South West Campus, Lancaster University Lancaster

Lancashire

Excavation Assessment Report

Oxford Archaeology North

August 2004

Jarvis Construction UK Ltd
Lancaster University

Issue No: 2004/5-292
OA North Job No: L9244
NGR: SD 4836 5694

Document Title: **SOUTH WEST CAMPUS, LANCASTER UNIVERSITY, LANCASTER, LANCASHIRE**

Document Type: **Excavation Assessment Report**

Client Name: Jarvis Construction UK Ltd, Lancaster University

Issue Number: **2004/5-292**
OA Job Number: L9244
Site Code: **BH02**

National Grid Reference: SD 4836 5694

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SUMMARY

Oxford Archaeology North (OA North) was commissioned by Jarvis Construction UK Ltd to undertake an archaeological excavation between June and August 2003 on land to the south of Barker House Farm, Lancaster University, Lancaster, Lancashire (centred at SD 4836 5694) in advance of the development of Lancaster University's South West Campus access road. The excavation was undertaken in advance of the determination of a planning application by Lancaster City Council.

The work was informed by an archaeological desk-based assessment of the overall site, undertaken by Nigel Neil in December 1995 (Neil 1995a; 1995b), followed by a programme of trial trenching in June and July 2002 (OA North 2002b), across the extent of the proposed South West Campus development area. Further evaluation work was carried out by OA North in November 2002 in the south-west of the development area, targeting apparent Romano-British activity revealed in the initial trial trenching, which culminated in the final evaluation stage in March 2003 (OA North 2003a), centred on a ring ditch initially highlighted by a geophysical survey undertaken by GSB Prospection (GSB 2002).

The western end of the proposed South West Campus access road was scheduled to cross these remains, and thus a programme of full excavation was instigated within its boundaries, carried out by OA North between July and August 2003. The western extent of the proposed access road was investigated, totalling a linear stripped area of 5680m².

The main focus of the excavation comprised a group of features located on top of a low promontory in the east of the site at 42m OD, overlooking the River Wyre, identified as a late prehistoric/Romano-British farmstead. A combination of a few cultural indicators and radiocarbon dating identified this site as being active in the first to early fourth centuries AD. The main elements comprised the remains of a roundhouse, a circular enclosure, and associated linear arrangements of postholes interpreted as fencelines. The farmstead was bound by a ditch to the west, beyond which a large water hole was identified. The evaluation identified further apparently Romano-British activity to the north, suggesting the settlement extended northwards beyond the limits of the excavation.

This assessment examined the results of the excavation, and evaluated the potential for future analysis of each category of data with regard to the project's research aims. The process has been designed to correspond to the objectives laid out in the guidance document *Management Of Archaeological Projects* 2nd edition (English Heritage 1991). Having assessed the significance of the data collected and considered the potential of individual datasets to sustain further analysis, several data categories have been recommended for post-excavation analysis, whilst others have already been sufficiently analysed. Revised research objectives are presented to guide further analysis, synthesis, and interpretation of the evidence, with a view to publication of the results as appropriate.

An updated research design has been compiled, and an appropriate programme of analysis outlined. It is recommended that, following analysis, a report be published as an occasional paper.

ACKNOWLEDGEMENTS

OA North wishes to thank Jarvis Construction UK Ltd for funding the 2003 excavation, and this assessment of its results. Thanks are gratefully owed to Gwen Ainsworth, of Lancaster University Photographic Unit, who arranged for and provided the aerial photographs of the site. Peter McCrone, Lancashire County Archaeological Service (LCAS), monitored the excavations and provided valuable advice and support.

This report was compiled by Mark Bagwell, and edited by Jamie Quartermaine, who was also responsible for project management. The author is indebted to Professor Dr PM Grootes, of Christian-Albrechts University, for the radiocarbon dating of charred remains from the excavation. The other specialist finds work was undertaken in-house by Christine Howard-Davis.

In addition to the above, the author would like to thank all those OA North staff who worked on the excavation and initial finds processing for their hard work and enthusiasm. These included Carli Douglas, Nicola Gaskell, Dawn Harrison, David Hodgson, Pat Kent, David McNicol, Jason Mole, John Onraet, Jess Opie, Sarah Phillips, Chris Ridings, Josh Slater, Martin Sowerby, and Nicola Thorpe, who each made a significant contribution to the excavation.

The environmental assessment, the selection of material for radiocarbon dating, and environmental sections for the report were undertaken by Elizabeth Huckerby and Frances Claxton. Nicola Gaskell and Chris Ridings assisted Frances Claxton with the processing of the environmental samples.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PRESENT PROJECT

1.1.1 In 1999, full planning applications were submitted to Lancaster City Council by Jarvis Construction UK Ltd for the proposed development of the South West Campus of Lancaster University, Lancashire (SD 4836 5694; Figs 1 and 2). Following on from, and informed by, an archaeological assessment of the overall study site undertaken by Nigel Neil in December 1995 (Neil 1995a; 1995b), which identified a post-medieval agricultural landscape associated with Barker House Farm, Oxford Archaeology North (OA North) as invited by Insignia Richard Ellis, on behalf of Jarvis Construction UK Ltd, to submit a project design and costs for an archaeological evaluation of selected sites in the area of the proposed South West Campus development. The project design was in accordance with a verbal brief from Peter McCrone, of Lancashire County Archaeological Service (LCAS).

1.1.2 Subsequent to the acceptance of the Project Design (OA North 2002a), OA North undertook a programme of archaeological evaluation, on behalf of Jarvis Construction UK Ltd in June and July 2002, involving the excavation of 77 trial trenches (Fig 3), These were typically 10m in length, sited to give maximum coverage, and targeted upon areas of greatest archaeological potential highlighted by the archaeological assessment (Neil 1995a; 1995b). The trial trenching within the proposed South West Campus development revealed evidence of a medieval and post-medieval agricultural landscape, comprising mainly field drainage ditches and field boundaries, and, to a lesser degree, clay extraction (OA North 2002b; *Appendix 2*). Apparent Romano-British settlement activity was identified in the south-west of the study area, on the route of the proposed access road. This was represented by a boundary ditch and associated pits and postholes, and was considered to be of great importance, given the rarity of such sites elsewhere in Lancashire.

1.1.3 In accordance with a verbal brief from Peter McCrone, of LCAS, a further programme of targeted trial trenching, comprising 24 trenches (Fig 3), was embarked upon along the route of the proposed access road for the South West Campus, in the south-west of the proposed development area. Its objective was twofold: firstly, it was to provide information on the nature of a sub-circular anomaly detected by a geophysical survey by GSB Prospection (GSB 2002). Two evaluation trenches in November 2002 across the geophysical feature identified a circular enclosure defined by a ring ditch, which showed three phases in its development and was thought to be of prehistoric or Romano-British date (OA North 2003a). The second objective was to establish the extent of the apparent Romano-British boundary ditch and associated features revealed in the Phase 1 evaluation. This was undertaken in March 2003 with 21 trenches excavated along the line of the ditch (OA North 2003c).

1.1.4 In view of the position of the proposed South West Campus access road in relation to this archaeological resource, Peter McCrone, of LCAS, recommended a programme of full excavation of features within the proposed access road (Fig 3). Features recorded in Trenches 57-59 and Trenches 63, 64

and 72 (*Appendix 2*), which were located beyond the proposed access road, were not to be impacted upon by the development and therefore were not subject to further fieldwork. OA North was commissioned by Jarvis Construction UK Ltd to carry out this excavation, which accordingly was conducted between July and August 2003, and was monitored by Peter McCrone, of LCAS. The excavation was guided by a project design (OA North 2003b), designed to fulfil the terms of the brief. An area of 5680m², located to the south of Barker House Farm (centred at SD 4836 5694), was stripped of topsoil under archaeological supervision and selectively hand cleaned to define the extent of the archaeological resource, followed by the implementation of the full excavation of all features revealed (Fig 4).

1.2 TOPOGRAPHICAL AND GEOLOGICAL BACKGROUND

1.2.1 ***Topography and location:*** the study area is situated on Lancaster University's South West Campus, in the vicinity of Barker House Farm (SD 4836 5694), which lies to the east of the main A6 road, and to the south of Lancaster (Fig 2). The gently undulating nature of the topography is a direct result of glacial and post-glacial activity, which has produced drumlin-like formations. The proposed South West Campus is within several of the fields closest to Barker House, namely Higher Close, Lower Close, Great Field, Great Meadow, Cringles, Nearer Chapel Field, Lay Close, Stack Parrock, and Barker's Parrock (Neil 1995a).

1.2.2 The excavation was focused on two of the fields, Wheat Field and Cringles, to the south of Barker House Farm. The stripped area comprised a rectangular area measuring 180m east/west by 37m north/south (Fig 3), with the focus of the archaeological activity centred on the highest ground in the east of the site, on a gentle promontory at 42m OD looking south over the River Wyre. The A6 forms the western boundary of the site at the base of the slope, at approximately 30m OD to the west.

1.2.3 ***Geology:*** the underlying solid geology of the area consists of mudstones, probably of the Crossdale Mudstone Formation, of the Upper Carboniferous Millstone Grit series, dating to the Namurian geological era, 250 million years ago (Crofts 1992). Overlying the solid geology, the drift geology is essentially boulder clays, laid down approximately 10,000 years ago at the retreat of the last glaciers. The soils of the area belong to the Brickfield Association, which are cambic stagnogleys (Jarvis *et al* 1984). The resulting landscape is one of mixed arable and pastoral agriculture land.

2. HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

2.1 INTRODUCTION

2.1.1 This historical background is largely compiled from secondary sources and is intended only as a brief summary of historical developments, emphasising the overall development in the vicinity of the study area.

2.2 PREHISTORIC PERIOD

2.2.1 There is relatively little information about prehistoric activity in North Lancashire, which in part reflects the minimal amount of work carried out and partially the paucity of known remains from this period (Middleton *et al* 1995). Bronze Age cemeteries might be expected to be found in the area, since place names such as Barrow Greave and Burrow Heights are found nearby; however, the latter has produced only finds of Roman date (Neil 1995a). More substantial evidence comes from a flint scatter revealed at Galgate Allotments in 1978, which is thought to represent Bronze Age occupation (LSMR 2759). Prehistoric activity has also been recorded in Lancaster, the earliest being a Neolithic Mortlake type bowl at 65 Church Street (Jones and Shotter 1988 207). A Bronze Age palstave was found on Castle Hill and a group of Bronze Age urns were recovered from Lancaster Moor in the mid to late nineteenth century development of the area (Shotter and White 1990, 5). In the Iron Age, the area seems to have come under the aegis of the Brigantes (Cunliffe 1991); there are no known remains dating to the Iron Age within the environs of the study area but it is notoriously difficult to identify such sites, in part due to a lack of a distinct material culture (Haselgrove 1996, 64).

2.3 ROMAN PERIOD

2.3.1 In the vicinity of Galgate, the various Roman roads from sites at Walton-le-Dale and the fort at Ribchester, identified by Margary (1973) as 70d and 704 respectively, are believed to have met and continued north towards the fort and extramural settlement at Lancaster. The road between Galgate and Lancaster has been recorded in two places: one at the former Royal Albert Hospital, where an earthwork appears to have survived, although excavations in the area produced ambiguous results (LUAU 2000; 2001); the second is at Highland Brow, *c*300m south-west of Leach House and west of the A6, where aerial photographs appear to show a linear mark consistent with a Roman road (Neil 1995b, 16). Burrow Heights (see *Section 1.3.1*) has produced Romano-British stone heads, milestones, and a third century AD coin of Claudius II (Shotter 1997). The intense level of Roman military occupation of the North West and the position of the study area in close proximity to the northern arterial route into Lancaster highlights the potential for occupation and settlement there during the Roman period.

2.4 MEDIEVAL PERIOD

2.4.1 The majority of the study area lies within Ellel township, part of Cockerham parish, but borders the township of Scotforth to the north. The area is mentioned in the Domesday Survey of 1086 as the manor of *Ellhale* and was adjacent to the manors of *Estun*, or Ashton as it is now known, and *Scozforde*, now Scotforth (Faull and Stinson 1986). Much of the land in Lancashire, including *Ellhale*, was controlled by Roger de Poitou, given to him by William the Conqueror, the lands passing into the Fitz Gilbert family a century later (Baines 1891).

2.4.2 The land holdings within the area are complex and varied over time; for instance, in the early thirteenth century some of the land within the manor of *Ellhale* (Ellel) was given over to Cockersand Abbey and other parcels of land in the area were gifted to numerous other religious houses, including Lancaster Priory, Furness Abbey, Burscough Priory, and even as far afield as Leicester Abbey (Farrer and Brownbill 1911, 99). From documentary sources it is possible to show that 'Long Launds', a field within the study area, may have been *Laundlands*, mentioned in the Cockersands Chartulary, and therefore direct Abbey ownership can be traced in the study area (*ibid*). The site of Cockshades Chapel, dating to the thirteenth century, is alleged to lie *c*1500m south-east of Barker House Farm. The field names Nearer and Further Chapel Field, within the study area, could be referring to Cockshades Chapel, or equally to Ellel Chapel, known to have been in the area. Alternatively, the names may relate to earlier versions of Green Lane / Chapel Lane (Neil 1995b).

2.5 POST-MEDIEVAL PERIOD

2.5.1 By 1769 (LRO DDM 14/28) the land around Brandrigg is shown as belonging to a Miss Clarkson, while the area around Barker's farmhouse, originally one of two tenements of Brandrigg, is noted as being held by the Barkers. A datestone of 1691 in Barker House Farm suggests that the tenancy came to the Barker family and that the holding was re-named some time after 1600 (Farrer and Brownbill 1911). The standing building predominantly dates to *c*1800, but the structure contains some seventeenth century elements. The nearby Brandrigg barn has a datestone of 1626, and is the third oldest dated building in Ellel (Neil 1995a).

2.5.2 In accordance with the widespread enclosure of common land during the eighteenth century, Ellel was enclosed in 1757 (LRO DDM 28/8), although later references on the 1839 Tithe Map (LRO AT/1) suggest that some enclosure had already taken place prior to 1757. The majority of the field boundaries seen today correspond to those shown on the 1769 estate map (LRO DDM 14/28) and the 1839 Tithe Map, and probably relate to land organisation at this time. Interestingly, on the 1769 map (LRO DDM 14/28) a field *c*200m west of Barker House Farm is labelled as Kiln Parrock and this could relate to a malt kiln mentioned in a 1756 survey of John Barker's tenement (LRO DDM 14/2). Alternatively, it is possible that it may relate to an earlier, medieval, brick kiln. Comparative evidence found during pipeline

construction in 1992, from Ellel Crag, east of Galgate, found a pottery kiln that had been mentioned in the Cockersand Chartulary (White 1992).

2.5.3 The principal modern-day communication route through the area is the A6 road, which was part of the Garstang and Heron Syke Trust and was operated as a turnpike. The road dates from after 1786 (Yates 1786), and was shown on a plan of 1815 (LL Pl 13/42), indicating that it was in place by that date. The turnpike superseded a medieval road slightly to the east, the 'road to Scotland', shown on Yates' map. This road gave Galgate its name, with 'Gal' deriving from 'Galloway' and 'Gate' from '*gata*' meaning ' road', hence 'the road to Scotland'. In addition, the cartographic sources and evidence from aerial photographs demonstrate that two previously extant tracks have gone out of use in recent times. The first is a track leading west from Green Lane to Brandrigg located to the north of the study area, and the second a lane leading north-east from Leach House, along the east side of Kiln Parrock, located within the western boundary of the study area (Neil 1995b).

2.6 PREVIOUS ARCHAEOLOGICAL WORK ON THE SITE

2.6.1 The proposed South West Campus access road, which is the subject of this assessment, comprises just part of the total development area. The focus of the excavation was the settlement activity believed to be of Romano-British origin centred within two fields known as Wheat Field and Cringles. The site came to light following three separate phases of an extensive archaeological evaluation programme on the proposed South West Campus development area in 2002-03 by OA North (OA North 2002b; 2003a; 2003c), in response to an application to Lancaster City Council for planning permission for development.

2.6.2 The complete evaluation phase involved the excavation of 99 trial trenches across several fields surrounding Barker House Farm, within the extent of the proposed South West Campus (OA North 2002b; 2003a; 2003c). Trenches 57-59 and Trenches 63, 64 and 72, in Wheat Field, to the south of Barker House Farm, revealed a boundary ditch, associated pits and a hearth. Charcoal recovered from two soil samples were sent to the Christian Universitäte, Keil, for radiocarbon dates, produced using an accelerated mass spectrometer (AMS). Charcoal from the ditch produced a date of cal AD 136 to 379 (1767 ± 28 BP; KIA-18422), and charcoal from the putative hearth produced a date of cal. AD 261 to 423 (1679 ± 29 BP; KIA-18423), suggesting the features represented part of a Romano-British settlement. Considerable evidence of medieval and post-medieval arable field systems was encountered across the study site, comprising mainly post-medieval field boundary ditches and field drainage systems, and to a lesser degree clay extraction (see below, *Appendix 2*). Evidence for traces of a medieval landscape, comprising agricultural terraces and horticultural soil horizons, were recorded in the west of the site.

2.6.3 The evaluation was followed by a geophysical survey by GSB Prospection (GBS 2002) across Wheat Field, the area with Romano-British settlement potential, which detected a circular enclosure and other geophysical anomalies, which were subsequently subject to an archaeological evaluation by OA North (OA North 2003a).

2.6.4 The main archaeological potential revealed by the evaluation trial trenching and the geophysical survey were the features and boundary ditch which produced second to fourth century radiocarbon dates and the circular enclosure. Part of the boundary ditch and the whole of the enclosure were centred within the western limits of the proposed South West Campus access road, and thus it was agreed these should be recorded in detail by means of an open area excavation, to mitigate the impact of the development. Features recorded in Trenches 57-59 and Trenches 63, 64 and 72, which were to the north of the proposed access road, and the medieval agricultural terraces and soil horizons in the west of the study site, were not to be impacted upon by the development and therefore were not subject to further fieldwork.

2.6.5 The remaining archaeological resource within the study area comprised elements of a post-medieval and modern pastoral landscape relating to Barker House and Brandrigg farms, in fields around Barker House Farm. Such features are not rare and are thus of low archaeological importance. The only significant feature was Barker House Farm farmhouse itself, which is being retained as part of the present development. Consequently, the development within this area will not affect any significant archaeological resource.

3. METHODOLOGY

3.1 PROJECT DESIGN

3.1.1 A project design (*Appendix 1*) was submitted by OA North in accordance with a verbal brief by LCAS. Following the acceptance of the project design by LCAS, OA North undertook the excavation between July and August 2003, monitored by Peter McCrone, of LCAS. The work was consistent with the relevant standards and procedures of the Institute of Field Archaeologists, and generally accepted best practice.

3.1.2 The project design was adhered to on the whole, with the exception being, with the permission of Jarvis Construction UK Ltd, the archaeological excavation of an extra area, approximately 15m by 15m, contiguous with the northern boundary of the site and therefore beyond the proposed development area. This allowed for the complete excavation of an apparently Romano-British roundhouse.

3.2 EXCAVATION

3.2.1 As a result of the evaluation, LCAS recommended a programme of full excavation of the western part of the South West Campus access road in order to mitigate the impact of the proposed development. An area of 5680m² was stripped of topsoil by a mechanical excavator, fitted with a toothless ditching bucket, working under archaeological supervision, to the level of the first potentially significant archaeological deposit, or to the upper surface of the natural subsoil, depending on the deposits revealed. The geophysical anomaly identified by GSB Prospection (GSB 2002) was initially targeted, followed by machining within the development area until the extent of the archaeological resource had been defined.

3.2.2 The first phase of the fieldwork involved the selective hand cleaning of approximately one quarter of the machined excavation area, focusing on those parts with concentrations of archaeological features identified during machining. The features were located with respect to the surrounding landscape features and recorded using a total station and data-logger. The digital survey was transferred into a CAD system. Subsequently, all features and deposits identified were excavated and recorded stratigraphically. Recording was by means of OA North's standard context recording system, based on that used by the Centre for Archaeology of English Heritage, using context record, photographic record, and object record *pro-forma* sheets and supporting registers and indices. A photographic record in colour transparency (slides), colour print, and monochrome formats was compiled. All features were planned by hand at a scale of 1:20 and sections of individual features were drawn separately at a scale of 1:10. The levels of all features and deposits were established from a temporary bench mark with a value of 41.46m OD transferred from an Ordnance Survey Bench Mark on Leach House with a value of 30.05m OD.

3.2.3 Thirty-three environmental bulk samples, each between 20 litres and 40 litres, were collected from a selection of suitable deposits. The artefactual material was processed in accordance with OA North standard practice, which follows current IFA guidelines. This has been fully catalogued and prepared for deposition with the final archive.

3.2.4 The position of the excavation area was located with respect to surrounding landscape features and recorded using a total station and data-logger. The digital survey data were transferred into a CAD system. The archaeological detail was drawn up in the field with respect to field plots of the survey data and these edits were then transferred onto the raw survey data within the CAD system.

3.2.5 All artefactual material was processed in accordance with OA North standard practice, which follows current IFA guidelines. This has been fully catalogued and prepared for deposition with the final archive.

3.3 ARCHIVE

3.3.1 A full professional archive has been compiled in accordance with the project design (*Appendix 1*), and in accordance with current IFA and English Heritage guidelines (1991). The paper archive will be deposited with the county Record Office and the material archive (artefacts and ecofacts) will be deposited with the Lancashire Museum Service following agreement with the client.

3.4 HEALTH AND SAFETY

3.4.1 OA North maintains Safety Policies, based on the SCAUM (Standing Conference of Unit Managers) *Health and Safety Manual* (1991). In keeping with current Health and Safety at Work Regulations, prior to commencing on-site work, a risk assessment for each activity was completed. Due regard was given to all Health and Safety considerations during all aspects of the project. Service information was obtained from Jarvis Construction UK Ltd prior to the excavation and the positions of all trenches were scanned prior to excavation using a U-scan meter to detect for any live services.

3.5 THE POST-EXCAVATION ASSESSMENT

3.5.1 The aim of this assessment report is to evaluate all classes of data generated by the OA North excavation, while incorporating the results of the 2002-2003 evaluation, thus enabling an updated project design to be produced, which details a programme of relevant analysis and publication. The assessment process has been designed to correspond to the objectives laid out in the guidance document *Management of Archaeological Projects, 2nd edition* (MAP 2; English Heritage 1991).

4. ORIGINAL RESEARCH AIMS

4.1 ACADEMIC AIMS

4.1.1 The excavation was designed to investigate a substantial length of the proposed South West Campus access road which had previously demonstrated the survival of *in situ* archaeological deposits (OA North 2002b; 2003a). The relatively large area of undisturbed archaeological stratigraphy offered a unique opportunity to excavate a rural settlement, which had produced radiocarbon dates of cal AD 136 to 379 (1767 ± 28 BP; KIA-18422), and cal AD 261 to 423 (1679 ± 29 BP; KIA-18423), and to enable substantial and significant additions to be made to the body of knowledge concerning the development and nature of the hinterland of Lancaster during the Roman period. The 2003 excavation was designed to clarify and enlarge on the results of the 2002-03 evaluations (OA North 2002b).

