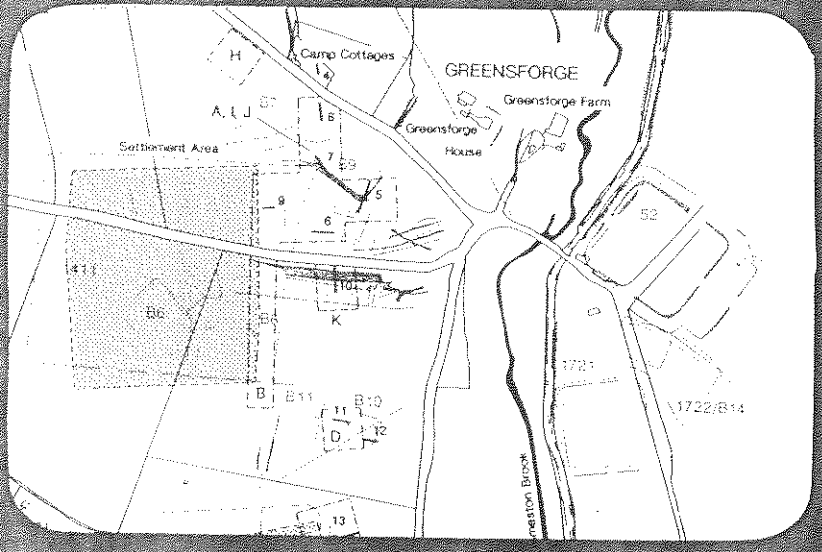
314.12

Greensforge , Staffordshire



An Archaeological Evaluation 1994

BUFAU

Birmingham University Field Archaeology Unit

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A WESTERN ORBITAL ROUTE FOR THE WEST MIDLANDS CONURBATION

STAGE 3 ENVIRONMENTAL STATEMENT

ARCHAEOLOGY WORKING PAPER No. 3

GREENSFORGE, STAFFORDSHIRE
An Archaeological Evaluation 1994

by A. E. Jones

illustrations by Richard Cuttler

with contributions by Jane Evans, Lisa Moffett,
Air Photo Services and Stratascan

For further information please contact:
Simon Buteux, Iain Ferris or Peter Leach (Directors),
Birmingham University Field Archaeology Unit
The University of Birmingham
Edgbaston,
Birmingham B15 2TT.
Tel: 0121 414 5513
Fax: 0121 414 5516
E-mail: BUFAU@bham.ac.uk
Web address: http:/www.bham.ac.uk/BUFAU

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1.0: SUMMARY

The archaeological potential of areas within the Roman military and civilian complex at Greensforge, identified by fieldwalking and aerial photography, was further tested by an archaeological evaluation employing geophysical survey and trial-trenching.

Trenches were cut to investigate the area of the putative Roman civilian settlement. Trenches were also cut to examine possible military enclosures, and to investigate the possible line of a Roman road running from Greensforge to the northwest.

The settlement area contained traces of timber-framed buildings, shallow hollow-ways and ditched plot boundaries. Of particular interest was the recovery of evidence for possible metalworking *in situ*. The dating evidence obtained suggests that the settlement area was occupied in the 2nd and 3rd centuries AD. No conclusive evidence was found by trial-trenching of any datable features associated with the military occupation of Greensforge, although it is possible that some of the undated cropmarked features tested by trial-trenching may have been of Roman date.

2.0: INTRODUCTION

This report describes the results of an archaeological assessment of arable and pasture farmland within the area of the Roman military and civilian complex at Greensforge, Staffordshire (Centred on NGR. SO 857886: Fig 1A - B). Birmingham University Field Archaeology Unit was commissioned to undertake the assessment by Rendel, Palmer and Tritton, on behalf of the Highways Agency. This fieldwork forms part of Stage 3 of the assessment of the archaeological effects of the proposed Western Orbital Route, which was undertaken in accordance with the requirements of Volume 11 of the Design Manual for Roads and Bridges (Department of Transport, June 1993).

The information contained in this report is also summarised in Section 7 of Volume 1 of the Environmental Statement which is concerned with the cultural heritage. This report details the results of the trial-trenching. It also provides a summary of the results of air photograph analysis and geophysical survey which are described in more detail elsewhere, in separate reports (Air Photo Services 1994, and Stratascan 1994).

The results described here derive from an initial study of the fieldwork data, which may be enhanced or modified as a result of further analysis.

3.0: AIMS

The evaluation was targeted to provide information concerning the archaeological significance of areas which would be affected by the Western Orbital Route and by the proposed junction with the Wall Heath Bypass.

As a first stage in site evaluation the available air photographs were analysed and re-plotted to accurately locate the cropmarked features previously identified, and also to identify and plot any further cropmarked features not previously recorded.

The subsequent geophysical survey was targeted to investigate areas of archaeological potential within the route corridor. In particular, the geophysical surveys were targeted to:
(1) identify the line of the Roman road;
(2) examine the potential of the putative settlement area (Fig 2) to contain structural features, occupation deposits, and other features;
(3) identify the eastern defences of military enclosures 1411 and 1412 (Fig 2), which were not clearly defined from the cropmarked evidence previously available;
(4) investigate the archaeological potential of areas where no cropmarked features were identified;
(5) provide for a degree of cross-comparison generally with the results of air photograph analysis; and
(6) permit the informed selection of areas for trial-trenching.

The examination of the eastern limits of enclosures 1411 and 1412 (Fig 2) by geophysical survey also involved the surveying of areas partly within two Scheduled Ancient Monuments, following the grant of a licence for this purpose from English Heritage.

The main aims of trial-trenching were to:
(1) examine the cropmarked concentrations and the major geophysical anomalies;
(2) examine the area of the settlement in detail;
(3) examine 'blank areas' where no cropmarked features or geophysical anomalies were recorded;
(4) provide samples of artifactual and ecofactual evidence, to study the site chronology and economy; and
(5) provide an understanding of the survival and significance of the archaeological deposits contained within the road corridor.

The aims and methodology of this field evaluation were discussed and agreed with Mr. R. A. Meeson, County Archaeological Officer, Staffordshire County Council.

The detailed aims of trial-trenching are described in Section 8.0 below which is concerned with the fieldwork results.

4.0: THE SITE AND ITS SETTING

4.1: The Archaeological Setting (Figs 1-2)

4.1.1: Prehistory

Little is known of pre-Roman activity in the Greensforge area. Scatters of worked flints found in the Stourton area (Staffordshire Sites and Monuments Record No. 3568 and 3646), suggest some form of activity in the early prehistoric period to the south of Greensforge. A few stray finds of prehistoric pottery and bronze objects have been found closer to Greensforge, but the distribution of these artifacts does not necessarily indicate that this area was a focus of prehistoric activity or settlement.

A number of possible pit alignments (e.g. SMR No. 3534: not illustrated) have been identified from the cropmarked evidence to the east of the Smestow Brook. These alignments could be land divisions of prehistoric date.

4.1.2: Roman

Military

The Roman conquest of Britain was begun in 43 AD from a bridgehead on the southeast coast. The initial advance into the Midlands will have used native trackways, although road building will have quickly followed. The XIV legion may have advanced along Watling Street, now partly marked by the modern A5 Trunk Road. By 47 AD much of lowland Britain had been conquered. As part of this, or later campaigns, and in addition to the legionary bases, auxiliary forts were stationed at regular intervals along the main routes of communication. Further roads were completed, including routes linking Wroxeter to Droitwich and Gloucester, with a fort located at Greensforge (Frere 1987, 63 and Fig 19a). The fort may have been located here to protect the crossing of the Smestow Brook. The continuing strategic importance of Greensforge is further underlined by the convergence of three Roman roads at this location. One led to the northeast, possibly heading for Watling Street near Penkridge. The second led to the northwest, towards Roughtown and Bridgnorth, and westwards towards a crossing of the River Severn (Margary 1973, 296; Webster 1981, 79). The third, and southernmost, route led to Droitwich (Margary 1973, Fig 12).

A large military enclosure (SMR No. 214), occupying 11.7 ha., recorded at Chasepool, 1 km north of Greensforge, may also be associated with the initial military advance or with later Roman campaigns.

Civilian

Little information is presently available concerning the nature or extent of the Roman civilian settlement of the surrounding countryside. However, the provisional identification from the cropmarked evidence of two possible Roman villa complexes, located at Chasepool Farm (B25: not illustrated), to the north of Greensforge, and near Stourton (1724: not illustrated), to the south of Greensforge, provides a tantalising glimpse of the Roman rural settlement pattern. Other forms of contemporary rural settlement, in particular farmstead enclosures, remain to be identified, although a number of the unidentified cropmarked enclosures within the Greensforge complex (eg B10 and B13: Fig 2) could represent farmsteads of Roman date.

A group of undated cropmarked ditches recorded adjoining the course of the Roman road near Chasepool Farm, to the north of Greensforge, could also indicate possible settlement or activity in this location, although no dating evidence is presently available.

4.1.3: Saxon and medieval

Archaeological excavation, in advance of pipeline construction at the Roman military enclosure at Chasepool, identified a Saxon kiln, for which a radiocarbon date of around 800 AD has been obtained (Wessex Archaeology 1985). However, this feature may reflect a chance re-occupation of the Roman military site, after the obliteration of the Roman defences by prolonged weathering.

It has been suggested that the placename 'Ashwood', recorded to the southeast of Greensforge, may indicate the location of a nearby settlement of Saxon origin (Gelling 1981).

The Domesday Book of 1086 AD also records a village settlement in the Greensforge area which may have been a Saxon foundation. Domesday records a settlement with land for 8 ploughs and refers to the surrounding woodland. Some

areas of ancient woodland of medieval, or earlier, date, survive in the Greensforge area, including woodlands at Greensforge Rough, to the northeast of Greensforge, and to the west of the Smestow Brook.

4.2: Greensforge

4.2.1: Military

The Roman military presence at Greensforge is represented by a number of military enclosures, comprising short-lived enclosures called marching camps and more permanent military encampments, called forts. Elements of this complex were perhaps first identified by the 17th century antiquarian Plot. Scatters of coins and pottery were identified in this location in the later 19th century (Cantrill 1928). Aerial photograph analysis (e.g Frere and St. Joseph 1983, 96-99), has identified a cluster of cropmarked forts and marching camps on the east and west banks of the Smestow Brook, a concentration which probably reflects the continuing strategic importance of the Greensforge area over a number of military campaigning seasons.

One cropmarked military enclosure (1722/ B14), located on the east bank of the Smestow Brook, enclosed an area of 0.33 ha; this enclosure adjoined the northwest corner of a second camp. It was succeeded by a more permanent fort nearby (1721). The later military occupation of the area is represented by the construction of a large fort (52: a Scheduled Ancient Monument), enclosing approximately 2.2 ha., to the north of the former sites, possibly to accommodate an increased, or more permanent, garrison. Limited trial-trenching has established that the external ditch was complemented by an internal ditch, with a turf revetment. The interior contained traces of timber buildings, and Frere and St. Joseph (1983, 97) have suggested that this fort was the base for an *ala* of cavalry or a mixed force comprising more than one unit of auxiliary infantry. Unusually, several sides of this fort survive as upstanding earthworks.

Two sub-rectangular cropmarked enclosures (1411, 1412: Welfare and Swan 1995 fig 141, nos 4 and 5) have been located on the west bank of the Smestow Brook. These enclosures are Scheduled Ancient Monuments. Although these sites have not previously been excavated, their morphology, size, and association with military enclosures located on the east bank of the Smestow Brook suggest that these former sites could have been Roman marching camps.

