

A Survey of Two Cropmark Sites in Lockington-Hemington Parish, Leicestershire

by *Patrick Clay*

When assessing research and excavation priorities, the potential for information about the impact of a new culture on existing settlement is of great importance. An area where this information may be forthcoming is in Lockington-Hemington parish where two adjacent cropmarks appear to show a native Iron Age settlement and a Roman villa. These two sites, although scheduled by the HBMC(E) are in an area of possible future gravel extraction which may, even if the sites are not destroyed, so change the drainage patterns as to endanger the survival of potential information. In view of this a detailed survey of the sites was undertaken in 1982 and 1984 with the consent and partial funding of the Department of the Environment and the permission of the landowner, Mr C.R.C. Coaker.

The cropmarks were discovered by aerial reconnaissance by Dr J.K. St Joseph.¹ The sites lie on the flood plain of the River Trent, 1.6km (1 mile) south of that river, 2.4km (1.5 miles) to the south west of its confluence with the River Soar, and same distance south-east of the confluence of the rivers Derwent and Trent (see Fig. 1). They are situated on argillic brown earth soils of Grade 3 agricultural land classification overlying a river gravel substratum. The two sites lie within two 30m contours forming small islands above the surrounding flood plain (see Fig. 2).

The western cropmark (SK480294, S.A.M. 126) consists of a complex of overlapping enclosures including *c.*20 roughly circular structures varying between 8m and 11m in diameter, indicated by trenches or gulleys possibly serving as eaves drips. Gaps for entrances are evident on some of the crop marks. Rectangular enclosures or compounds are also present varying between 20m and 60m in length. The settlement appears to be situated on either side of a driveway, demarcated in part by pit alignments. Linear features probably from field systems are also evident to the north and south of the settlement. The many overlapping features indicated by the cropmarks suggest several phases of development. The site resembles other settlement complexes with probable Iron Age origins found in the Trent Valley.² Comparable sites with similar substrata and topographies are known from other areas including the Thames Valley.³

The eastern cropmark (SK482294 S.A.M. 140) shows a rectangular building (*c.* 40m long) with a projecting wing to the north. Other buildings, including possible aisled barns, can be discerned to the south-east. All of the buildings appear to be within a large trapezoidal enclosure. Another small rectangular enclosure with a possible entrance lies to the east of the main complex and a pit alignment with linear field boundaries can be seen to the north-east. Excavation by Mr D. Reaney in 1962 confirmed that the rectangular building was part of a Roman villa and material of 2nd-4th century date was recovered. Further fieldwalking of the site by the Burleigh Archaeological Fieldwork Group has recovered more material of a similar date range (see below).

Cropmarks showing possible field boundaries, pit alignments and enclosures which may be related to the sites are also evident 100m to the north and 200m to the north west of the westernmost site at SK480298 and SK478288 (Fig. 2). These features are outside the