4.1.2 The original academic aims stated prior to the 2003 excavation were:

- given the commercial nature of the project, the main aim was to excavate the totality of the known site within the area affected by development and to characterise the surviving archaeological remains present;
- secondly it was to uncover and excavate as much as possible of the circular ditched enclosure identified in the geophysical survey and to gain an insight into its function, and to excavate more of the boundary ditch identified in the evaluation and explore its relationship with the enclosure, if any;
- the third aim of the excavation was to recover further dating evidence and samples for radiocarbon dating to confirm the date for the boundary ditch, and to provide dating evidence for the circular ditched enclosure;
- fourthly, it was hoped that the excavation would provide a better understanding of the evolving landscape and the development of settlement from the beginning of the first millennium AD to the present.

4.2 OBJECTIVES

4.2.1 Three objectives were specified for the excavation:

- to excavate as much of the development area as possible given the constraints of health and safety;
- to relate the findings to comparable dated settlement sites within Lancashire and the wider North West Region;
- in addition, to attempt to identify and characterise, if possible, any evidence of prehistoric, and indeed, later activity on the site.

5. FIELDWORK RESULTS

5.1 THE FARMSTEAD

5.1.1 ***Introduction:*** summary results of the excavation are presented below. The context list for the excavation is reproduced in *Appendix 3*, with Figure 3 showing the position of the excavation and Figure 4 the site of the archaeological features. The trench descriptions from all previous evaluation phases (OA North 2002b; 2003a; and 2003c) are presented in *Appendix 2*. Where relevant to the excavation, evaluation results have been incorporated into the following text.

5.1.2 The main focus of the excavation comprised a group of features located on top of a low promontory in the east of the site at 42m OD, identified as a farmstead (Fig 4; Plate 1). The main elements, located in the east of the excavation area, comprised a circular ring gully within which was a circle of postholes, and to its south was a circular ditched enclosure and linear arrangements of postholes, the latter interpreted as fencelines. The farmstead was bounded by a ditch 38m to the west, beyond which a large water hole was identified. Recent archaeological evaluation work (OA North 2002b) recorded Romano-British activity to the north, suggesting that settlement activity extended beyond the main excavation area. However, this area of archaeological potential was not within the proposed South West Campus access road or other development and was therefore not subject to further archaeological mitigation.

5.1.3 ***The roundhouse:*** a circular gully was identified in the east of the site at its northern boundary, within which was a circle of ten circular and subcircular features, interpreted as the postholes of a roundhouse within an eaves drip gully (Fig 5; Plate 2). The excavation area was enlarged, with the permission of Jarvis Construction UK Ltd, to beyond the easement boundary to reveal the full extent of the structure. The drip gully, ***155***, had a V-shaped profile with a 3.5m wide entrance on its eastern side. It measured 12m in diameter, was between 0.30m and 0.50m wide, and had an average depth of 0.20m. Greyish yellow silty sand with occasional charcoal fragments comprised its fill, which varied little around the feature, except in the north where greater amounts of charred material was present. The western part of the gully had been partially truncated by a post-medieval drain but presumably would have originally been continuous. Ten regularly spaced subround or suboval postholes (with general diameters of between 0.40m and 0.50m) formed a 9m diameter circle set approximately 1m inside the gully. These were filled with similar deposits to the gully itself. Dating of the individual postholes is problematic, as just one, posthole ***206***, contained a single pottery sherd. It is, however, assumed that the postholes, which contained similar fills, were contemporary and part of the same structure. An oval feature, ***210***, in the south-west of the building contained a large portion from a beehive-type quern, possibly deliberately deposited, suggesting cereal production and processing were practiced. All of the features cut the natural subsoil and were overlaid by plough soil containing post-medieval material. It appears that any contemporary occupation surfaces

or hearths had been lost, possibly as a result of the position of the structure on a relatively high promontory with relatively thin topsoil; this will have made the remains particularly susceptible to plough damage.

5.1.4 Two small postholes, ***161*** and ***165***, and a stakehole, ***163***, located immediately to the north-east of the entrance, formed a 4m north-west/south-east orientated line, interpreted as a fenceline (Fig 5).

5.1.5 After the drip gully had filled with soil, it was truncated by a circular posthole, ***181***, close to its southern terminus. Its fill, ***180***, was similar to the fills in the postholes but it produced no dating evidence. The stratigraphic sequence suggests that it formed a later phase of activity than the roundhouse, potentially dating to the early medieval period.

5.1.6 ***The enclosure:*** a further large feature, just 7.5m to the south-east of the roundhouse, was first identified as a circular geophysical anomaly by the geophysical survey conducted by GSB Prospection (GSB 2002) and subsequently was subject to an archaeological evaluation in November 2002 (OA North 2003a) which comprised two evaluation trenches, one across the north of the feature and one across the south. Although no dating evidence was recovered, both trenches demonstrated that the circular anomaly comprised three phases of ditch.

5.1.7 Excavation revealed a circular enclosure defined by a curvilinear ditch formed of two segments, to the north and south, separated by two opposing, 5m wide, entrances on its eastern and western sides (Fig 6; Plate 3). Excavation, demonstrated three phases of ditch (Fig 7), with a potential fourth phase represented by a short ditch or pit cutting the eastern end of the north ditch segment. The enclosure was manually excavated in two stages: initially 50% of the ditch fills were excavated in alternate 1.20m wide sections, thus enabling the relationships between the ditches to be observed in section. This was followed by complete excavation of the remaining portions, despite which, the only significant find was a beehive-type quern from ditch ***195***, similar in form to that recovered from one of the internal features (***210***) of the roundhouse. Specific phasing was dependent on the stringent interrogation of stratigraphic relationships, which suggested a sequence beginning with the innermost ring ditch. This was in turn replaced by ditches outside it, after it had filled with subsoil eroded from the surrounding ground surface. The positioning of each ditch mirrored the alignment of the preceding one, suggesting each phase followed the previous relatively continuously and before the previous ditch had become completely filled.

5.1.8 The earliest identifiable phase was the innermost curvilinear ditch, ***195***, in the north enclosure segment and ***202*** in the south enclosure segment, which formed a circular enclosure with an internal diameter of 15m (Fig 6; Plate 3). Curvilinear ditch ***202***, the southern segment, was 20.4m long, but only the eastern 9m and terminus of its northern segment, ***195***, survived, since the rest had been removed by ditch ***193*** (which formed the second phase of the enclosure). Both segments were up to 0.8m wide, had shallow gently rounded profiles, and rounded bottoms with depths up to 0.25m. They were filled with brownish grey silty clayey sand, ***194*** and ***201***, respectively, with *c* 20% small-medium sub-rounded stones and occasional charcoal fragments. Their eastern

terminals were considerably deeper, up to 0.45m deep, with a V-shaped base and straight sides at a ratio of approximately 1:1.

5.1.9 A second phase was identified outside the earliest ditch. The northern segment comprised a 25m long curvilinear ditch, ***193***, which obliterated much of ditch ***195*** to its south. An interrupted ditch formed by two short segments, ditch ***198*** which measured 5.5m in length, and ditch ***204*** with a length of 5.6m, was interpreted as possibly forming the southern side of the enclosure during this phase, based on the geographical and stratigraphical positions, and the alignment of the segments. This would have given an enclosure with a much more open form (fig 5; Plate 3). Each element of the ditch was approximately 1m wide, and the depths varied between 0.30m and 0.50m. They had generally rounded profiles, and were filled with brownish grey clayey sand, ***192/268***, ***197***, and ***203*** respectively, with *c* 20-30% small-medium subangular and sub-rounded stones and occasional charcoal fragments. The trend of having deeper terminals at the eastern entrance continued, where ditch ***193*** deepened to 0.60m. Concentrations of stones along the edges and base of segment ***198***, and occasional large boulders up to 500mm in diameter in ditch ***193***, suggest there may have originally been a bank associated with this enclosure, which had either eroded or slumped into the ditches or been removed when the ditch was recut.

5.1.10 Ditch segments ***191*** and ***200*** were observed cutting the fills of the second phase ditches, suggesting the earlier ditches had been allowed to fill before the enclosure was re-established. The southern edge of the northern segment, ***191***, truncated ditch ***193***, was 27m long, and orientated east/west, with a rounded profile between 0.60m and 1.10m in width and a minimum depth of 0.35m. The ditch deepened towards its western terminus to 0.60m and the eastern terminus tapered gradually. The lower fill, ***196***, comprised dark grey clay, suggesting that it may have been deposited under wet conditions. The upper fill, ***190***, comprising orange brown silty sand, contained relatively large amounts of stone in comparison to the surrounding natural subsoil, suggesting the fill may represent deliberate backfilling or material derived from an eroded bank. The southern segment, ***200***, was located outside ditch sections ***198*** and ***204***. It was 21m long, orientated east/west, and between 0.70m and 1m wide by 0.25m deep, and contained a single fill, ***199***, comprising brown grey silty clayey sand.

5.1.11 Close to its eastern terminus, the fill of ditch ***191*** was cut by an oval pit, ***189***, measuring 1.7m north/south by 0.7m wide and with a depth of 0.50m. This was positioned exactly within the edges of the ditch. A single find, comprising a smithing hearth bottom, was recovered from the feature.

5.1.12 A single, probably contemporary, substantial posthole, ***270***, was located in the centre of the enclosure, with a diameter of 0.70m, cut into the natural subsoil to a depth of 0.5m (Fig 6; Plate 4). The decomposed organic remains of a timber post, ***271***, were excavated, evidently sharpened to a point and driven 0.40m into the natural subsoil in the base of the cut. The post had been neatly packed with stones around its sides for support. The upper deposits, ***266*** and ***267***, filling the postpipe, contained large amounts of burnt debris, suggesting the post may have been burned.

5.1.13 Two north/south, suboval pits, ***157*** and ***159***, both with irregular profiles, and dimensions of approximately 1.5m by 1m by 0.30m deep, were located inside the eastern entrance of the earliest phase of the enclosure, positioned next to its northern and southern ditch terminals respectively. Neither produced datable finds but their morphologies suggest they were contemporary. An ephemeral oval-shaped feature, ***167***, was positioned inside the north of the opposite entrance close to the terminal of ditch ***193***. No dating evidence was recovered and there was no evidence for a similar feature on the southern side of the entrance. The position of the features in relation to the entrances may be significant in that they imply a relationship with the enclosure. The absence of postpipes within the features may preclude their interpretation as post pits for a structure, and the absence of any other associated structural evidence within the enclosure apart from the central post, ***270***, suggests they did not form part of a larger structure.

5.1.14 A large cut, ***208***, measuring 5.10m in length by 1.90m wide and 0.54m deep, was located immediately south of the enclosure. Although the single fill, ***207***, comprising grey brown silty clay with occasional charcoal fragments, was consistent, excavation revealed the feature had irregular edges, with an undulating base, possibly forming a north-west/south-east alignment of three possibly separate conjoining pits (recorded as ***208***). A single pottery sherd, dated to the mid-late second to early-third century AD, was recovered from its fill.

5.1.15 A north-west/south-east alignment of three postholes, ***214***, ***216*** and ***218*** (Fig 4), with diameters of between 0.40m and 0.50m, and between 0.15m and 0.20m deep, were located directly to the south of the enclosure, possibly representing the remnants of a fenceline. A single pottery sherd, dated to the mid-late second to early-third century AD recovered from posthole ***216***, suggests another group of features contemporary with the enclosure.

5.1.16 ***The Boundary Ditch:*** a substantial north/south orientated ditch, ***222***, measuring 32m in length, ran across the excavation area to the west and approximately 35m down slope from the roundhouse and 50m to the west of the enclosure (Fig 4, Plate 5). The ditch was traced northwards and southwards during the evaluation phase, terminating with a rounded terminus approximately 30m to the north (in Evaluation Trench 85; *Appendix 2*). The southern extent of the ditch was not established but continued beyond the development area 40m to the south of the excavation area, with a combined observed length of 102m. Although the geophysical survey recorded an eastward return at its northern end, suggesting it may have enclosed the farmstead, evaluation trial trenching failed to locate any linear features along the line of the geophysical survey responses. The combined evaluation and excavation evidence suggested the ditch represented a linear boundary between the settlement at the top of the slope to its east and a pastoral landscape to its west.

5.1.17 Seven slots were excavated across the ditch within the excavation area. Measuring between 1.5m and 1.7m wide by 1.2m to 1.7m deep, the ditch had a V-shaped profile with a rounded base and contained at least two fills, comprising an upper fill of brownish grey soft clayey sand with occasional

large stones, and a lower fill of sandy clay, with occasional large stones at its base in some of the excavated slots. In the centre and north of the excavation area, it contained three or four fills, and in one slot (cut ***237***) the section suggested the ditch had been re-cut at least once. Although 8m of the ditch was hand dug, *in situ* dating material was elusive.

5.1.18 ***Other features:*** an irregularly-shaped feature, ***212*** (Fig 4), with an undulating base and measuring 2m by 1.8m and up to 0.32m thick, was located to the west of the fenceline. Its morphology suggested a natural feature, possibly a tree throw, rather than having been formally cut.

5.1.19 Five undated features (Fig 4) were recorded between the boundary ditch and the enclosure. A 2.05m north/south by 0.68m deep suboval tree throw, ***250***, which was identified close to the southern edge of the excavation, and was filled with light grey clay sand, ***249***. A random group of features, ***246***, ***248***, ***251*** and ***254***, to its north represented shallow (less than 0.20m deep) suboval pits or natural features of little apparent archaeological significance. Their fills, ***245***, ***247***, ***252*** and ***254*** respectively, were generally silty clay sand. None of the features contained any finds.

5.1.20 Several features to the west of the ditch represented evidence for activity external to the settlement. The most notable was a large oval feature, ***279***, at the southern edge of the excavation, measuring 9.7m north/south by 4.2m east/west (Fig 4), located less than 10m down slope to the west of the boundary ditch. Its northern and southern edges were shallow, with a gradually sloping base which led to a 3.5m by 3.5m central area that dropped sharply to a depth of 1.65m. The base of the central portion was below the water table, suggesting its function may have been a watering hole for livestock. Naturally slumped subsoil, ***278***, formed the lowest fill within the feature, overlain by a 0.5m thick sequence of fine silty clay sediments, ***276*** and ***277***, noticeable for the absence of larger inclusions, thus suggesting they may have been laid under waterlogged conditions. Gradual infilling with light orange grey sandy silts, ***272-274***, lay above a deposit of deliberate backfilling, ***275***, which contained large amounts of stone rubble and the partial remains of a possible bovid mandible. No dating evidence was recovered from any of these fills. There were no visible ditches or gullys connected to the feature to suggest it was a sump for the run-off of surface ground water or excess water from the ditch. The evidence thus suggests it was a pit dug to access ground water.

5.1.21 A 3.5m wide linear stone spread, ***283***, comprising *c* 40% small-medium subangular stones and occasional large stones within a silty sand matrix, represents the possible remnants of a rough track or the eroded remains of a bank associated with the boundary ditch. It lay upon the natural subsoil immediately east of waterhole ***279*** and 8m to the west of the boundary ditch ***222***, following its course.

5.1.22 Features ***256***, ***258***, ***259*** and ***262*** formed a linear arrangement approximately 10m to the west of boundary ditch ***222*** (Fig 4; Plate 5). Just one, feature ***262***, contained dating evidence, comprising a single very abraded pottery sherd. Two of the features, ***256*** and ***259***, were 2.30m and 3.5m in diameter by 0.50m and 0.35m deep respectively. Both had irregularly shaped undulating bases filled with sterile silty sands, suggesting they may have been tree throws.

Feature ***258*** represented a suboval pit measuring 1.24m north-east/south-west 0.40m deep, and ***262*** was an irregularly shaped feature measuring 1.9m east/west by 0.40m deep with an irregular base. These may have been contemporary with the rest of this activity in this area, since the alignment of three of the features, ***258***, ***259*** and ***262***, closely resembled that of the boundary ditch.

5.1.23 ***Interpretation and Dating:*** few finds were recovered from the various features forming the farmstead, what finds there were tending to be found as individual sherds in widely separated features. For instance, a single pottery sherd came from posthole ***206***, forming part of the roundhouse, and another single sherd, this having been dated to the mid second to early third-century AD, was recovered from the fill of feature ***208***. In addition, two fragments of beehive querns were found, one in the primary enclosure ditch, ***195***, and the other from feature ***210***, which lay within the roundhouse. Whilst these features tend to suggest a Late Iron Age to Romano-British date, the morphology of the settlement would imply that it had been founded, at least, in the earlier part of this date range.

5.1.24 The results of the limited programme of radiocarbon dating was therefore crucial to the establishment of a date range for this settlement. Two dates were obtained from the fills of the enclosure ditches and a further two were obtained from the fills of the posthole located at the centre of the enclosure; a fifth was obtained from the boundary ditch. Perhaps surprisingly, all these returned dates from the early centuries of the first millennium AD. The primary enclosure ditch, ***195***, returned a date of cal AD 78-316 (1844 ± 40 BP; KIA-22560), giving an *terminus ante quem* for its construction, whereas the fill of the second phase of enclosure ditch, ***193***, returned a date of cal AD 27-212 (1906 ± 28 BP; KIA-22562). Carbonised grains from the lower fill, ***267***, of posthole ***270*** returned a date of cal AD 82-236 (1859 ± 31 BP; KIA-22558) and the posthole's upper fill, ***266***, returned a date of cal AD 127-322 (1814 ± 32 BP; KIA-22559). Charred remains from the boundary ditch, ***222***, also produced a similar date: cal AD 136-379 (1767 ± 28 BP; KIA-18422)). An attempt was made to obtain a radiocarbon date from the circular gully of the roundhouse, but due to contamination of the soil samples, analysis produced negative results. Apart from an abraded possible amphora sherd dated to the Romano-British period and a fragment of Iron Age - Romano-British type quernstone, from features inside the roundhouse, ***206*** and ***210***, dating of the roundhouse remains inconclusive.

5.2 LATER ACTIVITY

5.2.1 ***Early medieval:*** a single feature, ***265***, was found in the north of the site, comprising a shallow oval pit 1.5m by 0.95m in size which contained large amounts of charcoal, ***263***, with visible pieces of burnt wood. The natural subsoil at the base of the pit was scorched, ***264***, suggesting burning may have taken place *in situ* and thus it has been interpreted as a hearth or bonfire pit. The feature was located within the southern half of the roundhouse, and given that there was no other within the structure, it was thought initially to have been associated with the roundhouse. However, material from fill ***263*** was

subject to radiocarbon dating and produced a date of cal AD 778-956 (1177 ± 26 BP; KIA-22561), indicating some activity on the site some 500 years after the *floruit* of the settlement. The area in the vicinity of the feature was hand cleaned but no evidence of any structure was found, suggesting that it was an open feature, although it is possible that the undated posthole ***181***, which cut the eaves drip gully of the structure may have been associated (see above *Section 5.1.5*).

5.2.2 ***Medieval:*** a single sherd of unstratified medieval pottery was found in the vicinity of feature ***265***, recovered from the subsoil during the cleaning of the area. The sherd was not abraded, suggesting it might have been derived from medieval activity in the area. The sherd adds to the small medieval pottery assemblage found during the evaluation of a series of rectilinear earthworks located approximately 200m to the north-west, along the western boundary of the study site (*see Trenches 48-50, Appendix 2*).

5.2.3 ***Post-medieval:*** a single feature, ***153***, was located in the south-west of the excavation area, approximately 39m to the west of the north/south boundary ditch. This comprised an east/west aligned ditch, with a rounded profile, measuring 13m in length by 1.6m wide, and returning southwards beyond the limit of the excavation. The feature does not correspond to any of the post-medieval field boundaries highlighted in the desk based assessment of the study site (Neil 1995a; 1995b). However, the ditch adds to the significant evidence for the wider agricultural landscape, elements of which were examined in the trial trenches of the initial evaluation phase of the proposed South West Campus site, characterised mainly by field boundary ditches and field drainage systems (*see Appendix 2*).

6. ASSESSMENT OF THE RESULTS

6.1 ASSESSMENT AIMS AND OBJECTIVES

6.1.1 The aim of this assessment was to evaluate all classes of data from the excavation undertaken at the South West Campus, Lancaster University, in order to formulate a project design for a programme of further analysis, if appropriate to the potential of the site. A statement of the significance of the results from each element of the archive is given below. These statements are based on the assessment work undertaken, related to the original academic themes expressed in the project design (OA North 2003b).

6.1.2 The objectives of this assessment correspond to, and are prescribed by, *Appendix 4* of *MAP2* (English Heritage 1991). They are to:

- assess the quantity, provenance and condition of all classes of material: stratigraphical, artefactual and environmental;
- comment on the range and variety of that material;
- assess the potential of the material to address questions raised in the course of this project design, or by the evaluation of the site;
- formulate any further questions arising from the assessment of this material.

6.1.3 This assessment will present:

- a factual summary, characterising the quantity and perceived quality of the data contained within the site archive;
- a statement of the academic potential of these data;
- recommendations on the storage and curation of these data.

6.2 MATERIAL ASSESSED

6.2.1 The entire paper and material archive was examined for the purposes of this assessment. Quantifications are incorporated within the individual assessments.

6.3 PROCEDURES FOR ASSESSMENT

6.3.1 The method of assessment used varied with the class of information examined. All classes of finds were examined in full, with observations supplemented by the finds records generated during the course of the excavation. Full details of all the recovered finds reside with the project archive.

6.4 STRUCTURAL AND STRATIGRAPHIC DATA

6.4.1 ***Quantification:*** the site archive from the OA North evaluations and excavation in 2002-2003 comprises the following:

6.4.2 ***Evaluation phase:***

context / object / plan / section indices	12
context records	155
digital CAD plan, with all features shown on separate drawing layers	1
plans on drawing film	28
sections on drawing film	19
colour print photographs	389
monochrome photographs	408

6.4.3 ***Excavation phase:***

context / object / plan / section indices	8
context records	135
digital CAD plan, with all features shown on separate drawing layers	1
plans on drawing film	52
sections on drawing film	64
colour print photographs	72
monochrome photographs	283
colour transparencies	283

6.4.4 The 155 context records from the evaluation phase relate to the following number of features by period:

Undated (includes possible late prehistoric/Romano-British)	32
Bronze Age?	1
Medieval	3
Post-medieval	57
Modern	7

6.4.5 The 135 context records from the excavation phase relate to the following categories:

ditches relating to Enclosure	10
ditches relating to Roundhouse	1
boundary ditch	1
waterhole	1
postholes	19
stakeholes	1
pits	10
tree throws	8
hearth	1

post-medieval field boundary ditches 1

6.4.6 ***Evaluation:*** excavation has allowed a complete stratigraphic record to be made of the site stretching from the early first millennium AD to the post-medieval period.

