

NYCC HER	
SNY	15695
ENY	71
CNY	
Parish	1015
Reed	7/995

ARCHAEOLOGICAL EXCAVATIONS AT R.A.F. CATTERICK NORTH YORKSHIRE, 1994

A PROGRAMME OF RESEARCH ON BEHALF OF

TRAFALGAR HOUSE CONSTRUCTION
MANAGEMENT LTD

By

GeoQuest Associates

CONTENTS

	Page
INTRODUCTION	
Circumstances of the Project	4
Site Location	4
SUMMARY OF ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	4
AIMS AND OBJECTIVES OF THE PROJECT	
Roman Deposits in OA1	6
Roman Deposits in OA2	7
Non Roman Deposits in OA1 and OA2	7
METHODS OF INVESTIGATION	
Desk based Assessment	7
Geophysical Survey	8
Tnal Trenching	11
Open Area Excavations	12
Watching Bnef	13
RESULTS OF THE ARCHAEOLOGICAL EXCAVATIONS	
Notes on the Stratigraphy and Phasing	13
Natural Sub stratum	14
Buned Soil Honzon	14
Phase I	14
Phase II	23
Phase III	33
Phase IV	37
DISCUSSION	38
CONCLUSIONS	41
REFERENCES	43
LIST OF CONTRIBUTORS	44
ACKNOWLEDGEMENTS	44
APPENDIX A The Stratified Pottery	45
APPENDIX B The Small Finds	48
APPENDIX C Principles of Geomagnetic Surveying	50
NOTES	51

SUMMARY

A structured programme of archaeological investigations was conducted in the northern part of the airfield at R A F Catterick, North Yorkshire, in advance of two large scale development projects. Little conclusive evidence was found for human activity on the site before the second half of the Roman period and the vast majority of the features and deposits encountered appeared to derive from the fourth century AD. During the Roman period a cobbled roadway or lane was laid in the extreme north of the site and this preceded the digging of an extensive series of ditch defined enclosures in the area during the fourth century AD. A vast pit, sunk within the enclosure complex, also appeared to have been backfilled during the fourth century AD, although its form was highly suggestive of a type of 'sunken featured building' typically associated with early Anglo Saxon settlement. Later occupation horizons may have been truncated in the early twentieth century when the area was landscaped and turfed over to be transformed into the airfield of R A F Catterick.

INTRODUCTION

Circumstances of the Project

Archaeological investigations were undertaken by GeoQuest Associates, between the beginning of January and the end of May, 1994, in advance of two large scale development projects at the R A F station at Cattenck in North Yorkshire (Figure 1) The impending arrival at the station of a British Army regiment, following their withdrawal from Germany, necessitated the construction of a large area of hard standing for military vehicles and a REME workshop (Areas A and B respectively, Figure 3) GeoQuest Associates were commissioned by the project developers, Trafalgar House Construction Management Limited, to organise and implement an integrated programme of research and fieldwork in order to mitigate the impact of the proposed development projects upon the archaeological resource This programme, along with the work required for the production of this report and a post excavation assessment report (Taylor Wilson, 1995) was funded by the Ministry of Defence An earlier report summarised the project's provisional results ahead of the main post fieldwork analysis (Taylor Wilson, 1994)

Site Location

The development projects were to be sited to the south of Rocks Road, within the northern perimeter of the airfield at R A F Cattenck (NGR SE 246 972) The R A F station is located to the east of the A1 dual carriageway and borders the southern edge of the North Yorkshire village of Catterick (Figure 2) The village developed on the flood plain of the River Swale, whose meandering course lies approximately 0.5 km to the east Part of the western perimeter of the airfield lies along the 55 metre contour and the ground drops away to the east to a height of 46 metres OD at the eastern perimeter of the airfield The area is associated with deep, well drained, coarse, loamy and sandy soils above undifferentiated River Terrace deposits (Soil Survey of England and Wales, 1983) The published British Geological Survey map (sheet No 41) indicates that the latter deposits are underlain by Carboniferous Millstone Grit

SUMMARY OF THE ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

A rather limited amount of evidence exists for human activity in the vicinity of Cattenck prior to the Roman period (P R Wilson, pers comm) Where the A1 bypasses the R A F station it is known that it closely follows the line of the Roman road Dere Street This road was the main north south highway connecting the legionary fortress at York with the forts of the Hadrianic frontier

A series of archaeological excavations, largely undertaken in advance of road developments around Catterick, have established the existence of a Roman roadside village to both the east and west of Dere Street (e.g. Rankov, 1982). This settlement, surrounded by extensive field systems and associated with burial grounds, was apparently distinct from the defended Roman town of Cataractonium which developed on the southern bank of the River Swale, some 2 km to the north (P.R. Wilson, pers. comm.) (Figure 3). The Roman town itself has been the subject of several excavations, most notably an extensive project directed by J.S. Wacher for the Ministry of Works during the late 1950s (Wacher, 1960).

Construction work undertaken in 1939, in the area of the Roman Catholic church at R.A.F. Catterick, revealed the presence of a dwelling which had probably been erected in the fourth century (Hildyard, 1955). The location of this structure, which was also disturbed during the course of routine maintenance in 1966, lies some 0.2 km to the north of the GeoQuest excavations (Figure 3). On both occasions the remains of the Roman structure were shown to have Anglo-Saxon inhumations of the sixth century cut into them (P.R. Wilson, pers. comm.).

Anglian burials were also located, in 1959, on the line of the A1 approximately 0.5 km to the north of Baines Farm, and during excavations conducted in 1981-2 where they were observed cutting into Roman buildings constructed along the eastern edge of Dere Street at Baines Farm (Rankov, 1982). Approximately 0.3 km to the east of the airfield at R.A.F. Catterick, and situated in a bend in the River Swale, are motte and bailey earthworks known as Castle Hills (Figure 3).

AIMS AND OBJECTIVES OF THE PROJECT

The work described in this report was undertaken as a mitigatory response to development proposals within the northern perimeter of the airfield at R.A.F. Catterick. A programme of archaeological evaluation (described below) was carried out in order to establish the degree of survival of any sub-surface archaeological remains in these areas. The evaluation indicated that the area proposed for the construction of the REME workshop appeared to contain sub-surface archaeological remains dating from occupation of the site during the Roman period. While several recent excavations have investigated sections of Dere Street and the associated ribbon development to the south of the Roman town of Cataractonium, evidence for Roman occupation in the area between the roadside village and the River Swale is rather scant, with the exception of the late Roman dwelling discovered on the R.A.F. station in 1939. Therefore, more detailed archaeological investigation, in the form of two open area excavations (Open Areas 1 and 2), was considered to be the correct response to the findings of the evaluation.

Broadly, the main aim of the excavations in Open Areas 1 and 2 (OA1 and 2) was to investigate fully the stratigraphic sequence in order to determine the function of any features or structures encountered and also, where possible, to gain an understanding

of how the area developed over time. The results of the excavations would clearly enhance the Sites and Monuments Record for North Yorkshire.

Roman Deposits in Open Area 1

In OA1 the primary aim of the excavation was to undertake a detailed examination of part of what appeared to be an extensive ditch defined enclosure complex revealed by the initial geophysical survey and then investigated in evaluation Trenches I and J. This complex apparently dated from the second half of the Roman period. While the highest priority for excavation was afforded to the ditches of the enclosure complex, investigation of any associated deposits, such as occupation layers and cut features, such as pits or stake holes, was also considered highly important.

Several rather more specific objectives underlay the excavation in OA1.

- 1 By investigation of the stratigraphic relationships between different sections of the enclosure complex, it was hoped that it would be possible to gain an understanding of how the complex developed during the late Roman period.
- 2 Detailed analysis of the relative quantities and characteristics of ceramic sherds retrieved during excavation of the enclosure ditches and any associated features and deposits, would inevitably play a crucial role in attempting to establish date ranges for distinct phases of the site's occupation. Furthermore, such analysis could conceivably throw light upon the continuity of settlement, or lack of it, in the extra mural part of the Roman settlement in the vicinity of Cattenack. In addition, such study could aid in the formulation of a detailed chronological framework for the Roman ceramic sequence in North Yorkshire.
- 3 It was hoped that processing and analysis of sediment samples collected from well dated, priority contexts would provide detailed information on a variety of social, economic and environmental factors during the Roman period. Although the archaeological deposits present upon the site were not water logged, a substantial amount of evidence would be provided by the presence of carbonised plant remains, a variety of microfossils (such as diatoms and pollen), insect and mollusc remains, as well as bones from small mammals, birds and fish. In addition, the bones of larger mammals, retrieved during hand excavation of individual cut features and deposits, could provide evidence for the practising of crafts or commercial activities, such as bone working or butchery, which often yield characteristic assemblages of bone.
- 4 By detailed examination of the 'small finds' recovered it was hoped that it would be possible to obtain further dating evidence as well as information about a variety of agricultural, industrial and commercial activities which may have been undertaken on or around the site during the Roman period. Such evidence can indicate social or economic status and function, and can therefore have direct implications for the interpretation of the excavated stratigraphic sequence.

Roman Deposits in Open Area 2

In OA2 the primary aim of the excavation was to examine in detail the sequence of stratified deposits apparently dating to the Roman period which had been revealed, during the evaluation, in Trench L. Although the highest priority was afforded to detailed examination of what appeared to be a section of cobbled surface, investigation of any associated deposits, such as occupation layers and cut features, in particular a series of narrow ditches and gullies, was also considered to be of importance.

In principle the specific objectives of the excavation in OA2 were largely similar to those outlined above for OA1. In addition it was hoped that detailed investigation of the stratigraphic sequence, in particular precise determination of the alignment of the cobbled surface, would enable broad associations to be made regarding the excavated deposits and the Roman dwelling known to be situated only 0.2 km to the north.

Non-Roman Deposits in Open Areas 1 and 2

In both OA1 and OA2 the secondary aim was to identify, examine and record any features or deposits derived from phases of the site's utilisation either prior to or since the Roman period. Where it was considered appropriate (i.e. where sufficient dating evidence was recovered) bulk soil samples would be collected from any features or deposits in order to determine their function or origin and to provide evidence of local environment and activities.

METHODS OF INVESTIGATION

The open area excavations at R A F Cattenack were undertaken as a result of the findings of a structured programme of archaeological evaluation designed to assess the impact of the development proposals upon the archaeological resource. This evaluation of the archaeological potential of the threatened areas was commissioned by Trafalgar House Construction Management Limited and undertaken by GeoQuest Associates between January and March 1994. A detailed methods statement for this programme of evaluation has not previously appeared and for this reason one is included in this report.

Desk-based Assessment

A desk based archaeological assessment was undertaken by GeoQuest Associates for the two proposed development areas upon the airfield at R A F Cattenack. The results of this assessment, in the form of a synopsis of the archaeological and historical background to the site, is included above. This study comprised

- 1 A search of the National Archaeological Record (NAR) for Cattenck Pansh held in the Archaeology Section of North Yorkshire County Council's Planning Department
- 2 A search of the Yorkshire Archaeological Service (YAS) Inventory held in the Archaeology Section of North Yorkshire County Council's Planning Department
- 3 A search of the collection of aenal photographs held in the Archaeology Section of North Yorkshire County Council's Planning Department
- 4 A search of cartographic evidence which covered the proposed development areas The Ordnance Survey map editions of 1856 (25 inches to 1 mile), 1913 (6 inches to 1 mile) and 1974 (1:2500) were consulted
- 5 An examination of documentary and published sources pertaining to archaeological investigations in the vicinity of the proposed development areas

Geophysical Survey

Geophysical surveys of Areas A and B were carried out in order to provide subsoil physical maps from which the archaeological potential of the areas could be initially deduced. For archaeological survey, two methods of geophysical investigation are generally employed. Geomagnetic surveying employs a portable magnetometer to detect small perturbations in the Earth's magnetic field caused by changes in underlying magnetic susceptibility or permanent magnetisation. The resistivity method, on the other hand, maps differences in electrical resistance which mainly reflect variations in water content, this technique is particularly suited to the detection of stone structures such as wall footings and roads.

The documentary research indicated that the primary function of the geophysical surveys on the airfield at R A F Cattenck would be to prospect for evidence for settlement and agriculture dating from the Roman and post Roman periods. These remains should consist of ditches, pits and masonry structures characterised by significant contrasts in magnetic susceptibility which, under favourable conditions, will give rise to measurable geomagnetic anomalies. Indeed, previous experience of geomagnetic survey for comparable targets on similar geology (Carboniferous Millstone Gnt and gravel dnft) suggested that magnetic area survey would be a suitable technique for evaluation of the study areas.

Measurements of vertical geomagnetic field gradient were made over a regular grid, using a Geoscan FM36 fluxgate gradiometer with a ST1 sample trigger. A zig zag traverse scheme was employed and data were logged in units of 20x20m at 1.0x0.5m intervals. Part of Area B was subsequently resurveyed at a 0.5x0.5m intervals in order to increase the resolution of archaeological features located by the initial survey. A Geodimeter total station was used to set out the geophysical survey grid and to accurately fix its position in relation to control points identified on a plan of the

airfield Appendix C provides further information about the geophysical techniques employed

The GeoQuest *InSite* Windows program was used to process the geophysical data and produce grey scale images showing the residual geomagnetic anomalies within areas A and B (Figure 4) A Sobel algorithm was used to enhance the contrast of variations in the geophysical data

Geophysical Interpretation

Areas A and B were found to be characterized by weak to moderate geomagnetic anomalies. Locally intense anomalies due to ferrous litter, iron pipes and cable ducts can be seen throughout most of the study area and a particularly high concentration of strongly magnetised material has been detected within the long jump pit (west end of Area A). In places, anomalies due to ferrous litter has hampered the detection of subtle anomalies of archaeological interest

As a first stage in the interpretation the geomagnetic map has been classified into characteristic styles of geophysical terrain as follows

- Green Significant regions of anomalously high magnetic field gradient which might be associated with high susceptibility features such as soil filled ditches or pits
- Blue Areas of anomalously low magnetic field gradient, corresponding to features of low magnetic susceptibility, such as concentrations of gritstone rubble
- Red Dipolar anomalies (paired positive negative) These reflect iron objects with very high susceptibility, such as ploughshares, machine parts and pipes

A geophysical interpretation of the surveys is presented in Figure 5. The surveys have detected the following features, which are labelled f1, enc1, etc in Figure 6

Area A

- 1 The major geophysical feature comprises a network of positive, curvilinear, parallel magnetic lineations forming two distinct sets: one aligned WSW in the area west of the fuel compound and a second, of similar appearance, aligned NNW extending east of the compound. The spacing between the lineations varies from about 2-10m and is more uniform in the area east of the fuel compound. These anomalies are unlikely to reflect the remains of a medieval ridge and furrow field system whose geophysical appearance is generally more uniformly periodic and associated with more intense magnetic susceptibility contrasts. It is therefore concluded that these stations represent large scale soil differentiation caused by the bulldozers and graders which were presumably used to level and prepare the ground for use as an airfield

- 2 The geophysical survey provides evidence that a pair of linear ditches, d1 and d2, traverse the western third of this area near the long jump pit. Ditch d2 appears to be discontinuous and terminates with an inflection towards the north. Both ditches were investigated in trial trenches B and C.
- 3 Several weak, negative magnetic lineations have been detected in the eastern third of this area and probably reflect linear zones of more gravelly soil or subsoil created by the mechanical landscaping process.
- 4 A very weak, arcuate, positive magnetic anomaly, with a radius of about 15m, has been detected at the extreme SE corner of this survey area and was considered to provide tentative evidence for a silted sub-circular ditched enclosure, or ring ditch prior to the test trenching programme (f1, Figure 6).
- 5 Chains of intense magnetic dipoles traverse this area and can almost certainly be ascribed to buried metal pipes or cable ducts.

Area B

It was not possible to survey the part of this area covered by the helipad owing to the intense, random geomagnetic anomalies arising from the tarmac and foundations. In the remainder of the area, however, the geophysical data have provided excellent evidence for numerous features of archaeological interest (Figure 6).

- 1 The area is again characterised by a set of parallel, positive, curvilinear magnetic lineations, here aligned N-S. These have been omitted from the geophysical interpretation diagram of Figure 5 in order not to obscure the presentation of other features.
- 2 The western third of the area is characterised by a set of intersecting positive magnetic lineations which are consistent with ditches containing material of enhanced magnetic susceptibility. Several of these ditches appear to define sub-rectangular enclosures of which the largest, enc1, measures c. 50x30m. An entrance to this enclosure, with rounded terminals, can be seen midway along the NW side. No geophysical anomalies of archaeological interest can be discerned inside this enclosure.
- 3 Of particular interest are a group of strong, positive magnetic lineations which provide excellent evidence for a sub-rectangular ditched enclosure, measuring c. 25x40m, in the NW quadrant of this area, adjacent to the glider path (enc2). Judging by the relative intensity of the geophysical anomalies, this ditch is more substantial and contains material with greater susceptibility enrichment than that forming enc1.
- 4 Several diffuse, positive magnetic anomalies, of possible archaeological interest, are present within enc1 but identification of their geometry and function is not possible from the geophysical data.

- 5 A 2m wide, positive magnetic lineation has been found extending WNW from the helipad towards a point on Rocks Road south of building 302 This anomaly was tentatively interpreted as a ditch prior to the excavation (d3, Figure 6)
- 6 An extremely weak positive anomaly, in the form of an inverted 'U' may represent the ploughed out remains of a third enclosure or may simply reflect soil susceptibility contrasts produced by the airfield landscaping (enc3)
- 7 A number of additional weak geomagnetic lineations have been mapped in this area, some of which appear to reflect ditches connected to, or associated with, enclosures enc1 and enc2
- 8 A circular pattern of positive or dipolar magnetic anomalies, with diameter of 20m, is present in the extreme SE corner of the area and may reflect a ditch or buried utility for the airfield (f2)

Confidence Ratings

Prior to the programmes of trial trenching and area excavation, the following percentage levels of confidence were assigned to the features interpreted from the geophysical surveys

Ditches	d1 60%, d2 60%, d3 65%, d4 50%
Enclosures	enc1 85%, enc2 90%, enc3 20%

Trial Trenching

The results of the non intrusive geomagnetic survey described above were utilised directly in order to locate a series of trial trenches in both proposed development areas The adoption of a strategy which fully integrated techniques of archaeological field evaluation was considered to be the most cost effective means of assessing the archaeological potential of such relatively large development areas Furthermore, a combination of the results of the geomagnetic survey and the trial trenching would clearly enable as detailed an assessment as possible to be made of the depth, quality and extent of any sub surface archaeological remains

During a three week period fifteen trial trenches (A N on Figure 3) were excavated by earth moving machinery under the direct supervision of a suitably qualified archaeologist It was estimated that the trial trenches accounted for approximately 2% of the surface area of the proposed development areas Following careful removal of the overlying turf the trenches were extended through the underlying deposits until the surface of the natural sub stratum was revealed At least one section within each trench was cleaned by hand with small tools, photographed and then drawn to scale The trenches were then backfilled and the turf reinstated according to the instructions of Trafalgar House Construction Management Limited

Open Area Excavations

The results of the geomagnetic survey and the subsequent programme of small scale strategic excavation appeared to indicate that Area A (the location proposed for the construction of an area of hard standing for military vehicles) was devoid of significant archaeological remains. In contrast, however, Area B (the area proposed for the construction of a REME workshop) appeared to contain significant sub surface remains, relating to settlement, and dating from occupation of the site during the Roman period.

In the light of these findings a set of proposals for further archaeological work at R A F Cattenck were formulated. Consultation between GeoQuest Associates, Trafalgar House Construction Management Limited and the County Archaeologist for North Yorkshire (acting in his capacity as curator of the archaeological resource) defined a schedule of further investigation. Firstly, it was agreed that further geomagnetic survey to the south and west of Area B should be undertaken in an attempt to place the remains in a wider context. Secondly, it was clear that further archaeological excavation would be necessary within Area B in order to mitigate the impact of the proposed development project upon the archaeological resource. Therefore, it was agreed that two areas should be investigated in detail, by open area excavation, within the limits of Area B (OA1 and OA2 on Figure 3).

Although both the depth and degree of preservation of stratified archaeological deposits encountered during the trial trenching (in Trenches I, J, K and L) was not particularly great, the site was clearly of some importance given the apparent spatial extent, as indicated by the geophysical survey, of the remains. The significance of the site was further enhanced by the fact that it clearly offered the first opportunity to investigate, in a controlled manner, archaeological deposits possibly associated with the Roman dwelling located, on two separate occasions, only 0.2 km to the north. Furthermore, complete destruction of the surviving archaeological deposits, given their depth of burial, would be the certain outcome of the proposed construction work.

A team of six experienced field archaeologists was recruited to undertake two open area excavations within Area B. Excavation in OA1 commenced in mid March and continued until early May at which point work in OA2 began. The fieldwork was terminated on May 25th 1994.

OA1 was an irregularly shaped area, up to 60 metres long (N-S) and up to 30 metres wide (E-W). The position and extent of OA1 was determined by the fact that the proposed construction of the REME workshop directly threatened the survival of archaeological remains revealed initially by geomagnetic survey and subsequently during the trial trenching (in Trenches I and J).

OA2 was a rectangular extension (40 metres long and 10 metres wide) to evaluation Trench L. Rather enigmatic archaeological remains were revealed in Trench L and further investigation, in the form of more extensive open area excavation, was considered appropriate. The results of geomagnetic survey in the area to the north of

Trench L were largely unusable due to the presence of vehicles parked adjacent to the airfield's perimeter fence

Earth moving machinery was used (under the direct guidance of the supervising archaeologist) to strip off the turf, topsoil and an extensive homogeneous soil horizon which sealed the underlying archaeological deposits. The latter horizon was probably deposited as a result of the creation of the airfield at R A F Cattenack and the landscaping associated with this would undoubtedly account for the differential degree of survival of the stratified deposits in OA1 and OA2. In the former, the majority of the archaeological stratigraphy had been truncated to the top of the natural sand and gravel deposits leaving only the lower sections of a series of ditches, defining part of a rectilinear enclosure complex, and a number of other cut features intact. In contrast, in the northern part of OA2, around 0.30m of stratified pre twentieth century deposits survived, although in the south of this area rather less remained.

