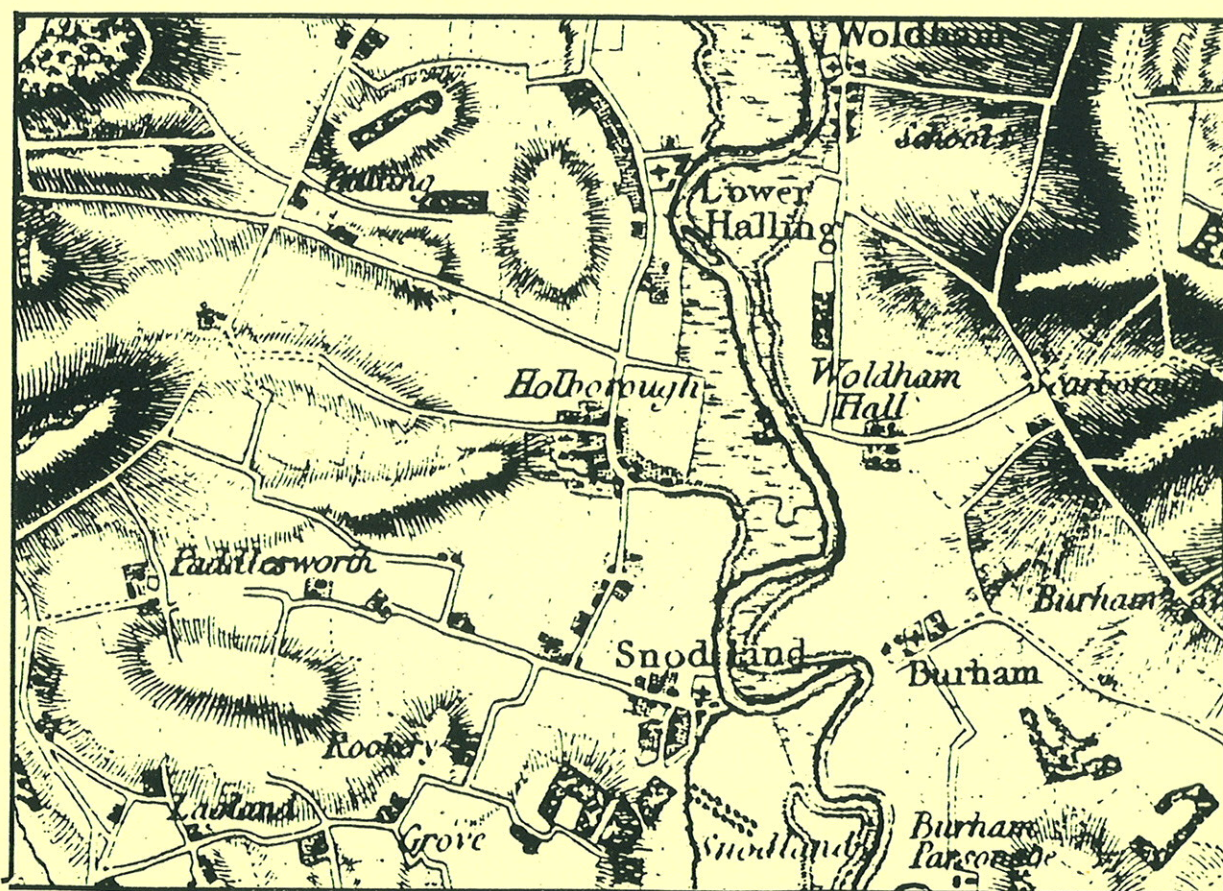


Lawson-Price Environmental / Blue Circle Cement PLC

# Snodland, Holborough, Kent

NGR TQ 698 632

Archaeological Fieldwalking and Auger Survey Report



Oxford Archaeological Unit

February 1997

Lawson-Price Environmental / Blue Circle Cement plc

Snodland, Holborough, Kent

*ARCHAEOLOGICAL REPORT  
FIELDWALKING AND AUGER SURVEY*

[TQ 698 632]

Vol 1: The Report on the fieldwork

OXFORD ARCHAEOLOGICAL UNIT

February 1997

Lawson-Price Environmental / Blue Circle Cement plc

Snodland, Holborough, Kent

*ARCHAEOLOGICAL REPORT  
FIELDWALKING AND AUGER SURVEY*

[NGR TQ 698 632]

Prepared by: <i>A Parkinson</i> <i>PP IRSWA</i>
Date: <i>30th January 97</i>
Checked by: <i>IRSWA</i>
Date: <i>31st January 97</i>
Approved by: <i>IRSWA</i>
Date: <i>17th February 97</i>

OXFORD ARCHAEOLOGICAL UNIT

February 1997

# Snodland, Holborough, Kent

## ARCHAEOLOGICAL EVALUATION

### LIST OF CONTENTS

#### VOLUME ONE

SUMMARY	1
1 INTRODUCTION	2
1.1 Project Background	2
1.2 Location geology and topography	2
2 ARCHAEOLOGICAL BACKGROUND	3
2.1 Palaeolithic	3
2.2 Bronze Age	3
2.3 Iron Age	3
2.4 Romano-British	3
2.5 Saxon	4
2.6 Post medieval	4
2.7 Air photographs	4
3 SCOPE OF THE PROJECT	4
4 AIMS AND OBJECTIVES	5
5 FIELDWALKING	6
5.1 Methodology	6
5.2 Crop and ground conditions	6
6 FIELDWALKING: SUMMARY OF RESULTS	6
6.1 Flint	6
6.2 Prehistoric pottery	6
6.3 Romano-British pottery	7
6.4 Medieval Pottery	7
6.5 Post-medieval pottery	7
6.6 Ceramic Building Material [CBM]	7
6.7 Other materials	7
6.8 Discussion and Interpretation	8
7 SPECIALIST FINDS REPORTS	9
7.1 Flint report: T. Durden	9
7.2 Prehistoric pottery report: A. Barclay	10
8 EARTHWORK SURVEY	10
8.1 Results	10
8.2 Earthwork survey discussion	10
9 AUGER SURVEY	11
9.1 Aims and methods	11
9.2 Conclusions of auger survey	12

Bibliography and references	13
-----------------------------	----

*List of Appendices*

Appendix 1	Fieldwalking results, by field	14
Appendix 2	Prehistoric pottery: Quantification	19
Appendix 3	Results of Auger survey	20

*List of Figures*

Fig. 1	Site location map
Fig. 2	Distribution of worked flint
Fig. 3	Distribution of burnt flint
Fig. 4	Distribution of later prehistoric pottery
Fig. 5	Distribution of Romano-British pottery
Fig. 6	Distribution of post-medieval pottery
Fig. 7	Distribution of ceramic building material
Fig. 8	Location of auger transects and cropmarks
Fig. 9	Auger transect No. 1
Fig. 10	Auger transect No. 2
Fig. 11	Auger transect No. 3
Fig. 12	Auger transect No. 4 & 5
Fig. 13	Auger transect No. 6

**VOLUME TWO**

Fieldwalking Data - Flint  
Fieldwalking Data - Non-flint finds  
Fieldwalking - Transect coordinates

Summary: Snodland, Holborough.

*A fieldwalking collection and auger survey were undertaken by the Oxford Archaeological Unit in accordance with a brief set by Lawson - Price Environmental, acting on behalf of Blue Circle Industries Plc. Two small concentrations of late Bronze Age and Iron Age pottery were located (which fall within a date range of 1150BC and 700BC). One area to the south of Lad's Farm in an area of cropmarks and another to the west of Whittings Farm. The main categories of finds were worked and unworked burnt flint which occurred throughout the site with a slightly higher concentration in the east. In addition a large quantity of post-medieval material was spread over the whole site which mostly dates to the 19th century. Six auger transects identified hillwash (colluvium) as well as periglacial deposits and features within the chalk dry valleys. A walk over survey located three linear earthworks (probably old field boundaries) and an old quarry hollow.*

# 1 INTRODUCTION (Fig. 1)

## 1.1 Project Background

1.1.1 A total of 80.6 ha was fieldwalked by the Oxford Archaeological Unit between the 18th November and the 9th of December 1996. The survey area was divided up into 10 fields which occupied an area between Pilgrims' Way and Lad's Farm in the west and continue to Home Farm and Whittings Farm in the east. In addition a small isolated field was situated on the northern outskirts of Snodland.

1.1.2 The work was carried out for Lawson-Price Environmental on behalf of Blue Circle Industries plc. The area is subject to an Environmental Assessment in advance of preparation for a planning application for a proposed new chalk quarry and related cement works. The specification for the fieldwalking and auger survey was set by Lawson-Price Environmental (Chadwick 1996).

## 1.2 Location, geology and topography (Fig. 1)

1.2.1 The site (centred at TQ 698 632) is located in the area between Maidstone and Rochester in Kent, and lies north of the village of Snodland and west of the A228. The site occupies an area at the foot of the North Downs where a number of spurs and valleys run down into the Medway Valley. The River Medway cuts through the North Downs and lies just east of the A228. The landscape has been significantly modified by quarrying since the 1860s. Holborough Hill has been totally removed by chalk quarrying. The old Holborough Quarry forms the southern limits of the site.

1.2.2 The site is shown on the Geological Survey (Sheet 272 Chatham). The area is dominated by the Chalk of the North Downs. Superimposed on the Chalk are various Head deposits associated with the Pleistocene (which ended 10,000 years ago), which occur in the base of dry valleys. The Pleistocene deposits are described in some detail as these provide the framework for the results of the auger survey and the deposits identified within the dry valley.

1.2.3 The Pleistocene deposits in this region were laid down in periglacial conditions beyond the limits of the ice sheets. These deposits are complex and discontinuous and often were reworked in subsequent glacial periods. The Head deposits at Holborough probably relate to the latest glacial stage (Devensian Stage 70,000 - 13,000 BP). Spring melting caused material to move downslope and accumulate in the valley floor. The Devensian Stage was also the period when periglacial features predominate; the cycle of freeze-thaw creates intrusions in the earlier deposits which become filled with Head deposits. These solution hollows (also known as pipes) and ice wedges are characteristic of chalk geology although the exact mechanisms are not fully understood (Harding et al. 1991).

1.2.4 During the Devensian Stage there were periods of milder climate (interstadials). The most recent interstadial (Windermere interstadial) lasted from 13,000 - 11,000 BP. The

milder periods can produce soils, although they are not common in Britain; however they have been recorded at other Kent sites (Bakers Hole, Northfleet), and significantly at Holborough where mollusc remains and a radiocarbon date places the soil in the Windermere interstadial (Sumbler 1996).

## **2 ARCHAEOLOGICAL BACKGROUND**

The archaeological background has been covered in a number of desk top assessments (Chadwick 1996) and a summary of the archaeology of the immediate area is set out below. Earlier chalk quarrying in the area has identified a large number of archaeological sites from a range of periods.

### **2.1 Palaeolithic**

Palaeolithic finds are extensive but many of the hand axes are rolled indicating reworking and redeposition, so establishing their exact provenance is difficult. Some sites in chalk regions provided useful information on the complex deposition of the Pleistocene deposits, for example Furze Platt near Maidenhead (Harding et al. 1991). These sites are usually near to rivers and have considerable potential for examining environmental changes. Recent work in the Medway Valley, during the construction of the Medway Tunnel (Allen 1995), exposed an 11 m high cliff overlooking the ancient Medway floodplain. A large depression produced a Palaeolithic hand-axe dated to 60,000 BC. There was further evidence for episodic occupation through to the Roman period.

### **2.2 Bronze Age**

A ring ditch (barrow) at Holborough Quarry was excavated in advance of chalk quarrying in the 1950s (Evison 1956). The later fills of the ring ditch contained Bronze Age, Iron Age, and Romano-British pottery.

### **2.3 Iron Age**

There has been little Iron Age evidence recovered from Kent although coins have been recorded north west of Upper Halling (NAR/SMR TQ 64SE31 :TQ 686 644) and near Constitution Hill, Snodland NAR/SMR TQ 77 SW39: TQ701 619.