6.4.7 Broad phasing has been ascribed to all features. This has allowed the provisional identification of the natural geological activity, and four broad periods of archaeological activity. The majority of archaeological features pertain to a settlement in the eastern half of the site, the extent of which was defined by a substantial boundary ditch. Its main elements comprised a roundhouse and a circular ditched enclosure on highest ground of the site. These were dated by several pottery sherds and a suite of radiocarbon dates to the early centuries of the first millennium AD, and relate to the main component of the settlement. Several undated features were also ascribed to the same period based on their alignments. A single early medieval feature, interpreted as a bonfire pit, was identified within the excavation area, dated to the eighth to tenth centuries AD, based on radiocarbon dating.

6.4.8 The evaluation demonstrated the development of the wider medieval agrarian landscape across the South West Campus development site. A series of rectangular terraces in the western half of the site were found to be associated with medieval pottery. In addition, parallel lynchets were identified at the south-western part of the study area close to the line of the modern A6. The evaluation trenching did not reveal any artefacts associated with these earthworks; however, they are typical of arable field systems that date from the medieval period.

6.4.9 In addition, the development of a post-medieval agrarian landscape could be traced, which may be able to be linked to the historic past by means of cartographic data.

6.5 CERAMIC VESSELS

6.5.1 ***Quantification, provenance, and dating:*** in all, 11 fragments of ceramic vessels were recovered from the evaluations and excavation; their dating and distribution is shown in Table 1. All fragments were very small and extremely abraded, and thus, whilst common fabric types could be recognised, the size of individual fragments precluded the recognition of vessel forms. The same constraints made dating extremely difficult.

Context	Feature Type	Local-native type pottery	Romano-British	Medieval	Modern
10	Wall (Tr11)				6
18	Field Boundary (Tr11)				1
-	Ditch (Tr12)				23
27	Pond (Tr25)				3
35	Gully (Tr28)				1
49	Subsoil (Tr48)			1	
51	Subsoil (Tr50)			1	
57	Subsoil (Tr52)				6
61	Drain (Tr52)				1
-	Drain (Tr53)				1

73	Subsoil (Tr53)				3
152	Boundary Ditch				2
205	Roundhouse Posthole		1		
207	Pit Alignment		1		
215	Posthole		3		
261	Pit / Tree Throw	3			
Unstratified	-			1	10
Totals	-	3	5	3	57

Table 1: provenance and broad dating of ceramic vessels from the site

6.5.2 ***'Locally produced-native'-type pottery:*** three small body sherds were identified as possibly locally-made in the 'native' tradition. The sherds were in an extremely coarse fabric, incorporating rounded mixed grits up to 4mm, and were of an extremely soft-fired nature suggesting hand-made fabric. No diagnostic features such as rims were recovered and thus it is impossible to assign a date range to the material, and the battered appearance of the sherds could suggest that they were residual within their context. There are no north Lancashire prehistoric assemblages with which comparisons can be made; bearing in mind its likely residuality, the small fragments might even possibly be of Bronze Age date, fitting in with the pattern of Bronze Age settlement on the Pennine foothills in this part of the county (Haselgrove 1996).

6.5.3 The pottery was recovered from a single pit or tree throw, which could therefore by implication be dated to the prehistoric period. However, based on the fact that there was no other evidence on the site for activity earlier than the Roman period, it is possible that the assemblage represents locally produced wares during the Roman period, but based on traditional prehistoric methods. Alternatively, the pottery may represent a residual prehistoric find, as suggested by it abraded condition, within a Romano-British context. Although the fabric does not appear similar, the relatively thin walls of the sherds might place them amongst the coarse hand-made fabrics of the later Romano-British period, such as Huntcliff ware or more local variants, and thus a late third or fourth century date cannot be entirely discounted.

6.5.4 ***Romano-British pottery:*** five fragments have been identified as being of Romano-British date. A single abraded rim sherd of Black Burnished Ware Category 1, from the fill of a pit within a pit alignment (***207***), suggests a late second to early third century date. The date of three greyware sherds, from the fill of a posthole (***215***), cannot be further refined. The fragment of pottery, from the fill of one of the roundhouse postholes (***205***), has been identified as amphora on the basis of its fabric, although again, the small size of the fragment means that further refining of the date and style is not possible.

6.5.5 ***Medieval pottery:*** three fragments have been identified as being of medieval date. A single fragment of unstratified medieval pottery was recovered from the vicinity of the roundhouse derived from the subsoil during the initial cleaning of the site. This can be identified with relative confidence as deriving from a hard-fired cooking pot-type vessel, its coarse oxidised buff-orange

fabric placing it within the Northern Gritty tradition and allowing a broad twelfth to fourteenth century date to be assigned. A single fragment of undiagnostic medieval pottery, comprising an incompletely reduced sandy fabric with glaze splashes, was recovered from the subsoil in Trench 48 during the evaluation phase. A further undiagnostic fragment, comprising a gritty white fabric, was recovered from the subsoil in Trench 50. The trenches were excavated to investigate a series of rectilinear earthworks, the excavation of which identified that the site had been terraced. The subsoil relates to these terraces, suggesting that the earthworks may have been of medieval origin.

6.5.6 ***Post-medieval fabrics:*** fifty-seven fragments have been identified as being of post-medieval date, ten of which were derived from unstratified contexts. During the excavation phase, two fragments of post-medieval pottery were retrieved from fill ***152*** of field boundary ditch ***153***. The fragments are from brown-glazed red earthenware coarseware vessels, and are small and in poor condition. They date to sometime between the late seventeenth century and the early twentieth century. During the evaluation phase, 45 fragments were recovered from excavation of the subsoil, drains, ponds, boundary ditches and other features within Trenches 11, 12, 25, 28, 48, 50, 52 and 53. These broadly date to between the late-eighteenth and nineteenth centuries.

6.6 CERAMIC BUILDING MATERIAL

6.6.1 ***Quantification, provenance, and dating:*** two fragments of terracotta field drain were recovered from the fill of the north-south aligned boundary ditch**,** **222**. Both are likely to be recent in date.

6.7 STONE

6.7.1 ***Quantification, provenance, and dating:*** two large fragments of gritstone hand querns were recovered, one from the fill (***194***) of an enclosure ditch (***195***), and another from the fill of an oval feature (***210***) within the roundhouse ***209***. Both are of beehive type and can thus be dated to the late Iron Age or Romano-British period. The dearth of a recognisable Iron Age material culture from Northern Lancashire means that there are few comparators, but these objects, as a day-to-day essential of food preparation, are frequently found on more obviously Romanised sites such as Ribchester (Buxton and Howard-Davis 2000) and Walton-le-Dale (Gibbons *et al* forthcoming) to the south, though none have been recovered from the extramural settlement at Lancaster to the north (Miller *et al* forthcoming). Evidence from Yorkshire suggests that the production of beehive-shaped quernstones began in the Iron Age (Buckley and Major 1990, 117), possibly in the second century BC, and the type continued in widespread use throughout the Roman period.

6.8 INDUSTRIAL DEBRIS

6.8.1 ***Quantification, provenance, and dating:*** two joining fragments of a single plano-convex hearth-bottom, or 'smithing bun', were recovered from the ditch

of the enclosure, ***188***. These objects are indicative of secondary iron-working in the vicinity.

6.9 ANIMAL BONE

6.9.1 ***Quantification, provenance, and dating:*** a single collection of shattered animal teeth, probably bovid, was recovered from fill ***275***, of waterhole ***279***. In addition, three minute fragments of calcined bone were recovered from the posthole at the centre of the enclosure, ***271***.

6.10 PLANT REMAINS

6.10.1 ***Quantification:*** thirty-four samples were taken during the excavation from a number of feature types (for full sample descriptions, see *Appendix 5*). Twenty-three of these samples were assessed in total, including five from the slots excavated through enclosure ***155*** (22 for charred plant remains and one for waterlogged plant remains). The number of samples from each feature type and period are shown in Table 2, below.

Features	
Bonfire/ hearth	1
Ditch (enclosure)	9
Fill	4
Pit	2
Pit/hearth	1
Posthole	1
Stakehole	1
Tree throw	1
Waterhole	2
Unknown	1
Total samples	**23**

Table 2: Number of samples by features periods

6.10.2 ***Laboratory Methods:*** the samples for charred and waterlogged plant remains, which varied in size from <0.5 litres to 30 litres in volume, were hand floated; the flots were collected on 250 micron mesh and air-dried. The flots were scanned with a Meiji EMT stereo dissecting microscope and the plant material was recorded and provisionally identified. The data are shown in Table 1 and *Appendix 4*. Plant remains were recorded on a scale of abundance of 1-4, where 1 is rare (less than five items) and 4 is abundant (more than 100 items). Abundancy scores for charcoal are based on fragments which were 2mm or greater. Where charcoal was present but less than 2mm only, this was stated.

Other material in the flot was also noted. Waterlogged plant material was recorded as present or abundant and provisionally identified. The waterlogged plant remains data are shown at the end of *Appendix 5*. Botanical nomenclature follows Stace (1991).

6.10.3 ***Evaluation:*** the results of the assessment of samples for charred plant remains are shown in *Appendix 4.* All 22 samples assessed contained some charred material.

6.10.4 ***Economic crops:*** cereal grains, including hulled and unhulled barley (*Hordeum*), wheat including possible spelta/emmer (*Triticum spelta/dicoccum*), oats (*Avena*), and indeterminate grains were recorded in most samples, and included samples from the eaves drip gully fill of roundhouse ***155***. Numbers of grains ranged from present to abundant. Cereal processing waste was identified in only two samples: the upper fill of boundary ditch ***222*** and slot 4 through the eaves drip gully of roundhouse ***155***.

6.10.5 Charred weed seeds were recorded in 12 samples and three sub-samples of the roundhouse eaves drip gully ***155***, and included a wide range of taxa. These included sedge (*Carex* lenticular type), pinks family (Caryophyllaceae, including common chickweed (*Stellaria media*), rushes (*Juncus* seed capsule and stem), plantain (*Plantago*), small grasses Poaceae <2mm) and brome (*Bromus*), knotgrasses (*Polygonum*), buttercups (*Ranunculus* including *Ranunculus* Batrachium-type from the waterlogged sample), wild radish (*Raphanus*), blackberry (*Rubus fruticosus*), elderberry (*Sambucus nigra*), and stinging nettle (*Urtica dioica*). Other charred plant material was recorded in two samples (Samples 37 (***194***) and 28 (***197***) from the enclosure ditch fills, and included hazel nut shell (*Corylus avellana*) and sloe/wild cherry (*Prunus*).

6.10.6 ***Waterlogged plant remains:*** waterlogged plant remains were preserved in the primary fill of waterhole ***279***. Given the large quantity of material processed, the remains were not abundant and their diversity was restricted. The ubiquitous blackberry (*Rubus fruticosus*) and elder (*Sambucus nigra*), the ruderal stinging nettle (*Urtica dioica*) and the occasional rush (*Carex* lenticular type), and buttercup (*Ranunculus* including *Ranunculus* Batrachium-type) were recorded. Charcoal was absent from this sample. Other material included monocotyledonous fragments, insect fragments, twigs, bark, earthworm egg cases, fungal sclerotia roots, and sand.

6.10.7 ***Charcoal:*** charcoal was recorded in all samples, ranging in frequency from present to very abundant. Ring porous taxa, eg Oak (*Quercus*), was recorded in most samples (13). However, two samples had only diffuse porous taxa, eg Alder/Birch/Hazel (*Alnus/Betula/Corylus*), recorded in them and a further four had mixed taxa recorded in them. Charred roundwood and twigs were also recorded. Preservation was variable but often the charcoal was engrained with silt.

6.10.8 ***The matrix components:*** the flots contained a range of material other than charred plant remains, for example, bone, coal and evidence of possible industrial activity, fungal sclerotia, insects, and sand. The blue colour of the fill of pit ***161*** suggests that it might have been used for cess. Modern contamination, mainly roots but also some seeds and leaves, was recorded in most samples.

6.10.9 The assessment of charred and waterlogged plant remains for the South West Campus has demonstrated that charred and waterlogged plant remains have been preserved. Seven samples contained significant numbers of cereal grains and can potentially provide information about the economy of the site. The apparent absence of crop processing material, ie chaff in the samples, suggest that cereals were not being processed around the main enclosure. The identification of blackberry, elderberry, sloes/wild cherry and hazel nut fragments suggests that some native plants were being used as a source of food. The assemblage of weed taxa are indicative of grassland, ruderal, and wet habitats.

6.10.10 The assessment of these samples is of considerable interest because late prehistoric information from sites in the region is non-existent and Roman and early medieval plant records from rural settlements in North Lancashire are rare. There are plant records from the Roman forts at Kirkham (Howard-Davis and Buxton 2000), Walton-le-Dale (LUAU and Gifford and Partners 1997) and Ribchester (Buxton and Howard-Davis 2000), and urban Roman records from Mitchell's Brewery (Huntley and Huckerby in prep). Recently, an evaluation and excavation at Sandhole Wood, Lancashire (OA North forthcoming), of a possible Romano-British rural settlement demonstrated significant numbers of charred plant remains. The site at the South West Campus and that at Sandhole Wood are therefore of regional importance.

6.11 RADIOCARBON DATING

6.11.1 With the absence of datable finds from a majority of the archaeological features excavated at the site, radiocarbon dating was utilised for a selection of the main features which produced suitable material for analysis, extracted from bulk samples. In total, seven radiocarbon dates have been obtained from the following contexts:

Context	Description
88	Boundary Ditch recorded by the evaluation
91	Boundary Ditch recorded by the evaluation
192	Fill of the first phase of the enclosure ditch
194	Fill of the second phase of the enclosure ditch
263	Bonfire pit from within roundhouse
266	Fill of central posthole in enclosure
267	Fill of central posthole in enclosure

Material dated included charred cereal grains, the axis of a charred catkin, and fragments of charcoal. Initial radiocarbon dating produced dates pertaining to the first to fourth centuries AD, except in the case of the bonfire pit from the roundhouse, ***263***, which produced an eighth to tenth century date range.

6.11.2 While these radiocarbon dates have provided a chronology for the boundary ditch and the large enclosure, there are no dates that can be reliably tied to the roundhouse. The only sample from this was from an off-centre bonfire pit, which seems not to be a contemporary component of the structure.

6.11.3 Environmental samples have demonstrated the possible potential for further radiocarbon dating (see *Appendix 5*) in a number of instances. This is potentially important for the roundhouse and to aid the refinement of dating of the various phases of the enclosure. Suitable samples are available from the fill of the eaves drip gully (***155***), the roundhouse posthole ***161*** to the east, the southern sections of enclosure ditch ***198*** and ***202***, and the third phase of enclosure ditch to the north (***191***).

7. CURATION AND CONSERVATION

7.1 RECIPIENT MUSEUM

7.1.1 Lancashire Museums Service has been nominated as the ultimate place of deposition for the material archive (artefacts and ecofacts) and the paper and electronic archive will be deposited with the Lancashire Record Office.

Lancashire Museums Service, Museum of Lancashire, Stanley Street, Preston
Contact: Anthony David
Tel 01772 264075

Lancashire Record Office, Bow Lane, Preston, PR1 2RE
Tel 01772 263039

7.2 CONSERVATION

7.2.1 There were no immediate conservation requirements in the field.

7.3 STORAGE

7.3.1 The complete project archive, which will include records, plans, both black and white and colour photographs, and artefacts, will be prepared following the guidelines set out in *Environmental standards for the permanent storage of excavated material from archaeological sites* (UKIC 1990, Conservation Guidelines 3) and *Guidelines for the preparation of excavation archives for long-term storage* (Walker 1990).

7.3.2 All finds will be packaged according to the Museum Service's specifications, in either acid-free cardboard boxes, or in airtight plastic boxes for unstable material. The smithing hearth base constitutes the only category which is potentially unstable; although it will be packaged in an airtight plastic box with silica gel, it may need to be stored in controlled conditions.

7.4 DISCARD POLICY

7.4.1 A relatively small finds assemblage was recovered from the excavation, all of which was from well stratified deposits, with very little material suitable to be discarded. The evaluation produced a general scatter of post-medieval pottery and a small scatter of medieval pottery sherds. However, considerable numbers of environmental bulk samples were recovered from the site, which upon agreement with the client, may be discarded at a later date, once processing and analysis has been completed.

7.5 GENERAL CONSERVATION

7.5.1 Most of the assemblage is well-preserved and in good condition and thus the conservation requirement is low.

7.6 PACKAGING

7.6.1 The assemblage is currently well-packed and will require no further packaging. Box lists are prepared and will be updated from the database when the identification of objects is complete.

8. STATEMENT OF POTENTIAL FOR FURTHER POST-EXCAVATION WORK

8.1 INTRODUCTION

8.1.1 The archaeological potential of the South West Campus access road site was highlighted during a process of evaluation and geophysical survey between 2002 and 2003. The subsequent excavation targeted the line of the proposed access road in the vicinity of the boundary ditch and enclosure, to reveal a wide range of features including a roundhouse, a pit alignment, and fencelines, and a large waterhole. The broadly contemporary features formed part of what appears to have been a farmstead which flourished during the Roman period. Other features included an early medieval bonfire pit and a post-medieval field boundary.

8.2 OVERALL POTENTIAL

8.2.1 The greatest potential for analysis lies in confirming the phasing and dating of the remains. in particular, it is of considerable importance to attempt to confirm the contemporaneity, or otherwise, of the roundhouse and adjacent enclosure. The paucity of datable finds from the archaeological features makes the detailed phasing of the site challenging. A few features have, however, produced pottery fragments datable to the Roman and medieval periods. Of greatest importance for the dating of the main settlement, however, has been the results of which radiocarbon dating from some of the major features (the ditched enclosure and boundary ditch ***222***). Other phases of the enclosure and the roundhouse have the potential for further radiocarbon dating. In addition, the possibility of reoccupation of the settlement site in the early medieval period, some 500 years after its initial occupation, has considerable regional importance, and should be examined..

8.3 THE SETTLEMENT

8.3.1 The main elements of the settlement comprised a roundhouse and a ditched enclosure on a low promontory at 42m OD looking south towards River Wyre. The settlement possibly represents a small, rural, family agricultural unit. The western edge of the settlement was defined by a large boundary ditch, beyond which was a large waterhole. Radiocarbon dates and pottery finds have provided a date range between the first and early fourth centuries AD for some of the components.

8.3.2 The roundhouse comprised a circle of postholes, which probably supported the main weight of the roof (Cunliffe 1991, 213), set within a circular ‘drip gully’. The morphology of the roundhouse fits with a generalised typology that is based largely on parallels from outside the region, but is suggestive of occupation in the Iron Age to early Roman period (Jobey 1985). Most of the documented unenclosed roundhouses from the North West have been identified

from survey evidence and are from Cumbria; they are typically stone-founded, which reflects the availability of surface stone from the region. This example is significantly a timber structure. The best parallel for a comparable timber roundhouse is from Lathom, near Ormskirk, which was excavated recently and has been radiocarbon dated to the first century BC (Ron Cowell pers comm). Potential dating for the Lancaster University roundhouse was provided by a single pottery sherd from one of its postholes, which has been dated to the mid-late second to early third centuries AD, and by part of a beehive quern of a similar type to one found in the circular ditched enclosure to the south-east. In more Romanised parts of Britain there was a change in construction techniques from the traditional roundhouses to rectangular structures during the Roman period (Cunliffe 1991, 213; Goodyear 1974, 6-7), but in the North the evidence would suggest that the rural population was slow to break from more traditional settlement practices, allowing the continuity of unenclosed roundhouses from the Iron Age into the Roman period (J Quartermaine pers comm; Ingleborough Archaeology Group forthcoming).

8.3.3 Of particular interest is the circular ditched enclosure to the south-east of the roundhouse. Except for the substantial posthole at its centre, this lacked evidence for any internal structure, and therefore is hard to interpret. It may simply be an enclosure for coralling stock, although a central post would be unnatural in this context. Clearly, further research is required for regional comparisons in order to characterise the feature and assess its function.

8.3.4 To the west of the roundhouse and enclosure a long boundary ditch produced radiocarbon dates from the first to third century, which would place it within the same broad period of occupation as the enclosure. There is presently no absolute dating for the roundhouse, but it would seem logical to suggest that these features form a small agricultural settlement, comprising a house and a stock pound contained within a field system. Evidence for cereal production has been retrieved, and if the use of the enclosure for stock can be confirmed, it would suggest that a mixed agricultural economy was being practised.

8.3.5 The chronology of the settlement as a whole is presently heavily reliant on that for the enclosure, which has provided two of the radiocarbon dates. Whilst these dates span the end of the late Iron Age and the bulk of the Roman occupation of the area, the possibility of an extended occupation of the site is suggested by the fact that the ditches were cut on three separate occasions.

8.4 EARLY MEDIEVAL PERIOD

8.4.1 A hearth or bonfire pit, radiocarbon dated to the early medieval period, was revealed during the excavation (*Section 5.2*), within the perimeter of the roundhouse. It is highly unlikely that this could represent the reuse of the early structure, since this would mean that it had stood for many hundreds of years, and thus the juxtaposition is likely to be completely coincidental. It is possible that the single posthole, ***181?***, which appeared to cut the eaves drip of the roundhouse, was associated with this, otherwise it would appear to be an isolated feature, apparently in the open air.

8.4.2 Few sites from the early medieval period have been identified in the North West, and rural settlements in the lowlands, and in Lancashire in particular, are extremely rare. Any site that has been firmly dated to the period is therefore of considerable regional importance, even if it is fragmentary, as in this case. There is a growing body of evidence to suggest that such sites were not constructed on virgin land, but reused existing landholdings (for instance, at Fremington, Cumbria (Oliver *et al* 1996) and Telegraph Road, Irby, on the Wirral (Philpott and Cowell 1992)), although there often seems to have been an hiatus on the site, as at another site in Irby (Philpott and Adams forthcoming) and Tatton Park in Cheshire (Higham 2000). Where this is the case, as at this site, the question must be asked as to whether such reoccupation was for the same purely practical reasons that had led to the siting of the original settlement: good, free-draining soils with a nearby water source, or whether it could represent a deliberate statement of land ownership, visibly superseding the previous, albeit abandoned, settlement.

8.5 MEDIEVAL PERIOD

8.5.1 Few features were identified that can be dated to the medieval period, although there was some suggestion within the evaluations that terraces could have been created on the west-facing slope close to Barker House Farm, perhaps as part of the developing agricultural landscape. Whilst the development of the modern landscape is an important source for further study, the few features dated to this period have little potential to add greatly to this.

8.6 POST-MEDIEVAL AND MODERN ACTIVITY

8.6.1 Evidence for the last 400 years is confined to disparate fragments of field boundaries and field drainage, and isolated clay extraction, which were largely examined during the evaluation of the South West Campus development area (OA North 2002b). In addition, a single field boundary was examined during the excavation. The data will bear comparison with available map and other documentary evidence and again can be used to demonstrate the longevity of some elements of the local landscape.