All subsequent excavation was undertaken by hand. The GeoQuest modified version of the Museum of London system for the recording of archaeological deposits was employed (Spence, 1990).

Watching Brief

Ground stripping in advance of construction in both Areas A and B was monitored by a suitably qualified archaeologist. Little additional information was obtained from this work. The results of the geophysical survey and trial trenching in Area A were largely confirmed in that the area was apparently devoid of archaeological remains. In Area B further evidence of the cobbled surface, investigated during excavations in OA2, was observed. The surface continued to the south east beyond the limit of Trench L for a distance of c. 20.0m. Presumably further remains of the surface to the south had been removed as a result of the twentieth century ground levelling.

RESULTS OF THE ARCHAEOLOGICAL EXCAVATIONS

Notes on the Stratigraphy and Phasing

- 1 During the fieldwork, discrete stratigraphic entities (e.g. a cut, a fill) were assigned individual context numbers and these are indicated in the following text as [#]. Within this report archaeological features and deposits have been organised into broad stratigraphic phases and these are indicated by Roman numerals and their sub-division into sub-groups/text sections by Arabic numerals (e.g. IV.3). Features and deposits were generally assigned to phases by consideration of their stratigraphic relationships in conjunction with any dating evidence available from ceramics or other diagnostic artefacts. The stratigraphic sequence could have been further sub-divided but this seemed inappropriate given the limited nature of the data (Taylor Wilson, 1995). Furthermore, to do so would risk obscuring what is after all a relatively simple and straightforward sequence, as one might expect given its rural setting.

- 2 Figures 7 and 8 are base plans of OA1 and OA2 respectively. These illustrate the form of cut features investigated during the excavations. Figures 9 and 10 are interpretative phase plans of OA1 and OA2 respectively. In these colour has been used with discretion in an attempt to draw out interpretations of the archaeological evidence.
- 3 In OA1 a number of features were revealed, after machine stripping, which cut into the natural sub stratum but were not directly related to other archaeological deposits. In these cases, where stratigraphic evidence was of little assistance and dating evidence was either non-existent or rather ambiguous, phasing was necessarily subjective.
- 4 In the following text the extensive site archive is summarised by passages in reduced text. For the reader wishing only a quick overview, the site sequence is summarised in the discussion sections for the individual phases and in the overall discussion.

Natural Sub-stratum

The underlying natural sub stratum which was observed in all evaluation trenches as well as in OA1 and OA2 generally consisted of poorly sorted rounded and sub rounded gravels and cobbles mixed with medium to coarse dark yellowish brown sand. The surface of the natural sub stratum was recorded at a maximum height in Trench N of +55.02m OD and at a minimum height in the north of Trench L of +51.07m OD. This difference in elevation was reflected in the downslope from west to east apparent at ground level across the project area.

Buried Soil Horizon

A soft dark brown sandy clay loam ([65] and [70]) with 25% small and medium rounded sub rounded and sub angular gravels and sub rounded cobbles surviving to a maximum depth of 0.34m was observed in section in Trench I (Figure 11). This deposit appeared to be a buried soil horizon representing the earliest soil formation upon the exposed surface of the natural sub stratum. This deposit was not observed in any other evaluation trench or to any significant extent in either OA1 or OA2. It had presumably been subject to horizontal truncation and this may well have occurred as a result of relatively recent ground levelling activity (Phase IV 1).

Phase I

I 1 177 179 180 181 185 186 187 190

A linear gully [181]/[187] was revealed in the southern part of OA1. The feature ran N-S for a total length of c. 13.40m. To the south (as [187]) it met the limit of excavation while to the north beyond the line of an intrusive ditch [67] the feature (as [181]) appeared to be truncated by a later ditch [142]. Typically the feature was 0.40m wide and had a maximum depth of 0.25m. At the top its edges broke sharply falling (at 60 degrees) with smooth generally straight sides to meet a flatish base of width 0.10m generally with a sharp break of slope. To the north where the gully was revealed in the base of the N-S oriented ditch [179] the upper edges had presumably been truncated by that feature. The base of the feature sloped downwards from 52.37 to 52.23m OD (from south to north). Where it met the

limit of excavation to the south the upper edge of the gully cutting into the surface of the natural sub-stratum was rather ill defined and the feature was only a few centimetres deep

Four sections of the feature m total c 7 0m (compsning 52% of the exposed length) were excavated It was filled [180]/[185]/[186]/[190] by a soft dark greyish brown sandy silt loam with 2% small and medium sub rounded and sub angular gravels and 1% flecks of charcoal

A linear N S oriented ditch [179] was revealed in the southern part of OA1 A total length of 6 10m of the ditch was exposed and excavated It had apparently been truncated at either end to the north by a ditch [142] and to the south by an amorphous feature [171] The ditch was 1 75m wide and had a maximum depth of 0 25m At the top its edges broke sharply falling (at 25 degrees) with smooth slightly concave sides to meet a flattish base (at c 52 38m OD) of width c 0 90m with a sharp or gradual break of slope It was filled [177] by a fnable dark brown sandy silt loam with 30% small and medium sub rounded gravels and rounded and sub rounded cobbles

It is difficult to establish the status and/or function of these features due to their limited exposure and the lack of matenal culture recovered dunnng their excavation They may well represent the results of crude attempts to drain the area which would undoubtedly have been prone to episodic flooding by the River Swale to the east Their penod of ongin is uncertain and they could equally denve from prehistonc times the early Roman penod or even immediately pnor to the cutting of Phase II features dunnng the second half of the Roman penod

I 2 115 116 163 171 172 199 200 201 202 203 204 208 209 214 230

Traces of a distinct deposit [172] were observed in plan overlying the natural sub stratum towards the centre of OA1 The matrix of the deposit was a fnable dark brown sandy silt loam with 10% small and medium sub rounded gravels It was difficult to define the extent of this deposit to the north and west A single nm sherd from a flanged bowl m an unidentifiable Roman (possibly second century) coarse ware was recovered dunnng hand excavation of the deposit The deposit may have survived after machine clearance due to its formation by silting action within a depression in the surface of the natural sub stratum

[202] may have been the base of the cut for a circular stake hole sealed below [172] in OA1 It was 0 30m in diameter and 70mm deep At the top its edges broke sharply to fall (at 45 degrees) with smooth concave sides to meet a concave base (at 52 42m OD) with an imperceptible break of slope It was filled [201] by a fnable dark brown silt loam with 10% small sub rounded gravels

[204] may have been the base of the cut for a circular stake hole sealed below [172] and 1 20m to the north east of [202] in OA1 It was 0 25m in diameter and 100mm deep At the top its edges broke sharply to fall (at 65 degrees) with smooth straight sides to meet a slightly concave base (at 52 36m OD) with a sharp break of slope It was filled [203] by a fnable dark brown silt loam with 10% small sub rounded gravels

[209] may have been the base of the cut for an oval stake hole sealed below [172] and 2 10m to the south west of [202] in OA1 It measured 0 45m by 0 30m and was up to 100mm deep At the top its edges broke sharply to fall (at 70 degrees) with smooth straight sides to meet a slightly concave base (at 52 40m OD) with a sharp break of slope It was filled [208] by a fnable very dark greyish brown silt loam with 20% small and medium sub rounded gravels

The senes of possible stake holes descnbed above ([202] [204] and [209]) were revealed below layer [172] and may well have been contemporary Cutting into the natural sub stratum they formed a line and could conceivably have housed wooden stakes forming part of a simple structure Their penod of ongin is uncertain although given their stratigraphic position they could conceivably denve from prehistonc times or the first half of the Roman penod

[116] was the base of a cut for a sub circular pit in the southern part of OA1. The feature lay along the southern edge of and was truncated by a later ditch [114]. It measured 1.90m by 1.20m and was up to 0.22m deep. At the top its edges broke imperceptibly to fall (at 10 degrees) with undulating slightly concave sides towards the edge of the intrusive ditch [114]. It was filled [115] by a soft dark brown sandy silt loam with up to 20% small and medium sub rounded gravels and sub rounded cobbles and 1% flecks of charcoal. Medium and large angular limestones (8.75kg m total) apparently roughly dressed were also recovered during hand excavation. The latter may well have actually been included within the fill of the intrusive ditch [114] whose southern edge was rather difficult to distinguish.

[171] was the base of the cut for an elongated rather irregularly shaped feature (possibly a pit) within OA1. The feature lay along the northern edge of and was truncated by a later ditch [67]. The feature measured 4.6m by 1.9m and was up to 0.10m deep. At the top its edges broke gradually to fall (at 15 degrees) with smooth slightly concave sides to meet a slightly concave base (at 52.43m OD) with a gradual break of slope. It was filled [163] by a friable very dark greyish brown silt loam with 10% small and medium sub rounded gravels and up to 10% medium angular limestones. A broken iron arrowhead and a single base sherd from a Cantley Cattenck mortarium (after the late third century) were recovered during hand excavation of the deposit.

[200] was the cut of a shallow irregularly shaped feature (possibly a pit) in OA1. Sealed beneath the accumulation deposit [172] this feature lay along the northern edge of and was truncated by a later ditch [67]. It measured 2.6m by 1.2m and was 0.10m deep. At the top its edges broke gradually and fell (at 10 degrees) with smooth slightly concave sides to meet a concave base (at 52.31m OD) with a gradual break of slope. It was filled [199] by a soft dark brown sandy loam with 5% small sub rounded gravels. The deposit was mottled with distinctive very dark brown lenses which may have been formed as a result of burrowing by a small animal.

[230] was the cut of a shallow irregularly shaped feature (possibly a pit) in OA1. This feature was located c. 0.80m to the north west of [204] and lay along the southern edge of and was truncated by a later ditch [69]. It measured up to 2.70m wide tapering towards the south to a rounded end 0.30m wide. To the south west the edge of this feature was most convincing being relatively straight and at the top breaking gradually to fall (at c. 10 degrees) with a smooth slightly concave side to meet a flattish base with a gradual break of slope. The southern half of this feature was excavated and its base sloped downwards from 52.49 to 52.42m OD (from north to south). It was filled [214] by a friable dark brown silt loam with 30% small and medium sub rounded gravels. A single body sherd with groove decoration in Calcite gntted ware (possibly fourth century) was recovered.

None of the deposits or features described in this text section were in all honesty particularly convincing as being of archaeological origin. Certainly with the possible exception of the three putative stake hole cuts it is difficult to comprehend their status and/or function. The small amount of material culture recovered could easily have been intrusive by one means or another into the various deposits.

I 3 86 87 175 176 178 182 183 184

[87] was the base of a cut for a sub circular pit in the western end of Trench lex. It measured 1.35m by 1.10m and was up to 0.10m deep. At the top its edges broke sharply to fall (at 30 degrees) with smooth slightly concave sides to meet a roughly flat base (at 52.40m OD) with a sharp break of slope. It was filled [86] by a dark brown silt loam with 1% small sub angular and sub rounded gravels, 1% flecks of charcoal and 1% small lumps of greyish green sandy clay. A small number of fragments of friable and eroded animal bone which could not be identified to species were recovered from the deposit by hand excavation. The feature may have been an animal burial.

[176] was the cut of a sub circular pit within OA1. It was located to the north of and was probably truncated by a later ditch [168]. The feature had a maximum diameter of 2.25m and was up to 0.43m deep. At the top its edges broke sharply to fall (at 50 degrees to the north west and 25 degrees in the south east) with smooth slightly concave sides to meet a generally flattish circular base (at 52.30m OD) with a gradual to sharp break of slope. It was filled [175] by a soft dark brown sandy silt loam with

10% small and medium rounded and sub rounded gravels and rounded and sub rounded cobbles and 5% flecks of charcoal (these being concentrated towards the base of the cut) Large angular limestones (27 5kg m total) apparently roughly dressed were recovered during hand excavation In addition a small amount of fragile and eroded animal bone which could not be identified to species were recovered from the deposit A 1kg test sub-sample (assigned priority 2) was processed for assessment of its content of biological remains The washover contained 1.2 cubic centimetres of charcoal to 15mm some burnt soil and a (possible) iron object Any biological remains recovered were of no interpretative significance

[184] was the cut of a sub circular pit within OA1 The feature lay to the west of and with its eastern side truncated by a later gully [145]/[162] It measured 1.50m by 1.20m and was up to 0.25m deep At the top its edges broke sharply to fall (at 65 degrees) with smooth slightly concave sides to meet a flattish base (at 52.36m OD) with a sharp break of slope The lower part of the cut which appeared to be lined with a dark brownish red burnt clay deposit was filled [183] by a fragile very dark greyish brown to black sandy silt loam with 10% small and medium sub rounded gravels and 1% flecks of charcoal A 1kg test sub sample (assigned priority 2) was processed for assessment of its content of biological remains and although no such remains were recovered the analysis revealed some burnt soil and fragments of burnt brick/tile or daub Bulk sieving of 2.8kg of the deposit recovered no biological remains or artefacts The upper fill [182] was a fragile dark brown sandy silt loam with 40% small and medium sub rounded gravels A patch of fragile dark brown sandy silt loam [178] with 10% small rounded and sub rounded gravels and 20% flecks and small fragments of charcoal was revealed during hand excavation in the base of the intrusive gully [162] A 1kg test sub sample (assigned priority 1) was processed for assessment of its content of biological remains and the washover contained 5 cubic centimetres of charcoal to 10mm Bulk sieving of 3.9kg of the deposit recovered a few small fragments of charcoal There is a strong likelihood that [178] was deposited residually as a result of the intrusion of [162] through the earlier pit [184]

The three pits described in this text section represent the most convincing evidence for the earliest human activity within OA1 Unfortunately none contained datable artefacts and [87] revealed below machine clearance in Trench Iex had no stratigraphic association with other features or deposits Although [176] was truncated by a Phase II enclosure ditch it is by no means certain that the pit pre dated the earliest cutting of that feature and this of course cannot be resolved by stratigraphic evidence The fact that the deposit filling [176] contained large angular limestones typical of those found in relatively large quantities within the fills of the later cuttings of the Phase II enclosure ditches would appear to suggest that the feature may in fact have been contemporary with the land management undertaken upon the site during the fourth century

I 4 108 109 260 277 278 279 284 287 289 293 295 296 297 298 299 301 302 303 304 305 306 307

[109]/[299] was the cut of a linear E W oriented ditch located initially in the northern end of Trench L and subsequently towards the eastern end of OA2 A total length of 2.60m of the feature was revealed although the northern edge partially met the limit of excavation and it was 1.30m wide and had a maximum depth of 0.22m At the top its edges broke sharply to fall (at 45 degrees) with smooth generally straight or slightly concave sides to meet a flattish base (at c 51.19m OD) of maximum width 0.85m generally with a sharp break of slope It was filled [108]/[293] by a soft dark brown sandy clay loam with 15% small and medium rounded sub rounded and sub angular gravels 5% dark reddish brown iron pan concretions and 1% small and medium sub angular sandstones A 1kg test sub-sample of [293] (assigned priority 2) was processed for assessment of its content of biological remains and although no such remains were recovered the washover contained less than 1 cubic centimetre of charcoal per 10mm Bulk sieving of 3.65kg of the deposit recovered 2 fragments of unidentifiable mammal bone in addition to a small amount recovered during hand excavation

[302] was the cut of a linear NW SE oriented ditch/gully in OA2 To the north west the feature appeared to be c 4.65m wide and although generally exposed to only a limited extent (within a 1.0m wide evaluation trench Trench O at the conclusion of the excavation) it did appear that it narrowed

to the south east. At the top its edges where exposed broke sharply to fall (at 30 degrees) with smooth straight or slightly stepped sides to meet a flattish base of maximum width 3.30m. Within the base of the feature there appeared to have been laid in a deliberate manner rounded and sub-rounded cobbles and sub rounded medium gravels with c. 5% small and medium angular sandstones and limestones. The latter appeared to constitute a formal surface [301] within the base of the cut.

[302] was filled [289] by a soft very dark greyish brown sandy silt loam with 10% medium and large angular probably roughly dressed limestones, 5% small and medium rounded and sub-rounded gravels and sub rounded cobbles and 1% flecks of charcoal. A 1kg test sub sample (assigned priority 1) was processed for assessment of its content of biological remains and the washover contained less than 1 cubic centimetre of charcoal per 5mm, traces of invertebrate cuticle, a single charred henbane (*Hyoscyamus niger*) seed (possibly of ancient origin) as well as a single sheep or goat upper molar. Limited hand excavation of the deposit (in the 1.0m wide evaluation Trench O) recovered 11 fragments of animal bone of which only two could be identified to species: cattle (1) and horse (1). In addition a single body sherd in Calcite gntted ware (possibly fourth century) was recovered by hand excavation. [289] had presumably accumulated in or been deliberately dumped into the ditch following its abandonment.

The latter feature ([302]) may well have been dug in order to perform a drainage function and this would presumably explain the presence of the consolidated surface laid within its base. It is not inconceivable that features [302] and [109]/[299] were one and the same. Certainly their form and relative alignment strongly support this conjecture. However if this were the case then not only did the feature narrow considerably towards the east but the cobble lining was absent in the narrower section.

[287] initially appeared to be the cut of an irregularly shaped pit located towards the eastern end of OA2. Reconsideration of the form of this feature has thrown up the alternative interpretation that this was actually two intercutting features filled by deposits which differed little in appearance. Both features had been truncated to the west by a later ditch [264] and to the east by a later pit [294]. The northernmost of these two features was an E-W oriented ditch or gully 0.90m wide and up to 0.25m deep. The top of the feature's northern edge broke sharply to fall (at 45 degrees) with a smooth slightly concave side to meet an undulating base (at c. 51.10m OD) with a gradual break of slope. Only the lower c. 100mm of the southern edge survived. It seems likely that this gully was the same feature as [109]/[299] which as described above may well have been a continuation of [302].

To the south the remainder of what was [287] was a sinuous edge running NE-SW for a length of c. 2.40m. At the top the edge broke gradually to fall (at 30 degrees) with a smooth slightly concave side to meet a flat base (at 51.21m OD) with a gradual break of slope. It seems likely that this feature presumably a shallow pit of maximum depth 0.20m post dated the earlier gully to the north and was thus responsible for the truncation of the upper part of the southern edge to the latter. [287] was filled [279] by a soft very dark greyish brown silt loam with 20% small and medium rounded and sub rounded gravels. Excavation of the feature produced 29 fragments of animal bone of which only two could be identified to species: cattle (1) and horse (1).

A sinuous ditch [277] was revealed towards the south of OA2 cutting into the surface of the natural substratum. This feature was clearly evident in the geomagnetic survey as a strong positive magnetic anomaly (Figure 6). The feature aligned E-W was traced for a length of c. 15.0m and it met the limit of excavation to both the west and the east. Its maximum width was c. 1.60m and it had a maximum depth at its eastern end of 0.15m. At the western end the top edges of the feature broke sharply to fall (at 45 degrees) with generally smooth straight sides to meet a flattish base with a gradual break of slope. At the eastern end the break of slope was imperceptible at both the top and base of the feature. The base of the feature sloped downwards from 51.36 to 51.26m OD (from west to east). It was filled [260] by a loosely compacted dark brown sandy loam with 40% small and medium rounded and sub rounded gravels and 1% flecks of charcoal. Hand excavation of the feature recovered 45 fragments of animal bone of which 11 could be identified to species: horse (3), cattle (7) and pig (1). 8 sherds of pottery were also recovered including a flanged nm sherd in Nene Valley ware (an imitation of samian Drag 36 form dating from the late third to mid fourth century) and neck sherds in Calcite gntted ware (possibly third or fourth century). Some of the pottery in particular the Nene Valley ware may have

been deposited intrusively into this feature. The feature may well have served a crude drainage function or could conceivably have been dug to demarcate plots of land of different usage.

[284] was the cut of a sub oval pit located close to the northern limit of excavation in OA2. To the south east the feature terminated in a butt end 0.40m wide. From this location it ran to the north west for a length of 0.80m and was then truncated by a later ditch [264]. The feature was up to 0.20m deep. At the top its edges broke sharply to fall (at 50 degrees) with smooth concave sides to meet a concave base (at 51.12m OD) with a gradual break of slope. It was filled [278] by a friable very dark greyish brown silt loam with 20% small and medium sub-rounded gravels.

[295] was the cut of an oval post pit located towards the northern end of OA2 sealed beneath the later spread [258]. To the north the feature met the E/W oriented limit of excavation established by the insertion of a 1.0m wide test slot at the conclusion of the excavation. The feature measured 0.37m by 0.31m and was up to 0.17m deep. At the top its edges broke sharply to fall (at 35 degrees) with smooth straight sides to meet a concave base (at 51.18m OD) with an imperceptible break of slope. It was filled [296] by a loose dark brown silt loam with 15% small rounded and sub rounded gravels.

[306] was the cut of a sub circular post pit located towards the centre of OA2 sealed beneath the later spread [258]. The feature measured c. 0.50m in diameter and had a maximum depth of 0.28m. At the top its edges broke sharply to fall (at 50 degrees) with smooth straight sides to meet a flattish base (at 51.09m OD) with a sharp or gradual break of slope. The eastern edge of the feature had a V shaped extension some 0.40m long with smooth straight sides falling steeply to meet a flat base with a gradual break of slope. The feature had a primary fill [305] up to 0.12m deep of a soft dark yellowish brown sandy loam with up to 15% pea gnt small and medium rounded and sub rounded gravels and sub rounded cobbles. A sample of [305] (assigned priority 3) was considered unsuitable for general biological analysis following the compilation of a laboratory description. The secondary fill of the feature [304] was a soft very dark greyish brown silt loam with 50% flecks of charcoal and 5% pea gnt and small rounded and sub rounded gravels. A 1kg test sub sample (assigned priority 2) was processed for assessment of its content of biological remains and the washover contained c. 10 cubic centimetres per 25mm and a few fragments of bone to 10mm. Bulk sieving of 3.6kg of the deposit recovered a small fragment of brick or tile and 5 small fragments of charcoal. A small amount of friable and eroded animal bone which could not be identified to species was recovered from the deposit during excavation.