Although comparatively little of the enclosures has been excavated, the dating evidence obtained suggests a Claudian date for their occupation.

4.2.2: Civilian

A large quantity of artifacts of Roman date were recovered from fieldwalking by local amateur archaeologists in the 1970s from an area to the west of the Smestow Brook (Fig 2). The finds collected included a large quantity of Roman coarse pottery, comprising Severn Valley wares and mortaria. Fragments of glass and metal objects were also recovered, and this area was tentatively identified as the location of a civilian settlement. However, Crickmore (1984, 38) has argued that there was no such civilian settlement at Greensforge, nor at other forts such as The Lunt, near Coventry and Metchley, Birmingham.

Although both pottery and in particular metal artifacts (Webster 1981a) of 4th century date has been recovered from the area of the putative civilian settlement at Greensforge there is no present evidence of a military presence at Greensforge, or elsewhere in the midlands in the later Roman period, or, indeed, at Greensforge in the post-Claudian period.

5.0: METHODOLOGY

5.1: Air photograph analysis

The Greensforge area was subjected to a thorough photographic search. The sources consulted comprised:
(1) the Cambridge University Collection of Aerial Photographs;
(2) the National Library of Aerial Photographs;
(3) the BKS Surveys Ltd coverage taken specifically for the route;
(4) the Staffordshire County Council Sites and Monuments Record; and
(5) the relevant photographs in the collection of the Planning Department of Staffordshire County Council.

Vertical and oblique photographs were interpreted to identify archaeological and non-archaeological information. Photographic interpretation and mapping was undertaken using the techniques defined in Palmer and Cox (1993). The photographs were viewed under magnification and stereoscopically, where appropriate. Archaeological information was digitised, rectified and plotted using the Bradford aerial photographic rectification software, AERIAL version 4.20 (Haigh 1993). The positioning accuracy of the cropmarked features was +/- 2m.

A recent re-survey of the air photograph evidence in the Greensforge area (Welfare and Swan 1995), published after completion of the fieldwork, has also been consulted.

5.2: Geophysical survey

The geophysical survey involved the use of a gradiometer, a resistivity meter, and a magnetic susceptibility meter. The gradiometer measures slight variations in magnetic field caused by buried anthropogenic features or variations in the subsoil, and is capable of detecting subtle variations in below-ground deposits, caused by pits and ditches. A Geoscan Research FM36 Fluxgate Gradiometer with data logger was employed. A resistance meter maps variations in the conductivity of an electric current through the soil, which are caused by changes in soil moisture content and porosity. A Geoscan Research twin-probe RM15 resistance meter was used. The magnetic suceptibility meter was employed to measure changes in the iron minerals present in the topsoil caused by human activity, which enhance the magnetic susceptibility of that soil. Data from all instruments were separately downloaded onto a computer and processed to enhance the visibility of anthropogenic features. The results are presented as dot-density plots (Fig 3), and an interpretative plot (Fig 4) is also presented. The remaining plots may be found in the detailed survey report (Stratascan 1994).

A total area of 6.4 ha. was examined by geophysical survey. A total of 2.9 ha. was examined by resistivity and gradiometer survey combined, and 3.5 ha. was examined by gradiometer survey alone. An area of 0.36 ha. was examined by magnetic suceptibility survey and gradiometer combined. Permission for geophysical survey in certain areas (not illustrated) was not granted.

5.3: Trial-trenching

A total of 13 trenches was excavated, totalling approximately 600 square metres in area. All trenches measured 1.6m in width. All trenches excavated were located outside the designated areas of the Scheduled Ancient Monuments. Permission for trial-trenching in certain areas (not illustrated) was not granted.

In each trench the ploughsoil overburden was removed by a JCB excavator under archaeological supervision, to expose the upper horizon of the natural subsoil. The machined surface was then hand-cleaned to define any archaeological features present in plan. A sample of the archaeological features so defined was selectively hand-excavated to provide a representative sample of feature types, and to provide artifactual evidence and samples for plant macrofossil analysis.

Recording was by means of pre-printed pro-forma recording sheets for contexts and features, supplemented by scale drawings, plans, sections and photographs, which are all held in the archive.

A 20 litre soil sample was taken from all apparently undisturbed archaeological contexts which contained datable artifacts. These soil samples were processed for the recovery of plant macrofossils. The methodology of sample processing and the results are described in Section 11 below.

6.0: THE CROPMARKED EVIDENCE by Air Photo Services

Air photograph reconnaisance has been particularly intensive over the Greensforge area, concentrating on the Roman military features in a particularly thorough manner. The air photograph reconnaisance by J. K. St. Joseph in particular show considerable persistence in hunting the missing sides of Roman cropmarked military enclosures. The Greensforge area was visited in at least 22 years between 1945 and 1979, and it may be assumed that this has resulted in a high percentage of recovery of levelled features.

Oblique photographs are taken to record features that an airborne observer has seen and identified as being of archaeological significance. The vertical photographs covering this area were, in the main, disappointing, showing very sparse archaeological evidence for buried ditches and banked features. The Roman military complex at Greensforge comprises a group of cropmarked enclosures mainly identified by aerial photography. Alluvial deposits alongside the Smestow Brook may restrict the visibility of archaeological features alongside the course of the brook.

The revised cropmarked plot of site 1412 (Fig 2) suggests that it comprises two enclosures, constructed on divergent alignments. The northernmost of these enclosures (1412a) appears to contain traces of possibly associated cropmarked features which could include ditches and pits. These cropmarked features identified within the interior of enclosure 1412 could represent contemporary internal features. This interpretation could suggest that the enclosure was a fort, and not a marching camp, which is a class of military enclosure only occupied temporarily. Three sides of cropmarked enclosure 1411 (Fig 2) are presently identifiable as cropmarked features. A number of cropmarked features (B6, B8) are located both within its interior and immediately outside its perimeter (B7). The eastern cropmarked feature B6 (aligned north-south) has recently been interpreted as part of the eastern side of enclosure 1411 (Welfare and Swan 1995, 173).

A D-shaped cropmarked enclosure (B10: Fig 2) has been identified to the west of the Smestow Brook. This enclosure could be associated with the Roman military or civilian activity here. A number of unidentified linear cropmarked features (B11: Fig 2) have also been located to the west of site B10.

The alignment of the route entering Greensforge from the north-west is mapped (2685), although an unidentified linear cropmarked feature (B12: Fig 2) to the west of site 2685 is also recorded. To the east of road 2685 lies an incomplete cropmarked enclosure (B13: Fig 2), which could be of Roman date.

7.0: THE GEOPHYSICAL SURVEY by Stratascan

For clarity the main anomalies are numbered; the prefix M is used to denote magnetic anomalies recorded by the gradiometer, and R is used to identify resistance anomalies.

7.1: The civilian settlement. Areas A (north part), H, I, J and K (Fig 2)

Areas A, I, J. (Figs 3-4)

The broad right-angled cropmarked feature B9, which may be interpreted as a hollow-way, is clearly seen by both the gradiometer and resistivity meter. The resistance survey shows an anomaly 10-12m wide (R2 and R13), with outer banks R1, R3, R11 and R13. Anomaly R1 continues to the southeast of the area, and is also shown as the magnetic anomaly M7. It should be noted that under the dry conditions prevailing at the time of the survey ditches appear as high resistance anomalies and banks as lower resistance anomalies. This is not uncommon. Magnetic anomaly M1, at approximately 5m wide, is the same width as the linear cropmarked feature B9, aligned north-south, but where the anomaly turns to the west it reduces to a width of 2m (M2). This suggests ditch re-cutting within the larger ditch, with the subsequent filling being of a different and more magnetic material. There are in this vicinity several high resistance anomalies, including R4, R5 and R6 which may be interpreted as pits.

To the south of anomalies M1 and M2, the magnetometer survey has also identified a three-sided enclosure (?M4 and M5), also recorded as cropmarked features. A possible pit (M3) is located between the western anomaly M5 and anomaly M4. The possible southern annexe (M6) to this enclosure is not recorded from the cropmarked evidence.

The magnetic anomalies in the central and western zones of Areas A, I and J are less distinct. Anomaly M18 in the north may only be of interest as a response to a possible area of burning or a scatter of thermoremanent debris. However, being close to the hedge and the existing road it may be modern in origin.

Several weak linear magnetic anomalies are also apparent (M12, M17, M19, M20, M22 etc.). The only anomaly which correlates with the plotted cropmarked features is M12. Anomalies M13 and M14 are two weak sub-circular anomalies approximately 5-7m across, and may be of archaeological origin.

The resistance data are dominated by a series of parallel lines (R15, R16, R17, R18, R20, R24, R27 and R28). These anomalies are thought to be caused by modern ploughing. Anomaly R26 is a modern plough headland. The fragmented resistance anomalies R21, R22 and R23 may be of archaeological interest. Anomaly R25 is discussed in Section 7.2 below.

The noisy zone in the north of the area, near anomaly R14 is thought to represent a natural feature.

Area H (not illustrated)

The magnetic susceptibility survey of this area, though showing a range of readings, gave no real indication as to the focus of any features, so the area was re-surveyed using the magnetometer. This survey identified several rather spiky anomalies, for example anomaly M49, which are likely to be caused by buried ferrous objects. However, anomalies M46 and M47 are possibly pits.

Area K (not illustrated)

No anomalies were recorded.

7.2: The military enclosures. Areas A (south part), B, C and D (Fig 2)

Area A (south part) (Figs 3-4)

The position and alignment of resistance anomaly R25 suggests that it may represent the eastern ditched boundary of military enclosure 1411. The magnetic anomalies in this western zone of the area are generally less distinct.

Area B (not illustrated)

This area was surveyed with a magnetometer only, but produced some anomalies. Anomaly M23 is a short linear cropmarked feature which may be the northern of the linear cropmarked features which are interpreted by Air Photo Services as a possible vehicle track. However, as this is picked up by geophysics it may be archaeological in origin. Anomalies M24, M25 and M26 are likely to be small ferrous objects.

Area C (not illustrated)

As with Area B, this area revealed few anomalies, despite the fact that cropmarked features are recorded here. The weak, diffuse, linear anomaly M27 does not correspond with any cropmarked features. Anomaly M28 is likely to be a metal object, but anomalies M30 and M31 could be of archaeological interest, and may be pits. Anomaly M32, which is parallel to the modern field boundary, is probably a plough headland.

Area D (not illustrated)

This site contained both magnetic and resistance anomalies. The two gently curving linear anomalies M34 and M35 correspond with a D-shaped cropmarked enclosure (B10). There is also an interesting area of low resistance at R30 through which runs the thin but distinct linear resistance anomaly R31 which may represent the linear cropmarked feature following the same alignment running through cropmarked enclosure B10. On the eastern side of this area are several discrete magnetic and resistance anomalies (M35, M36, R33, R34 etc.) which may be pits or other archaeological features.

7.3: The Roman road.

Area E (not illustrated)

Running across the northwestern corner of this area is a strong linear magnetic anomaly M37. Close by, and parallel with, this anomaly is a line of discrete anomalies, which may be pits. As this area was positioned across the mapped alignment of a Roman road, it is tempting to interpret the latter anomalies as representing the road, although the anomalies follow a dissimilar alignment. Further, in the light of the poor magnetic response of the area, the Roman road is unlikely to produce such a strong anomaly. The strong anomaly is more likely to be a ditch. In the southwest corner of the area is a noisy magnetic area M42, which may be a spread of brick hardcore. Two discrete anomalies M43 and M44 may be pits.