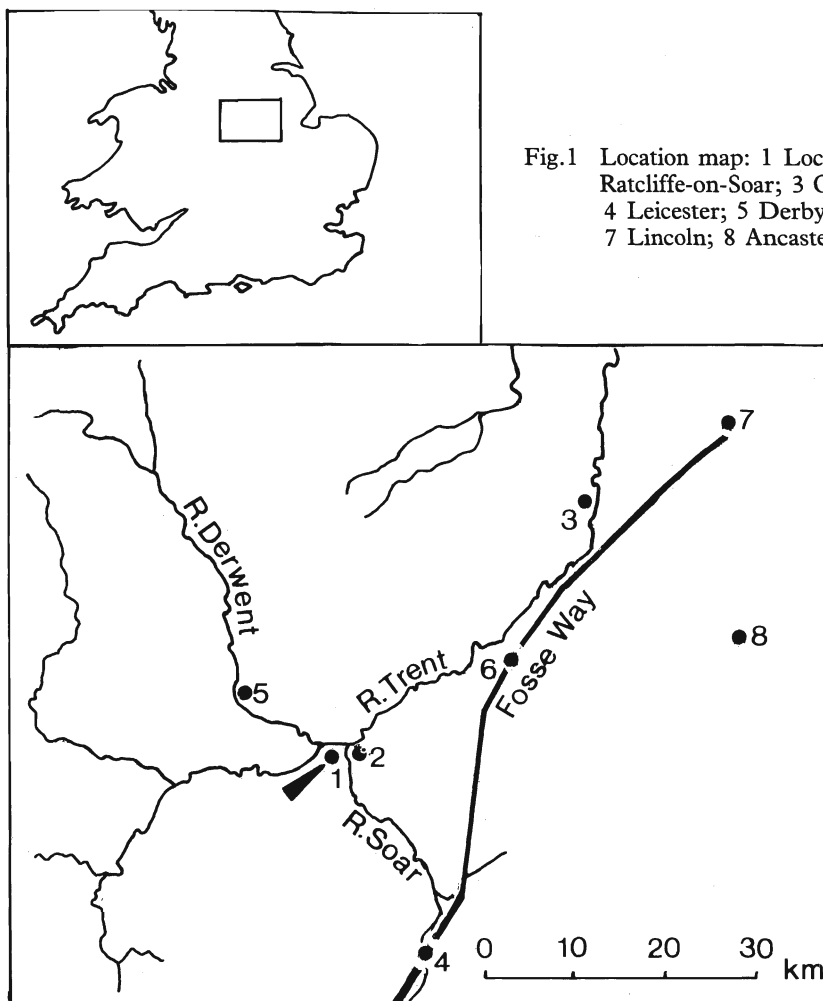


Fig.1 Location map: 1 Lockington; 2 Red Hill, Ratcliffe-on-Soar; 3 Cromwell; 4 Leicester; 5 Derby; 6 Margidunum; 7 Lincoln; 8 Ancaster.

scheduled areas and may be threatened by gravel extraction.

THE SURVEY

The survey had four main aims, 1) to assess the extent of plough damage to the sites, 2) to attempt to evaluate the areas of maximum occupation, 3) to assess the potential for the survival of environmental information, 4) to locate other sites in the parish not visible as cropmarks. Information from fieldwalking, trial sondages, phosphate analysis, study of the cropmarks and the recent history of the site would, it was hoped, help to answer some of these questions.

Fieldwalking was undertaken by the Burleigh Archaeological Fieldwork Group in 1981 and 1982. Both cropmark sites were walked and finds plotted using a 20m grid. In addition, other areas within the parish having a similar topography and geology were walked where available. This latter work is continuing. Trial sondages of *c.* 1m square were excavated at intervals across the western site in July 1982 and the eastern site in August 1984 (Fig. 3).