8.7 STRATIGRAPHIC POTENTIAL

8.7.1 The overall stratigraphy across the site is difficult to analyse because it has been subject to considerable truncation as a result of plough action. There is, however, potential for analysis by detailed comparison of the fills of the various ditches, postholes and the drip gully to provide any indication of comtemporaneity between the respective elements of the putative settlement complex. The morphology of the roundhouse and the enclosure have the potential to provide direct comparisons with other settlements elsewhere in the country and there is consequently a need for detailed research to provide pertinent comparators. In addition, the further establishment of features pertaining to a later reoccupation of the site will add to the growing body of evidence for this throughout the lowland North West.

8.8 ARTEFACTUAL POTENTIAL

8.8.1 ***Finds Data:*** the archaeological assemblage from the North West as a whole is relatively small, but any material that can provide datable or stratified assemblages, however small, can be used in the refinement of primary type series (particularly of pottery, but also of other material).

8.8.2 ***Romano-British and medieval pottery:*** the pottery has a restricted potential to add to the evidence for dating at the site, but given the importance of the site and the rarity of dated rural assemblages from Lancashire it would warrant some further analysis.

8.8.3 ***Post-Medieval Pottery:*** the two fragments of post-medieval pottery from the excavation have little further potential, since it would not be possible to determine the type of vessel from which they originated, or their precise date. However, the much larger post-medieval assemblage from the evaluation would have the potential to provide an indication of the post-medieval land use for the area of the development.

8.8.4 ***Ceramic building material:*** this material has no potential for further analysis.

8.8.5 ***Stone:*** this material has little potential for further analysis. A note of its presence will, however, contribute both to the broad dating of the features from which the querns were recovered, and to any discussion of the nature of activity undertaken at the site.

8.8.6 ***Industrial debris:*** this material has no potential for further analysis.

8.9 ENVIRONMENTAL POTENTIAL

8.9.1 ***Animal Bone:*** this small assemblage bears no potential for further analysis and, the majority being unstratified, has no discernible use as a source of material for radiocarbon dating.

8.9.2 ***Plant Remains:*** seven of the environmental samples were assessed as having a high potential for further analysis of charred plant remains. The samples selected are shown in *Appendix 5*. Several samples had a high potential for charcoal analysis and it is recommended that four should be taken to full analysis.

8.10 DATING

8.10.1 ***Potential for Radiocarbon Dating:*** radiocarbon dates have thus far been attained for seven contexts (*see Appendix 6*), two from the evaluation and five from the excavation. Given the paucity of artefactual material and the potential importance of the site for an understanding of rural occupants at the time of the Roman occupation of the North, there is a need for a considerable programme of dating to provide dates for all phases of activity in the settlement and particularly for the roundhouse, which at present has no dates directly relating to the structure. However, there are only a limited number of samples which have datable organic material from stratified contexts and it is therefore recommended that all these samples be submitted for radiocarbon dating.

These would provide further dates for the roundhouse eaves drip gully (***155***), roundhouse posthole ***161***, the southern sections of enclosure ditch ***198*** and ***202***, and the third phase of enclosure ditch to the north (***191***).

8.11 REGIONAL PRIORITIES

8.11.1 The proposed development provides a unique opportunity to study a lowland farmstead in close proximity the northern Roman arterial route into Lancaster (Margary 1973). Assessment of the site has made it clear that further analysis will not only be of benefit for the local archaeological record, but will considerably add to the body of knowledge at a regional level. Recent sampling of Roman rural sites in Lancashire has been mainly restricted to military sites and few contemporary 'native' settlements have been examined (Buxton and Shotter 1996, 75-77). Several small individual farmsteads, presumably for single family groups, and larger rural settlements, have been identified along the Lune valley (Shotter and White 1995; 58-76), but again very few of these have been subject to archaeological excavation. The most pertinent comparator is potentially a roundhouse recently excavated by Ron Cowell, of Merseyside Archaeological Field Unit, in conjunction with Liverpool University, at Duttons Farm, near Lathom, Ormskirk. This produced evidence for a timber roundhouse which has been dated to the late Iron Age, but with some continuity into the early Roman period. The site has yet to be published, but the excavator has agreed to an exchange of information in advance of publication (R Cowell pers comm). There is also the potential for comparison within the broader region (eg Cheshire, Merseyside and Cumbria) to examine how the native Roman settlement character of the present site compares with rural settlement evidence from further afield. Indeed, a research priority has been highlighted to identify and investigate Romano-British rural settlements in order to build up a picture of their relationships with the governing Roman authorities (Buxton and Shotter 1996, 90). Although the radiocarbon dates suggest that the site was for the most part of Roman date, some of them have ranges beginning in the pre-Roman Iron Age, and there exists the possibility that the settlement had its origins before the Roman occupation. The site, therefore, may extend across the Iron Age / Roman transition, an era about which there is almost no information. The presence of a native, 'Iron Age type' of settlement coexisting with the Roman fort and associated Romanised urban settlement at nearby Lancaster is of considerable importance, and has the potential to provide an important insight into the continuity of native culture and traditions into the Roman period. This aspect is considered a high priority by the Regional Research Framework which is presently being compiled for the North West Region (Mark Brennand pers comm). The study site will enhance the level of understanding with regard to the development and evolution of the local landscape through the Iron Age / Roman transition and will provide an important insight into the rural economy within the hinterland of Roman Lancaster.

9. UPDATED RESEARCH AIMS AND OBJECTIVES

9.1 ORIGINAL RESEARCH AIMS AND OBJECTIVES

9.1.1 The original academic aims and objectives was specified in *Section 2* of the project design for the excavation (OA North 2003), and reiterated in *Section 4* this report.

9.2 UPDATED RESEARCH AIMS

9.2.1 This section follows the guidance of English Heritage regarding the formulation of updated research aims (English Heritage 1997, 2-3). This recommends that it is useful to treat *aims* as major themes or goals to which specific *objectives* contribute, and think of these aims and objectives as questions.

9.2.2 ***Updated Research Aim 1:*** what is the nature and date of the settlement at the South West Campus access road site and when was it founded?

Objective 1: Is it possible to date the roundhouse by radiocarbon dating methods?

Objective 2: Were the excavated elements contemporary, or can a sequence of activity be recognised?

Objective 3: What is the character and nature of the settlement?

Objective 4: Did the settlement have pre-Roman origins and what native continuity is represented on the site?

Objective 5: Is it possible to provide appropriate study of, and comparison between, other similar excavated sites in Lancashire and the surroundings region?

Objective 6: Did the people have access to the Romanised culture in Lancaster? Is there evidence for trading links?

Objective 7: What is the function of the circular enclosure, and are there any regional or national parallels for this type of feature?

Objective 8: What is the form and layout of the associated field system represented by the boundary ditch, and what is the implication of its presence for the agricultural practices at the site?

Objective 9: What was the material culture of the people living at the farmstead, and what can it tell us about the economy of the farmstead?

Objective 10: Were there changes at the site at the coming of the Romans into the area, and the establishment of the fort at Lancaster.

Objective 11: Is it possible to elucidate our understanding of the local environment and economy of the settlement by further analysis of the environmental samples?

Objective 12: Is it possible to elucidate understanding of the diet of the inhabitants of the settlement by further analysis of the environmental samples?

Objective 13: Is there evidence for industrial activity?

9.2.3 ***Updated Research Aim 2:*** What is the nature and date of the early medieval activity?

Objective 1: What is the character and nature of the early medieval activity on the site?

Objective 2: Is there any continuity between the original settlement and this activity?

9.2.4 ***Updated Research Aim 3:*** How did the landscape develop on this site in the last 2000 years?

Objective 1: Is it possible to enhance our understanding of the development of land-use on the subject site and how it may relate to activity on adjacent sites? How has the landscape been changed from the putative late prehistoric occupation of the site through to and beyond the early medieval and medieval occupation?

Objective 2: Can we recognise the post-medieval landscape by means of comparisons with cartographic data?

10. METHOD STATEMENT

10.1 INTRODUCTION

10.1.1 The following methods are required to fulfil the revised research aims outlined in *Section 9*. This will require a programme of analysis, followed by the preparation of an appropriate text for publication.

10.2 INFORMATION AND REVIEW

10.2.1 It is proposed that regular review meetings should be held to monitor the progress of the analysis, and to keep all parties informed. In addition, OA North will liaise with the radiocarbon laboratory to ensure that the critical dates are obtained within the defined programme.

10.3 PHASING, STRATIGRAPHY AND SITE DESCRIPTIONS

10.3.1 The data from the site will be further analysed so that updated phase plans can be prepared. A stratigraphic outline has been produced for this assessment but this will need to be refined, and detail added. In the course of this analysis, amendments to site matrices will require some recasting to conform to the amended periods and sub-phasing, and to include those contexts whose stratigraphic sequence could not be resolved at the assessment stage.

10.3.2 It is considered essential that specialists should be able to commence work on the small artefact and ecofact assemblages without undue delay. The radiocarbon dating will take an extended period and therefore these samples need to be submitted as a matter of urgency. The stratigraphy and matrices will be completed as soon as possible, to allow information to be disseminated. On completion, the site database will require updating and amending, and will then be provided digitally for the use of specialists. An analytical text will be drafted to cover the stratigraphic sequences. As required, all necessary material will be transported to specialists. Phase plans, and selected plans and sections from the site, will be digitised and drafts prepared for use by the specialists.

10.3.3 Further amendments to the database will be required when the specialists complete their updated reports and dating evidence will also be incorporated. The detailed analytical text of the stratigraphic information will then be written for the final report and relevant plans and sections prepared for integration into the final report.

10.3.4 Data will be compiled from the previous evaluation and assessment work undertaken at the site. Also, cartographic and documentary evidence will be consulted in order to determine the background information required to present coherent data on the historical and topographical background to the site.

10.4 ARTEFACTUAL EVIDENCE

10.4.1 ***Romano-British and medieval pottery:*** a brief catalogue and report should be prepared for inclusion in the final report.

10.4.2 ***Post-medieval pottery:*** the material will be fully quantified and recorded, and then will be prepared in the conventional fashion, accompanied by discussion with regard to dating.

10.4.3 ***Ceramic building material:*** no further work is recommended.

10.4.4 ***Stone:*** an outline catalogue should be prepared and both examples illustrated.

10.4.5 ***Industrial debris:*** no further work is recommended, although the presence of this material will be noted in the final report.

10.5 ENVIRONMENTAL EVIDENCE

10.5.1 ***Charred and waterlogged plant remains:*** the remaining nine samples will be processed and assessed for charred plant remains. Then, from the total of 32 samples that will have been processed, a maximum of ten samples will be selected for analysis for charred plant remains; the data derived from this analysis and the earlier assessment will be included in the site narrative. A summary of the environmental data will be included in the published report. This will add an understanding of the economy of the site, including the methods of crop processing and the earlier environment.

10.5.2 ***Charcoal analysis:*** four samples will be analysed for charcoal. This will produce identification of species, and understanding of woodland management and fuel consumption.

10.5.3 ***Animal bone:*** no further work is recommended.

10.6 DATING

10.6.1 ***Radiocarbon dating***: a further five samples will be submitted for radiocarbon dating. Suitable samples are available from the

- One sample from the fill of the eaves drip gully (***155***)
- One sample from roundhouse posthole ***161***
- Two samples from the southern sections of enclosure ditch ***198*** and ***202***
- One sample from the Third phase of enclosure ditch to the north (***191***).

10.7 ILLUSTRATION

10.7.1 During each part of the analytical programme, a selection will be made of appropriate material for illustration. This will cover general plans, phase plans, and artefacts. Experienced illustrators, using standard conventions, will compile these illustrations, the plans by electronic means and the finds by hand.

10.8 PUBLICATION TEXT

10.8.1 Following the completion of the full analysis of all the stratigraphic and artefactual evidence, a text suitable for publication as an occasional paper, published by Oxford Archaeology North and distributed by Oxbow and a local distribution network. This will be in the format described in *Section 11*, and will incorporate as necessary any information from comparable excavations. This text will be submitted to internal revision, and will be submitted to all specialists after editing, for their comments. The edited text will be submitted to an external referee for formal academic review. Following incorporation of the referee's and other comments, the text will be copy edited, ready for publication.

11. PUBLICATION SYNOPSIS

11.1 INTRODUCTION

11.1.1 Following the analysis and interpretation of the excavation results, a text will be prepared suitable for publication as an occasional publication published by Oxford Archaeology North.

11.2 THE STRUCTURE OF THE REPORT

11.2.1 The following section represents a likely breakdown of the proposed publication. The publication article will address the revised and updated research aims and objectives detailed in *Section 9*.

11.2.2 The text will be supported by a number of graphics, comprising line drawings and photographs to illustrate the evidence, tables to summarise data and, where appropriate, interpretative phase drawings. Specialists will work closely together in order to facilitate integration of material categories. The finished text will aim to present a high degree of integration between both finds categories and the structural/stratigraphical history of the site.

11.3 OUTLINE SYNOPSIS

Summary	400 words
The Excavation Background	
Circumstances of the project/site location	1000 words
Archaeological Background	2500 words
Historical Background	1500 words
Results	
The settlement	3000 words
Early Medieval activity	1000 words
Later agricultural activity	500 words
Finds and Environmental evidence	
Ceramics	500 words
Other finds	500 words
The environmental evidence	2000 words
Discussion	3000 words
Bibliography	
Acknowledgements	400 words

12. RESOURCES AND PROGRAMMING

12.1 PROJECT TEAM

12.1.1 The project team will consist mainly of OA North internal staff, although the radiocarbon dating will be undertaken by an external laboratory. The quality assurance for the project will be maintained by OA North Director, Rachel Newman. The project being managed by Jamie Quartermaine, Senior Project Manager.

12.1.2 The following Oxford Archaeology North and Oxford Archaeology staff will work on the project:

Mark Bagwell	Project Officer	MB
Christine Howard-Davis	Finds Manager	CHD
Andrew Bates	Project Supervisor	AB
Emma Carter	Illustrator	EC
Jo Dawson	Finds Supervisor	JD
Elizabeth Huckerby	Environmental Archaeologist	EH
Frances Claxton	Environmental supervisor	FC
Dana Challoner	Environmental Archaeologist	DC
Rachel Newman	Director OA North	RN
Adam Parsons	Illustrator	AP
Jamie Quartermaine	Senior Project Manager	JQ

12.2 MANAGEMENT

12.2.1 OA North places importance on the tight and effective management of the post-excavation stages of projects in order to deliver best value to our clients. An element of time is provided to on-going quality assurance and internal monitoring. This is part of our internal quality assurance system and ensures the prompt delivery of the agreed report on time and budget. Regular meetings are planned into the task list in order that the representatives of the client will be kept fully informed of the progress of the work.

12.2.2 In addition to the internal team structure, quality standards will be maintained by an external referee, who will appraise the quality of the report prior to publication.

12.3 HEALTH AND SAFETY

12.3.1 All OA North post-excavation work will be carried out under relevant Health and Safety Legislation, including Health and Safety at Work Act (1974). A copy of the Oxford Archaeology Health and Safety Policy can be supplied on request. The nature of the work means that the requirements of the following legislation are particularly relevant:

Workplace (Health, Safety and Welfare) Regulations (1992) – offices and finds processing areas.

Manual Handling Operations Regulations (1992) – transport of bulk finds and samples.

Health and Safety (Display Screen Equipment) Regulations (1992) – use of computers for word-processing and database work.

COSSH (1998) - finds conservation and environmental processing/analysis.

12.4 TASK LIST

12.4.1 The analysis and production of a text suitable for publication has been broken down into a series of tasks, which are set out in the Task List in *Appendix 7*.

12.5 TOTAL COSTS

12.5.1 The total costs for the analysis stage and report production are set out in the Financial Breakdown section in *Appendix 8*.

13. BIBLIOGRAPHY

13.1 PRIMARY SOURCES

13.1.1 *Lancashire County Record Office, Preston (LRO)*

AT/1 1839 Tithe commutation for Corn Rents

DDM 14/2 1756 Ellel, survey for Enclosure Commissioners

DDM 14/28 1769 A map of the manor of Ellel

DDM 28/8 1757 Award of the Enclosure Commissioners, Ellel

DRB 1/73 1839 Plan of the township of Ellel, tithe map and apportionment

13.1.2 *Lancaster City Library (LL)*

Pl 13/42 *c*1815 Plan of Leach House and Brandrigg Estates

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APPENDIX 1: PROJECT DESIGN

April 2003

Oxford Archaeology North

LANCASTER UNIVERSITY

LANCASHIRE

ARCHAEOLOGICAL EXCAVATION

Proposals

The following project design is offered in response to a request from John Riley, Jarvis Construction UK Ltd, for an archaeological excavation at the South-West Campus, Lancaster University.

1. INTRODUCTION

1.1 CONTRACT BACKGROUND

1.1.1 Oxford Archaeology North (OA North) (formerly Lancaster University Archaeological Unit) has been invited by *Jarvis Construction UK Ltd* to submit a project design and costs for an archaeological excavation on the line of the proposed western access road for the proposed South-West Campus, of the Lancaster University, Lancashire. This follows on from, and is informed by, an archaeological evaluation by OA North (OA North 2002). The project design is in accordance with a verbal brief by Lancashire County Archaeological Services (LCAS).

1.2 ARCHAEOLOGICAL BACKGROUND

1.2.1 The evaluation identified a circular enclosure and a settlement area associated with a long boundary. Carbon 14 dates for the settlement area indicate a third to fourth century AD date for the enclosure. The enclosure and settlement are probably of Romano-British date and are of considerable importance given their rarity elsewhere in Lancashire. There is also the vestiges of a medieval field system, comprising lynchets and cultivation terraces at the western end of the area.

1.3 OXFORD ARCHAEOLOGY NORTH

1.3.1 OA North has considerable experience of the evaluation and excavation of sites of all periods, having undertaken a great number of small and large scale projects during the past 18 years. Evaluations and assessments have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. OA North has undertaken extensive archaeological research in the area of Lancaster, including extensive excavations throughout Lancaster city itself, and also programmes of excavation and evaluation at Galgate (LUAU 1997). OA North has undertaken the previous phases of evaluation at the site of the South-West Campus.

1.3.2 OA North has the professional expertise and resource to undertake the project detailed below to a high level of quality and efficiency. OA North and all its members of staff operate subject to the Institute of Field Archaeologists (IFA) Code of Conduct.

2. OBJECTIVES

2.1 The following programme has been designed in accordance with a verbal brief by Peter McCrone, Lancashire County Archaeological Service, LCAS, to provide for a top-soil strip and corresponding excavation on the line of the proposed western access road for the South-West campus, recording sites that have been highlighted by the previous evaluation (OA North 2002). The required stages to achieve these ends are as follows:

2.2 SUPERVISED TOPSOIL STRIP AND CLEANING

2.2.1 A watching brief will be maintained in the course of a topsoil strip of the extent of the proposed eastern access road from the junction with the A6 to the edge of the campus. Following the topsoil strip the site will be subject to manual cleaning of the site concentrating in areas of observed features.

2.3 EXCAVATION

2.3.1 Excavation of features identified in the area of the topsoil strip by means of manual techniques.

2.2 ASSESSMENT REPORT

2.2.1 An archive for the project to the specification provided in Appendices 3 and 6 of English Heritage's *Management of Archaeological Projects, 2nd edition* (MAP2), prepared during the excavation programme and will be prepared to professional standards for deposition in an appropriate repository. An assessment report will then be compiled which will review the dataset and examine the resource requirements for bringing the project to completion. This will enable the subsequent programme of analysis, which will result in text suitable for publication in an appropriate journal.

3. METHODS STATEMENT

3.1 The following work programme is submitted in line with the stages and objectives of the archaeological work summarised above.

3.2 SUPERVISED TOP-SOIL STRIP AND CLEANING

3.2.1 The area on the line of the proposed access road, covering an area of 5680m^2 will be topsoil stripped, using plant to be provided by the client, down to the level of a significant archaeological resource (See attached plan). Excavation of the uppermost levels of modern overburden material will be undertaken in successive, level spits, by a machine fitted with a toothless ditching bucket to the top of the first significant archaeological level. The work will be supervised by a suitably experienced archaeologist.

3.2.2 Thereafter, the area will be selectively cleaned by hand and subsequent excavation of any identified features and/or deposits will, for the most part, be manual. It is anticipated that this would involve the cleaning of one quarter of the stripped area (1420m^2). The areas selected for cleaning will be based on areas of potential following the mechanical strip and then a linear strip along the full length of the easement. Subject to these results there may be a need for additional cleaning to inform specific features, and will be subject to contingency costs. The area of known archaeology, the settlement areas and the enclosure, will be fully cleaned.

3.3 EXCAVATION

3.3.1 Following the cleaning of the site and the identification of the archaeological resource a programme of excavation will be implemented. The costs and time on site for this element are totally reliant on the extent of the features identified during the topsoil strip. It is therefore proposed to cost for this element following the site cleaning. Guideline costs for excavation per square metre are quoted as part of the present project design.

3.3.2 Excavation will be by manual techniques. Pits and postholes will be subject to a 100% by volume controlled stratigraphic excavation, with the remainder of the feature, should it prove necessary to be removed in entirety, excavated quickly keeping only that dating evidence which is securely derived from the feature in question.

3.3.3 Linear cut features, such as ditches and gullies, will be subject to a maximum of 100% by volume controlled stratigraphic excavation, with the excavation concentrating on any terminals and intersections with other features which would provide important stratigraphic information. As with pits and postholes, should it prove necessary to remove the remainder of the feature to expose underlying features and/or deposits, it will be excavated quickly keeping only that dating evidence which is securely derived from the feature in question.

3.3.4 Extensive linear deposits or homogeneous spreads of material will be sample excavated by hand to a maximum of 100% by volume (the size of the sample to be agreed following consultation with LCAS). If features/deposits are revealed which need to be removed and which are suitable for machine excavation, such as large-scale dump deposits, or substantial

linear cut features, then they would be sample excavated to confirm their homogeneity before being removed by machine.

3.3.5 Structural remains will be excavated manually to define their extent, nature, form and, where possible, date. Any hearths and/or internal features will be 100% sample excavated to provide information on their date and function, and the extent of any associated floor surfaces will be determined.

3.3.6 If the excavation is to proceed below a depth of 1.2m then the sides will be stepped in. Cut features identified against the edges of the excavation will not be excavated below a safe working limit of 1.2m unless it is confirmed by LCAS that they are of exceptional importance.

3.3.7 Any cremations and inhumations that are discovered will be subject to a 100% by volume controlled stratigraphic excavation (it should be noted, however, that should intact cremations be revealed then the vessels will be lifted whole for excavation later under laboratory conditions). All human remains will be recorded using OA North's skeleton recording forms. The grave cut and/or coffin and contents will be recorded in plan at 1:20. Significant details of any grave goods, should they be discovered, will be planned at 1:10. Photography will be used to provide a further detailed record of the skeleton. The removal of such remains will be carried out with due care and sensitivity under Home Office Licence as required by the *Burials Act 1857*.