8.0: TRIAL-TRENCHING

A selection of the most informative plans, sections and photographs has been chosen to illustrate this report. The remaining illustrations may be found in the archive.

8.1: Trenches 1-3: The Roman Road (Fig 2)

Objectives

Trenches 1-3 were cut across the suggested line of the Roman road leading from Greensforge to the northwest. The objectives were to establish the road's precise alignment, to determine the survival of the road surface, and of any roadside ditches, and to identify any evidence for roadside settlement or activity. The trenches were positioned at intervals to examine the course of the Roman road over some length.

Results

Trenches 1-3 each measured 20m in length and were cut perpendicular to the suggested line of the Roman road, as mapped by the Ordnance Survey. Trench 1 was dug on the eastern edge of a field which sloped gently downwards, from east to west. Trench 2 was cut towards the top of a steep west-facing scarp, close to a recorded change in road alignment, where the suggested alignment diverged slightly northwards before descending into a valley. Trench 3 was dug on a plateau, in an area which was used for market gardening.

In Trench 1 the uppermost horizon of the natural subsoil, revealed by the hand-cleaning of the machined surface, comprised an orange-brown clay-silt (1001) which contained small concentrations of grey silt. Selective hand-excavation of the silt areas suggested that these were probably of natural origin. A machine-dug sondage, subsequently cut along part of the length of the trench, confirmed that the natural subsoil was not masked by colluvial deposits. The overlying ploughsoil (1000) comprised a grey-brown silt-clay which measured an average of 0.35m in depth.

In Trench 2 the natural subsoil comprised an orange-brown clay-silt (1051), which was sealed by a layer of brown clay-silt ploughsoil (1050), measuring 0.3m in depth.

In Trench 3 the natural subsoil, an orange-brown clay-silt (1101), was sealed by a brown clay-silt ploughsoil (1100). A sub-circular disturbance (F200) within the subsoil was established by hand-excavation to be a tree-hole.

No man-made features were recorded in Trenches 1-3.

Finds

No finds were recovered from Trenches 1-3, except for a few brick fragments recovered from the ploughsoil (1000) in Trench 1.

Interpretation

No evidence of the Roman road was found, nor were there any traces of settlement or activity of Roman or other date. It is possible that all trace of the Roman road could have been scoured-out by ploughing, although some trace of any associated roadside ditches might have been expected to have survived such truncation. Alternatively, it is possible that the Roman road followed a different alignment, such as that indicated by cropmarked feature B12 (Fig 2).

8.2: Trenches 4-10: The civilian settlement (Fig 2)

Trench 4

Objectives

The aims of trenching were to establish whether the Roman civilian settlement had extended into this area, and thus to attempt to define the northernmost limit of the Roman settlement zone. The trench was cut in a slight natural hollow, within the gardens of Camp Cottage. The trench was aligned approximately north-south, and measured 15m in length.

Results

The natural subsoil (1153), which comprised an orange-brown clay-silt, was located at a depth of 0.4m below the modern ground surface. The subsoil was sealed by a layer of clay-sand (1152) which contained a large quantity of charcoal flecks. This layer was overlain by a deposit of grey-brown sand-clay (1151), measuring 0.25m in depth, which was overlain by the modern garden soil (1150). No man-made features could be identified in this trench.

Finds

The finds principally comprised 16 sherds of post-medieval pottery and eight clay pipe fragments derived from layer 1151. One undated fragment of Roman pottery was also recovered from this layer.

Interpretation

No evidence of *in situ* Roman activity was found here. However, only a small area was available for investigation, and this trench was unfortuitously positioned over a zone which had been disturbed in the later post-medieval period. Because this area is used as a market garden, cropmarked features would not be recorded here. Accordingly, the northernmost limit of the Roman civilian settlement remains to be defined.

Trench 5 (Fig 5-7, Plates 1-3)

Objectives

This trench, along with others located in the putative settlement area, was excavated to provide information concerning the presence, quality and survival of archaeological deposits in this zone. In particular, Trench 5 was intended to investigate a wide linear cropmarked feature (B9), also identified by the geophysical survey, and to also test a possible cropmarked ditched enclosure (Fig 4: anomalies M4-M6). Trench 5 measured 50m in length and was located on the eastern edge of a natural plateau.

Results

The natural subsoil (1204) comprised a red sand-silt, containing a few rounded quartz pebbles. Hand-cleaning of the upper subsoil horizon revealed a number of features of manmade and natural origin, all cut into the subsoil. A representative sample of all feature types was selected for hand-excavation. For simplicity, the features are described below from north to south.

In the north of the trench was an area of brown silt-sand (1213: not illustrated), which may represent an unexcavated feature fill. To the south was a shallow man-made cut (F300), with gently sloping sides. This feature was aligned approximately northwest-southeast, and measured a maximum of 7.5m in width and 1.1m in depth. Its primary fill comprised a dark brown silt (1202) which had infilled from the southern edge of the feature. Layer 1202 was sealed by a layer of light brown silt-sand (1218). The feature was later cut by a ditch (F306), positioned along the southern edge of the earlier cut (F300). The re-cut respected the orientation of the earlier feature, and measured 3m in width and 0.5m in depth. It was backfilled with dark brown sand-silt (1201).

To the south of features F300 and F306, a small sub-circular patch of dark brown sand-silt (1203), measuring 0.3m in diameter, was recorded in plan but was not excavated. This feature may be interpreted as a post-hole. To the south, was a band of light grey-orange sand (1206), aligned approximately perpendicular to the trench, which was recorded in plan. Layer 1206 appeared to be cut by an oval feature (unexcavated) filled with brown silt (1205).

To the south of unexcavated feature fill 1205 was an irregularly-shaped pit (F301), which was examined in half-section. The pit was U-shaped in profile, with a flat base. It was backfilled with a large quantity of angular sandstone fragments contained within a dark brown, charcoal-rich, clay-silt-sand matrix (1207).

To the south of pit F301 was an area of brown silt-sand (1202), which may represent an unexcavated feature-fill, containing a number of large angular sandstone fragments.

Further to the south was a gully (F303), aligned approximately southwest-northeast. The gully was U-shaped in profile, and measured a maximum of 0.6m in width and 0.25m in depth. It was filled with light brown sand (1209). To the south of the gully two areas of light brown silt (1216 and 1217) were identified in plan, but not excavated. To the south was a band of light-brown silt-sand (1214), which was orientated approximately perpendicular to the trench, and a small circular area composed of light-brown silt-sand (1215) which was recorded in plan.

To the south of layer 1215 was a gully (F305), which was aligned approximately east-west. It measured 1m in width and 0.15m in depth. It was filled with light brown silt-sand (1210).

In the extreme south of the trench a possible tree-root hole (F302) and other disturbances of natural origin (not illustrated) were tested by hand-excavation.

Finds

A total of 334 sherds of Roman pottery was recovered from the trench. The fills of feature F300 contained sherds of Black Burnished Ware 1 and a Black Burnished Ware flange-rimmed bowl which provide a *terminus post-quem* in the second quarter of the 3rd century AD, and in the mid-3rd century respectively. The Oxford Colour Coated wares present indicated a *terminus post-quem* between 300-400 AD. Pit F301 contained Black Burnished Ware sherds with obtuse cross-hatch burnish and sherds of Severn Valley ware, which indicated a *terminus post-quem* in the mid-3rd century onwards. Gully F303 contained pottery including sherds of Black Burnished Ware 1 and Severn Valley ware, which provided a *terminus post-quem* in the 2nd century AD. The remaining finds comprised a coiled strip of lead and some tile from layer 1200, and nails and animal bones from the fills of feature F300. A discussion of the ironworking residues recovered from this trench is set down in Section 10 below.

Interpretation

The results from this trial-trench correlate well with the information obtained by the analysis of cropmarked features and geophysical survey. Feature F300 corresponds with the position and alignment of the broad cropmarked feature B9, and its differing fills were also identified as distinct resistance anomalies. Other feature types recorded as cropmarked features and geophysical anomalies, including pit-like features and linear gullies or small ditches, have also been identified by trenching. Other smaller features such as post-holes, not previously identified, have also been recorded.

The profile of ditch F300 is unusual for a drainage or boundary ditch. The size and flat-based profile of this feature could suggest that it was formed as a hollow-way. This feature is recorded to the east of Trench 5 as an interrupted linear cropmarked feature, probably being masked in places by colluvium. The remaining linear features comprise small ditches, which may have defined separate plots or small enclosures within the settlement. Other feature types recorded include post-holes, which may have defined timber-framed buildings. Within the narrow trench it was not possible to identify any ground-plans of such possible buildings.

Trench 6 (not illustrated)

Objectives

Trench 6 was cut to examine a concentration of weak geophysical anomalies recorded in this area and to test a linear cropmarked ditch, aligned approximately north-south.

Results

Trench 6 measured 30m in length, and was aligned approximately east-west. The natural subsoil comprised a red-brown sand (1254), which was located at a depth of 0.35m below the modern surface. The subsoil was cut by a number of features, of both man-made and natural origin. A band of red sand-clay (1256), measuring a maximum of 3.5m in width, was defined as being of geological origin by selective hand-excavation. A probable tree-hole (F351) was also selectively hand-excavated. To the west of feature F351 was a ditch (F350), aligned approximately north-south. The ditch was U-shaped in profile, and measured 1.2m in width and 0.5m in depth. It was filled with light grey-brown silt-sand (1252). A number of slight variations (1257) of geological origin were noted within the uppermost level of the subsoil horizon towards the western end of the trench. The subsoil and the infilled features were all sealed by a layer of dark brown clay-silt ploughsoil (1250).

Finds

No Roman pottery was recovered from this trench. The only find recovered was an incomplete iron nail from the ploughsoil (1250).

Interpretation

Ditch F350 was the only feature of man-made origin identified in the trench. It corresponds approximately, both in position and orientation, with the plotted linear cropmarked feature. Although this feature is undated, it could be of Roman date. No clear parallels could be found for the slight geophysical anomalies recorded in this zone, except for slight localised changes in the composition of the natural subsoil.

Trench 7

Objectives

Trench 7 was cut on a northwest-southeast alignment to intercept the western end of the broad linear cropmarked feature (B9), also examined in Trench 5, and to locate the northern ditch of military enclosure 1411, to the east of the area of the Scheduled Ancient Monument.

Results

Trench 7 was positioned towards the top of a northeast-facing scarp, and measured 30m in length. The natural subsoil here comprised a red sand (1301). The subsoil was cut by two features (F400, F401).

Feature F400 was a steep-sided cut, which measured 0.9m in width and 0.4m in depth. It was backfilled with light brown sand-silt (1303). Part of a broad cut (F401), aligned southwest-northeast, was defined at the extreme northwestern end of the trench. The feature crossed the trench diagonally, and neither its full width or profile could be recorded. It was excavated to a maximum depth of 1.2m below the modern surface. Its fills comprised a soft grey sand (1302), sealed by a shallow lens of dark brown sand-silt (1304). To the south was a small amorphous area of light brown sand (1305), which was recorded in plan but not excavated.

The infilled features F400 and F401, and layer 1305, were sealed by ploughsoil (1300), here comprising a dark brown clay-silt, measuring an average of 0.4m in depth.

Finds

No Roman pottery was recovered from this trench. The finds comprised two fragments of lead scrap recovered from the ploughsoil (1300).