[307] was the cut of a sub circular post pit located at the northern end of OA2 and sealed beneath the later spread [258]. It measured 0.59m by 0.63m and was up to 0.15m deep. At the top its edges broke sharply to fall with smooth slightly concave sides to meet a flattish base (at 51.25m OD) with a sharp break of slope. To the west the sides were almost vertical whereas to the south and north they were rather less steep. The feature was filled [303] by a friable dark brown loamy sand with 25% small and medium rounded and sub rounded gravels and sub rounded cobbles.

[297] was the cut of a sub oval pit located towards the eastern end of OA2. It was truncated to the north west by the later ditch [264]. The feature was up to 0.19m deep and measured 0.57m by 1.17m with a further c. 1.0m of the very base of the cut being discernible within the base of the cut of [264] to the north west. The feature had been horizontally truncated by the later pit [287]. At the top its edges broke sharply to fall (at 40 degrees) with smooth concave sides to meet a flattish base (at 50.92m OD) with a gradual break of slope. It was filled [298] by a loose very dark greyish brown sandy loam with 10% rounded and sub rounded gravels and 5% flecks of charcoal. A small amount of friable and eroded animal bone which could not be identified to species was recovered during hand excavation of the deposit.

I 5 93 94 95 96 110 258 265

[110]/[258] was an extensive spread of medium rounded and sub rounded gravels sub rounded cobbles and medium and large angular apparently roughly dressed limestones. The cobbles and limestones were generally within a matrix c. 0.20m deep of soft dark brown sandy loam or sandy silt loam with 1% flecks of charcoal. These elements had apparently been laid in a deliberate attempt to

form a relatively robust surface possibly for a crude road track or yard. The surface oriented SE NW was revealed for a length of 23.5m within Trench L and OA2. At its south eastern extent the surface lay at 51.50m OD and at its north western extent it lay at 51.46m OD thereby indicating a relatively consistent elevation over the observed length. It had a maximum width of 8.40m having been truncated to the north by later ditches [268] and [271] and pit [272]. To the south the deposit appeared to fill a shallow lip in the natural sub stratum. In Trench L this edge was numbered [94] and the deposit itself was numbered [93].

Amongst the pottery recovered during excavation of [110]/[258] were a pedestal base sherd and two body sherds in Nene Valley ware with black colour coat and a body sherd from a beaker in the same ware with orange colour coat (all after the late second century). Also recovered were a base sherd from a bowl or dish in Black Burnished (Type 2) ware (second to third century), a base sherd in Calcite gntted ware (possibly third or fourth century) and a scrap of Central Gaulish samian ware (second century). In addition 5 small abraded fragments of bnck or tile were recovered. More than 216 fragments of animal bone were recovered during excavation of [93]/[110]/[258] of which 42 could be identified to species: horse (8), cattle (26), caprovid (7) and red deer (1). Also recovered during hand excavation were two broken iron knife blades, an iron nail and a fine example of a penannular copper alloy brooch. The terminals of the brooch were decorated with zoomorphic forms and although its pin was complete it did not articulate. While penannular brooches were manufactured throughout the Roman period this example is probably from the third or fourth century.

[265] was an accumulation deposit spread SE NW for a length of up to 8.50m and up to 3.20m wide. It consisted of soft dark brown sandy loam with 5% pea gnt, small and medium sub rounded and sub angular gravels, 1% flecks of charcoal, 1% flecks of bnck. The deposit which was revealed below cleaning in the northern end of OA2 overlay [258] with the result that many elements of the latter were incorporated within [265]. A single nm sherd from a wide mouth bowl in East Yorkshire Grey ware (after the late third century) was recovered during hand excavation of [265] along with residual pottery including a sherd of Central Gaulish samian ware (second century). More than 275 fragments of animal bone were recovered during excavation of [265] of which 26 could be identified to species: horse (3), cattle (13), caprovid (8), pig (1) and dog (1). Also recovered during excavation of the deposit were a fragment of industrial waste and a lump of lead thought to be a run off. Bulk sieving of a 5.6kg sample of [265] (assigned priority 3) recovered further fragments of bone all unidentifiable to species.

[95] may have been the base of the cut for a sub circular pit revealed adjacent to the western limit of excavation in Trench L. The feature measured 1.90m (NS) by 0.85m (EW) and was up to 0.10m deep. At the top its edges broke gradually to fall (at 30 degrees) with smooth concave sides to meet a flattish base with a gradual break of slope. It was filled [96] by a very dark greyish brown sandy loam with up to 15% small and medium rounded and sub rounded gravels and sub rounded cobbles. Hand excavation of the feature recovered 37 fragments of animal bone of which 9 were identifiable to species: horse (4), cattle (3) and caprovid (2). During excavation of this feature it was difficult to distinguish its edges and it is likely that it may have been merely a disturbance possibly the result of animal burrowing within the earlier deposit [110].

I 6 255 272 274 275 285 286 300 308

[274] was the cut of a sub oval pit in the north western corner of OA2. The feature measured 1.30m by 0.65m and was up to 0.30m deep. At the top its edges broke sharply as they cut into the natural sub stratum to fall (at 60 degrees) with smooth straight sides to meet a flattish base (at c 50.65m OD) with a sharp break of slope. To the north the side of the feature was rather more concave in shape and fell less steeply (at 45 degrees). It was filled [275] by a soft very dark greyish brown sandy clay loam with 20% rounded and sub rounded boulders and large angular limestones (apparently roughly dressed) up to 10% flecks and small fragments of charcoal and 1% flecks of burnt daub. A 1kg test sub sample (assigned priority 1) from [275] was processed for assessment of its content of biological remains and although no such remains were recovered the washover contained about 20 cubic centimetres of charcoal per 10mm and a trace of bone to 15mm. Bulk sieving of 2.5kg of the deposit produced 4 fragments of iron, 2 fragments of slag and a few very small fragments of charcoal. This

feature may well have been utilised in a simple industrial process perhaps as a slag or charcoal pit in a crude furnace

[300] was the cut of a linear SE NW oriented slot located some 0.20m to the north west of cut [274]. A length of 2.0m of the feature which was 0.27m wide and up to 0.16m deep was revealed cutting into the surface of the natural sub stratum. The feature met the limit of excavation to the north and terminated in a butt end to the south. At the top its edges broke generally sharply to fall (at 70 degrees) with smooth straight sides to meet a flat base (at c 51.00m OD) generally with a sharp break of slope. It was filled [308] by a soft very dark greyish brown sandy silt loam with 5% flecks of charcoal and 1% small and medium rounded and sub rounded gravels. This feature may well have been cut as a foundation trench for a narrow wall in a simple structure and could have been associated with the putative furnace mentioned above.

[285] may have been the base of the cut for a stake hole some 0.15m to the north of pit [274]. The feature was circular in shape of diameter c 0.20m and was 50mm deep. At the top its edges cutting into the surface of the natural sub stratum broke sharply to fall (at 30 degrees) with smooth concave sides to meet a concave base (at 50.92m OD) with an imperceptible break of slope. It was filled [286] by a soft dark brown sandy silt loam with up to 40% flecks and small fragments of charcoal and 5% peagnt. A distinct burnt arc was observed within the natural sub stratum around the northern edge of the feature.

[272] was an irregularly shaped cut (probably a pit) located in the north western corner of OA2. Precise dimensions of the feature were uncertain since to the north west it met the limit of excavation and to the north and east it had apparently been truncated by a later ditch [268]. The feature had a maximum depth of c 0.20m. To the south the top edge of the feature (cutting into the earlier spread [258]) broke gradually to fall (at 15 degrees) with an undulating side to meet an uneven base (at c 51.05m OD) with a gradual break of slope. The earlier features [275], [285] and [300] were revealed in the base of the cut. It was filled [255] by a soft very dark greyish brown sandy silt loam with 5% flecks of charcoal, 5% small and medium rounded and sub rounded gravels and sub rounded cobbles and 1% sub rounded boulders. Dunning hand excavation of the feature 54 fragments of animal bone were recovered. Of these only six could be identified to species: cattle (4), caprovid (1) and pig (1). An iron nail and a broken iron knife were also recovered. A 1kg test sub sample (assigned priority 2) of [255] was processed for assessment of its content of biological remains and although no such remains were recovered the washover contained flecks and small fragments to 10mm of charcoal and small fragments of burnt soil or daub to 25mm. Bulk sieving of 1.8kg of the deposit recovered a small fragment of brick/tile along with 5 small fragments of charcoal.

Given the limited exposure of [272] it is difficult to understand precisely its original function unless it may be interpreted as a crude pit dug in order to rob out the contents of features [274], [285] and [300]. The latter three features a pit, possible wall trench and stake hole may well have been related in some form of proto industrial activity.

1 7 106 107 252 253 254 266 267

[107] was the cut of a linear NE SW oriented feature located in the northern end of Trench L. The feature butt ended to the north and met the limit of excavation to the south in total a length of 1.50m was revealed. It had a maximum depth of 0.10m. At the top its edges broke sharply to fall (at 45 degrees) with smooth slightly concave sides to meet a flattish base (at 51.02m OD) of maximum width 0.20m with a gradual break of slope. It was filled [106] by a soft dark brown sandy silt loam with 80% small and medium rounded sub rounded and sub angular gravels, sub rounded cobbles, medium and large angular sandstones and 1% flecks of charcoal. The upper edges of the feature were extremely indistinct as it cut through the earlier spread [110] and it may well have been formed as the result of animal burrowing.

[267] was the cut of a sinuous gully revealed adjacent to the southern limit of excavation in OA2. To the north the feature terminated in a bulbous butt end of width c 0.40m. From this location it ran SSE for a length of 2.60m to meet the limit of excavation. At this point the feature appeared to be either

terminating in a butt end or alternatively turning to the SW to continue. The feature was typically 0.30m wide and up to 0.10m deep. Towards the north it had been cut through by a later gully [254]. At the top the edges broke gradually to fall (at 30 degrees) with smooth concave sides to meet a concave base (at 51.38m OD) with an imperceptible break of slope. It was filled [266] with a loose dark brown sandy loam with 20% small and medium rounded and sub rounded gravels and 1% flecks and small fragments of charcoal. One large angular limestone was also included within the deposit. The shallow and rather sinuous form of this feature was highly suggestive of an animal burrow.

[254] was the cut of a rather irregular curvilinear gully revealed adjacent to the southern limit of excavation in OA2. To the SE the feature terminated in a butt end of width 0.28m and from this location it ran NW with a rather sinuous form for a length of 7.20m. It then curved sharply to the SW and continued for a length of 1.0m before meeting the limit of excavation. The width of the feature varied from 0.18m to 0.54m and it attained a maximum depth of 0.16m. At the top its edges generally broke sharply to fall (at an angle of between 30 and 80 degrees) with extremely irregular straight or concave sides to meet an undulating base (between 51.31 and 51.47m OD) with an imperceptible break of slope. It was filled [253] by a loose dark brown sandy silt loam with 20% small rounded and sub rounded gravels and 1% flecks and small fragments of charcoal. Hand excavation of the deposit recovered 5 body sherds in a (possible) Organic tempered ware (of uncertain date) in addition to a small amount of fragile and eroded animal bone which was not identifiable to species.

Located at intervals along the length of [254] and apparently embedded within [253] were a series of medium and large angular possibly roughly dressed limestones and sub angular and sub rounded sandstones [252]. These stones appeared to have been deliberately placed along the length of the gully and this gave the impression that the feature may have acted as a boundary or demarcation line. Although part of the southern edge of [258] did appear to respect the line of the gully this was probably as a result of the truncation of that deposit to the south. Given its highly irregular form it is rather more likely that the feature was formed as a result of animal burrowing.

Phase I Discussion

Little can be said, even in broad terms, concerning the function of many of the features which have been assigned to this phase of activity. Problems relating to the interpretation of the cut features in this phase, and indeed this is generally true for the stratigraphic sequence as a whole, are compounded by the degree of horizontal truncation to the area, which has presumably removed their associated (horizontal) strata.

It would appear that human activity on the site in the early part of the Roman period was extremely limited. The possible flood plain drainage gullies of I 1, along with the putative proto industrial activity represented by the pits of I 3 and the features of I 6 could, given their stratigraphic position, conceivably derive from the first two centuries of the Roman occupation or earlier. However it is impossible to suggest a period of origin for these features and deposits with any degree of certainty given the limited amount of material culture recovered during their excavation. Furthermore, there is rather more evidence (as discussed above in the narrative for Phase I 3) to suggest that at least one of these features may well be contemporary with the Phase II enclosure ditches, which are more securely dated to the fourth century.

In OA2 the features and deposits assigned to Phase I represent the first concentration of human activity upon the site. The extensive cobbled surface of Phase I 5, probably in use after the late second century, post dates a sequence (Phase I 4) of small pits

and gullies, the functions of which generally remain elusive. Some of the latter features are of rather ambiguous date. Although it is by no means certain, the cobbled surface may well have been associated with the late Roman dwelling, investigated in 1939 and 1966, some 0.2km to the north (Hildyard, 1955). The orientation of the feature would certainly seem to support this conjecture. Certainly the laying down of the cobbled surface represents a major enterprise and one must question whether or not an individual household would be able to sponsor such an endeavour (unless it was of relatively high status).

Phase II

II 1 69 81 85 98 136 137 159 160 215 216 218 220 222 228 247

[69]/[85]/[98]/[137]/[160]/[216] was the cut of a ditch apparently defining part of a rectilinear enclosure revealed initially in Trenches I and Ix and subsequently in OA1. The ditch ran NW SE ([160] and [216]) for a length of c. 9.0m before turning at right angles ([137]) to run NE SW ([69]) for a length of c. 19.0m. The feature again turned through 90 degrees ([85]) to resume a SE NW orientation for a length of 3.0m before meeting the limit of excavation at the west of OA1 ([98]). When first cut the feature probably terminated in a butt end to the north. However, re-cutting of the ditch (Phase II 5) had apparently removed all evidence for the primary cut at the feature's northern extent. When first cut this ditch may have been at least 1.50m wide although re-cutting of the feature made determination of the dimensions of the primary cut difficult. The ditch survived to a maximum depth of 0.50m.

The top edges of this primary cut were generally not visible but the sides of the feature appeared generally smooth, straight or slightly stepped, falling (at 50 degrees) to meet a flattish base which was up to 0.40m wide with a gradual break of slope. The base of the ditch varied in height along the c. 31.0m length revealed between a maximum of 52.38m OD ([137]) and a minimum of 51.95m OD ([69]).

The ditch was filled [81]/[136]/[159]/[215]/[218]/[220]/[222]/[228]/[247] by a soft dark brown or dark greyish brown sandy silt loam with up to 35% small and medium rounded, sub rounded and sub angular gravels, sub rounded cobbles, sub rounded boulders and 1% flecks of charcoal. During hand excavation of a total length of 31.0m (c. 51%) of this ditch, five sherds of pottery were recovered including a plain nm sherd from a bowl or dish and a body sherd from a beaker, both in Nene Valley ware with black colour coat (fourth century), a rounded everted nm sherd and a sherd from a small handle, both in Grey ware (second to third century). No other material culture could be assigned with any certainty to the primary fill, the survival of which was generally rather limited.

II 2 142 148 226 227 241 242

[142]/[227]/[242] was the cut of a ditch in OA1 probably dug to extend to the south east, the section of the rectilinear enclosure complex described in II 1. From a right angle in the latter feature ([137]) this ditch ran NW SE for a length of c. 9.0m ([142]) before turning through 90 degrees to run NE SW for a length of c. 24.5m ([227]). The ditch ([242]) then met the limit of excavation at the south of OA1. When first cut this ditch may have been at least c. 0.90m wide although again re-cutting of the feature (Phase II 5) made determination of the dimensions of the cut somewhat problematic. The ditch survived to a maximum depth of 0.38m. It is possible that this cutting may also have re-defined the c. 9.0m length of NW SE oriented ditch of II 1. If this were the case it is likely (as for Phase II 1) that to the north the feature was cut in a butt ended terminal with subsequent re-cutting having removed the evidence for this. Alternatively, there is a possibility that the Phase II 1 and Phase II 2 ditches may have been dug contemporaneously.

Where visible the top edge of the cut generally broke sharply to fall (at 35 degrees) with smooth straight or slightly concave sides to meet a flattish base which was up to 1.20m wide with a gradual or imperceptible break of slope. The base of the ditch varied in height along the c. 33.5m length revealed between a maximum of 52.44m OD ([242]) and a minimum of 52.11m OD ([227]).

The ditch was filled [148]/[226]/[241] by a soft or friable dark brown or dark yellowish brown sandy silt loam or sandy loam with up to 20% small and medium rounded sub rounded and sub angular gravels sub rounded cobbles sub rounded boulders and up to 2% flecks and small fragments of charcoal. A total length of 21.0m (c. 62%) of this ditch was hand excavated. A single body sherd in Calcegnated ware (Roman but of uncertain date) was recovered during excavation of the fill ([142]) of the ditch.

II 3 97 100 127 131 134 135 173 174 224 225 229

[100]/[131]/[174]/[229] was the cut of a ditch in OA1 apparently dug in order to re define and also sub divide part of the enclosure complex as described in II 1 and II 2. Extending from the limit of excavation at the west of OA1 ([229]) the ditch ran NW SE for a length of c. 15.50m ([100]/[174]) cutting at right angles across the line of the earlier ditch (Phase II 2) before meeting the limit of excavation at the south of OA1 ([131]). To the south of the II 2 ditch the edges of this feature in particular the southern edge of [131] were extremely difficult to distinguish. The matrix of the deposit filling the feature differed little from the adjacent natural sub stratum (in fact in evaluation Trench I this feature was not observed in plan and was barely recognisable as a cut feature in section). It is possible that the southern section of this ditch existed only temporarily perhaps having been dug as a shallow guide trench before being abandoned or infilled with the upcast natural sub stratum.

When first cut the ditch may have been at least 1.80m wide and it survived to a maximum depth of c. 0.35m. At the top the edges of the feature broke sharply to fall (at 30 degrees) with smooth straight or slightly concave sides to meet a narrow slightly concave base with a gradual break of slope. The base of the ditch varied in height along the c. 15.50m length revealed between a maximum of 52.35m OD ([174]) and a minimum of 52.21m OD ([100]).

The ditch was filled [97]/[127]/[173]/[224] by a friable dark brown or dark yellowish brown sandy silt loam or sand loam with up to 30% small and medium rounded sub rounded and sub angular gravels sub rounded cobbles up to 2% flecks and small fragments of charcoal and 1% fragments of burnt clay. Excavation of a total length of 10.50m of this feature (68%) yielded 4 sherds of Roman pottery all of which were probably residual (scraps of Eastern Gaulish samian ware from the mid second to mid third century and body sherds in unidentifiable Roman coarse wares).

A small amount of friable and eroded animal bone unidentifiable to species was recovered during the excavation of [97]. A sample of the latter deposit was not processed (assigned priority 3) following the compilation of a laboratory description. A 1kg test sub sample (assigned priority 1) of [128] was processed for its content of biological remains and the washover contained less than 1 cubic centimetre of charcoal to 5mm as well as a single charred grain of wheat or barley. Bulk sieving of 4.2kg of this deposit recovered one small fragment of charcoal.

[129]/[135]/[225] was a re cut of the ditch described above. It was apparently dug in order to re define a section of the ditch and also to terminate the feature to the south in the form of a butt end ([135]). Whether the line of the ditch was re defined to the north of the right angle within the II 1 ditch is uncertain. Re cutting appears to have only occurred along a c. 6.5m length to the south east of this point (as [129] and [225]). The maximum width of the ditch was 1.10m and it survived to a depth of 0.28m. At the top the edges of the feature broke sharply to fall (at 35 degrees) with smooth concave sides to meet a flattish base with a gradual break of slope. At either end of the re cut the base was recorded at a height of 52.43m OD.

The ditch was filled [99]/[128]/[134] by a soft dark brown or dark yellowish brown sandy loam or sandy silt loam with up to 20% small and medium rounded sub rounded and sub angular gravels 1% flecks of charcoal and 1% small sub angular sandstones. Recovered during hand excavation of [128]

was a body sherd in East Yorkshire Grey ware (after the late third century) In total c 4.5m (c 70%) of the ditch was excavated

II 4 68 84 88 119 139 140 217 219 221 223 239 240 248 249

[140]/[217]/[219]/[221]/[223]/[239]/[248]/[249] was the cut of a ditch apparently dug in order to re-define and extend a length of enclosure ditch described above (Phase II 1). The feature extended from the limit of excavation at the west of OA1 ([140]) and ran SW-NE for a length of c 22.0m before terminating in a butt end ([239]) located adjacent to the right angle turn in the line of the II 1 ditch. The feature survived to a maximum width of 1.70m ([248]) and up to a maximum width of 0.44m ([248]). At its top the edges of the cut broke sharply to fall (at 50 degrees) with smooth generally straight sides to meet a slightly concave base up to 0.35m wide generally with a gradual break of slope. The base of the ditch varied in height along the c 22.0m length revealed between a maximum of 52.39m OD ([239]) and a minimum of 52.15m OD ([249]).

The ditch was filled [68]/[84]/[119]/[139]/[240] by a friable very dark grey or greyish brown silt loam with up to 10% small and medium rounded sub-rounded and sub-angular gravels sub-rounded cobbles and sub-rounded boulders up to 5% flecks of charcoal and up to 1% flecks and small fragments of brick/tile. Large apparently roughly dressed angular limestones were recovered from several excavated lengths of the deposit [68] 269.25kg [84] 235.25kg (assigned [88]) [119] 55.0kg and [139] 90.0kg.

