TEMPVS REPARATVM

Archaeological and Historical Associates

EXCAVATION REPORT

STOWE FARM EXTENSION (W3/PL/5)
WEST DEEPING
LINCOLNSHIRE

(PHASES 1A AND 1B AND SUBSOIL DUMPING AREA)

TR 31012DFC

ON BEHALF OF

Redland Aggregates Limited
Six Hills
Melton Mowbray
Leicestershire
LE14 3PD

TEMPVS REPARATVM
FIELD SERVICES DEPARTMENT

6 AUGUST 1996

Lincolnshire County Council
Archaeology Section
12 Friars Lane
LINCOLN LN2 5AL
TEL. 0522 5[illegible]2 FAX: 0522 530724
9.8.96.

TEMPVS REPARATVM
Archaeological and Historical Associates Limited

29 BEAUMONT STREET
OXFORD OX1 2NP

Tel: 01865 311046
Fax: 01865 311047

ARCHAEOLOGICAL EXCAVATION REPORT

In connection with a planning condition on a
permission to extract aggregates

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Prepared by:

Philip J Kiberd BA MSc

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1.0 PROLEGOMENA

1.1 Personal and organisation qualifications

1.1.1 Tempvs Reparatvm is a private limited company concerned with many aspects of archaeology and history including consultancy field evaluation and excavation.

1.1.2 Tempvs Reparatvm works on a national basis. It is an recognised contractor in many English and Welsh Counties.

1.1.3 Since its formal incorporation in 1988, the Company has, as archaeological consultant, represented a wide range of clients, both corporate and individual. Similarly, it has undertaken a large number of fieldwork projects both large and small. Tempvs Reparatvm acts for Redland Aggregates Limited as that company's archaeological consultant and is its preferred field contractor.

1.1.4 Tempvs Reparatvm is the publisher of British Archaeological Reports, a prestigious international series of archaeological monographs and conference proceedings, also of other books and pamphlets on archaeological and historical subjects.

1.1.5 Tempvs Reparatvm is committed to ensuring that the client receives a cost–effective service while itself maintaining the highest professional standards. The Company only employs specialists and technicians whose work and expertise match the quality requirements of the Company.

1.1.6 All projects are managed in accordance with and in the light of English Heritage's MAP2 framework, recommendations of PPG16 and the Institute of Field Archaeologists guidelines.

1.1.7 Philip Kiberd is an Assistant Manager (Field Services Department) with Tempvs Reparatvm, with particular responsibilities for field–work procedures and post–excavation analysis. He has extensive field–work and post–excavation experience in archaeology in Britain and abroad. He holds a Bachelor of Arts degree in Archaeology and Prehistory and a Master of Science degree in Human Osteology, Palaeopathology and Funerary Archaeology.

1.2 The commission

1.2.1 In March 1995, Tempvs Reparatvm Field Services Department was commissioned to carry out open–area archaeological excavation following soil–stripping at Stowe Farm Extension (W3/PL/5), West Deeping, Lincolnshire.

1.2.2 This excavation work was carried out in accordance with specifications (doc no TR 31012DCE) agreed by Dr C E Howlett of Tempvs Reparatvm Consultancy Department on behalf of Redland Aggregates Ltd with Mr I George acting for Mr S Catney, Lincolnshire County Council Archaeological Officer.

1.2.3 This report details the results of the open–area excavation carried out in areas Phase 1A and 1B and subsoil dumping area.

1.3 In connection with the commission

1.3.1 In 1989, Redland Aggregates Limited commissioned Tempvs Reparatvm to carry out a consultancy report on the archaeological potential of the proposed area of development at Stowe Farm and possible constraints on the planning application. Redland Aggregates also supplied Tempvs Reparatvm with necessary background data for this document.

1.3.2 Tempvs Reparatvm carried out this review of the known archaeology for a number of sites at Stowe Farm, including the Stowe Farm Extension. This information is contained in an archaeological desk–top document produced in 1989 – document TR 31012DB.

1.3.2 Following refusal of permission for one of the areas initially considered (Stowe Farm W3/PL/4), a consultation took place in the summer of 1994 between Tempvs Reparatvm and S Catney, Lincolnshire County Archaeologist, with regard to the need for further archaeological work of the land known as W3/PL/5 for which Redland Aggregates had applied for permission to extract sand and gravel, and regarding the likely requirements of an archaeological planning condition. As a result of this consultation, general proposals for a first phase of archaeological investigation were agreed. A document setting out explicitly a programme of works for preliminary evaluation by non–intrusive archaeological techniques (document TR 31012DCA) was subsequently submitted to the Lincolnshire County Archaeologist for approval. Thesepecifications initially included air–photo analysis, fieldwalking and geophysical survey. Further discussions took place between S Catney and C Howlett of Tempvs Reparatvm, Redland Aggregates' archaeological consultants and it was agreed that the preliminary work should be expanded to include research of historical documents relating to the application area and a preliminary soil survey by the project's palaeoenvironmental specialist.

1.3.3 The various elements of the preliminary evaluation were put into operation. Air Photo Surveys of Cambridge were commissioned to undertake a reassessment and plotting of the air photographs available. The Bartlett–Clarke Consultancy undertook geophysical survey. James Rackham of the Environmental Archaeology Consultancy carried out the soil survey. Tempvs Reparatvm's Field Services Department fulfilled the requirement for fieldwalking and Dr C E Howlett of Tempvs Reparatvm surveyed and reported on the historical landscape.

1.3.4 The results of the preliminary evaluations were somewhat ambiguous and inconclusive and raised various further questions about the archaeological remains that may have survived. There was no indication that the site had undergone any process that would have negated the use of invasive techniques of evaluation. Thus it was agreed to proceed to a stage of trial trenching.

1.3.5 C E Howlett drew up a specification for the evaluation and a plan of the physical layout of the proposed trial trenches (document TR 31012DCB) and submitted this to Lincolnshire County archaeology office together with a brief summary of the preliminary evaluations, and copies of the reports, as available.

1.3.6 The specified fieldwork was undertaken by Tempvs Reparatvm's Field

Services Department and supervised by Andrew (Bob) Hatton. Monitoring of the work was undertaken by Lincolnshire County Council archaeological officers on at least two occasions. Francis Pryor of the Fenland Archaeological Trust also made a brief visit to the site and offered advice.

1.3.7 In tandem with the trial trenching a programme of environmental survey and analysis, and scientific dating was undertaken. This work was done under the supervision of James Rackham and reported on by Karen Izard. Samples of organic material were subsequently sent to Beta Analytic Inc, Miami, Florida, USA for Carbon 14 dating.

1.3.8 The evaluation was reported on in document TR 31012DFA.

1.4 Summary of Work and Results

1.4.1 Following the initial evaluation, specifications for archaeological excavation were prepared and agreed between Redlands Ltd and Tempvs Reparatvm (doc no TR 31012DCE). These were forwarded to and agreed by the Assistant County Archaeologist, Mr Ian George on behalf of the County Archaeologist, Mr Stephen Catney.

1.4.2 Following the acceptance of the specifications, a meeting was held between Tempvs Reparatvm and Redlands Aggregates Ltd at which the programme of works was decided and the methodology for topsoil stripping agreed.

1.4.3 Excavation took place from 9th May 1995 to 8th September 1995. A team of archaeologists numbering six maximum was employed during this time. Work began in Area A to locate and record a proposed ring-ditch, this was not positively identified. Work then proceeded from the southern end of the site, 1A northwards to the first headland. The entire area of 1A and the new subsoil dumping area, B, which lay to the west of 1A were fully excavated and recorded, before work began on 1B. Area 1B was located to the north of the first headland through to the northern perimeter of the extraction area.

1.4.4 Area 1A comprised an area 200m square, including the dumping area, B. Area 1B comprised an area 150m wide by 200m long.

1.4.5 All areas were fully recorded, planned and sample excavated; an approximate 20% sample of all features was undertaken. Analysis revealed a largely unstratified series of field boundaries and settlement activity within the area, ranging from late neolithic to post-medieval times.

2.0 THE APPLICATION AREA

2.1 Site Location

2.1.1 The location of the proposed Stowe Farm Extension in **Figure 1**, is shown as the land marked as W3/PL/5. It is located north of the River Welland.

2.1.2 The application area comprises a total of 17.5 ha and is centred at TF 100111.

2.2 Topography, soil and geology

2.2.1 The site consists of high quality arable land. The landscape in the area is lightly alluviated Fen and Terrace gravels over Kellaway sands.

2.2.2 The river Welland is bordered by a narrow strip of alluvium and gravel up to 1.5km wide as it passes through the limestone uplands surrounding Stamford. To the east of Stamford the gravel widens, to form a broad spread of fen edge gravel set among fenland silts and peat. This gravel belt stretches from Peterborough north to Bourne, and is at its widest around West Deeping. It is at West Deeping that the Roman road now followed by King Street crossed the Welland, running north to Bourne and Lincoln.

2.2.3 Current land–use of the area is arable.

2.2.4 The geomorphology of the area has been the subject of a particular study carried out by James Rackham.

3.0 THE ARCHAEOLOGICAL BACKGROUND

3.1 Introduction

3.1.1 The part of the Welland Valley near which the application site is located has been the focus of intensive archaeological study since at least 1957, when the Welland Valley Research Committee was formed to survey and excavate threatened archaeological sites. Subsequent research has been carried out by the Royal Commission on Historic Monuments for England (RCHM(E)) and other organizations, most recently the Fenland Archaeological Trust.

3.1.2 The results of this cumulative research demonstrate that large tracts of the Welland Valley landscape were substantially deforested by the middle neolithic period. A palimpsest of cropmarks exists spanning several millenia and betraying the presence of a series of organized prehistoric landscapes incorporating farms, field systems, and a spectacular range of ceremonial monuments.

3.1.3 Prehistoric communal monuments, settlements, field systems and landscape features have been singled out as targets for research priority by English Heritage and the Prehistoric Society. The transition from Iron Age to the Roman including sites, their settings, field boundaries and food production and consumption also fall within the national research priority category.

3.2 Known sites from the surrounds of the application area

3.2.1 The following sites were first listed in the original desk–top report document TR 31012DB and dated 8/11/89. They lie outside the area where there is currently permission for gravel extraction.

(1) A shield shaped enclosure visible as a cropmark. Lies on the side of the field, partly covered by woodland. Double ditches lead from the entrance, which is in the southern corner of the flattened side. Extends into the adjoining Scheduled Ancient Monument.
?IA/R NGR 0971 1167 LCC SMR 32979

(2) Ring ditch, visible as cropmark, on east side of field.
P NGR 0992 1169 LCC SMR 32991

(3) Ring ditch, visible as cropmark in the middle of the field, approached by two ditches, to form corner on west side of barrow.
P NGR 0980 1158 LCC SMR 32992

(4) An extensive, probably Roman, occupation site, set within an area of ancient fields and visible as a cropmark.
?R NGR 0980 1155 LCC SMR 33559

(5) Scheduled Ancient Monument (160). Recommended for scheduling by the RCHM(E) in 1960:

'This clearly marked enclosure, in which lines of pits can be distinguished, may be an Iron Age farm frequently reconstructed'.

The Scheduled Ancient Monument is described as an irregular pentagonal enclosure (approx. 200' x 260') with subdivisions, excavated by Welland Valley Research Committee. It contains what appears to be a timber basilical building, visible on aerial photographs. A ditched droveway leads to the site. Pottery from the site has been mostly Roman.
R NGR 0951 1400 LCC SMR 30051 (SAM 160)

(6) Scheduled Ancient Monument (327). Described by DoE as:

'Part of the large and straggling agricultural settlement at Greatford, probably of Iron Age or Romano – British date'.

This site comprises a homestead enclosure, and what appear to be stockyards. There would appear to be a complex palimpsest of features, indicative of several overlapping periods of use.

At least fourteen irregular rounded enclosures are known in the complex as a whole, linked by droveways, and double ditches with right angle bends.
IA/R NGR 0980 1190 LCC SMR 30054

(7) Slight cropmarks, no distinctive site types visible.
?P/R NGR 0960 1170 LCC SMR 32980

(8) Cropmarks, extensive and probably indicating Roman settlement (see catalogue entries 1,2,3,6R NGR 0980 1155 LCC SMR 33559

Rectory Farm

3.2.2 The original desk–top document referred to above also included under this heading all the sites from the Rectory Farm application area (W3/PL/6). Since the preparation of the original document, a considerable amount of further archaeological work has been carried out across the Rectory Farm application area including intrusive evaluation and, in the summer of 1994, area excavation. Through this process a very considerable amount of knowledge of that area has been gained and it is therefore possible to examine the archaeology at Stowe Farm with particular reference to that at Rectory Farm.

3.2.3 At Rectory Farm it has been possible to trace a succession of periods of landscape use and exploitation from the neolithic to medieval periods and including important structural evidence from the Iron Age and Roman periods (Roman villa) and field systems of the neolithic/Bronze Age, Iron Age, Roman and medieval periods. The precise significance of the wide variety of prehistoric evidence is currently undergoing detailed consideration.

It is intended that information concerning landscape change at Stowe Farm, at a later date, will be integrated with Rectory Farm data.

3.3 The archaeology of the application area

3.3.1 Prior to the field evaluation there was no known archaeology within the application area, though the potential was reasonably high given the past activity that is known to have taken place in the surrounding area. Surprisingly, although the area had undergone relatively intense air photographic cover since the mid–twentieth century, no cropmarks had been revealed.

The 1994 evaluation

3.3.2 As described above (Sub–section 1.3) the application area has been systematically fieldwalked and been subject to an aerial photographic study, geophysical survey and trial trenching.

3.3.3 This appeared to suggest a complex system of ditches and pits, representing ceremonial and non–ceremonial activity.

Aerial photographic survey

3.3.4 The aerial photography for the site did not suggest the extensive sequence of features revealed by trial trenching.

3.3.5 The reasons for this are that the combination of shallow extant features, alluvial capping and medieval ploughing, mask the presence of the earlier archaeology. See also **Figure 11**.

Fieldwalking

3.3.6 Fieldwalking did not locate any concentrations of artefacts that might suggest a buried archaeological site, even though relatively shallow

soils and continuous cultivation should have provided ideal conditions for material from artefact rich features to become incorporated into the ploughsoil. Finds were sparse. Two flint artefacts were recovered, the remainder of the finds, were of the medieval or post–medieval period.

3.3.7 The subsequent evaluation makes this lack of finds understandable. Low densities of artefacts are normal for neolithic/Bronze Age sites. When this factor is combined with truncation by medieval / post–medieval ploughing, the results from the fieldwalking are not surprising.

Historical survey

3.3.8 The earliest useful map is that accompanying the Enclosure Award (1801). No earlier estate map exists. A map of the 16th century, or before, which included the application area is of too small scale to be of use. There is a paucity also of other manuscript or published material.

3.3.9 At Enclosure the western part of the site is shown as lying in Barholme 'lordship' (manor) and a strip along the north–east and south–east boundary of the field in Stowe lordship.

3.3.10 The tithe map (1840) of the area is of the Stowe part of Barholme cum Stowe parish and shows only the eastern part of the field under study.

3.3.11 Certain conclusions can be drawn from the cartographic sources. Prior to Enclosure the application area was part of two of the 'medieval' open fields of the parish. At the time of the mid 19th century tithe survey the field was arable, as it remains today, thus there is good evidence of a long period of continuous ploughing on the site.

3.3.12 There is little evidence that the field was sub–divided in the post–medieval period. In the early 19th century a small gravel pit was opened at the extreme western end of the field to provide material to maintain the local roads. This area was later wooded.

Geophysical survey: magnetic susceptibility

3.3.13 The most striking feature of the survey is that the variation of readings across the site was small. Although the magnetic susceptibility plot identified small areas of high readings, the absolute range between the highest and lowest results within the application area is slight compared with the generality of areas subjected to this form of survey.

3.3.14 A programme of detailed magnetometer survey was also instigated.

Geophysical survey: magnetometry

3.3.15 As previously hypothesized by A Bartlett, relatively few of the features identified by air photos were detected by magnetometer survey.

3.3.16 No ditched features were identified – whether ring ditches, archaeological or natural. The 'modern' quarry along the north–west edge identified by aerial photographs was located.

3.3.17 In conclusion it can be said that with the shallow nature of the features and the topsoil, and possibly little magnetic disturbance, inconclusive

magnetometry results were likely.

Trial trenching and environmental analysis

3.3.18 This section summarises the findings of the trial trenching that was carried out on the site and which is reported fully in doc no TR 31012DFA. The variables that were to be assessed as part of the evaluation (ie character of the archaeological remains, their date/phasing, and quality and degree of preservation) are addressed.

Character

3.3.19 The effects of medieval and post–medieval ploughing practices (ie ridge and furrow with headlands) were evident across almost the entire site and this has had a differential effect in the level of preservation of the prehistoric archaeological remains (see below). This finding confirmed the expectations derivingfrom the air photo survey and preliminary historical research.

3.3.20 The trial trenching appeared to show an unexpectedly complex prehistoric landscape. Archaeological features ranged from those related to agricultural activities – field boundary ditches and pits, probably with a variety of functions, to funerary monuments (ie ring ditches) and features which may have had some other ceremonial purpose (eg a circular hengeform ditch and elsewhere two massive post–holes). A total of 227 features was identified in the 18 trenches opened (**Figures 4 and 5**).

3.3.21 The surface of the undisturbed deposits occupies a position between 0.3 m and 0.5 m below the current ground surface. Almost exactly half of the features identified were ditch sections. The vast majority of the ditches appeared to be associated with what appear to be surviving prehistoric field systems. The majority of these ditches run on a NW–SE orientation, a smaller number NE–SW, and a tiny handful N–S.

3.3.22 Pits of various dimensions accounted for approximately 45% of the features identified (About 4% of features were not interpreted as either ditches or pits).

3.3.23 In addition to the almost ubiquitous ditch sections and pits, three circular ditches were identified. One of these was preliminarily interpreted as a possible neolithic 'hengeform' monument. Another had an apparently segmented nature and on this basis was also considered to be of neolithic date. The third ring–ditch was an unexpected discovery towards the centre of the area. The feature has an estimated diameter of 30 m and could be of either late neolithic or early Bronze Age date.

3.3.24 Towards the western part of the field two very large post–holes were revealed. One post hole excavated was up to 0.7 m in diameter and survived to a depth of 0.6 m. There could be various interpretations of the function of these features. Unfortunately the evaluation process allowed too small a proportion of the area to be sampled to make any firm statement, however, these are clearly significant features.

3.3.25 In summary it can be said that the features identified during the Stowe Farm evaluation were all truncated negative features, most of which were ditches and pits. The features contained almost no artefactual

material for defining their use or age. In addition, there were a number of more distinctive monumental features, as described above.

3.3.26 The features excavated were artefact poor, to the extent that they could not be dated by surviving material.

3.3.27 The excavation confirmed the evaluation's finding of ditch systems and the date range of the archaeological evidence from prehistoric to post–medieval. It became clear, however, that the evaluation had over–interpreted the archaeological evidence in that none of the postulated extensive neolithic / Bronze Age remains of a ceremonial nature were found in the Phase 1A and Phase 1B areas, present were rather ditches relating to a Romano–British field system.

Date and phasing

3.3.28 As explained above, no useful artefactual material survived from the evaluation with which to propose a date for the archaeological features revealed. Thus Carbon 14 dating was applied to the only two samples of organic material that were suitable for the use of this technique. One C14 sample gave an early Bronze Age, or possibly late neolithic date. The other date was middle Bronze Age, though the date span could cross the EBA/MBA/LBA transition. There was no evidence from the evaluation to suggest that any other periods were represented among the features investigated. Again this may be as much a product of the evaluation as the site, as the open area excavation revealed that the level of activity was generally the same across Phases 1A and 1B for all periods from early prehistoric to post–medieval.

3.3.29 No deep or complex stratigraphy was revealed during the evaluation but there were indications that two or more phases of activity were represented. In all, 29 features cut other features and there was an example of this in each of the trenches opened for archaeological investigation.

Extent

3.3.30 Archaeological features were revealed in all 18 trenches opened during the evaluation

Quality and degree of preservation

3.3.31 There has been a long history of medieval and post–medieval cultivation of the area under investigation. Ploughing has had the effect of truncating the surviving negative features. This has been compounded by the existence of ridge and furrow formation in the medieval period which has removed all evidence of pre–existing archaeological features in strips across the area.

Environmental survey

3.3.32 Environmental sampling carried out as part of the evaluation concluded that soil factors have produced a low potential for the survival of significant quantities of unburnt material. Thus the potential for palaeoenvironmental research yielding useful additional data was initially thought to be low.

4.0 AIMS AND OBJECTIVES AND GENERAL EXCAVATION STRATEGY

4.1 Aims

4.1.1 One of the priority aims of further intrusive work was to assess spatial patterns and relationships. Landscape patterning rather than individual site development was considered relatively more important.

4.1.3 During the excavation, emphasis was placed on the importance of attempting to understand how boundaries co–existed and to unravel their potentially multi–faceted life history. For instance, how many roles does a field boundary have? Is a ring ditch a purely ceremonial structure or a variable quantity depending on socio–cultural and environmental circumstances?

4.1.4 The elements within the site fall within the area of research priorities set by the Prehistoric Society and English Heritage namely prehistoric boundaries, the relationships between field systems and ceremonial monuments, settlements and ritual.

4.1.5 Fuller excavation of this landscape when considered alongside already published results from the Fenland area would allow the site to be viewed within a regional framework. And thence, against a national background.

4.1.6 Stowe Farm is a landscape study. This means that the project endeavours to examine the changes both broad and specific, which have occurred from the early prehistoric through to post–medieval in the area set aside for gravel extraction. Once this has been recorded it will then be linked in to previous research and excavation in the area, to aerial photographic material and SMR details.

4.1.7 By the very nature of archaeology, past landscapes are made up of individual features, structures and ditches, these in turn form farmsteads, fields and monuments, at a higher level these fields become estates and wider territories. It is hoped that as Phase 2 and 3 proceed and are integrated with Phases 1A and 1B and the surrounding landscape, issues such as these can be addressed.

4.2 Local and site specific objectives

4.2.1 As noted above, the character and quality of preservation of the features at Stowe Farm to some extent limit the potential for excavation and analysis. In broad terms the features are negative features, there is little stratigraphy, they are artefact poor, and generally environmental preservation is poor.

4.2.2 A summary of the specific objectives of the excavation at Stowe Farm and the methods to be employed to secure an adequate record of the archaeology of the site prior to gravel extraction are given below:

a Recovery of the full plan form

This will be achieved by removal of deposits above the archaeological layers, identifying archaeological

features and planning their outline on the ground

b **Identification of the function of features / functional zoning of the site**

Excavation and recording of features with different morphologies across the area. Analysis of the distribution of any artefacts recovered

c **Phasing of the various elements of the site**

Excavation of locations where archaeological features intercut or are superimposed. Consideration of the dating evidence from the site. The carbon dates and stratigraphy obtained from intercutting ditch sections will be used to build up a phasing profile for the site.

d **Dating of the main elements of the site**

It is proposed that most of the dating on the site will be achieved by applying C14 techniques to burnt organic material from in-situ archaeological contexts. If any artefactual material is recovered this will also be utilised. Given the probable neolithic / Bronze Age date of the early archaeology, flint artefacts may provide approximate dating.

Environmental potential

4.2.3 Due to the results of the evaluation no intensive environmental sampling strategy was initiated, however any unexpectedly well preserved organic material was collected, assessed and analysed.

4.3 Outline of strategy

4.3.1 The general strategy has been developed from the results of the evaluation with the aim of meeting the expectations contained within the aims and objectives set out above

4.3.2 To summarise the results of the evaluation, it can be said that the air photographic and geophysical survey of Stowe Farm identified a few discrete individual archaeological features, and suggested that the majority of cropmarks and anomalies recorded were of natural origin. Also, the fieldwalking survey suggested a relatively low level of past human activity. However, trial trenching revealed widespread activity across the site.