Interpretation

Feature F401 probably represents the northward continuation of feature F300, recorded in Trench 5. Feature F400 may be a large post-hole.

Trench 8

Objectives

Trench 8 was excavated to test the archaeological potential of an area located towards the north of the settlement zone, where no cropmarked features were identified. The trench was also positioned to examine a roughly circular geophysical anomaly (M18).

Results

This trench was located on a steep north-facing slope, and measured 20m in length. The natural subsoil was an orange-brown sand (1356), which was exposed at a depth of between 0.4m and 0.8m below the modern surface. The subsoil was sealed by a dump of dark brown silt-sand (1354). Towards the centre of the trench a broad cut (F450) was dug into the subsoil. This feature extended beyond the east and west baulks of the trench. The feature was backfilled with a light brown mottled sand (1355). Layer 1354 and the infilled feature F450 were both sealed by a layer of medium brown silt sand (1352), which was overlain by a layer of light brown silt-sand (1353), recorded below the modern ploughsoil (1300).

Finds

Layer 1351, a cleaning horizon above the subsoil (1356), contained a samian platter and a Central Gaulish samian bowl, and hook-rim Severn Valley ware jars, indicating a *terminus post-quem* in the later 2nd to early 3rd-century AD. Layer 1352 contained Black Burnished Ware 1, Mancetter-Hartshill mortaria, sherds in Malvernian metamorphic fabric, and Severn Valley ware hooked-rim jars, which indicate a *terminus post-quem* of 120 AD plus. Layer 1353 contained sherds of Black Burnished Ware 1, fragments of a Central Gaulish bowl, and Severn Valley hooked-rim fragments, which together indicate a *terminus post-quem* in the late-2nd to early-3rd-century AD. Layers 1351-1354 also contained iron nails and unidentifiable ferrous fragments. A description of the ironworking residues recovered from this trench is set down in Section 10 below.

Interpretation

Layer 1354 may be interpreted as a road or yard surfaced with ironworking slag. This layer was sealed by successive layers of colluvium (1352, 1353) which had accumulated in a slight natural hollow towards the north of the trench. The cut (F450) is not paralleled by the evidence from analysis of cropmarked features or by geophysical survey.

Trench 9 (not illustrated)

Objectives

Trench 9 was excavated to investigate a linear geophysical anomaly (R25), aligned approximately north-south, which was interpreted as possibly representing the eastern ditch of marching camp 1411. It was also intended to test the archaeological potential of this raised plateau within the settlement limits.

Results

Trench 9 measured 20m in length, and was orientated east-west. It was positioned outside the limits of the area of the Scheduled Ancient Monument. The natural subsoil here was a light brown sand (1402), which was exposed at a depth of 0.35m below the modern pasture surface. A spead of charcoal (1401) was recorded immediately above the subsoil, towards the western end of the trench. The subsoil was sealed by a dark brown clay-silt ploughsoil (1400). No man-made features were recorded in this trench.

Finds

One undiagnostic sherd of Roman pottery was recovered from layer 1401. The ploughsoil (1400) contained sherds of 19th-century pottery.

Interpretation

The spread of charcoal (1401) recorded corresponds with the approximate position and orientation of the linear geophysical anomaly, which was originally interpreted as representing the eastern ditch of marching camp 1411. However, no evidence was found of the eastern ditched limit of this cropmarked enclosure, or of any associated features within this trench.

Trench 10

Objectives

Trench 10 was excavated to investigate the archaeological significance of this area, which lay slightly beyond the suggested southern limit of the settlement zone. In particular, it was intended to test a group of parallel linear cropmarked features (B6), aligned approximately east-west.

Results

Trench 10 measured 30m in length, and was orientated approximately east-west. The subsoil in this trench was a light brown sand (1454). The earliest feature recorded within the trench was a small ditch (F551), orientated east-west and backfilled with a light brown silt sand (1451). This feature was cut by a broad, flat-based cut (F550: Plate 4), which followed the same alignment as the earlier feature. The fill of the latter feature comprised a light brown silt-sand (1450). A ditch (F552) was cut to the south of the former feature, again following the predominant alignment, and was backfilled with red-brown sand (1455). Both infilled features F550 and F552 were sealed by a shallow layer of grey-brown silt-sand (1452), recorded immediately below the modern ploughsoil (1453).

Finds

No Roman pottery was recovered from this trench. The fill of feature F550 contained sherds of post-medieval pottery, which are probably intrusive, and a number of iron objects, including five nails.

Interpretation

The features identified by trial-trenching correlate well with the main cropmarked features recorded in this location, although these negative features were not identified by geophysical survey, possibly because of the similarity between the feature fills and the surrounding subsoil. The broader cut feature F550 may be interpreted as a hollow-way by analogy with the size and morphology of feature F300 recorded in Trench 5. The absence of pottery, and of settlement features such as post-holes and pits, could suggest that this zone lies on the southern margin of the settlement, or outside its limits.

8.3: Trenches 11-13: The military zone (Fig 2)

Objectives

Trench 11 was located to examine a group of linear cropmarked features (B11), while Trench 12 was positioned to test part of the southern side of a D-shaped cropmarked enclosure (B10). Trench 13 was intended to investigate cropmarked features provisionally interpreted as defining the eastern limits of a military enclosure (1412a) which contained traces of internal cropmarked features, including linear ditches and pits. In addition to these specific objectives, it was also intended to establish the extent and significance of any archaeological features or deposits located immediately to the east of military enclosure 1412.

Results

Trench 11 (not illustrated)

Trench 11 measured 30m in length, and was aligned approximately east-west. The subsoil here was an orange sand (1501), sealed by the ploughsoil (1500), the latter measuring 0.4m in depth. No manmade features could be defined in this trench.

Trench 12 (not illustrated)

Trench 12 measured 20m in length, and was aligned approximately east-west. The subsoil (1550) was a dark red sand. The earliest feature was a shallow, flat-based ditch (F651), which was filled with dark brown silt sand (1552). It was cut by a later ditch (F650), and neither the full width nor the orientation of the earlier feature could be defined within the trench. Ditch F650 was aligned northeast-southwest, and was filled with dark brown silt-sand (1551). The infilled feature F650, and the subsoil were sealed by the ploughsoil (1553), which measured 0.3m in depth.

Trench 13 (not illustrated)

Trench 13 measured 50m in length, and was cut on an approximate east-west orientation. It was positioned to the east of the eastern boundary of the Scheduled Ancient Monument. The trench was broadened to a width of 3m for a length of 10m at its western end, to assist in the definition of archaeological features. The subsoil here was a red-orange sand (1601). Hand-cleaning of the uppermost surface of the subsoil revealed patches of lighter silt, which were identified after selective hand-excavation as slight variations in the composition of the subsoil. The subsoil was sealed by the ploughsoil (1600), which here measured 0.3m in depth. No man-made features could be defined in this trench.

The finds

Two iron objects were recovered from the ploughsoil (1500) in Trench 11. No finds were recovered from Trench 12. A number of iron objects and a lead token were recovered from the ploughsoil (1600) in Trench 13. No Roman pottery was found in Trenches 11-13.

Interpretation

The features defined in Trench 12 correlate well with the cropmarked features and the main geophysical anomalies recorded in that area. Feature F651 corresponds with the southwestern corner of the D-shaped cropmarked enclosure (B10), and post-dates feature F650 which was also identified as a cropmarked feature. No manmade features could be identified within Trenches 11 and 13, and it is possible that the recorded variations in composition of the subsoil may account for some of the identified cropmarked features. Alternatively, it is possible that some of these cropmarked features may have been caused by variations in the composition of the ploughsoil or by modern agricultural practices. Trench 13 may have coincided with a gap in the cropmarked features which was not evident on the aerial photographs. The fact that no Roman pottery was recovered from Trenches 11-13 also suggests that this area lay outside the focus of military activity, centred on the higher ground to the west.

9.0: THE ROMAN POTTERY by Jane Evans

9.1: Introduction

A total of 429 sherds of Roman pottery was recovered from trial-trenching. The majority of the pottery comprised Severn Valley ware, the other fabrics represented in varying proportions including Black Burnished Ware 1, Oxfordshire red colour coated ware, Mancetter-Hartshill mortaria, Nene Valley ware, Malvernian metamorphic ware and Central Gaulish samian (Table 1). All of the datable samian was produced in the 2nd century AD, and there was generally little evidence for 1st-century AD activity on the site, the only clearly residual pottery being sherds from fine, grey ware beakers and Malvernian metamorphic cook pots or storage jars. None of the contexts which provided good dating evidence pre-dated 120 AD, the date at which Black Burnished Ware 1 is thought to have been more widely marketed, and some were obviously much later in date. The dating evidence for each context is described below.

TABLE 1: ROMAN POTTERY QUANTIFICATION

Trench	*Feature*	*Context*	*Count*	*Weight (gms)*
4	-	1151	1	1
5	-	1200	10	137
5	F300	1201	138	873
5	F300	1202	56	550
5	F301	1207	10	82
5	F304	1208	1	41
5	F303	1209	119	1,273
8	-	1350	1	14
8	-	1351	16	128
8	-	1352	28	374
8	-	1353	38	523
8	-	1354	10	150
9	-	1401	1	5

9.2: Pottery dating

2nd century AD

Trench 5 Feature F303 Context 1209

A *terminus post quem* of approximately 120 AD onwards is suggested by the presence of Black Burnished Ware 1 sherds, while a Black Burnished Ware 1 flat rimmed dish or bowl indicated a broadly 2nd-century AD date. This dating was supported by the presence of a Severn Valley ware bowl of 2nd to 3rd-century AD type, copying Samian form Dr 37. A single sherd in a fine grey ware, possibly from a beaker, may reflect residual military or early 2nd century AD activity. A sherd of Malvernian metamorphic ware also probably dates to the 1st or early 2nd century AD.

Trench 8 Layer 1352

A *terminus post-quem* around 120 AD onwards was suggested by the presence of Black Burnished Ware 1 fragments from a cook pot decorated with acute cross hatch burnish which indicate a date in the 2nd century AD. Also present were sherds of Mancetter-Hartshill mortaria, Severn Valley ware hooked-rim jars of 2nd to 3rd-century AD date, and sherds in a Malvernian metamorphic fabric, probably dating to the 1st or early 2nd-century AD.

Later 2nd to early 3rd-century AD

Trench 5 Layer 1200 (ploughsoil)

A hammer-head rim from a Mancetter-Hartshill mortaria suggested a date in the late 2nd-century AD, or probably later.

Trench 8 Layer 1351 (cleaning layer)

A *terminus post-quem* of approximately 160 AD plus is suggested by a samian *Ludowici Tg*. platter. Also present were a Central Gaulish samian Dr 37 bowl dating to the 2nd century AD, and hooked-rim Severn Valley ware jars dating to the 2nd to 3rd-century AD.

Trench 8 Layer 1353

A *terminus post-quem* from the later-2nd to early-3rd century is suggested by the presence of a Black Burnished Ware 1 bowl with an incipient flange rim. Also present was a 2nd century AD Central Gaulish samian Dr 37 bowl, sherds of Mancetter-Hartshill mortaria, and fragments from a Severn Valley ware hooked rim jar.