Excavation of a total length of c 16.0m (73%) of the ditch yielded 24 sherds of Roman ceramic including (from [68]) a Huntcliff type nm sherd in Calcite gntted ware (mid fourth century) body sherds and a nm from a hemispherical flanged bowl in Reduced ware (after the late third century) (from [84]) a base sherd in Nene Valley ware with brown exterior and interior color coat (third to fourth century) and a body sherd in the same ware with brown exterior and orange interior colour coat and white painted decoration (third or fourth century). Fragments of friable and eroded animal bone not identifiable to species were recovered from [84] while of the 27 fragments recovered from [68] only 4 were identifiable to species and these were all horse. An unidentifiable iron object was also recovered from [84].

A 1kg test sub-sample (assigned priority 1) from [84] was processed for its content of biological remains and the washover contained approximately 1 cubic centimetre of charcoal to 15mm and this may have included some non-wood charred plant debris. Bulk sieving of 2.6kg of the deposit recovered a few very small fragments of charcoal well-rotted animal bone and a single fragment of possible amphibian bone.

II 5 66 67 111 112 113 114 118 120 121 125 126 130 138 141 143 157 158 168 193 196 238

[67]/[112]/[114]/[121]/[126]/[158]/[168]/[238] was the cut of a ditch revealed in OA1 and apparently dug in order to re-define sections of the enclosure ditch described above (Phase II 1 and Phase II 2). To the north the ditch ([112]) terminated in a butt end of surviving width 1.30m. At this location it is likely that the feature re-cut an earlier version of the terminal. This butt end would have formed the southern end of a NE-oriented terminally defined entrance to the enclosure complex. Although the northern terminal lay beyond OA1's western limit of excavation its presence was confirmed by the results of the geomagnetic survey. From the excavated terminal the ditch ran NW-SE for a length of c 23.50m ([121]/[158]/[168]/[238]) before turning at right angles to run NE-SW for a length of c 21.0m ([67]) to terminate in another butt end ([114]) of surviving width 0.80m. Some 2.80m to the SW the line of the ditch continued from another butt end ([126]) of surviving width 0.65m to run into the southern limit of excavation of OA1. Therefore in this cutting of the ditch an additional terminally defined SW-facing entrance within the enclosure complex was formed the presence of which was also confirmed by the results of the geomagnetic survey.

The maximum surviving width of the ditch was 1.80m ([168]) and the feature survived to a maximum depth of 0.38m ([67] and [121]). At the top the edges of the cut broke sharply to fall (at 40 to 60 degrees) with smooth generally concave sides to meet a slightly concave base up to 0.50m wide with a gradual break of slope. The base of the ditch varied in height along the c. 44.0m length revealed between a maximum of 52.39m OD ([238]) and a minimum of 52.25m OD ([67]).

The ditch was filled [66]/[111]/[113]/[118]/[120]/[125]/[130]/[138]/[141]/[143]/[157]/[193]/[196] by a friable dark brown dark greyish brown or very dark grey sandy silt loam or silt loam with up to 15% small and medium rounded and sub rounded gravels sub rounded cobbles and sub rounded boulders and up to 2% flecks and small fragments of charcoal. Large apparently roughly dressed angular limestones were recovered from several excavated lengths of the deposit [66] 104.5kg [111] 24.5kg [113] 13.25kg [118] 61.5kg [120] 187.25kg [125] 1.25kg [138] 160.25kg [141] 13.75kg [157] 254.25kg [193] 43.75kg and [196] 85.25kg.

Excavation of a total length of c. 28.5m (65%) of the ditch yielded 32 sherds of Roman ceramuc. These included (from [66]) a nm sherd from a necked bowl (Young Type C75) with rouletted decoration underneath the nm in Oxford ware (generally from the second quarter of the fourth century but usually only found in the north of England within stratified contexts from the second half of the fourth century) a body sherd from a hemispherical flanged bowl (Corder Type 5b) in Crambeck Parchment ware (after the mid fourth century) (from [120]) a Huntcliff type nm sherd in Calcite gntted ware (mid fourth century) a base sherd in East Yorkshire Grey ware with a white slip (after the late third century) (from [143]) a base sherd from an open bowl or platter in Nene Valley ware with dark brown colour coat and white painted decoration (this a rare form dating from the late third to fourth century) a body sherd from a bowl or dish in East Yorkshire Grey ware (after the late third century) (from [196]) a flange nm scrap from a Mancetter Hartshill mortarium (late second to fourth century) [66] also contained a short length of copper alloy wire twisted towards one end which may have come from a broken bracelet [157] contained an iron nail.

A small amount of friable and eroded animal bone not identifiable to species was recovered during the excavation of [66] [111] [118] [120] [130] [143] and [193] while of 15 fragments recovered from [196] only one was identifiable to species that being horse.

A 1kg test sub sample (assigned priority 1) from [66] was processed for its content of biological remains and the washover contained less than 1 cubic centimetre of charcoal to 15mm 2 or 3 charred hulled barley (*Hordeum vulgare*) grains and a wheat (*Triticum* sp.) glume base a number of puffed charred fragments probably from cereals together with a few charred rhizome fragments. A further 3kg sub sample yielded a few more charred cereals. Bulk sieving of 5.3kg of the deposit recovered only a few fragments of charcoal and unidentifiable mammal bone.

A 1kg test sub sample from [120] was processed for its content of biological remains and the washover from this analysis contained less than 1 cubic centimetre of charcoal to 10mm a charred grass fruit a fragment of charred oat (*Avena* sp.) caryopsis at least 2 hulled barley grains and a few very puffed fragments probably also from cereals. A further 3kg sub sample was sieved to 500 microns and this yielded several hulled barley grains (some showing evidence of germination) some wheat glume bases and a few possible wheat grains. There was a charred wild radish (*Raphanus raphanistrum*) pod segment and single charred specimens of a dock/sorrel (*Rumex* sp.) fruit and a vetch (*Vicia* sp.) seed. In addition there was a single charred specimen identified as a tuber from an onion couch (*Arrhenatherum elatius* ssp. *bulbosum*) a form of false oat grass indicative merely of grassland (J.P. Huntley pers. comm.) Bulk sieving of 7.7kg of this deposit recovered three earthworm capsules and a few small fragments of charcoal.

A 1kg test sub sample (assigned priority 2) from [125] was processed for its content of biological remains and the washover contained less than 1 cubic centimetre of charcoal to 5mm. No further analysis was considered necessary for a sample from [111] (assigned priority 3) following the compilation of a laboratory description.

II 6 91 92 250 259 261 262 263 264 268 270 271

[264] was the N S oriented edge of a linear ditch located in OA2. A length of c 6.50m of the feature was exposed and apparently it had been truncated to the north east and south by a later ditch [271]/[262]. It survived to a maximum width of 0.90m and a maximum depth of c 0.28m. At the top the edge broke sharply and fell (at 60 degrees) with a smooth slightly concave side to meet a flattish base with a sharp break of slope. The base of the feature dipped from 51.31m OD to 50.96m OD (from south to north) along its c 6.50m length. The feature was filled ([263]) by a soft dark greyish brown sandy silt loam with 10% small and medium rounded and sub rounded gravels. 28 fragments of mammal bone were recovered during excavation of the deposit of which only 2 were identifiable to species these being cattle.

[91]/[262]/[271] was the cut of a ditch revealed in Trench L and OA2 and probably cut to define part of an enclosure. At its northern extent the feature had apparently been re cut by [268]. It met the NW SE oriented limit of excavation of OA2 and ran parallel to it ([271]) with only the southern edge exposed for a length of c 8.0m. The ditch ([262]) then turned through 120 degrees and ran south for a length of c 12.0m to meet (as [91]) the limit of excavation at the southern end of Trench L. The ditch survived to a maximum width of 1.40m and a maximum depth of 0.67m. Where oriented NW SE with only the southern edge exposed there was a sharp break of slope at the top and a smooth slightly concave side fell (at 40 degrees) to meet a flattish base up to 0.70m wide with a gradual break of slope. Where the feature was oriented N S its top edge broke gradually to fall (at 10 degrees) with smooth straight sides to meet a further sharp break of slope. From this a smooth straight side fell (at up to 70 degrees) to meet a flattish base up to c 0.70m wide with a gradual or sharp break of slope. Very little of the upper part of the cut survived for the southernmost 3.50m of the feature due to horizontal truncation. The base of the ditch sloped downwards (from south to north) along the N S oriented length from 51.46m OD to 50.91m OD (recorded at the point at which the feature began to turn to the NW). The base of the NW SE oriented section was relatively level at c 50.92m OD.

The feature was filled [92]/[261]/[270] by a fine very dark greyish brown or dark brown sandy silt loam with up to 30% small and medium rounded and sub rounded gravels sub rounded cobbles and sub rounded boulders 5% large angular probably roughly dressed limestones and 1% flecks of charcoal. [261]/[270] contained a scrap of highly abraded and therefore probably residual Eastern Gaulish samian ware (mid second to mid third century) and large quantities of mammal bone. Almost 300 fragments were recovered of which 55 could be identified to species horse (4) cattle (42) caprovid (3) and pig (6).

A 1kg test sub sample (assigned priority 2) of [261] was processed for its content of biological remains and the washover contained less than 1 cubic centimetre of charcoal to 10mm along with traces of insect remains. Bulk sieving of 3.65kg of the deposit recovered 2 fragments of unidentifiable mammal bone.

[268] was the cut of a ditch apparently dug in order to re define and extend to the north west the line of an earlier ditch [271]. The feature ran roughly parallel to the NW SE oriented limit of excavation of OA2 with only the southern edge exposed for a length of c 9.0m before curving to the north to run into the north western corner of OA2. The ditch probably truncated the earlier pit [272]. The feature's maximum exposed width was c 1.30m and it survived to a maximum depth of 0.32m. At the top its edge broke sharply to fall (at 20 degrees to the south increasing to 60 degrees at the north) with a smooth slightly concave side to meet a concave base generally with a gradual break of slope although to the north the break of slope became more sharp. It was filled [259] by a fine very dark greyish brown silt loam with 10% small and medium rounded gravels and rounded cobbles (these were generally concentrated towards the base of the cut) and up to 2% medium angular limestones. 30 fragments of animal bone were recovered during excavation of the feature of which 7 could be identified to species cattle (5) and caprovid (2). No further analysis was considered necessary for a sample (assigned priority 3) from [259] following the compilation of a laboratory description.

[250] was an oval spread of small and medium rounded and sub rounded gravels and sub rounded cobbles revealed in OA2. It measured c 5.0m (N S) by c 2.5m (E W) and was of the order of 100mm.

thick Revealed below cleaning the deposit partially overlay the fill [261] of ditch [262] It may have been dumped in order to consolidate the late Roman ground surface following the backfilling of the enclosure ditches described above

**II 7 169 170 189 191 192 194 195 197 198 205 206 210 211 231
232 233 234 236 237 (Figure 12)**

[195] was the cut of a post pit revealed along the western edge of the base of pit [170] in OA1. The feature was square in plan 0.50m wide and was up to 0.80m deep. At the top its edges broke sharply to fall (at c. 80 degrees) with smooth straight sides to meet a flat base (at 51.79m OD) with a sharp break of slope. The pit was filled [194] by a soft dark yellowish brown loamy sand with up to 5% pea grit small and medium sub rounded gravels and sub rounded cobbles. A large angular limestone and a large angular block of chalk were also included within the deposit. A scrap of Calcite gntted ware (Roman but of uncertain date) was recovered during hand excavation of the feature. No further analysis was considered necessary for a sample from [194] (assigned priority 3) following the compilation of a laboratory description.

[192] was the cut of a circular vertical post pipe of diameter 0.25m and depth 0.80m revealed within the post pit [195] in OA1. It was filled [191] by a friable dark brown loamy sand with up to 35% pea grit small and medium sub rounded and sub angular gravels and 2% flecks of charcoal. A few fragments of friable and eroded animal bone not identifiable to species were recovered during hand excavation of the deposit. No further analysis was considered necessary for a sample from [191] (assigned priority 3) following the compilation of a laboratory description.

[198] was the cut of a post pit revealed along the south western edge of the base of pit [170] in OA1. The feature was rectangular in plan and measured 0.35m by 0.26m and it was up to 0.34m deep. At the top its edges broke sharply to fall (at c. 75 degrees) with smooth straight sides to meet a flat base (at 52.03m OD) with a sharp break of slope. The pit was filled [197] by a friable dark brown loamy sand with 3% pea grit small and medium rounded and sub rounded gravels and 1% flecks of charcoal. A large angular fragment of limestone and a large angular block of chalk were also included within the deposit. A single body sherd of decorated Central Gaulish samian ware (second century) was recovered during the excavation of the feature along with a few fragments of friable and eroded animal bone which were not identifiable to species. No further analysis was considered necessary for a sample from [197] (assigned priority 3) following the compilation of a laboratory description.

[206] was the cut of a post pit revealed in the north western corner of the base of pit [170] in OA1. The feature was square in plan 0.45m wide and was up to 0.70m deep. At the top the edges broke sharply to fall (at 65 to 85 degrees) with smooth straight sides to meet a flattish base (at 51.90m OD) with a sharp break of slope. It was filled [205] by a friable dark brown sandy loam with up to 20% pea grit small and medium rounded and sub rounded gravels and 2% flecks of charcoal. A single body sherd of Eastern Gaulish samian ware (Drag 18/31 mid second to mid third century) was recovered during hand excavation of the deposit. No further analysis was considered necessary for a sample from [205] (assigned priority 3) following the compilation of a laboratory description.

[211] was the cut of a circular post pit revealed along the eastern edge of the base of cut [170] in OA1. The feature had a diameter of 0.40m and was 0.34m deep. At the top its edges broke sharply to fall with smooth straight vertical sides to meet a flat base (at 51.93m OD) with a sharp break of slope. It was filled [210] by a soft dark yellowish brown loamy sand with up to 30% pea grit small and medium rounded and sub rounded gravels and sub rounded cobbles and 2% flecks of charcoal. Two large angular limestones and two of large angular blocks of chalk were also included within the deposit. Although no animal bone was recovered during hand excavation of the feature bulk sieving of 5.6kg of [210] recovered several fragments of animal bone none of which were identifiable to species. No further analysis was considered necessary for a sample from [210] (assigned priority 3) following the compilation of a laboratory description.

[232] was the cut of a post pit revealed roughly centrally within the base of the cut of pit [170] in OA1. The feature was square in plan 0.50m wide and was up to 80mm deep. At the top its edges broke sharply to fall with smooth straight vertical sides to meet a flattish base (at 52.13m OD) with a sharp break of slope. It was filled [234] by tightly packed medium angular bimestones.

[231] may have been the cut of a sub circular vertical post pipe revealed within the post pit [232] in OA1. The feature measured 0.25m by 0.18m and was 0.18m deep. It was filled [237] by an unrecorded deposit.

[233] may have been the bases of the cuts for two abutting stake holes revealed along the southern edge of the base of the cut of pit [170] in OA1. The feature comprised two sub circular depressions measuring 0.16m by 0.14m and 0.14m by 0.12m and both were around 50mm deep. At the top the edges of both broke sharply to fall with smooth straight almost vertical sides to meet flattish bases (at c. 52.10m OD) with a gradual break of slope. Both depressions were filled [236] by an unrecorded deposit.

[170] was the cut of a sub circular pit revealed within OA1 cutting into the surface of the natural substratum. This feature was clearly evident in the geomagnetic survey as a strong positive magnetic anomaly. The feature measured 4.40m (E-W) by 4.0m (N-S) and it had a maximum depth of 0.52m. At the top the edges broke sharply to fall (at 40 to 60 degrees) with smooth concave sides to meet a flat base (at c. 52.05m OD) with a gradual break of slope. Revealed within parts of the lower edge of the cut was a primary fill [189] of loose dark yellowish brown sand with up to 45% pea gnt small and medium rounded and sub rounded gravels. This deposit varied in thickness from 0.50m (within one part of the lower edge of the feature) to less than 20mm (in the base of the pit). A single body sherd in Native ware (of uncertain date) was recovered during hand excavation of [189] along with a small amount of friable and eroded animal bone which was unidentifiable to species. Bulk sieving of a 5.5kg sample (assigned priority 3) of the deposit recovered one small fragment of charcoal and some well rotted fragments of animal bone.

The remainder of pit [170] was filled [169] by a soft dark brown loamy sand with up to 10% small and medium rounded and sub rounded gravels sub rounded cobbles and sub rounded boulders up to 10% flecks of charcoal and 1% flecks and small fragments of brick/tile. Large angular apparently roughly dressed limestones (22.5kg) were also included within the deposit. A total of 34 sherds of ceramic were recovered during hand excavation of the deposit. Notable amongst these were a Huntcliff type nm sherd from a wide mouth bowl in Calcet gntted ware (mid fourth century) and a nm sherd from a flanged conical bowl with internal bead in an unidentified but probably local sandy micaceous grey fabric (thought likely to date from the third quarter of the third century or later). Many residual ceramic sherds predominantly Central Gaulish samian ware (mid second to mid third century) were also recovered. Over 600 fragments of animal bone were recovered during hand excavation of the deposit of which 107 were identifiable to species: horse (3), cattle (66), caprovid (36) and pig (2).

A total of 17 small finds were recovered during excavation of the secondary fill [169]. Most notable among this assemblage were parts from at least 2 separate antler combs. Following consolidation using synthetic resins it was possible to almost fully reconstruct one side of one of these combs. Evidence of nine nrets: 5 in metal and 4 in antler (arranged alternately) was apparent. In addition stamped ring and dot decoration and a finely scored crossing of lines was visible on the comb. Also recovered during excavation of this feature were 5 iron objects (including two broken knives), 2 broken fired clay loom weights, a broken fired clay bead, 2 complete bone pins, 3 broken bone tools (two were possibly pin beaters) and a fragment of glass from the rim of a small vessel.

A 1kg test sub sample (assigned priority 2) of [169] was processed for its content of biological remains and the washover contained 1.2 cubic centimetres of charcoal to 15mm and a fragment of animal bone which was unidentifiable to species. Bulk sieving of 3.7kg of the deposit recovered a few small fragments of charcoal, pieces of well rotted mammal bone and 3 earthworm capsules of indeterminate age. A further sample (assigned priority 3) from this deposit were not considered to be worthy of further analysis following the compilation of a laboratory description. A sample (assigned priority 3) of clay lumps (mid to dark grey light orange/brown and mid red/brown) recovered from within [169] was also not considered to be worthy of further analysis.

Although pit [170] was situated only a few centimetres from the edge of the II 5 enclosure ditch it proved impossible to ascertain any stratigraphic association between the two features. The pit was assigned to Phase II on the assumption that its utilisation for whatever purpose may have been contemporary with that of the enclosure complex. The material culture recovered during the meticulous excavation of the entire pit was apparently exclusively of Roman origin and the feature may have been backfilled after the mid fourth century. However, it is noteworthy that the form of the pit was highly suggestive of a type of sunken featured building commonly found in association with early Anglo-Saxon settlement. While this is discussed at greater length in the Phase II discussion below, it is perhaps worth expanding further upon one aspect of the feature at this point. The commonest form of sunken featured building was apparently the twin post type, with one upright at each end, usually interpreted as having supported a simple ridge pole in the roof of the super structure (Rahtz 1976, Adkins and Adkins 1982). The post pits [211] and [195] can be interpreted as representing such features (Figure 12). [206] may represent a re-setting of the post at the western end of the feature. It has been generally assumed that weakening of the support system was the eventual reason for the abandonment of sunken featured buildings (Rahtz 1976). [198] may have housed a supporting element for a lining to the hollow or even the wall structure and [231] may have housed a central post. The latter may have been represented in the fill of [170] by a void above the position of [231] which demonstrates that the post may have still been in place when the fill was deposited.

Phase II Discussion

The ditches of Phase II 1 II 6 indicate that a significant degree of land management was being undertaken in the area probably during the fourth century AD. Noticeably, the cutting of the Phase II 6 ditches in OA2 is at variance with the alignment of the earlier cobbled surface of Phase I 6 and this would appear to adumbrate a distinct change of function for the site. Presumably use of the cobbled 'roadway' (if indeed that was its function) was abandoned with the setting out of a complex of probably non-defensive enclosures. The general form of the complex was clearly evident in the geomagnetic survey as a series of linear positive magnetic anomalies (Figure 6).

Since the extent of horizontal truncation to the site is uncertain it is impossible to determine exactly how wide the enclosure ditches may actually have been when they were originally cut. However, since the ditches of Phase II 4 and II 5 both survived to a width of up to 1.80m it seems likely that, in conjunction with an upcast bank, the features would form an effective barrier to livestock. Therefore, these enclosures may well have been intended to provide secure areas in which livestock could be sheltered and grazed. The constant re-digging of the Phase II enclosure ditches indicates both the necessity of maintaining the boundaries and the continuity of land use.