4.3.3 It appears that the true character of the archaeological remains cannot be detected by the usual non-intrusive evaluation techniques. The characteristics of the deposits above the gravel, including a sandy layer below the top-soil, appear to mask all but the most substantial features. Thus the more extensive use of these techniques as part of the long-term recording strategy is not appropriate here.

4.3.4 Archaeological recording was integrated with the process of removal of the 'over-burden' prior to extraction of the mineral reserve (what was aimed for was not a traditional watching brief to identify and

quickly record an undetermined archaeological resource, but a carefully considered method of recording an extensive archaeological landscape). Slight amendments were made to the areas stripped in 1A and to the extent of the soil bund perimeter, at the beginning of stripping, see **Figure 2** and paragraph **5.1.3** below.

4.3.5 Following stripping of the overburden all archaeological features were recorded in plan and sample excavated to identify form and relationships with intercutting features. Due to the extensive nature of the site a sampling strategy was devised. The strategy ensured that the total variability within the archaeology of the site was represented, while being an efficient and cost–effective approach. Also this was deemed appropriate to the aims of the excavation, that is that it was a landscape project, not designed to study known specific feature types.

4.3.6 The nature of the archaeology within Phases 1A and 1B at Stowe Farm being dispersed across the area with very few discrete concentrations dictated the methodology employed. Areas were machined in accordance with Redland Aggregates' needs and archaeology examined as appropriate levels were reached. This meant in reality that the topsoil was removed up to a maximum of 400mm depth onto the upper gravel surface, this surface was designated by Redland Aggregates as subsoil, due to its depth not composition. All visible archaeology cut into this layer. Archaeology was visible as dark soil filled regular and irregular patches. These were in the main readily visible after machining had taken place and given time limits and budgetary restraints it was not not deemed necessary to clean large areas of the site, nor was this physically possible. Instead individual features were cleaned to define edges prior to and during excavation or planning. Although this resulted in a visually unappealing site as witnessed by the photographs it enabled large areas to be recorded and sample excavated in as short a time as possible. In certain areas where larger features or feature groups appeared to be evident a greater level of cleaning prior to excavation was undertaken. The general policy adopted was, that if a group of features could be discerned post–machining, extensive cleaning was unnecessary, so long as positions and edges could be adequately recorded and relationships defined. Indeed given the hot and dusty excavation conditions cleaning often proved to be more of a hindrance than a help.

4.3.7 Although artefact poor, an attempt was made to obtain sufficient organic material from features excavated to date the main phases of the site by C14 dating.

5.0 METHODOLOGY:

5.1 Machine stripping

5.1.1 The archaeological excavation and recording programme followed the stripping programme as agreed with Redland Aggregates.

5.1.2 Thereby the first area of work was Phase 1A; the second was Phase 1B (see **Figures 2** and **3**).

5.1.3 Phase 1A was extended to the west by 50m in order to create a subsoil

dumping area. The archaeology in this area was recorded as part of the phase 1A programme and designated Area B (Figure 2).

5.1.4 Prior to the excavation of 1A an area in the north of the site which was due to be buried under the spoil bund was opened up and examined. Aerial photography suggested that a ring ditch lay in this area. Excavation did not reveal the ring ditch as plotted from aerial photographic data.

5.1.5 For the purpose of the archaeological works, the main phase areas were to have been subdivided into strips 50 metres wide. This methodology proved unnecessary and machining continued in strips across Phases 1A and 1B areas until the entire area was machined.

5.1.6 All stripping was undertaken using a 360 back–acter fitted with a toothless ditching bucket and soil was removed using dumper trucks.

5.1.7 All stripping of the overburden was regularly supervised by an experienced archaeologist in order to ensure that any archaeology was not removed prior to recording.

5.2 Recording and excavation

5.2.1 After the removal of the overburden to the appropriate level, below the topsoil 300–400mm, the exposed surface was manually cleaned where necessary and a base plan of the archaeological features present drawn.

5.2.2 General planning was carried out at a scale of 1:100.

5.2.3 Where complex or unclear relationships occurred, a smaller scale of 1:20 or 1:10, as appropriate, was used.

5.2.4 All areas were planned on a multi–context basis. It was not considered necessary to plan using a single context system.

5.2.5 Once features had been planned, a 20% sample of them was excavated. This was considered the overall percentage for both areas although in some parts of the sites percentages varied from 100% to 1%.

5.2.6 Linear features were sectioned along their lengths and at intersections; post–holes were half–sectioned. Where groups of post–holes occurred a proportion of them suitable to characterise the whole was excavated. Pits were either quarter or half–sectioned.

5.2.7 All sections were drawn at a scale of 1:10.

5.2.8 Where more complex features were encountered, a higher level of excavation was employed.

5.3 Recording system

5.3.1 Archaeological data was recorded according to the Tempvs Reparatvm's Archaeological Excavation Manual (based on the Museum of London system). A copy of blank recording forms and recording manual has been made available to the archaeological adviser to the minerals planning authority.

5.3.2 One of the merits of the recording system is that it allows for features to be recorded in such a way that they are examined and described simply and systematically. Each feature has to be described, assessed and categorised in its own right in the field before it is interpreted and placed within the site as a whole. In this way there is no requirement for immediate on–site interpretation, as the core data about a feature is retained in the record.

5.4 GSys

5.4.1 The Gsys computer software package has been used for analysis of the Stowe Farm results.

5.4.2 The approach toward Gsys has been slightly different than Rectory Farm. Overall results have been assessed and those points relevant for use with Gesys separated and entered. The project does not seek to be determined by Geosys but to use it as a tool when and where appropriate.

5.4.3 Site plans were created on site and during post–excavation work using a combination of EDM and Gsys techniques and straightforward manual planning.

5.5 Finds Policy

5.5.1 All finds were dealt with briefly on site by an archaeologist nominated for the task and were:

1 Cleaned / given conservation first aid / packaged as appropriate

2 Catalogued and numbered

3 Boxed and removed to a place of security pending final deposition.

5.5.2 Advice has been sought from local specialists on the identification of finds.

5.5.3 Artefacts have been sorted and sent to suitable specialist. Carbonised material has been sorted and usable items selected for scientific dating (Carbon 14). This has been carried out by Beta–Analytic Inc, Miami, Florida, USA.

5.5.4 Long–term conservation of objects will be conducted by the Lincolnshire Conservation Laboratory, provided acceptable contractual arrangements can be made.

5.5.5 All artefacts will be placed in the care of the City and County Museum, Lincoln.

6.0 RESULTS (see **Figures 4** and **5**)

6.1 Introduction and general summary

6.1.1 Excavation at Stowe Farm was aimed at producing information relating to landscape use and change in general rather than specific known features. The results will therefore concentrate on an overall picture of the site looking at landscape types and based within a broad chronology.

6.1.2 Stowe Farm produced a large number of features. Unfortunately owing to the truncated nature of the site and the absence of any quantity of finds, very few features can be reliably dated. Thus it follows that few features can be easily grouped into certain specific structures and across the area as a whole only a few landscape types can be stratigraphically placed.

6.1.3 Therefore rather than detailing phases, those landscape types recognised are referred to and within each area of discussion and their probable phasing position assigned. The most obvious groupings are dealt with first rather than the earliest in date. Codes referring to to groups and landscapes are listed in **Appendix 1** and details of group numbers contained within Landscape Goups are available as **Appendix 2.**

6.1.4 The phasing that follows attempts to arrange the landscape types into a probable chronological order.

6.1.5 All features excavated were assigned cut and fill numbers (context numbers). All unexcavated features were assigned single context numbers. During post–excavation analysis all contexts were placed into groups. Groups represent all contemporary contexts in the same area which were likely to have been formed during the same processual phase. And which form or appear to form a specific feature unit. For example, all cuts along the length of a ditch would be linked to form a group.

6.1.6 Processual data is determined as falling into three broad categories: construction, use and disuse, the later two being fill types. Groups are considered a higher level of interpretation than contexts but being comprised of contexts can be dismantled and recreated if necessary. Groups are wholly interpretative and are illustrative of the wider–scale development of the site as a whole. Groups cover such things as structures, boundaries, activity areas, but also types of disuse material, whether natural backfilling or deliberate infilling. A total of 243 groups were identified from Phases 1A and 1B, see **Figures 4** and **5.**

6.1.7 At a higher level, landscape elements are formed from an aggregation of groups, of contemporary processual nature. Again this can be dismantled into their components and reassigned if necessary. These are an higher level of interpretation and discuss features as areas of farmstead, fields, trackways, and so forth. Each landscape element is then assigned to a phase, based on dating evidence available. A total of 18 Landscape Elements were identified from Phases 1A and 1B, see Figure 6.

6.1.8 Phases are considered as specific chronological time periods, during which different landscape elements may appear, function and disappear.

6.1.9 As groups and landscape elements are liable to change, both via expansion and possible deletion following Phase 2 and 3 extraction and excavation, in the final report a series of appendices will detail all those groups, and landscape elements identified, as well as listing all unprovenanced contexts and anomalies. The final report (the compilation of results from 1A, 1B and Phases 2 and 3) will also be structured in a more chronological way.

6.1.10 These will take into account:

- The group number, the group type (boundary, structure etc) which contexts it consists of, which landscape element it is within, its processual phase (use, disuse or construction) and its probable date/phase.
- For landscape groups, their number, type, group contents, date and phase will be listed.
- Ungrouped Contexts will be listed via context number, and type of context.

6.1.11 All will be referable to appropriate plans.

6.2 Stratigraphic Matrix

6.2.1 Due to the nature of the site and the fact that so many features cannot be readily assigned to phases a matrix has not been incorporated into this report. At best for phases 1A and 1B a matrix would be full of probable, possible and dubious stratigraphic relationships.

6.3 Area A excavation and the proposed ring ditch in the extreme north of the site

6.3.1 Before the removal of topsoil and the excavation of Phase 1A, an area in the north of the site, which was due to lie under the soil bund, was excavated (**Figure 3**). Within this area it was hoped that part of a ring–ditch, apparently visible on aerial photographs and apparently identified during evaluation, would be located. The subsequent excavation of this area revealed a number of ditches and plough furrows but no ring ditch. One ditch, Y224, was located in the general area where the ring–ditch was originally suspected. This ditch ran for 10m from the north baulk toward the south–east. It had a slight curve to the north/north–east side. The upper part of the ditch and its southern edge had been badly obliterated by later post–medieval ploughing. Indeed the feature was located only when a box–section was placed through furrow H201. Ditch Y224 butt–ended within evaluation trench 001 and it is likely that this butt–end gave rise to the possibility that the ring–ditch was causewayed. No evidence of the ditch continuing round into the eastern baulk was forthcoming. On the aerial photograph the ring–ditch is visible as a wavy indistinct line, lying as a semi–circle against the road. It subsequently moved during evalution and post–evaluation, on plan at least, to lie as a circle within the extraction area. Post open–area excavation it seems apparent that the ring–ditch was mis–plotted both as a ring–ditch originally and later in its position. Quite possibly a combination of furrow turning to meet the headland in the north, plus the occurrence of ditch Y224 combined

to give the impression on the aerial photograph of a ring–ditch. Subsequent movement of the ring–ditches position resulted in two separate ditches being located during evaluation which matched to the erroneous, pre–excavation site plans.

6.3.2 The ditch located and recorded as Y224 in profile, which is flat–bottomed, wide with slightly concave to irregular sides may well represent an early, at least prehistoric ditch.

6.4 Discussion of evaluation results and excavation results

6.4.1 Elsewhere within Phase 1A (see **Figure 3**), two large features were identified during evaluation. A further ring–ditch was said to have been located within evaluation trench 015 and a probable barrow within evaluation trench 10. Again following open area excavation it became apparent that both suggestions were erroneous. In both cases the trenches had been placed at an angle which meant that they obliquely cut across ditches which form part of the co–axial field system, designated Landscape 002–004 above. Trench 10 had hit across ditch Y128 and Trench 15 across Y012. These had been misinterpreted as ring–ditches. In the case of Trench 10 the presence of the headland silts had also combined to create the impression of a barrow mound. Equally in both cases overmachining had created shallow broad ditches with apparent curves, subsequent extensions of the trenches had compounded the mistaken interpretation through further obliquely cutting the same ditch, giving the impression of a returning circle (Figure 3).

6.4.2 All in all, the archaeology identified during the excavation and the level and nature of that archaeology was broadly similar to that suggested from the evaluation. The main differences were that features were over– interpreted through a number of furrows and natural features being designated ditches and pits.

6.4.5 Although there are several components to the landscape at Stowe which may be early prehistoric, very few can be assigned with any confidence to before the middle Bronze Age / Early Iron Age.

6.5 The Landscape Elements (Figure 6)

Landscape Element: M001 – Ploughing

6.5.1 The most obvious feature of both Phases 1A and 1B was the group of large furrows running approximately north–south. These occured as broad dark fills, up to 6m across, and consisted of multiple furrow cuts.

6.5.2 Three field groups were apparent. The first, consisting of H001–H011, ran north from the southern edge of Phase 1A for 250 metres where the furrows turned and stopped. The second group ran from this point north under the northern edge of Phase 1B in the east and were seen to turn to the west in the western half of the site where they formed Headland 2.

6.5.3 Headland 1 was formed at the junction of furrows in Fields 1 and 2.

6.5.4 A third set of furrows consisting of a small group running

approximately east to west was visible on the northern side of Headland 2.

6.5.5 The furrows consisted of deep and broad multiple swathes and smaller more ephemeral cuts in between. Pottery recovered from the furrow fills indicated a date range from Saxo–Norman to post–medieval. The Saxo–Norman pottery was recognised as St Neots ware (10–12th century AD). The later pottery ranged from 12th–19th century in date, indicating a long continuity in the use of the fields as arable land.

6.5.6 No obvious structures were visible which related to the medieval fields. Given the fact that the furrows run into and out of the area it is likely that any associated settlement is located outside the extraction area. Most probably this lies to the south and east in the area of the original Stowe village, possibly close to the position once occupied by St John the Baptist church, just off the King Street.

Landscape Element: M002–M004 – Co–axial or 'Celtic' Field System (Figure 7)

6.5.7 A co–axial field system was observed running across both 1A and 1B. The majority of ditches was within 1A. This consisted of u–shaped ditches averaging 300mm in depth, the majority of which ran east to west. A number of ditches overlapped, so that butt–ends lay to one side of other ditches running at ninety degrees to them. Unfortunately due to the heavy truncation from later ploughing and very similar silty fills. It was not easy to determine which ditch cut which, and thereby which ditches were earlier and which later. In some cases it appeared that most, if not all the ditches, were contemporary or very near contemporaries. The curious smaller enclosures created by ditches may well have been deliberately created. Evidence of earlier structures in the area was noted by the presence of a filled–in post–hole within the course of Y012 at its western end (E015, N016).

6.5.8 Three feasible sub–division groupings are evident, these have been identified as Landscape Element 002, 003, and 004. Emphasis has been placed, when differentiating between ditches, on creating what appear to be feasible field shapes. This has resulted in small irregular parcels of land being considered to be products of the archaeological record, rather than as things were. Yet it is worth bearing in mind that on many contemporary farms, it is possible to see very irregular and apparently impractical field shapes. Therefore some of the field shapes visible on the plans, showing all the ditches, may have more validity than can be determined. For example, if the ditches are considered as a single group, the suggested north–south trackway 3 (K021), formed by Y054 and Y122 (see below) is broad enough for the small rectangular fields, formed by apparent (real ?) overlapping of east–west ditch and ditch ends, to have actually been fields, and for the trackway to be the result of archaeological (mis)interpretation rather than past reality. The following elements are therefore overall, general guides to the development of the Stowe Farm ditch systems in areas 1A and 1B. These will be re–assessed as work continues.

Landscape Element: M002.

6.5.9 Landscape Element 002 has been based on probably contemporary ditches. Approximately five long narrow fields are visible with two other either large fields or external / open areas. In the Headland 1

area, four ditches Y163–Y166, appear to be contemporary and to form a double trackway (Trackway 1, K019 and Trackway 2, K020) at either end of which evidence of settlement (house structures) were noted, these are decribed further in R005 and possibly immediately pre–date landscape element M002. Equally, further south settlement activity was noted where ditches Y079 and Y125 butt–end slightly out of alignment. It is suggested that at this stage only the northern section of ditch Y054 was in existence.

Landscape Element: M003

6.5.10 This landscape element retains much of the form of Landscape Element 002. It is also likely that some of the M002 ditches remained active as a whole or in part during the M003 phase. The whole area appears to have been opened up to form larger fields, around 6 being visible in the excavation area. Boundaries Y149, links directly into the main north–south artery ditch Y054. In addition the ditch Y012 may have been added at this time, a fence–line consisting of Y017 may well have been erected at this time to the south of boundary ditch Y012. At this stage it is difficult to determine why there should be a single fence–line running east to west. The fenceline is formed of two fence–post ditches which overlap at the middle leaving a chicane type gap. It is possible that this fence–line indicates the presence of an area of occupation to the south out of the gravel extraction area. In place of the small east–west trackways in the headland 1 area, a single trackway runs north to south in area 1B, formed by Y054 and Y204 (Trackway 3, K021).

Ditch Y189

6.5.11 This boundary ditch may be part of an earlier field system, possibly with 002. Y189 has an eastern butt–end lying beyond north running Y054. It was not apparent, however, which cut which. Y189 contained Roman pottery indicating that it was open during Romano–British times. Yet it could feasibly have been created long before then. Spatially it fits very well within Landscape Element 005 below to form one boundary associated with a probable prehistoric round–house.

Landscape Element: M004

6.5.12 This is formed by 7 ditches segments which are not specifically assigned to a definate phase.

6.5.13 It is possible (probable?) that Y185, Y223, Y224 could be linked to M002 and that Y017, Y125, Y167, form part of M003.

Landscape Element: M004B

6.5.14 This represents the dis–use phase of the boundary ditches. They are all very similar in composition. All the boundary ditches contained a dark brown sandy silt. There was occasional evidence of ditch collapse with high quantities of gravel evident at the base and edges of ditches. The ditches appeared to have silted up naturally and not to have been backfilled. Once a ditch had gone out of service it was left to silt up and its cut was not renewed. Very few finds were recovered from any of the fills. Where finds were recovered they were of Roman pottery. Thus the final phases of the field boundaries were open either during the Roman occupation or when Roman pottery was available in South

Lincolnshire. The lack of any Saxon or medieval pottery in the ditches themselves suggests that they had silted up and gone out of use before any significant medieval occupation.

6.5.15 It seems highly likely that some of the field boundaries visible are of early prehistoric, Bronze Age date. In the Fenland co–axial field systems have been recorded occurring in the second to late third millenium bc (Pryor 1978, 1985). And at least some of the ditches at Stowe appear to be earlier than others, notably those within Headland 1. What seems apparent is that even if some ditches are early most have been kept open until Roman (and post–Roman ?) times, indicating a degree of stability and continuity within the area as a whole. So far the lack of any suitable dating evidence hinders any further dicussion concerning the field boundaries.

Landscape Element: R005 – Farmstead.

6.5.16 This group is located at the junction of Phases 1A and 1B, within Headland 1. It comprises a probable round house E156 and associated out–house structure E157. To the east four ditches Y163–166 form two trackways leading to and from the house. Y166 and Y165 are very probably contemporary, Y166 is obliterated by later field sytem, Landscape element 003, and Y165 is incorporated into this system. Ditches Y163 and Y164 are also very probably part of this group, creating both a southern boundary and a second trackway, possibly leading to another house in the east beyond the excavation limit. To the east, north of Y166 another structure was located. Post–holes possibly linked to it lay south of Y166, if so then it is likely to have been earlier than Y166 and not part of this group. Yet equally without these southern posts it forms a probable structure and may indicate a second contemporary house or out–building.

6.5.17 To the north of ditch Y189, a probable boundary and a further structure E186 is located at the ditch's eastern butt–end. E186 is 6 x 4 m (approximately 20ft x 13 ft, with a 2.5–3.5m/8ft–11ft square internal space) structure of uncertain function. Its related fills were all charcoal rich and it had possibly been burnt down. It may represent a possible small house or some form of agricultural structure, a large animal pen, or a storage area, at the edge of a field. The feature group had a distinct sub–rectangular shape and was very similar to other structures elsewhere occuring at or close to the butt–ends of ditches.

Landscape element: Z006 – Unspecific activity area

6.5.18 This landscape element has been defined largely by spatial position. All the feature groups lie in the south of Phase 1A and are apparently bounded by ditch Y012. The groups form several clusters of pits and post–holes, some of which appear to form possible structures. No definite structures were noted. It is equally possible that the groups form series of fence–lines. No pottery or other dating evidence was found with the feature groups and they are therefore unphased. If they do have any real relationship to the ditches this suggests a last date of use within late Roman times. however they could still be therefore of prehistoric origin. The probable structure within A020 had a clear disuse phase, F021 suggesting it had been abandoned and left to decay rather than being deliberately removed and backfilled. Equally pit group P023 appears to have naturally silted up, suggesting a probable contemporary occupation and abandonment. Elsewhere in this group

the dis–use phase of A050, namely N061 suggests a deliberate backfilling for this area, with a mixed gravelly clay sandy silt and charcoal inclusions.

Landscape Element: R007 – Farmstead /Settlement

6.5.19 Landscape Element 007 lies in the north–west of Phase 1A, in the subsoil dumping area, designated Area B. This comprises a range of structures and activity areas which form a definite settlement area. Most of the settlement is concentrated around ditches Y079 and Y125. A probable house E080, lies to the east of the butt–end of Y079, to the south a comparative but slightly smaller structure E078 lies to the west of Y125. A cluster of structures, E070–E75 lie close to Y079 and west of Y125, forming a probable farmstead. E073 and E074 comprise two probable houses to the north of a deep and broad pit, E075. This was very straight sided and flat based, 6m diameter and 1.5m in depth. It is likely to have been a well–pit for the surrounding houses. After its use the pit appears to have been deliberately infilled N088, and the resultant hollow later naturally silted up, F088. Scattered around the house structures are other smaller structures, E069–072 and E076 and other spreads of post settings and small pits, A056, A058–59, A067. These represent outbuildings, animal pens, storage and the like as well as yard activity and possible fence–lines. Activity Area A055 to the south contained a second large 4m diameter pit, only half of which was in the excavation area, this contained a rich organic layer at its base. It may well be the focus of a second farmstead lying to the west in Extraction Phase 3. This pit and post group lay 45m to the south of E075. Above the organic fill it showed evidence of some deliberate infilling on disuse, but mainly natural backfilling, F/N062, F063, within which was some undiagnostic but possibly prehistoric pottery. Equally the fills forming F066 (within A058) suggest a natural silting up and decay during disuse. Carbon dating (Beta–90053) revealed a date from the lower fill of pit [1145] within group A055 of 3430+–70BP or approximately 1700B.C. By inference this landscape zone is likely to have been created at this time. What we might be seeing is a small settlement or single–household added to and re–constructed within the same area over perhaps a number or even a couple of hundred years.

6.5.20 Given the date of A055 within this landscape it is feasible that the landscape could be further deconstructed and that those groups in the north of the Landscape 007 (E069–E080) which are associated more directly with the ditches should form a separete landscape on their own. This assumes that the ditches are part of a later organisation of the landscape around 1400–1300 B.C. This in turn would match with the carbon date from the lower fill of P085, Landscape 010, of 3040+–60BP or approximately 1300B.C.

6.5.21 It should be born in mind that the date is from what is most likely a disuse fill and therefore dates the phase of abandonment for the pit rather than its initiation. However even allowing for an extended period of use the pit is likely to have been constructed around the time of the late early Bronze Age – early middle Bronze Age, ie within the 1400–1300 BC time span.

6.5.22 A re–assessment of all unclear groups and landscapes will be made during the completion of the final report on Extraction Phases 1A to 3.

Landscape Element: R008 Farmstead (?)