### **2.4 Romano-British**

2.4.1 The villa site at Snodland (Scheduled Monument Kent 398) has been known for many years and further evidence was found during construction at the gasworks in 1900 and 1927. A small investigation was recently carried out (Birkbeck 1994). A field system associated with the villa economy would be expected in the area under investigation.



2.4.2 Chalk quarrying at Holborough Quarry unearthed a number of Romano-British burials (Dean Hill NAR/SMR TQ66 SE7) and most notably a Roman Barrow at Holborough Knob (NAR/SMR TQ66 SE18) contained a cremation and associated iron folding chair.

## 2.5 Saxon

2.5.1 Holborough Quarry also exposed 39 Saxon graves (Evison 1956). These were arranged around the southern and eastern sides of the prehistoric barrow (see above) suggesting that the barrow mound survived at the time. The cemetery probably represents a small community and further burials are indicated by a single burial at Lad's Farm and a Saxon sword discovered when the road was diverted south of Holborough Mill in the 1890s.

2.5.2 The site of Holborough Mill at the eastern end of the site near the A228 probably dates to the ninth century.

## 2.6 Post-medieval

By 1869 chalk quarrying was well established at Upper Halling, with tramways linking the quarry to the wharfs on the Medway (the old tramlines can still be seen immediately north of Home Farm).

## 2.7 Air Photographs

Within the area of surface collection three areas of cropmarks have been identified (Chadwick 1996). The cropmarks east of Lad's Farm most clearly represent archaeological features:

- (i) An area east and south-east of Lad's Farm (in fieldwalking Fields 7 & 8) reveals two enclosures, which are probably rectangular, as well as a possible ring ditch (? prehistoric barrow).
- (ii) An area south-west of Home Farm (in fieldwalking Field 2) including a curving linear feature, possibly an enclosure.
- (iii) An area west of Whittings Farm (in Fieldwalking Field 10), interpreted as a periglacial feature and an infilled quarry.

## 3 SCOPE OF THE PROJECT

The overall project comprises four elements, three of which were undertaken by the Oxford Archaeological Unit. These were the fieldwalking, rapid earthwork survey and the auger survey. The fourth element comprises geophysical prospecting to be targeted in part on the areas of known crop marks and in part on areas identified by

concentrations of finds recovered in fieldwalking. The fieldwalking survey covered the whole of the development area. The auger survey investigated in particular the dry valleys and provided data for interpreting the fieldwalking information.

#### **4 AIMS AND OBJECTIVES**

##### **4.1 Aims and objectives of the Archaeological and historical landscape baseline studies**

4.1.1 The aims of the archaeological fieldwork were to establish so far as possible the location, extent, date, character, condition and significance of any surviving archaeological remains. The studies undertaken were to 'seek to clarify the nature and extent of existing disturbance and hence assess the degree of archaeological survival of buried deposits and surviving structures (Chadwick, 1996, 15, paragraphs 4.1 & 4.2).

4.1.2 The major works reported in this document comprised Fieldwalking and Auger Surveys. In conjunction with these works a rapid survey of standing earthworks was undertaken.

##### **4.2 Fieldwalking**

Within the overall Project Aims and Objectives (paragraph 4.1 above), the fieldwalking can contribute to locating, dating and defining the extent of any surviving archaeological remains present within the site and towards understanding their significance within the wider landscape.

##### **4.3 Auger survey**

The auger survey was intended to give a greater understanding of the hillwash (colluvium) and periglacial deposits known to exist within the development site, and in conjunction with the data recovered through fieldwalking to establish the potential for buried archaeological deposits within the dry valleys.

##### **4.4 Rapid earthwork survey**

The aims of this survey were to establish the extent of the surviving earthworks and in conjunction with fieldwalking data to establish in the first instance their relationship with any finds concentrations. Using both fieldwalking data and auger survey information it may be possible to establish the overall extent of potential archaeological deposits and their relationship to colluvial deposits.

## **5 FIELDWALKING (Figs 2-7)**

### **5.1 Methodology**

5.1.1 The fieldwalking transects were placed at 20m intervals and orientated on the National Grid. Each transect was walked from south to north and each collection unit (stint) along the transects measured 20m.

5.1.2 The finds from the surface collection were washed, bagged and quantified by collection and the data entered into a database. The results have been plotted onto the digital plan (Figs 2-7).

### **5.2 Crop and ground conditions**

All ten fields were under arable cultivation. In Fields 1 to 9 the crop was just through, in contrast Field 10 had a fairly thick cover of cereal and it was only just practical to field walk this area. This could have affected the level of artefact recovery and this should be borne in mind when interpreting the data. The weather in the first week was particularly wet and windy with snow on the 19th of November. During this period conditions for the recovery of finds were not good. The remaining period was overcast or sunny. The overcast days provided the best conditions for fieldwalking. Overall the conditions for artefact recovered varied between poor to good. The mixture of good to poor conditions effected all fields equally and therefore did not materially affect the overall pattern of artifact distribution as represented in the plots (Figs 2-7).

## **6 FIELDWALKING: SUMMARY OF RESULTS**

### **6.1 Flint (Fig. 2 & 3)**

A total of 1227 pieces of flint (both struck and burnt unworked) was collected, but the majority consists of burnt unworked flint. The flint was distributed throughout the site although some higher concentrations of burnt flint were noted in the eastern end of the site. Most significantly a spread of burnt flint was associated with late Bronze Age pottery south of Lad's Farm. The technological traits of the struck flint are typical of the later Neolithic and Bronze Age industries. One notable find was a barbed and tanged arrowhead datable to the Beaker/early Bronze Age period.

### **6.2 Prehistoric pottery (Fig. 4) (see Appendix 1)**

Two well defined scatters of prehistoric pottery were located in Fields 8 and 10; further material was found in Fields 2 and 3:

Field 8            A total of 23 sherds of prehistoric pottery was collected from Field 8. The pottery was predominantly late Bronze Age in date and correlates

closely to the area of cropmarks which probably represent rectangular enclosures.

Field 10 A small concentration of eight late Bronze Age sherds was collected from Field 10. Most of the sherds were concentrated on a slight prominence on TQ 7010/6337. The westernmost sherds were very small and abraded and were found in a shallow dry valley. They were probably ploughed into the dry valley.

Fields 2 & 3 A small diffused scatter of prehistoric pottery was also collected in the wide dry valley south of Home Farm.

### **6.3 Romano-British pottery (Fig. 5)**

The surface collection produced very few sherds of Romano-British pottery: only 10 sherds could be firmly attributed to the Roman period. There was not sufficient quantity to indicate occupation or even heavy manuring within a field system which might have been expected because of the proximity of Snodland villa.

### **6.4 Medieval Pottery**

The surface collection produced only 6 sherds which could be firmly attributed to the medieval period.

### **6.5 Post-Medieval Pottery**

The surface collection produced very large quantities of post-medieval pottery. The material was found spread over the whole fieldwalking area, but the densest spreads were located in Fields 1 and 7. Field 10 produced the lowest density of post-medieval material.

### **6.6 Ceramic building materials [CBM] (Fig. 7)**

The ceramic building material comprised predominantly red clay roof tile but also includes brick and material which could be either brick or tile. There substantial spreads of red roof tile throughout the site particularly in the eastern half of the site (Fields 1, 2, 3, and 4), but no significant concentrations. Much of this material is associated with glass and clay pipe and probably indicates intensive arable cultivation in the late 19th century.

### **6.7 Other materials**

Other materials recovered included glass (mainly bottle (?)), clay tobacco pipe, and post-medieval ceramics, and these show a similar pattern of distribution to the red roof tile [CBM]. This material was not examined in detail but was quantified in order to establish its distribution throughout the site.

## 6.8 Discussion and Interpretation

- 6.8.1 The most significant finds from the fieldwalking were the two small concentrations of late Bronze Age and Iron Age pottery from south of Lad's Farm (Field 8) and the other west of Whittings Farm (Field 10). The pottery concentrations which fall into a date range of 1150 -700BC, are likely to be indicators of domestic activity and settlement. The concentration in Field 8 is associated with cropmarks which probably indicate rectangular enclosures. Higher concentrations of burnt unworked flint were also associated with the pottery in Field 8, which again is a likely indicator of domestic activity.
- 6.8.2 Worked and unworked burnt (fire-cracked) flint occur throughout the site with occasional slightly higher concentrations and a generally higher concentration towards the eastern half of the site. The worked flint collected is typical of the later Neolithic and Bronze Age industries.
- 6.8.3 The auger survey identified hillwash (colluvial) deposits in the dry valleys which could influence the fieldwalking results in two ways. In some instances archaeological features in the valley bottom will be buried beneath the colluvial layer which will mask the presence of archaeological material and prevents finds being ploughed up, or archaeological artefacts from the top and sides of the valley are carried down slope into the bottom of the valley which probably occurred with the burnt flint in Field 7. It may be significant that both the concentrations of late Bronze Age pottery were on slightly raise areas in the topography and so more vulnerable to denudation by deep ploughing. Therefore the scatter consists of fairly large sherds, which have not had time to break down (although the late Bronze Age pottery is relatively hard). Consequently some of the higher concentrations of burnt flint and isolated late Bronze Age sherds may be the remains of more significant amounts of pottery which have been decreased by continual ploughing.
- 6.8.4 The Bronze Age period has already been noted by the presence of the Bronze Age barrow at Holborough Quarry (Evison 1956) which appears to be still be a feature well into the Saxon period. The fieldwalking has identified further evidence of Bronze Age activity in the landscape which probably continue into the Iron Age.
- 6.8.5 The amount of Roman and Medieval material was very low and may indicate a pastoral economy rather than intensive arable cultivation although it is possible there are Roman and Medieval field systems present and if so the ditches probably contain little in the way of pottery. Half of the Romano-British sherds were in Field 3 at the far eastern end of the site and although near to Snodland villa the amount is too small to gauge its significance.
- 6.8.6 There was no Saxon material from the fieldwalking despite its close proximity to a Saxon cemetery just south of Ladd's Lane (Evison 1956). However if further inhumations were in the study area they are unlikely to reveal any surface material unless badly damaged by ploughing. It is not uncommon to for Saxon sites to contain

very little ceramic material so no firm conclusions can be made. Although as stated before the most likely location for Saxon settlement is just east of the site at Holborough itself.

- 6.8.7 The red roof tile, clay pipes and post-medieval pottery probably represent a phase of intensive arable cultivation in the 19th century which continues up to the present day.

## 7 SPECIALIST FINDS REPORTS

### 7.1 Flint Report: Tess Durden

- 7.1.1 A total of 1227 pieces of struck and burnt unworked flint were collected during the course of fieldwalking. This total excludes a number of unburnt and unstruck pieces which formed part of the collection.
- 7.1.2 The site is located on the chalk and it appears that most of the flint in the collection is from this source. A number of pieces, however, bore a thin brown or grey cortex, suggesting these were derived from gravel sources. Four pieces of possible Bullhead flint, which is found in the Bullhead Beds in the north of the county (Shepherd 1972, 114), were also in the collection. Almost all of the flint is corticated white or speckled grey/white. Recent breaks and the few fresh pieces would indicate the original colour of the flint to be dark grey/brown, with some beige-coloured pieces. The majority of struck flints are abraded and iron staining is common, particularly on the heavily abraded and corticated pieces.
- 7.1.3 The collection is dominated by burnt unworked flint, ranging in size from small pieces to nodules. Struck pieces made up the smaller part of the collection and consisted mostly of unmodified flakes. Cortical, trimming and inner flakes were represented. These flakes are typically broad with thick butts and struck with hard hammers, and often irregular in outline. These technological traits are typical of Later Neolithic and Bronze Age industries. Very few blades and blade-like flakes were collected. Cores were uncommon and consisted of a few fragments and tested nodules, and two complete multi-platform flake cores. These would support the date range suggested by the flakes. Only a small number of retouched pieces were collected; these consisted of simple retouched flakes and scrapers, and one barbed and tanged arrowhead in fresh uncorticated condition. The arrowhead is datable to the Beaker/Early Bronze Age period.
- 7.1.4 Due to the lack of diagnostic items, only a broad date for the material can be suggested. The presence of broad, hard hammer struck flakes, the barbed and tanged arrowhead and the density of burnt flint on the site, would make an Earlier Bronze Age date feasible, though it is likely that the collection also includes some Neolithic and Later Bronze Age material.