3.3.8 All information identified in the course of the site works will be recorded stratigraphically, using a system, adapted from that used by the Centre for Archaeology Service of English Heritage, with sufficient pictorial record (plans, sections and both black and white and colour photographs) to identify and illustrate individual features. Primary records will be available for inspection at all times.

3.3.9 Results of all field investigations will be recorded on *pro forma* context sheets. The site archive will include both a photographic record and accurate large-scale plans and sections at an appropriate scale (1:50, 1:20 and 1:10). All artefacts and ecofacts will be recorded using the same system, and, following on-site processing, will be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.

3.3.10 Environmental samples (bulk samples of 30 litres volume, to be sub-sampled at a later stage) will be collected from suitable deposits (ie. the deposits are reasonably well dated and are from contexts the derivation of which can be understood with a degree of confidence).

3.3.11 Samples will also be collected for technological, pedological and chronological analysis as appropriate. In particular, where possible samples will be taken for C14 dating. If necessary, access to conservation advice and facilities can be made available. OA North maintains close relationships with Ancient Monuments Laboratory staff at the Universities of Durham and York and, in addition, employs artefact and palaeoecology specialists with considerable expertise in the investigation, excavation and finds management of sites of all periods and types, who are readily available for consultation.

3.3.12 The position of the excavation will be recorded using a total station. The information will be tied in to OD.

3.4 SITE ARCHIVE

3.4.1 Following fieldwork, the results will be collated and the site archive will be completed in accordance with English Heritage MAP 2, Appendix 3. This archive represents the collation and indexing of all the data and material gathered during the course of the fieldwork. It will include summary processing of any features, finds or other data recovered. It is intended that the archive be deposited with the Lancaster City Museum, with the excavated material, and a further copy can be made available for deposition in the National Archaeological Record (RCHME).

3.4.2 ***Archive Assessment:*** OA North accords with best practice for the analysis of the excavation results in accordance with the guidelines of MAP2. This would involve a brief assessment of the data-set generated by the excavation, followed by a review of the excavation archive to establish the potential for further analysis. This assessment will take place in close consultation with the client and the report format will also be agreed at this stage of the work. An appropriate programme of analysis should then be undertaken to prepare a research archive, as detailed in Appendix 6 of *Management of Archaeological Projects.* The Harris Matrix, largely produced during the excavation programme will be completed and checked as part of the assessment. The assessment will involve the compilation of a brief archive report, detailing the stratigraphic history of the site, and outlining the significance of the structural, artefactual and environmental evidence. It is not possible to provide a finite quotation of costs for the final analysis and reporting until the results of the assessment are known, but a best estimate of costs has been submitted on the basis of the results of the evaluation. A provisional programme of post-excavation analysis is proposed, on the basis of the anticipated recovery of material from the excavation; however, the extent of the programme can only be reliably assessed on completion of the fieldwork. The proposed programme anticipates analysis of the artefactual evidence and of the site stratigraphy leading to the production of a final report.

3.5 FINAL EXCAVATION REPORT

3.5.1 ***Final Report:*** the cost implication of this element of the programme will be subject to the assessment and review although an estimate is presented for guidance purposes within the present costs. Following the analysis of the excavation results, a report will be written which will present, summarise, and interpret the results of the programme and will incorporate specialist reports on artefact assemblages and environmental reports. It will include an index of archaeological features identified in the course of the project, with an assessment of the site's development. It will incorporate appropriate illustrations, including copies of the site plans and section drawings all reduced to an appropriate scale. The report will consist of a statement of acknowledgements, lists of contents, executive summary, introduction summarising the brief and project design and any agreed departures from them, methodology, interpretative account of the site and associated structures, gazetteer of features, a complete bibliography of sources from which data has been derived, and a list of further sources identified during the programme of work.

3.5.2 The results of the programme of works detailed above should be placed in the public domain by a number of routes, firstly by publication and secondly by deposition of the archive in an appropriate museum. A synthesis of the work should also be placed in the Lancashire Sites and Monuments Record.

3.5.3 ***Publication:*** it is anticipated that the results will be of sufficient import to warrant their publication. The cost implication of this element of the programme will be subject to the assessment and review.

3.6 GENERAL CONDITIONS

3.6.1 ***Access:*** liaison for basic site access will be undertaken through the Lancaster University and it is understood that there will be access for both pedestrian and plant traffic to the site.

3.6.2 ***Health and Safety:*** full regard will, of course, be given to all constraints (services) during the survey, as well as to all Health and Safety considerations. The OA North Health and Safety Statement conforms to all the provisions of the SCAUM (Standing Conference of Unit Managers) Health and Safety manual. Risk assessments are undertaken as a matter of course for all projects. The Unit Safety Policy Statement will be provided to the client, if required. If there is a requirement to excavate trenches deeper than 1.25m the trenches will be stepped out to minimise section collapse. As a matter of course the Unit uses a U-Scan device prior

to any excavation to test for services. It is assumed that the client will provide any available information regarding services within the study area, if available.

3.6.3 ***Confidentiality:*** the report is designed as a document for the specific use of the client for the particular purpose as defined in this project design, and should be treated as such. Any requirement to revise or reorder the material for submission or presentation to third parties or for any other explicit purpose can be fulfilled, but will require separate discussion and funding.

3.6.4 ***Insurance:*** the insurance in respect of claims for personal injury to or the death of any person under a contract of service with the unit and arising out of an in the course of such person's employment shall comply with the employers' liability (Compulsory Insurance) Act 1969 and any statutory orders made there under. For all other claims to cover the liability of OA North, in respect of personal injury or damage to property by negligence of OA North or any of its employees, there applies the insurance cover of £10m for any one occurrence or series of occurrences arising out of one event.

3.6.5 ***Reinstatement:*** it is understood that there will be no requirement for reinstatement of the ground and that the site will be left open until the start of the road construction.

3.6.6 ***Fencing:*** it is assumed that the site will be protected by fencing from the outset of the topsoil strip to prevent stock and the general public gaining access to the site, and that this will be provided by the client.

3.7 PROJECT MONITORING

3.7.1 ***Lancaster University/Jarvis Construction UK Ltd:*** OA North will consult with the Client regarding access to land within the study area. This consultation will include, if required, the attendance of a representative of LCAS.

3.7.2 ***Lancashire County Archaeological Service:*** any proposed changes to the project brief or the project design will be agreed with LCAS in conjunction with the client.

4. WORK PROGRAMME

4.1 OA North can execute projects at very short notice once an agreement has been signed with the client.

4.2 The project will be under the management of **Jamie Quartermaine, BA, Surv Dip, MIFA** (Unit Project Manager) to whom all correspondence should be addressed. All Unit staff are experienced, qualified archaeologists, each with several years professional expertise.

APPENDIX 2: EVALUATION TRENCH DESCRIPTIONS

INTRODUCTION

The gazetteer below contains the detailed trench descriptions from the evaluation phase of the programme of work. The topsoil, subsoil and natural geology were consistent throughout the site, with some limited variation in the glacial till. Minor differences between topsoil and subsoil descriptions are considered to be the result of different recorders rather than significant changes within these layers. A description of these layers is given below, with any variation from this stratigraphy detailed in the gazetteer.

The topsoil typically comprised a dark grey fine sandy silty clay. The underlying subsoil comprised a mid brownish grey fine sandy silty clay. Included within both these layers were small- to medium-sized sub-rounded stones, forming less than 10% of the topsoil and up to 20% of the subsoil. The natural till typically comprised a mid greyish orange medium sandy clay, with 1% to 10% sub-rounded stone inclusions of a maximum size of 0.38m by 0.29m by 0.15m.

Trench No: **1**
Alignment: north/south
Length: 10.0m
Depth: 0.6m
Description
Topsoil was excavated to a depth of 0.3m, and the subsoil for a further 0.3m, to reveal the underlying natural till. In the northern half of the trench was an area of disturbed natural till. A short rectangular linear feature, continuing under the western baulk, was considered to be either associated with this disturbance or possibly to be a variation in the natural geology. It measured a minimum of 0.8m in length, 0.6m wide, and 0.32m deep, filled with a very light grey matrix. A linear ditch or drain cut across the centre of the trench in an east/west direction. It measured a minimum of 1.6m in length, a maximum of 0.15m wide, and 0.25m deep. It was filled with a very dark brown to black peaty deposit, with frequent small- to medium-sized stone inclusions.

Trench No: **2**
Alignment: north/south
Length: 10.0m
Depth: 0.58m
Description
Topsoil was excavated to a depth of 0.35m, and the subsoil for a further 0.2m, to reveal the underlying natural till. Two current, connecting, stone-filled field drains were located, one orientated in a north-north-west/south-south-east direction, and the second in a east-north-east/west-south-west direction. At the base of the vertical cuts small stone culverts were located which carried the water. No significant archaeological deposits were noted within the trench.

Trench No: **3**
Alignment: east/west
Length: 10.0mm
Depth: 0.6mm
Description
Topsoil was excavated to a maximum depth of 0.4m, and the subsoil for a further 0.20m, to reveal the underlying natural till. Cutting across the centre of the trench was a stone-filled field drain. No significant archaeological deposits were noted within the trench.

Trench No: **4**
Alignment: north/south
Length: 10.0m
Depth: 0.6m
Description

Topsoil was excavated to a depth of 0.25m, and the subsoil for a further 0.35m, to reveal the underlying natural till. An area of disturbed natural geology was noted at the northern end of the trench, and also some variation in the southern end, with lenses of mid grey and greyish white till. No archaeologically significant deposits were noted within the trench.

Trench No: **5**
Alignment: east/west
Length: 10.0m
Depth: 0.6m
Description
Topsoil was excavated to a depth of 0.3m, and the subsoil for a further 0.3m, to reveal the underlying natural till. No archaeological deposits were noted within the trench.

Trench No: **6**
Alignment: east/west
Length: 10.0m
Depth: 0.5m
Description
Topsoil was excavated to a depth of 0.35m, and the subsoil for a further 0.12m, to reveal the underlying natural till. A stone-filled field drain was located, on a north-east/south-west alignment, in the western half of the trench. Also at this end of the trench, continuing under the southern baulk, was a feature, probably oval in shape, measuring a minimum of 0.3m x 0.6m and 0.03m deep. It had an uneven base, and was filled with a mid brownish grey clayey silt containing occasional medium-sized rounded stone inclusions. This was possibly a heavily truncated feature, of unknown date.

Trench No: **7**
Alignment: north /south
Length: 10.0m
Depth: 0.5m
Description
Topsoil was excavated to a depth of 0.45m, and subsoil for a further 0.05m, to reveal the underlying natural till. A stone-filled field drain was noted cutting across the northern end of the trench, orientated on a north-east/south-west alignment, measuring 0.30m wide and containing post-medieval pottery. Also, in approximately the centre of the trench, and continuing under the eastern baulk, was a modern feature. No archaeologically significant deposits were noted within the trench.

Trench No: **8**
Alignment: north/south
Length: 10.0m
Depth: 0.6m
Description
Topsoil was excavated to a depth of 0.30m, and subsoil for a further 0.30m, to reveal the underlying glacial till. Post-medieval pottery was noted within the topsoil. A silty clay and loose stone-filled linear feature was noted cutting across the northern end of the trench, measuring 0.5m wide This was interpreted as a crude field drain. No archaeologically significant deposits were noted within the trench.

Trench No: **9**
Alignment: east/west
Length: 10.0m
Depth: 0.55m
Description

The topsoil and subsoil were excavated to a depth of 0.55m to reveal the underlying natural till. Cutting across the trench, on a north-west/south-east orientation, was a shallow linear feature, ***4***. This comprised a flat-bottomed U-shaped cut measuring at least 4.5m in length, 0.7m wide and 0.05m deep. It was filled with a deposit, ***5***, a moderately compacted mid greyish brown clayey silt. Included within this were a

few charcoal flecks, small coal fragments, small rounded stones and occasional burnt stones. The date of the feature is unknown, but it is not considered to be of great antiquity, considering it contained fragments of coal.

Also contained within the eastern half of the trench was a single, possible, posthole, feature ***6***. It comprised a sub-square cut, measuring 0.28m square and 0.05m deep, with a flat base. It was filled with deposit ***7***, a moderately compact mid greyish brown clayey silt, with dark grey and orangey red clay mottles and frequent charcoal flecks. No dating material was recovered from this feature.

Trench No: **10**
Alignment: north/south
Length: 10.0m
Depth: 0.55m
Description
The topsoil and subsoil were excavated to a depth of 0.55m to reveal the underlying glacial till. An east/west orientated stone-filled drain was located in the southern half of the trench, and a ceramic post-medieval field drain cut across the northern end on a north-west/south-east orientation. A burst water pipe in the southern end of the trench prevented any further observation being made at this end of the trench. No archaeologically significant deposits were noted.

Trench No: **11**
Alignment: north-west/south-east
Length: 10.0m
Depth: 0.5m
Description

The topsoil and subsoil were excavated to a depth of 0.50m to reveal the underlying till. In the south-western half of the trench, a series of features was located. The earliest of these was a north-south orientated linear cut, measuring at least 1.6m in length, 0.6m wide and 0.12m deep, with concave sides falling at a gradient of approximately 1:2 and a concave base. It was filled with a mid greyish brown silty clayey sand, deposit ***18***. This feature may represent a field boundary ditch. Cutting into layer ***18*** was a posthole or small pit, feature ***13***. This comprised a sub-circular feature measuring 0.6m by 0.3m and 0.20m deep, with concave sides and a concave base. It was filled with a mid brown silt clay deposit, ***12***.

To the east were a further two possible postholes, creating an alignment of three. The westernmost feature ***15*** comprised a sub-circular feature measuring 0.40m by at least 0.20m, extending beyond the limit of excavation, and 0.20m deep, with concave sides and base. It was filled with deposit ***14***, a dark greyish brown silty sand with occasional small sub-rounded stone inclusions. The easternmost feature in this alignment, feature ***17***, comprised a sub-circular cut measuring 0.6m by at least 0.3m, extending beyond the limit of excavation, and 0.25m deep. It had concave sides and base, and was filled with a mid greyish brown silty clayey sand with occasional small rounded stone inclusions.

Cutting the fill of feature ***13*** was the construction cut, ***11***, for stone foundation ***10***. This construction cut measured 1.0m wide and 0.20m deep, and was present across the entire width of the trench, with concave sides falling at a gradient of approximately 1:2 on its western side and approximately 1:1 on its eastern side, with a flat base. Foundation ***10*** was orientated in a north/south direction and comprised roughly hewn stone of a maximum size of 0.38m by 0.25m by 0.15m, with rubble and silt bonding material. Only a single course of the foundation was located, but the surviving structure was present across the entire width of the trench, measuring 0.8m wide and 0.3m deep.

Above this foundation, and to the east, was layer ***9***, also present across the width of the trench, and measuring 4.2m wide and 0.1m thick. This comprised a dark brown silty sand with approximately 50% small- to medium-sized sub-angular stone inclusions. This deposit appears to represent the rubble and silt core of a wall, the larger stone apparently having been robbed. It was stratigraphically above deposit ***19***.

Trench No: **12**
Alignment: south-west/north-east
Length: 10.0m
Depth: 0.4m
Description
The topsoil was excavated to a depth of 0.2m, and the subsoil for a further 0.2m, to reveal the underlying natural till. Cutting across the centre of the trench was a linear feature, 1.7m wide, within which an 8" ceramic drainage pipe was located. No archaeologically significant deposits were located within the trench.

Trench No: **13**
Alignment: east/west
Length: 10.0m
Depth: 0.26m
Description
The topsoil was excavated to a depth of 0.10m, and the subsoil for a further 0.16m, to reveal the underlying glacial till. The trench contained three field drains, one containing a ceramic pipe and the other two being stone-filled features. No archaeologically significant deposits were located within the trench.

Trench No: **14**
Alignment: north/south
Length: 10.0m
Depth: 0.5m
Description
Topsoil was excavated to a depth of 0.20m to reveal the underlying glacial till. Cutting across the centre of the trench was an approximately east/west orientated ditch, feature ***23***. This ditch measured 2.2m in width and 0.37m deep, with a wide U-shaped profile and a flat base. It was filled with a mid orangey grey, loose, sandy silty clay, deposit ***24***, with a concentration of medium-sized rounded stone inclusions towards the top of this layer, up to 40% of the matrix, and less than 5% small- to medium-sized stone inclusions towards its base.

Trench No: **15**
Alignment: north/south
Length: 10.0m
Depth: 0.5m
Description
Topsoil was excavated to a depth of 0.3m, and subsoil for a further 0.2m, to reveal the underlying natural till. The northern half of the trench contained concentrations of large rounded and sub-angular stones, interpreted as either a dump of stone over the natural geology, or simply a concentration of stone within the natural till. No significant archaeological deposits were located within the trench.

Trench No: **16**
Alignment: north-west/south-east
Length: 10.0m
Depth: 0.55m
Description
The topsoil was excavated to a depth of 0.2m, and the subsoil for a further 0.3m, to reveal the underlying natural till. In the centre of the trench was a stone-built water tank. Two north-east/south-west aligned stone walls supported three limestone capping stones of a maximum size of 1.9m by 0.78m by 0.12m. The supporting walls comprised mortared stone, measured at least 0.7m high, although water obscured the base of the structure. The construction cut for the structure measured 2.9m wide, with a mix of redeposited topsoil and natural clay, with occasional small- to medium-sized sub-angular stone inclusions, present between the construction cut and the stone structure. The complete structure extended beyond the limit of excavation. Although undated, it is likely to be of post-medieval construction.

Trench No: **17**
Alignment: north-west/south-east
Length: 10.0m
Depth: 0.45m
Description
Topsoil was excavated to a depth of 0.3m, and subsoil for a further 0.10m, to reveal the underlying natural till. A north/south aligned, stone-filled field drain was present at the south-western end of the trench. No archaeologically significant deposits were located within the trench.

Trench No: **18**
Alignment: north-east/south-west
Length: 4.6m
Depth: 1.05m
Description
Topsoil was excavated to a depth of 0.4m, and subsoil for a further 0.1m, to reveal the underlying natural till. No archaeologically significant deposits were located within the trench.

Trench No: **19**
Alignment: east/west
Length: 10.0m
Depth: 0.5m
Description
Topsoil was excavated to a depth of 0.3m, and subsoil for a further 0.2m, to reveal the underlying natural till. A north-west/south-east aligned, stone-filled field drain was present at the eastern end of the trench. No archaeologically significant deposits were located.

Trench No: **20**
Alignment: north-east/south-west
Length: 10.0m
Depth: 0.55m
Description
Topsoil was excavated to a depth of 1.3m, and subsoil for a further 0.25m, to reveal the underlying natural till. An east/west aligned, stone-filled field drain cut across the centre of the trench. No archaeologically significant deposits were located within the trench.

Trench No: **21**
Alignment: east/west
Length: 10.0m
Depth: 0.5m
Description
Topsoil was excavated to a depth of 0.3m, and subsoil for a further 0.1m, to reveal the underlying natural till. No archaeologically significant deposits were located within the trench.

Trench No: **22**
Alignment: north/south
Length: 10.0m
Depth: 0.4m
Description
The topsoil and subsoil were excavated to a depth of 0.4m to reveal the underlying natural till. No archaeologically significant deposits were located within the trench.

Trench No: **23**
Alignment: north/south

Length: 10.0m
Depth: 0.45m
Description
Topsoil was excavated to a depth of 0.23m, and subsoil for a further 0.22m, to reveal the underlying natural till. An east/west aligned, clay- and stone-filled field drain was located at the northern end of the trench. No archaeologically significant deposits were located.

Trench No: **24**
Alignment: north/south
Length: 10.0m
Depth: 0.45m
Description
Topsoil was excavated to a depth of 0.25m, and subsoil for a further 0.2m, to reveal the underlying natural till. Bioturbation, caused by either root action or animal burrows, was visible, disturbing the natural geology in the northern half of the trench. A single posthole, ***153***, was present in roughly the centre of the trench, comprising a circular cut, 0.35m in diameter and 0.11m deep, with concave sides and base. It was filled with a mid to light brown clayey silt, with occasional charcoal flecks and small rounded stone inclusions, deposit ***152***. Although undated, this feature was thought quite likely to be modern in origin due to the nature of its fill.

Trench No: **25**
Alignment: east/west
Length: 10.0m
Depth: 2.4m
Description
Topsoil was excavated to a depth of 0.2m, and the subsoil for a further 0.2m, to reveal the underlying natural till at a depth of 0.4m. Across the western two thirds of the trench a single large, north/south aligned, edge of a feature was excavated, feature ***29***. It measured at least 10.0m in width, being present across the entire width of the trench, and 2.4m deep. The fills of this, apparently deliberately backfilled feature, contained layers of organic material and builders' rubbish, including tarmac and plastic. The feature may represent and old pond or waterhole for livestock. No archaeologically significant features were located within the trench.

Trench No: **26**
Alignment: north/south
Length: 10.0m
Depth: 0.4m
Description
Topsoil was excavated to a maximum depth of 0.25m, and subsoil for a further 0.15m, to reveal the underlying natural till. An east/west aligned post-medieval ceramic field drain was located at the southern end of the trench. No archaeologically significant deposits were noted.

Trench No: **27**
Alignment: north/south
Length: 10.0m
Depth: 0.45m
Description
Topsoil was excavated to a depth of 0.25m thick, and subsoil for a further 0.2m, to reveal the underlying natural till. A stone-filled cut was located across the northern end of the trench, on a north-east/south-west alignment. No archaeologically significant deposits were noted within the trench.

Trench No: **28/33**
Alignment: east/west

Length: 15.0m
Depth: 0.5m
Description

Two trenches, **28** and **33,** were excavated adjacent to each other as originally planned. Trench **28** was excavated in the first instance, then Trench **33**. In order to understand archaeology within both trenches better, the trenches were linked together to form a single entry**.**

The topsoil and subsoil were excavated to a depth of 0.5m to reveal the underlying natural till. Two gullies were observed cutting the natural geology, features ***34*** and ***36***. Gully ***34*** comprised a shallow east/west aligned feature, a minimum of 13.0m in length, 0.6m wide and 0.14m deep, with straight, near vertical, sides and a flat base. It was filled with deposit ***33***, a light greyish brown, loose, sandy silt with occasional small rounded stone inclusions and charcoal flecks.

Gully ***36*** comprised an east/west aligned cut, a minimum of 12.65m in length, 0.4m wide and 0.08m deep, with concave sides and base; this was filled with a light brown sandy silt, deposit ***27***, with occasional small rounded stone inclusions. Both features extended beyond the extent of the trench, but the western terminus of ***34*** and the eastern terminus of ***36*** were in close proximity to each other, forming a gap of 0.58m in roughly the centre of the trench, presumably deliberately created in this manner to form an entrance.