The sub-rectangular enclosure formed by the cutting of the Phase II 1 ditch would have provided a corral with an area of just over 600 square metres (this area includes the section revealed by geomagnetic survey beyond the western limit of excavation of OA1, Figure 6). This enclosure would have probably had a terminally defined north-east facing entrance of some 4 metres width. Phase II 2 suggests that a new ditch was dug in order to provide a far greater area than had been previously available in which to corral livestock. Exactly why this expansion occurred is uncertain. Perhaps it reflects the broad pattern of intensification in sheep and cattle breeding in the late Roman period (Applebaum, 1966). If it is assumed that the southern and eastern lengths of the Phase II 1 ditch were not cleaned out or re-cut when the Phase II 2 ditch was cut (i.e. the earlier enclosure was merely subsumed into the later) then the sub-rectangular

enclosure of II 2 would have provided an estimated total area of over 2200 square metres

The ditches of Phase II 3 and II 4 indicate that sub divisions of the land, within the limits of the II 2 enclosure, were taking place. A sub rectangular paddock or field, with an area of just over 100 square metres, would have been created in the north eastern corner of the Phase II 2 enclosure by the cutting of these ditches. In addition, it seems likely that further narrow sub rectangular 'plots' would have been created along the eastern edge of the Phase II 2 enclosure. The original area defined by the Phase II 1 ditch would also have been re defined at the same time. Although a group of strip fields may have been created within the overall enclosure complex by the cutting of these ditches there is little evidence for the rather chaotic networks of square fields, probably used exclusively for summer cereal production, which are typically associated with villa estates (de la Bedoyere, 1993)

Phase II 5 indicates that re definition of the ditch forming the northern and eastern sides of the Phase II 2 enclosure became necessary. In addition, a narrow terminally defined entrance, of less than 3 metres width, was apparently cut along the eastern side of the larger feature. This would have enabled access to be gained to the interior of the complex from an adjoining large, curving, enclosure to the south east. The latter feature was revealed only by geomagnetic survey to the south of the development Area B

What remains uncertain is the time scale over which the enclosure complex was utilised. This problem cannot be satisfactorily resolved for reasons which are commonly encountered during the interpretation of archaeological information. When interpreting ditches which have been re cut (usually on more than one occasion) one is dependent, in order to formulate an accurate reconstruction of the sequence of events, largely upon the re cut(s) being shallower than the original ditch. Where this is the case the deposit forming the earliest silting of the first ditch is of course preserved to some degree, along with any material culture contained within it. However, it is entirely possible that the final re cutting of a ditch might be considerably deeper than any previous cut(s), thereby removing the whole of the evidence for the previous activity.

In the case of the Phase II ditches it appears that a combination of the events outlined above has probably occurred. The Phase II 4 and II 5 ditches were apparently cut at a shallower level than the previous ditches, with the notable exception of the northernmost section and terminal of the Phase II 5 ditch. Since the deposits filling both of these features produced relatively large amounts of pottery, their disuse/infilling can be fairly securely dated after the mid fourth century AD. The fills of the Phase II 1, II 2 and II 3 ditches did survive to a greater or lesser degree but produced relatively small quantities of pottery and therefore secure dating for these features is problematic. The pottery evidence suggests that the first enclosure was probably laid out well into the fourth century and subsequently it was expanded and then sub divided over a period of perhaps not more than fifty years. It may still have been in use towards the end of the fourth century or later.

From the fact that approximately 80% of the deposits filling the Phase II enclosure ditches was silt it is highly likely that the features filled in as a result of natural weathering/silting or they were backfilled deliberately with silt (J P Huntley, pers comm) The presence of large quantities of roughly dressed limestone within the backfill of the Phase II 4 and II 5 ditches may indicate that disuse or abandonment of the enclosure complex accompanied deterioration of any stone buildings with which it was associated Although most fields on villa estates were probably hedged to protect winter crops against stock grazing the fallow, there is some evidence that on occasions fields may have been enclosed by dry stone walls (de la Bedoyere, 1993) Perhaps this could account for the presence of such large quantities of dressed limestone within the backfill of the ditches Although the site was well served with excellent lines of communication with Dere Street close to the west it is likely that the stone recovered from the backfill of the enclosure ditches was probably cut in quarries relatively close to the site rather than being transported a great distance Outcrops of Carboniferous and Permian limestone occur, to the north west and south respectively, within 5km of Cattenack Most quarries in Roman Britain were under imperial ownership or had been leased out by the state (de la Bedoyere, 1993)

This vast pit of Phase II 7, located within an angle of the Phase II enclosure ditches was undoubtedly the most intriguing feature investigated during the project The similarity of the feature to a form of sunken featured building has previously been mentioned Clearly the quantity and nature of the material culture recovered during its excavation raises its status above that of the type of cut feature typically referred to as a refuse pit (although rarely do they seem to contain any evidence of refuse) which are commonly encountered during archaeological excavations

Sunken featured buildings first appeared in the sub Roman period and are usually associated with the presence of 'Germanic' elements (usually explained in terms of late fourth century mercenaries or other officially settled groups) on sites in Britain Although sunken featured buildings survive only as pits they are generally considered to have originally been structures whose floor was at ground level, the sunken area being a sub floor space, store or simple cellar (Rahtz, 1976) They were normally sub rectangular in shape but sub circular, trapezoid or irregular examples have also been located If the II 7 pit was a sunken featured building, there is no evidence that the sunken level was used for any purpose as there was, for example, no structural flooring or hearth

It is accepted wisdom that sunken featured buildings were utilised as spinning huts or weaving sheds or were associated with other small scale crafts, for example, antler working, or with the manufacture of objects such as loom weights (Rahtz, 1976) The material culture recovered during the excavation of [170], in particular the broken loom weights, knives, antler combs (it is possible that these combs were associated with weaving rather than with the combing or adornment of hair), bone pins and other tools would, therefore, appear to strongly support the notion that the pit was an early Anglo Saxon sunken featured building

Phase III

III 1 149 150 151 152 153 154 155 156 212 213

[149] may have been the base of the cut for a sub circular post pit located close to the eastern limit of excavation in OA1. The feature measured 0.55m by 0.40m and was up to 0.12m deep. At the top its edges broke sharply to fall (at 50 degrees) with smooth concave sides to meet a concave base (at 52.21m OD) with an imperceptible break of slope. It was filled [150] by a soft dark brown sandy silt loam with 5% small and medium sub rounded gravels and up to 1% flecks of charcoal.

[151] may have been the base of the cut for a circular stake hole located close to the eastern limit of excavation in OA1. The feature was 0.28m diameter and up to 0.21m deep. At the top its edges broke sharply to fall (at 60 degrees) with smooth concave sides to meet a flattish base (at 52.20m OD) of width 0.14m with a gradual break of slope. It was filled [152] by a soft dark brown sandy silt loam with up to 10% small sub rounded gravels and up to 1% flecks of charcoal.

[153] may have been the base of the cut for an oval stake hole located close to the eastern limit of excavation in OA1. The feature measured 0.36m by 0.25m and was up to 0.20m deep. At the top its edges broke sharply to fall (at 60 degrees) with smooth concave sides to meet a flattish base (at 52.19m OD) with a gradual break of slope. It was filled [154] by a soft dark brown sandy silt loam with up to 10% small and medium sub rounded gravels and sub rounded cobbles and 1% flecks (and 1 small fragment) of charcoal. One small fragment of fired clay/burnt daub was also included within the deposit.

[155] may have been the base of the cut for a circular stake hole located in the eastern part of OA1. The feature was 0.24m in diameter and 0.14m deep. At the top its edges broke sharply to fall (at c. 60 degrees) with smooth concave sides to meet a flattish base (at 52.26m OD) with a gradual break of slope. It was filled [156] by a soft dark brown sandy silt loam with 5% small and medium sub rounded and sub angular gravels and up to 1% flecks of charcoal.

[213] may have been the cut for a circular stake hole located close to the south eastern limit of excavation in OA1. The feature was 0.21m in diameter and 0.29m deep. At the top its edges broke sharply to fall (at 80 degrees) with smooth straight sides to meet a concave base (at 52.14m OD) with a gradual break of slope. It was filled [212] by a fine very dark greyish brown silt loam with up to 20% small rounded and sub rounded gravels.

This series of features is not particularly convincing in archaeological terms. They could conceivably represent randomly established heavily truncated stake holes (and one possible post pit). However all were revealed below machining/hand clearance and cut into the surface of the natural sub stratum so there were no stratigraphic clues as to their period of origin. Furthermore none contained any material of interpretative value. They could equally be the result of animal burrowing or plant growth.

III 2 144 145 161 162 164 165 166 167 207

[145]/[162]/[164] was the cut of a sinuous N-S oriented gully revealed in OA1. To the north the feature ([164]) terminated in a butt end of width 0.25m. From this point the feature ran to the south for a length of c. 21.0m before terminating close to the northern edge of an earlier ditch [67]. Hand excavation of both features failed to resolve satisfactorily their stratigraphic association. The gully attained a maximum width of 0.70m and was up to 0.16m deep. At the top its edges broke sharply to fall (at 30 to 60 degrees) with smooth generally straight or slightly concave sides to meet a flattish base with a gradual or sometimes sharp break of slope. The base of the feature varied in height along the c. 21.0m revealed from a minimum of 52.34m OD (towards the south) to a maximum of 52.45m OD (at the extreme north).

Five sections of the feature (four lengths of 0.5m ([164]) and one 6.0m length ([145]/[162])) were excavated comprising c. 38% of its exposed length. It was filled [144]/[161]/[165]/[166]/[167]/[207]

by a friable dark brown or dark yellowish brown sandy silt loam or sandy loam with up to 10% small and medium rounded and sub rounded gravels and 1% flecks of charcoal. One fragment of animal tooth was recovered during the excavation of [165].

As mentioned above excavation failed to establish with any degree of certainty the stratigraphic relationship between this feature and the ditches of the late Roman enclosure complex. However if this feature can be interpreted as representing the impression of a mole plough then it clearly post dates the Roman ditches. Such implements were widely used throughout England particularly during the Victorian period in order to create a relatively short lived but inexpensive drainage system. The system utilised a pointed metal mole drawn deeply through the soil originally by a windlass turned by horses and in later years by steam power or tractor. The narrow underground channel thus formed served to drain the land. Of course if this were the impression of a mole plough then one would have expected additional similar features to have been apparent on the site as the plough would have worked across an area cutting slots at suitable intervals.

III 3 122 123 124 132 133 146 147

[123] was the cut of an elongated E-W oriented pit revealed in OA1. The feature measured 3.90m by 2.10m and it was up to 0.12m deep. To the east the pit terminated in a butt end while to the west the edge cutting into the surface of the natural substratum became rather difficult to distinguish due to machine truncation. At the top its edges broke sharply to fall (at 10 degrees to the west and 40 degrees to the east) with undulating slightly concave sides to meet the base of width 1.10m with an imperceptible break of slope. The base of the feature sloped downwards from 52.49m OD at the east to 52.39m OD at the west. It was filled [124]/[122] by a soft dark yellowish brown sandy silt loam with up to 5% small and medium rounded and sub rounded gravels. A base sherd and a scrap of Eastern Gaulish samian ware (Drag 18/31 mid second to mid third century) were recovered during hand excavation of the feature. Since part of the feature cut into the upper part of pit [170] it is likely that this pottery actually derived from the earlier feature which as described above contained a relatively large amount of residual Roman ceramic. In addition a small amount of friable and eroded animal bone not identifiable to species was also collected. A 1kg test sub sample (assigned priority 2) from the deposit was processed for its content of biological remains and the washover contained approximately 1 cubic centimetre of charcoal to 5mm. Bulk sieving of 3.8kg of the deposit recovered a few small fragments of charcoal.

[133] was the cut of a circular pit located towards the eastern limit of excavation in OA1. The feature had a diameter of 1.48m and it was c. 0.30m deep. At the top the edges broke sharply to fall (at 45 degrees) with generally smooth slightly concave sides to meet a flat circular base (at 51.98m OD) of diameter c. 0.75m with a gradual break of slope. The pit was filled [132] by a soft dark yellowish brown sandy loam with 15% small and medium rounded and sub rounded gravels and 1% flecks of charcoal. A few fragments of extremely friable and eroded animal bone were also observed within the deposit. This feature could well represent the position of an ancient root bole.

[147] was the cut of an irregularly shaped pit adjacent to the western limit of excavation in OA1. A roughly L shaped section of the feature was excavated. It measured 3.0m by 2.0m and it was up to 1.0m wide. Its maximum depth was 0.46m. The south facing and east facing edges broke sharply to fall with smooth straight almost vertical sides to meet a narrow base which sloped downwards towards the north with a sharp break of slope. The north facing and west facing sides fell less steeply and were smooth and slightly concave. The feature was filled [146] by a soft very dark greyish brown sandy silt loam with 1% small rounded and sub rounded gravels, 1% flecks of sandstone and 1% flecks of charcoal. Although this deposit was fairly distinct within the edges of [147] the rather amorphous form of the feature suggests that it may well have represented the position of a tree at some point in time. Further to this interpretation was the fact that to the west of the excavated section the feature appeared to be filled with re-deposited natural sand and gravels.

III 4 39 40 41 42

[39] was the cut of a feature partially revealed only in the NE facing section of Trench N. It was 1.17m wide and at least 0.35m deep. At the top the edges appeared to break sharply to fall (at 40 degrees) with undulating slightly concave sides which met the base of the trench. It was filled [40] by a brown loamy sand with 1% pea gnt and small sub rounded gravels.

[41] was the cut of a feature revealed only in the NE facing section of Trench N less than 0.50m to the north of [39]. It was 1.15m wide and 0.28m deep. At the top its edges broke sharply to fall (at 30 degrees) with smooth straight or slightly concave sides to meet a narrow concave base (at 54.70m OD) with a gradual break of slope. It was filled [42] by a brown loamy sand with 1% pea gnt and small sub rounded gravels.

Given the limited exposure and excavation of these features it is difficult to comprehend their function.

III 5 251 256 257 269 273 276 280 281 282 283

[257] may have been the base for the cut of a sub circular post pit revealed in OA2. The feature measured 0.50m (N S) by 0.40m (E W) and was up to 80mm deep. At the top its edges broke sharply to fall (at 60 degrees) with smooth straight sides to meet a flat base (at 50.81m OD) with a sharp break of slope. It was filled [256] by a loose dark brown sandy loam with 5% small sub rounded gravels and 1% flecks of charcoal. Overlying the feature was a sub circular spread [251] up to 1.20m wide of rounded and sub rounded cobbles and boulders. These may actually have lined the base of a large pit probably of relatively recent origin which had been truncated horizontally to the level at which [251] was revealed.

[280] may have been the base of the cut for a pentagonal post pit revealed in the northern part of OA2. The feature was 0.25m wide and up to 0.12m deep. At the top its edges broke sharply to fall (at 70 degrees) with smooth concave sides to meet a flat base (at 51.22m OD) with a sharp break of slope. It was filled [281] by a loose dark greyish brown silt loam with 30% small and medium rounded gravels and rounded cobbles and 2% flecks of charcoal.

[282] may have been the base of the cut for an irregularly shaped post pit revealed in the northern part of OA2. The feature measured 0.60m (N S) by up to 0.50m (E W) and it was up to 0.15m deep. At the top its edges broke sharply to fall (at c. 50 degrees) with smooth straight sides to meet a flattish base (at 51.22m OD) with a sharp break of slope. It was filled [283] by a loose dark brown sandy silt loam with up to 5% crushed and fragmented dark reddish brown iron pan concretions, 2% small and medium rounded sub rounded and sub angular gravels and rounded cobbles. Within the upper part of the deposit were two large angular limestones and one rounded boulder which may have been intended as packing for a post within [282]. A small amount of fragile and eroded animal bone which was not identifiable to species was recovered during hand excavation. Since this feature cut through the accumulation deposit [265] it is likely that the bone derived from that horizon. Likewise an iron object recovered from [283].

The series of possible post pits ([257], [280] and [292]) described above is of uncertain period of origin.

[273] was the cut of a sinuous gully revealed adjacent to the north western limit of excavation in OA2. To the south the feature terminated in an angular butt end c. 0.55m wide and from this location it ran NNW for a length of 6.40m before meeting the limit of excavation. The width of the feature varied between a minimum of 0.28m and a maximum of 0.55m and it was up to 0.10m deep. At the top its edges broke sharply to fall (at 30 degrees) with undulating generally concave sides to meet a flattish base with an imperceptible break of slope. It was filled [269] by a loose very dark greyish brown sandy loam with 20% small and medium sub rounded gravels and sub rounded cobbles and 1% flecks of charcoal. A small amount of extremely fragile oyster shell was also observed.

Dunng hand excavation of the feature a Huntcliff type nm sherd in Calcite gntted ware (after the mid fourth century) and a base sherd in Native ware (of uncertain date) were recovered. In addition 41 fragments of animal bone were collected of which 10 were identifiable to species: cattle (5), red deer (1), caprovid (1) and pig (1). Since a length of c 4.0m of this feature cut through the accumulation deposit [265] it is highly probable that the material culture actually derived from that horizon. This feature could well be of relatively recent origin and may even have been formed given its rather sinuous form as a result of animals burrowing.

III 6 290 291 292 294

[294] was the cut of a pit revealed at the north eastern end of OA2. It measured 1.80m (N-S) by 0.90m (E-W) and was up to 0.25m deep. To the north the pit met the limit of excavation and to the south and east it had been truncated by the later gully [291]. At the top its edges broke sharply to fall (at 60 degrees) with smooth straight sides to meet a flattish base with a sharp break of slope. The base of the feature sloped downwards from south to north from c 51.00m OD to 51.11m OD. It was filled [292] by a soft very dark greyish brown silt loam with 30% small and medium sub rounded gravels, rounded and sub rounded cobbles and rounded boulders. One large angular limestone was also observed within the deposit. A single scrap (probably residual) in an unidentified Roman coarse ware was recovered during hand excavation of the feature.

[291] was the cut of a linear gully revealed in the eastern end of OA2 and in Trench L. To the north the feature met the limit of excavation and from this location ran south for a length of c 3.0m to meet the edge of Trench L. In that trench it is likely that part of the feature was excavated out of phase due to the confusion caused by the presence of the pit [95]. To the south the feature petered out due to horizontal truncation within Trench L. It was up to 0.80m wide and attained a maximum depth of 0.20m. At the top its edges broke sharply to fall (at 40 degrees) with smooth concave sides to meet a concave base with an imperceptible break of slope. The base of the feature was recorded along its length consistently at a height of c 51.17m OD. It was filled [290] by a soft very dark greyish brown silt loam with 20% small and medium rounded gravels and 5% medium and large angular fragments of poorly consolidated mortar or concrete (which may have been modern in origin). During hand excavation of the deposit 20 fragments of animal bone were recovered of which 6 were identifiable to species: cattle (3), caprovid (2) and horse (1). The feature cut through the spread of cobbles [110]/[258] which contained large amounts of animal bone and it is likely therefore that the animal bone derived from the earlier horizon.

Phase III Discussion

The Phase III features are not easy to interpret in any wider context. They may represent small scale post Roman activity upon the site, which has probably been truncated severely as a result of the levelling of the area undertaken in advance of the formation of the airfield (Phase IV). Post structures (e.g. Phase III 1), such as temporary fence lines, may well have been erected periodically upon the site since the Roman period and trees and shrubs may have taken root (e.g. Phase III 3). It seems certain that the site has not been intensively utilised since the fourth century. Of course some of the features assigned to this phase could relate to non surviving earlier strata. However, even taking into account the effects of the twentieth century landscaping, the dearth of datable non Roman cut features visible in the surface of the natural substratum weighs heavily against the possibility that additional archaeological periods of occupation were ever represented within the site's stratigraphic sequence.

Phase IV

IV 1 2 8 20 21, 24 27 32 37 52 56 60 64 77 90 102

An extensive homogeneous layer [2]/[8]/[21]/[27]/[32]/[37]/[52]/[56]/[60]/[64]/ [77]/[90]/[102] was observed in the sections of every trench as well as those of OA1 and OA2 effectively sealing all previous activity in the project area (Figure 11) It consisted predominantly of a soft dark yellowish brown or dark brown sandy silt loam Generally included throughout were up to 10% small and medium rounded sub rounded and sub angular gravels 1% flecks of charcoal up to 1% flecks and small fragments of sandstone and up to 1% flecks of tile The thickness of the deposit varied between 0.22m (in Trench C) and 0.58m (in Trench L) but was typically 0.30-0.35m The top of the layer was recorded at a maximum height of 55.15m OD (in Trench N) and at a minimum height of 51.95m OD (in Trench L) This reflected the downslope from west to east at ground level across the project area This deposit was probably formed as a result of machine truncation and ground levelling prior to the construction of the airfield at R A F Cattenack in the early twentieth century The homogeneous nature and relative sterility of the deposit across such an expansive area attests to this

In one or two locations traces of a deposit [20]/[24] survive which post date the horizon described above This was a fine dark brown or dark yellowish brown sandy silt loam with 1% small and medium rounded and sub rounded gravels This deposit may have been formed as a result of a final levelling to the area necessary in only parts of the airfield

[25] appeared to be a shallow V shaped cut revealed in the section of Trench E The feature which was of width 1.60m and depth 0.16m cut into the earlier horizon [27] and was sealed by the later deposit [24] It was filled [26] by a soft dark brown sandy silt loam with 60% small and medium rounded and sub rounded gravels and sub rounded cobbles This feature probably represents some small scale and relatively recent activity occurring between the deposition of the two horizons described above

IV 2 73 74 75 76 79 80

[79] was the cut of an irregularly shaped feature observed in the section of Trench M It measured up to 2.15m wide and was up to 0.23m deep To the north its edge broke gradually to fall (at 10 degrees) with a smooth straight side to meet an undulating base with an imperceptible break of slope To the south the edge broke sharply to fall (at 60 degrees) with smooth straight side to meet the base with a gradual break of slope The feature was filled [75] by a dark brown loamy sand with 50% small and medium sub rounded gravels and sub rounded cobbles

[80] was the cut of a (probably) linear feature which was observed only in the section of Trench M A width of 1.10m was revealed and the feature had a maximum depth of 0.23m At the northern end the edge broke sharply to fall with a smooth straight vertical side to meet an undulating base with a sharp break of slope The full profile of the feature was not exposed as it met the southern limit of excavation of Trench N It was filled [76] by a loose very dark greyish brown loamy sand with 15% crushed and fragmented brick/tile 5% crushed and fragmented charcoal and 5% small and medium rounded and sub rounded gravels One fragment of modern glass was observed within the deposit

The two features described above were of modern origin

[73] and [74] were two thin spreads each up to 0.12 thick of loose dark grey crushed charcoal ash gnt and slag These deposits which were observed in the section of Trench M overlay the cut features [79] and [80] described above These deposits represent modern fire debris

An extensive homogeneous layer of topsoil [7]/[14]/[19]/[23]/[29]/[30]/[31]/[36]/[43]/[44]/[51]/[55]/[59]/[63]/[72]/[89]/[101] was observed in section in every trench as well as in the sections of OA1 and OA2 effectively sealing all previous activity in the project area (Figure 11). It consisted predominantly of a soft dark brown or very dark greyish brown sandy loam or sandy silt loam. Generally included throughout were up to 10% small and medium rounded sub-rounded and sub-angular gravels, 1% flecks of charcoal and moderate fine rootlets. In addition to several sherds of modern ceramic, a residual body sherd in a Medieval green glazedware (probably thirteenth to fifteenth century) and several residual sherds of Roman ceramic were recovered from the deposit. Fragmentary animal bone and fragments of brick and tile were also observed within the deposit.