## **7.2 Pottery Report: by A. Barclay**

7.2.1 The fieldwalking produced a small assemblage of pottery (50 sherds, 283g). The pottery assemblage contains only worn and plain body sherds and, therefore, approximate dates have been assigned through fabric analysis. Most of the assemblage consists of handmade and relatively hard-fired flint-tempered sherds with oxidised outer surfaces that are assumed to be of a late Bronze Age date, although it is possible that some of these could be either middle Bronze Age or Iron Age. A relatively small number of grog, shell and sand-tempered sherds are thought to be of Iron Age and Medieval date. Of the five fields that contained pottery (Appendix 1), two (Fields 8 & 10) produced notable concentrations of late Bronze age pottery. The concentrations of these sherds are likely to be indicators of domestic activity and settlement. Where as nearly all the material recovered from Field 10 appeared to be of one phase (LBA), the material from Field 8 was more mixed and also contained a number of possible Iron Age sherds.

## **8 EARTHWORK SURVEY (Fig. 14)**

### **8.1 Results**

8.1.1 A rapid field reconnaissance survey was carried out during the surface collection. Particular attention was paid to the areas of cropmarks.

8.1.2 A total of four earthworks were recorded, three linear earthwork features in Fields 1, 2 and a large hollow in Field 10. The earthworks in Fields 1 and 2 were linear and all similar in character (see Fig 8 A, B, and C). These were all orientated NNE/SSW and between 12-20m in width. They had a well defined slope down on the east side and were almost flat on the top and little if no slope on the west side. These linear earthworks tend to be positioned along a natural break in the slope. Linear earthwork B crossed the present boundary from Field 2 into Field 1.

8.1.3 Earthwork A: Length 220m; Width 26m  
Earthwork B: Length 270m; Width c.20m  
Earthwork C: Length 190m; Width c.13m

8.1.4 Earthwork D in Field 10 was situated just north of Home Farm and consisted of a large hollow c.90m across apparently excavated into the natural slope. Exposed chalk was noted along the western edge.

### **8.2 Earthwork survey discussion**

The linear earthworks (A, B, and C) are on a similar orientation to the existing field boundaries and probably represent former field boundaries. The movement of soil down slope probably accounts for an absence of slope on the west side and the sharp slope on the east side.

Observations of Earthwork hollow D would suggest an abandoned/infilled quarry. This hollow corresponds to one of the cropmarks in Field 10 which had been previously identified as an infilled quarry. Incidentally the north/south linear cropmark in Field 10 was confirmed as a geological divide between exposed chalk to the west and a clay silt Head deposit in the eastern half of the field.

There were no earthworks which could be discerned associated with the areas of cropmarks in Fields 2, 7 and 8.

## 9 AUGER SURVEY (Figs. 8 - 13)

### 9.1 Aims

9.1.1 The aim of the auger survey was to ascertain the extent of colluviation and quantify the depth of ploughsoil, subsoil and Head deposits. In the majority of cases chalk was recorded. (See also section 4 above.)

9.1.2 A total of six auger transects were surveyed :

Auger Survey: Snodland, Holborough (SNHO96)				
Transect	Length (m)	Number of Augers points	Start Co/ord	End Co/ord
1	780	38	69440/63303	68540/62890
2	520	27	68704/63180	69260/63400
3	620	32	69545/63078	70160/62980
4	340	18	69733/63318	69912/63035
5	350	17	70131/63202	70084/62844
6	460	24	70270/63310	69805/63420
Total	3120	156		

9.1.3 A Russian hand auger was used and the auger points were placed at 20m intervals along the transect. For each auger point a description and depth of the deposits were recorded along with the height above Ordnance Datum.



## 9.2 CONCLUSIONS OF AUGER SURVEY

- 9.2.1 The auger transects located up to 1.78m (although 0.60m is more typical) of a reddish brown silt in the bottom of the dry valley. On the upper slopes the chalk was directly overlain by the modern ploughsoil.
- 9.2.2 A well defined valley profile was seen in Auger Transect 1,2, 4 & 6, however Transect 3 and 5 revealed an irregular profile across the dry valley.
- 9.2.3 The latest silt deposits (below the modern ploughsoil) showed little variation. They were a reddish brown silt with 10-15% sub-rounded chalk inclusions (0.01m-5mm in size). Charcoal and mollusc fragments were occasionally noted.
- 9.2.4 In contrast the lower silt deposits had less chalk inclusions, were brighter in colour and in different locations, varied in colour from a light brown to a dark reddish brown. The light brown silts were fine and friable and the darker silts contained an element of clay in their matrix.
- 9.2.5 The latest silts probably represent hillwash (colluvium) accumulation, which would be expected to exhibit a similar profile to the existing dry valley with no significant anomalies in depth. The distinctions between the upper and lower silts although clear in most auger points was not apparent in some of the auger points. The hillwash (colluvium) derives from ploughing and erosion of the Head deposits and therefore the character of the two deposits is very similar. The presence of artefactual material is often the most unequivocal indication of a hillwash deposit.
- 9.2.6 It should also be borne in mind that isolated deeper anomalies could represent archaeological features sealed by colluviation. However due to the ubiquitous reddish brown silt deposits, none of the deeper anomalies be clearly identified with any confidence as an archaeological feature.
- 9.2.7 The 'clean' slightly brighter colour of the lower silt deposits, combined with the deeper anomalies indicate the lower silts represent Pleistocene Head deposits. The old chalk quarries in the neighbourhood contain a number of periglacial silt filled features formed within solution hollows within the chalk. These periglacial features were most obvious in auger transects 3 and 5. Other studies (Harding et al 1991) indicate large periglacial features may be expected to occur at about four per hectare.

## ***Bibliography***

- Allen, T. 1995 Canterbury Archaeology Trust, Annual Report 1994-1995
- Birkbeck, V. 1994 Excavations on a Romano British villa at Churchfields, Snodland, Kent 1992-94 (Wessex Archaeological Unpub. client report No.35457).
- Chadwick, P. 1996 Specification for Archaeological and Historic Baseline Studies
- Evison, V.I. 1956 An Anglo-Saxon Cemetery at Holborough, Kent. *Arch. Cant.* 1954 70 84-141.
- Harding et al. 1991 Recent investigations of Pleistocene sediments near Maidenhead Berkshire and their archaeological content. *Proc. Geol. Ass.* 102(1), 25-53
- Shepherd, W 1972 *Flint. Its origin, properties and use.* London.
- Sumbler, M.G. 1996 *British Regional Geology 'London and Thames Valley'* HMSO 1996

## FIELDWALKING RESULTS BY FIELD

## APPENDIX 1

A brief summary of each field and the quantity of pottery is outline below

Date codes:     LBA     = late Bronze Age  
                  IA       = Iron Age  
                  RB       = Romano-British  
                  Med      = Medieval

### Field 1

Grid ref.        TQ 698 632  
Area             5.2ha  
Crop             cereal

Pottery          1   LBA  
                  3   MED?

Field 1 is rectangular in shape bound to the east by Home Farm and to the north by the old tramway which once served the disused chalk quarries. The west side of the field was bound by spoil from the former quarry, now under arable cultivation. The ground slopes up steeply towards at the north end of the field. Chalk was visible ploughed up on the top of the slope.

Only one sherd of prehistoric pottery was collected which dated to the late Bronze Age

Struck flint and burnt flint were collected throughout Field 1. A significant concentration of burnt flint was centred at TQ 69745/63160 in the south-west corner of the field. A very small sherd of late Bronze Age pottery was located on the northern limit of this concentration of burnt flint. Both the late Bronze Age pottery and burnt flint scatter were situated at the bottom of a south facing slope. The burnt flint scatter appeared to continue to the south into Field 2.

### Field 2

Grid ref.        TQ 697 630  
Area             8.8ha  
Crop             cereal

Pottery          4   LBA  
                  4   IA  
                  1   RB  
                  2   RB or later  
                  4   MED?  
                  1   RB or MED

Field 2 is rectangular in shape and is bound to the south by Ladd's Lane and to the east by the road to Home Farm. The ground slopes down towards the east where it forms a wide dry valley.

Eight sherds of prehistoric pottery (late Bronze Age or Iron Age) were collected from the eastern half of Field 2. These were dispersed throughout the eastern half of the field and were too few in number to indicate any concentration.

Burnt flint and struck flint were collected throughout the field and the most noticeable find was a barbed and tanged arrowhead at TQ6960/6299 (Sutton type b) made from an orange flint. A small concentration of flint was noted in the north-east corner of Field 2.

### Field 3

Grid ref.	TQ 7005 6295
Area	5.2ha
Crop	cereal
Pottery	1 LBA 2 LIA 5 RB 2 RB or later 4 RB? tile 2 RB or MED 2 MED 5 MED?

Field 3 is situated within a broad dry valley, immediately north of Ladd's Lane and east of the road to Home Farm. The eastern boundary is slightly irregular and the southern end rises steeply onto an area of chalk and follows the route of Ladd's Lane. This bend in Ladd's Lane was the diversion (south of Holborough Mill) constructed in 1890s and the area where a Saxon sword was discovered during the road construction.

Three sherds of prehistoric (two late Iron Age and one late Bronze Age) pottery were recovered from the western half of Field 3. Although few in number they probably form a continuation of the dispersed scatter collected in Field 2.

A concentration of burnt flint occurred in the northern half of Field 3. This concentration of burnt flint continued north into Field 4. A small concentration was identified in the far south - east corner.

### Field 4

Grid ref.	TQ 7015 6315
Area	3.2ha
Crop	cereal
Pottery	4 RB or later 1 RB or MED 3 MED?

Field 4 is situated immediately east of Home Farm and the ground rises steadily to the north. The north is bound by the line of the old quarry tramway.

A concentration of burnt flint was located in the western half of Field 4. It may be significant that the burnt flint is directly south and downslope of a small concentration of late Bronze Age pottery collected in Field 10. The burnt flint scatter also continues southward into Field 3.

## Field 5

Grid ref.	TQ 694 631
Area	7.3ha
Crop	cereal
Pottery	2 RB or later 2 MED?

Field 5 is rectangular in shape and is bound to the south by Ladd's Lane. This field is situated immediately north of the old Holborough Quarry.

The distribution of burnt flint and struck flint was slightly erratic which may reflect a collection bias. However it appears there is a slightly higher concentration of burnt flint and struck flint in the western half of Field 5.

## Field 6

Grid ref.	TQ 694 633
Area	3.3ha
Crop	cereal
Pottery	1 LBA 4 RB or later 1 RB or MED

Field 6 is situated immediately south of the old quarry workings which have cut away some of the northern edge and spoil heaps encroach along the eastern edge.

A single sherd of late Bronze Age pottery was collected from the east end of Field 6.

Little if any flint was collected from the western half of Field 6. One of the transects in the eastern half of the field produced a significant concentration of burnt flint.

## Field 7

Grid ref.	TQ 690 633
Area	12.8ha
Crop	Linseed
Pottery	1 LIA? 2 RB 4 RB or MED 1 MED 3 MED?

The northern half of Field 7 forms a broad dry valley which continues into Field 6. The ground rises steeply up to the south, where chalk is exposed on the surface. Pilgrims Way runs along the western boundary of the field. Air photographs show a number of features running approximately parallel to pilgrims way which continue south into Field 8

No prehistoric pottery was recovered from Field 7. This is surprising considering the proximity to the late Bronze Age scatter in Field 8 to the south and the presence of well defined cropmarks in the south-west corner of Field 7.