6.5.23 Located in the north–eastern quarter of 1A, this landscape element comprises a series of feature groups of probable early prehistoric date.

6.5.24 The main feature of this landscape group is Y127 a curious ditch running east to west, in two segments. Both segments have a broad width sloping gently in at each side to a central straight–sided flat–bottomed gully. The box shape and the gravelly fill with large gravel pieces toward the base suggests that this was a palisade at some time. Positioned at the butt–ends of this feature and along its length on both sides were 16 very large square post–settings or pits. These had straight squared profiles. These were accompanied in the east by two structures, one of four posts and one of four/six posts. A further structure A139, subsequently deliberately infilled N138, was evident beyond the east butt–end of the ditch and an activity area of posts and pits, not necessarily contemporary lay to the north of the eastern butt–end. In N140, the disuse phase of structure E136, the ring–ditch contained a mid–red brown fill with clay lump inclusions. This suggest that this structure too was deliberately infilled. Likewise the palisaded structure shows a sudden uniform clay rich fill again suggesting a single disuse phase of dismantling and deliberate infilling, N142.

6.5.25 The profile and fill suggested a palisade with accompanying large posts or squared pits. The two segments suggested an entrance way between two large fence lines. No finds were located within the fills and no other dating evidence is forthcoming. Evidently this was a boundary of some sort and appears to act as a barrier to separate the area to the north from the south where other probably associated features lie.

6.5.26 South–east of the palisade and set in a position where it would have been visible from the gap between the two palisades, the very truncated remains of a ring ditch were located.

6.5.27 E136, represents a 10m wide penannular enclosure with an entrance to the south–west. Internally five post–holes were located with a further two on the outside of the entrance, accompanied by two pits. This feature was very truncated by later ploughing, so much so that it was not traceable along its entire length, the eastern half having been completely obliterated by later furrow H013. This represents a possible early (Bronze Age ?) enclosure.

6.5.28 To the south of E136 were two probable house structures, E105 and E106 and an area of posts and pits, A137. E106 forms a distinctive horseshoe–shape and although lacking posts to form a circle probably represents the remnant of an early prehistoric house. Equally E105 is a group of post trench slots and posts which again is likely to have formed a prehistoric house. It is impossible to tell whether the two were contemporary. A likely scenario is that one replaced the other as a dwelling place. E105 is partly comprised of a feature partly revealed in evaluation and dated to 1935–1420 BC, well within the Bronze Age. Further work revealed that the dated level may be that of an earlier tree–hole, the tree having been removed prior to the building of the structure. Therefore the structure itself is likely to be later than this date. This is still likely to give it a Bronze Age date.

Landscape Element: Z009 Unspecified activity area

6.5.29 This grouping revolves around the fence–line boundaries, Y018, Y019 and Y048, these are narrow straight edged gullies interpreted as fence line ditches. These form a rough three sided enclosure, any eastern side is likely to have been lost to the plough. H/Y243 may also belong to this group but was very ephemeral and possibly was a fortuitously positioned furrow cut of unknown date. These four boundaries created an internal space 20m wide (N–S) x 64m long (E–W). Within this space structure E035 was contained along with elements grouped into structures E031, E036, E037, P038 and A041. There was no clear indication if any of these post–hole clusters was truly related to the enclosure. Y018/Y019 are provisionally dated to the Saxo–Norman period on the basis of pottery within their fill at their junction. To the north of Y019 two further structures lay, E029 and E030. These were defined by gully ditches and post–holes and divided by a later plough furrow. Two groups were assigned due to plough disturbance masking any relationships. It is possible that in reality only one structure existed. Again there is no positive data beyond spatial positioning to suggest contemporenity between these groups and those to the south. Both groups were of uncertain function.

Landscape Element: U010 – House 1 / Farmstead (?)

6.5.30 Situated to the north of Landscape Element 007, this grouping is probably contemporary with it. It comprises a pit group P085 featuring another large pit containing a rich organic layer, very similar to A055 in Landscape Element 007. This lay against the west edge of the site and it is likely that any associated house lies under Extraction Phase 2. It appears to have been backfilled N091, possibly at the same time as the well pit in E075, and the resultant hollow silted up with fill type assigned to F089. To the north and south of this pit grouping was a number of posts, pits and gullies forming groups E084 and A086. E084 was a curious small three–sided rectangle with associated post–holes and may have been an agricutural structure. Further east another small structure of uncertain, but likely agricultural origin was noted, E082 and two areas of post–holes and pits. One, E081 was designated as a structure and appear to form a possible north–south running fence–line. A087 incorporates another large pit. This was unexcavated but was recorded at 3m diameter and had probable Iron Age pottery in its upper fill. This suggests another house area with associated water or storage pit.

6.5.31 Pit P085 was dated via its lower fill to 3040+–80 BP (C14 Beta–90054) or approximately 1300 BC. This is several hundred years later than A055 and may indicate a shift in settlement position coinciding with the re–organisation of the landscape noted elsewhere in Lincolnshire and Britain during 1400–1300 BC. It is feasible that it was around this time that the earliest ditches and hence more permanent field systems were constructed at Stowe. If so it is likely that the groups E069–E080 should be classed within Landscape 010 rather than 007 above. It should be borne in mind that the date is from what is most likely a disuse fill and therefore dates the phase of abandonment for the pit rather than its initiation. However even allowing for an extended period of use the pit is likely to have been constructed around the time of the late early Bronze Age – early middle Bronze Age, ie within the 1400–1300 BC time span.

Landscape Element: Z011 – Unspecified activity area

6.5.32 Landscape Element Z011 lay in the south–east quarter of Phase 1A, consisting of two possible structures, again of uncertain function and two activity areas of multiple pits and posts. Many of the pits contained iron panning indicating fluctuating water tables and appear to have naturally silted up, F120. This landscape element was overlain by boundary ditch Y110, indicating that it pre–dated this feature. It is therefore likely to be of early Iron Age or even Bronze Age date. The grouping lies just to the south of Landscape Element 008, the probable mid–late Bronze Age complex.

Landscape Element: Z012 – Unspecified activity area

6.5.33 Located in the extreme south–east of Phase 1A, the pit groups P096–097 were only revealed during subsoil stripping (Figures 12 and 13). Unfortunately they lay beneath the narrow strip at the edge of the site preserved for machine tracking into, out of and along the site. The pits were very large u–shaped and bell–bottomed features, containing very rich organic fills but no finds. This pits where associated with boundary ditch Y110 which runs to the north of P097, butt–ending in the west 50m away and running under the east baulk. A later ditch Y109 runs between P096 and P097. That pits P096 were still in use when this ditch was cut can be seen by the fact that the ditch clearly kinks to the north so as to avoid the pits. Evaluation noted a number of posts in the area to the east of the pits and it seems likely that any associated structures lie outside the extraction area. The ditch associations and the shape of the pits suggest a mid–late Iron Age date for this landscape group. At the disuse phase the fill of the pits suggests a single deliberate infilling, N/F119.

Landscape Element: U013 – House 2 / Farmstead (?)

6.5.34 In the far north of the site another pit group was located. This was centred around a very large 6m diameter pit, with two 3m diameter satellite pits lying to the north–east. The larger pit (P213) was straight sided and flat bottomed and suggested another water–pit. It contained a rich organic layer at it base, G216, and evidence that it had been abandoned at some–time during which a tree had grown in it. This was later removed and a layer of clay added to seal off the organics. Later the pit was backfilled and trees again reclaimed it. To the south of the pits a structure denoted via post–holes was located this may have been the accompanying house to which the pit belonged. This structure was 8m long x 6m wide with an internal space of 6m x 4m. To the north of the pits an area of many post–holes was noted. These formed no overall pattern but are likely to have been contemporary with the pits and structure. Intense ploughing, approaching the second headland has in all likelihood obliterated any other structural remains in the immediate area. The pits P212 show evidence of re–use after the first disuse phase. After naturally silting up, F215, they are re–cut to a shallower depth, P232, used and then deliberately backfilled, N233. The subsequent hollow left by infilling gradually silted up as evidenced by F234.

6.5.35 The lower fill of P213 from which the dog skull came was dated via C14 dating (Beta–90056) to 3080+–70 BP, approximating to 1300 BC. This is a comparable age to P085 in Landscape 010. This shows that during this time there were a series of individual homesteads, probably directly related to the field systems within the Stowe area. It

possibly indicates the re–organisation of the landscape and the creation of more fixed settlements with associated boundaries. It is unclear how P213 relates to the broad linear in Landscape 015. The presence of the barbed and tanged arrowhead would suggest that at least some of the ditch predates the settlement within Landscape 013.

Landscape Element: U014 – House 3 / Farmstead (?)

6.5.36 To the immediate south and west of Landscape Element 013, three clusters of post–holes and pits were identified. These lie to the north of ditch group Y217, which seems to form a boundary to them. E178 comprised posts and post–slots and forms a highly probable house structure. It is however of uncertain date, but likely to be of prehistoric date. This was associated with two activity areas of posts and pits to the immediate north and east. These are of uncertain nature but could be second and third houses. Again both these areas had no accompanying finds or environmental data and are thus of uncertain date. They are assigned to a prehistoric date due to their association with ditch Y217.

Landscape Element: BY015 – Boundary

6.5.37 This grouping represents perhaps the most interesting of the features on the site. Located in the north of area 1B Y217 is a linear ditch running north–east / south–west (Figure 14). Originally identified on aerial photographs as a probable geological feature, this ditch appears to form a very early prehistoric feature running 100m across the area of site exposed in 1B. It then runs through Extraction Phases 2 and 3 for a further 300+ metres, and appears again beyond the Greatford cut in the field diagonal opposed to the Stowe Farm site. In the north–east it runs out of the extraction area, appears again beyond the road and runs into a complex of archaeological features 150+ to the north. Therefore in total this represents a ditch of over 650 metres, approximately 2200ft .

6.5.38 Y217 has a very wavy edge and the original cut undulates along its length. It seems highly likely that originally rather than a ditch there existed a series of slots with interconnecting causeways. The original cut is broad, with slightly concave side and and a flat rather broad base. Evidence of fills suggest this first phase was accompanied by a bank or series of banks for each slot. At some–time, possibly not long after opening the bank was removed and backfilled into the ditch or ditch slots. Later, possibly immediately (?), a new ditch was cut joining the segments and creating the complete ditch length. The ditch was kept open and used for dumping of various bits of rubbish; it was also subject to natural silting. A second phase of re–cutting is visible along certain sections of the ditch, although not extensively and it may well be that only specific pits were dug along the ditch length for the purpose of dumping material. Finally the ditch seems to have been backfilled. within this backfill a relatively high amount of pottery and daub and burnt clay was noted. One possiblity is that the associated settlement was abandoned, due re–organisation of the landscape during Iron Age times. Houses were pulled down and the ditch backfilled with settlement debris in order to create an open field.

6.5.39 At the western extreme of the exposed section, the ditch was associated with another small ditch to the south (Y174) and a series of pits and posts (E175) set around the ditch itself. A further large square post–setting or small pit was positioned in front of the second linear. These

have been interpreted as an entrance way. The extra ditch forming a chicane like entrance to hinder quick access to the north of the ditch where the probable associated settlement lay, part of which probably comprises Landscape Group 014. The post setting in front of Y174 contained a very good example of a flint arrowhead. This is a barbed and tanged arrowhead and probably dates to the Beaker period (Edmonds 1995). There is however the possibility that it has been re–deposited at a later date.

6.5.40 The ditch and associated complex is dated on pottery and stratigraphic evidence to the prehistoric period. It was last in use during the pre–Roman Iron Age and was therefore probably initiated sometime during the Bronze Age. If the flint arrowhead is contemporary this would suggest a date for the first phase of 2700–1700 bc. Certainly carbon dating for Group A055 to the south–west indicates that there was occupation in the immediate area around 1700 b.c. In profile the earlier ditch or ditch segments are not unlike that seen in the Etton Woodgate site which lies to the south near Maxey (Pryor 1985). This was also dated to the Beaker period and therefore the earliest stage of the Stowe ditch and the Etton Woodgate are likely to be contemporary. Equally, the possible causewayed nature of the orginal ditch is more reminiscent of neolithic structures than other periods (Parker–Pearson 1993). So potentially the Stowe ditch had a long history stretching from the late neolithic through to Iron Age: about as many years as it is long.

6.5.41 The ditch had gone out of use when the fields were re–organised along co–axial east–west and north–south lines probably during mid–late Iron Age times. In other areas of Lincolnshire and Cambridgeshire on the fenland, co–axial field systems occur in the second to late third millenium bc (Pryor 1978). This is somewhat earlier than suggested for Stowe. However this is based on the pottery from the upper levels of the Stowe ditch. These fragments are only tentatively proposed as Iron Age and could well be earlier. If this is the case then the overlying field system could well have been created at a much earlier time than suspected.

Landscape Element: Z016 – Unspecified activity area

6.5.42 To the south and east of the large prehistoric ditch Y217, a series of pits and posts were located. None of these formed any coherent structural groups and only small Bronze Age flints were recovered. These groups merely suggest that activity of some nature, probably agricultural was taking place to the south of the ditch. The fact that no obvious structure are visible lends credence to the view that the settlement lay to the north of the ditch.

Landscape Element: W017 – Woodland

6.5.43 This was a series of probably natural features, isolated on the basis of spatial position, fill type and shape in plan and profile. Most are likely to be tree–throws, although other smaller features could be anything from a range of natural phenomena including deer and other animal latrines, post–medieval rabbit burrows, scoops made by hares, badgers etc. It is worth notoing that within a few weeks of soil stripping the site had been colonised by rabbits, hares, pheasants, swans, badgers and foxes.

6.5.44 There was no overall patterning of tree throws to suggest their use in

the fields to mark boundaries, although this is not unlikely. Three broad tree–scapes can be identified. An early prehistoric one, pre–neolithic through to early–middle Bronze Age and possibly contemporary to at least part of the Iron Age; a phase of tree expansion during which pit group P213 was colonised. Finally a post–Roman expansion when the ditches silted up and the tree cover appears to have expanded across the site. This final episode corresponds to the regeneration of the land and increase in woodland following the collapse of the Roman economy. This is noted from other parts of the country and alluded to in the Anglo–Saxon chronicle where it states that a great forest existed between Peterborough and Stamford.

6.5.45 "Let no one be surprised at what we are about to relate, for it was common gossip up and down the countryside that after February 6th many people both saw and heard a whole pack of huntsmen in full cry. They straddled black horses and black bucks while their hounds were pitch black with staring hideous eyes. This was seen in the very deer park of Peterborough town, and in all the woods stretching from that same spot as far as Stamford." (Anglo–Saxon Chronicle, entry for AD 1127; quoted in Branston 1993)

6.5.46 The natural features would have had two phases, that of construction/growth and use/living and a dis–use or destruction/clearance phase. During the prehistoric period it is unlikely that all trees would have been cleared. Trees appear to have held a special place in Bronze Age–Iron Age to medieval mythology and folklore and during certain periods tree growth may have been actively encouraged.

6.5.47 At the nearby Etton Woodgate site, willow and birch were preserved in prehistoric contexts. Both of these may well have occurred at Stowe and both were considered to have practical as well as more spiritual characteristics.

6.5.48 Willow is a tree associated with water and may well have grown along the banks of ditches. Its foliage was used as winter fodder and willow bark can be eaten ground up with oatmeal. Willow down was also traditionally used for stuffing pillows. The tree is also linked to sadness and enchantment. This may reflect the fact that it grows near water, and water is traditionally seen as the boundary of this world and the other or spirit world.

6.5.49 Birch is considered a protective tree, warding off the evil eye, it also symbolises fertility and love. At least in Scotland, birch was used to set alight a fire at the rising of May's first sun. This tradition echoes the Celtic view of the winter extending for six months of the year and May being its end. Birch is also said to have life–giving properties. In medieval times birch rods were carried in front of a magistrate on his way to court. This was a symbol of his authority and its use as an instrument of correction probably indicates its value in driving away evil spirits. Medicinally birch was used to break kidney and bladder stones and also as a mouth wash. Eczema and other skin complaints were combatted using an ointment of birch tar (Milner 1992).

6.5.50 So in many ways the natural elements of the site in particular the trees would have been as integral a part of the landscape as the man–made structures. Both would have adapted to and complemented one another.

6.5.51 The furrows indicate that some time during the medieval period the Stowe Farm area was stripped of trees and definitely by post-medieval times there was no more tree cover on the site than at present and probably slightly less, some of the copses having been encouraged to grow in recent times.

Landscape Element: Z018 – Unspecified activity area

6.5.52 This landscape element is not a true landscape feature but a collection of miscellaneous feature groups which cannot be readily placed into any other landscape element. Each component group is detailed separately in **Appendix 3**, and their possible associations noted.

6.6 Aerial photography and cropmark evidence

6.6.1 During the desk-top analysis of the Stowe Farm site and area, prior to excavation, aerial photographic records were examined. This was undertaken by Dr R. Palmer, Air Photo Services, Cambridge, on behalf of Tempvs Reparatvm. The aerial photography denoted the medieval to post-medieval furrow system across the area, 10 east-west ditches and 1 north-south ditch within 1A/1B, a possible ring ditch in the north of the area, a possible quarry area and 3 large pits in the northern area. Other features in the area were noted as geological. A large number of pits were noted on the aerial photograph but most were believed to be natural, these concentrations were not plotted due to their lack of definition, and in some areas dense clustering.

6.6.2 Of the features identified and plotted on the plans drawn from the aerial photographic evidence, the following were located, see **Figure 10**. The furrow system was readily visible and proved to cause no problems in defining on the ground. All 11 of the ditches were located, in addition a further 10 ditches of similar type were defined. The quarry and the pits in the north were readily and easily located. The ring ditch remained elusive and as discussed in subsection 6.3 may well have been a misplotted feature. In addition a further five pit groupings were defined on the ground, these may have been amongst those seen on photographs but not plotted, and assumed to be natural. A further natural feature, the geological crack running NE-SW across 1B was defined on the ground as anthropogenic. It forms the large prehistoric ditch mentioned above, subsection 6.5.48ff. Of the other geological features none was located, giving credence to their interpretation. The many pits noted in the aerial photographic discussion, Evaluation Report (TR 31012 DFA, 28/12/94) Appendix 2, were clearly visible on the ground as from the photographs. These proved as diffcult in excavation to classify. However it was clearly evident that there were roughly as many true archaeological features as natural features. In future it may well be of use to have such features plotted along with ditches etc on aerial photograph plans. This would have greatly enhanced the archaeological work. As mentioned above, subsection 6.5.56ff, the positioning of natural features can prove as valuable as man-made ones.

7.0 FINDS

7.1 Finds from 1A and 1B introduction

7.1.1 There was an extreme paucity of finds, so much so that no detailed analysis of them is applicable. The majority of prehistoric pottery fragments are of probable Iron Age date, although a sherd from P085 (1258) comes from a context dated by C14 to 3040 +– BP and is therefore likely to be Bronze Age. Some of the other fragments initially identified as probably Iron Age may well therefore be Bronze Age in date. Tiny fragments of Roman pottery were recovered from some of the co–axial ditches. The furrows produced material ranging from early Saxo–Norman medieval through medieval to post–medieval. Other find types included a eight flints, nine pieces of glass, all small identified body fragments, eighteen pieces of metal, mostly iron nails, two pieces of quern, a possible rubbing stone and a stone floor tile/setting.

7.1.2 Due to the paucity of material and lack of good provenance for much of it, most came out of plough furrows, in this report it is only listed with additional brief descriptions where merited. In the final report all finds will be expanded upon and fully written up.

7.2 Pottery

7.2.1 The pottery was briefly examined and classified into periods by Alistair Barclay, Oxford Archaeology Unit.

7.2.2 Total number of pieces: 116

Percentages are based on the overall assemblage minus the unidentified and unstratified pieces.

- Prehistoric: 14 (16.6%)
- Bronze Age 6 (7.1%)
- Iron age 8 (9.5%)
- Roman 12 (14.2)
- Saxo–Norman 19 (22.6%)
- Medieval 19 (22.6%)
- Post–medieval 20 (23%)
- Unidentified 4
- Unstratified 28

7.2.3 Although not statistically viable taking into account fragility of pottery from period to period and the amount of pottery produced from period to period, the Bronze Age and Iron Age are equally represented suggesting that most of the prehistoric activity on the site is of uncertain date. The C14 dates however at least indicate that the initial activity occurred during the Bronze age. Equally the Saxo–Norman material is well represented suggesting that the present form of the

field and its use as a plough zone was probably set by the 10–12th century AD.

7.2.4 A group by group assessment is available in **Appendix 4.**

7.3 Flint

7.3.1 Eight pieces of flint were recovered, these are fully detailed in **Appendix 5** and the site archive. The most significant piece was flint no.1 a barbed and tanged arrowhead of late neolithic to early Bronze Age date (**Figure 15**). The flint was assessed by Philip Kiberd (Assistant Manger, Field Services, Tempvs Reparatvm).

7.4 Metal

7.4.1 A total of 14 pieces of metal were recovered, mostly nails and post–medieval agricultural debris. The metal was briefly assessed by Philip Kiberd (Assistant Manger, Field Services, Tempvs Reparatvm).

7.4.2 9 pieces of metal were recovered from the medieval/post–medieval furrows these are either nails or agricultural artefacts.

7.4.3 Pit group P097 produced a single copper/alloy wire strip 34mm long.

7.4.4 Ditch Y224 produced a possible brooch fragment, small find 004, made out of copper/alloy.

7.4.5 An iron lump 25mm long was recovered from (2097) within ditch Y217.

7.4.6 A copper alloy pin was located in fill (2131) within ditch group Y188, this is possibly of Romano–British date.

7.4.7 A copper alloy thimble was recovered from fill (1266) within possible pit group A014, this may well be an intrusive medieval find from the intercutting furrow.

7.5 Non–flint lithic

7.5.1 Four pieces of stone were found, all from the southern half of Phase 1A. Three of the pieces were in furrows. Equally it was noted that there was a higher level of natural limestone slabs in the southern half of 1A, principally located within the furrows. This material was briefly assessed by Philip Kiberd (Assistant Manger, Field Services, Tempvs Reparatvm).

7.5.2 It is feasible that all these stone elements have come into the field from the now non–existent Stowe village which lay to the south and east. Alternatively they could suggest either that the area of activity in the south, noted by the posts and pits bounded by furrows H008 and ditch Y012 (note also A014) was a more substantial structural area in the past, now ploughed out, or that further structures exist in the field but outside the extraction boundaries.

7.5.3 Two fragments of quern were recovered from the southern end of

furrows in Phase 1A. One piece in H001 (1203) and one in H008 (1210).

7.5.4 One fragment (1210) is 190mm long 90mm wide and 30mm thick. It has a clearly worked and ground surface on one side. It is part of a larger quern, possibly the nether stone or saddle stone, and of Rhenish lava. Probably of Romano–British date (Figure 15).

7.5.5 The other piece (1203) is more a lump of rock with a smoothed underside. It is of pudding stone, conglomerate rock type. Its dimensions are 110mm long by 95mm wide by 50mm thick; of unknown date.

7.5.6 In another furrow, H010, a floor stone was located. This is of unknown date, 150mm long by 60mm wide by 35mm deep. It shows clear signs of having been burnt at one end and side.

7.5.7 From A055, pit [1145] fill (1146) a possible rubbing stone was also recovered, This is a cobble of quartzite, with a flat smooth surface on one side. It was recovered from the organic rich layer toward the base of the pit.

7.6 Animal bone

7.6.1 Only identified pieces, mainly teeth, are listed; the rest is very fragmentary and amounts to very little. All bone will be re–assessed in the final report. Further details can be found in **Appendix 6**. The animal bone was identified and assessed by Philip Kiberd (Assistant Manger, Field Services, Tempvs Reparatvm).