The thickness of the deposit varied between 0.12m (in Trench I) and 0.44m (in Trench K). The top of the layer, which was sealed on by c. 0.10m of verdant turf, was recorded at a maximum height of 55.38m OD (in Trench N) and at a minimum height of 52.07m OD (in Trench L). This reflected the gradual downward slope from west to east at ground level across the project area. This layer represented topsoil deposited following ground levelling in advance of the construction of the airfield at R A F Catterick.

[1] was an uncompacted layer composed of 90% small and medium sub-angular gravels with 10% ash and crushed slag. It was observed only in the section of Trench A where it was 0.32m thick. The deposit represents the surface of the athletics area located towards the north western corner of the airfield at R A F Catterick.

Phase IV Discussion

Broadly, Phase IV represents the transformation of the area into the airfield at R A F Catterick during the early twentieth century (Phase IV 1) and all subsequent land use. The area was probably levelled with bulldozers in order to create the airfield. The cause of a series of positive curvilinear magnetic lineations, particularly intense in Area A, may have been earth moving machinery (Figure 6). There was small scale activity (e.g. Phase IV 2) on the site during this period. A number of football and rugby pitches have been laid out in the northern part of the airfield and a portion of the north western corner of the airfield has been utilised for athletics (Phase IV 3).

DISCUSSION

Although no structural remains were discovered in situ during the excavations at R A F Catterick it is fair to say that, in broad terms, the nature and density of the material culture recovered during the excavation of the Phase II features, and a number of the Phase I features in OA2, certainly attest to the proximity of a settlement during the second half of the Roman period. The attributes of Romanisation are very apparent, as one might expect, in the types of finds made during the excavation of these features (such as technologically advanced iron tools, cosmetic items and the fine table wares within the ceramic assemblage).

It is clear that some association must be suggested between the dwelling, discovered in 1939 in the vicinity of the Roman Catholic church on the station, and the remains

investigated during the excavations described in this report. Less than 250 metres separates the two sites. The dwelling was apparently occupied at least into the late fourth century and the Phase II enclosure complex was probably abandoned in the second half of that century. Inevitably at this point rises the question of the status of the dwelling. While the structure has frequently been referred to as a villa it has recently been acknowledged that there is little to be gained for archaeologists to enforce rigid divisions between the terms villa and farmhouse (casa) (Miles, 1990). It is now largely accepted that the term villa implies an economic unit, normally based on agriculture, at the centre of which was a building of some pretensions to Romanisation. Furthermore, there is now increasing acceptance of the overall complexity of the Romano British countryside with gradations of farm types that changed through time.

If one accepts the assumptions, firstly, that the enclosure complex was associated with the villa to the north and, secondly, that these features were stock pens (and their interpretation as such is by no means certain) then it should be borne in mind that the keeping of livestock need not necessarily signify that the inhabitants of the villa were farmers. Animals may well have been kept by people who were not farmers, for example, cattle, sheep and goats may have been kept to supply milk and wool and horses and oxen utilised for traction (Finch Smith 1987). In addition to villa sites in the hands of Romano British land owners, some estates were owned by senatorial families and others were actually owned by the emperor and worked on his behalf (de la Bedoyere, 1993). There was also *ager publicus*, literally 'public land', which had usually been acquired by the state as a consequence of military conquest. While some land was then sold at auction to raise finances for the state, some estates were used for the establishment of colonies of military veterans and others were let to tenants on leases of varying lengths. One must bear in mind that villas form a very small proportion of the potential number of fourth century rural sites, and therefore were probably occupied by a very small proportion of the population. This has been estimated at c 1% (de la Bedoyere, 1993).

It has generally been acknowledged that Romano British villas probably operated diversified economies (Branigan, 1990). However, it seems clear that animal husbandry became a more significant component of the agricultural scene from the Iron Age through the Roman period (King, 1990). Although the animal bone assemblage from this excavation was relatively small and poorly preserved it is noticeable that over 50% of the bone which could be identified to species was cattle. A general trend which has emerged from studies of animal bone assemblages from Roman sites is that cattle become increasingly represented through time, at the expense of sheep and goats (King, 1990).

It has been observed that oxen typically account for up to 70% of the bones recovered from excavations on Roman military sites and major conurbations (de la Bedoyere, 1993). As the demand for more and better quality meat 'per pound' was therefore highest in towns and forts (such as *Cataraetonium*) it seems highly probable that cattle rearing would predominate at associated sites (such as the R A F Cattenack villa). Since urban populations were such a major source of demand for cattle in particular, it is clear that such livestock would obviously command higher prices. It has

become increasingly apparent that villas provided crucial economic support to towns during the late Roman period by selling the surplus of any type of farming produce (de la Bedoyere, 1993)

While the idea that the economics of the villa estate at R A F Cattenck were directly influenced by its proximity to the defended town of Cataractonium is entirely supposition, it is broadly accepted that villas played an important role in the social and economic structure of the province throughout the late Roman period (de la Bedoyere, 1993) The reader is guided to Shimon Applebaum's superb sketch reconstruction of a fully developed villa estate as this paints a vivid picture of what the R A F Cattenck site may have looked like during the late Roman period (Applebaum, 1966)

Good links of communication were clearly fundamental to the maintenance of economic relationships between towns and villas and if the owners of the Cattenck villa did trade with Cataractonium merchants then the town would of course have been easily accessible via Dere Street to the west or even by the River Swale to the east Any relationship which may have existed between the Cattenck villa and either the military settlement to the north or the roadside village to the west, at Bainesse, remains elusive However, what evidence there is would appear to indicate that the villa site may have been founded sometime after the decline of the Dere Street ribbon development

The presence of a roadside village at Bainesse has been firmly established by a series of recent excavations and it now seems certain that the settlement was distinct from the town of Cataractonium (P R Wilson, pers comm) Although some fourth century material has been recovered during recent fieldwalking and trial trenching at Bainesse Farm, it has been suggested that the settlement may well have been abandoned by the last century of the Roman occupation (Dr J Evans, pers comm) As an example, the life of a mortared masonry building investigated in the roadside settlement ran from the mid second to the mid third century (although substantial post pits cutting through the final demolition layer indicated subsequent occupation) (Frere, 1983)

In contrast the town of Cataractonium had a substantially longer life span, as one might expect for a settlement of such strategic significance The earliest fort was probably established at Cattenck in the late first century by Agricola before being evacuated c AD 120 (Wacher, 1971) Following re occupation c AD 160 a civilian settlement developed to the south and this continued to prosper well into the fourth century Stone wall defences surrounding the *vicus* were probably erected towards the end of the third or beginning of the fourth century and many of the buildings in the town were apparently rebuilt at the beginning of the fourth century North of the river, in the parish of Brompton on Swale, lay a suburb which did not develop until the fourth century, when the town on the south bank was well established with its defences and street grid (Esmonde Cleary, 1987)

Around AD 370 a major rebuilding programme appears to have taken place in Cataractonium and these alterations would seem to point to a radical change in the nature of the settlement The apparent closure of shops and their conversion to other

uses, perhaps as barracks or store rooms, could be indicative that the town became caught up in the re organisation of the British defences by Theodosius. Following abandonment by the military the town was apparently re occupied, probably by civilians, around the end of the fourth or beginning of the fifth century, before the main waves of Anglo Saxon settlers reached North Yorkshire (Wacher, 1971)

Whether or not the Theodosian re organisation had a debilitating effect on outlying civilian settlements, such as the Cattenck villa site, is open to question. Occupation of the dwelling at R A F Cattenck may have continued into the fifth century but by the sixth century, when Anglian inhumations were cut through the structure, it was probably in a ruinous condition (Hildyard, 1955). A proportion of the masonry from the dwelling appears to have found its way into the backfill of the enclosure ditches following their final abandonment. Although the site was well served with excellent lines of communication with Dere Street close to the west it is likely that the stone was probably originally cut in quarries relatively close to the site rather than being transported a great distance. Most quames in Roman Britain were under imperial ownership or had been leased out by the state (de la Bedoyere, 1993). Outcrops of carboniferous and Permian limestone occur, to the north west and south respectively, within 5km of Cattenck (Hull and Thomas, 1974)

It has been pointed out that although continuity of occupation from the Roman to Anglo Saxon periods at the villa site appears unlikely, the presence of Anglo Saxons in the structure may well be non coincidental, given the apparent strategic importance of the Cattenck district at the time of the Saxon influx (Hildyard, 1955). Anglian burials have also been recorded cut into deposits associated with the roadside settlement at Baines Farm (e.g. Rankov, 1982). In addition, what has been described as a grubenhaus, was recorded during excavations 0.75km north east of Baines Farm at Cattenck Triangle (Frere, 1989)

The putative sunken featured building of Phase II could well have been the result of late fourth century Germanic influence on the site. Furthermore, the Romano British material culture contained within its backfill could merely represent contact with the neighbouring late/sub Roman population rather than looting from the nearby Roman dwelling. Somewhat surprising is the apparent absence of any material culture of early Anglo Saxon date even in the unstratified pottery assemblage. If the enclosure complex was still being utilised at the time the structure was founded then presumably whatever function the structure had (the most likely would appear to be as a weaving shed) was related to an animal by product (in that case wool)

CONCLUSIONS

The proposed development projects within the northern perimeter of the airfield at R A F Cattenck offered an opportunity to investigate an extensive area of land between the A1 dual carriageway (here almost directly overlying the Roman road Dere Street) and the River Swale approximately 1km to the east. It is known that a Romano British roadside settlement was established in the vicinity of Baines Farm

around AD 100. However, little or no activity during the first half of the Roman period was encountered during the excavations described in this report.

While the roadside village at Bainesse may have been in decline by the fourth century, some of the land further to the east, between Dere Street and the River Swale, had by then become incorporated into the estate of a villa discovered, in 1939, on the R A F station. A complex of ditch defined enclosures was laid out and these may well have been utilised to provide facilities for corralling livestock. It is likely that the villa was closely related, in economic terms, with the defended Roman town of Cataractonium to the north.

Some evidence of Germanic influence upon the site towards the end of the Roman period, in the form of a possible sunken featured building, was encountered. This feature produced a fine assemblage of material culture. Little or no evidence for human activity upon the site between the end of the Roman period and the twentieth century was found.

Although the depth of archaeological strata encountered during the investigations at R A F Catterick was not particularly great, the site was clearly of some significance. Undoubtedly, the archaeological evidence recovered will form an important contribution to the Sites and Monuments Record for North Yorkshire.

REFERENCES

- Adkins L and Adkins R A 1982 *The Handbook of British Archaeology* David and Charles
- Applebaum S 1966 Peasant economy and types of agriculture in Thomas C (ed) *Rural Settlement in Roman Britain* CBA Research Report 7 Council for British Archaeology
- de la Bedoyere G 1993 *Roman Villas and the Countryside* Batsford
- Branigan K 1990 Specialisation in Villa Economies in Branigan K and Miles D (eds) *The Economies of Romano British Villas* Department of Archaeology and Prehistory University of Sheffield
- Esmonde Cleary A S 1987 *Extra Mural Areas of Romano British Towns* British Archaeological Reports British Series 169
- Finch Smith R 1987 *Roadside Settlements in Lowland Roman Britain* British Archaeological Reports British Series 157
- Frere S S 1983 Roman Britain in 1982 (Baines Farm Cattenack North Yorkshire) *Britannia* XIV p 293
- Frere S S 1989 Roman Britain in 1988 (Cattenack Tnangle North Yorkshire) *Britannia* XX p 277
- Hildyard E J W 1955 A Roman and Saxon Site at Cattenack Yorkshire Archaeological Journal Part 150 (second part of Vol 38) pp 241 245
- Hull J H and Thomas I A 1974 Limestones and Dolomites in Rayner D H and Hemingway J E (eds) *The Geology and Mineral Resources of Yorkshire* Yorkshire Geological Society
- King A 1990 Villas and Animal Bones in Branigan K and Miles D (eds) *The Economies of Romano British Villas* Department of Archaeology and Prehistory University of Sheffield
- Miles D 1990 Villas and Variety Aspects of Economy and Society in the Upper Thames Landscape in Branigan K and Miles D (eds) *The Economies of Romano British Villas* Department of Archaeology and Prehistory University of Sheffield
- Rahtz P 1976 Buildings and rural settlement in Wilson D M (ed) *The Archaeology of Anglo Saxon England* Cambridge University Press
- Rankov N B 1982 Roman Britain in 1981 (Cattenack Tnangle North Yorkshire) *Britannia* XIII pp 346 348
- Spence C 1990 *Archaeological Site Manual* Museum of London
- Taylor Wilson R H 1994 *Archaeological Excavations at R A F Catterick North Yorkshire March 14th May 25th 1994* GeoQuest Associates
- Taylor Wilson R H 1995 *Archaeological Excavations at R A F Catterick North Yorkshire 1994 Post Excavation Assessment Report* GeoQuest Associates
- Wacher J S 1960 Roman Britain in 1959 (Cattenack Bndge Yorkshire) *Journal of Roman Studies* I pp 217 218
- Wacher J S 1971 Yorkshire towns in the fourth century in Butler R M (ed) *Soldier and Civilian in Roman Yorkshire* Leicester University Press

LIST OF CONTRIBUTORS

Author **R H Taylor-Wilson** (GeoQuest Site Director)

Production of graphics and report on the geophysical survey **Dr M J Noel**
(GeoQuest Project Manager)

Desk based assessment and documentary research **D N Hale** and **R H Taylor-Wilson**

Analysis of small finds **York Archaeological Trust**

Analysis of ceramics **Arbeia Roman Fort and Museum, Tyne and Wear Museums Service, South Shields**

Analysis of sediment samples and animal bone **The Environmental Archaeology Unit, University of York**

ACKNOWLEDGEMENTS

This research was commissioned by **Trafalgar House Construction Management Limited** on behalf of the **Ministry of Defence**. We greatly appreciate the assistance provided by **Roger Smith** and **Phil Parnell** of **Trafalgar House** in providing access and other site arrangements for the archaeological investigation. In addition, we are grateful to the personnel of **R A F Catienc** for their hospitality, assistance and interest during the research programme.

GeoQuest Associates would like to thank the following people for help and information in compiling the desk based assessment: **Neil Campling** and **Linda Smith** in the **Archaeology Section** of the **Planning Department**, **North Yorkshire County Council**, **Peter Wilson** and **Peter Busby** of the **Central Archaeology Service**, **English Heritage** and the staff of the **County Records Office**, **North Yorkshire County Council**.

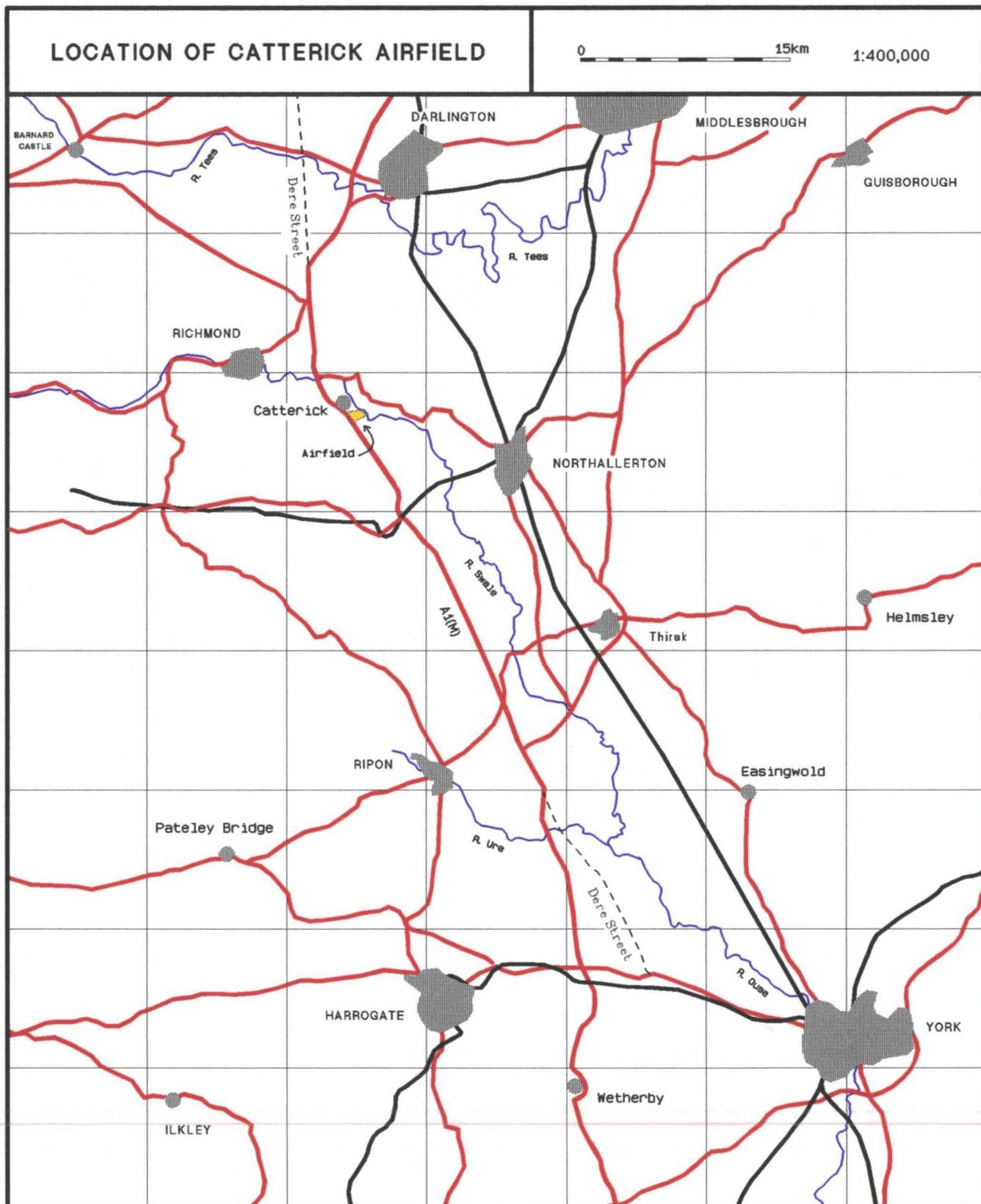


FIGURE 1

ARCHAEOLOGICAL SITES IN THE VICINITY OF R.A.F. CATTERICK

KEY

- Archaeological Site
- Archaeological Settlement

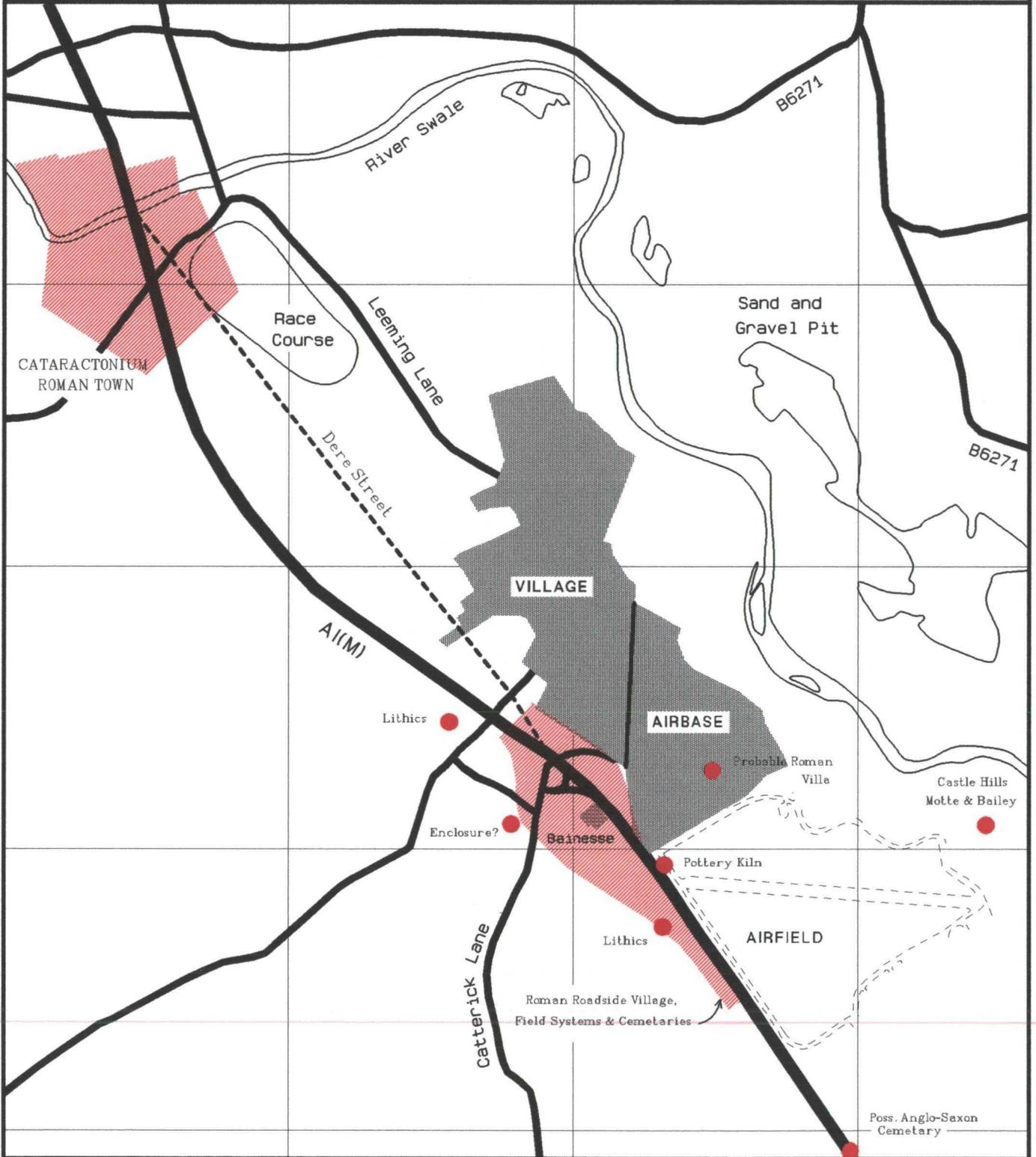
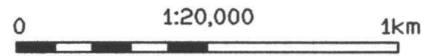


FIGURE 2

SNY 15695 Figures 3 to 7 and 9 TOO LARGE TO SCAN
SEE ORIGINALS.