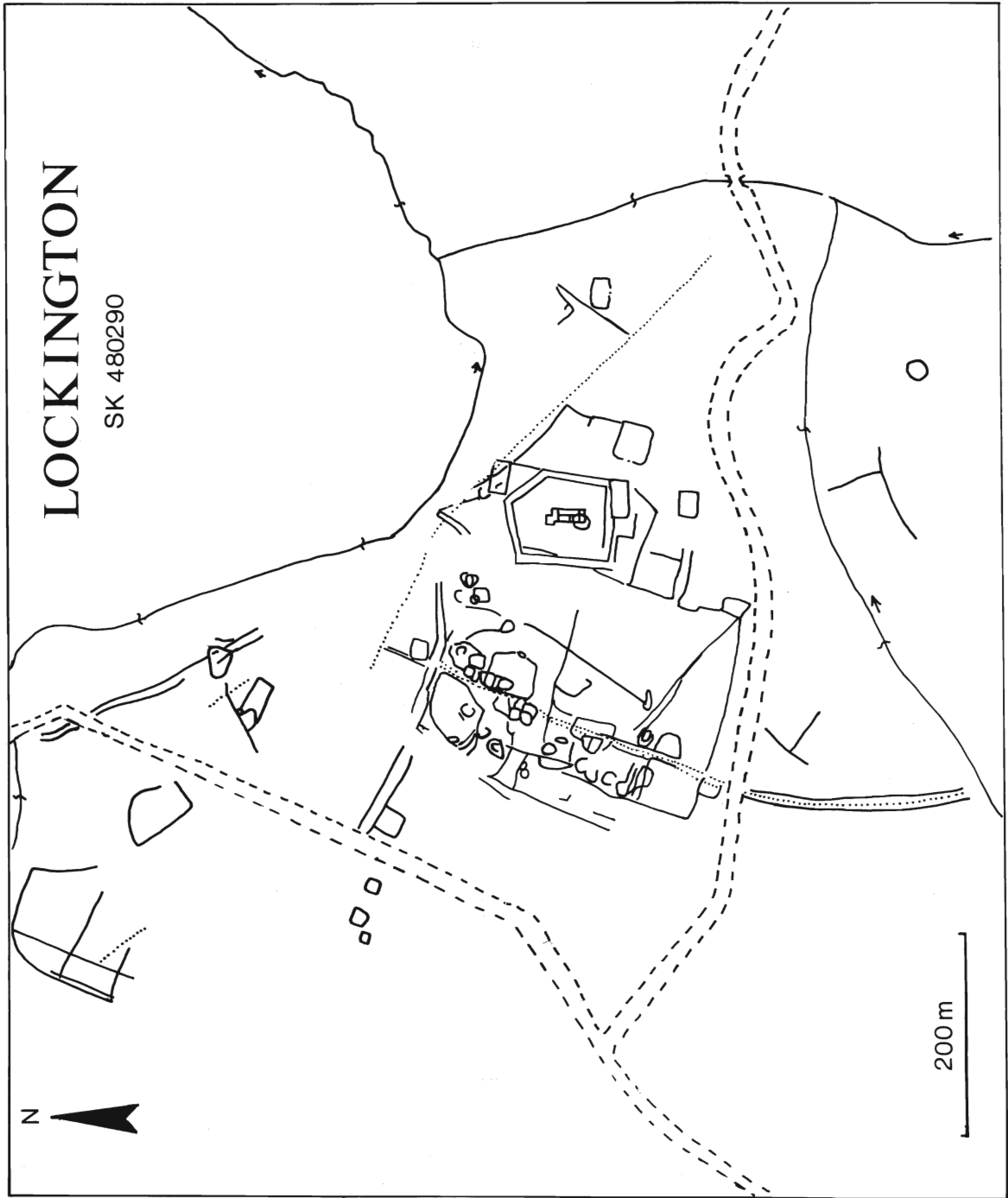


Fig. 2 Cropmarks in the area of the two scheduled sites

In addition three holes excavated for new CEGB posts crossing the eastern site were also inspected in August 1984. The soil horizons were examined and samples taken while in two cases (1 and 4) small areas 0.25m square were extended down to the substratum. Analysis of the phosphate content in the topsoil may suggest areas of maximum occupation.⁴ Assuming that the modern plough soil includes a proportion of the disturbed archaeological horizons, the phosphate content when measured against the background of modern use, may show evidence of human and animal occupation and possible middening. Topsoil samples, therefore, were taken at 10m intervals over the whole of the western site for analysis of the total phosphate content. In addition 6,000 sq. m. was sampled at 5m intervals near the centre of the site.

The potential for the survival of environmental information may be indicated by areas subject to waterlogging. Marshy areas are known to the north of the site and the field is often flooded in winter. Examination of the soil horizons and measurement of the pH was undertaken, and two of the sondages were placed close to the marsh areas to the north of the sites (Fig. 3.6 and 10).

RESULTS

Only a very few sherds of pottery and tile fragments were recovered from fieldwalking the western site. This was in sharp contrast to the large quantity of material found on the adjacent villa site (see Figs. 4, 5 and 6). No new sites as yet have been located from fieldwalking in other areas of the parish.