7.6.2 A total of 12 contexts produced readily identifiable animal bone, this emphasises the extreme paucity of bone material. With such a miniscule amount of bone it is impossible to say anything constructive about animal husbandry at the Stowe site. All that can be said is that during the Iron Age to Roman times, sheep/goat, cattle and horse are available to the Stowe farm societies. Interestingly pigs hardly make an appearance.

7.6.3 Horse teeth were identified in 3 contexts.

7.6.4 Sheep/goat teeth and bones were identified in 4 contexts.

7.6.5 Cattle teeth were identified in 4 contexts.

7.6.6 Pig was identified in 1 context.

7.6.7 A further 18 bags from contexts across the site contained small post–cranial fragments of unidentified large mammals, probably cattle, horse and sheep.

7.6.8 Headland 2 also produced a single piece of oyster shell.

7.7 Environmental evidence and C14 dates

7.7.1 A full discussion of the environmental evidence is available in **Appendix 7**.

7.7.2 Carbon dates were determined from the fills of four features, all pits. These were taken to try to ascertain more accurately the time range of occupation across the site and of specific feature types.

7.7.3 Three samples [Numbers 21 (1146) Beta–90053, 24 (1258) Beta–90054, and 40 (2158) Beta–90056, contexts in brackets] produced dates placing them in the Bronze Age these were respectively 3430BP, 3040BP and 3080BP see also appendix 7.

7.7.4 Sample 21 represented the lower fill of a pit within group A055, Landscape 007, in the south–west of the site, in Phase 1A area. The date of 3430+–70BP, which equates to around 1700b.c. indicates definate early Bronze Age activity at the site, this is further backed up by small find 007, flint no.001 the barbed and tanged arrowhead, associated with the broad linear Y217 located in the northern part of the site, Phase 1B area.

7.7.5 Samples 24 and 40 both from lower pit fills, sample 24 from within group P085, Landscape 010 and sample 40 from within group P213, Landscape 013 both revealed very similar dates. although located at different ends of the site they both gave dates approximating to 1300b.c. This is within the Middle Bronze Age and during a time when the reorganisation of the landscape is evident and the creation of boundaries and more fixed settlements began to occur. The fact that two pit features with associated post strucutres occur at different ends of the site in this period may be evidence for the creation of specific territories within the Stowe area at this date.

7.7.6 The fourth sample, Beta–90054 [Number 29 (1744)] was retrieved from disturbed pits during subsoil machining in the south–east corner of the site. The stratigraphy of the pits and the carbon date received do not match and it is therefore concluded that the sample was contaminated and unreliable.

8.0 PHASES

PHASE 1: Early Prehistory: 2700–1700 BC
PHASE 2: Bronze Age: re–organisation: 1400–1100 BC
PHASE 3: Later Bronze Age: 1100–800BC
PHASE 4: Iron Age to Roman: 700BC – AD400
PHASE 5: Post–Roman
PHASE 6: Medieval and Post–Medieval

8.1 Introduction

8.1.1 There is little information from the material gathered to create an accurate and intricate dating framework for phasing of the Stowe Farm site in Areas 1A and 1B. Indeed the paucity of information makes any attempt verge on the implausible. The following phases bring together landscapes group that were probably contemporary or near contemporary within a broad time framework, see **Figures 8** and **9**.

8.1.2 One of the biggest problems regarding the Stowe site is that it is not possible to say with any certainty which features were still in use when new elements were created. However on the basis of the most plausible

scenario, the phases below are proposed. For the purposes of this interim report, accepted broad chronological phases rather than structural phase have been used. Once more information has been gleaned from Extraction Phases 2 and 3 and the above results re-assessed in the light of this, the full anf final report will attempt to examine the landscape structurally within its own timescale.

8.2 PHASE 1: Early Prehistory: 2700–1700 B.C

8.2.1 This phase approximates to the Beaker period and is based on the carbon date from the 1994 evaluation and the flint recovered during excavation. In particular the flint arrowhead, (Small Find 007), see **Figures 8** and **14**.

8.2.2 During this phase the first element of the large NW–SE running ditch may have been created in the north of the site (Landscape Element 015). This appears to have been as a series of ditch slots with accompanying causeways running between each slot. The slots themselves were open ditch lengths averaging 14m in length and with an accompanying bank, probably positioned to the north. There are likely to have been structures associated with these ditch slots but it is unclear which post-hole clusters are likely to be contemporary. It seems feasible that the house E178, in Landscape Element 014, was of this era, although this could equally have been a later structure.

8.2.3 Further to the south a probably contemporary settlement existed in the form of Landscape Element 008 and on the basis of C14 dates at least part of Landscape 007 was constructed toward the end of this phase. Landscape 008 appears to represent a house enclosed by a ring-ditch, possibly itself the ditch for a palisade and an associated 80m long palisade fence to the north. To the west of this, a small possible house E130 existed. To the south of this complex lay further houses. At some-time prior to or just within the next phase all these areas where abandoned. They appear to have been abandoned quite rapidly and posts removed and deliberately infilled.

8.3 PHASE 2: Bronze Age: re-organisation: 1400–1100 BC

8.3.1 It is possibly during this time period that the causewayed ditch slots mentioned above were backfilled and re-cut to form a single large ditch. Equally it may be at this time that the other ditches are cut and the first field groups are created. Generally during this time period there is evidence in Britain for more fixed settlements and the division of land and creation of boundaries (Cunliffe 1995). Potentially this is the case at Stowe, although no direct evidence is forthcoming. Some of the ditches within Landscape Elements 002–004 are likely to have been created at this time. Ditches Y079, Y109, Y110, Y149, Y163, Y164, Y165, Y166, Y188, Y189, Y217, Y228, are all potential candidates for construction during this period, see **Figure 9**.

8.3.2 Landscape 010 and 013 have been dated to this phase on the basis of C14 dating. It is also likley that the cluster of features in the upper part of Landscape 007 associated with the ditches Y079 and Y125 also belong more properly to this phase. If so it seems that the creation of the settlemtns and boundaries was coincidental rather than one respecting the presence of an earlier system.

8.4 PHASE 3: Later Bronze Age: 1100–800BC

8.4.1 Little can be said about the period from 1100bc to about 700bc as regards the Stowe site. From the little evidence available it is likely that the fields continued in use and that any associated settlement lies either to the west in Extraction Phases 2 and 3 or to the north and east in amongst the dense series of crop–marks visible in the fields diagonally opposite the Stowe site. Some of the possible structures noted above, especially in Landscape Element 018 may date from this period but are just as likely not to, their heavily ploughed out nature making it impossible to phase them.

8.5 PHASE 4: Iron Age to Roman: 700BC – AD400

8.5.1 During the Iron Age settlement and activity areas occur across the Stowe site, the main area being Landscape Element 007. These are largely in the form of large pits, possibly water–pits which are in several instances linked to structures, some of which are undoubtedly houses. Also a number of structures are built at the butt–ends of ditches. Again some of these may be houses but most appear to storage areas or animal pens. This represents another re–organisation of the landscape and possible the break–up of earlier landscape organisation so that much smaller areas are utilised by individual household groups. This may be to some extent a regressive step and perhaps indicates an area/regional collapse.

8.5.2 With the arrival of the Romans themselves or Roman influence the area is again re–organised. The Iron Age buildings are most likely removed and the population displaced. The field systems appears to be reorganised slightly to make fewer but larger fields, making production more efficient and perhaps more market orientated. It seems likely that the fields may have come under the jurisdiction of the villa site located at Rectory farm, Market Deeping (Hunn et al, forthcoming).

8.6 PHASE 5: Post–Roman

8.6.1 Following the collapse of Rome and the departure of the Roman administration from Britain. The fields at Stowe are abandoned and silt up. Later the fields are ploughed on a north–south basis, creating two large fields with the Stowe Farm Extraction Area 1A and 1B (Landscape Element 001). There is no evidence for Saxon or Scandinavian activity on the Stowe Farm site The earliest pottery from within the plough furrows were a few sherds of St Neots ware, dating from the 10th–12th century AD. These are likely to be the result of field manuring, but there is the possibility that structural, but not necessarily settlement occupation occurs at the site. In 1A and 1B this Anglo–Scandinavian content may have been heavily ploughed out and has thus proved unrecognisable, but also it may await recovery in Phases 2 and 3.

8.7 PHASE 6: Medieval and Post–Medieval

8.7.1 Further ploughing of the fields, which retained their shape through

until the present day, occurred through the medieval period. Pottery recovered from plough furrows ranged in date from medieval green glazed ware through to later nineteenth century stoneware.

9.0 CONCLUSIONS

9.1 Phases 1A and 1B

9.1.1 Excavation at Stowe Farm has revealed a relatively complex array of activity. Due to the lack of stratified remains and the heavy truncation resulting from medieval to later ploughing, the interpretative potential of the archaeological resource is limited.

9.1.2 A good example of prehistoric and later field systems is readily identifiable at Stowe and the high level of organic material encountered in the deep pits is valuable for environmental evidence.

9.1.3 In general a broad chronology of landscape change can already be visible within 1A and 1B with small–scale, isolated farmsteads (and ceremonial strucutres ?) in the neolithic and early Bronze Age, giving way to more complex and wider reaching field systems and settlement concentrations in the middle Bronze Age to Iron Age. These in turn give way to larger fields in the Roman period and after a short period of woodland regeneration. The fields are opened again, realigned and became the shape that lasted through from medieval times until the present.

9.1.4 There is slight variation across the site as regards preservation, but on the whole the distribution and preservation of features is quite uniform. Where they occur concentrations of structures are fairly well defined.

9.1.5 The major drawback of the site is the sparsity of finds, this makes any attempt at true chronology or economic analysis, virtually impossible. It also weighs against exhaustive excavation of features.

9.2 PHASE 1A and 1B in relation to previous archaeological work

9.2.1 The Stowe Farm site lies within an area known for its intensive concentration of prehistoric archaeology. Of immediate relevance to the Stowe Farm site is the site of Maxey. This lies only 2 miles to the south and was the focus of substantial excavation of prehistoric remains during 1982–85. Particularly of interest to Stowe is the Etton Woodgate. This site comprised an incomplete enclosure, Woodgate I and a causewayed enclosure associated with pits and posts. Artefactual evidence suggests that the activity here was in the main much earlier than at Stowe, although the arrowhead and carbon date for A055 suggest that some features are likely to be contemporaries of those at Etton. Overall, however, the initial impression from Extraction Phases 1A and 1B is that the Stowe Farm settlement came into being as that at Etton to the south was in decline.

10.0 PHASE 2 EXTRACTION AREA

10.1 Implications from Phases 1A and 1B

10.1.1 Aerial photography reveals that Phase 2 contains a large number of pits. Within Phases 1A and 1B pits of the size visible to aerial photography have proved to be the most interesting of all features across the site. In areas 1A and 1B only 3 pits were visible on aerial photography. Excavation revealed 9 such pits spread across the area, ie three times as many, these included those not visible in the south–east corner until subsoil stripping occurred. Three of these pits were dated as having a Bronze Age origin. Therefore if this is taken to its logical conclusion the 13 pits in Phase 2 could represent the visible element of about 39 pits. If these are accompanied by associated structures as pits seem to be in Phases 1A and 1B there is considerable potential for prehistoric archaeology in Phase 2. Any true settlement within the Stowe site is likely to lie within Phase 2 and be defined by this large concentration of pits. Most of the pits lie to the north of the large NE–SW running prehistoric ditch, which itself is of importance within Phase 2. Together these two elements may be defined as a settlement with accompanying boundary ditch (BY015), the size of which suggest a possible regional demarcation. A second potentially large prehistoric ditch (BY015b) is noted on the aerial photographs. Again designated as a geological entity, this was highly visible as a cropmark during the 1995 summer excavation. Apart from this ditch as a cropmark and the first ditch as negative feature, none of the other linears defined as geological on the aerial photographs were visible in cropped or soil stripped areas. This adds to the weight of BY2 being a true ditch.

10.1.2 Phase 2 is likely to concentrate on excavating a proportion of these deep pits, which evidence from previous work suggests will be organically rich. The opportunity to retrieve Bronze Age waterlogged material is of importance due to the fact of waterlogging preserving otherwise perishable materials. Associated structures are likely to be less well preserved and in most cases will need to be merely planned, with a sample being excavated to recover finds and overall character. Non–definable structure–related post–holes and pits will need planning but not excavating. Equally natural features will be defined and planned. One area of the site will be at some point more rigourously recorded and excavated in order to fully characterise natural versus man–made features. These characteristics will then be used as the basis across the site for recording and planning features as man–made or natural.

10.1.3 The process of tracing and recording the field systems apparent will continue through to Phase 2 with a greater emphasis being placed on attempting to elucidate chronological development of the fields, rather than the character of the ditches which has been confirmed in Phases 1A and 1B.

10.1.4 The large prehistoric ditch will receive attention, in order to work out its development and retrieve datable and socially interpretative material. Equally the second possible prehistoric ditch (designated BY015b on plans), which was not in Phase 1A/1B but will be encountered first in Phase 2 will need to receive a similar level of study.

10.1.5 Methodology will continue as per the previous phases. It is suggested that machine drivers endeavour to keep the site as clean as possible, to leave as little spoil on site as possible. One way in which this can be achieved is if the dumper trucks are not overfilled, and thus spillage is kept to a minimum.

10.1.6 It is proposed that planning will be undertaken manually via the use of a grid which will be later tied into the site via the use of an EDM. All 1A and 1B plans will be modified in order to be entered onto the Gsys computer record. Appropriate planning conventions will be employed during Phase 2 so that plans can be immediately transferred to Gsys. Equally the site supervisor will endeavour to check all site records on site and create information readily available to be transferred to the database as soon after the end of excavation as possible.