Mid 3rd-century AD onwards

Trench 5 Feature F300 Layer 1201

A date at least in the second quarter of the 3rd century AD was indicated by the presence of Black Burnished Ware 1 cook pot sherds decorated with obtuse cross hatch burnish. The presence of a Black Burnished Ware 1 flange rimmed bowl, however, suggests a *terminus post-quem* in the mid-3rd century AD onwards, a dating which is supported by the presence of sherds of Oxford red colour coated ware dated from 240 AD onwards. A few very fragmentary and abraded sherds of samian were also present.

Trench 5 Feature F300 Layer 1202

A *terminus post-quem* of approximately 300-400 AD onwards was provided by an Oxford ware red colour coated mortaria, probably Young type C100 (Young 1977). Also present was a rim from an Oxford ware bowl copying samian form Dr 31 (Young form C45), dated approximately between 270 to 400 AD plus (Young 1977), Black Burnished Ware 1 cook pot sherds with obtuse cross hatch burnish and markedly splayed rims and a fragment of Nene Valley ware.

Trench 5 Feature F301 Layer 1207

The *terminus post-quem* was suggested by the presence of Black Burnished Ware 1 cook pot sherds with obtuse cross hatch burnish. Also present were sherds of Severn Valley ware, including a late-2nd to 3rd century AD tankard with a moderately splayed rim. A fine grey ware beaker rim was probably residual material derived from military or other early-2nd century AD activity.

Uncertain

Trench 8 Layer 1350 (ploughsoil)

Uncertain dating evidence was provided by abraded sherds from a Severn Valley ware bowl or jar.

9.3: Discussion

The assemblage was too small for any meaningful functional interpretations to be made, although the presence of tablewares and food preparation vessels such as mortaria indicated domestic activity on site, as well as the industrial activity indicated by metal working residues.

9.4: Other finds

The other finds comprised nails, and lead fragments.

10.0: THE INDUSTRIAL RESIDUES

Slag was collected by context during trial-trenching. The slags have been briefly scanned, and quantified and classified according to morphology, following McDonnell and Maclean (1995)(Table 2). Smithing slag comprises randomly shaped fragments of fayalitic slag generated by the smithing process. Smelting slag is fragments of 'tap smelting slag', identified from the characteristic 'flowed' surfaces. However, smithing slag that has been subjected to particularly high temperatures may have become partly liquified and may not be distinguishable from smelting slag without detailed analysis.

TABLE 2: QUANTIFICATION OF IRONWORKING RESIDUES

Trench	*Feature*	*Context*	*Smithing slag*	*Smelting slag*
			No. of fragments/ wt. in gms.	
5	-	1200	400/3	125/5
5	F300	1201	80/8	1200/26
5	F300	1202	1200/16	1800/25
5	F301	1207	2200/46	1000/81
5	F310	1210	25/3	-
8	-	1350	180/1	-
8	-	1351	100/2	20/11
8	-	1352	600/16	1800/80
8	-	1353	16000/25	6400/47
8	-	1354	2000/57	3200/164

All slag fragments were recovered from the area of the Roman settlement. The slags were derived from the topsoil in Trenches 5 and 8 (1200, 1350), from well-sealed features in Trench 5 (F300, F301 and F305), and from discrete contexts in Trench 8 (1351-1354). Excepting the slags from the ploughsoil (contexts 1200 and 1350), the slags were recovered from features and contexts which were datable artifactually to the Roman period. Although metalworking activity is recorded at Greensforge in the post-medieval period, there is no reason to suppose, with the possible exception of the material recovered from the ploughsoil (1200, 1350), that these slag assemblages were derived from, or had become mixed with, similar material derived from this later period of nearby metalworking activity.

The largest assemblage of slag recovered from Trench 5 was derived from a pit (F301) which could have been associated with metalwoking, although a large quantity of slag was also found in the backfills of the possible hollow-way (F300). In Trench 8, the largest quantity of slag was derived from context 1354, which may be interpreted as a road or track surfaced with fragments of slag, although the layers

of colluvium (1352-3) recorded above surface 1354 also contained significant quantities of slag.

Both smithing slag and tap slag were recovered from all features and contexts which contained slag, with the exception of feature F305 and context 1350, which only contained smithing slag. The majority of the slags recovered were derived from residual contexts, with the possible exception of feature F301 in Trench 5. Although the bulk of this material is admittedly residual, the total quantity recovered, amounting to approximately 614 fragments weighing approximately 38 kg., may be considered to represent more than a 'background' level of debris, and could suggest a nearby focus of ironworking within the Roman settlement area. Such an ironworking focus might be identified from the geophysical survey. However, with the exception of anomaly M18, and the distinct anomalies in Area H, no convincing evidence for ironworking was identified as a geophysical anomaly.

Given that this material has not been subjected to detailed analysis and that most of this material is probably residual, it is difficult to speculate upon the precise nature of the ironworking activities undertaken here. The apparent proximity of this settlement area to the military zone of occupation at Greensforge could be argued to imply that ironworking within the settlement was undertaken to supply the military. However, the dating evidence obtained for the settlement suggests the main floruit of activity within the settlement may have post-dated the military abandonment of Greensforge, and thus it may not be possible to argue such an economic nexus between the Roman military and civilian elements represented here. Given this dating, and the roadside position of the settlement, it is possible to speculate that ironworking was undertaken here not only to supply the needs of the civilian community but also perhaps for trade.

11.0: ENVIRONMENTAL EVIDENCE by Lisa Moffett

Six 20 litre soil samples were collected from contexts that contained datable pottery. The samples were processed by water flotation. The resulting flots (Table 3) were assessed by briefly scanning under a binocular microscope (12x magnification).

TABLE 3: SAMPLES ASSESSED

Tr/Feature/Context	*Flot size*	*Results*
5/F300/1201	30ml	Wood charcoal only
5/F300/1202	90ml	*Corylus avellana* (1 fragment)
5/F301/1207	85ml	Wood charcoal only
5/F303/1209	40ml	Wood charcoal only
5/ - /1303	10ml	Wood charcoal only
8/ - /1354	50ml	*Triticum sp.* (15 grains) *Fallopia convolvulus* (1 seed)

Most of the samples did not produce any plant remains other than charcoal. One sample produced a sample of hazelnut shell *(Corylus avellana)* nutshell and another produced about a dozen grains of wheat *(Triticum sp.)* and a seed of black bindweed *(Fallopia convolvulus)*. It is clear that cereals were being used on the site of the Roman settlement, but since samples rich in charred material are apt to be in a minority on most sites, it is not possible to guess the potential of the rest of the site from the limited material recovered in the evaluation.

12.0: DISCUSSION

12.1: The Roman settlement

This evaluation has provided the first opportunity to investigate the archaeological potential of the settlement area by excavation. Previous information was limited to the unpublished collections of finds from fieldwalking. Notwithstanding the limits necessarily placed upon the extent of the area of the settlement investigated, it is possible to form some interim conclusions concerning the extent, chronology and economy of this settlement.

The limits of the settlement, as previously defined by artifact scatters, were necessarily somewhat arbitary. The evaluation (Trench 10) has suggested that the southern limits of the settlement could perhaps extend to the south of the modern road. The northern limit is more difficult to define, although it is now known that the higher plateau in the centre of the previously defined settlement area (Trenches 5-7) was occupied as such in the Roman period. Further to the north (Trench 4) the ground is lowlying, and may have been unattractive for settlement. The finds recovered from this area may have been redeposited by erosion and plough action.

Analysis of the relative density of both artifacts and archaeological features in relation to the natural topography of the area suggests that activity may largely have been concentrated within the area of Trenches 5-7. Hollow-ways were cut linking the settlement with a presumed crossing of the Smestow Brook (B9, F300), and further hollow-ways or tracks were located in the south of the settlement area (Trench 10). The evidence from Area H and Trench 8 may represent activity on the southern edge of a Roman road which followed the approximate alignment of the modern road leading to the west (Fig 2).

Of particular importance is the definition of a chronological context for this settlement. Although some residual 1st and early-2nd century material is present, the pottery dating suggests that the main floruit of the settlement was in the period post-120 AD, that is, post-dating the probable military abandonment of Greensforge. The pottery includes vessels dating from the 2nd century and up to the 4th century. Given the limits necessarily placed upon the trial-trenching it is difficult to identify different phases of activity in the settlement, or to identify changes in settlement focus during the continued occupation of this area. Most of the dating evidence derives from Trench 5. The range of the dating evidence obtained from this trench could suggest that several distinct periods of activity are represented here. One ditch (F303) contained pottery with a *terminus* in the 2nd century, while the hollow-way (F300) and a pit (F301) in the same trench contained pottery dating this activity to the 3rd century onwards. It is also possible that this dating could suggest an extended period of occupation on site. The later Roman chronology of this settlement is supported by the evidence of earlier fieldwalking discoveries, including 4th century ironwork (Webster 1981b).

The recovery of significant quantities of ironworking residues suggests ironworking was one of the main activities carried out on site, although only one feature (F301 in Trench 5) was found which could be directly associated with this activity.

Domestic activity within the settlement is represented by the recovery of tablewares and food preparation vessels, including mortaria. There is also evidence for the use of cereals in the settlement area (Section 11, above). The evidence from Trench 5 suggests this flat area or plateau may have been sub-divided into plots, bounded by ditches and containing timber-framed buildings.

12.2: The military zone

No features of undisputed Roman military origin could be identified by the field evaluation. The results of the evaluation could be interpreted to suggest that the military activity on the west bank of the Smestow Brook was limited to the higher ground, on which military enclosures 1411 and 1412 were located. However, it should be noted that the evaluation was based on a necessarily small sample of the area between enclosures 1411 and 1412 and the Smestow Brook.

The eastern side of enclosure 1411, variously identified as geophysical anomaly R25 and the eastern crop marked feature B6, was not located by trial-trenching. Trenches 6 and 7 were positioned to intercept the projected alignment of the latter, but no trace could be identified. This negative evidence could suggest that the cropmarked feature may have been ploughed away after being recorded by aerial photography. An alternative explanation is that the trences were unfortuitously positioned across entry-gaps in the eastern perimiter of this enclosure.

Also of interest was the identification of part of a D-shaped cropmarked enclosure (B10), which occupied a slightly raised natural plateau. Although no dating evidence was obtained, the morphology of this feature suggests it may be a farmstead enclosure of possible later prehistoric or Roman date.

Since the cropmarked features have been interpreted from air photographs taken prior to 1980, it is possible to argue that the negative evidence provided by this evaluation, and from Trench 13 in particular, could be a result of the plough truncation of buried archaeological features.

12.3: The road

It was not possible to define the course of the Roman road leading to the northwest from Greensforge, nor were any features identified associated with contemporary activity or settlement. The line investigated by Trenches 1-3 was the alignment indicated by the Ordnance Survey and by air photograph analysis. The parallel linear cropmarked features located to the west (B12) could possibly indicate a road alignment of Roman or later date. However, it is difficult to reconcile the alignment of possible road B12 with the cropmarked alignment of the Roman road in the vicinity of Chasepool Farm, unless there was an abrupt change in alignment.