The sondages in the western site (Fig. 3.1-6) revealed that modern ploughing had disturbed the soil to a depth of 0.24m over the whole site. Underlying this topsoil was a layer of strong brown coarse sandy loam varying between 0.21m and 0.26m in depth. This contained one sherd of Iron Age and four sherds of Romano-British pottery in one sondage (3). This layer overlay the gravel substratum which itself showed variation in clay and sand content. The pH of the soils varied between 5.7 and 6.2. In view of the presence of the soil horizon between the modern plough soil and the substratum, it was thought after discussion with Dr Myra Shackley of Leicester University and Dr Helen Keeley of the Department of the Environment, that any phosphate remaining in the soil would probably be modern. No analysis was therefore undertaken. The sondages excavated on the eastern, 'villa', site (7-10) and an examination of the CEGB post holes (11-13) indicated different horizons from those on the western site. At the centre of the site (sondages 9, 11, 12) deposits of fine sandy loam with high charcoal concentrations and building debris were encountered beneath the modern plough soil. Very slight traces of the coarse sandy loam, located above the natural gravel on the western site, were found in sondages 7 and 10.

CONCLUSIONS

Although it was not possible to use one of the survey's proposed techniques (phosphate analysis) some important information was obtained about the present condition of the sites. Evidence from the survey suggests that the western site may not be seriously affected by modern plough activity. The presence of the sandy loam deposit between the modern soil and the substratum may mean that some occupation horizons are being protected. The lack of fieldwalked material may also indicate that deposits containing artefacts are not being disturbed. Formation of this loam layer may be due to alluvial or colluvial deposition resulting from flooding or ploughwash. A small quantity of silt present in the deposit may suggest that flooding was a partial mechanism in its formation. It may however, in view of the Romano-British pottery present, be a relic of earlier ploughing and the condition of the site must be uncertain.