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FIGURES

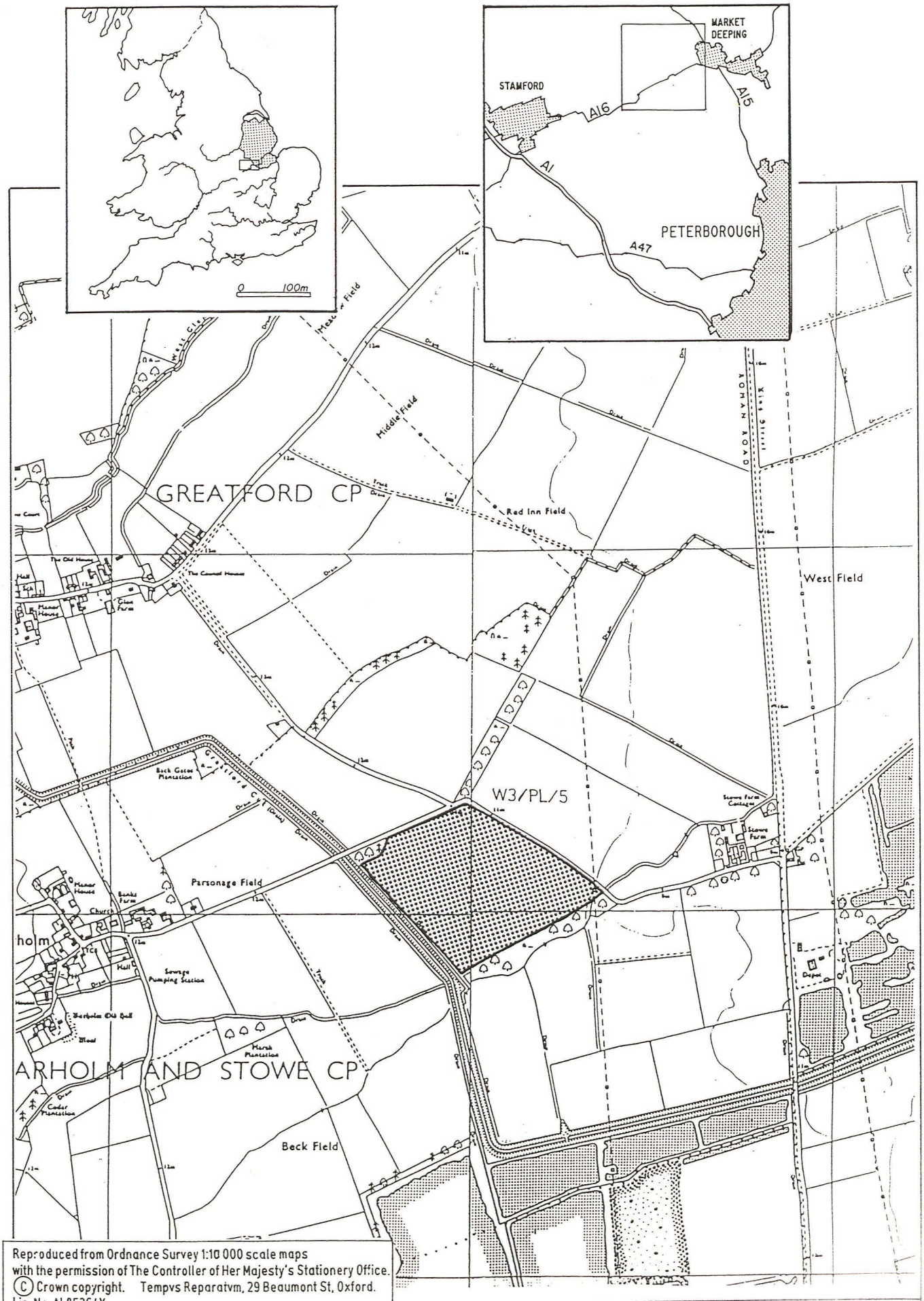


Figure 1: Site Location

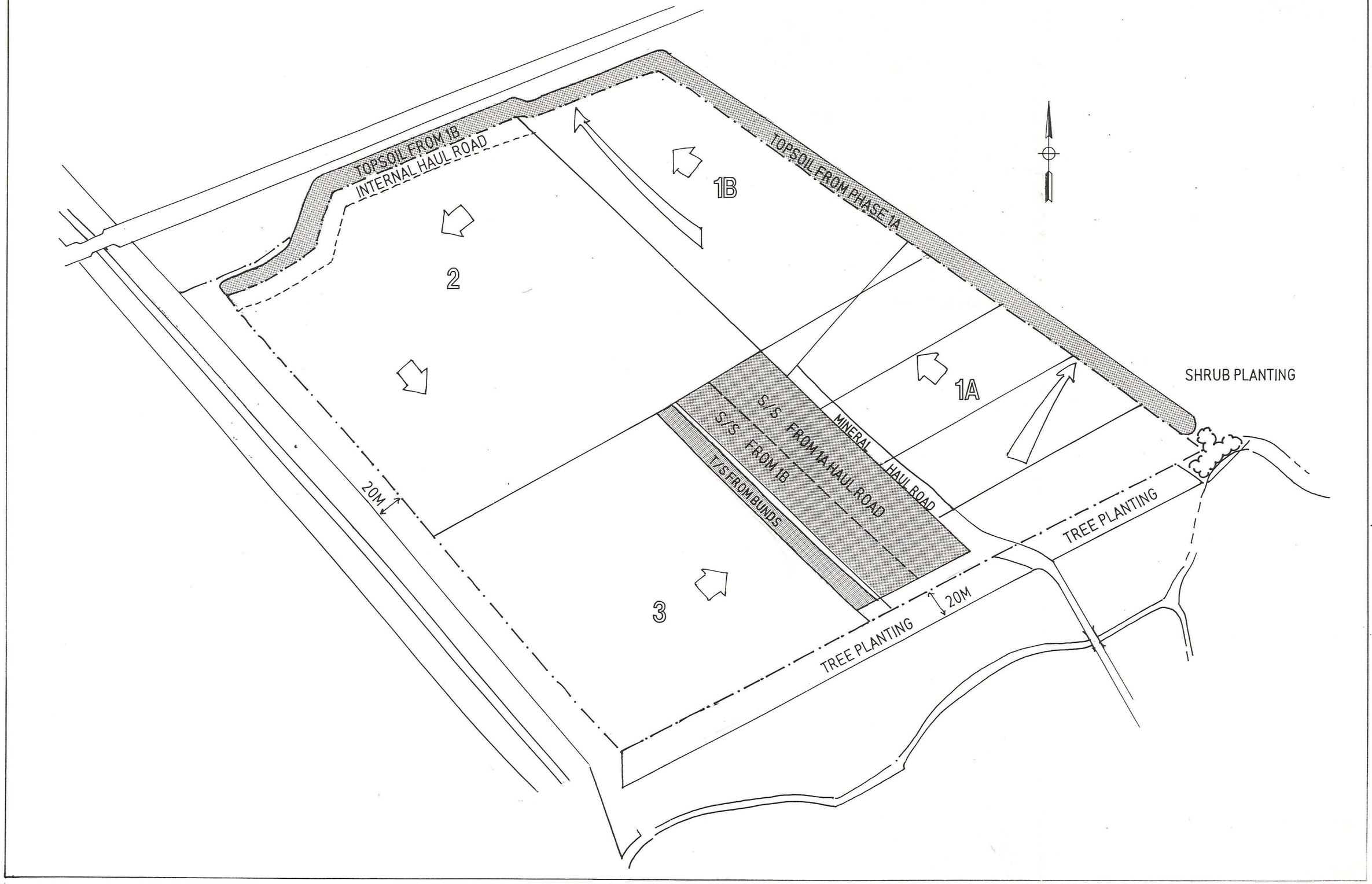


Figure 2: Amendment to extraction areas, bunds and subsoil dumping area

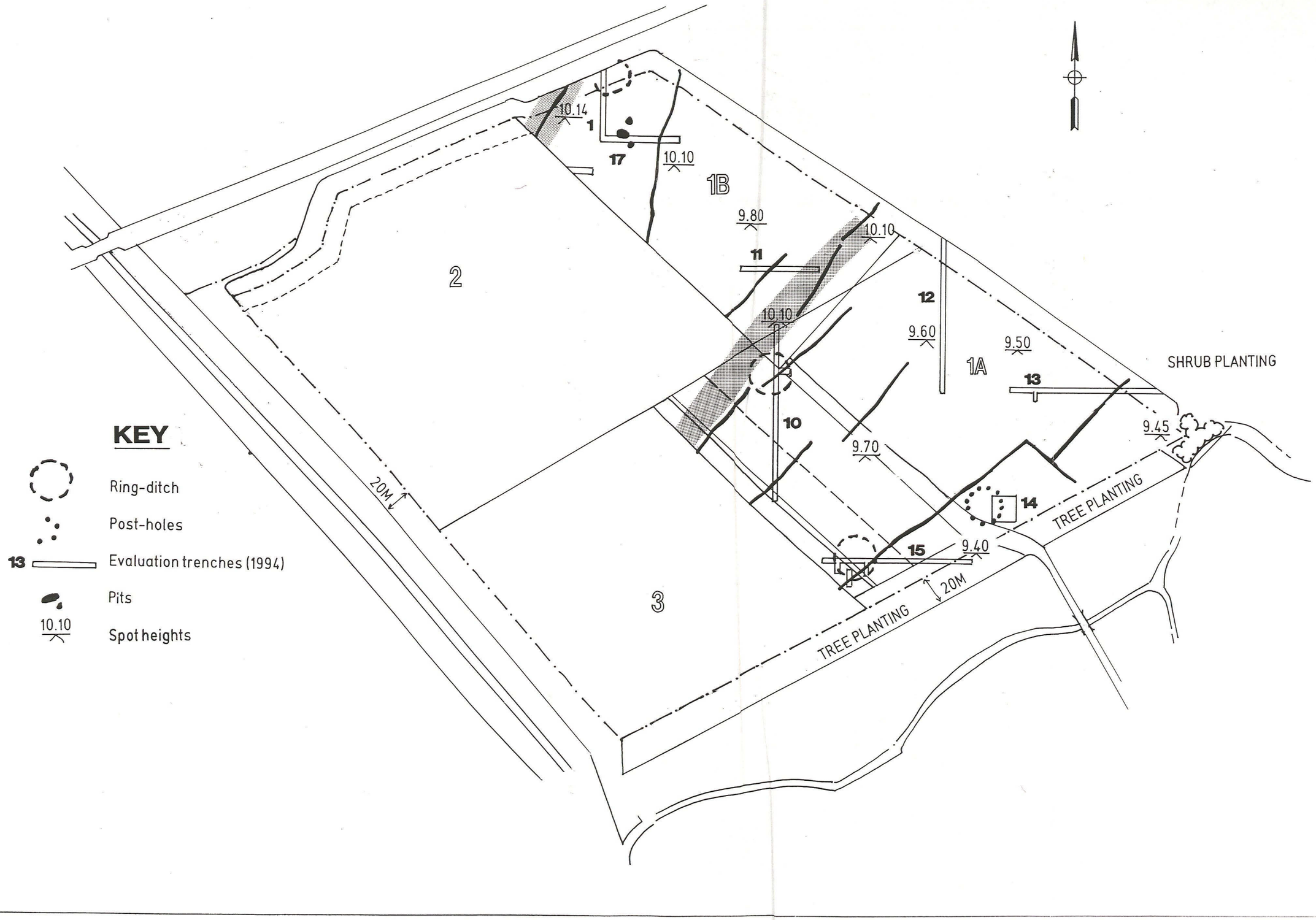


Figure 3: Evaluation interpretation compared to cropmark and excavation evidence

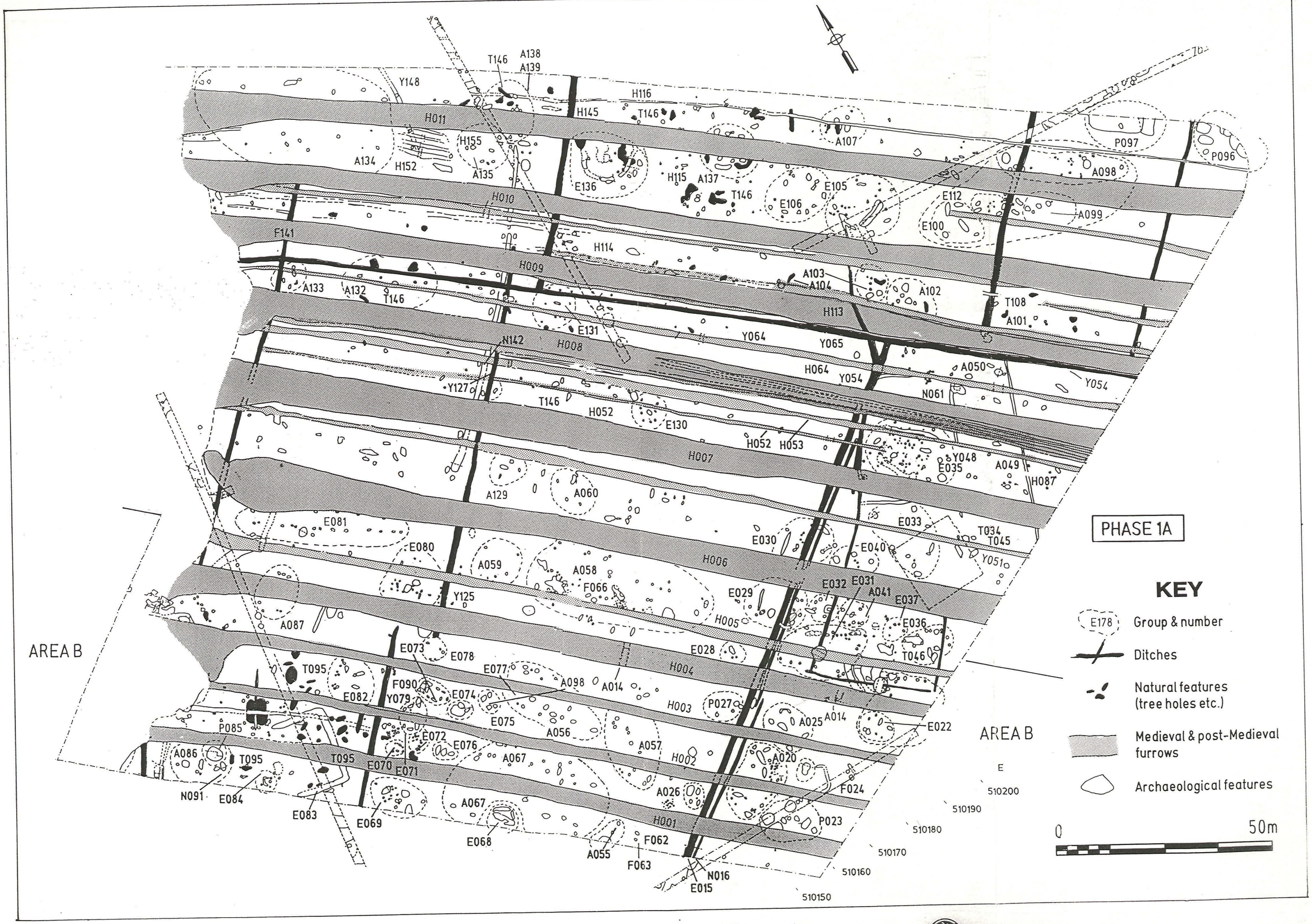


Figure 4: Phase 1A showing features and Group numbers

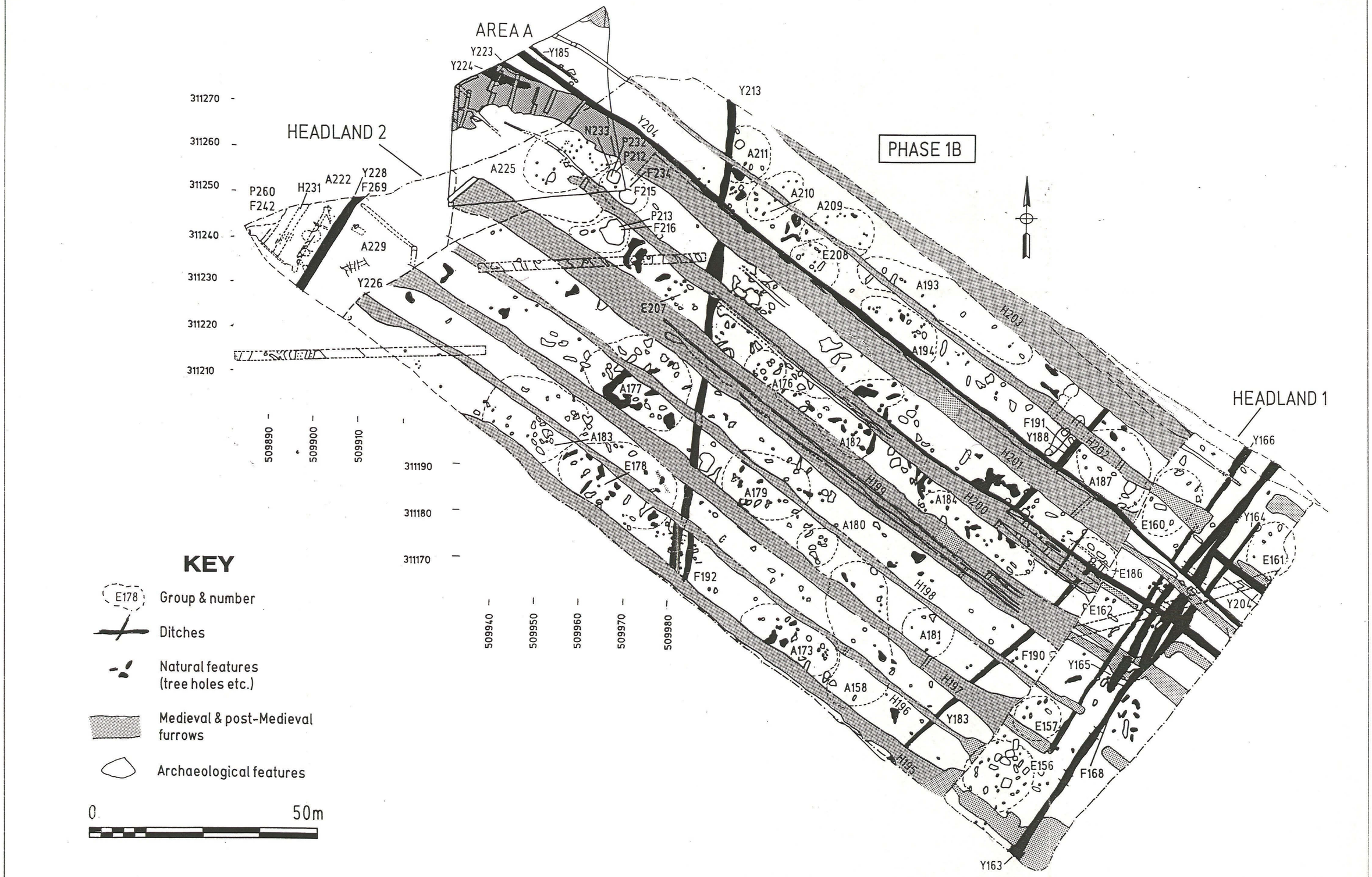
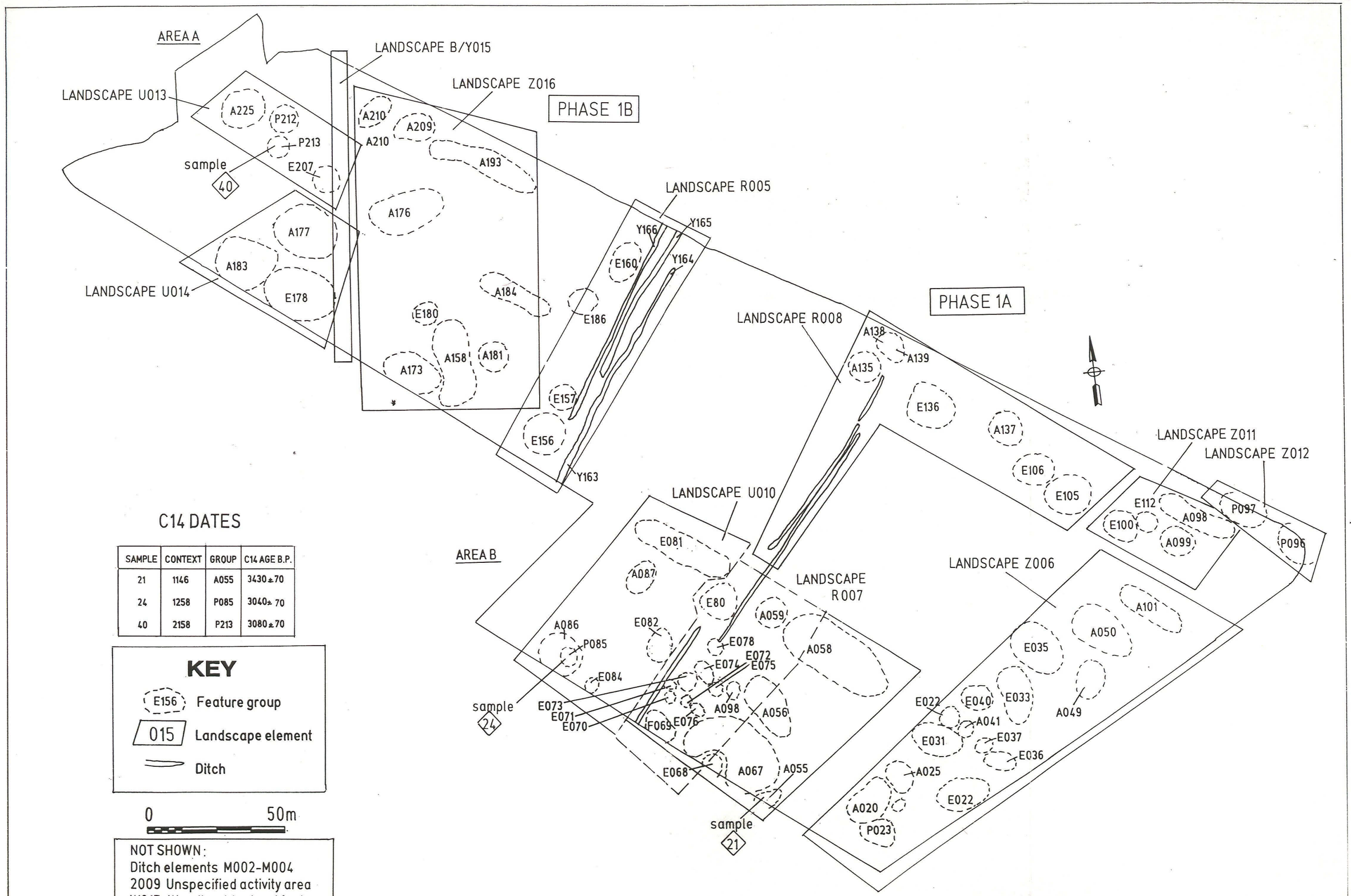


Figure 5: Phase 1B showing features and Group numbers



C14 DATES

SAMPLE	CONTEXT	GROUP	C14 AGE B.P.
21	1146	A055	3430±70
24	1258	P085	3040± 70
40	2158	P213	3080±70

KEY

E156 Feature group

015 Landscape element

Ditch

0 50m

NOT SHOWN:
Ditch elements M002-M004
2009 Unspecified activity area
W017 Woodland/natural features

Figure 6: Phases 1A and 1B showing Landscape Elements positions

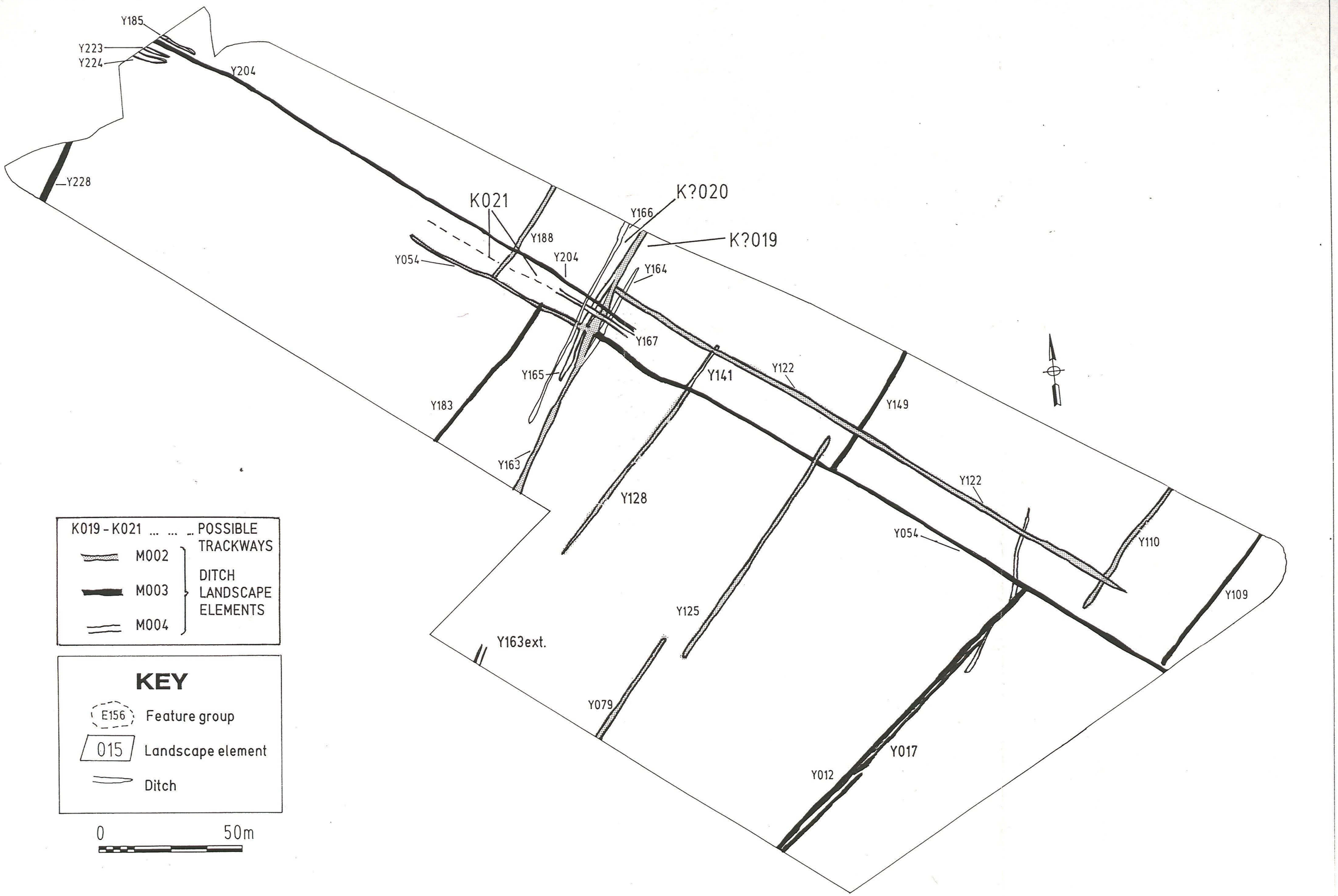


Figure 7: Ditch System (Celtic Fields)