The bottom of the dry valley had a slightly higher concentration of burnt flint which would suggest movement of material down the north facing slope. This would be supported by the sparse amount of material on top of the slope at the south end of the field adjacent to Ladd's Lane. A slightly higher concentration of flint was noted at the south and south-east of Field 7

#### **Field 8**

Grid ref.	TQ 687 629
Area	12.5ha
Crop	Linseed
Pottery	13 LBA 10 IA 1 RB 1 RB or later 2 RB or MED 1 MED

Field 8 is bound to the north by Ladd's Lane and Pilgrims' Way runs along the western edge of the field. Whitedyke Road (Track) forms the southern boundary and the old Holborough Quarry forms the eastern boundary of the field. The cropmarks in Field 7 continue into Field 8.

A total of 23 sherds of prehistoric pottery (late Bronze Age and Iron Age) were collected from Field 8. The pottery was predominantly late Bronze Age in date and correlates closely to the area of cropmarks which probably represent rectangular enclosures. The main area of pottery concentration towards Lad's is situated on an area of higher ground and therefore more vulnerable to present day ploughing.

There was a noticeable concentration of burnt flint associated with the main area of late Bronze Age/ Iron Age pottery.

#### **Field 9**

Grid ref.	TQ 7025 6320
Area	2.9ha
Crop	cereal
Pottery	1 LBA 1 IA 1 RB

Field 9 is an isolated level field, situated on the northern outskirts of Snodland and it is bound on the east and west side by houses. The old Holborough Quarry forms the western boundary.

Two sherds of prehistoric pottery was collected from Field 9; one late Bronze Age and one probably late Iron Age in date.

**Field 10**

Grid ref.	TQ 701 635
Area	19.3ha
Crop	cereal
Pottery	8 LBA 3 IA 1 RB or MED 2 MED

Field 10 is situated immediately west of Whittings Farm. It is bound to the south by the old quarry tramway and a tarmac footpath runs along the northern boundary. The position of this field gives a clear view up the Medway valley towards Rochester.

A small concentration of eight late Bronze Age pottery sherds were collected from Field 10. Most of the sherds were concentrated on a slight raised area of high ground around TQ 7010/6337. The higher ground is likely to be particularly vulnerable to disturbance by present day ploughing. The western most sherds were very small and abraded lying in a shallow dry valley and consequently probably ploughed down into the dry valley. In addition three sherds were Iron Age in date.

The distribution of struck and burnt flint in Field 10 shows no particular pattern and no heavy concentrations.

PREHISTORIC POTTERY: SNODLAND, HOLBOROUGH, KENT, SNHO 96				
Field	Transect	grid ref	Quantification	Date
1	K4	6974E/6321N	1, 1g	LBA
2	K2	6972E/6291N	1, 5g	LBA
2	K10	6972E/6307N	1, 2g	MIA?
2	N8	6978E/6303N	1, 2g	LBA
2	O4	6980E/6293N	1, 4g	LBA
2	Q10	6984E/6305N	1, 2g	LBA
2	Q11	6984E/6307N	1, 3g	MIA?
2	R3	6986E/6291N	1, 7g	LIA
2	R11	6986E/6307N	1, 3g	LIA?
3	C7	6996E/6299N	1, 5g	LIA? or ERB
3	F5	7002E/6295N	1, 5g	LIA? or ERB
3	G2	7004E/6289N	1, 8g	LBA
6	O2	6950E/6323N	1, 10g	LBA
7	G7	6912E/6325N	1, 4g	LIA? or ERB rim
8	A8	6888E/6279N	1, 5g	LIA?
8	B6	6286E/6275N	1, 2g	LIA?
8	C3	6884E/6271N	1, 2g	IA
8	C22	6884E/6309N	1, 3g	LIA?
8	D10	6882E/6285N	1, 6g	LBA or IA?
8	D12	6882E/6289N	1, 9g	LBA
8	D12	6882E/6289N	1, 6g	LIA? grog- tempered
8	D13	6882E/6291N	1, 5g	LBA
8	D14	6882E/6293N	1, 9g	LBA
8	D15	6882E/6295N	1, 12g	LBA
8	F2	5878E/6271N	1, 11g	IA?
8	F15	6878E/6297N	1, 4g	LBA
8	G17	6876E/6303N	1, 2g	LBA
8	G18	6876E/6305N	2, 15g	LBA
8	G19	6876E/6307N	1, 5g	LIA?
8	G22	9876E/6313N	1, 5g	LBA



PREHISTORIC POTTERY: SNODLAND, HOLBOROUGH, KENT,  
SNHO 96

Field	Transect	grid ref	Quantification	Date
8	H16	6874E/6301N	1, 8g	IA? flint and shell-tempered
8	I15	6872E/6301N	1, 8g	IA flint, sand and black sand-tempered
8	I18	6872E/6307N	1, 10g	LBA OR IA? flint-tempered
8	I21	6872E/6313N	1, 7g	LBA
8	J13	6870E/6297N	1, 5g	LBA
8	L9	6866E/6291N	1, 8g	LIA
9	D2	7028E/6225N	1, 11	LIA?
9	D4	7028E/6229N	1, 2	LBA
10	H3	7014E/6329N	1, 7g	IA shell tempered fabric
10	H7	7014E/6337N	1, 5g	LBA
10	H16	7014E/6355N	1, 3g	LBA
10	I4	7012E/6331N	1, 6g	LBA
10	J7	7010E/6337N	1, 1g	LBA
10	J8	7010E/6339N	1, 14g	LBA
10	K6	7008E/6337N	1, 19g	LBA
10	K15	7008E/6355N	1, 6g	LIA
10	O4	7000E/6335N	1, 2g	LBA
10	Q3	6996E/6333N	1, 2g	LIA
10	S9	6992E/6347N	1, 2g	LBA
Total			50, 283g	

LBA = late Bronze Age. IA = Iron Age. MIA = middle Iron Age. LIA = late Iron Age  
ERB = early Romano-British.

**Auger Transect 1 (Fig. 9)**

Length of Transect	780m
Auger points	1.1 - 1.38
Auger 1.1 Grid ref.	69440/63303 (30.33m OD)
Auger 1.38 Grid ref.	68540/62890 (73.87m OD)

The auger transect was orientated north east to south west. The north-east end lay within a dry valley and the transect ended in the south-west corner of the site where Pilgrims' Way meets Whitedyke Road (Track). The transect was interrupted by the old Holborough Quarry and the full length of the transect including the quarry is 1.1km.

For much of the transect (Auger points 1.7 - 1.38) the modern ploughsoil overlaid a slightly weathered soft natural chalk. At the far north-east end the transect descended into a dry valley (Auger points 1.1 - 1.6), where subsoil reddish brown silt deposits were recorded up to 1.26m thick (Auger point 1.1). The distinction between hillwash (colluvium) and Head deposits was not always clear although the results suggest there is up to 0.40m of hillwash which overlies up to 0.83m of Head deposit. The hillwash deposits were a friable reddish brown silt with 10% chalk inclusions. The Head deposits were a dark red silt which tended to become a clay silt with increasing depth and similarly less chalk inclusions with depth.

A few deeper anomalies were noted which are probably periglacial features. Auger points 1.30 - 1.32 recorded deeper anomalies just south of an area of cropmarks. However the anomalies extend for at least 60m, which probably indicate a periglacial feature.

**Auger Transect 2 (Fig. 10)**

Length of Transect	520m
Auger points	2.1 - 2.27
Auger 2.1 Grid ref.	68704/63180 (52.67m OD)
Auger 2.27 Grid ref.	69260/63400 (35.01m OD)

Auger transect 2 is orientated north-east south-west and runs up a dry valley rising steadily up to Lad's Farm. The auger transect reflects the general profile along the bottom of the dry valley and there are few anomalies in depth. Chalk was located in 23 of the auger holes and four were halted by obstructions or hard deposits.

The latest silt deposit consisted of a reddish brown silt with 5-10% chalk inclusions (1mm-2mm in size). This is probably a hillwash (colluvial) deposit in the bottom of the dry valley and is between 0.12m - 0.50m thick, with a possible maximum thickness of up to 0.75m. The silt deposits show a gradual vertical transition with a higher percentage of chalk in the lower silt deposits which tend to be darker in colour and becoming a clay silt in some of the basal regions.

**Auger Transect 3 (Fig. 11)**

Length of Transect	620m
Auger points	3.1 - 3.32
Auger 3.1 Grid ref.	69545/63078 (32.98m OD)
Auger 3.32 Grid ref.	70160/62980 (13.76m OD)

Transect 3 is orientated approximately east - west running down an east facing slope into a wide dry valley crossing the road to Home Farm.

Solid chalk was located in 15 of the auger holes and 11 were halted due to obstructions or hard deposits. There was considerable differences in the depth down to the natural chalk from 0.45m (Auger hole 3.22) to 2.08m in auger hole 3.5.

On average the subsoil silt was between 0.30m to 0.40m thick and probably indicates a hillwash (colluvial) deposit. The remaining anomalies would suggest Head deposits with periglacial features in the chalk which are about a metre or more in depth.

**Auger Transect 4 (Fig. 12)**

Length of Transect	340m
Auger points	4.1 - 4.18
Auger 4.1 Grid ref.	69733/63318 (33.69m OD)
Auger 4.18 Grid ref.	69912/63035 (17.86m OD)

Auger Transect 4 was orientated north-west / south-east and ran from the highest point (Auger 4.1) at the north-west end; down slope to the lowest point (Auger 4.18), where it intersects Auger Transect 3.

Chalk was observed ploughed up to the surface both on top of the slope and on the south facing slope. The presence of the Lower Chalk was confirmed in Auger points 4.3 - 4.5 & 4.7 - 4.9 where the modern ploughsoil directly overlaid the chalk although the upper surface of the chalk was weathered.

Auger points 4.10 - 4.18 identified a silt deposit, which varied from a pale grey on the upper slope (Augers 4.10-4.12) and became progressively browner towards the end of the transect. This silt contained between 5-10% sub rounded chalk fragments which were typically <5mm in size.

The thickness of the silt varied from 0.15m (Auger 4.16), up to 0.54m (Auger 4.11). The silt was fairly consistent in character; although it was not clear whether this all of the deposit was due to hillwash (as suggested by the charcoal flecks in Auger 4.18), or if some of the lower portion of the silt was a Pleistocene Head deposit.

**Auger Transect 5 (Fig. 12)**

Length of Transect	350m
Auger points	5.1 - 5.17
Auger 5.1 Grid ref.	70131/63202 (24.84m OD)
Auger 5.17 Grid ref.	70084/62844 (20.30m OD)

Auger transect was orientated approximately NNW/SSE. The transect runs down a south facing slope into a wide dry valley before rising steeply up the opposite north facing slope to stop just short of the road. The depths down to the chalk varied from 0.32m (Auger hole 5.17) up to 1.68m (Auger hole 5.14). In all auger points except 5.17 the modern ploughsoil overlaid a silt subsoil.

The silt subsoil in auger holes 5.1 - 5.6 is probably a continuation of a similar deposit seen in auger transect 6 and may represent an earlier ploughsoil.

Chalk was encountered in nine of the auger holes and the auger was halted (either due to stones or hard deposits) in four cases.

As would be expected the sequence of deposits were deeper in the bottom of the dry valley (between auger points 5.8 and 5.15). Four auger points had deeper anomalies (5.7, 5.11, 5.14 and 5.15). Generally the subsoil silt was between 0.40m and 0.50m thick and probably represents a hillwash (colluvial) deposit.