Although these features are undated, their alignment and similar characteristics suggest they are contemporary. A north/south aligned, stone-filled field drain (feature ***32***), cut gully ***34***. It is highly likely that this field drain, as with numerous others on the site, was post-medieval in date, suggesting a *terminus ante quem* for these two gullies. The function of features ***34*** and ***36*** remains uncertain.

Trench No: **29**
Alignment: north/south
Length: 10.0m
Depth: 0.55m
Description
Topsoil was excavated to a depth of 0.25m, and subsoil for a further 0.30m, to reveal the underlying glacial till, with root action visible disturbing some areas of the natural geology. In the southern half of the trench, one circular posthole, feature ***155***, was present, measuring 0.2m in diameter and 0.04m deep. It comprised straight, near vertical, sides and a concave base, and was filled with a mid to light brown clayey loam, deposit ***154***. Although no dating material was recovered, it was considered likely to be post-medieval or modern in date due to the nature of its fill.

Trench No: **30**
Alignment: east/west
Length: 10.0m
Depth: 0.35m
Description
Topsoil was excavated to a depth of 0.2m, and subsoil for a further 0.15m, to reveal the underlying natural till. No archaeological deposits were located within the trench.

Trench No: **31**
Alignment: north/south
Length: 10.0m
Depth: 0.5m
Description
Topsoil was excavated to a depth of 0.25m, and subsoil for a further 0.25m, to reveal the underlying natural till. No archaeological deposits were located within the trench.

Trench No: **32**
Alignment: north/south

Length: 10.0m
Depth: 0.35m
Description
Topsoil was excavated to a depth of 0.2m, and subsoil for a further 0.15m, to reveal the underlying natural till. No archaeological deposits were located within the trench.

Trench No: **34**
Alignment: north/south
Length: 10.0m
Depth: 0.6m
Description
Topsoil was excavated to a depth of 0.3m, and subsoil for a further 0.3m, to reveal the underlying natural till. Cutting across the entire width of the southern half of the trench was the northern edge of a clearly modern, east/west aligned ditch. This was excavated to a depth on 1.2m where excavation ceased due to health and safety reasons. It comprised a slightly irregular cut, falling at a gradient of approximately 1:1. The earliest fill recorded, deposit ***42***, comprised a black sediment 0.23m thick, predominantly of burnt material which had been backfilled into the feature. Above this was a modern backfill of mixed brown and orange clayey sandy silt, deposit ***43***. No archaeologically significant deposits were located within the trench.

Trench No: **35**
Alignment: east/west
Length: 10.0m
Depth: 0.35m
Description
Topsoil was excavated to a depth of 0.2m, and subsoil for a further 0.15m, to reveal the underlying natural till. No archaeological deposits were located within the trench.

Trench No: **36**
Alignment: north/south
Length: 10.0m
Depth: 0.38m
Description
Topsoil was excavated to a depth of 0.11m, and subsoil for a further 0.27m, to reveal the underlying natural till. Areas of root action were visible disturbing the natural till, but no archaeological deposits were located within the trench.

Trench No: **37**
Alignment: north/south
Length: 10.0m
Depth: 0.38m
Description
Topsoil was excavated to a depth of 0.23m, and subsoil for a further 11m, to reveal the underlying natural till. Disturbance of the natural geology via root action was visible in the northern half of the trench, and cutting across the middle of the trench, on a north-east/south-west alignment, was a post-medieval, ceramic, field drain. No archaeologically significant deposits were located within the trench.

Trench No: **38**
Alignment: north/south
Length: 10.0m
Depth: 0.40m
Description
The topsoil and subsoil were excavated to a depth of 0.4m to reveal the underlying natural till. No archaeologically significant deposits were located within the trench.

Trench No: **39**

Alignment: north/south
Length: 10.0m
Depth: 0.55m
Description
Topsoil was excavated to a depth of 0.28m, and subsoil for a further 0.3m, to reveal the underlying natural till. No archaeological deposits were located within the trench.

Trench No: **40**
Alignment: east/west
Length: 10.0m
Depth: 0.4m
Description
The topsoil and subsoil were excavated to a depth of 0.4m to reveal the underlying natural till. No archaeologically significant deposits were located within the trench.

Trench No: **41**
Alignment: east/west
Length: 10.0m
Depth: 0.38m
Description
Topsoil was excavated to a depth of 0.25m, and the subsoil for a further 0.13m, to reveal the underlying natural till. No archaeological deposits were located within the trench.

Trench No: **42**
Alignment: east/west
Length: 10.0m
Depth: 0.4m
Description
Topsoil was excavated to a depth on 0.18m, and subsoil for a further 0.22m, to reveal the underlying natural till. An east/west aligned gully, measuring at least 12.65m in length, 0.4m wide and 0.08m deep, was located cutting down the centre of the eastern two-thirds of the trench, feature ***36***, with concave sides and a concave base. It was filled with a light brown sandy silt with occasional small rounded stone inclusions, deposit ***35***. This formed a very similar feature to those found in Trench 28/33, although its western end petered out rather than forming a deliberate terminus.

Trench No: **43**
Alignment: east/west
Length: 10.0m
Depth: 0.38m
Description
Topsoil was excavated to a maximum depth of 0.16m, and subsoil for a further 0.12m, to reveal the underlying natural till. Gully ***34***, first located in Trench 28/33, was also located aligned east/west in the western half of this trench. It terminated where it appears to have been cut by a stone-filled field drain, cutting across the centre of the trench on a north-east/south-west alignment. Gully ***34*** measured at least 5.12m, within the trench, 0.42m wide and 0.15m deep, but no sign of it was visible to the east of the field drain.

Trench No: **44**
Alignment: north/south
Length: 10.0m
Depth: 0.43m
Description
Topsoil was excavated to a depth of 0.20m, and subsoil for a further 0.23m, to reveal the underling natural till. A stone-filled field drain was located at the southern end of the trench on an east/west alignment. No archaeologically significant deposits were located within the trench.

Trench No: **45**
Alignment: east/west
Length: 10.0m
Depth: 0.45m
Description
Topsoil was excavated to a depth of 0.25m, and subsoil for a further 0.2m, to reveal the underlying natural till. Limited amounts of root action were visible in the eastern half of the trench, disturbing the natural till, and a south-east/north-west stone-filled field drain was present cutting across the centre of the trench. No archaeologically significant deposits were located.

Trench No: **46**
Alignment: north/west
Length: 10.0m
Depth: 0.53m
Description
The topsoil and subsoil were excavated to a depth of 0.53m to reveal the underlying natural till. No archaeological deposits were located within the trench.

Trench No: **47**
Alignment: east/west
Length: 10.0m
Depth: 0.45m
Description
Topsoil was excavated to a depth of 0.25m, and subsoil for a further 0.20m, to reveal the underlying natural till. Cutting across the western half of the trench, in a north/south direction, was a stone-filled field drain. No archaeologically significant deposits were located within the trench.

Trench No: **48**
Alignment: north/south
Length: 10.0m
Depth: 0.4m
Description
This trench was positioned over a possible earthwork visible at ground level. Topsoil was excavated to a depth of 0.3m, and subsoil for a further 0.10m, to reveal the underlying natural geology. In the centre of the trench this sloped to the north at a gradient of approximately 2:1, thereby creating the earthwork. It is possible that this feature represented the remains of a lynchet, a remnant of agricultural activity, although it may well simply have been the result of erosion of the natural till.

Trench No: **49**
Alignment: east/west
Length: 10.0m
Depth: 0.72m
Description
The trench was positioned over a north/south orientated earthwork visible at ground level. Topsoil was excavated to a depth of 0.20m, and subsoil for a further 0.15m, to reveal the underlying natural till. Cutting across the western half of the trench were two, inter-cutting, stone-filled field drains, features ***45*** and ***44***. The slope of the natural till created the earthwork, falling at a gradient of 3:1. It is possible that this feature represented the remains of a lynchet, a remnant of agricultural activity, although it may well simply have been the result of erosion of the natural till.

Trench No: **50**
Alignment: east/west

Length: 10.0m
Depth: 0.4m

Description
Topsoil was excavated to a depth of 0.25m, and subsoil for a further 0.05m, to reveal the underlying natural till. Two stone-filled field drains were located cutting across the centre and western half of the trench. No archaeologically significant deposits were located within the trench.

Trench No: **51**
Alignment: east/west
Length: 10.0m
Depth: 0.55m
Description

The topsoil and subsoil were excavated to a depth of 0.55m to reveal the underlying natural till. Across the centre of the trench lay a presumed post-medieval road surface, stratigraphic group ***71***. This comprised a total of four layers. At its base, above the natural till, layer ***63*** comprised a compacted mid brown sandy silt, with mid orange mottles, and occasional small rounded stone inclusions and charcoal flecks, measuring 1.6m wide and 0.16m thick. This formed an earthen cambered bank upon which the surface of the road was laid. Layer ***64***, above layer ***63***, measured 1.45m in width and 0.03m thick, and comprised a compact, mid to light orangey brown sandy silt, with frequent small rounded stone inclusions. This material formed a bedding layer for the cobbled surface, ***65***. Cobbles ***65*** had a maximum size of 0.25m by 0.25m by 0.25m, covering an area 1.4m wide and 0.15m thick, and were recorded as being one to two courses thick, with a mid brown clayey silt matrix between the stones. This surface was only present over the south-eastern side of the road surface, the opposing side having been eroded away, with only the occasional stone surviving *in-situ*. The uppermost layer of this stratigraphic group, above cobbled surface ***65***, was deposit ***66***; this was a layer of loosely compacted dark brown to black coarse sandy silt, with a high percentage of charcoal flecks, occasional fuel slag and rare iron slag inclusions. It measured 1.6m in width and 0.05m thick, and was present over the upper surface of the road. This appears to have been an attempt to resurface, or perhaps more likely to repair eroded areas, of the road.

Along the eastern edge of the road was a stone-filled drain, ***62***. This comprised a cut running parallel to the road, measuring 0.45m wide and 0.12m deep, with straight sides and a flat base. It was filled with a deposit, ***61***, a mid orangey brown clayey silt, with frequent rounded stone inclusions of a maximum diameter of 0.17m. Along the western edge of the road, a shallow drainage ditch had been cut, feature ***68***, measuring 0.56m wide and 0.22m deep. It was filled with a single deposit, ***67***, comprising a mid orangey brown clay, sandy silt, with occasional small- to medium-sized rounded stone inclusions.

To the east of drain ***62*** lay a further series of deposits. Deposit ***60***, laid above natural till**,** comprised a compacted orange clayey silty sand, with occasional small- to medium-sized sub-rounded and sub-angular stone inclusions, which sloped down into the trench from the eastern baulk at approximately 45º. Interpretation of this slope was not resolved, although one possibility was that deposit ***60*** formed a bank at least 1.4m wide and 0.3m deep to the east of the road, made from possible re-deposited natural till. Alternatively, the deposit may in fact be natural; the gradient of deposit ***60*** may represent a point at which the natural geology had been cut away to create a level area within which a wall was constructed, and as such is the same as cut ***59***. Cut ***59***, at the base of layer ***60***, was a construction cut for foundation ***58***, 0.23m deep, but was only cut down to the level of the base of road ***71***. This construction cut therefore had only one side and a base, and could also have been associated with levelling the area for the road. Foundation ***58***, within cut ***59*** and to the east of drain ***62***, comprised a compact mid to light brown clayey silt, with mid orangey brown mottles and frequent rounded stone inclusions of a maximum size of 0.45m diameter used to form a solid foundation base.

Trench No: **52**

Alignment: north/south
Length: 10.0m
Depth: 0.42m
Description
Topsoil was excavated to a depth of 0.16m, and subsoil for a further 0.26m, to reveal the underlying natural till. A north-west/south-east aligned stone-filled field drain was located cutting the north-eastern corner of the trench. No archaeologically significant deposits were located within the trench.

Trench No: **53**
Alignment: north/south
Length: 10.0m
Depth: 0.42m
Description
Topsoil was excavated to a depth of 0.25m, and subsoil for a further 0.10m, to reveal the underlying natural till. Three stone-filled field drains were located within the trench, aligned in north-west/south east, east/west and north-east/south-west directions respectively. No archaeologically significant deposits were located within the trench.

Trench No: **54**
Alignment: east/west
Length: 10.0m
Depth: 0.4m
Description
Topsoil was excavated to a depth of 0.2m, and subsoil for a further 0.2m, to reveal the underlying natural till. Cutting across the trench, on a north-east/south-west alignment, was a putative gully, 0.03m deep, continuing beyond the limits of excavation. Its fill was identical to the subsoil, and it contained one fragment of post-medieval pottery. It was considered unlikely that this gully was a feature, perhaps having been created by ploughing.

Trench No: **55**
Alignment: east/west
Length: 10.0m
Depth: 0.48m
Description
Topsoil was excavated to a depth of 0.26m, and subsoil for a further 0.1m, to reveal the underlying natural till. At the western end of the trench some root disturbance of the natural geology was visible. No significant archaeological deposits were noted within the trench.

Trench No: **56**
Alignment: east/west
Length: 10.0m
Depth: 0.43m
Description
Topsoil was excavated to a depth of 0.21m, and the subsoil for a further 0.22m, to reveal the underlying natural till. No archaeological deposits were noted within the trench.

Trench No: **57**
Alignment: east/west
Length: 10.0m
Depth: 0.6m
Description

The topsoil and subsoil were excavated to a depth of 0.6m to reveal the underlying natural till. Cutting into the natural geology was one, slightly curving, ditch, two pits and four postholes. The ditch, ***89***, was aligned in a north-east/south-west direction, measuring at least 1.5m in length, 2.0m wide and 1.2m deep, continuing beyond the limit of excavation. It comprised concave sides, at a gradient of

approximately 1:2, and a concave base. It was filled with a deposit, ***88***, a light grey, firm, sandy clay with approximately 30% small to large rounded stone inclusions. Cutting this deposit was linear feature ***84***, containing a post-medieval or modern ceramic field drain at the base of its fill, deposit ***86***.

Pit ***75*** measured 1.1m in diameter and 0.24m deep, with concave sides and a flat base. Its fill, deposit ***74***, comprised a dark greyish brown sandy clay with approximately 2% small rounded stone inclusions and charcoal flecks. Pit ***77*** measured 0.28m in diameter and 0.52m deep, with irregular sides and a concave base. It was filled with deposit ***76***, a light greyish brown sandy clay, with approximately 1% small rounded stone inclusions. Both of these features were tentatively interpreted as rubbish pits.

Posthole ***79*** measured 0.28m in diameter and 0.20m deep, whilst posthole ***81*** was 0.3m in diameter and 0.25m deep, and posthole ***85*** was 0.34m in diameter and 0.3m deep. All had straight, near vertical sides, with a V-shaped profile, and were filled with light greyish brown sandy clay with charcoal flecks, deposits ***78***, ***80***, and ***84*** respectively. Deposit ***80*** also contained approximately 1% small rounded stone inclusions. Postholes ***79***, ***83***, and ***95*** created an approximately east/west alignment of three postholes with 1.66m to 1.7m between them, with posthole ***80*** located 0.53m to the north of the eastern end of this alignment, at very close to a 90º angle. The two pits were almost directly between the three postholes of this alignment, at almost equal distances, which suggests they were features associated with the postholes although it is possible that they formed a separate phase of activity.

Trench No: **58**
Alignment: north/south
Length: 10.0m
Depth: 0.55m

Description
Topsoil was excavated to a depth of 0.35m, and the subsoil for a further 0.2m, to reveal the underlying natural till. At the southern end of the trench, a concentration of stone was located, initially thought to be a variation in the natural geology, although in hindsight there is a small possibility that this material comprised the fill of ditch ***108***.

Trench No: **59**
Alignment: east/west
Length: 10.0m
Depth: 0.43m
Description
Topsoil was excavated to a depth of 0.24m, and subsoil for a further 0.15m, to reveal the underlying natural till. Two inter-cutting, stone-filled field drains were located across the centre of the trench, orientated in a north-east/south-west direction and a roughly north/south direction respectively. In the western end of the trench some limited, modern, disturbance of the natural till was noted. No archaeologically significant deposits were noted within the trench.

Trench No: **60**
Alignment: north/south
Length: 10.0m
Depth: 0.45m
Description
The topsoil and subsoil were excavated to a depth of 0.45m to reveal the underlying natural till. No archaeologically significant deposits were located within the trench.

Trench No: **61**
Alignment: east/west
Length: 10.0m
Depth: 0.5m
Description

The topsoil and subsoil were excavated to a depth of 0.5m to reveal the underlying natural till. No archaeological deposits were located within the trench.

Trench No: **62**
Alignment: north-west/south-east
Length: 10.0m
Depth: 1.4m
Description
This trench was placed over an oval earthwork in what was named the "Wheat Field". Topsoil was excavated to a depth of 0.3m, and subsoil for a further 0.41m, to reveal the underlying natural till. Cutting the subsoil, and covering the south-eastern two-thirds of the trench, a large pit was partially excavated to a depth of 1.1m, where excavation ceased due to health and safety reasons. Stratigraphically this feature was observed cutting the subsoil, measured at least 7m wide, and was present across the entire width of the trench. Its earliest fill comprised a dark grey clay at least 0.6m thick, and its upper fill a orangey brown clay 0.5m thick, containing fragments of post-medieval ceramic field drains and reinforced concrete. The feature was interpreted as a possible clay extraction pit, its backfill at least being of a recent date.

Trench No: **63**
Alignment: south-west/north-east
Length: 10.0m
Depth: 0.6m
Description

The topsoil and subsoil were excavated to a depth of 0.6m to reveal the underlying natural till. Cutting this in the north-eastern half of the trench were three features, a hearth or posthole, feature ***92***, pit ***94***, and a pit or posthole, feature ***96***. The putative hearth, ***92***, was located in the very northern corner of the trench, and comprised a sub-circular cut measuring at least 0.6m in length, at least 0.3m wide, and 0.12m deep, continuing beyond the limit of excavation, with straight sides and a flat base. It was filled with a compact mid to light grey sandy clayey silt, with frequent charcoal flecks and occasional charcoal inclusions of a maximum size of 20mm square.

Pit ***94*** comprised a sub-circular feature at least 1.2m in length, 0.7m wide, and 0.32m deep, continuing beyond the north-western baulk, with concave sides and a flat base. It fill, deposit ***93***, comprised a compact light grey sandy silt clay, with orangey brown mottles, frequent small- to medium-sized sub-rounded stone inclusions, and rare occurrences of charcoal flecks.

Feature ***96*** formed a pit or posthole at least 0.6m in length, 0.26m wide, and at least 0.18m deep, with concave sides and base. It fill, deposit ***95***, comprised a light to mid grey sandy clayey silt, with rare orangey brown mottles and occasional small sub-rounded stone inclusions.

Located in the south-western half of the trench was a north/south aligned, stone-filled field drain and some limited bioturbation caused by root action.

Trench No: **64**
Alignment: east/west
Length: 10.0m
Depth: 1.55m
Description
Topsoil was excavated to a depth of 0.22m, and subsoil for a further 0.28m, to reveal the underlying natural till. At the western end of the trench was a north/south orientated ditch, feature ***97***, measuring 1.8m wide and 0.93m deep, cutting across the entire width of the trench. The cut comprised a U-shaped feature, with straight sides falling at a gradient of approximately 1:1, and a concave base. Its basal fill, deposit ***98***, comprised a mid grey clayey sand with brown mottles, occasional medium- to large-sized rounded stone inclusions and charcoal flecks, and was 0.51m thick. Above this lay a mid grey sandy clay, 0.16m thick, deposit ***99***, below a greenish grey silty sand with brown mottles, 0.26m thick, deposit ***100***. Above this lay deposit ***101***, comprising a yellowish grey silty sand, 0.14m thick, with

approximately 50% medium- to large-sized sub-rounded stone inclusions. The first three deposits were interpreted as the result of natural silting of the ditch, although this fourth fill was thought to represent deliberate back filling of the feature because of the high concentrations of stone within it. The uppermost fill of the ditch, deposit ***102***, measured 0.14m thick and comprised a light grey silty sand, with occasional medium-sized sub-rounded stone inclusions. This was interpreted as the deposition of material eroded from the surrounding topsoils.

Trench No: **65**
Alignment: north/south
Length: 10.0m
Depth: 0.45m
Description
Topsoil was excavated to a depth of 0.45m, and subsoil for a further 0.14m, to reveal the underlying natural till. Although some putative plough scars were located, orientated in an east/west direction, no further archaeologically significant deposits were located within the trench.

Trench No: **66**
Alignment: east/west
Length: 10.0m
Depth: 0.4m
Description
Topsoil was excavated to a depth of 0.3m, and subsoil for a further 0.2m, to reveal the underlying natural till. A north-east/south-west orientated, stone-filled field drain was located at the eastern end of the trench. No archaeologically significant deposits were located within the trench.

Trench No: **67**
Alignment: north-west/south-east
Length: 10.0m
Depth: 0.5m
Description
Topsoil was excavated to a depth of 0.4m, and subsoil for a further 0.1m, to reveal the underlying natural till. A north-east/south-west orientated, stone-filled field drain was located at the north-western end of the trench. No archaeologically significant deposits were located within the trench.

Trench No: **68**
Alignment: north-east/south-west
Length: 10.0m
Depth: 0.4m
Description
The topsoil was excavated to a depth of 0.3m, and the subsoil for a further 0.2m, to reveal the underlying natural till. No archaeological deposits were noted within the trench.

Trench No: **69**
Alignment: north/south
Length: 10.0m
Depth: 0.4m
Description
The topsoil was excavated to a depth of 0.2m, and the subsoil for a further 0.2m, to reveal the underlying natural till. No archaeological deposits were noted within the trench.

Trench No: **70**
Alignment: north/south
Length: 10.0m
Depth: 0.52m

Description
The topsoil was excavated to a depth of 0.30m, and the subsoil for a further 0.10m, to reveal the underlying natural till. A curving field drain, aligned in a roughly north-west/south-east direction, and filled with stone, was located across the centre of the trench. No archaeologically significant deposits were located with the trench.

Trench No: **71**
Alignment: east/west
Length: 10.0m
Depth: 0.52m
Description
Topsoil was excavated to a depth of 0.35m, and subsoil for a further 0.17m, to reveal the underlying natural till. A field drain, orientated in a north-south direction, and filled with stone, was located at the western end of the trench. No archaeologically significant deposits were located in the trench.