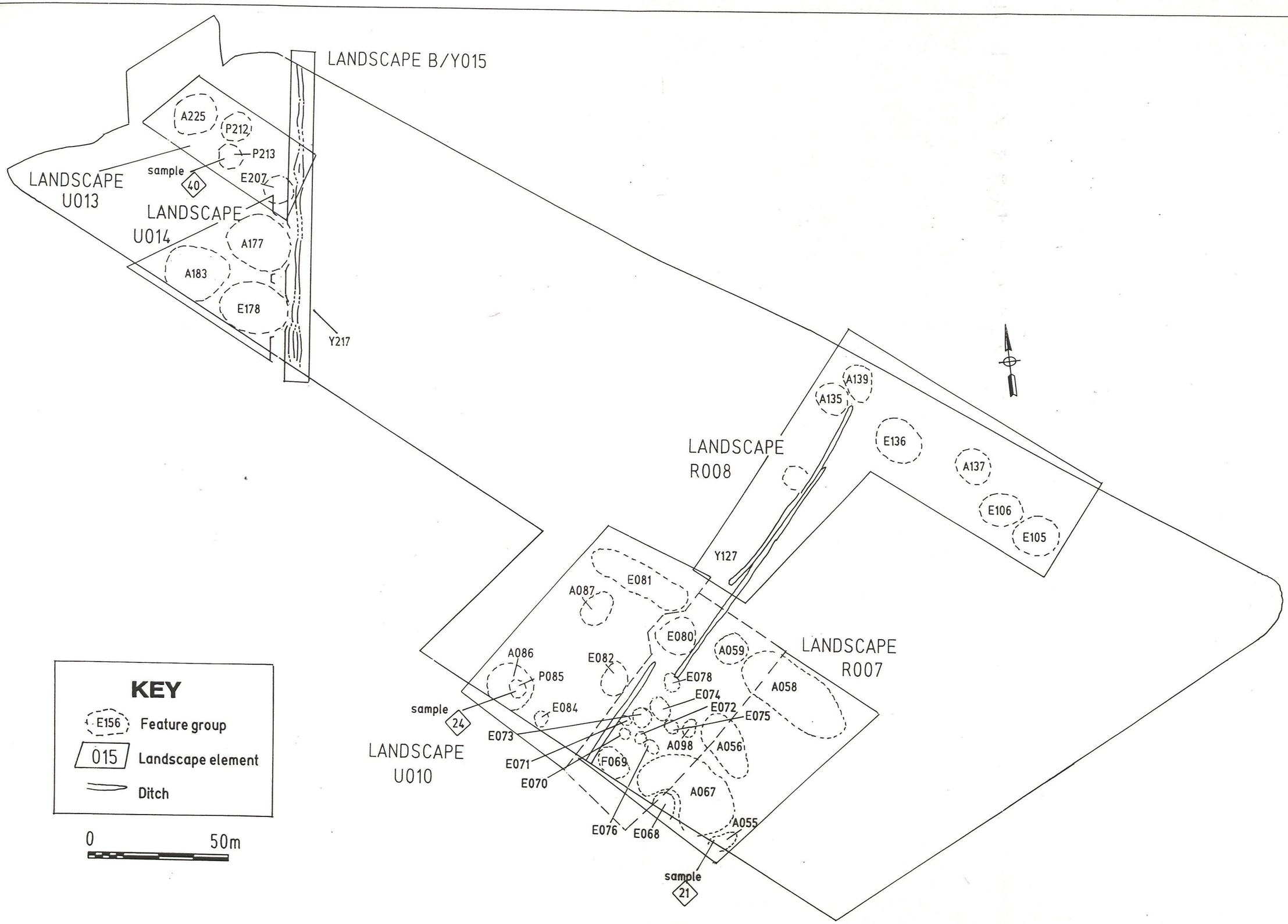


Figure 8: Phase I – Neolithic–Bronze Age – **Probable Landscape Elements**

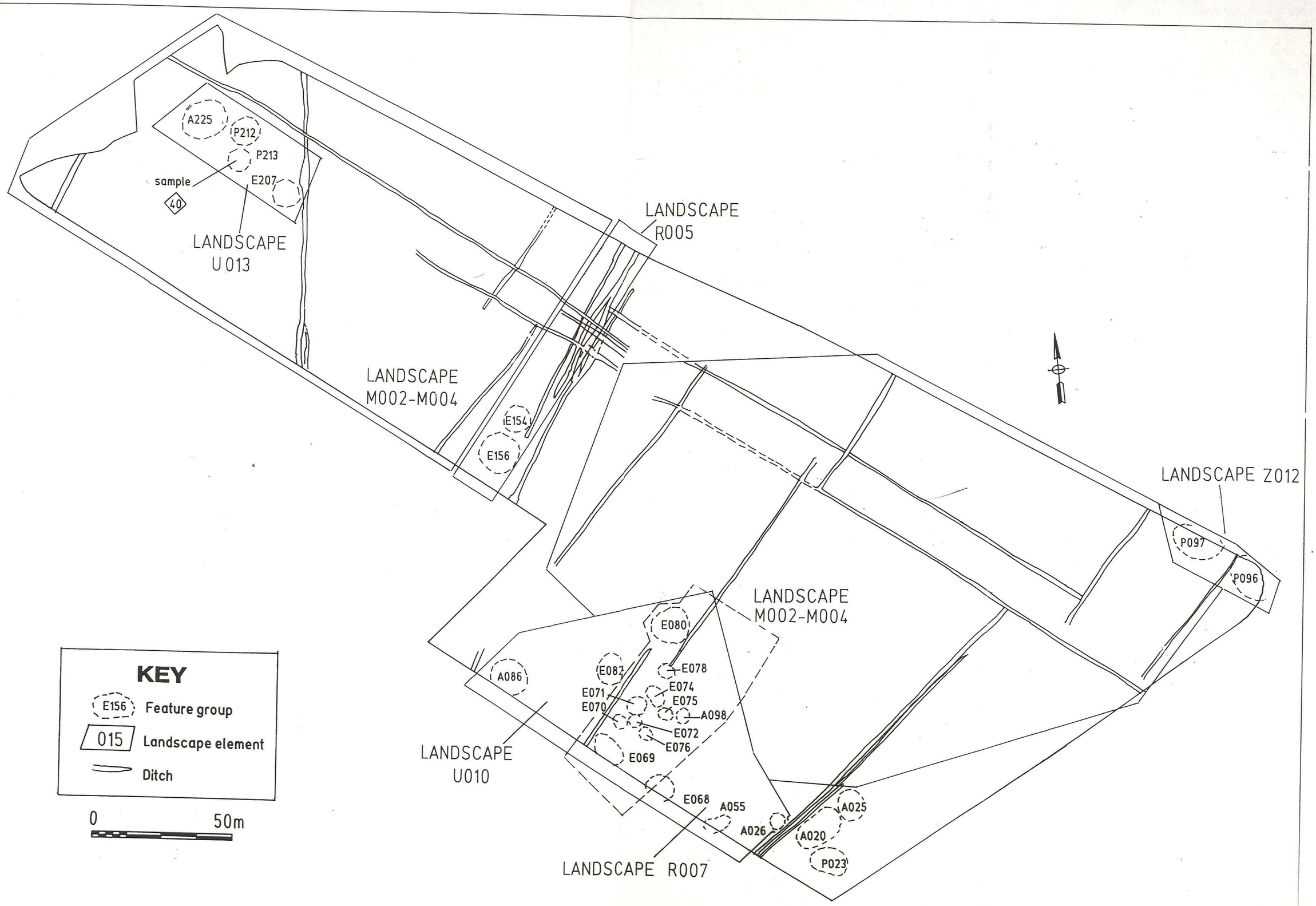


Figure 9: Phase II – Bronze Age–Iron Age – Probable Landscape Elements

Stowe Farm,
West Deeping, Lincs:
Aerial photograph evidence

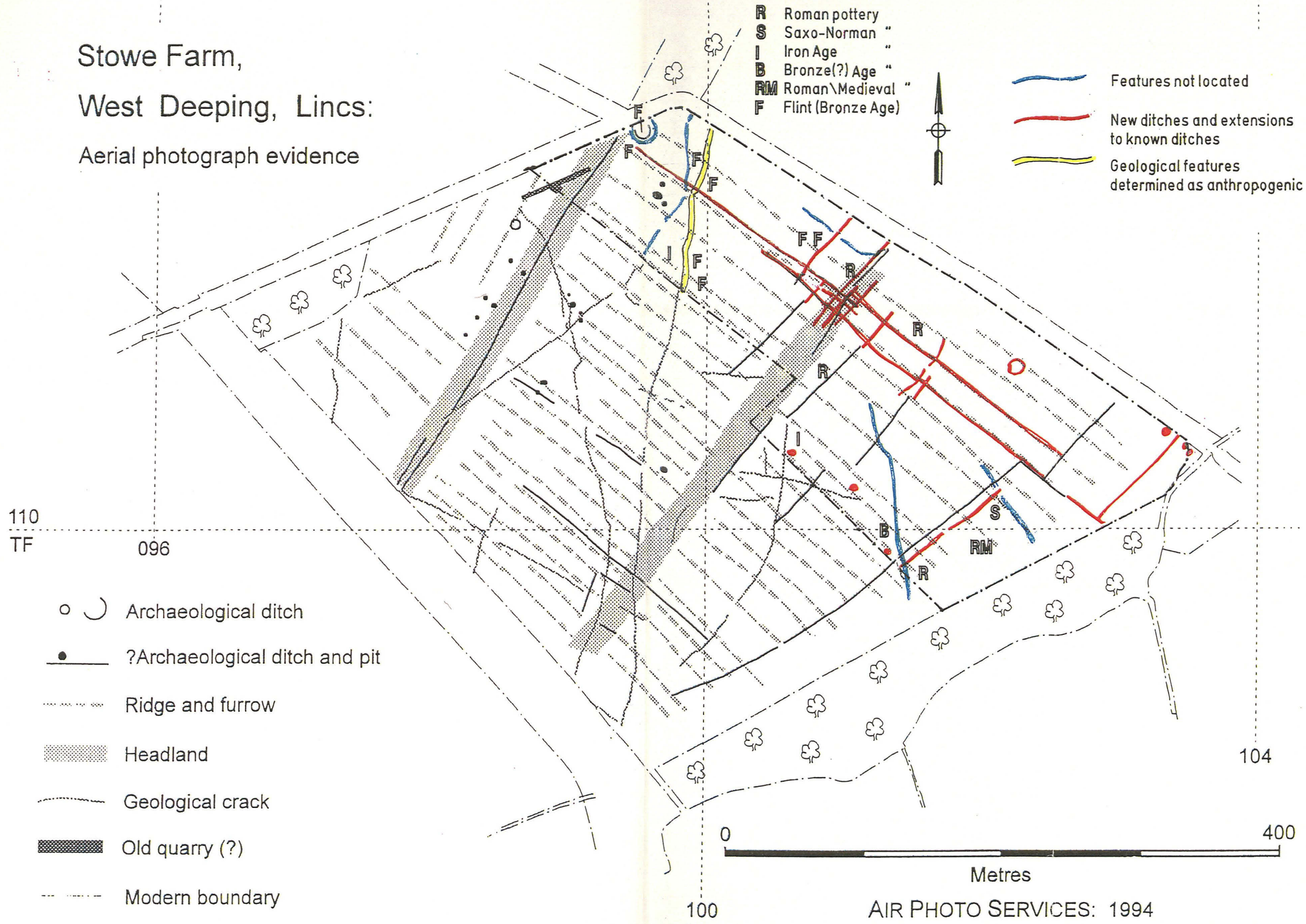
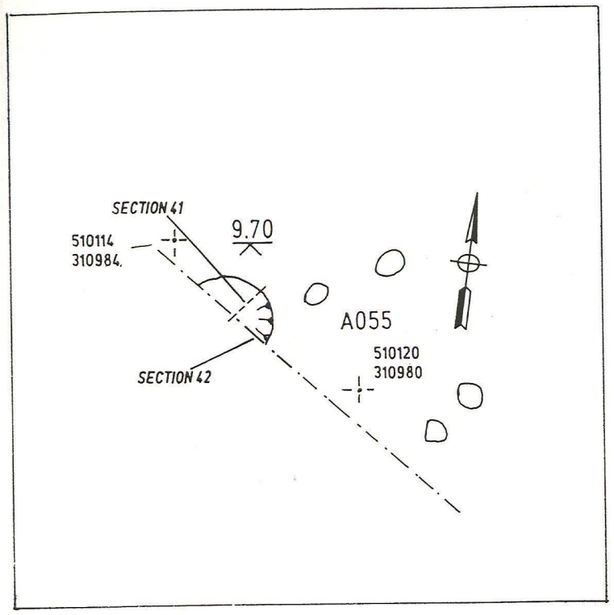
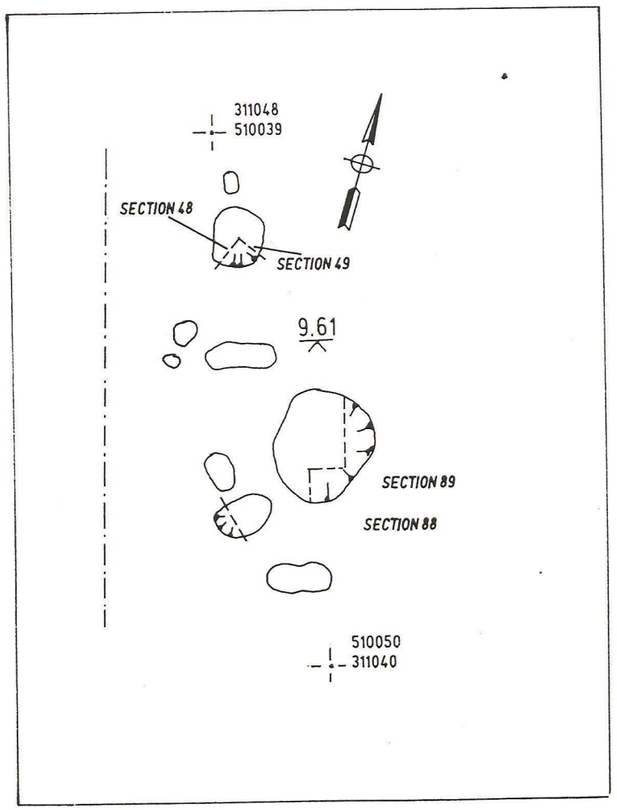
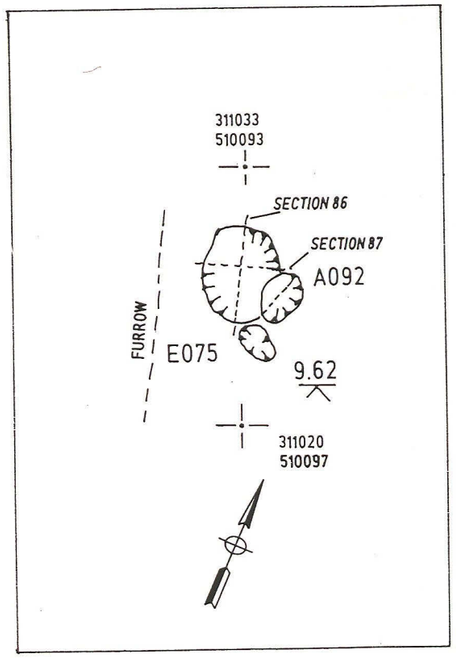


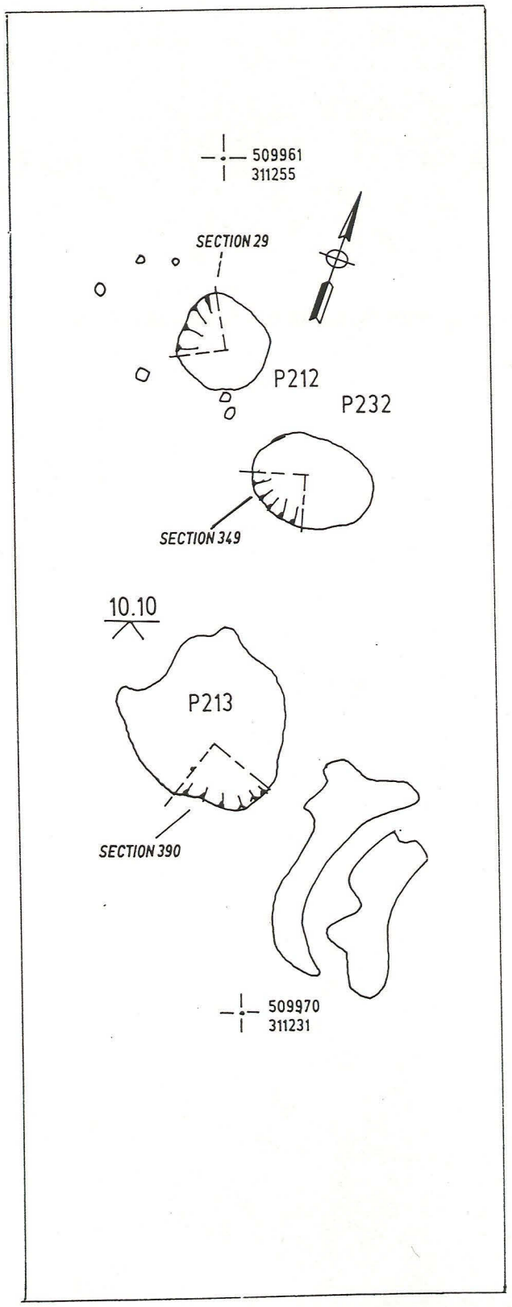
Figure 10: Aerial Photograph plot detailing known features, extensions to features and new features

Figure 11: Site Features showing the relationship of Phases 1A & 1B to known cropmarks in the Stowe–Barholm area.









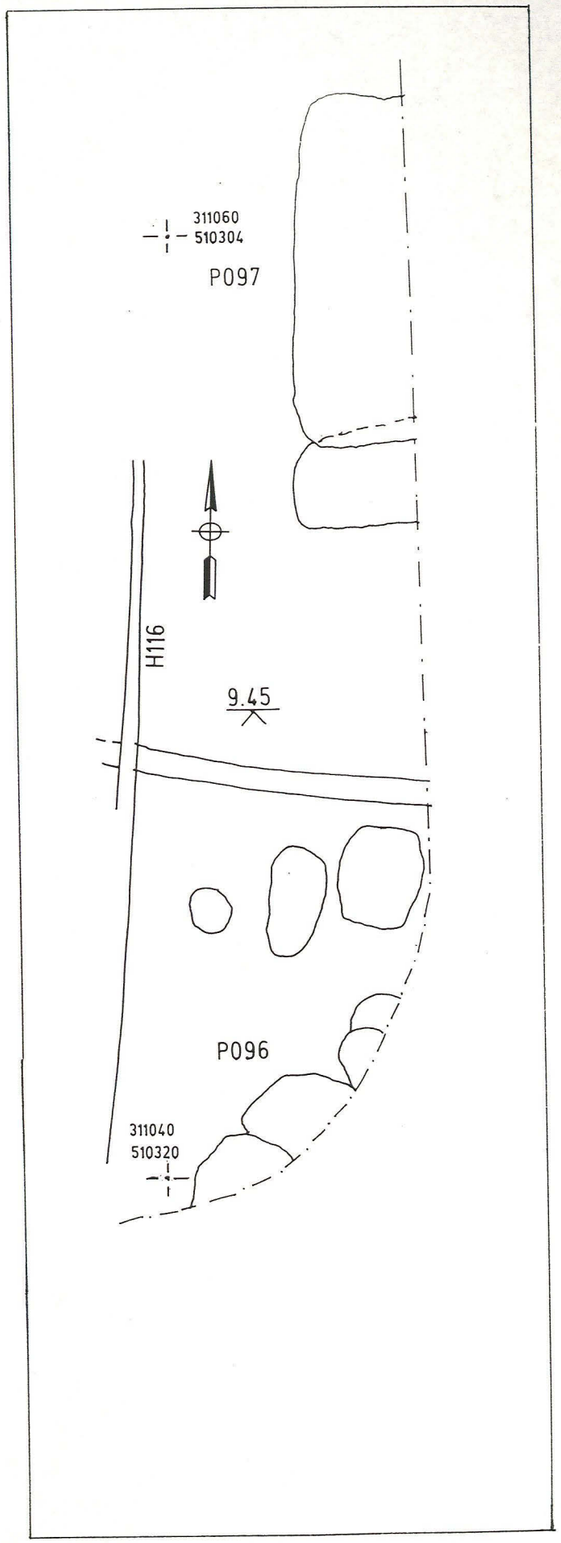


Figure 12: Pit Groups compared; in plan

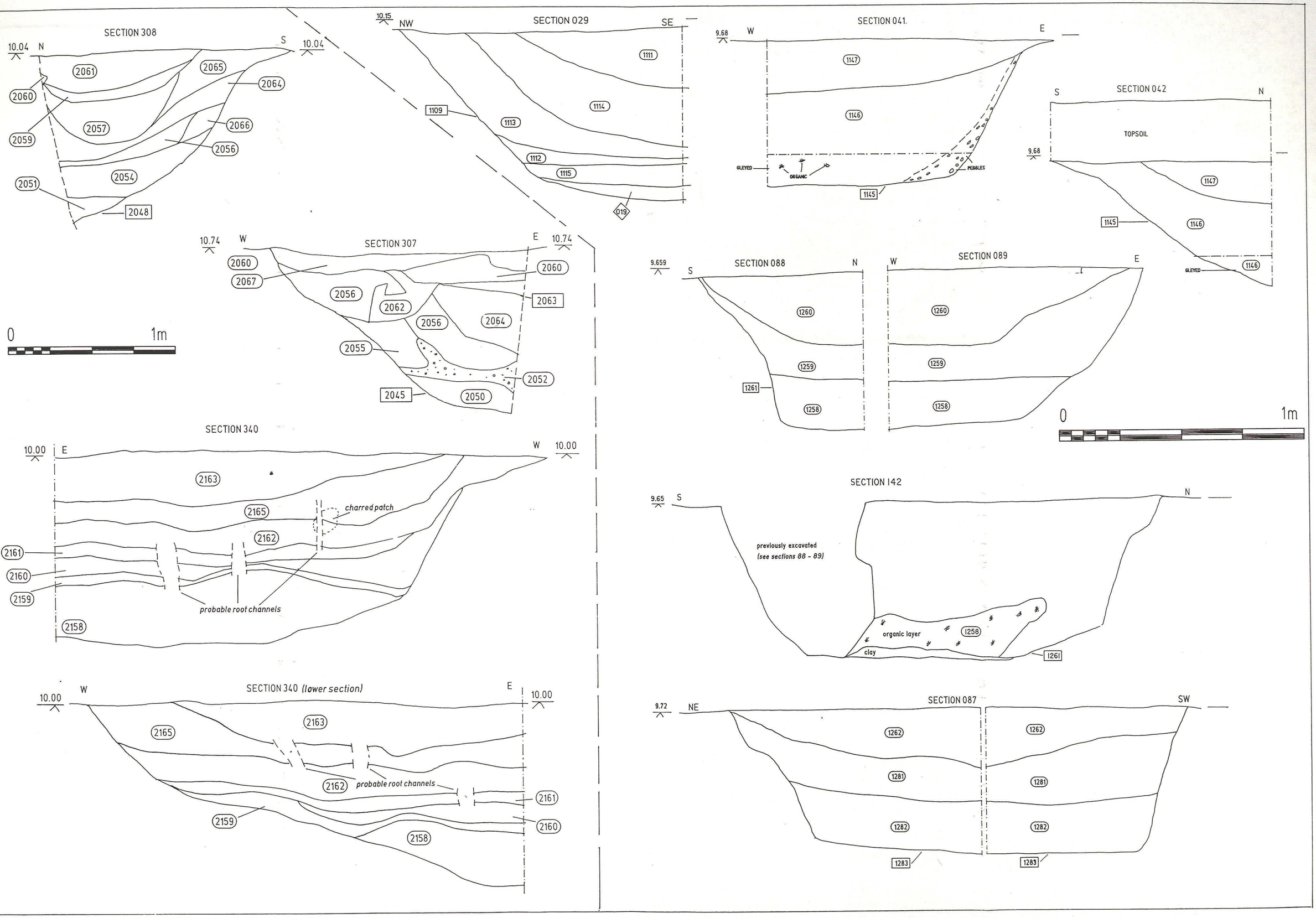


Figure 13: Pit Groups compared; in section

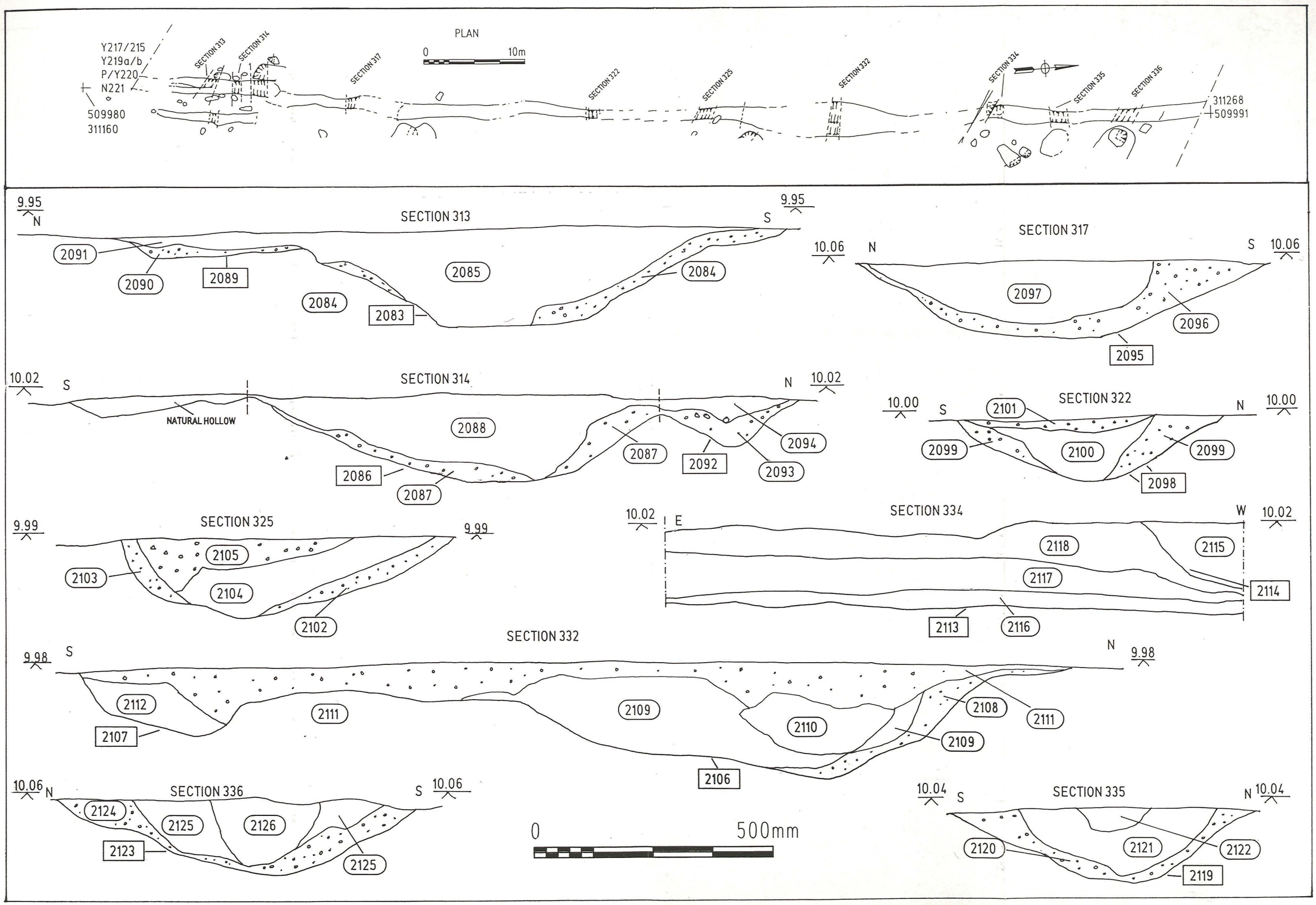
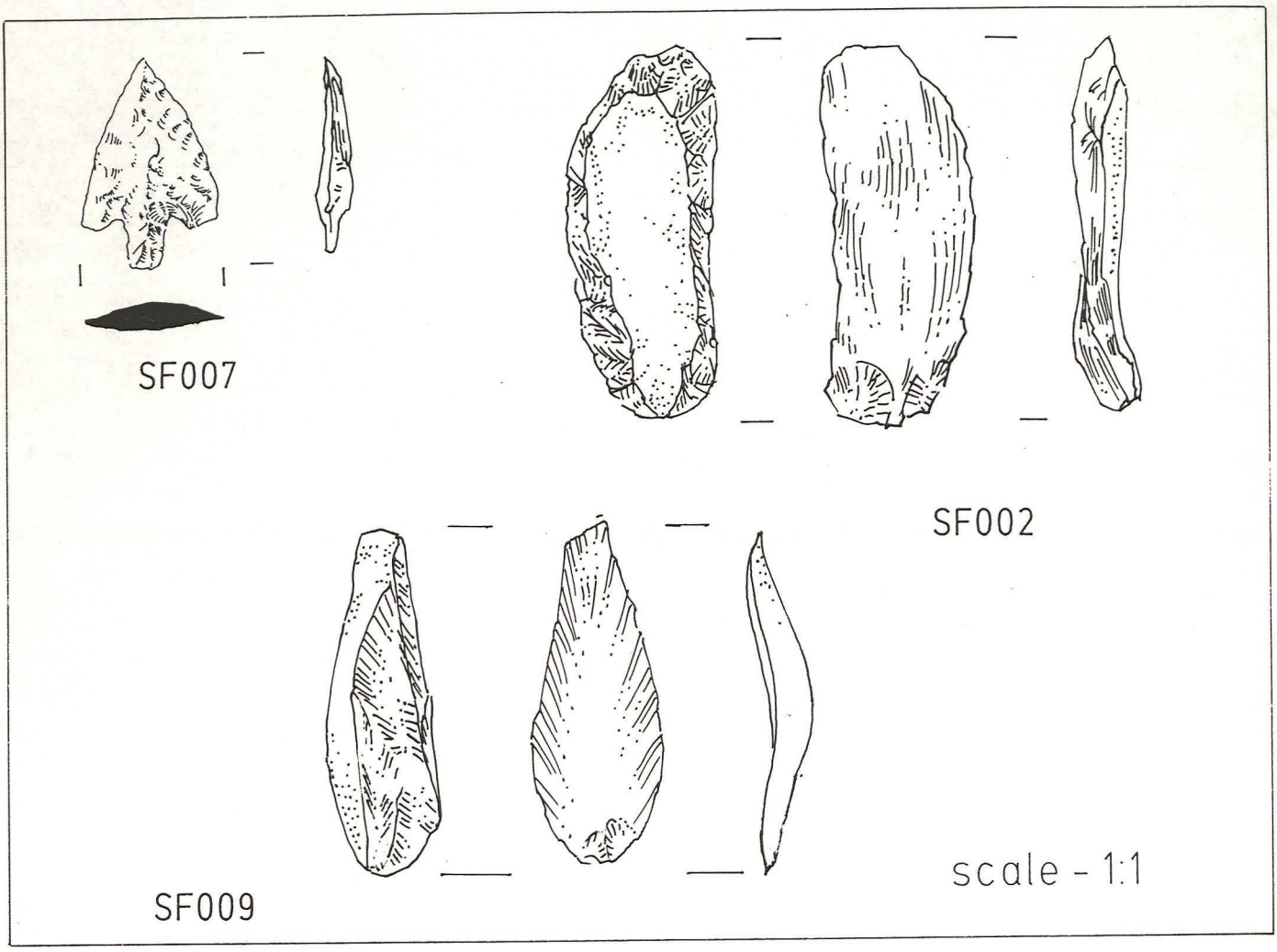