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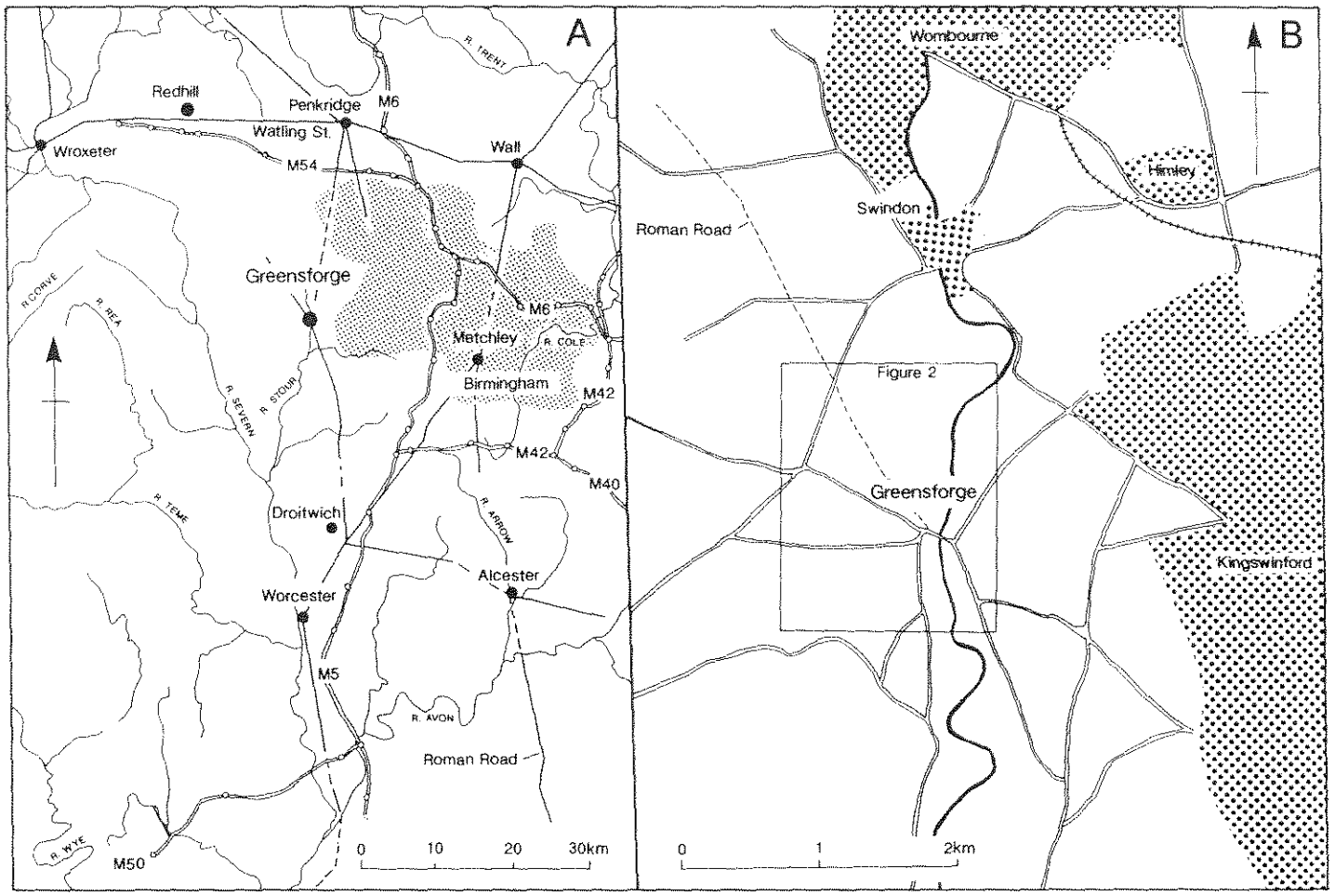
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Wall
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R. SEVERN
R. STOUR
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R. COLE
Birmingham
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R. TEME
Droitwich
R. ARROW
Alcester
Worcester
M5
R. AVON
Roman Road
R. WYE
M50
0 10 20 30km
B
Wombourne
Himley
Swindon
Roman Road
Figure 2
Greensforge
Kingswinford
0 1 2km

Figure 1

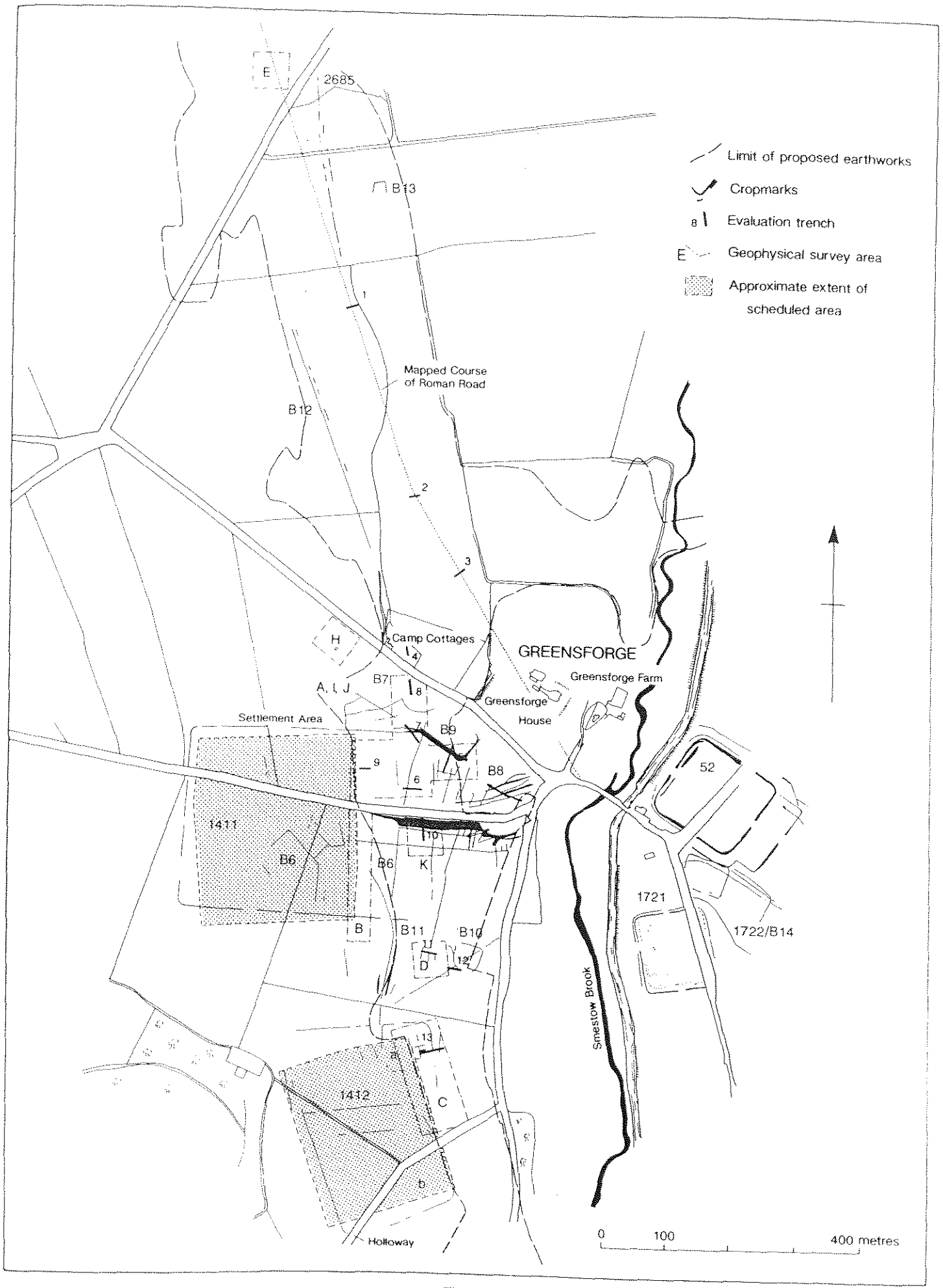
Limit of proposed earthworks
Cropmarks
Evaluation trench
Geophysical survey area
Approximate extent of scheduled area
E
2685
B13
1
Mapped Course of Roman Road
B12
2
3
H
Camp Cottages
4
GREENSFORGE
Greensforge Farm
A, I, J
B7
8
Greensforge House
Settlement Area
7
B9
9
6
B8
52
1411
10
B6
B6
K
1721
1722/B14
B
B11
B10
D
12
Smestow Brook
13
a
1412
C
b
Holloway
0
100
400 metres

Figure 2

Plotting parameters
Minimum -1nT (white)
Maximum +2nT (black)

Date August 1994	Client THE UNIVERSITY OF BIRMINGHAM FIELD ARCHAEOLOGY UNIT	Figure 3	
Scale 1:1000	Subject Geophysical Survey - Greensforge Plot of magnetometer data - Sites A, I and J		

GEOPHYSICAL & SPECIALIST SURVEY SERVICES

TILTRIDGE FARM
UPPER HOOK ROAD
UPTON UPON SEVERN
WORCESTERSHIRE WR8 0SA UK
TELEPHONE (0684) 592266
FAX (0684) 594142

Date August 1994	Client THE UNIVERSITY OF BIRMINGHAM FIELD ARCHAEOLOGY UNIT	Figure 4	STRATASCAN™ GEOPHYSICAL & SPECIALIST SURVEY SERVICES
Scale 1:1000	Subject Geophysical Survey - Greensforge Abstraction of Features - Sites A, I and J		

TILTRIDGE FARM
UPPER HOOK ROAD
UPTON UPON SEVERN
WORCESTERSHIRE WR8 0SA UK
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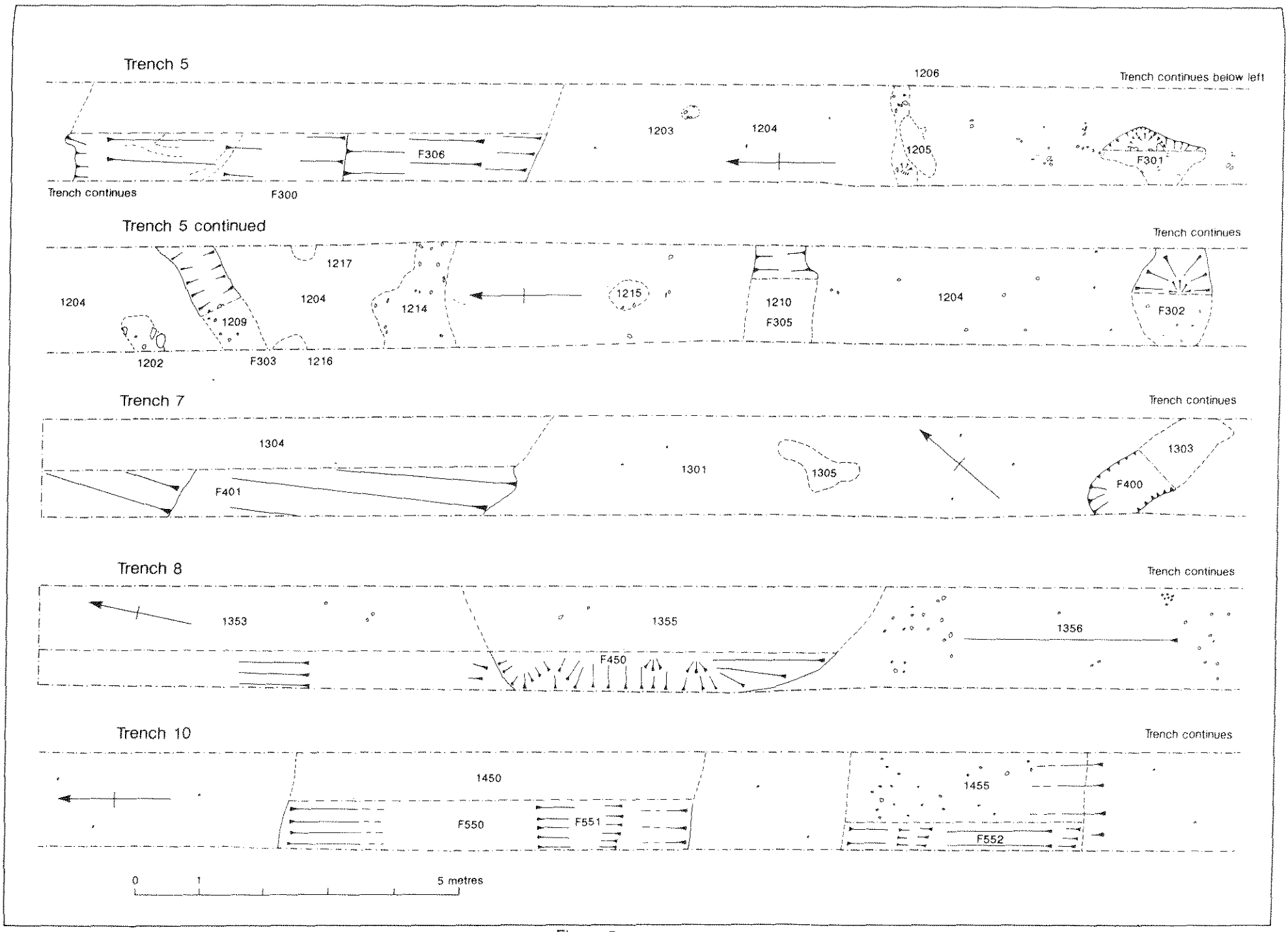
Trench 5
1206
Trench continues below left
1203
1204
F306
1205
F301
Trench continues
F300
Trench 5 continued
Trench continues
1217
1204
1215
1204
1214
1210
F305
1204
F302
1209
1202
F303
1216
Trench 7
Trench continues
1304
1301
1305
1303
F401
F400
Trench 8
Trench continues
1353
1355
1356
F450
Trench 10
Trench continues
1450
1455
F550
F551
F552
0
1
5 metres