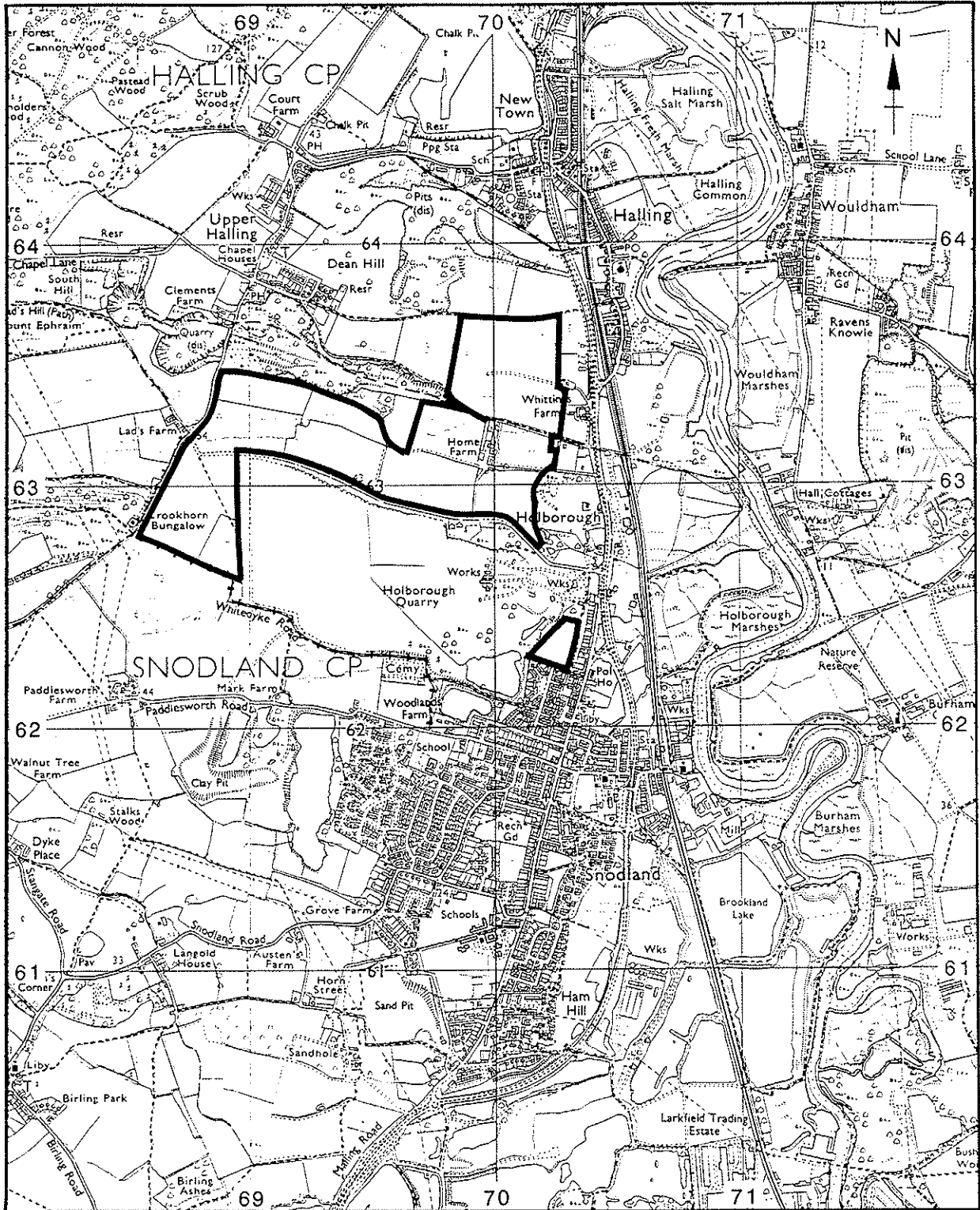
The deeper silt anomalies probably represent head deposits and periglacial features in the chalk.

**Auger Transect 6 (Fig. 13)**

Length of Transect	460m
Auger points	6.1 - 6.24
Auger 6.1 Grid ref.	70270/63310 (23.42m OD)
Auger 6.24 Grid ref.	69805/63420 (45.94m OD)

Auger transect 6 ran approximately east west, starting at Whittings Farm and running west over a slight rise before crossing a dry valley and then rising steeply for the final 100m. Geologically the field is divided into two halves with a clay-silt with flint in the eastern half and chalk exposed in the western half. Auger holes 6.1 - 6.12 were halted which reflects the high percentage of flint in the subsoil which probably represents a 'clay with flints' deposit.

In auger holes 6.1 - 6.7 a silt subsoil was encountered and this could have been a natural silt head deposit or possibly an earlier ploughsoil which varied in depth from 0.11-0.23m. Auger holes 6.8 - 6.12 all contained a reddish brown to orange natural silt subsoil which overlaid the natural chalk. Only auger holes 6.15 and 6.16 suggest a colluvial deposit which was 0.40m thick.



Based on the Ordnance Survey's 1:25000 map of 1989 with the permission of the Controller of Her Majesty's Stationery Office, © Crown copyright. Licence No. AL 854166

scale 1:25000

Site location

Figure 1



Fig 2: Distribution of worked flint

Scale 1 to 6250

1	2	3	4+
▲	▲▲	▲▲▲	▲▲▲▲

Key:

