups of features were found. Those at the upper level (Fig. 3A) consisted of a ditch-like feature c. 85 cm (3ft.) deep, and a pit which cuts it, both found immediately on removal of the modern plough soil. The ditch follows a line very close to that of one of the ditches of the Roman road. Some 80cm of soil had accumulated between use of the lower group of features (Fig. 3B) and the use of the upper group. This lower group consisted of a substantial ditch, a shallow gully, two pits and two post holes. The ditch is on a similar alignment to the one marked

1. R. Robertson-Mackay, 'The Excavation of the Causewayed Camp at Staines, Middlesex', *Arch. News Letter*, 7 (1962), 131-4.

2. A. Meaney, *A Gazetteer of Early Anglo-Saxon Burial Sites* (1964).

3. D. Longley, 'The Archaeological Implications of Gravel Extraction in North-West Surrey' *Surrey Arch. Soc. Res. Vol 3* (1976), especially Fig. 4.

4. See especially H. Bowen and P. Fowler (eds.), 'Early Land Allotment', *Brit. Arch. Rep* 48 (1978).

5. See J. Liversidge, *Britain in the Roman Empire* (1968) 385.

6. *Op cit* fn 3.

7. J. Rocque, *A Topographical Map of the County of Middlesex, 1754*, reprinted by London & Middlesex Archaeological Society. (1971).