Trench No: **72**
Alignment: north/south
Length: 10.0m
Depth: 0.5m
Description
The topsoil and subsoil were excavated to a depth of 0.5m to reveal the underlying natural till. Cutting across the width of the western half of the trench, on a north-east/south-west orientation, was ditch ***115*** which comprises part of the same ditch identified in trench 71. In this trench it measured 1.6m wide and 0.92m deep, with straight sides falling at a gradient of approximately 1:1, with an irregular base forming a U-shaped profile. Deposit ***119***, at the base of the feature and measuring 0.3m thick, comprised a mid grey clayey sand with brown mottles and occasional medium- to large-sized sub-rounded stone inclusions. This deposit represented a primary fill, formed from material eroded from the unstable sides of the feature and from the surrounding topsoils. Above ***119***, along the eastern side of the ditch only and measuring 0.3m thick, was deposit ***120***. This comprised a mid grey clayey sand with brown mottles, interpreted as sediment slumped into the ditch from the eastern side. Stratigraphically above this lay deposit ***118***, a mid grey sandy clay, 0.3m thick, with occasional small rounded stone inclusions. The bulk of the ditch was filled with deposit ***117***, stratigraphically above ***118***, comprising a mid to light grey clayey sand with brown mottles and frequent small- to medium-sized sub-rounded stone inclusions. The uppermost fill, deposit ***116***, measured 0.2m thick and comprised a light grey brown silty sand with frequent small- to medium-sized rounded and sub-rounded stone inclusions.

Trench No: **73**
Alignment: north/south
Length: 10.0m
Depth: 0.5m
Description
Topsoil was excavated to a depth of 0.3m, and subsoil for a further 0.2m, to reveal the underlying natural till. Cutting across the western half of the trench was a stone-filled field drain on a north-east/south-west orientation. No archaeologically significant deposits were located within the trench.

Trench No: **74**
Alignment: east/west
Length: 10.0m
Depth: 0.5m
Description
Topsoil was excavated to a depth of 0.3m, and subsoil for a further 0.2m, to reveal the underlying natural till. Cutting across the centre of the trench was a stone-filled field drain on a north/south orientation. No archaeologically significant deposits were located within the trench.

Trench No: **75**
Alignment: east/west
Length: 10.0m
Depth: 0.4m
Description
Topsoil was excavated to a depth of 0.25m, and subsoil for a further 0.1m, to reveal the underlying natural till. No archaeological deposits were located within the trench.

Trench No: **76**
Alignment: north/south
Length: 10.0m
Depth: 0.5m
Description
Topsoil was excavated to a depth of 0.3m, and subsoil for a further 0.2m, to reveal the underlying natural till. Cutting across the southern half of the trench was a stone-filled field drain on an east/west orientation. No archaeologically significant deposits were located within the trench.

Trench No: **77**
Alignment: north/south
Length: 10.0m
Depth: 0.4m
Description
Topsoil was excavated to a depth of 0.3m, and subsoil for a further 0.1m, to reveal the underlying natural till. No archaeological deposits were located within the trench.

Trench No: **78**
Alignment: east/west
Length: 9.2m
Depth: 0.7m
Description
Topsoil was removed to a depth of 0.25m together with a further 0.50m of subsoil, to revealed the underlying natural till. The till varied slightly from a firm orange brown to a light brown sandy clay, with up to 20% medium to large angular and sub-rounded stone inclusions. No archaeological deposits were located within the trench.

Trench No: **79**
Alignment: north-east/south-west
Length: 6m
Depth: 0.6m
Description
Topsoil was excavated to a depth of 0.30m, beneath which lay 0.20m of subsoil, above the underlying natural till. Across the south-western end of the trench was a north/south orientated ditch, ***126***, measuring 1.70m wide and 0.90m deep, comprising a V-shaped cut with a concave side and base. It basal fill, ***125***, was a mid greyish blue compact clay, 0.10m thick, including less than 5% small angular stones and approximately 5% small rounded stones. Above this, fill ***124*** comprised a mid orange clayey silt with 10% small rounded stone inclusions located on the western edge of the ditch, possibly material slumped in from this side. Overlying ***124*** was deposit ***123***, a mid greyish brown, loose, silty sand deposit with less than 5% medium-sized angular stone inclusions; this was 0.58m thick. This layer formed the main secondary fill of the ditch and had the appearance of being heavily leached of its mineral content. The uppermost fill comprised a mid yellowish brown, loose, sandy silt, 0.20m thick, with 5% small- to medium-sized rounded and sub-angular stone inclusions. This formed part of the ditch in Trenches 71 and 72.

Trench No: **80**
Alignment: north-west/south-east
Length: 9.8m
Depth: 0.57m
Description
The topsoil was excavated to a depth of 0.40m, and the underlying subsoil for a further 0.17m, to reveal the underlying natural till. Three features were identified in the south-eastern half of the trench: a possible ditch terminus continuing into the south-western baulk, ***130***, and two postholes, ***132*** and ***134***. Feature ***130*** lined up with ditch ***127*** in Trench 81, and measured 1.03m wide and a maximum of 0.54m deep, with concave sides and base. The ditch did not have an obvious terminus, singly feeding into the surrounding natural till. Its fill, ***129***, comprised a mid grey fine sandy silty clay, with sub-rounded and sub-angular stone inclusions of a maximum size of 0.12m by 0.11m by 0.08m. This primary fill represents redeposited natural till eroded from the sides, mixed with some material eroded from surrounding topsoils. The two inter-cutting postholes, ***132*** and ***134***, were filled with sediments of an identical matrix, deposits ***131*** and ***133*** respectively. This comprised a friable, mid grey, clayey medium sand. Included within the fills were packing stone, of a maximum size of 0.20m by 0.20m by 0.13m, concentrated around the edge of the features. A large packing stone was placed in between the two, at their intersection. Their shape in plan and the placement of the packing material does suggest that these features represent the position of two posts, both of an unknown date, but which may well be contemporary.

Trench No: **81**
Alignment: north-east/south-west
Length: 4.6m
Depth: 1.05m
Description
The excavation removed 0.25m of topsoil, beneath which was 0.48m of subsoil, to reveal the underlying natural till. Cutting this, on a north-east/south-west orientation, was linear feature ***127***, also recorded in Trench 80 as feature ***130***. In this trench it measured 1.34m wide and 0.27m deep, with a flat base. The sides were at an approximate gradient of 30º, with a concave shape to the south-east and a straight side to the north-west. Its only fill comprised a mid brown, loose, sandy clay, with less than 5% angular and sub-angular stone inclusions of a maximum size of 0.10m by 0.10m by 0.10m.

Trench No: **82**
Alignment: north-east/south-west
Length: 5.4m
Depth: 0.7m
Description
Topsoil was excavated to a depth of 0.30m, and subsoil for a further 0.35m, to reveal the underlying natural till. A current field drain was observed orientated in an east/west direction in the north-eastern half of the trench. The natural geology also included areas of yellowish grey and light greyish brown sandy silt, which was tested by the excavation of a sondage in the south-western half the trench. No archaeological deposits were located within the trench.

Trench No: **83**
Alignment: east/west
Length: 8.0m
Depth: 0.6m
Description
Topsoil was excavated to a depth of 0.30m, and subsoil for a further 0.30m, to reveal the underlying natural till. The natural till comprised a layer of light grey silt with concentrations of medium-sized sub-rounded stone inclusions in concentrations up to 80% to 90% in some parts of the trench. This upper till layer measured 0.30m thick, below which was the natural till, consistent with that described in the introduction of this *Appendix*. At the eastern end of the trench, ditch ***136*** was visible, orientated in a north/south direction. The uppermost fill, deposit ***135***, comprised a light grey, firm, medium sandy clay with 1% to 5% sub-rounded stone inclusions of a maximum size of 0.30m by 0.28m by 0.17m. Also

included within the deposit was less than 1% charcoal flecks. The ditch was not excavated in this trench, but it forms part of the feature identified in trenches 71, 72 and 79.

Trench No: **84**
Alignment: north-west/south-east
Length: 4.7m
Depth: 0.7m
Description
The topsoil was removed to a depth of 0.45m, and the subsoil for a further 0.25m, to reveal the underlying natural till. Cutting the length of the trench, in a roughly north/south direction, was ditch ***147***. The uppermost fill of this feature comprised a mid grey fine sandy silty clay, with 1% to 5% medium-sized stone inclusions, deposit ***146***. This feature was not excavated in this location, but forms part of the ditch traced in Trenches 71, 72, 79 and 83.

Trench No: **85**
Alignment: north/south
Length: 7.5m
Depth: 1.64m
Description

This trench was excavated to a width of 4.75m, making a roughly square trench. The topsoil was removed to a depth of 0.89m. Two liner features were noted cutting the natural till on an approximately north/south orientation. Ditch ***141*** comprised a V-shaped cut, with concave sides falling at a gradient of approximately 1:1 and a concave base, measuring 0.77m deep and 1.75m wide. The ditch appears to have a terminus at its northern end. Its basal fill, ***142***, was 0.57m thick and comprised a firm mid grey brown clay with less than 5% medium- to small- sized stone inclusions, mainly towards the top. Above this was 0.27m of a mid grey, loose, sandy silt, deposit ***143***, with less than 5% small rounded stone inclusions and occasional larger rounded stone of a maximum size of 0.4m by 0.4m by 0.2m,. Cutting layer ***143*** to the east was ditch ***144***. This comprised a wide shallow feature, 1.16m wide and 0.3m deep, with straight sides falling at a gradient of approximately 1:2 and a flat base. It only fill, layer ***145***, comprised a mid grey brown, loose, sandy silt with less than 10% small- to medium-sized stone inclusions, and one larger rounded stone measuring 0.15m by 0.15m by 0.15m. The fill also included one fragment of post-medieval pottery.

It is clear that ditch ***141*** formed part of the boundary traced in Trenches 71, 72, 79, 83, and 84. Interpretation of the later feature is not entirely clear, without seeing more of it in plan, but it may well form a boundary ditch from a later field system.

Trench No: **86**
Alignment: north-west/south-east
Length: 23m
Depth: 0.5m
Description
Further to the standard excavated trench, an additional extension was added at the south-eastern end, measuring 5m in length on a south-west/north-east alignment. Topsoil and subsoil were excavated to a depth of 0.35m, to reveal the underlying natural till. A sondage was excavated through this in the north-western end of the trench. No archaeological deposits were noted within the trench.

Trench No: **87**
Alignment: north-west/south-east
Length: 17.0m
Depth: 0.6m
Description
Topsoil was excavated to a depth of 0.3m and subsoil for a further 0.3m. Below this was a layer of mid grey orange fine sandy silt clay, with 1% to 10% sub-rounded stone inclusions of a maximum size of 0.30m by 0.28m by 0.15m. This was initially thought to be the natural till, but the excavation of Trench

96 at the south-eastern end of this trench proved it to be a layer of re-deposited natural material with the an earlier ditch located beneath it (see noted made on Trench 96).

Trench No: **88**
Alignment: east-north-east/west-south-west
Length: 8.3m
Depth: 0.7m
Description
Topsoil and subsoil were excavated to a depth of 0.7m to reveal the underlying natural till. A current, stone-filled field drain was located at the south-western end of the trench. No significant archaeological deposits were noted within the trench.

Trench No: **89**
Alignment: north-west/south-east
Length: 11.5m
Depth: 0.5m
Description
Topsoil was excavated to a depth of 0.35m, and subsoil for a further 0.15m, to reveal the underlying natural till. No archaeological deposits were noted in the trench.

Trench No: **90**
Alignment: north-east/south-west
Length: 14m
Depth: 0.8m
Description
Topsoil was excavated to a depth of 0.55m, and subsoil for a further 0.25m, to reveal the underlying natural till. No archaeological deposits were noted in the trench.

Trench No: **91**
Alignment: north-west/south-east
Length: 15.7m
Depth: 0.5m
Description
Topsoil and subsoil were excavated to a depth of 0.50m to reveal the underlying natural till. An extension to the original 13.5m length of trench was excavated, on a north/south orientation at the north-western end of this trench, to expose all of feature ***138***. This comprised a sub-rounded or oval cut, 0.85m in length, 0.55m wide, and 0.23m deep, with straight steep sides and an uneven base. Its fill, deposit ***137***, comprised a mid grey silty clay with less than 20% stone inclusions placed in a vertical manner around the edge of the feature. It seems likely that this was a posthole, but of an unknown date. Also cutting across the centre of the trench, in a north/south direction, was a current stone-filled field drain.

Trench No: **92**
Alignment: north-west/south-east
Length: 15.5m
Depth: 0.6m
Description
Topsoil and subsoil were excavated to a depth of 0.6m to reveal the underlying natural till. Cutting across the trench on an east/west orientation was a current stone-filled field drain. No archaeologically significant deposits were noted within the trench.

Trench No: **93**
Alignment: north/south
Length: 18.2m
Depth: 0.5m

Description
Topsoil and subsoil were excavated to a depth of 0.5m, to reveal the underlying natural till. In the northern half of the trench was a possible posthole ***140***. It comprised a sub-circular cut, 0.58m in length, 0.48m wide and 0.11m deep, with concave sides and a flat base. It was filled with a light grey silty clay, with occasional light orange mottles and less than 5% small stone inclusions, deposit ***139***. Also cutting across the trench, in a north-west/south-east direction, was a current field drain.

Trench No: **94**
Alignment: east/west
Length: 9.5m
Depth: 0.6m
Description
Topsoil was excavated to a depth of 0.4m, and subsoil for a further 0.2m, to reveal the underlying natural till. Cutting across the trench, on a south-west/north-east orientation, was a current stone-filled field drain. No archaeologically significant deposits were located within the trench.

Trench No: **95**
Alignment: north-west/south-east
Length: 7.1m
Depth: 1.0m
Description
This trench was excavated initially on a north-west/south-east orientation for 7.1m. It was clear that the major ditch, defined in Trenches 71, 72, 79, 83, 84, and 85, also ran beneath the modern hedgerow to the north-east of the trench. The hedgerow was removed and the trench extended to the north-east for a further 3.05m, measuring a maximum of 3.60m wide. The ditch, feature ***149***, measured 1.6m in width, but was not excavated. Its upper fill, ***148***, comprised a mid to light grey silty clay.

Trench No: **96**
Alignment: east/west
Length: 7.0m
Depth: 1.0m
Description
The topsoil and subsoil were excavated to a depth of 1.0m to reveal the underlying glacial till. This trench was excavated at the south-eastern end of Trench 87 (see notes made on Trench 87). Cut across the trench, on a north-north-west/south-south-east orientation was ditch ***151***, measuring 3.2m wide. A sondage was excavated along the northern baulk through the ditch fill to define its edge, to a depth of 0.3m, but no further excavation on the ditch took place. The upper fill, deposit ***150***, comprised a light grey silty clay, with approximately 50% small to large rounded stone inclusions. This formed part of the major ditch traced in Trenches 71, 72, 79, 83, 84, 85 and 95.

Trench No: **97**
Alignment: north-east/south-west
Length: 9.0m
Depth: 0.55m
Description
The topsoil was excavated to a depth of 0.3m and the subsoil for a further 0.25m, to reveal the underlying natural till. A current, stone-filled field drain was located cutting across the south-western end of the trench. No archaeologically significant deposits were located within the trench.

Trench No: **98**
Alignment: north-east/south-west
Length: 1.6m
Depth: 0.64m
Description
Topsoil was excavated to a maximum depth of 0.3m, and subsoil for a further 0.34m, to reveal the underlying natural till. A current, stone-filled field drain cut across the centre of the trench. A sondage

was excavated in the south-western end of the trench, to a depth of 0.4m, to test the natural geology. No archaeologically significant deposits were located within the trench.

Trench No: **99**
Alignment: north-west/south-east
Length: 14.0m
Depth: 0.45m
Description
Topsoil was excavated to a depth of 0.25m, and the subsoil for a further 0.20m, to reveal the underlying natural till. No archaeological deposits were located within the trench.

APPENDIX 3: EXCAVATION CONTEXT LIST

CONTEXT NO	FEATURE SUBDIV	DESCRIPTION
150	-	Fill of ***151***
151	-	Pit/tree throw, filled by ***150***
152	-	Fill of ditch ***153***
153	-	Post-medieval boundary ditch
154	Roundhouse	Fill of Roundhouse ring gully
155	Roundhouse	Roundhouse ring gully, filled by ***154***
156	-	Fill of ***157***
157	-	Pit, filled by ***156***
158	-	Fill of ***159***
159	-	Pit, filled by ***158***
160	Roundhouse	Fill of ***161***
161	Roundhouse	Small pit/posthole, filled by ***162***
162	Roundhouse	Fill of ***163***
163	Roundhouse	Small posthole/stakehole, filled by ***162***
164	Roundhouse	Fill of ***165***
165	Roundhouse	Small pit/posthole, filled by ***164***
166	Enclosure	Fill of ***167***
167	Enclosure	Pit, filled by ***166***
168	Roundhouse	Fill of ***169***
169	Roundhouse	Posthole, filled by ***168***
170	Roundhouse	Fill of ***171***
171	Roundhouse	Posthole, filled by ***170***
172	Roundhouse	Fill of ***173***
173	Roundhouse	Small pit/posthole, filled by ***172***
174	Roundhouse	Fill of ***175***
175	Roundhouse	Posthole, filled by ***174***
176	Roundhouse	Fill of ***177***
177	Roundhouse	Small pit/posthole, filled by ***176***
178	Roundhouse	Fill of ***179***
179	Roundhouse	Posthole, filled by ***178***
180	Roundhouse	Fill of ***181***
181	Roundhouse	Posthole, filled by ***180***
182	Roundhouse	Fill of ***183***
183	Roundhouse	Posthole, filled by ***182***
184	Roundhouse	Fill of ***185***
185	Roundhouse	Posthole, filled by ***184***
186	Roundhouse	Fill of ***187***
187	Roundhouse	Posthole, filled by ***186***
188	Enclosure, fourth phase	Fill of ***189***
189	Enclosure, fourth	Enclosure ditch cut, northern segment, filled by

	phase	***188***
190	Enclosure, third phase	Fill of ***191***
191	Enclosure, third phase	Enclosure ditch cut, northern segment, filled by ***190/196***
192	Enclosure, second phase	Fill of ***193***
193	Enclosure, second phase	Enclosure ditch cut, northern segment, filled by ***192/268***
194	Enclosure, first phase	Fill of ***195***
195	Enclosure, first phase	Enclosure ditch cut, northern segment, filled by ***194***
196	Enclosure, third phase	Fill of ***191***
197	Enclosure, second phase	Fill of ***198***
198	Enclosure, second phase	Enclosure ditch cut, southern segment, filled by ***197***
199	Enclosure, third phase	Fill of ***200***
200	Enclosure, third phase	Enclosure ditch cut, southern segment, filled by ***199***
201	Enclosure, first phase	Fill of ***202***
202	Enclosure, first phase	Enclosure ditch cut, southern segment, filled by ***201***
203	Enclosure, second phase	Fill of ***204***
204	Enclosure, second phase	Enclosure ditch cut, southern segment, filled by ***203***
205	Roundhouse	Fill of ***206***
206	Roundhouse	Posthole, filled by ***205***
207	-	Fill of ***208***
208	-	Triple pit alignment, filled by ***207***
209	Roundhouse	Fill of ***210***
210	Roundhouse	Small oval feature, filled by ***209***
211	-	Fill of ***212***
212	-	Pit/tree throw, filled by ***211***
213	-	Fill of ***214***
214	-	Possible posthole cut, filled by ***213***
215	-	Fill of ***216***
216	-	Small pit/possible posthole cut, filled by ***215***
217	-	Fill of ***218***
218	-	Small pit/possible posthole cut, filled by ***217***
219	Boundary ditch ***222***	Fill of ***221***
220	Boundary ditch ***222***	Fill of ***221***
221	Boundary ditch ***222***	Cut of boundary ditch ***222***, filled by ***219/220***

222	-	North/south boundary ditch
223	Boundary ditch ***222***	Fill of ***225***
224	Boundary ditch ***222***	Fill of ***225***
225	Boundary ditch ***222***	Cut of boundary ditch ***222***, filled by ***223/224***
226	Boundary ditch ***222***	Fill of ***229***
227	Boundary ditch ***222***	Fill of ***229***
228	Boundary ditch ***222***	Lower fill of ***229***
229	Boundary ditch ***222***	Cut of boundary ditch ***222***, filled by ***226/227/228***
230	Boundary ditch ***222***	Upper fill of ***225***
231	Boundary ditch ***222***	Lower fill of ***225***
232	Boundary ditch ***222***	Cut of boundary ditch ***222***, filled by ***223/224***
233	Boundary ditch ***222***	Fill of ***237***
234	Boundary ditch ***222***	Fill of ***237***
235	Boundary ditch ***222***	Fill of ***237***
236	Boundary ditch ***222***	Fill of ***237***
237	Boundary ditch ***222***	Cut of boundary ditch ***222***, filled by ***233-236***
238	Boundary ditch ***222***	Fill of ***240***
239	Boundary ditch ***222***	Fill of ***240***
240	Boundary ditch ***222***	Cut of boundary ditch ***222***, filled by ***238/239***
241	Boundary ditch ***222***	Fill of ***244***
242	Boundary ditch ***222***	Fill of ***244***
243	Boundary ditch ***222***	Fill of ***244***
244	Boundary ditch ***222***	Cut of boundary ditch ***222***, filled by ***241-243***
245	-	Fill of ***246***
246	-	Shallow pit
247	-	Fill of ***248***
248	-	Shallow pit
249	-	Fill of ***250***
250	-	Cut of tree throw, filled by ***249***
251	-	Cut of pit or tree throw, filled by ***252***
252	-	Fill of ***251***
253	-	Fill of ***254***
254	-	Pit cut, filled by ***253***
255	-	Fill of ***256***
256	-	Tree throw, filled by ***255***
257	-	Fill of ***258***
258	-	Tree throw or pit, filled by ***257***
259	-	Cut of pit or tree throw, filled by ***260***
260	-	Fill of ***259***
261	-	Fill of ***262***
262	-	Tree throw or pit, filled by ***261***
263	-	Charcoal residue within ***265***
264	-	Scorched natural geology at base of ***265***
265	-	Shallow oval hearth, filled by ***263/264***
266	Enclosure	Fill of ***270***
267	Enclosure	Fill of ***270***

268	Enclosure	Lower fill of ***193***
269	Enclosure	Stone packing within posthole ***270***
270	Enclosure	Posthole at centre of ***Enclosure***
271	Enclosure	Lower fill of ***270***
272	-	Upper fill of ***279***
273	-	Fill of ***279***
274	-	Peripheral fill of ***279***
275	-	Fill of ***279***
276	-	Fill of ***279***
277	-	Primary fill of ***279***
278	-	Slumped natural material at edges of ***279***
279	-	Large waterhole
280	-	Deposit, subsoil layer
281	-	Deposit, natural subsoil
282	-	Deposit, topsoil
283	-	Linear stone spread to west of ***222***
284	-	Fill of ***285***
285	Roundhouse	Posthole, filled by ***284***

APPENDIX 4: FINDS SUMMARY

Table 3: Finds from Evaluation Trenches (OA North 2002b)