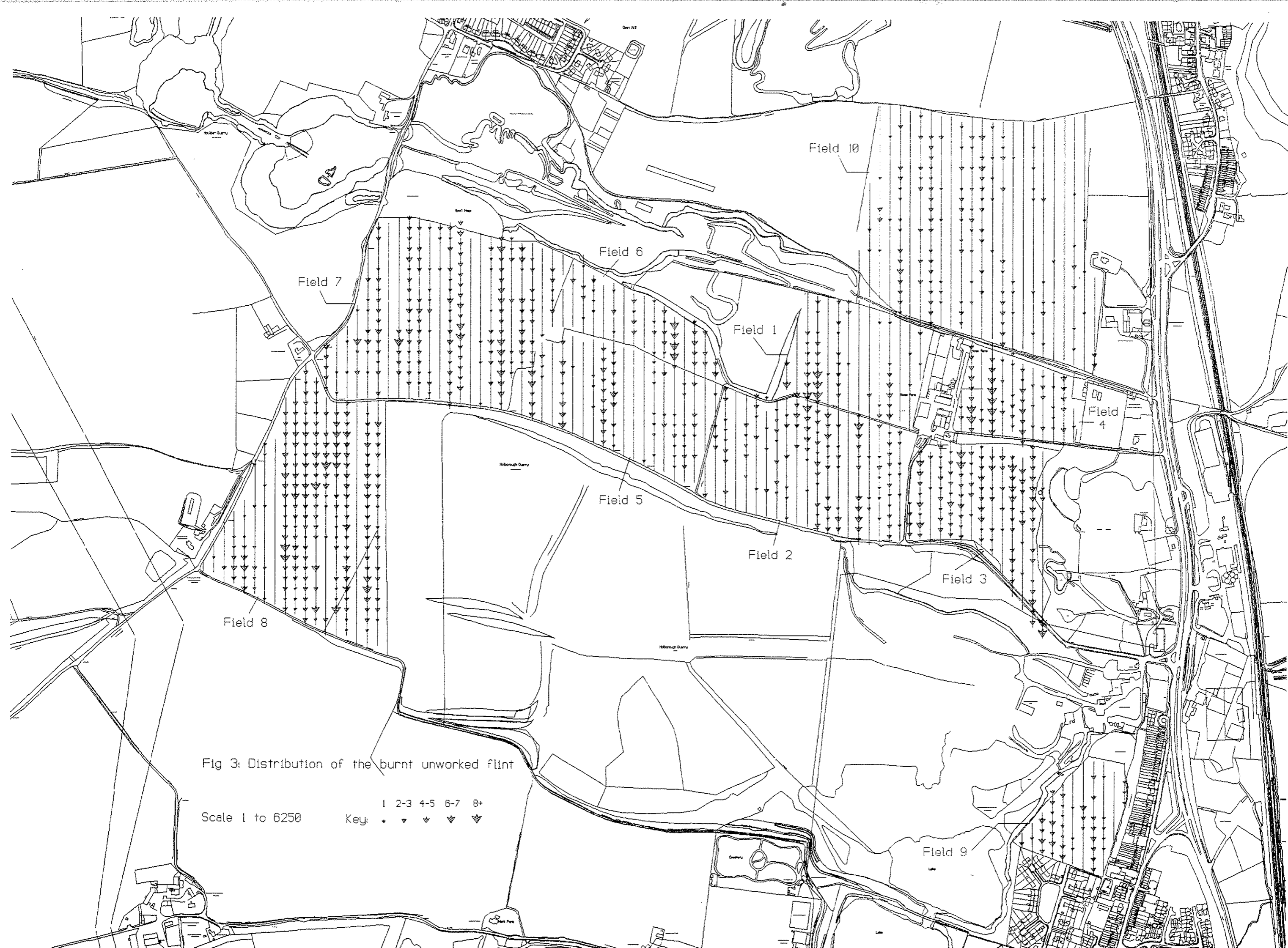


Fig 3: Distribution of the burnt unworked flint

Scale 1 to 6250

Key: 1 2-3 4-5 6-7 8+  
 • ▼ ▽ ▾ ▿



Fig 4: Distribution of later prehistoric pottery

Scale 1 to 6250

Key: 1    2  
 +    +





Fig 5: Distribution of Romano-British pottery

Scale 1 to 6250

Key: |  
\*

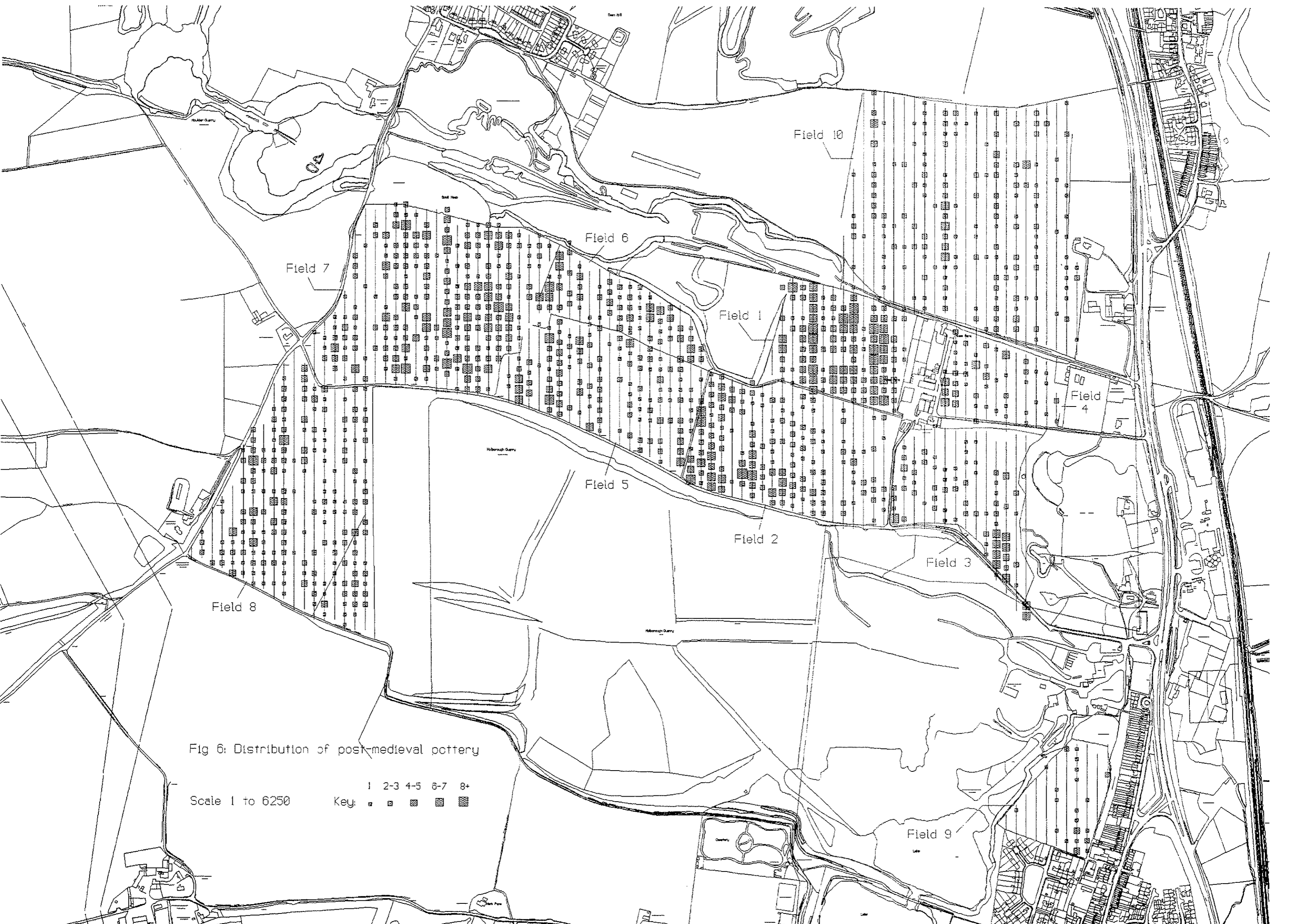


Fig 6: Distribution of post-medieval pottery

Scale 1 to 6250

Key:	1	2-3	4-5	6-7	8+
	□	▤	▥	▧	▨

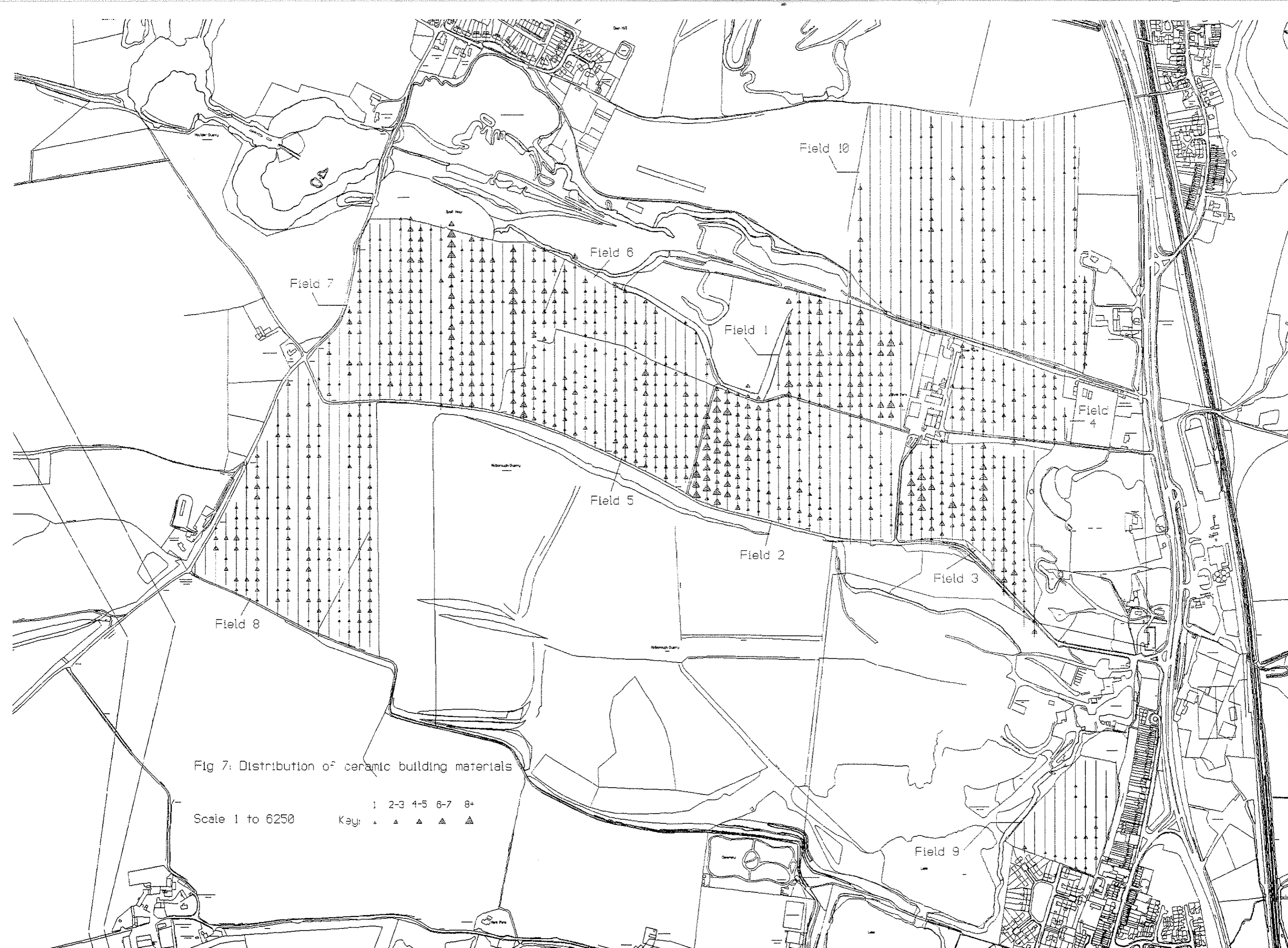
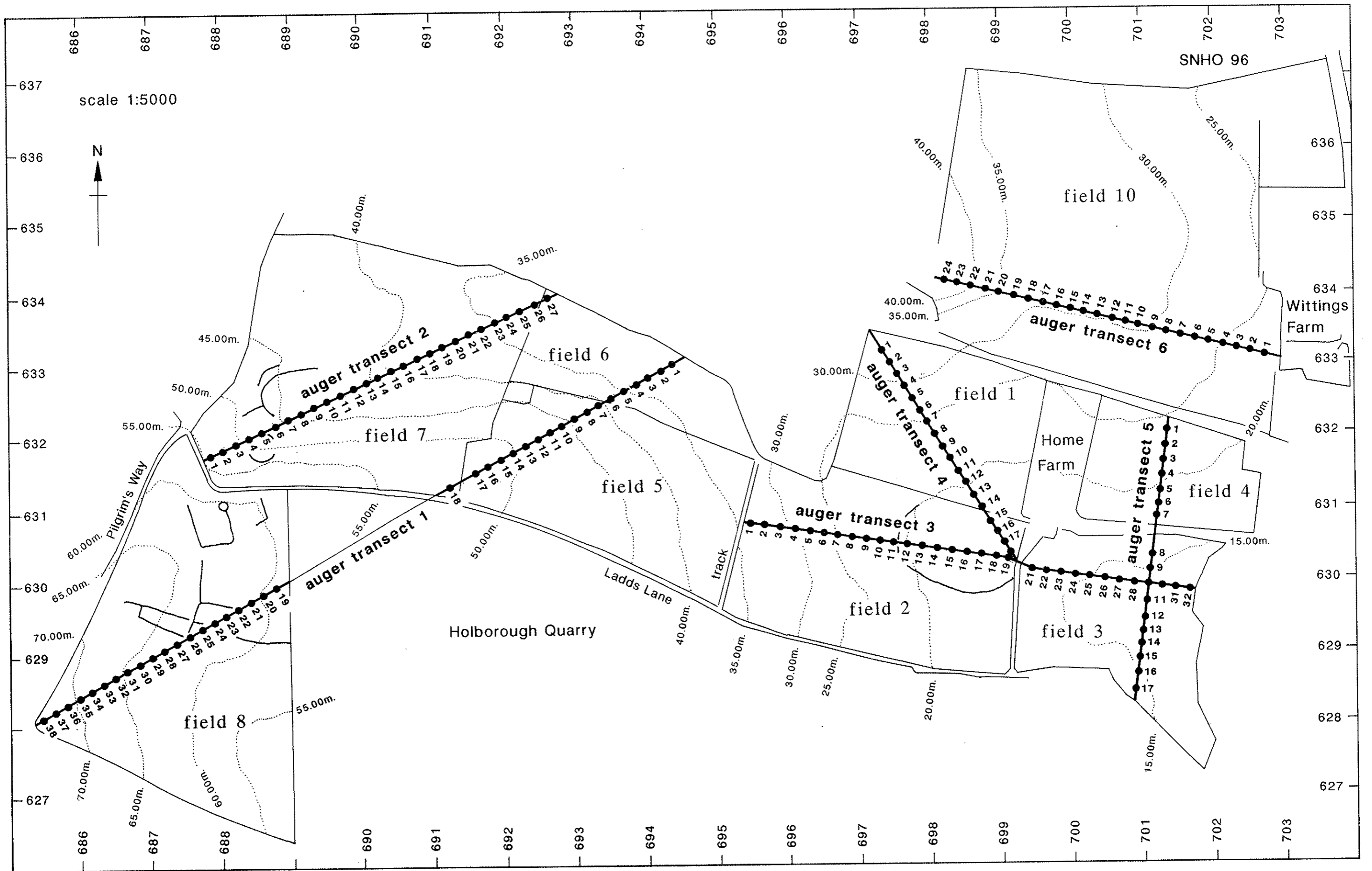


Fig 7: Distribution of ceramic building materials

Scale 1 to 6250

Key: 1 2-3 4-5 6-7 8+  
 ▲ ▲ ▲ ▲ ▲



Location of auger transects and cropmarks (field 9 not shown)