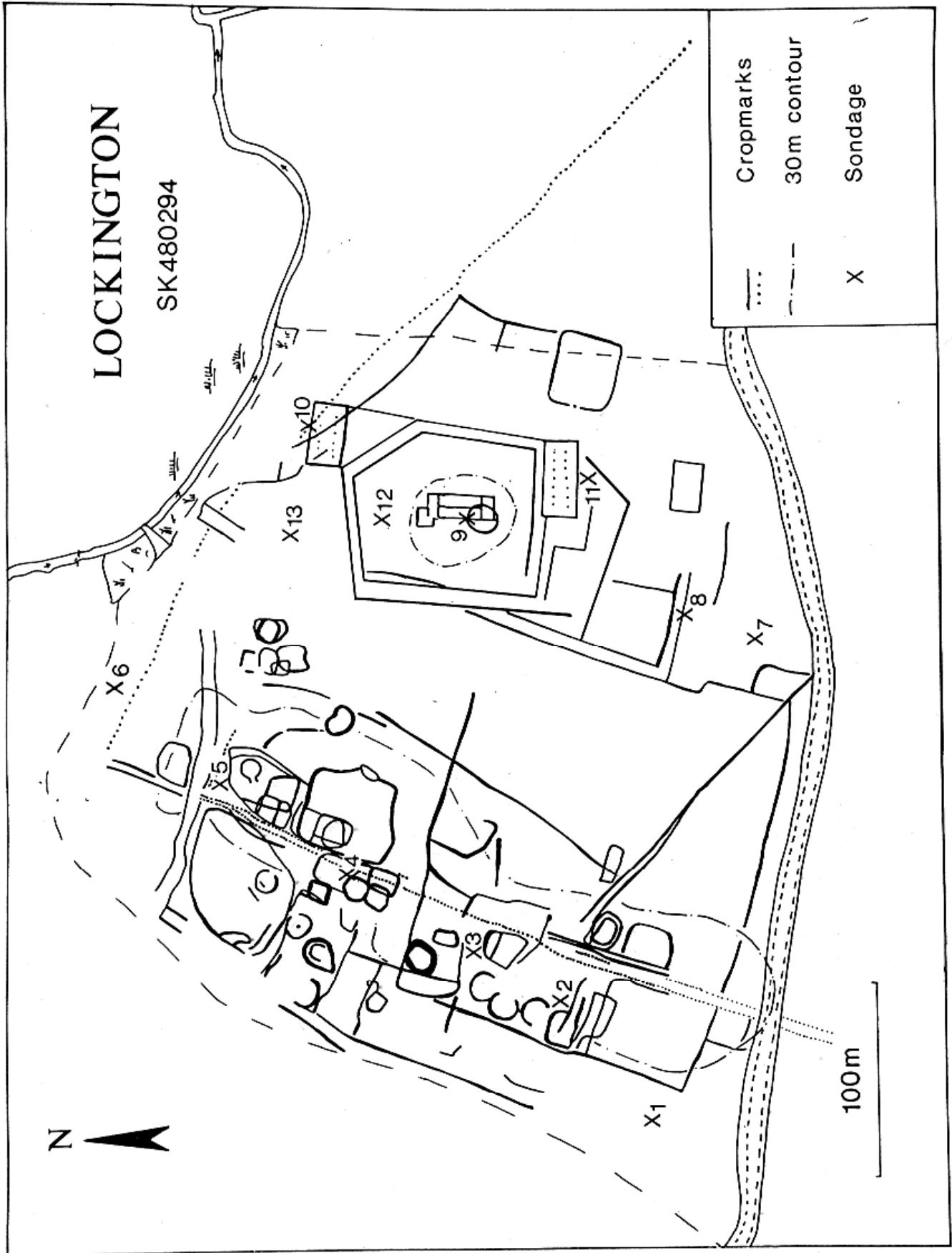


Fig. 3 The two scheduled sites showing position of sondages (X)