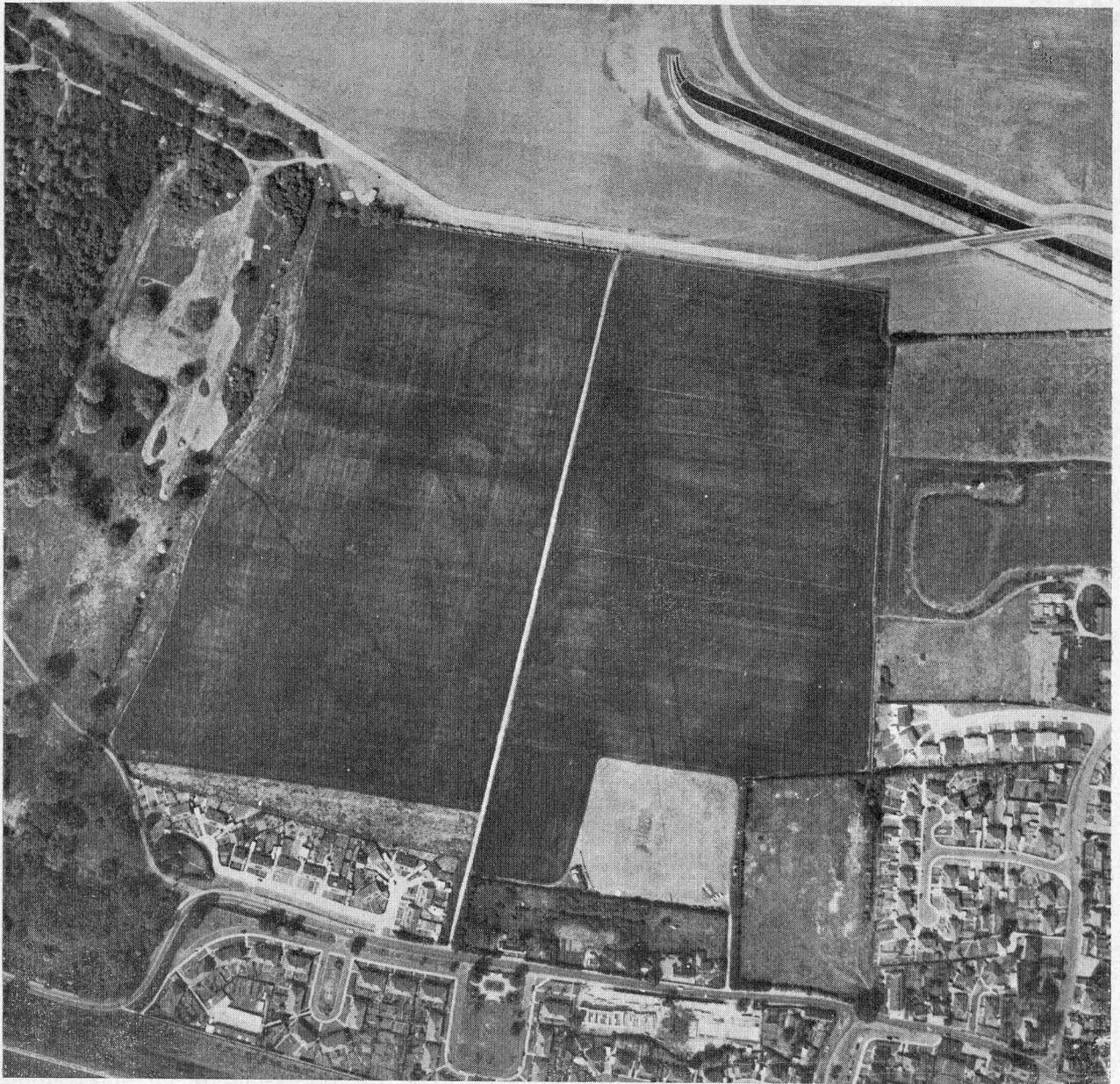


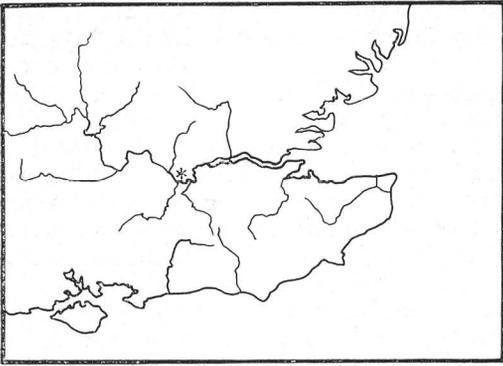
Fig. 1

(Photo: Aerofilms Ltd.)

"A" on Fig. 2. The only significant finds were sherds of grass tempered and flint-tempered pottery from the level of the lower group of features.

Taken together the aerial photographs and the excavation demonstrate that the site is potentially of considerable importance. The aerial photograph shows at least four phases of activity on the site and the features on it are probably only a small fraction of those below the ground. There

are three reasons for this. Firstly an aerial photograph inevitably only shows the largest of sub-surface features. Secondly the major group of features is at least one metre below the ground surface; at that depth many archaeological features would only be revealed by crop-marks under optimum conditions. Thirdly none of the aerial photographs were taken in optimum conditions. The Aerofilms photographs were taken from heights of