Figure 8

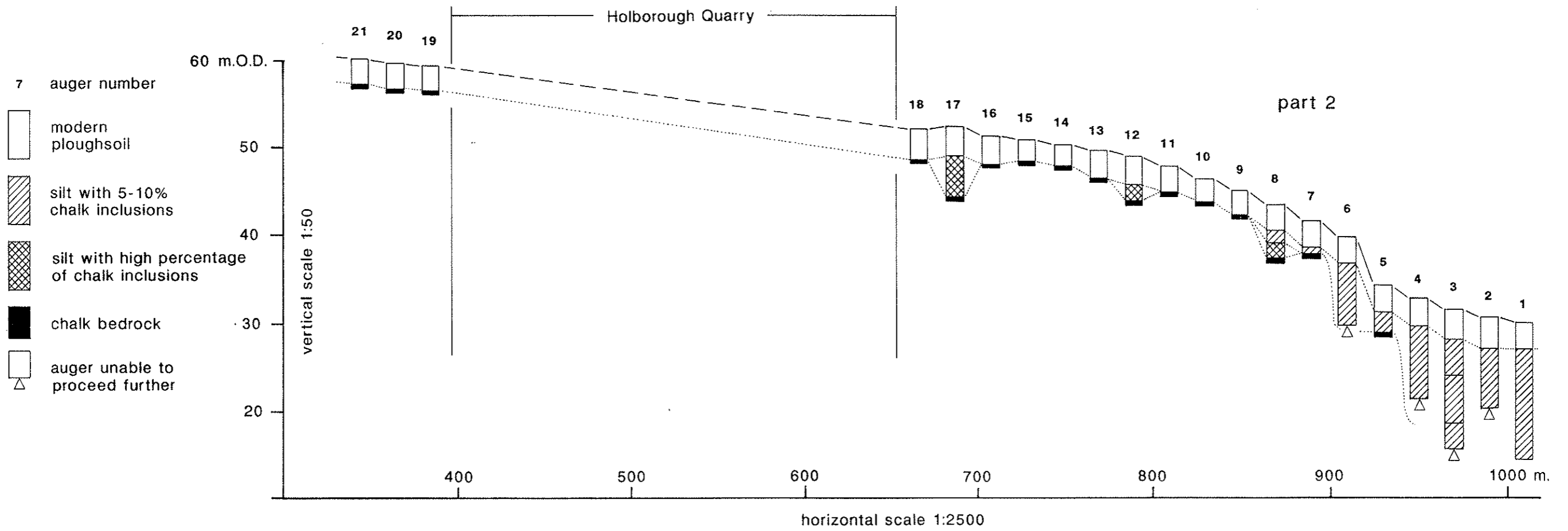
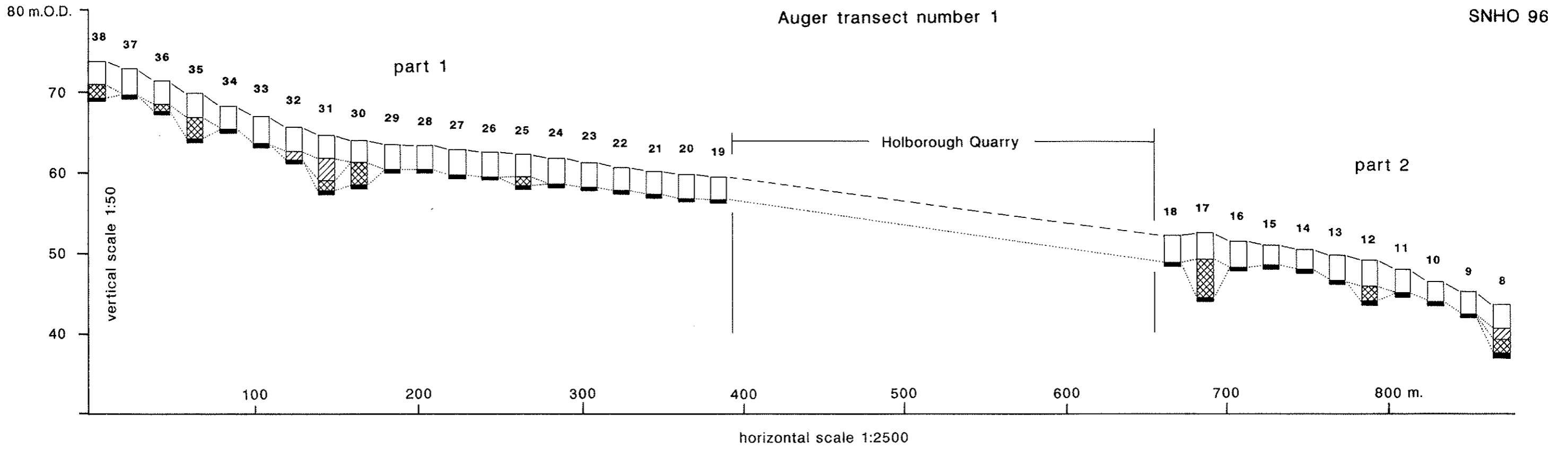


Figure 9

Auger transect number 2

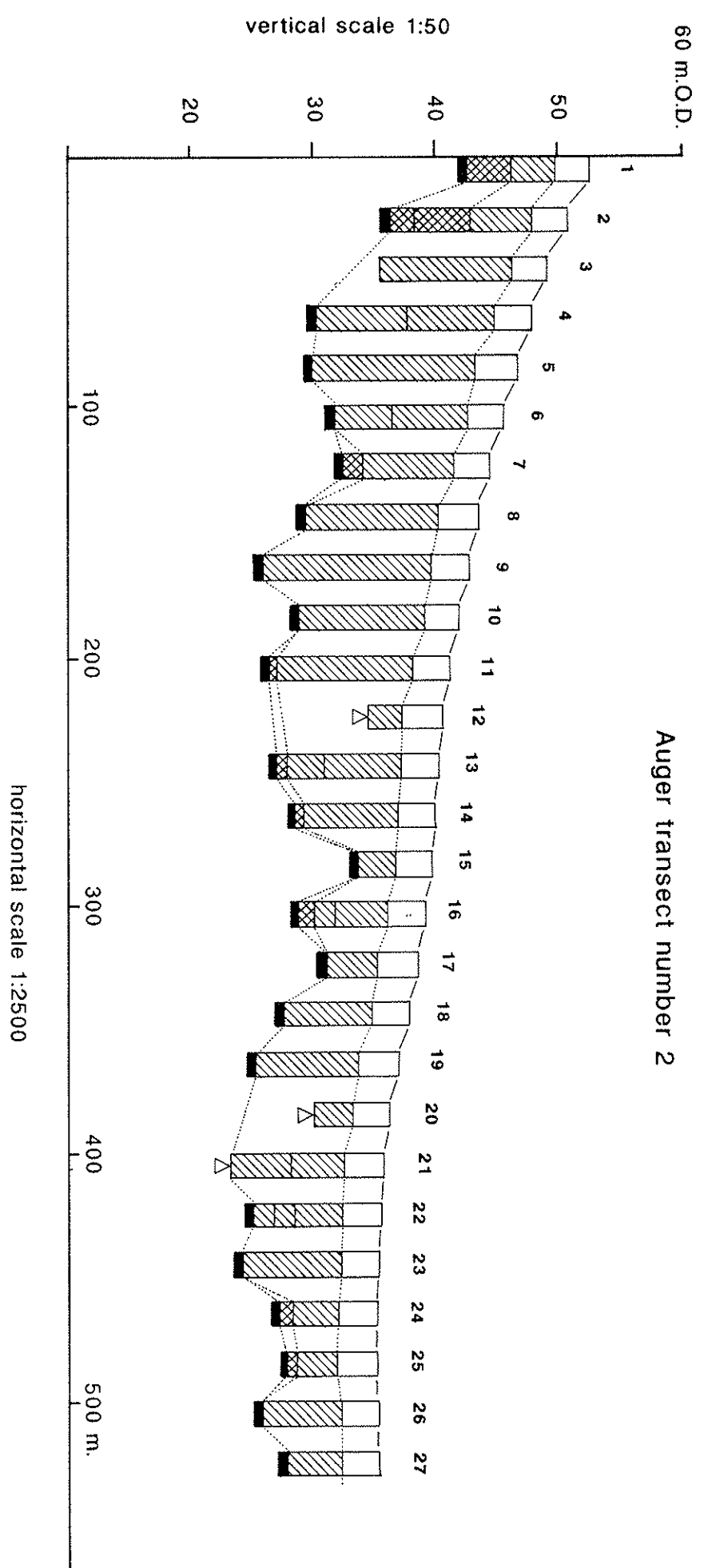


Figure 10

Auger transect number 3

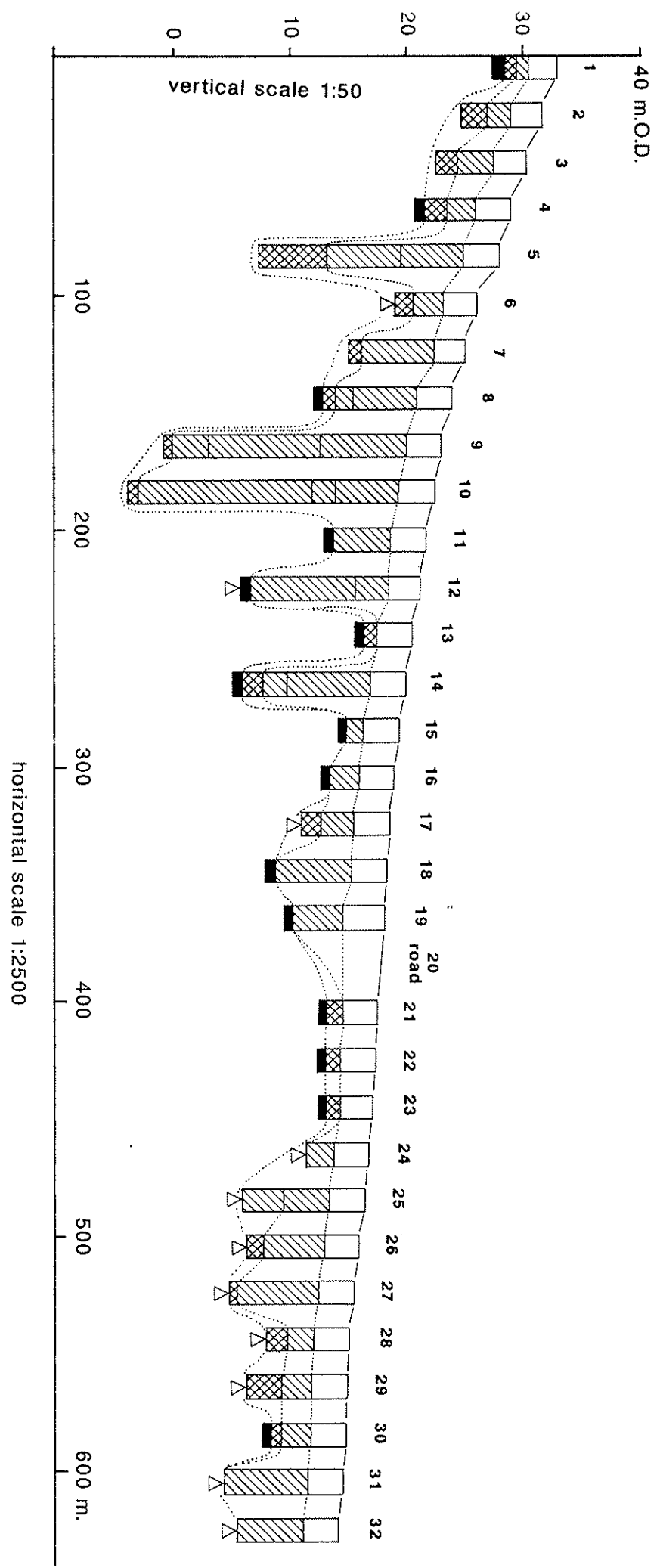
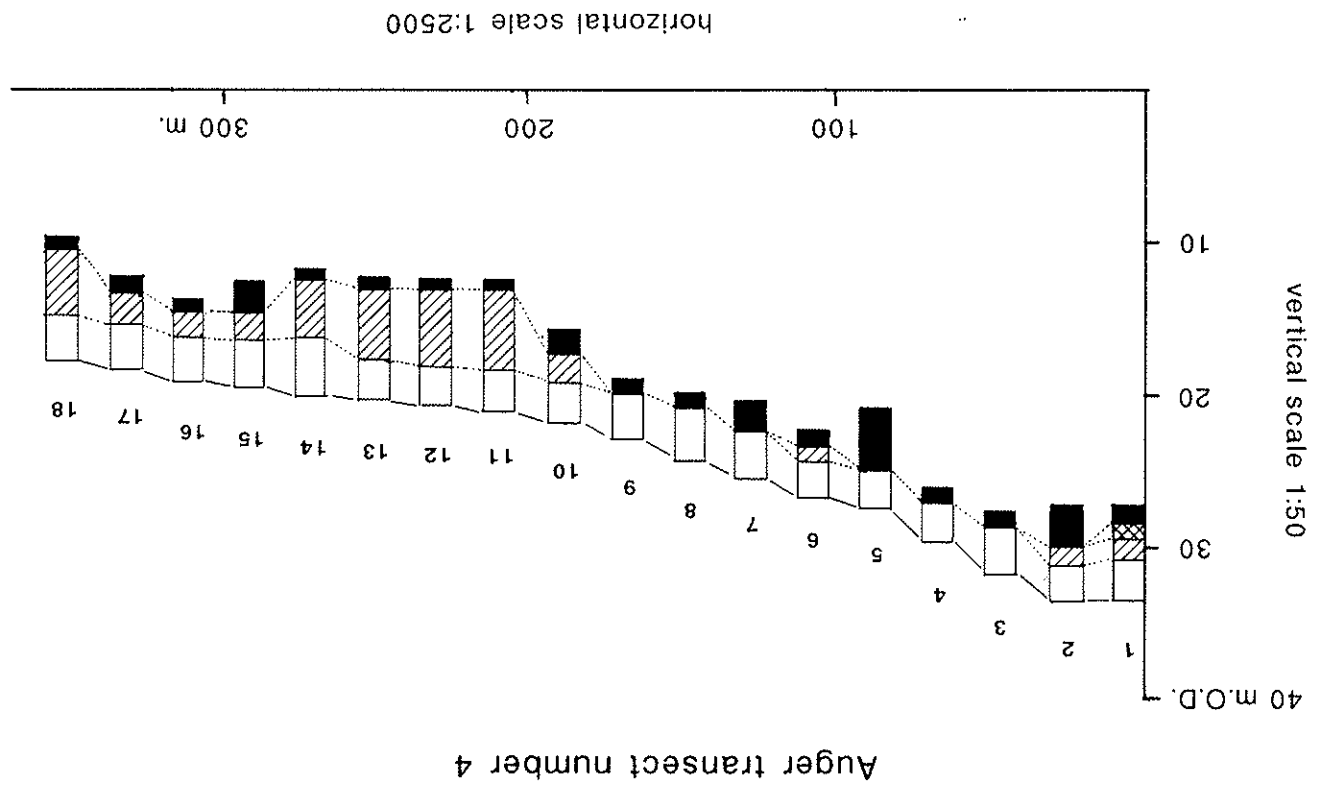
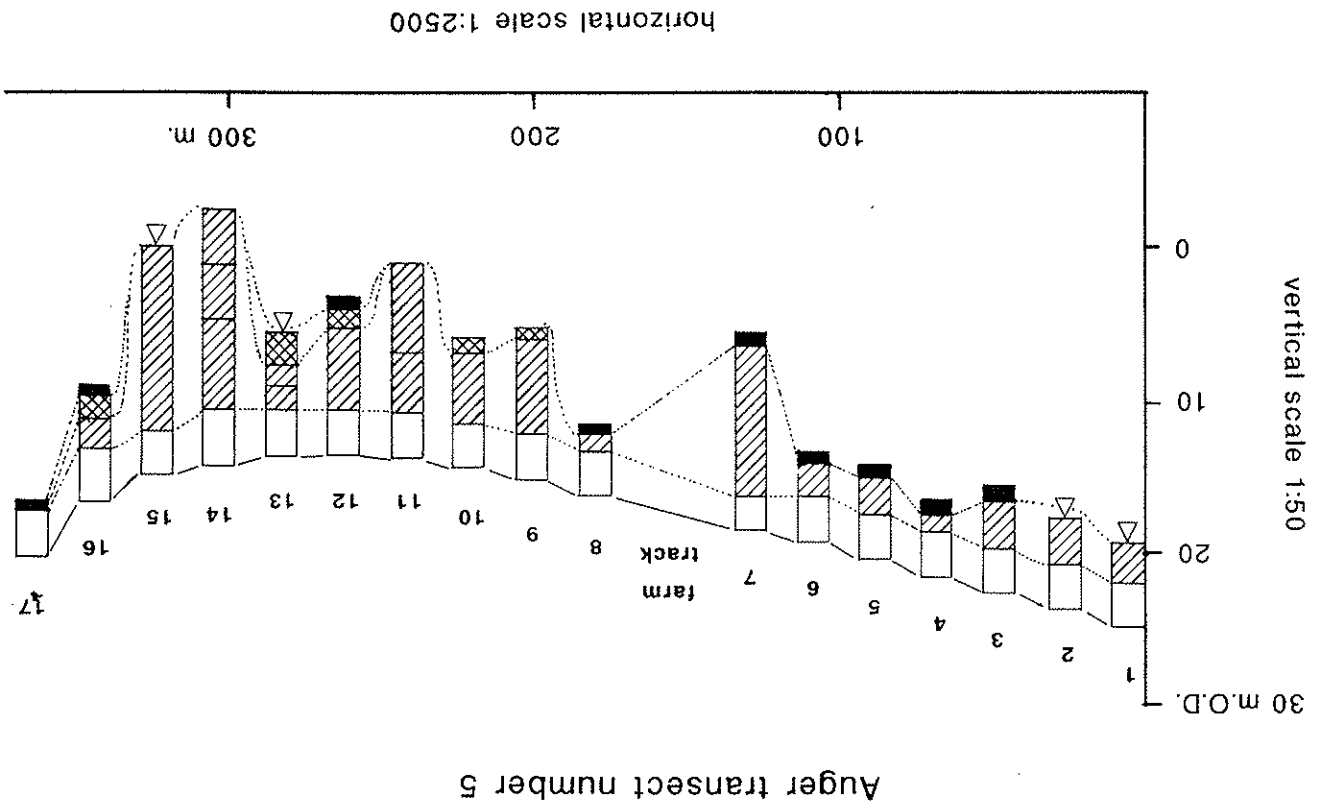