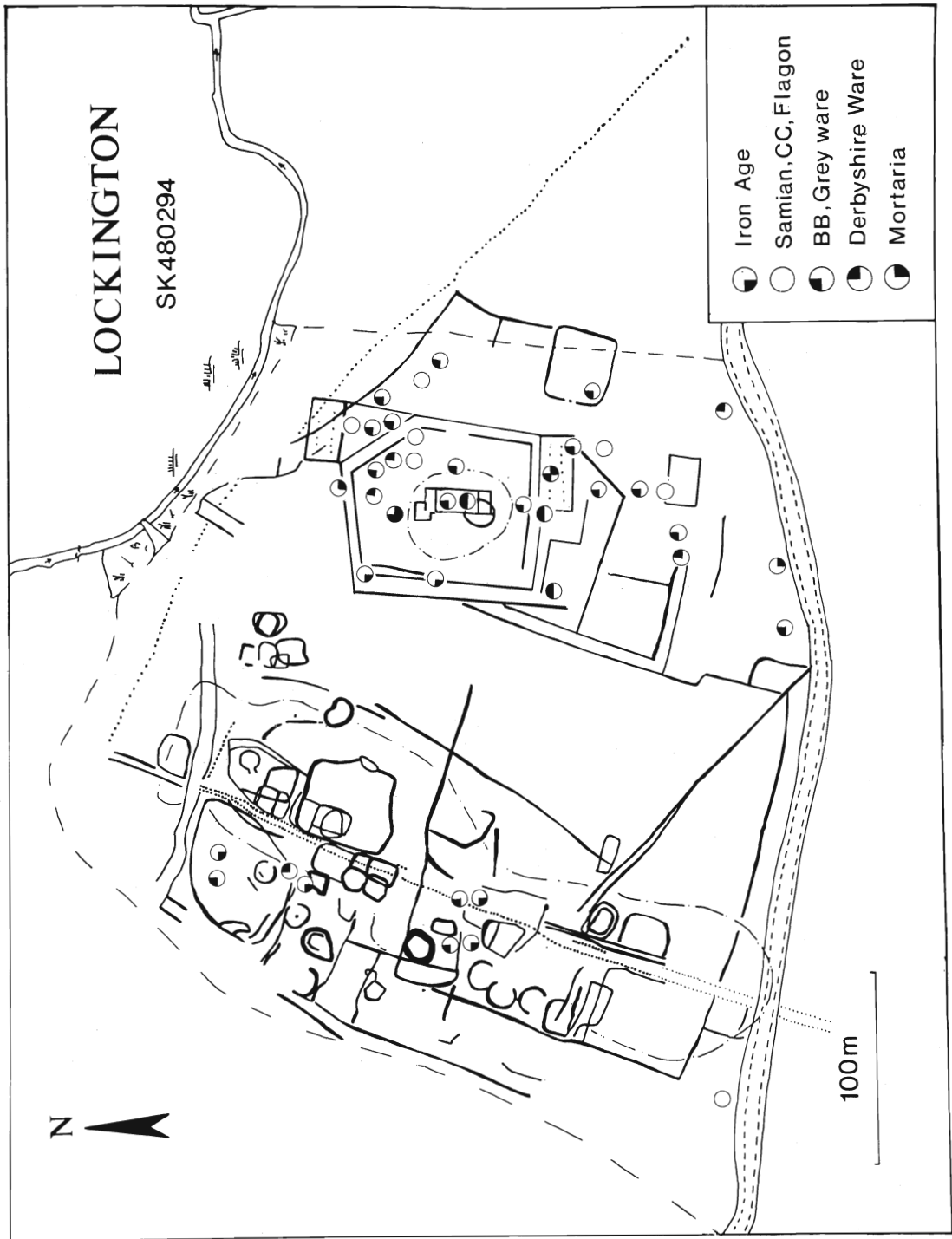


Fig. 4 Distribution of pottery: 1 Iron Age; 2 Samian, Colour-coated ware, Flagons; 3 Black-burnished ware, Miscellaneous grey sandy ware; 4 Derbyshire ware; 5 Mortaria