RAF CATTERICK EXCAVATION
OA2 BASE PLAN

0 1:100 5m

KEY

Projected
edge

RESEARCH BY

GeoQuest
ASSOCIATES

ON BEHALF OF



TRAFALGAR HOUSE
CONSTRUCTION MANAGEMENT LIMITED

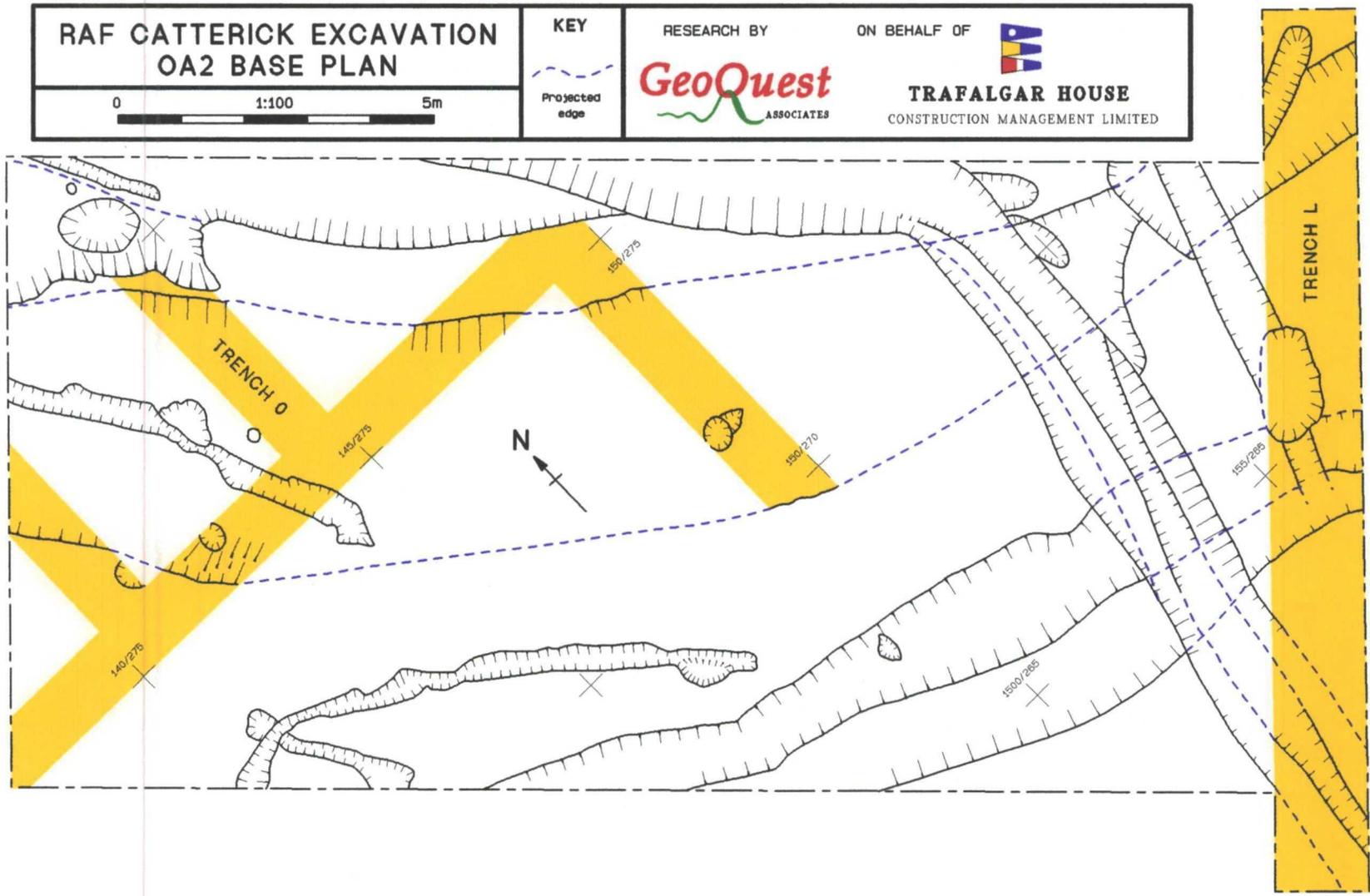


FIGURE 8

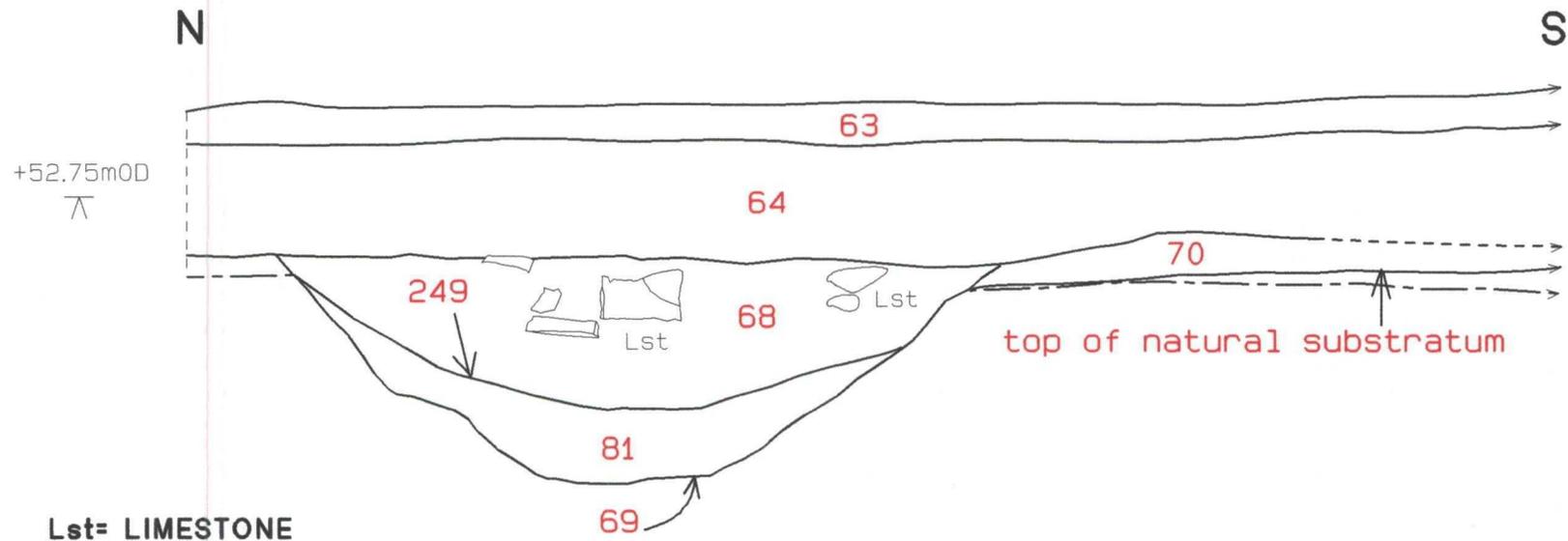
RAF CATTERICK EXCAVATION
TRENCH I: PART OF SECTION I3

0 1m 1:20

RESEARCH BY
GeoQuest
ASSOCIATES

ON BEHALF OF

TRAFALGAR HOUSE
CONSTRUCTION MANAGEMENT LIMITED



- Phase II.1 [69] & [81]
- Phase II.4 [68] & [249]
- Phase IV.1 [64]
- Phase IV.3 [63]

FIGURE II

RAF CATTERICK EXCAVATION
PLAN AND SECTION OF PIT [170]

0 1:50 3m

RESEARCH BY **GeoQuest** ASSOCIATES
ON BEHALF OF **TRAFALGAR HOUSE**
CONSTRUCTION MANAGEMENT LIMITED

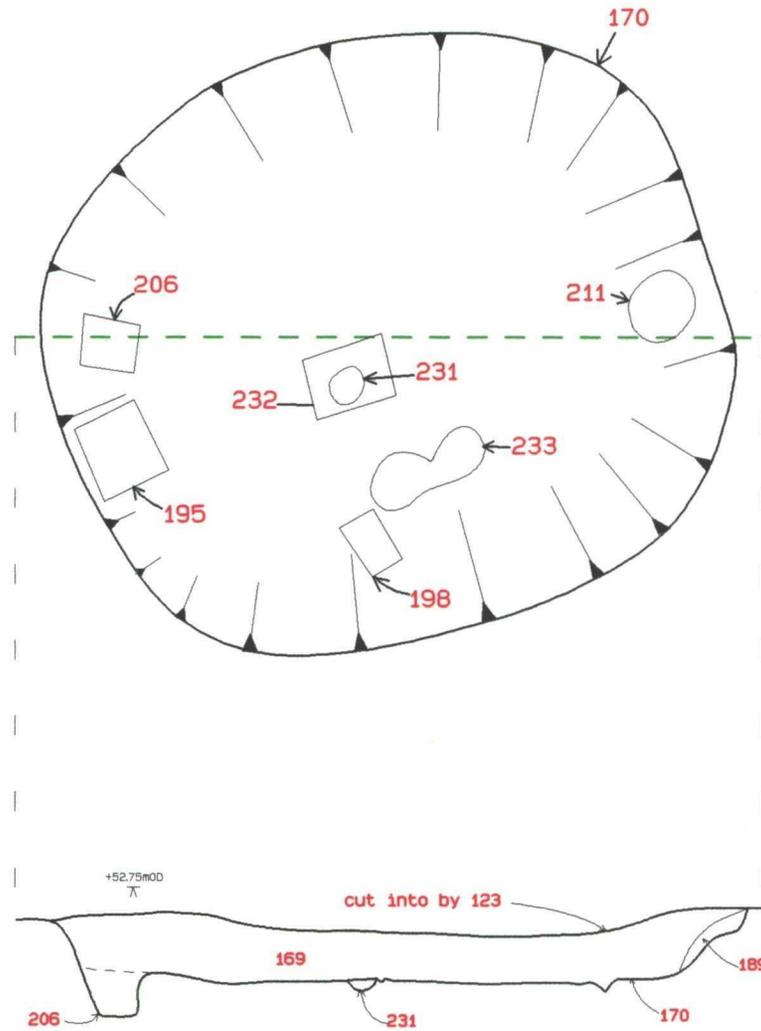


FIGURE 12

APPENDIX A

Stratified Pottery

Note: 'Roman' refers to wares which are found throughout the Roman period. No diagnostic features were present to provide a more accurate date.

Phase I.2

[172] Coarse ware. Rim. Flanged bowl, oxidised, large red inclusions, fine soft orange fabric. 0.010g. Second century.

[214] Calcite-gritted ware. Body sherd with groove decoration. 0.008g. Roman.

[163] Cantley-Catterick mortarium. Base sherd. 0.069g. Late third century +

Phase I.4

[260] Samian. Scraps. Central Gaulish. 0.005g. Second century.

Nene Valley ware. Flanged rim sherd with groove. Imitation samian ware (Drag. 36.) Mottled brown/orange colour-coat. 0.035g. Late third to mid fourth century. Figure A3.

Calcite-gritted ware. Neck sherds. 0.015g. Roman.

Coarse ware. Scrap. Hemispherical flanged bowl. Highly micaceous orange fabric with burnished grey exterior. 0.009g. Difficult to date accurately.

Coarse ware. Scrap. Oxidised. 0.001g. Difficult to date accurately.

[289] Calcite-gritted ware. Body sherd. 0.003g. Roman.

Phase I.5

[110] Samian. Scrap. Central Gaulish. 0.005g. Second century.

[258] Nene Valley ware. Pedestal base with thick walls. Black exterior and brown interior colour-coat.

Nene Valley ware. Body sherds. Black colour-coat exterior and interior.

Nene Valley ware. Body sherd from beaker. Orange colour coat exterior and interior.

Total 0.050g. Late second century +

Black-Burnished (Type 2) ware. Base sherd from bowl or dish. 0.008g. Second to third century.

Calcite-gritted ware. Base sherd. 0.009g. Roman.

Coarse ware. Rim sherd. Oxidised highly micaceous fabric with large quartz inclusions and gold mica plates. 0.006g. Difficult to date accurately.

Coarse ware. Body sherds. Orange fabric. 0.004g. Difficult to date accurately.

[265] Samian. Body sherds. Central Gaulish. 0.006g. Second century.

East Yorkshire Grey ware. Rim sherd from wide mouth bowl. Corder Type 4. 0.063g. Late third century +

Coarse ware. Body sherd. Oxidised gritty fabric. 0.007g. Difficult to date accurately.

Phase I.7

[253] ?Organic Tempered ware. Body sherds. Oxidised exterior and thin oxidised interior surface. 0.005g. Difficult to date accurately.

Phase II.1

[136] Nene Valley ware. Plain rim from bowl or dish. Black colour-coat.

Nene Valley ware. Body sherd from beaker. Black colour-coat.

Total 0.026g. Fourth century.

Black-Burnished (Type 1) ware. Body sherd from cooking pot. 0.009g. Hadrianic +

Grey ware. Rounded everted rim.

Grey ware. Small handle, single groove.

Total 0.012g. Second to third century

Phase II.2

[148] Calcite-gritted ware. Body sherd. 0.025g. Roman.

Phase II.3

[97] Coarse ware. Body sherds. Orange fabric, grey exterior surface, black inclusions. 0.009g. Difficult to date accurately.

[127] Samian. Scraps. East Gaulish. 0.004g. Mid second to mid third century.

[128] East Yorkshire Grey ware. Body sherd. 0.002g. Late third century +

Phase II.4

[68] Tr. I Calcite-gritted ware. Huntcliff-type rim. 0.157g. Mid fourth century +

Flagon. Body sherd. Grey fabric, cream exterior, thin cream interior surface. 0.002g. Second century.

[68] E Reduced ware. Rim and body sherds. Hemispherical flanged bowl, flanges deliberately cut off and smoothed down. Grey core with quartz inclusions, buff margins and micaceous black burnished surfaces (worn). 0.155g. Late third century +

[68] W Coarse ware. Everted cooking pot rim. Gritty, micaceous, buff fabric. 0.016g. Difficult to date accurately.

[84] Nene Valley ware. Base sherd. Brown exterior and tan interior colour-coat.

Nene Valley ware. Body sherd from beaker. Brown exterior with orange interior colour-coat. White paint decoration. Total 0.071g. Mid third to fourth century.

Calcite-gritted ware. Base and body sherds. 0.117g. Possibly third century but more probably fourth century.

Coarse ware. Scrap. Orange fabric. 0.001g. Difficult to date accurately.

[119] Calcite-gritted ware. Body sherds. 0.025g. Roman.

Phase II.5

[66] Tr. I Samian. Rim sherd. Drag. 37. Central Gaulish. 0.002g. Second century.

Nene Valley ware. Scrap. Brown colour-coat. 0.001g. Late second century +

Crambeck Parchment ware. Body sherds. Hemispherical flanged bowl. Corder Type 5b. 0.029g. Mid fourth century +

Oxidised ware. Body sherd. Orange fabric, red inclusions, darker burnished exterior.

Oxidised ware. Body sherds. Pale orange fabric, large red inclusions.

Oxidised ware. Scrap.

Total 0.010g. c. Second century.

[66] E Oxford ware. Rim sherd from wide mouth bowl. Red colour-coat. Rouletted decoration under rim, groove on shoulder. Young Type C75. 0.015g. Second quarter of fourth century +. Figure A1.

[66] W Coarse ware. Body sherd from cooking pot or jar. Grey core, black exterior surface, white margin to interior, grey interior. Micaceous fabric with few inclusions. 0.020g. Difficult to date accurately.

[120] East Yorkshire Grey ware. Base sherd. White slip. 0.042g. Late third century +

Calcite-gritted ware. Huntcliff-type rim

Calcite-gritted ware. Body sherds.

Total 0.165g. Mid fourth century.

Coarse ware. Square everted rim. handmade, micaceous black fabric, buff exterior surface. 0.006g.

Coarse ware. Body sherd. Micaceous fabric, pale grey core and dark surfaces. Zone of decoration (two grooves and slashed diagonal lines) joins sherd from near base, with rivet hole. 0.035g.

Coarse ware. Scrap. Orange fabric. 0.001g.

All difficult to date accurately.

Possibly Medieval. Body sherd. 0.008g.

[141] Thameside ware. Body sherd. 0.004g. Third century.

[143] Nene Valley ware. Base sherd with footring from bowl, dish or platter. Black colour-coat. White painted decoration (flower and radiating line). 0.055g. Late third to mid fourth century. Figure A4.

East Yorkshire Grey ware. Body sherd from bowl or dish. 0.012g. Late third century +

Calcite-gritted ware. Body sherds. 0.024g. Roman.

[157] Coarse ware. Body sherd. Gritty grey fabric. 0.005g. Difficult to date accurately.

Scrap. Orange fabric. Difficult to date accurately.

[193] East Yorkshire Grey ware. Rim sherd from hemispherical flanged bowl. Corder Type 5a. 0.009g. Late third century +

Grey ware. Body sherd. 0.006g. Difficult to date accurately.

[196] Mancetter-Hartshill mortarium. Scrap from flange rim. 0.004g. Late second to fourth century.

Nene Valley ware. Body sherd. Black colour-coat. 0.002g. Late second century +

Grey ware. Body sherd. Gritty fabric. 0.018g. Difficult to date accurately.

Phase II.6

[261] Samian. Scrap. East Gaulish. 0.001g. Mid second to mid third century.

Phase II.7

[169] Samian. Rim. Drag. 33. Central Gaulish.

Samian. Rim. Drag. 37. Decorated. Central Gaulish.

Samian. Rim. Drag. 37. Central Gaulish.

Samian. Body sherds. Drag. 37. Decorated. Central Gaulish.

Samian. Body sherd. Mortarium. Worn.

Samian. Body sherd. Drag. 18/31. Slightly burnt. Central Gaulish.

Samian. Body sherds. Central Gaulish.

Samian. Body sherds. East Gaulish.

Total 0.164g. Second to mid third century.

Calcite-gritted ware. Huntcliff-type rim from wide mouth bowl. 0.062g. Mid fourth century.

Native ware. Body sherd. Black micaceous fabric with large silver mica plates.

Native ware. Body sherd. Handmade black fabric with a few quartz inclusions.

Native ware. Body sherd. Micaceous black fabric with quartz inclusions. Patchy orange on exterior.

Total 0.047g. All difficult to date accurately.

Coarse ware. Flanged rim with internal bead from conical bowl. Grey micaceous fabric with orange margins, grey surfaces. 0.089g. Late third century+. Figure A2.

Coarse ware. Scraps. Orange fabrics. 0.002g. Difficult to date accurately.

[189] Native ware. Body sherd. Handmade, highly micaceous black fabric. Oxidised on exterior. 0.016g. Difficult to date accurately.

[194] Calcite-gritted ware. Scrap. Oxidised. 0.002g. Roman.

[197] Samian. Body sherd. Decorated. Central Gaulish. 0.001g. Second century.

[205] Samian. Body sherd. Drag. 18/31. East Gaulish. 0.011g. Mid second to mid third century.

Phase III.3

[122] Samian. Base sherd. Drag. 18/31. East Gaulish.

Samian. Scrap.

Total 0.025g. Mid second to mid third century.

Phase III.5

[269] Calcite-gritted ware. Huntcliff-type rim scrap. 0.007g. Mid fourth century.

Native ware. Body sherd. Thick black micaceous fabric with plentiful large quartz inclusions. 0.023g. Difficult to date accurately.

Phase III.6

[292] Coarse ware. Scrap. Oxidised. 0.002g. Difficult to date accurately.

Phase IV.3

[23] Medieval. Body sherd. Green glaze.

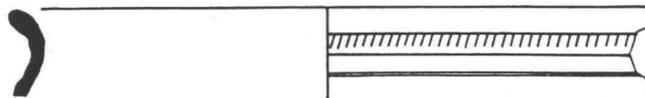


Figure A1. From [66]: Rim sherd from a necked bowl with rouletted decoration in Oxford ware, Young Type C75. From the second half of the fourth century

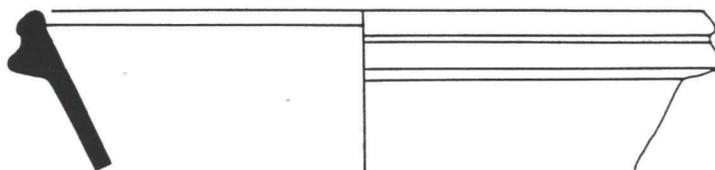


Figure A2. From [169]: Rim sherd from a flanged conical bowl with internal bead in unidentified Roman coarse ware. From the third quarter of the third century or later.

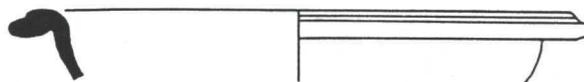


Figure A3. From [260]: Rim sherd from necked bowl in Nene Valley ware. An imitation of samian ware - Drag. 36 form. From the late third to mid fourth century.