STANWELL

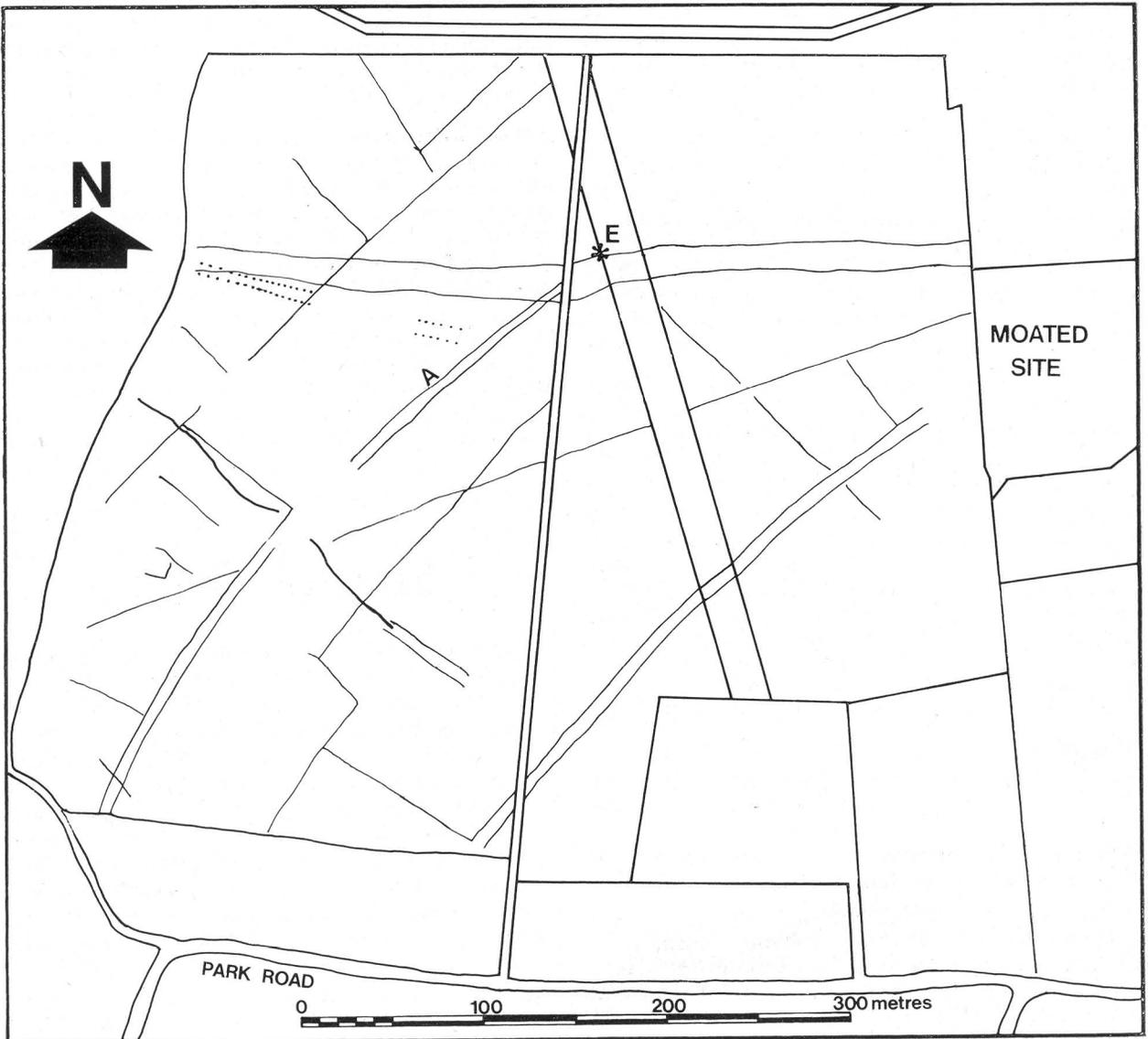


Fig. 2

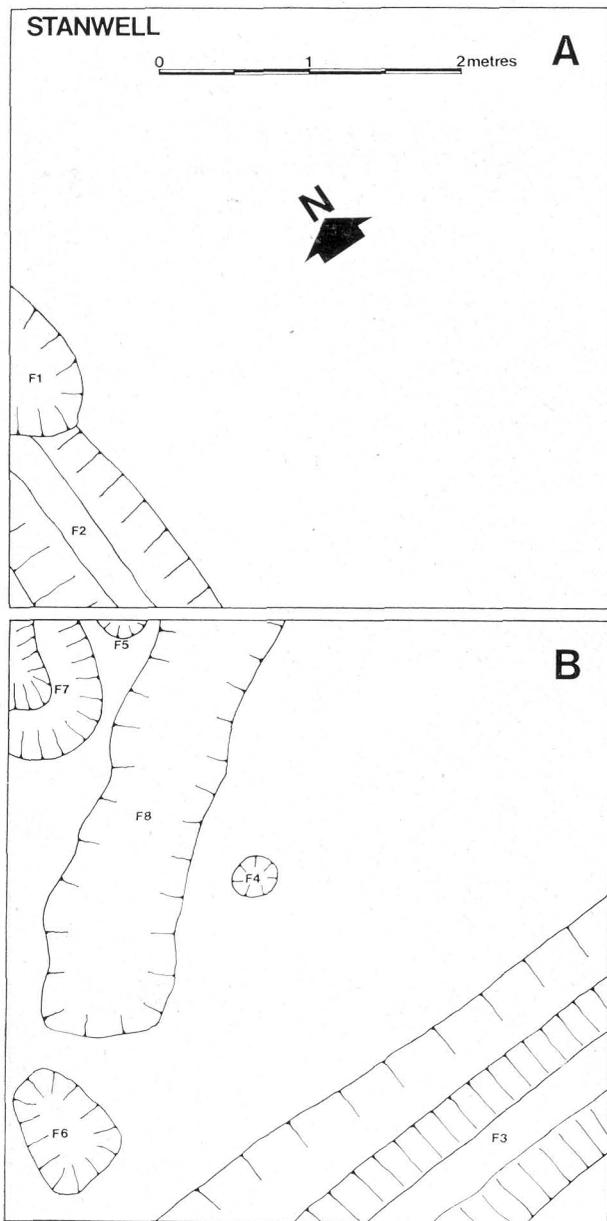


Fig. 3

6000 feet while John Hampton's were actually of the stubble rather than the crop itself.

The excavation produced evidence of at least two phases of activity. More are probably present since it is likely, though not at present demonstrable, that the features on Fig. 3B belong to more than one phase. The correlation of these phases with those indicated on the aerial photographs is difficult, not least because of the problems of highly accurate

translation of crop-marks to the map and possible slight surveying errors. The correlations suggested above, that F2 (Fig. 3A) is a side ditch of the Roman road, and that F3 (Fig. 3B) is to be equated with 'A' on Fig. 2—raise as many problems as they solve. In particular the cause of the 80cm rise in land level between the prehistoric and Roman periods must be elucidated. Additionally, grass-tempered pottery is normally Anglo-Saxon; if the above correlation is correct these particular sherds would have to be prehistoric. It remains for future excavation to resolve these problems. In addition the opportunity will be there, at minimum, to establish the date and purpose of a 'new' Roman road; to examine an early field system and possible related habitation sites and to excavate an old stream course which may well reveal important environmental evidence.

Acknowledgements

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