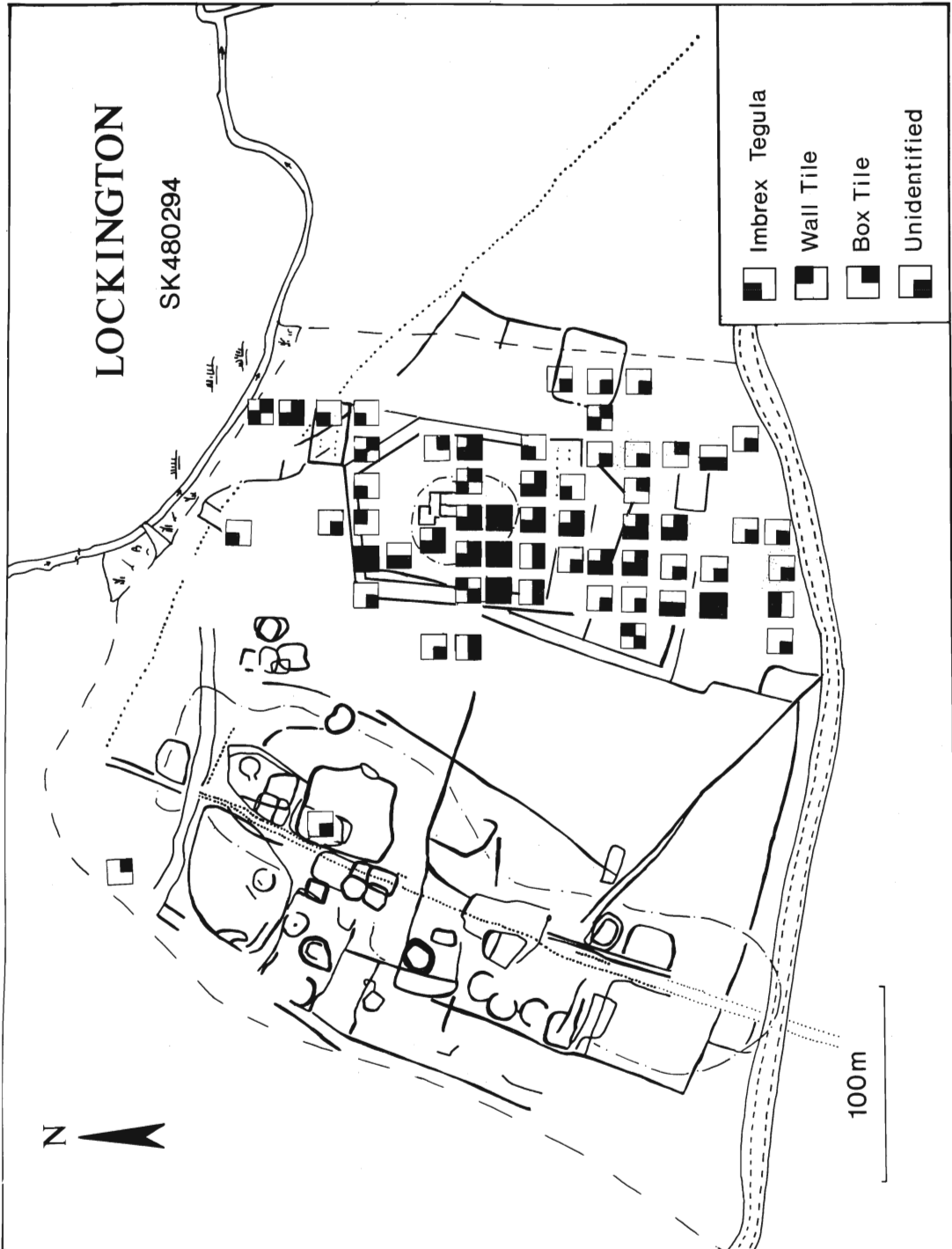


Fig.5 Distribution of Tile: 1 Imbrex, Tegulae; 2 Wall tile; 3 Box tile; 4 Unidentified tile