Figure 14: Ditch Y217 and Sections along its length



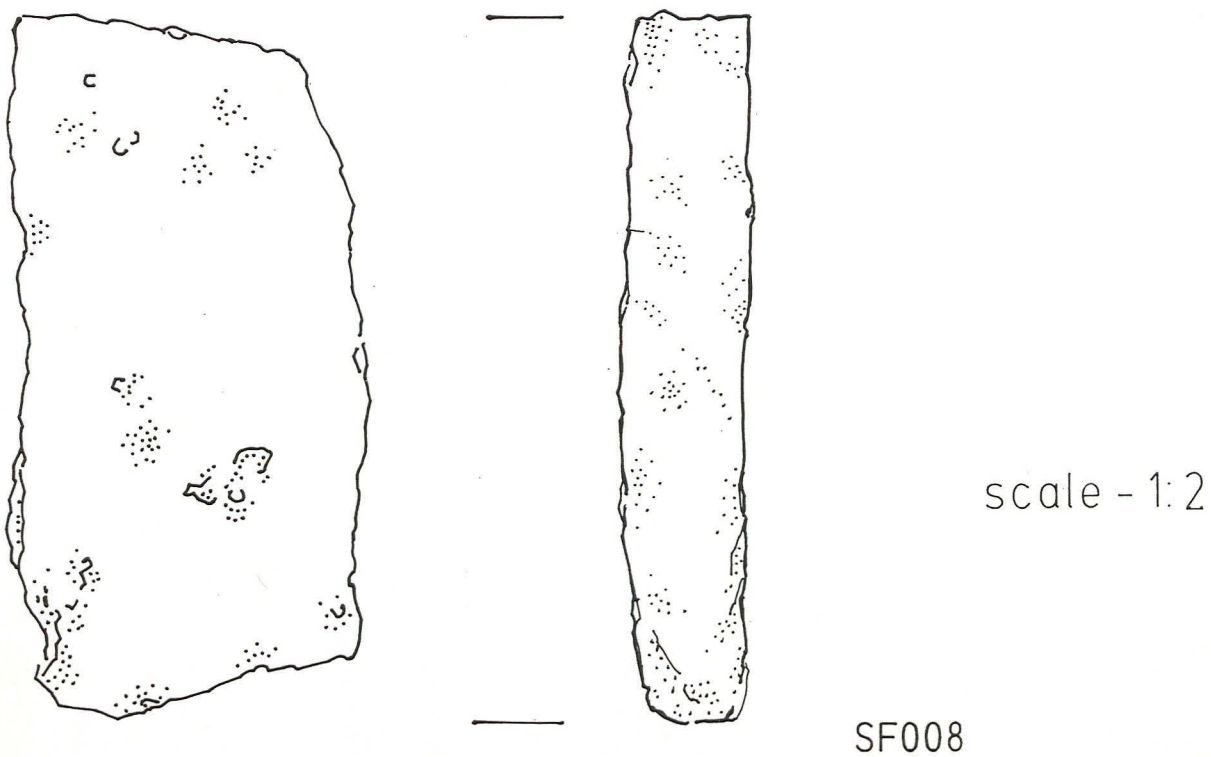


Figure 15: Flints (small finds 002, 007, 009) and Quernstone (small find 008)

APPENDIX 1

APPENDIX 1:
Codes for Groups and Landscapes.

Groups

A = Activity Area
B = Burial
C = Occupation Debris
D = Building
E = Structure
F = General Disuse Backfill
G = Use (for specific phases meriting discussion
separately from the construction phase)
H = Ploughing
N = Deliberate Infilling
P = Pit group
S = Demolition Debris
T = Natural feature
Y = Boundary

Landscapes

BY = Territorial boundary
C = Open Area
K = Trackway
M = Field/Field System
R = Farmstead/Settlement
U = House
Z = Unspecified activity area
W = Woodland

APPENDIX 2

APPENDIX 2: LANDSCAPE ELEMENTS

Landscape Element: M001 – Ploughing.
Landscape Element: M002–M004 – Co–axial/ 'Celtic' Field System.
Landscape Element: R005 Farmstead.
Landscape Element: Z006 – Unspecific activity area
Landscape Element: R007 – Farmstead /Settlement
Landscape Element: R008 Settlement
Landscape Element: Z009 Unspecified activity area
Landscape Element: U010 – House ?
Landscape Element: Z011 – Unspecified activity area
Landscape Element: Z012 – Unspecified activity area
Landscape Element: U013 – House ?
Landscape Element: U014 – House ?
Landscape Element: BY015 – Boundary
Landscape Element: Z016 – Unspecified activity area
Landscape Element: W017 – Woodland
Landscape Element: Z018 – Unspecified activity area

Landscape Element: M001 – Ploughing.

Consists of groups: H001–H011, H019, H047, H051–H053, H064, H113–H116, H145, H151–H155, H195–H203, H231.

Landscape Element: M002–M004 – Co–axial/ 'Celtic' Field System.

Consists of Element: Y012, E015, N016, Y017 –fence–line, Y054, Y079, Y109–Y111, Y122, Y125, Y128, Y148–Y149, Y163, Y167, Y174, Y185, Y188, Y189, Y204, Y223, Y224, Y226, Y228

Landscape Element: M002.

Consists of Groups: Y054, northern section, Y079, Y110, Y122, Y125, Y163, Y188, Y189.

Landscape Element: M003

Consists of groups: Y012, Y054, Y109, Y128, Y149, Y183, Y204, Y228, and probably fence–line Y017.

Landscape Element: M004

Consists of groups: Y017, Y125ext, Y141, Y167, Y185, Y223, Y224.

Landscape Element: M004B

Consists of groups: F013, F065, F090, F117, F118, F123, F124, F141, F143, F144, F150, F168, F169, F170, F171, F172, F190, F191, F192, F205, F229, F238, F239, F240, F241, F242

Landscape Element: R005 – Farmstead.

Consists of groups: E156, E157, E160, Y163, Y164, Y165, Y166, E186

Landscape Element: Z006 – Unspecific activity area

Consists of groups: A020, F021, E022, A025, P023, F024, E031, E032, E033, E035, E036, E037, E040, A041, A049, A050, N061, A101.

Landscape Element: R007 – Farmstead /Settlement

Consists of groups: A055, A056, A058, A059, F/N062, F063, F066, A067, E068, E069, E070, E071, E072, E073, E074, E075, E076, E078, E080, N088, F089.

Landscape Element: R008 Settlement

Consists of groups: E105, E106, Y127, A137, A135, E136, N138, A139, N140, N142.

Landscape Element: Z009 Unspecified activity area

Consists of groups: Y018, Y019, E029, E030, (E031, E033, E035, E036, E037, A041), Y048, H/Y243.

Landscape Element: U010 – House 1 / Farmstead (?)

Consists of groups: E081, E082, E084, P085, A086, A087 (F089), N091.

Landscape Element: Z011 – Unspecified activity area

Consists of groups: A098, A099, E100, E112, F120

Landscape Element: Z012 – Unspecified activity area

Consists of groups: P096, P097, N/F119, (Y110, Y109)

Landscape Element: U013 – House 2 / Farmstead (?)

Consists of groups: E207, P212, P213, F215, G216, A225, G235, N236, P232, N233, F234, P237, F238

Landscape Element: U014 – House 3 / Farmstead (?)

Consists of groups: A177, E178, A183

Landscape Element: BY015 – Boundary

Consists of groups: Y174, E175, Y217, N218, Y219a/b, P/Y220, N221,

Landscape Element: Z016 – Unspecified activity area

Consists of group: A158, A173, A176, E180, A181, A184, A193, A209, A210.

Landscape Element: W017 – Woodland

Consists of groups: T034, T045, T046, T095, T108, T126, T146, T214

Landscape Element: Z018 – Unspecified activity area

Consists of groups: A014, A026, P027, E028, P038 N039, P042, E043, F/N044, A057, A060, E077, E083, A092/P092, N093, A094, A101, A102, A103, A104, A107, F121, A129, E130, E131, A132, A133, A134, A147, E159, E161, E162, A179, A182, A187, A194, A206, E208, A211, A222, A227, P230.

APPENDIX 3

APPENDIX 3: Group by Group Discussion of Landscape Element 018.

A014

This group is comprised of two stone spreads located beneath furrow H004 at its western side. The group is formed of two discrete clusters of quartzite pebbles and limestone slab definitely interlocking and overlapping. It is possible that these represent the remians of stone lined pits in the area or they could be simple field clearance cairns. Either way they indicate the transportation of stone material to the site at some date. The two areas of stone lay in the south of area 1A and were 50m apart.

A026

Four pits or large post–settings, unexcavated but with similar dark brown sandy silt fills.

P027

Four circular pits and one elongated one in an area 8m x 4m, all of approximately 1m diameter. Pit group of uncertain nature. Possibly linked to A026 and A025.

E028

Five stake or post–holes concentrated around a group of three interlocking post–settings in an area 2m x 3m. Activity area of uncertain nature.

P038 and N039

These two groups represent three probable pits intercutting each other butt apparently contemporary, ie. all were open at the same time. They were subrectangular in shape with post–settings at their base. They formed a single group distinct from surrounding groups in the southern are 1A, south of boundary ditch Y012. They perhaps represent an 'industrial' structure whose exact nature is uncertain. The fill , a dark grey brown clay sandy silt was heavily panned and had a moderate gravel content. It appears as a single event suggesting deliberate infilling.

P042 and F/N044

Two pits of large dimensions, 3m diameter. Situated in the southern area of 1A, they obliterate earlier features E043 and are themselves partially obliterated by later fence–line Y018. The two pits are grouped together on size, shape and spatial position. They have deep concave sides, but no detailed stratigraphy and are of uncertain date or function. They are filled by similar fills, F/N044, a gravelly sandy silt probably representing a single deliberate infilling phase.

E043/P043

A cluster of four pits or large post–settings, very similar in size in an area 3m x 4m similar fills probably partly use related. Nature of activity is uncertain. They pre–date P042.

A057

A linear spread over 24m x 8m, of eight probable post–holes, nine probable pits and three post–slots or double post–holes. Representing an activity area of uncertain nature, possibly more than one true group. Difficult to group with other elements. Agricultural activity ? Animal pens etc ?

A060

A further activity area comprised of four post–holes clustered in an area 7m x 5m with a curvi–linear gully or tree throw. Small area of occupation in general area with A058 to the south and A059 to the west and north. Uncertain nature.

E077

A set of four pits or large posts in an area 4m x 3m, varying in size and shape. A possible four–post structure of uncertain nature. Located to the south of well pit E075.

E083

A straight edged three sided enclosure, very ephemeral and largely ploughed away. 'Arms' run NW–SE and the main body NE–SW. Does not align to Y079 therefore not likely to be contemporary with it. Interpreted as the remnant of a shallow enclosure whose exact function is uncertain. Features were located internally, however these could not be readily grouped with E083, many of which may well be tree–boles. It is possible that the enclosure was designed to demarcate/protect the treed area.

A092/P092

Two moderate sized pits, located cutting N088. No obvious function, but a later phase of activity than E075, relationship to E074/077 unclear. possible that they are tree–throws representing expansion of tree–scape post–abandonment of the settlement. similar re–growth is noted elsewhere on the site. The fill, N093, seems to be a single event, possibly infilling but equally a sudden collapse of material or infilling of a tree–throw would give the same effect.

A094

Possible super–group alternative to Landscapes 006 and 009 above, see appendix.

A101

A dispersed group of five post–holes, representing a small area of occupation of uncertain nature.

A102 and F121

Cluster of post–holes to the immmediate east of Y113, possible small area of occupation, equally possible that these are natural features. Naturally silted disuse phase F121.

A103

Three post–holes aligned to the south of Y111 and north of a group of natural features. Possibly a short segment of fence–line. It may not be a coincidence that natural features T108 are immediately associated with these posts. It is possible that they demarcate the natural features from the rest of the site or even contained posts used to support limbs and branches.

A104

Two post–holes on the north side of boundary Y111, 1.20m apart. Possibly contemporary with A103 to the south. Further remnant of fence–line ?

A107

A cluster of two posts and three pits in an area 5m x 8m. They vary in size and shape, but are generally sub–rounded. Represents a small area of occupation whose exact nature is uncertain.

A129

Five pits or large posts ranging widely in size and shape clustered in an area 10m x 6m. Uncertain as to nature, these features could equally be natural.

E130

A small structure 6m x 4m with a central hearth ringed by nine post–holes. Located to the west of ring ditch E136 but possibly contemporary to it. This structure appears relatively isolated.

E131

A structure of unknown use, again a possible house, but not associated with any pits or out–houses. It lies to the south of Y125 and straddles Y054. It is possible that posts 3303–3305 on the east side of Y054 form a group on their own. This would leave E131 as a six post structure lying to the west.

A132

An area of activity representing a possible small pit alignment or part of a fence–line. It is possible that it has a connection to the four posts forming part of Y127.

A133

A further activity area and another possible pit group. It may be linked to the features noted under headland 1. Some of the fills were charcoal rich.

A134

Another possible spread of pits of unknown nature. It is possible that many of these features and those mentioned earlier are flint retrieval pits of neolithic and bronze age origin. Equally they could be natural. The lack of any associated finds and their truncated nature, makes it difficult to comment on them further.

A147

A small area of occupation of uncertain nature. Possible structure, probably agricultural.

E159

A small structure of unknown function. It may be related to E160 lying to the north–east, it is earlier than Y165, but later than Y168.

E161

Possibly part of a structure, the rest of which may lie to the south masked by the remnant of headland 1. Uncertain nature.

E162

Remnant of a structure of unknown function. This is a very loose grouping. It appears bounded by Y166.

A179

A small area of occupation whose nature is uncertain, it is possibly the remnant of a structure, fence–line ? As linears the features in this group appear to run obliquely toward a possible entrance Y174. Might be part of an earlier field system, with A173, A158, A180–184.

A182

A possibly erroneous group of post–holes, within an area of highly probable natural features. Some of those designated post–holes may be natural and vice–versa. There is no obvious structure.

A187

An area of occupation whose nature is uncertain. General oval pattern, suggesting a probable structure again of uncertain function. Possibly contemporary with Y188 but it could be that the northern part of the structure has been obliterated by this ditch.

A194

A spread of twenty post–holes forming a small area of occupation. Again the exact nature of the activity is uncertain. This group is possibly contemporary with A193 to the east. May be the remnant of a fence–line or field structures.

A206

A small area of occupation whose exact nature is uncertain. Possibly associated with A183 to the south, composed of five post–holes in an area 6m square.

E208

A probable small structure of uncertain type and function. Features within this group form am approximate rectangle with an internal space of 3m square. No evidence of a north 'wall'.

A211

A small area of occupation of uncertain nature. It contains pit [1981] whose fill is very similar to that of the prehistoric ditch lying immediately to the north. Thus it is likely that this represents a contemporary disuse phase. The feature dates at least to the later Iron age.

A222

A series of pits within headland 2. Largely masked by this headland, of uncertain nature and function.

A227

Three charcoal fills within headland 2 suggesting some occupation in this area. Again the exact nature is uncertain. No obvious structure.

P230

Possibly a large pit, not dissimilar to that of P213. It matches the approximate position of the suspected quarry on aerial photographs. The lower fill was very organic rich.

TRACKWAYS

The following landscape elements are all detailed under previous Landscape Elements 002–004 (Celtic Field System).

Landscape Element: K019 – Trackway 1
Consists of groups: Y164 and Y165
Landscape Element: K020 – Trackway
Consists of groups: Y165 and Y166
Landscape Element: K021 – Trackway 3
Consists of groups: Y054 and Y122
Landscape Element: K022 – Trackway 4
Consists of groups: Y163 and Y188
Landscape Element: K023 – Trackway 5
Consists of groups: Y204 and Y054

APPENDIX 4

APPENDIX 4: POTTERY

Groups containing pottery:
H001–010 Y017 Y019 P042 A055 E073 P085 Y165 A173 E178 E186 Y189 H197–201 H200 H201 Y204 Y217 A227 Y228 P230

Group No.	Prehist	Roman	Saxo–Norman	Post–Med
H001–010			02	08
Y017		03	17 Medieval	
Y019			08	
P042		01 R/B or Medieval		
A055	02 BA?			
P085	04 IA?			
Y165		02		
E178				01
E186	02 IA?			
Y189		01		
H197–201			02	06
			02 Medieval	
Y204		01		
Y228		03		

Group No:H001–H010 contained 26 pieces of pottery, these were of Saxo–Norman date (2), Medieval date (17) and Post–medieval date (8) [see archive].
Group No:Y017 contained 3 pieces of pottery, these were of Roman date, all pieces were within fill (1215) [see archive]
Group No:Y019 contained 8 pieces of pottery, these were of Saxo–Norman date, all pieces were within fill (1346) [see archive]

Group No:P042 contained 1 pieces of pottery, these were of Roman/medieval date, within fill (1288)) [see archive]
Group No:A055 contained 2 pieces of pottery and 1 piece of fired clay, these were of probably bronze age date, 2 pieces were within fill (1147) [see archive]
Group No: E073 contained 8 pieces of probably daub, these were of unknown date, within fill (1151) [see archive]
Group No:P085 contained 4 pieces of pottery, these were of possible Bronze age date, 2 pieces were within fill (1262), 1 piece in (1259) and 1 piece in (1258) [see archive]
Group No:Y165 contained 2 pieces of pottery, these were of Roman date, both pieces were within fill (2266) [see archive]
Group No:A173 contained 1 pieces of unidentified pottery, within fill (1681) [see archive]
Group No:E178 contained 1 piece of pottery, this was of Post–medieval date, within fill (1892) [see archive]
Group No:E186 contained 2 pieces of pottery, these were of probably Iron age date, both pieces were within fill (2212) [see archive]
Group No:Y189 contained 1 piece of pottery, this was of Roman date, within fill (2076) [see archive]
Group No:H197–201 contained 10 pieces of pottery, these were of Saxo–Norman date (2), Medieval date (2) and Post–medieval date (6) [see archive]
Group No:H200 contained 11 pieces of pottery, these were of Saxo–Norman to Post–medieval date and 1 Roman piece, 7 pieces of Saxo–Norman date were within fills (1001, 1002, and 1017) [see archive]
Group No:H201 contained 2 pieces of pottery, these were of Post–medieval date, 2 pieces were within fill (1054) [see archive]
Group No:Y204 contained 1 piece of pottery, this was of Roman date, within fill (1093) [see archive]
Group No:Y217 contained 4 pieces of pottery, and 3 pieces of daub, these were of probably Iron age date, pieces were within fills (2085 and 2122) pottery and (2097) daub [see archive].
Group No:A227 contained 1 piece of unidentified pottery, within fill (2177) [see archive]
Group No:Y228 contained 3 pieces of pottery, these were of Roman date, all pieces were within fill (1976) [see archive]
Group No:P230 contained 2 unidentified pieces of pottery, within fill (2198) [see archive]
Headland 1 produced 1 Saxo–Norman and 8 Post–medieval pieces of unstratified pottery.
Headland 2 produced 1 piece of unstratified Post–Medieval pottery.
Other unstratified pieces comprised 6 medieval/Post–medieval pieces.
1 Saxo–Norman piece and 2 medieval pieces of pottery were collected from the Phase 2/3 area topsoil.

APPENDIX 5

APPENDIX 5: FLINT ARTEFACTS

A total of 08 flint artefacts were recovered

Groups containing artefacts:

Y174
H201
Y217
Ungrouped Context (2136)

Flint No.	Group No.	Type	Date
1	Y174	Arrowhead	Neolithic/Bronze Age
2	H201	Plano–Convex Knife	Bronze Age
3	H201	Waste Flake	?
4	Y217	Waste Flake	?
5	Y217	Core frag.	Bronze Age ?
6	Y217	Waste Flake	?
7	(2136)	Waste Flake	?
8	(2136)	Backed Knife	Bronze Age?

Flint No.1 Small find no.007 Group No. Y174, Type. Post–hole as part of boundary, Context (1752) In–situ: Probably yes, but may have been re– deposited Common name: Barbed and Tanged Arrowhead Basic dimensions: L: 29mm /B: 20mm /Th: maximum 4mm Probable date: Beaker 2700–1700 B.C.	Flint No.2 Small find no.002 Group No. H201 Type. Probable furrow cut Context. (1001) In–situ: No Common name: Plano–Convex knife Basic dimensions: L:54mm /B:20mm /Th: 7mm Probable date: Bronze Age

Flint No.3 Small find no.N/A Group No.H201 Type. Furrow Context. (1060) In–situ: No Common name: Waste flake, part of core rejuvenation (?) Basic dimensions: L:30mm/B:22mm /Th:8mm Probable date: Unknown, (Bronze age ?)	Flint No.4 Small find no.N/A Group No. Y217 Type Ditch Context. (2096) In–situ: Probably Yes Commonname: Waste Flake Basic dimensions: L:18mm /B:15mm /Th:3mm Probable date: Unknown (Bronze Age ?)

Flint No.5 Small find no.N/A Group No. Y217 Type. Ditch Context. (2096) In–situ: Probably Yes Common name: Core fragment Basic dimensions: L:35mm /B:32mm /Th:17mm Probable date: Bronze Age	Flint No.6 Small find no.N/A Group No.Y217 Type. Ditch Context. (2120) In–situ: Probably Yes Common name: Waste flake Basic dimensions: L:22mm /B:14mm /Th:1mm Probable date: Unknown (Bronze age ?)