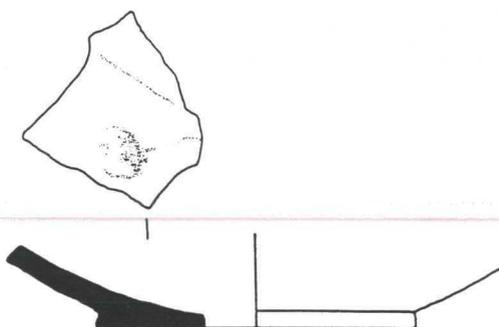


Figure A4. From [143]: Base sherd from open bowl or platter in Nene Valley ware. From the late third to mid fourth century.

APPENDIX B

Stratified Small Finds

Phase I.2

[163]

SF 9: Iron. Leaf-socketed arrowhead with a broken tip. Mineralised wood remains survived in the socket.

Phase I.5

[258]

SF 35: Iron. Knife with broken blade and tang.

SF 37: Iron. Nail.

SF 38: Iron. Knife with broken blade. Back displays distinct shaping.

SF 36: Copper alloy. Penannular brooch. Although complete the pin does not articulate. The terminals were decorated with zoomorphic forms. Figure B3.

[265]

SF 32: Slag.

SF 33: Lead. Possible run-off.

Phase I.6

[255]

SF 28: Iron. Nail.

SF 29: Iron. Knife with broken blade and tang.

Phase II.4

[84]

SF 6: Iron. Object.

Phase II.5

[66]

SF 7: Copper alloy. Wire. Slightly twisted at one end, this could be part of a broken bracelet.

[157]

SF 8: Iron. Nail.

Phase II.7

[169]

SF 10: Glass. Fragment of vessel rim.

SF 11: Iron. Knife with chipped/broken end. Tang has a curved end which is possibly original.

SF 16: Iron. Strip.

SF 20: Iron. Knife with broken end. Tang has possible remains of wooden handle on it.

SF 22: Iron. Strip/Tool.

SF 30: Iron. Blade/Tool. The object has a narrow bevelled edge on all three sides.

SF 12: Antler. Comb. After consolidation and partial reconstruction there was evidence of 9 rivets, 5 in metal and 4 in antler. These were arranged alternately. The surface of the object displayed stamped ring and dot decoration and there was a series of finely scored crossed lines in one location. Figure A1.

SF 21: Antler. Comb. The surface of the object displayed stamped ring and dot decoration. Figure A2.

SF 25: Antler. Comb. Small fragment.

SF 13: Fired Clay. Broken bead.

SF 17: Fired clay. Broken loom weight.

SF 18: Fired clay. Broken loom weight.

SF 15: Bone. Possible broken pin-beater.

SF 19: Bone. Possible broken pin-beater.
SF 23: Bone. Pin.
SF 24: Bone. Pin.
SF 31: Bone. Tool?

Phase III.5

[283]
SF 34: Iron. Object.

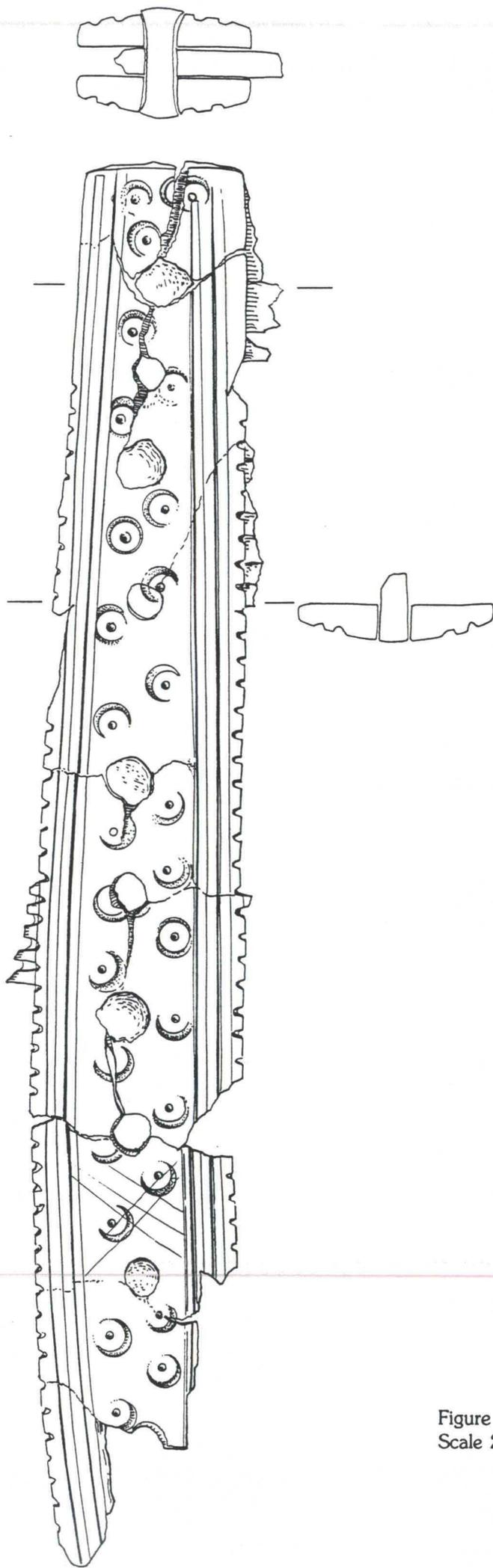


Figure B1. From [169]: Small find 12. Antler comb.
Scale 2:1 (Drawn by G. Boyles, Y.A.T.).

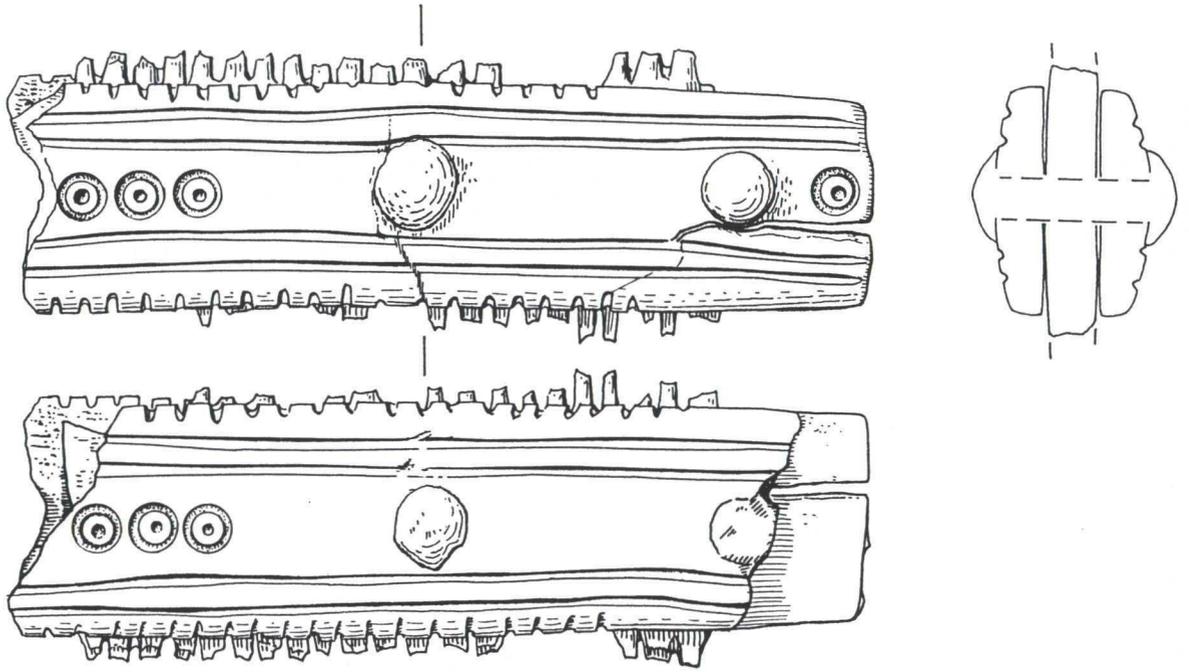


Figure B2. From [169]: Small find 21. Antler comb. Scale 2:1 (Drawn by G. Boyles, Y.A.T.).

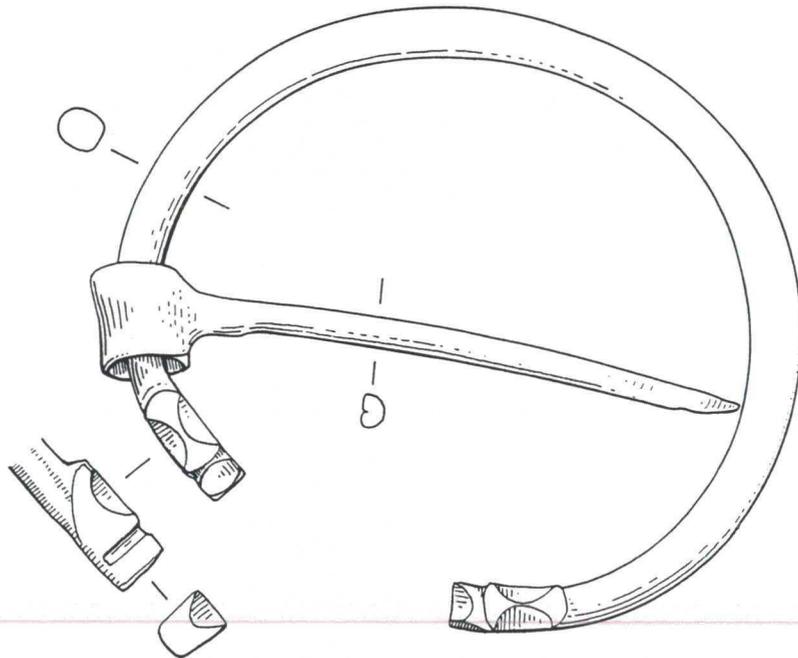


Figure B3. From [258]: Small find 36. Copper alloy brooch. Scale 2:1 (Drawn by G. Boyles, Y.A.T.).

APPENDIX C

Principles of Geomagnetic Surveying

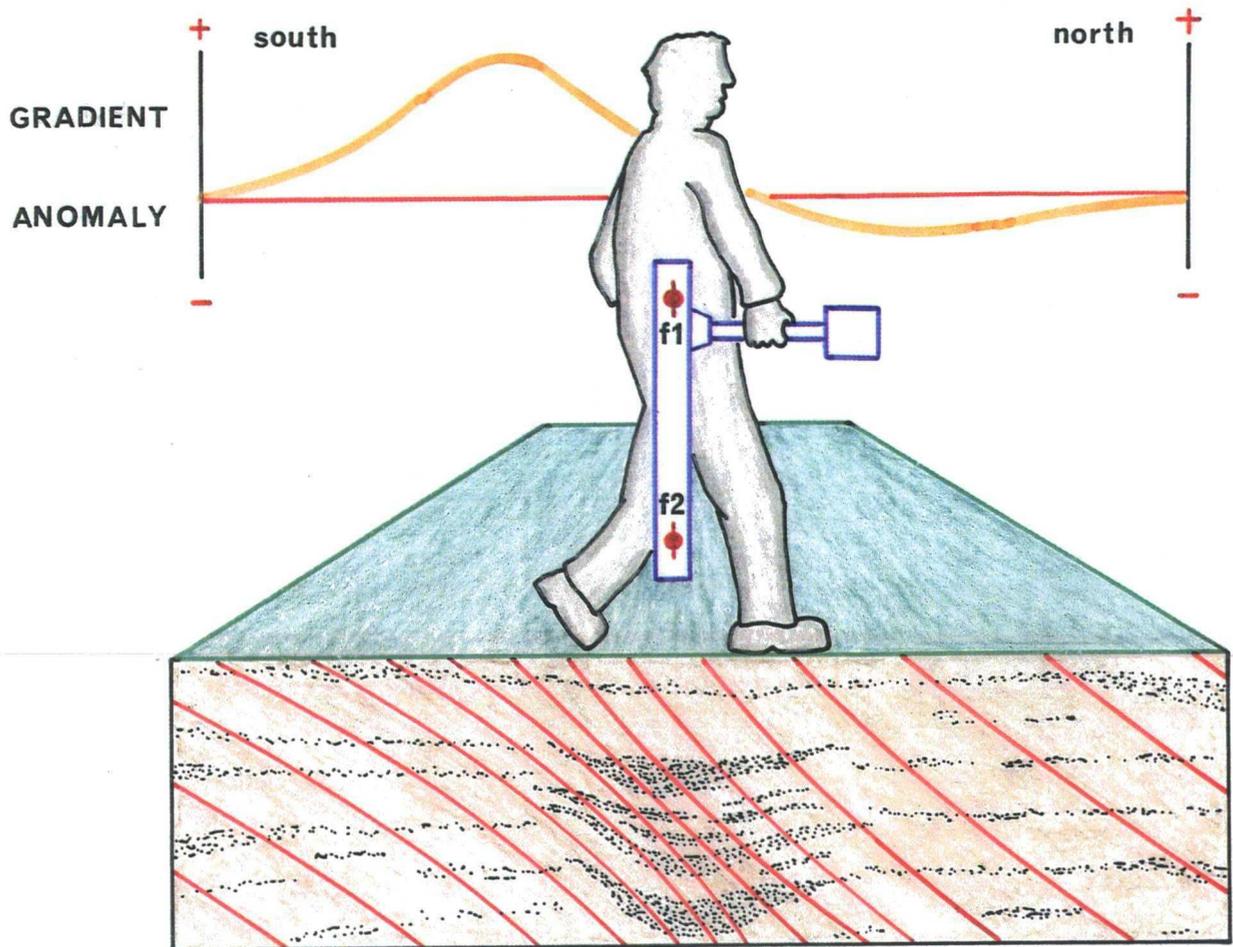
Geomagnetic prospecting detects subsurface features in terms of the perturbations or 'anomalies' that they induce in the Earth's magnetic field. In contrast to resistivity, seismic or electromagnetic surveying, no energy is injected into the subsoil and hence this is one of a class of *passive* geophysical techniques that includes gravity and thermal surveying. In an archaeological setting two types of magnetic anomalies can be distinguished:

- 1 Anomalies arising from variations in *magnetic susceptibility* which will modulate the component of magnetisation *induced* in the subsurface by the Earth's magnetic field. For most archaeological sites, this is the dominant factor giving rise to geomagnetic anomalies. In general, susceptibility is relatively weak in sediments, such as sandstones and enhanced in igneous rocks and soils, especially those which have been burnt or stratified with organic material.
- 2 Anomalies due to large, *permanently magnetised* structures. Such permanent magnetisation or 'remanence' arises when earth materials are heated to above $\sim 600^{\circ}\text{C}$ and cooled in the geomagnetic field. Thus kilns and hearths are often detected as strong permanent magnets causing highly localised anomalies that dominate effects due to background susceptibility variations. Remanence can result from other physical and chemical processes but these give rise to anomalies that are usually unimportant for geophysical prospecting.

There are several approaches towards the practical measurement of geomagnetic anomalies. In this study measurements were made using a Geoscan FM36 fluxgate gradiometer which records the change with height in the vertical component of the Earth's magnetic field, as shown overleaf. This method has the advantage of being insensitive to diurnal variations while the Geoscan instrument also benefits from an integrated data logger. Note that in mid northern latitudes the magnetic anomaly will be asymmetric with the main peak displaced to the south of the archaeological feature. Thus, a ditch filled with a soil of enhanced susceptibility, for example, will generate a positive anomaly to the south, mirrored by a weak negative anomaly north of the feature. When portrayed as an area map of grey tones this gives rise to a 'shadowing' or pseudo relief effect which must be borne in mind when making an archaeological interpretation.

Two techniques can be used to survey gridded areas using the fluxgate magnetometer. In the parallel method the instrument is used to scan the area along traverses which are always in the same direction. This method minimises 'heading errors' due to operator and instrument magnetisation but is time consuming. The alternative zig-zag method is significantly faster and suitable for areas where anomalies are large compared to these and other sources of error.

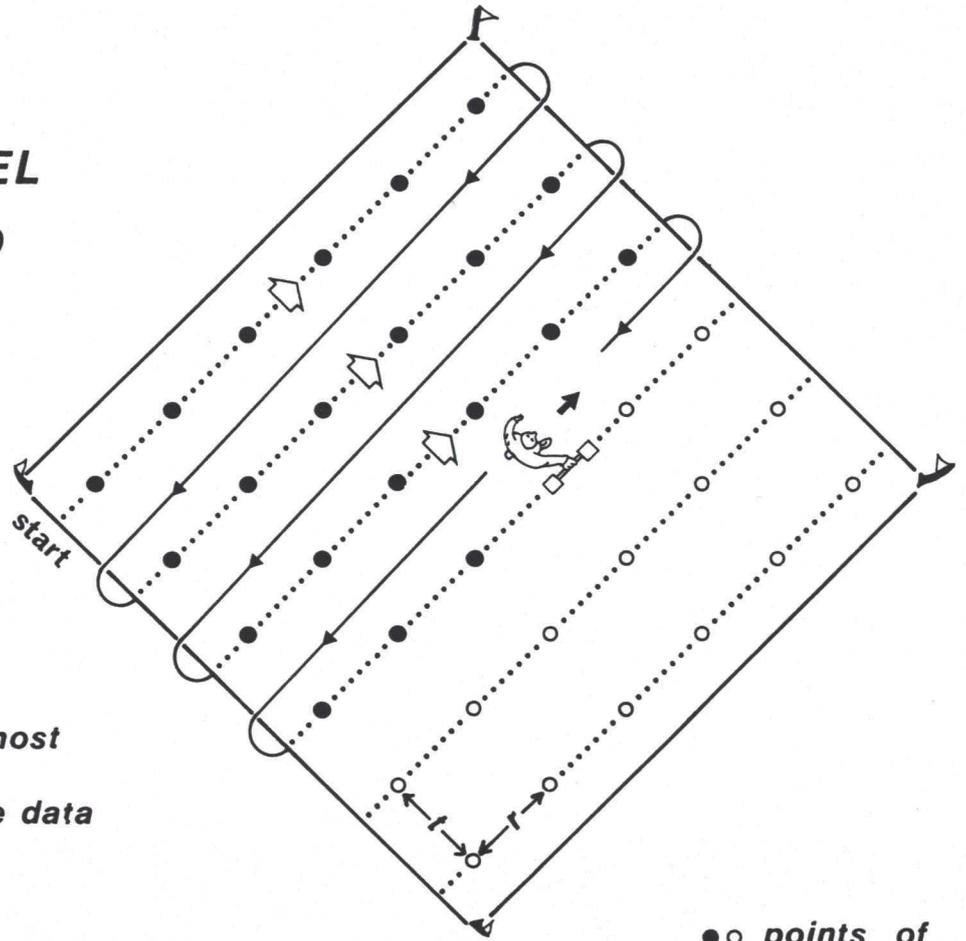
MAGNETIC SURVEYING



SURVEY SCHEMES

PARALLEL METHOD

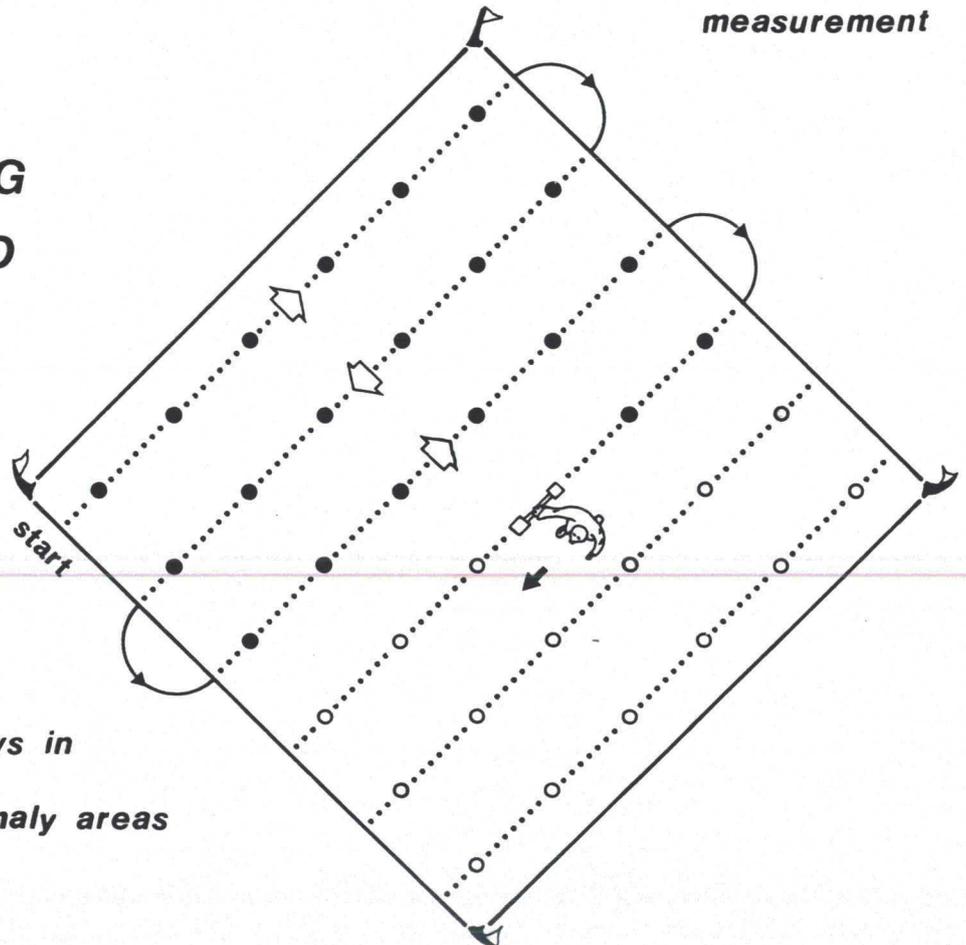
*slower but
minimises most
errors in the data*



●○ points of measurement

ZIG-ZAG METHOD

*suitable for
rapid surveys in
strong anomaly areas*



NOTES

GeoQuest Associates
The Old Vicarage
Castleside
Co. Durham DH8 9AP