Figure 5

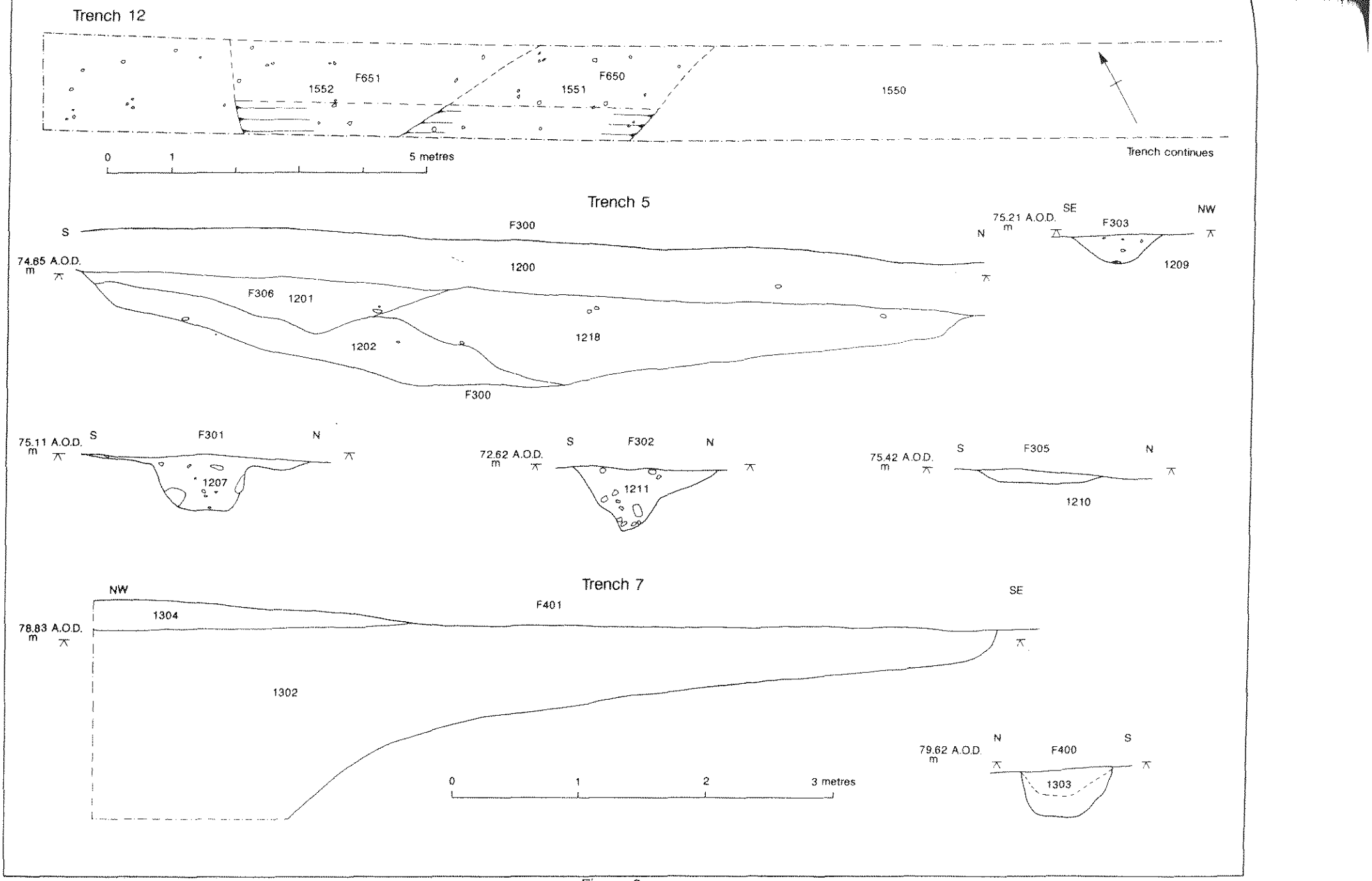
Trench 12
F651
F650
1552
1551
1550
0
1
5 metres
Trench continues
Trench 5
S
F300
N
74.65 A.O.D.
m
1200
F306
1201
1218
1202
F300
75.21 A.O.D.
m
SE
NW
F303
1209
75.11 A.O.D.
m
S
F301
N
1207
72.62 A.O.D.
m
S
F302
N
1211
75.42 A.O.D.
m
S
F305
N
1210
Trench 7
NW
SE
F401
1304
78.83 A.O.D.
m
1302
0
1
2
3 metres
79.62 A.O.D.
m
N
S
F400
1303

Figure 6

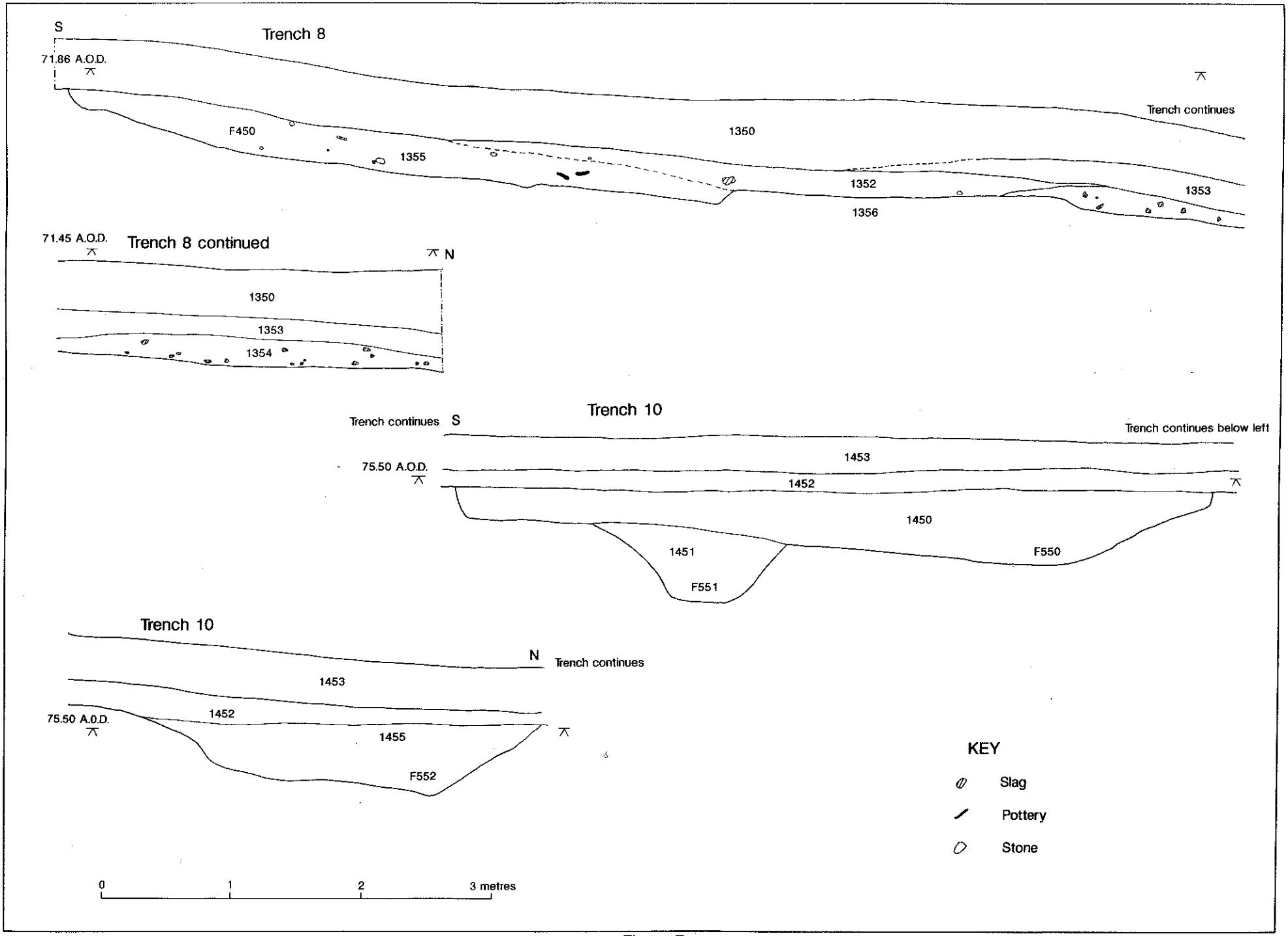
S
Trench 8
71.86 A.O.D.
Trench continues
F450
1350
1355
1352
1353
1356
71.45 A.O.D.
Trench 8 continued
N
1350
1353
1354
Trench continues
S
Trench 10
Trench continues below left
75.50 A.O.D.
1453
1452
1450
1451
F550
F551
Trench 10
N
Trench continues
1453
75.50 A.O.D.
1452
1455
F552
KEY
Slag
Pottery
Stone
0
1
2
3 metres