Flint No.7 Small find no.N/A Group No. Ungrouped Type. Disturbed post–hole or animal burrow Context.(2136) In–situ: Probably No Common name: Waste flake Basic dimensions: L:29mm /B:13mm /Th:3mm Probable date: Unknown (Bronze Age ?)	Flint No.8 Small find no.N/A Group No Ungrouped Type. Disturbed post–hole or animal burrow Context.(2136) In–situ: Probably No Common name: Backed knife Basic dimensions: L:50mm /B:17mm /Th:6mm Probable date: Probably Bronze Age

APPENDIX 6

APPENDIX 6: ANIMAL BONE

Groups containing recognisable (mainly teeth) animal bone:

H001
F062
F064
F089
F168
A173
H197
A211
P213
F215
F242

Group No.	Pig	Horse	Cattle	Sheep/Goat
H001	no	no	yes	no
F062	no	no	yes	no
F064	no	yes	no	no
F089	no	no	no	yes
F168	no	yes	no	yes
A173	no	no	no	yes
H197	yes	no	no	no
A211	no	no	yes	no
P213	no	no	no	yes
F215	no	no	no	yes
F242	no	no	yes	no

Group: H001 context (1203) Species: Cattle No. of pieces: Post–cranial Phase: Plough furrow	Group: F062 context (1146) Species: Cattle No. of pieces: Teeth, Phase: Iron age

Group: F064 context (1257) Species: Horse No. of pieces: Single tooth, Phase: Iron age–Roman	Group: F089 context (1258) Species: Sheep/goat No. of pieces: Single tooth adult and possible juvenile post–cranial, Phase: Iron age

Group: F168 context (2272) Species: Horse No. of pieces: Single tooth, Phase: Iron age–Roman	Group: A173 context (1681) Species: Sheep/goat No. of pieces: Single tooth, Phase: Possibly Iron age

Group: H197 context (1642) Species: Pig No. of pieces: Single tooth, Phase: Plough furrow	Group: A211 context (1982) Species: Cattle No. of pieces: Teeth, Phase: Iron age

Group: P213 context (2158) Species: Sheep/goat No. of pieces: Post–cranial Phase: Iron age	Group: F215 context (2061) Species: Sheep/goat No. of pieces: Single tooth, Phase: Iron age

Group: F242 context (2198) Species: Horse No. of pieces: Single tooth, Phase: Possibly Iron age	Group: F242 context (2197) Species: Cattle No. of pieces: Post–cranial Phase: Iron age–Roman

APPENDIX 7

Stowe Farm, West Deeping, Lincolnshire - LIWDSF95

Environmental Assessment

Introduction

A series of samples were collected during two phases of excavation at Stowe Farm. A number of these were specific samples of wood, seeds, snails or charcoal and the remainder were soil samples varying in size between 0.3 litres and 50 litres. The latter from a pit whose basal fills contained considerable quantities of organic material and wood. The samples assessed and their volumes are given in Table 1.

Processing

Sample volume was measured prior to processing. The samples were washed in a 'Siraf' tank using a flotation sieve with a 0.5mm mesh and an internal wet-sieve of 1mm mesh for the residue. Small samples were processed in bowls using a sieve of 0.3mm. Both residue and float were dried (except where organic), the dry volume of the flot was measured, and the weight of the residue recorded. Organic flots and residues were kept wet and flot volume recorded as a wet volume.

The residue was sorted by eye, and environmental and archaeological finds picked out, noted on the assessment sheet and bagged independently. The residue was then bagged. The float of each sample was studied under a low power binocular microscope. The presence of environmental finds (ie snails, charcoal, carbonised seeds, waterlogged plant remains, insects bones etc) was noted and their abundance and species diversity recorded on the assessment sheet. The float was then bagged, or where organic stored in sealed jars. The sorted residue, float and finds constitute the material archive of the samples.

Four samples were selected for C14 dating and dispatched to Beta Analytic for dating.

The assessment sheets are attached and the results summarised below.

Results

No finds were recovered from any of the samples.

The samples include both waterlogged material and carbonised remains, although the very small number of waterlogged seed remains in a number of the samples suggest the possibility of intrusion by more recent contaminants. A considerable number of the samples have very low potential with no more than a dozen identifiable elements generally of very low diversity. It is not recommended that any further work is carried out on these samples. These are noted as of 'Poor potential' in the comments column of Table 1.

The samples taken for identification include snails, bark and wood samples. Of these only the wood samples warrant any further work, and although a few fragments have been identified as oak the remaining pieces should be identified and the character of this wood recorded, ie roundwood, timber, evidence for coppicing, evidence for working, etc.

A single sample of several thousand *Chenopodium* sp. seeds was collected from the medieval furrow, 1206. This is an unusual deposit and since it has no 'archaeological' context may be a natural accumulation although quite how a species specific deposit of this sort is formed is difficult to conceive. Species identification should be made and some consideration given as to whether it could constitute and humanly generated collection.

Carbonised plant material other than charcoal was rare throughout the samples, none of which contained more than half a dozen carbonised cereal grains, with occasional possible legume seeds. Given the general lack of dating with some of these samples further analysis is not recommended.

A number of the samples contained preserved organic remains, including wood, plant seeds, flower heads and buds, thorns, leaves, stems, beetles and waterflea ephyppia. But even some of these samples were very poor in identifiable remains. Context 1750, sample 30, despite producing 175 mls of waterlogged flot contained no identifiable seed or insect remains, and most of the fibrous and stem material was very fragmented. The only contexts deserving further attention are 1146, the lower fill of Pit 1145 which produced a radiocarbon date of 1900-1530 BC (at 95% probability); context 1258, the lower fill of Pit 1261 which has produced a radiocarbon date of 1440-1020 BC (at 95% probability); context 1748, a pit fill; context 1744, a pit fill dated to AD 1645-1950; and 2158, a lower fill of a pit dated to 1490-1130 BC (at 95% probability). The post-medieval date for context 1744 is a little unexpected, and unless it can be established that this must be due to 'contamination' no further work should be done on this sample.

Pit 1145
This is a waterlogged sample with numbers of seeds, wood and insect fragments present. Fragments of caddis fly cases and waterflea ephyppia indicate that aquatic conditions prevailed in the bottom of the pit. The quantity and quality of the remains and the Bronze Age radiocarbon date indicate that post-excavation analyses should be carried out.

Pit 1261
The sample from the lower fill of this pit includes molluscs, charcoal, numerous waterlogged seeds, wood and insects. Only a 2 litre sub-sample was processed and unwashed material remains for further sampling. A complete dog skull was also recovered. This is the richest sample from the site and has an associated Bronze Age radiocarbon date. Full analysis of the environmental material is recommended.

Context 1748
This pit fill produced molluscs, including aquatic species, occasional carbonised cereal grains, numerous exceptionally well preserved plant remains and insect fragments. If it is possible to establish a date for this feature then further work is warranted.

Context 2158
Considerable quantities of wood, including oak were recovered from these lower pit fills, and waterlogged seeds and insect fragments were also common. A radiocarbon date on wood from the feature indicates a Bronze Age date. The upper fill of this pit, 2163 was

also sampled and included molluscs and carbonised cereals. Although intrinsically poor in combination with the lower fills study of this sample is probably worth pursuing.

These four samples constitute a very well preserved collection of material, with three being securely dated to the Bronze Age. Deposits this well preserved from this period of prehistory in Lincolnshire are rare and afford an unusual opportunity. The environmental analyses can be expected to contribute to an understanding of the function of these pits, the contemporary environment, and pollen analyses may permit some assessment of the wider vegetational cover. Whether or not woodland has already been largely cleared from the landscape at this period would be of considerable interest. A full post-excavation analysis of these features is recommended, including study of the unprocessed samples for pollen.

There is however little justification for further work on the remaining samples from the site, apart from those wood samples that derive from dated features or can be used to date the features by radiocarbon.

Animal bone appears to have been completely lacking from the site except the dog skull recovered from Pit 1261 and a mouse incisor from the upper fill of a pit (context 2163), which should be considered with the other environmental evidence from these pits.

Radiocarbon

The results of the radiocarbon analyses are attached.
Beta-90053 - 1146; Beta-90054 - 1258; Beta 90055 - 1744; Beta-90056 - 2158.
Other contexts with material suitable for radiocarbon dating include 2050 (wood), 2125 (wood), 2088 (wood), 2078 (wood), 1816 (charcoal), 1166 (charcoal).

Recommendations

Full analysis of the organic remains (wood, insects, molluscs, seeds, other plant material) from contexts 1146 (sample 21), 1258 (sample 24), 1748 (sample 28- if dated), and 2158 (sample 39).

Stowe Farm, Lincolnshire - LIWDSF 95

Environmental Archaeology Assessment

Table 1: Sample and Soil sample assessment results

Sample	Cont.	Vol l.	Bone	Shell	Char	Cereal	Seeds	Wood	Insect	Car/wl	Context type	Comments	Date
001	1258	0.3	+	++			++	+		w	Pit 1261, lower fill	Includes dog skull	Iron Age
002	1744							+		w	Pit or pond fill	Oak	Prehistoric
005	1166				+					c	Possible post slot	14g charcoal	Anglo-Saxon?
006	1206						+++++				Medieval furrow		Medieval?
007	1262							+		w	Pit fill	Bark- not identif.	Iron Age
008	2452				+					c	No data	Tiny fragments	No data
010	1894			+							Ditch fill	Shells-Cepea nemoralis	RB/Med ?
011	1921	0.1									Furrow	Mortar sample	Med/PMed
012	2050							+		w	Pit fill		Iron Age?
013	2125							+		w	Ditch fill		Bronze Age?
014	2088							+		w	Ditch fill		Bronze Age?
015	2078							+		w	Ditch fill		Romano-British?
017	2158							+		w	Pit/well fill		Iron Age?
019	1115	5			+		+		+	w	Pit 1109, lower fill	Waterlogged	No data
020	1111	4		++	++	+	+			c	Pit 1109, upper fill	Poor potential	No data
021	1146	17			++		+++	++	++	w	Pit 1145, lower fill	Aquatic component	No data - C14
022	1149	14		+			+			w	Linear feature, fill	Poor potential	No data
023	1262	14		+			+		+	w	Pit 1283, Upper fill	Poor potential	No data
024	1258	14		++	++		++++	++	+++	w	Pit 1261, lower fill	Good potential	Iron Age - C14
025	2459	13		+	++	+	+			w/c	Post hole 2460, fill	Poor potential	No data
026	1739	8		+			+			w	Encl ditch 1740, fill	Poor potential	No data
027	1151	18		+	++	+				c	Ditch fill	Poor potential	No data
028	1748	5		++		+	++++		++	w	Pit fill	Good potential	No data
029	1744	1.5					+++	++	++	w	Pit fill	Fairly good pot.	No data - C14
030	1750	3								w	Pit fill	Poor potential	No data
031	1700	10					+		+	w	Ditch fill	Poor potential	No data
032	1816	8		++++	+		+			c/w	Pit 1815, fill	Suitable for C14	No data
033	2010	10		++	+		+			c/w	Pit 2011, fill	Poor potential	No data
034	2059	5		+			+			w	Pit 2048, upper fill	Poor potential	No data
035	2110	3		+	+		+			c/w	Ditch? fill	Poor potential	No data
036	2122	3.5		+++	+					c	Ditch, upper fill	Poor potential	No data
037	2126			+	+	+	+			c/w	Ditch, upper fill	Poor potential	No data
038	2163	8	+	++	++	+	+			c/w	Pit, upper fill	Poor potential	Iron Age?
039	2158	50			+		+++	+	++	w	Pit, lower fill	Good potential	Iron Age
040	2158							+++		w	Pit, lower fill	Oak present	Iron Age - C14
041	2227	6			+		+			w	Pit 2225, upper fill	Poor potential	No data
042	2229	5		+	+		+			c/w	Pit 2228, fill	Poor potential	No data

w-waterlogged; c-carbonised;
+ 1-10 identifiable items; ++ 11-100; +++ - 101-250; ++++ 251-500; +++++ >500

APPENDIX 8

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

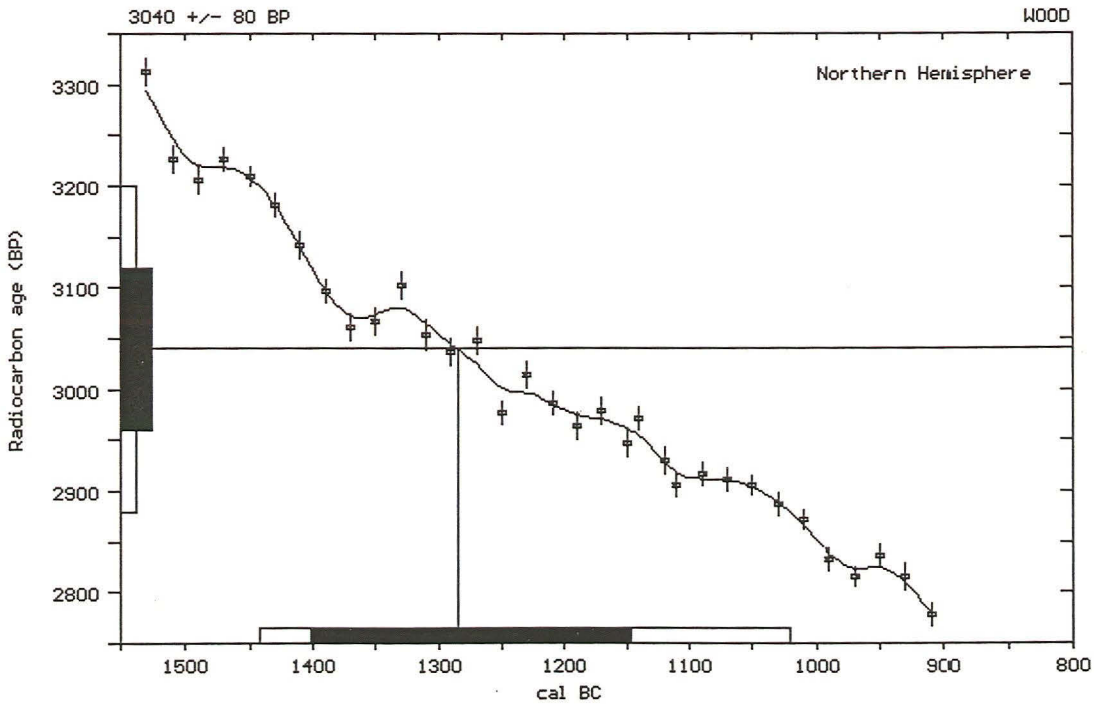
(Variables:estimated C13/C12=-25:lab mult.=1)

Laboratory Number:	Beta-90054
Conventional radiocarbon age*:	**3040 +/- 80 BP**
Calibrated results: (2 sigma, 95% probability)	**cal BC 1440 to 1020**

* C13/C12 ratio estimated

Intercept data:

Intercept of radiocarbon age with calibration curve:	cal BC 1285
1 sigma calibrated results: (68% probability)	cal BC 1400 to 1145



References:

Pretoria Calibration Curve for Short Lived Samples

Vogel, J. C., Fuls, A., Visser, E. and Becker, B., 1993, Radiocarbon 35(1), p73-86

A Simplified Approach to Calibrating C14 Dates

Talma, A. S. and Vogel, J. C., 1993, Radiocarbon 35(2), p317-322

Calibration - 1993

Stuiver, M., Long, A., Kra, R. S. and Devine, J. M., 1993, Radiocarbon 35(1)

Beta Analytic Radiocarbon Dating Laboratory

4985 S.W. 74th Court, Miami, Florida 33155 ■ Tel: (305)667-5167 ■ Fax: (305)663-0964 ■ E-mail: beta@analytic.win.net

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

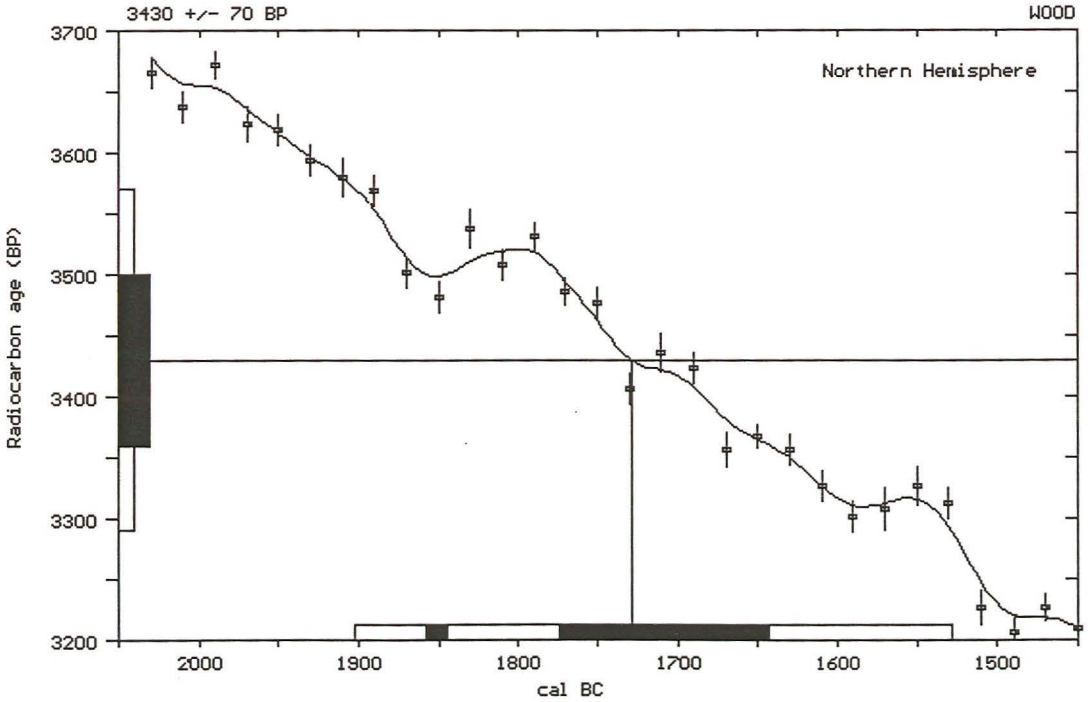
(Variables:estimated C13/C12=-25:lab mult.=1)

Laboratory Number:	Beta-90053
Conventional radiocarbon age*:	**3430 +/- 70 BP**
Calibrated results: (2 sigma, 95% probability)	**cal BC 1900 to 1530**

* C13/C12 ratio estimated

Intercept data:

Intercept of radiocarbon age with calibration curve:	cal BC 1730
1 sigma calibrated results: (68% probability)	cal BC 1860 to 1845 and cal BC 1775 to 1645



References:

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Beta Analytic Radiocarbon Dating Laboratory

4985 S.W. 74th Court, Miami, Florida 33155 ■ Tel: (305)667-5167 ■ Fax: (305)663-0964 ■ E-mail: beta@analytic.win.net

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

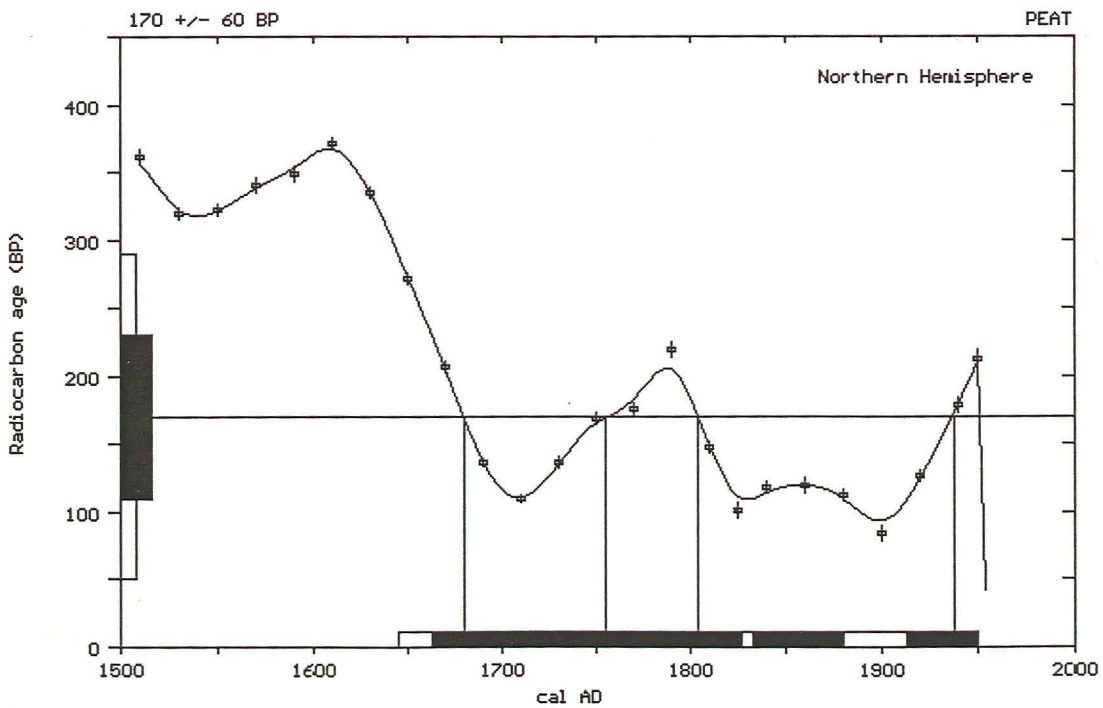
(Variables:estimated C13/C12=-25:lab mult.=1)

Laboratory Number:	Beta-90055
Conventional radiocarbon age*:	**170 +/- 60 BP**
Calibrated results: (2 sigma, 95% probability)	**cal AD 1645 to 1950**

* C13/C12 ratio estimated

Intercept data:

Intercepts of radiocarbon age with calibration curve:	cal AD 1680 and cal AD 1755 and cal AD 1805 and cal AD 1940
1 sigma calibrated results: (68% probability)	cal AD 1665 to 1825 and cal AD 1835 to 1880 and cal AD 1915 to 1950



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Calibration - 1993
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Beta Analytic Radiocarbon Dating Laboratory

4985 S.W. 74th Court, Miami, Florida 33155 ■ Tel: (305)667-5167 ■ Fax: (305)663-0964 ■ E-mail: beta@analytic.win.net

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

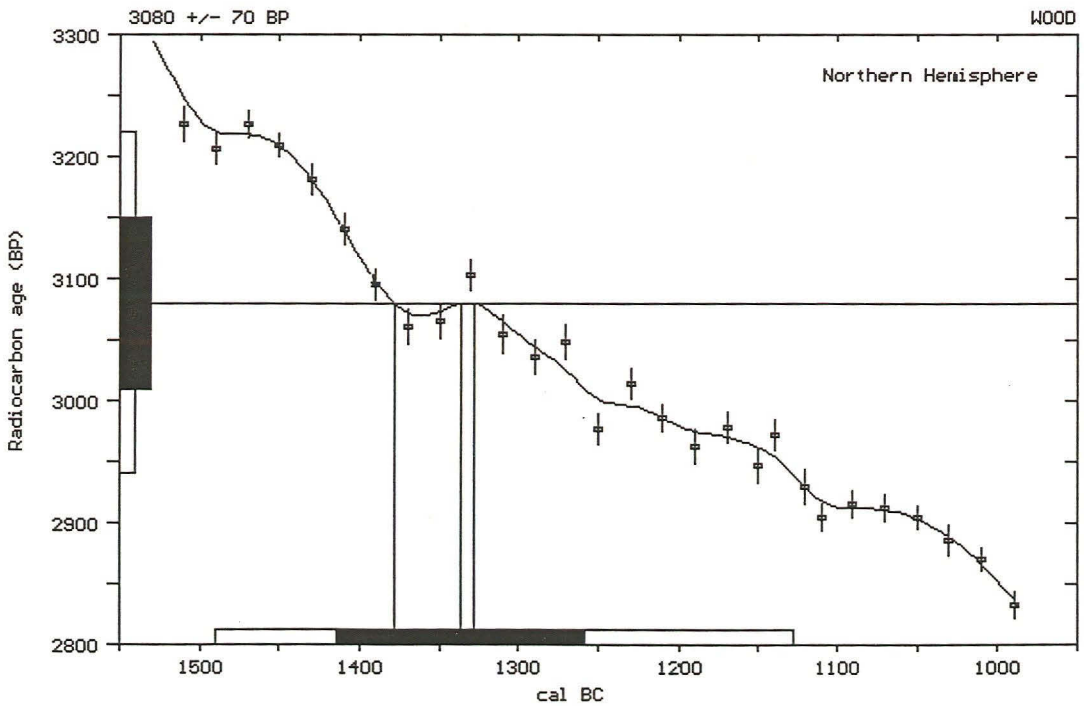
(Variables:estimated C13/C12=-25:lab mult.=1)

Laboratory Number:	Beta-90056
Conventional radiocarbon age*:	**3080 +/- 70 BP**
Calibrated results: (2 sigma, 95% probability)	**cal BC 1490 to 1130**

* C13/C12 ratio estimated

Intercept data:

Intercepts of radiocarbon age with calibration curve:	cal BC 1380 and cal BC 1335 and cal BC 1330
1 sigma calibrated results: (68% probability)	cal BC 1415 to 1260



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