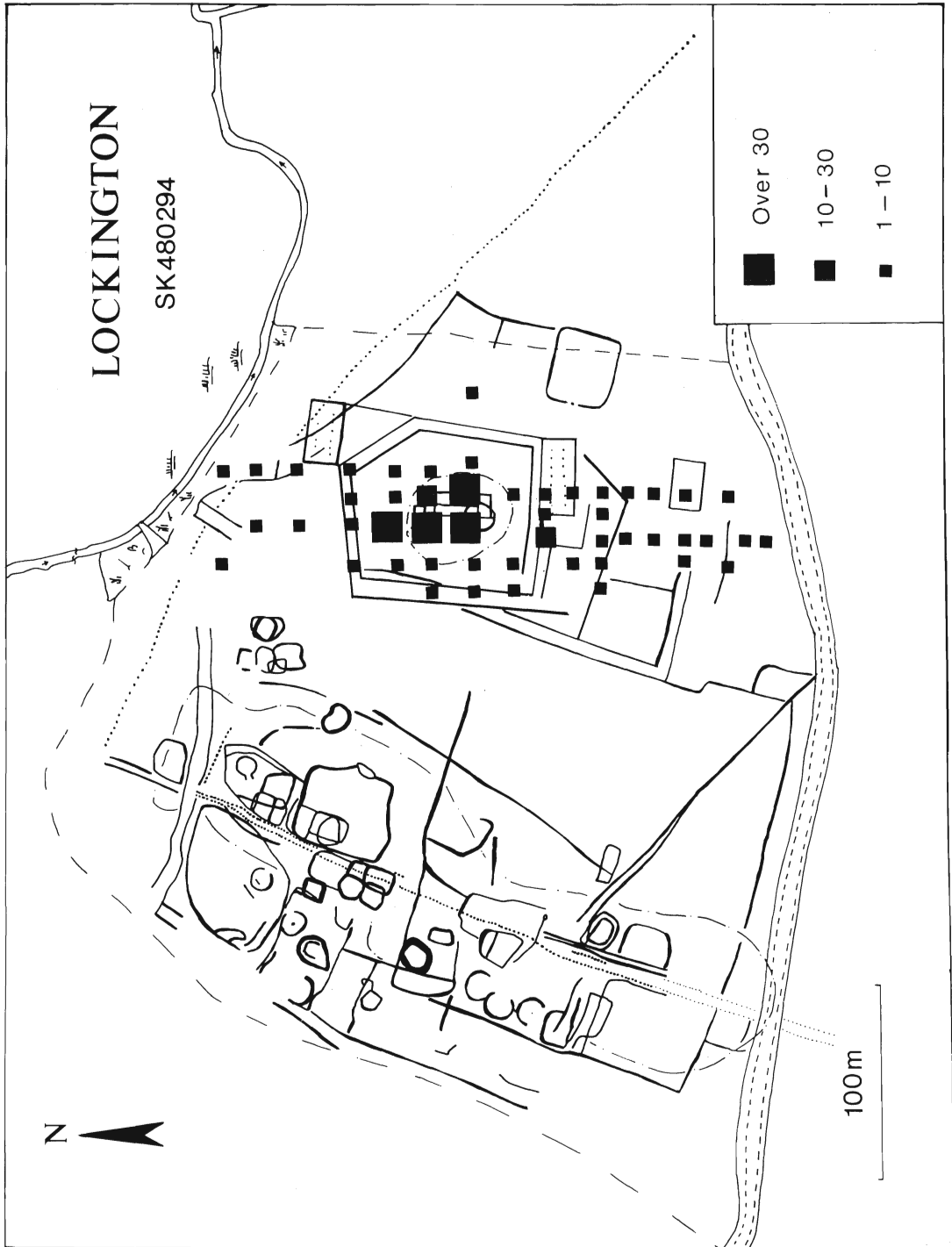


Fig.6 Distribution of tesserae

In contrast to the damage to the villa site appears to be considerable. Large quantities of building material — stone, tile and tesserae — are evident as surface finds after each season's ploughing. The sondages suggest that plough damage to the north and south of the scheduled area may be less serious. It appears that the ridge of higher ground, understandably, suffers greater plough erosion.

Examination of the two sites for indications of potential for environmental information suggested that waterlogged deposits were unlikely to be found due to the rapidly draining substratum. Consequently the survival of organic material is unlikely except in very deep features or in, as yet undiscovered, features in the marsh areas to the north. The neutral pH of the soil suggests little potential for pollen or mollusc survival. Dating of the western site remains impossible due to the lack of fieldwalked material recovered. The very few Iron Age sherds recovered may suggest origins in the 1st century BC or earlier. The Romano-British material recovered from this site may have been introduced by later ploughing or manuring.

More can be said however about the villa site. The pottery, examined by Dr R.J. Pollard, suggests a founding date for the villa in the mid-2nd century AD with occupation into the 4th century. Of note is the absence of the 1st century AD calcite gritted wares found in Leicester, and the presence of Derbyshire ware. The latter pottery is rare further south in Leicestershire but might be expected at Lockington owing to the proximity of the production centres, c. 18-20km (c. 12 miles) to the north-west. Concurrent dates were arrived at from an examination of the building material evidence by John Lucas. The presence of flue tile and tesserae may suggest a villa with relatively high status perhaps with a *floreat* in the 3rd-4th century. The spread of building material (Fig. 5) may indicate several buildings using tile and tesserae perhaps at different times. Most of the tesserae are of the larger later Roman type.

Many interesting questions arise over the juxtaposition of these two sites and similar examples (eg Cromwell 45km (28 miles) to the north-east) in the Trent Valley.⁵ Villas developing from settlements with Iron Age origins are not uncommon, for example Gorhambury⁶ and Barton Court Farm, Abingdon,⁷ but other possibilities should not be ignored. The cropmark of the native settlement at Lockington suggests several phases of development although questions of when and how long these lasted are at present impossible to answer. It is possible that part of this settlement was in use at the same time as the villa, perhaps with a tenurial distinction.⁸ The possibility of two different economic systems existing side by side in Roman Britain has also been suggested. Cunliffe⁹ postulates the use of a town/villa based cash-tax-market system co-existing with a rural system still based on exchange and self-sufficiency. Whether such subtleties can ever be recognised in the archaeological record must remain in doubt. However, only from a study of the relationship between such sites and their wider contacts with urban centres (for example the possible small town 2km to the east of the Lockington sites as Red Hill, Ratcliffe on Soar¹⁰) can these questions of social and economic change following the Roman conquest be approached. The importance of maintaining the preservation of sites such as those at Lockington with potentially vital information on these questions cannot be over-emphasised. Failing this a most careful and extensive survey and excavation programme would be required.

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Notes

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