Figure 7

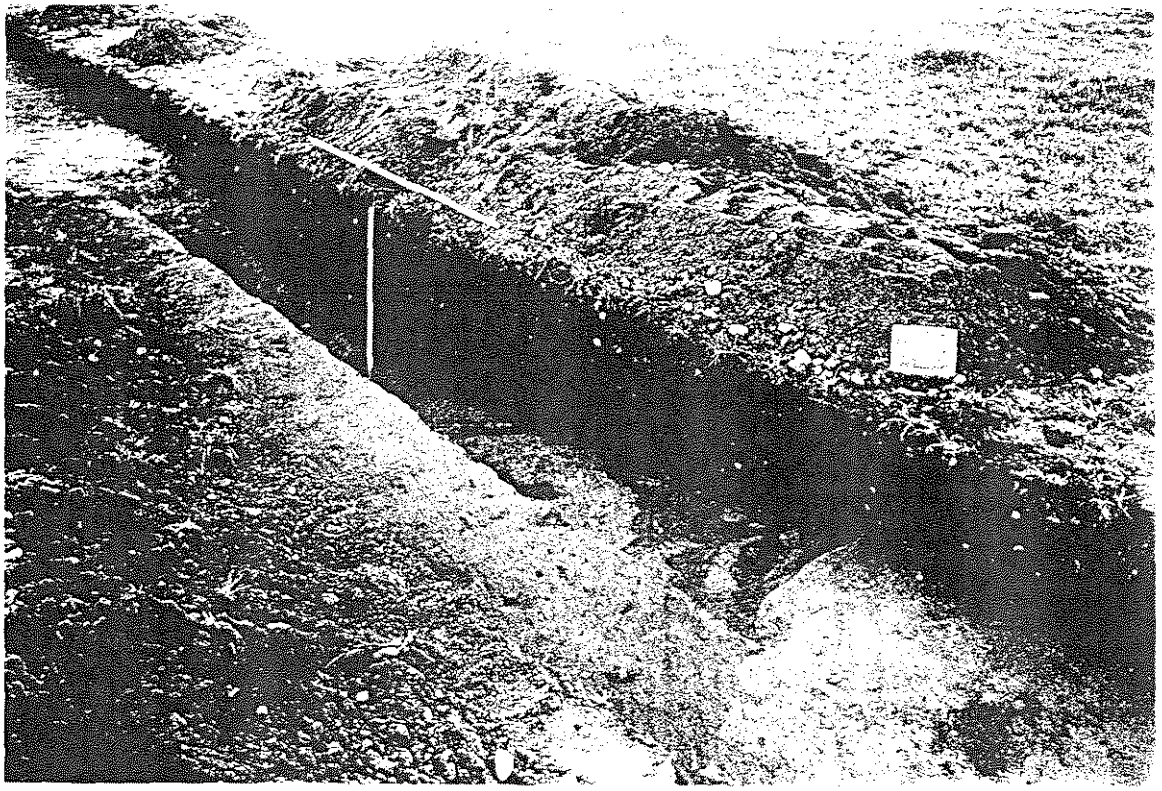

Plate 1

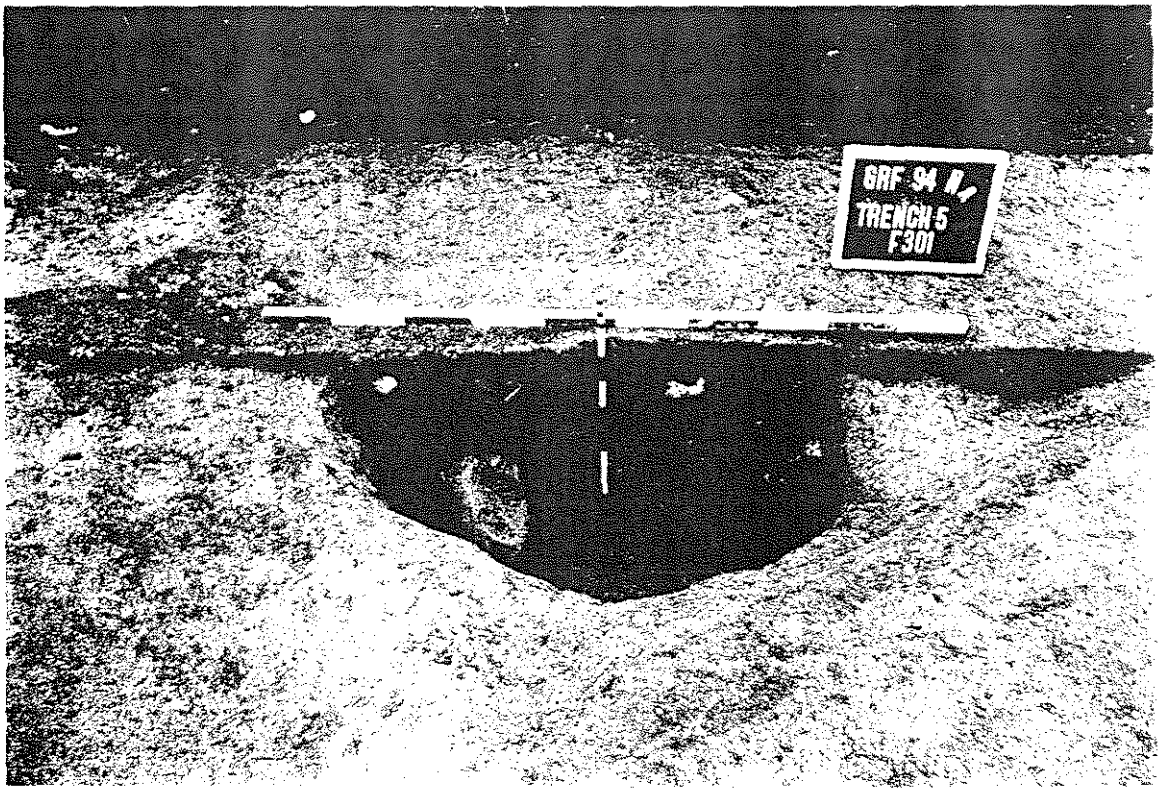

Plate 2

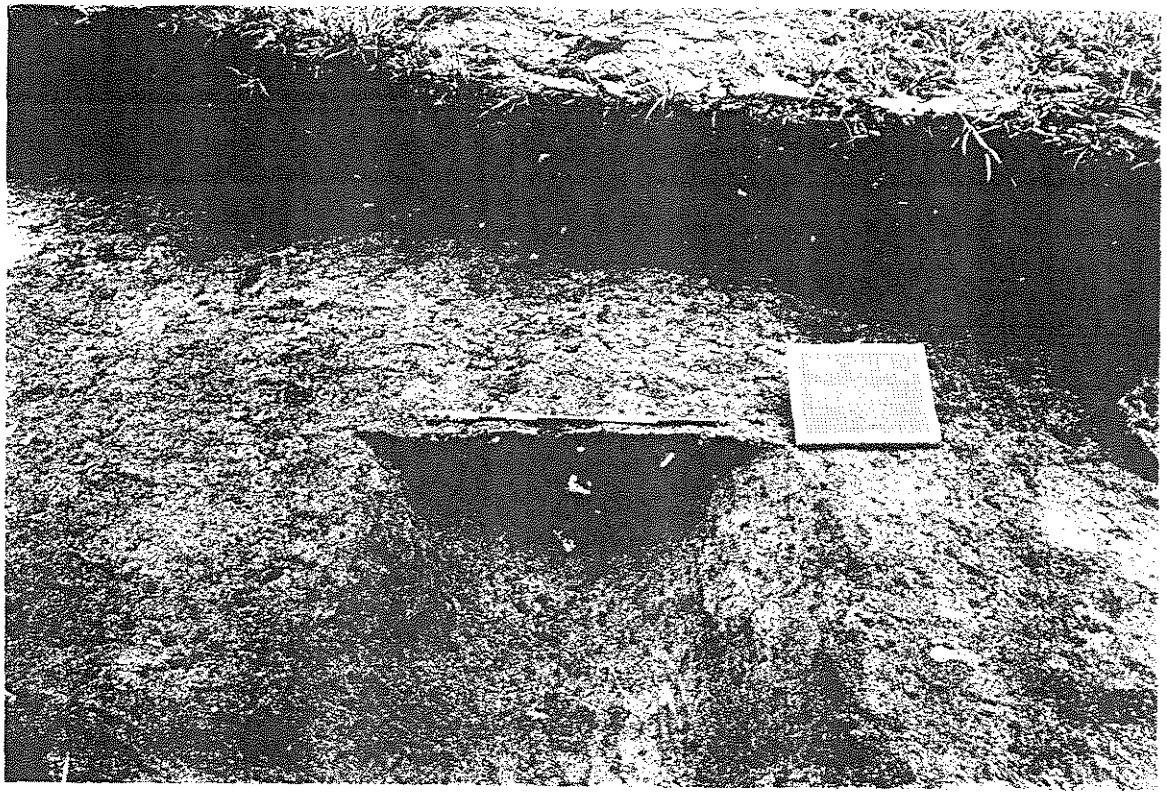

Plate 3

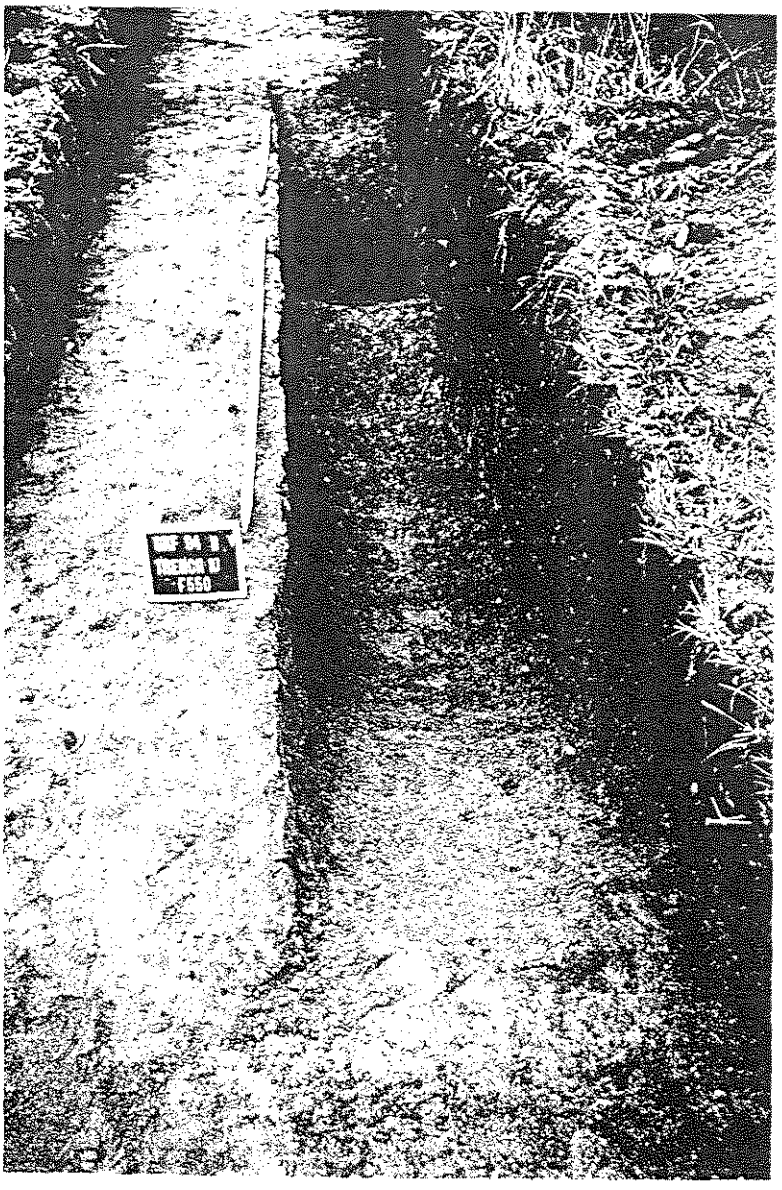

Plate 4