Figure 11

Figure 12





Auger transect number 6

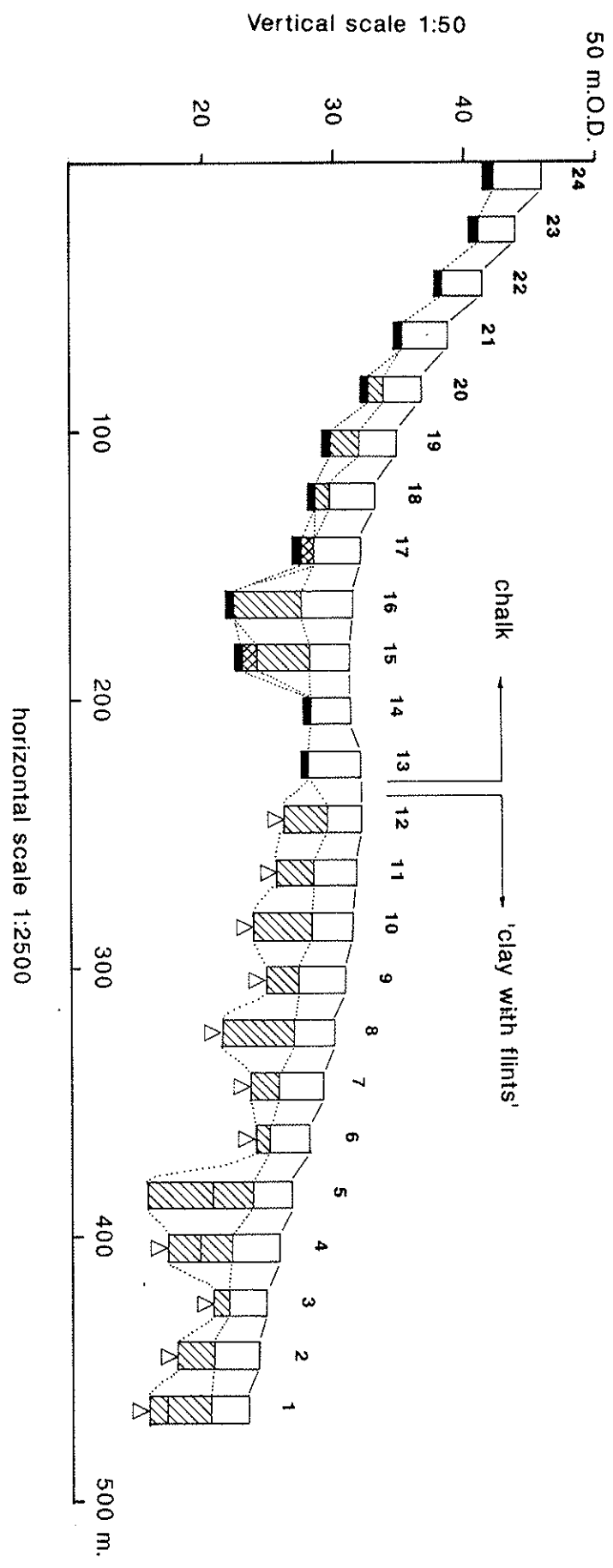
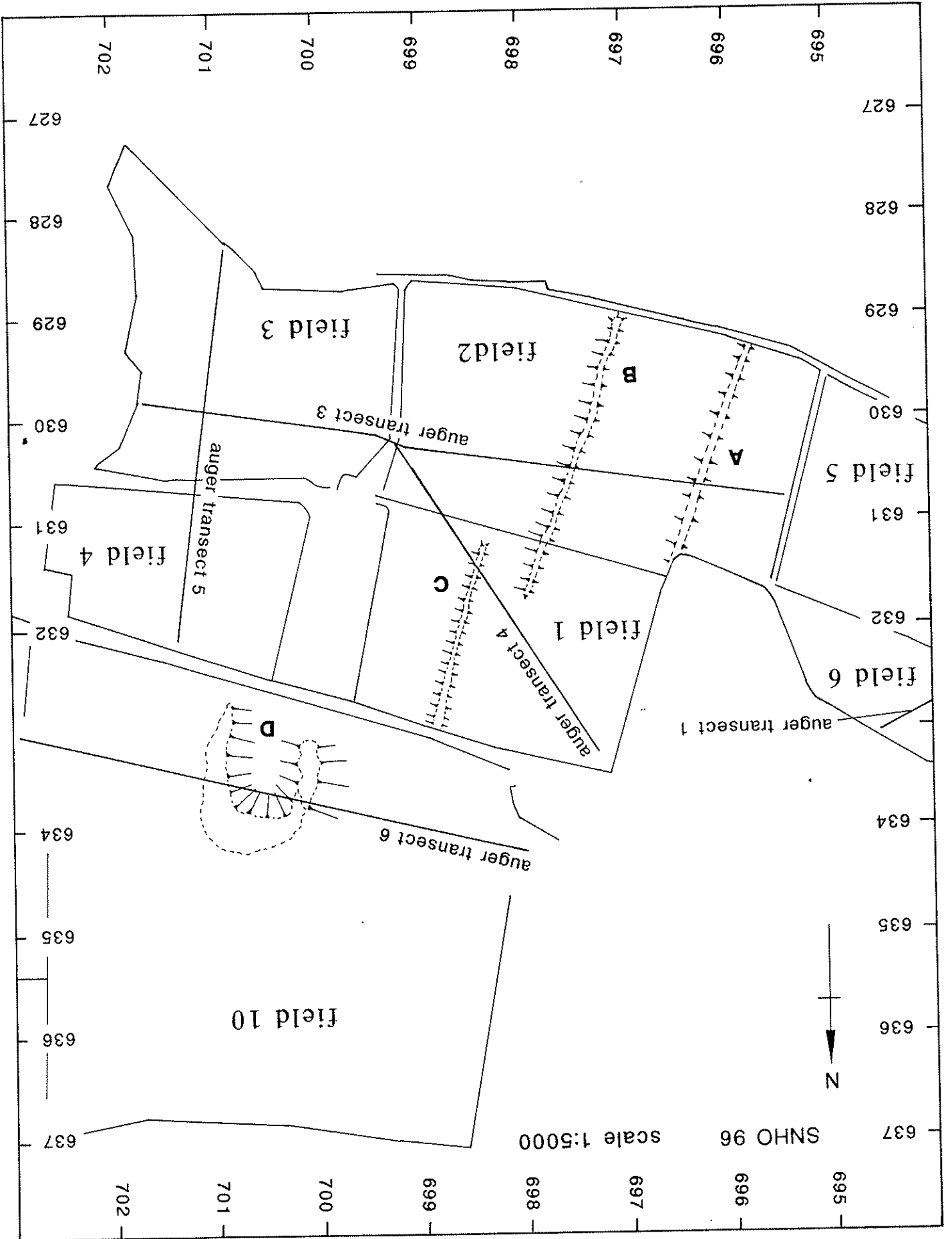
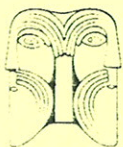


Figure 13

Plot of earthwork survey

Figure 14





## OXFORD ARCHAEOLOGICAL UNIT

Janus House, Osney Mead, Oxford, OX2 0ES  
Telephone: 01865 243888 Fax: 01865 793496



---

Director: David Miles B.A., F.S.A., M.I.F.A.  
Oxford Archaeological Unit Limited. Registered Office: Janus House, Osney Mead  
Registered Charity Number: 285627 Private Limited Company Number: 1618597