Trench	Context	Material	Category	No s	Description	Date
1	Topsoil	Ceramic	Vessel	1	Undiagnostic body fragment, brown-glazed redware.	Nineteenth century
10	Ploughsoil	Ceramic	Vessel	1	Rolled rim, late slip-decorated redware.	Nineteenth century?
11	10	Ceramic	Vessel	1	Body fragment. Pearlware.	Late eighteenth - early nineteenth century
11	10	Ceramic	Vessel	3	Undiagnostic body fragments. Late slipwares, including Mocha ware.	Nineteenth - twentieth century
11	10	Ceramic	Vessel	2	Joining undiagnostic body fragments. Late slipped redware.	Nineteenth - twentieth century
11	18	Ceramic	Vessel	1	Undiagnostic body fragment, late slip-decorated redware.	Nineteenth century?
12	Fill of drainage ditch	Ceramic	Vessel	9	Joining fragments of a single jar, grey stoneware.	Late nineteenth – early twentieth century
12	Fill of drainage ditch	Ceramic	Vessel	9	Joining fragments of a single plate, blue and white underglaze transfer-printed whiteware.	Late eighteenth century on
12	Fill of drainage ditch	Ceramic	Vessel	2	Body fragments, whiteware.	Nineteenth century on
12	Fill of drainage ditch	Ceramic	Vessel	1	Body fragment, garden ware.	Nineteenth - twentieth century
12	Fill of drainage ditch	Ceramic	Vessel	1	Body fragment, brown-glazed redware.	Nineteenth century
12	Fill of drainage ditch	Ceramic	Vessel	1	Teapot spout fragment, cream fabric, black glaze.	Nineteenth century
12	Fill of drainage ditch	Glass	Vessel	3	Mould blown bottle, natural blue-green.	Late nineteenth - twentieth century
12	Fill of drainage ditch	Glass	Vessel	2	Joining fragments of mould blown body, colourless.	Late nineteenth - twentieth century
12	Fill of drainage ditch	Leather	Shoe?	6	Small fragments of nail-studded boot sole and small fragment of vamp with copper alloy.	Twentieth century?
25	26	Glass	Vessel	2	Mould blown bottles, colourless. Embossed 'Yorkshire Relish' and 'Puritan Maid'.	Modern
25	27	Ceramic	Vessel	3	Undiagnostic body fragments. Late stoneware.	Late nineteenth – early twentieth century
25	27	Ceramic	Electrical insulator	1	Porcelain circuit insulation.	Twentieth century
25	27	Glass	Vessel	1	Mould blown bottle, colourless. Screw top.	Twentieth century

Trench	Context	Material	Category	No s	Description	Date
27	Fill stone-lined drain	Copper Alloy	Spoon	1	Dessert spoon, base metal.	Modern
28	35	Ceramic	Vessel	1	Undiagnostic body fragment, very soft, coarse fabric, brown glaze. Inclusions >10mm.	Modern?
28	35	Copper Alloy	Button	1	Tinned button.	Modern
32	Subsoil	Ceramic	Clay tobacco pipe	2	Undiagnostic stem fragments.	Post-medieval
34	42	Ceramic	Tile	10	Floor and wall tiles.	Modern
34	42	Ceramic	Drain	1	Stoneware drain fragment.	Modern
37	Topsoil	Ceramic	Vessel	1	Body fragment, blue and white underglaze transfer-printed whiteware.	Late eighteenth century on
37	Topsoil	Ceramic	Vessel	1	Body fragment, black-glazed redware.	Nineteenth century
38	Topsoil?	Ceramic	Vessel	1	Undiagnostic body fragment, gritty oxidised fabric. Thin-walled. Glaze splashes.	Medieval
38	Topsoil	Ceramic	Vessel	1	Body fragment, blue and white underglaze transfer-printed whiteware.	Late eighteenth century on
43	33	Ceramic	Tile/Brick	6	Small undiagnostic fragments. Abraded.	Modern?
45	Topsoil	Ceramic	Vessel	2	Body fragments, sponge-decorated whiteware.	Nineteenth century on
45	Topsoil	Ceramic	Vessel	1	Base fragment, Pearlware.	Late eighteenth–early nineteenth century
46	Topsoil?	Ceramic	Vessel	1	Undiagnostic body fragment, late slip-decorated redware.	Nineteenth century?
48	49	Ceramic	Vessel	1	Undiagnostic body fragment, sandy fabric, incompletely reduced. Glaze splashes.	Medieval
50	51	Ceramic	Vessel	1	Undiagnostic body fragment, gritty white fabric.	Medieval
50	51	Ceramic	Clay tobacco pipe	1	Undiagnostic stem fragment.	Post-medieval
52	57	Ceramic	Vessel	6	Body fragments, whiteware. Small and abraded.	Nineteenth century on
52	61	Bone	Animal	1	Tooth.	
52	61	Ceramic	Vessel	1	Body fragment, blue and white underglaze transfer-printed whiteware.	Late eighteenth century on
53	Fill Drain	Ceramic	Vessel	1	Undiagnostic body fragment, late slip-decorated redware.	Nineteenth century?

Trench	Context	Material	Category	No s	Description	Date
57	73	Ceramic	Vessel	3	Undiagnostic body fragments, gritty fabric, one sherd reduced, two sherds oxidised. Small abraded fragments.	Medieval
62	Fill Pit 121?	Ceramic	Drain	4	Terracotta field drain.	Nineteenth century on
64	98	Stone	Flint	1	Fragment of worked flint. Toffee-coloured flint flake, slight patination. There is little retouch except for notches that appear to form tangs, suggesting that the piece was hafted, perhaps as an arrowhead. A break at the opposite end is unpatinated and thus possibly recent.	Bronze Age?
72	119	Bone	Animal	3	Cow bone?	

Table 4: Finds from Excavation

Context	Material	Category	No s	Description	Date
152	Ceramic	Vessel	2	Small body fragments. Redware fabric with internal black glaze.	Later eighteenth to early twentieth century.
188	Industrial	Debris	2	Joining fragments, plano-convex hearth bottom.	Late Prehistoric-Romano-British
194	Stone	Quern	1	Beehive quern fragment.	-
205	Ceramic	Vessel	1	Very small, abraded fragment. Fabric suggests amphora.	Romano-British?
207	Ceramic	Vessel	1	Partial rim profile. Black Burnished Ware Category 1.	Later second-early third century
209	Stone	Quern	1	Beehive quern fragment.	Late Prehistoric-Romano-British
215	Ceramic	Vessel	3	Small body fragments greyware.	Romano-British.
222	Ceramic	Drain	2	Field drain.	Modern
261	Ceramic	Vessel	3	Very small body fragments. Soft-fired, coarse-gritted fabric.	Possibly Prehistoric
271	Bone	Animal	3	Calcined bone. Extremely small fragments.	-
275	Bone	Animal	1	Remains of a possible bovid mandible	-
Unstratified	Ceramic	Vessel	1	Small body fragment. Orange oxidised gritty fabric with sooted exterior. Northern gritty tradition.	Twelfth to fourteenth century?
Unstratified	Bone	Animal	-	Shattered teeth	-

APPENDIX 5: ASSESSMENT OF CHARRED AND WATERLOGGED PLANT REMAINS

The Numbers in brackets relate to a scale of 1-4 where 1 = 1-5 items and 4 is greater than 100 items

Indet = Identified items; Monocot remains are vegetative fragments from grasses, sedges or rushes

C14 = Potential for further Radiocarbon Dating

Sample	Context	Feature	Description	Vol (litres)	Flot description	Plant remains	Potential
11 Combined	***154***	Fill of ***155***	Romano-British?	50	60ml. Charcoal, poor preservation, engrained. Earthworm egg cases. Modern contamination including roots and seeds.	Cereal (3).	High C14
11 Slot 4	***154***	Fill of ***155***	Romano-British?	10	50ml. Charcoal (1), poor preservation, engrained. Coal, industrial waste earthworm egg cases and fungal sclerotia. Modern contamination including roots.	Cereal (2) *Triticum* and indet, chaff (1) possible glume base and weeds (1) possible *Galium*.	Medium
11 Slot 7	***154***	Fill of ***155***	Romano-British?	20	90ml. Charcoal (2) very engrained with silt, ring porous. Coal, industrial waste, fungal sclerotia, earthworm egg cases and sand. Modern contamination including roots and seeds.	Cereal (1?) other chard (1) indet.	Low
11 Slot 11	***154***	Fill of ***155***	Romano-British?	10	75ml. Charcoal (2) ring porous, very engrained. Coal, industrial waste, sand, quartz and earthworm egg cases. Modern contamination including some roots and seeds.	Cereal (2) *Hordeum*, *Triticum* and indet. Weeds (1) including Caryophyllaceae and Poaceae (<2mm).	Medium
11 Slot 12	***154***	Fill of ***155***	Romano-British?	10	150ml. Charcoal (2) ring porous including roundwood. Coal, industrial waste, earthworm egg cases and sand. Modern contamination including roots and seeds.	Cereal (1) indet., weeds (1) including Poaceae (<2mm) and *Rumex* (charred?).	Low
12	***160***	Fill of pit ***161***	Romano-British?	6	50ml. Charcoal, poor preservation, engrained. Cess (?) blue. Modern contamination including roots and seeds.	Cereal (4), weeds (1) *Stellaria media.*	High C14
13	***168***	Fill of ***169***	Romano-British?	30	70ml. Charcoal (2) ring porous including roundwood. Coal, industrial waste, earthworm egg cases and fungal sclerotia. Modern contamination including roots and seeds.	Weeds (1) including Caryophyllaceae (charred?) and indet.	Low
15	***176***	Fill of ***171***	Romano-British?	20	165ml. Charcoal (4) ring porous. Coal, bone, earthworm egg cases and sand. Modern contamination including roots, seeds and paper.	Cereal (1) *Triticum*.	Low. High for charcoal

Sample	Context	Feature	Description	Vol (litres)	Flot description	Plant remains	Potential
17	***215***	Fill of posthole ***216***	Romano-British?	12	75ml. Charcoal (3) ring porous and roundwood. Coal, insects and earthworm egg cases. Modern contamination including roots, seeds and paper.	Cereal (3) *Hordeum* (hulled and unhulled), *Triticum* and other. Weeds (2) including *Plantago*, Poaceae (<2mm), *Polygonum* and *Ranunculus*.	High
19	***190***	Fill of enclosure 1 ditch ***191***, slots 21/22	Romano-British?	30	Charcoal (2). Modern contamination including roots, stems and leaves.	Cereal (1) *Triticum*, *Hordeum* and indet.	Low C14
20	***192***	Fill of enclosure 1 ditch ***193***, slot 19	Romano-British?	10	<25ml. Charcoal (2) including *Alnus/Betula/Corylus*-type.	Cereal (1) *Hordeum/ Triticum*, weeds (1) *Juncus* seedhead (?).	Low
21	***192***	Fill of enclosure 1 ditch ***193***, slot 17	Romano-British?	20	100ml. Charcoal (4) including *Alnus/Betula/Corylus*-type, engrained. Sand and gravel. Modern contamination including roots, leaves and seeds.	Cereal (2) *Hordeum*, *Avena* and indet, engrained. *Juncus* stems and tubers.	Medium. High for charcoal C14
22	***188***	Fill of enclosure ditch ***189***, slot 15	Romano-British?	30	180ml. Charcoal (4) ring porous (mixed taxa). Industrial waste, bone, earthworm egg cases, fungal sclerotia, and sand. Modern contamination including roots and seeds.	Cereals (2) *Triticum* and possibly *Hordeum*. Weeds (2) Caryophyllaceae and Chenopodiaceae	Medium. High for charcoal
23	***166***	Fill of pit ***167*** inside enclosure	Romano-British?	20	70ml. Charcoal (2) ring porous including roundwood. Earthworm egg cases, fungal sclerotia and sand. Modern contamination including roots and seeds.	Cereals (2) *Hordeum* and *Bromus* (?). Weeds (2) including *Carex* lenticular type and Poaceae (<2mm).	Medium
24	***156***	Fill of pit ***157***	Romano-British?	20	75ml. Charcoal (2-3). Modern contamination including roots.	Cereal (3) *Hordeum/Emmer/Spelta*, badly engrained. Weeds (1) including Chenopodiaceae and *Raphanus*. Waterlogged plant remains seeds.	High
25	***201***	Fill of enclosure ditch ***202***, slot 25	Romano-British?	30	280ml. Charcoal (4) mixed taxa and roundwood. Coal, bone, industrial waste, earthworm egg cases and indet. Modern contamination including roots and seeds.	Cereals (2) *Triticum* (?), *Hordeum* (?) and indet. Weeds (1) including *Rubus*.	Medium. High for charcoal C14

Sample	Context	Feature	Description	Vol (litres)	Flot description	Plant remains	Potential
28	***197***	Fill of enclosure ditch ***198***, slot 5	Romano-British?	30	850ml. Charcoal (4) ring porous (mixed taxa) including *Quercus*. Industrial waste, earthworm egg cases, fungal sclerotia and sand.	Cereal (2-3) *Hordum (*Hulled and unhulled) and *Bromus* (?). Other charred (1) *Prunus*.	Medium-high. High for charcoal C14
35	***261***	Tree throw	Romano-British?	<10grams	210ml. Charcoal (1).	-	None
36	***263***	Charcoal residue from bonfire/hearth context ***265***, associated with roundhouse	Romano-British?	20	500ml assessed of much larger flot. Charcoal (4+++) including roundwood, twigs, *Quercus* and *Alnus/Betula/Corylus*. Bone, sand, silt and insects. Modern contamination including roots.	Possible male catkin axis.	High for charcoal
37	***194***	Fill of enclosure ditch ***193***	Romano-British?	20	75ml. Charcoal (4) including *Quercus* and roundwood but very engrained. Bone. Modern contamination including roots and seeds.	Cereals (3) *Hordeum* and *Triticum*, very engrained. Other charred material including *Corylus* shell.	High. High for charcoal
38	***266***	Fill of posthole at centre of enclosure	Romano-British?	10	100-125ml. Charcoal (3) mixed taxa. Sand, silt and clay. Modern contamination including roots, seeds and insects.	Cereals (3) *Hordeum*, very engrained with silt. Weeds (1) *Sambucus*.	High
39	***267***	Fill of posthole at centre of enclosure	Romano-British?	20	<50ml. Charcoal (4), coal, sand and gravel. Modern contamination including roots.	Cereals (2) *Hordeum*, *Triticum* and indet.	Medium. High for charcoal
41	***233***	Upper fill of boundary ditch ***222***	Romano-British?	30	150ml. Charcoal (2) ring porous and coal, industrial waste, earthworm egg cases insects and sand. Modern contamination including roots and seeds.	Chaff (1-2) glume base (?). Weeds (2) indet.	Low
42	***235***/***236***	Lower/Primary fill of boundary ditch ***222*** from slot cut ***237***	Romano-British?	20	80ml. Charcoal (3) mixed taxa, earthworm egg cases and sand. Modern contamination including seeds	-	None

Sample	Context	Feature	Description	Vol (litres)	Flot description	Plant remains	Potential
43	***271***	Fill of stakehole ***270***	Romano-British?	10	65ml. Charcoal (1) and coal, earthworm egg cases, fungal sclerotia insects and sand. Modern contamination including seeds.	Cereal (2) *Hordeum* and indet. Weeds (1) Caryophyllaceae.	Medium
44	***276***	Fill of waterhole ***279***	Romano-British?	30	110ml. Charcoal (1-2) ring porous including *Quercus*. Plus insects, quartz and sand. Modern contamination including seeds.	Weeds (1) indet.	None
45	***277***	Fill of waterhole ***279*** primary grey fill	Romano-British?	30	290ml. Matrix – monocot fragments, insect fragments, roots, twigs, earthworm egg cases, fungal sclerotia, sand and quartz.	Weeds (4) including *Ranunculus* Batrachium-type, *Ranunculus* sp, *Rubus fruticosus* (2), *Sambucus nigra* and *Urtica dioica*.	None

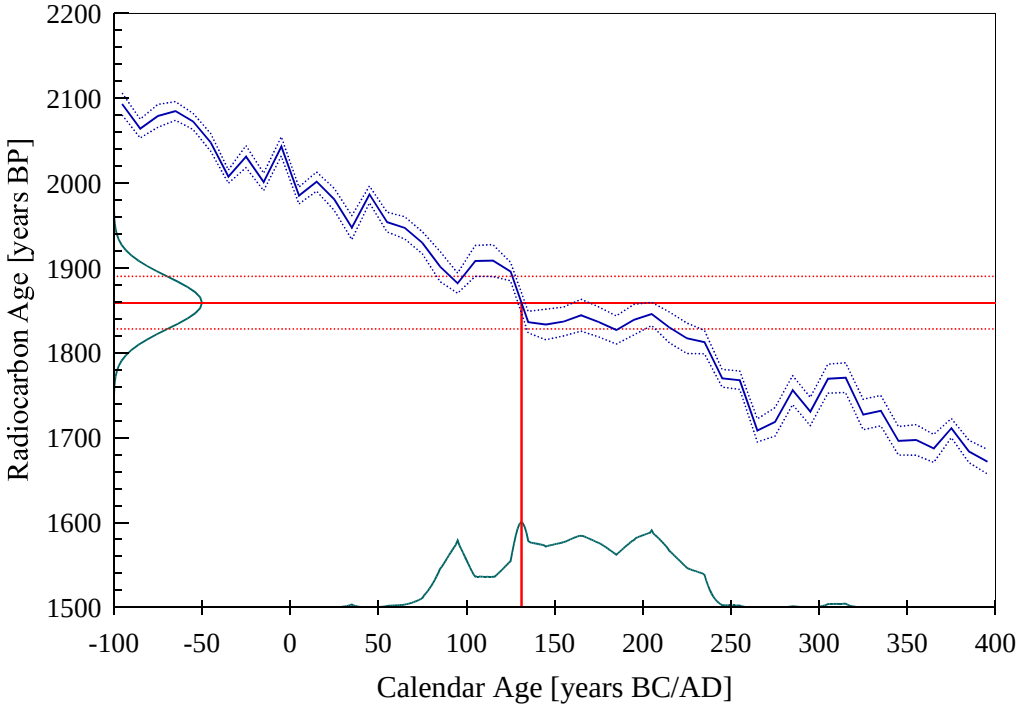
APPENDIX 6: RADIOCARBON DATING

KIA22558 BH02 <39> (267)

3 carbonised Triticum grains and 3 fragments of cereal grains, Lancaster University, sample depth: 0,50 m

Fraction	Corrected pMC†	Conventional Age	$\delta^{13}C$(‰)‡
carbonized seeds, alkali residue, 2.5 mg C	79.34 ± 0.31	1860 ± 30 BP	-22.78 ± 0.08
carbonized seeds, humic acids, 0.07 mg C	84.86 ± 2.29	1320 +220 / -210 BP	-30.55 ± 0.48

Radiocarbon Age: BP 1859 ± 31
Calibrated Age: cal AD 131
One Sigma Range: cal AD 91 - 98 (Probability 4.1 %)
(Probability 68,3 %) 126 - 183 (Probability 42.3 %)
187 - 216 (Probability 21.9 %)
Two Sigma Range: cal AD 82 - 236 (Probability 95.4 %)



References for calibration:
The calibrated age is according to “CALIB rev 4.3” (Data set 2),
Stuiver et al., Radiocarbon **40**, 1041 - 1083, 1998

† “Corrected pMC" indicates the percent of modern (1950) carbon corrected for fractionation using the ^{13}C measurement. The indication “> 1950*” denotes the influence of bomb ^{14}C

‡ Please note that the $\delta\ ^{13}C$ includes the fractionation occurring in the sample preparation as well as in the AMS measurement and therefore cannot be compared to a mass-spectrometer measurement.

KIA22559 BH02 <38> (266)

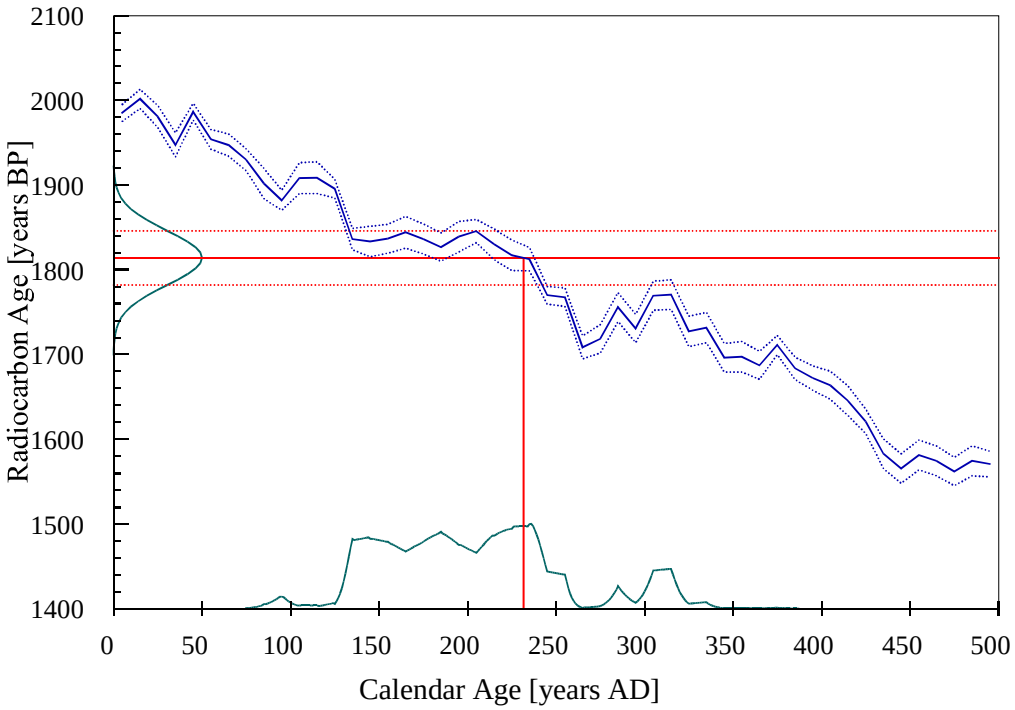
4 carbonised Hordeum grains, Lancaster University, sample depth: 0,50 m

Fraction	Corrected pMC†	Conventional Age	$\delta^{13}C$(‰)‡
carbonized seeds, alkali residue, 3.5 mg C	79.79 ± 0.31	1815 ± 30 BP	-22.36 ± 0.03

Radiocarbon Age: BP 1814 ± 32
Calibrated Age: cal AD 232

One Sigma Range: cal AD 134 - 161 (Probability 19.1 %)
(Probability 68,3 %) 169 - 199 (Probability 21.9 %)
208 - 241 (Probability 27.3 %)

Two Sigma Range: cal AD 127 - 259 (Probability 85.9 %)
(Probability 95,4 %) 281 - 291 (Probability 1.9 %)
298 - 322 (Probability 7.6 %)



References for calibration:

The calibrated age is according to “CALIB rev 4.3” (Data set 2),
Stuiver et al., Radiocarbon **40**, 1041 - 1083, 1998

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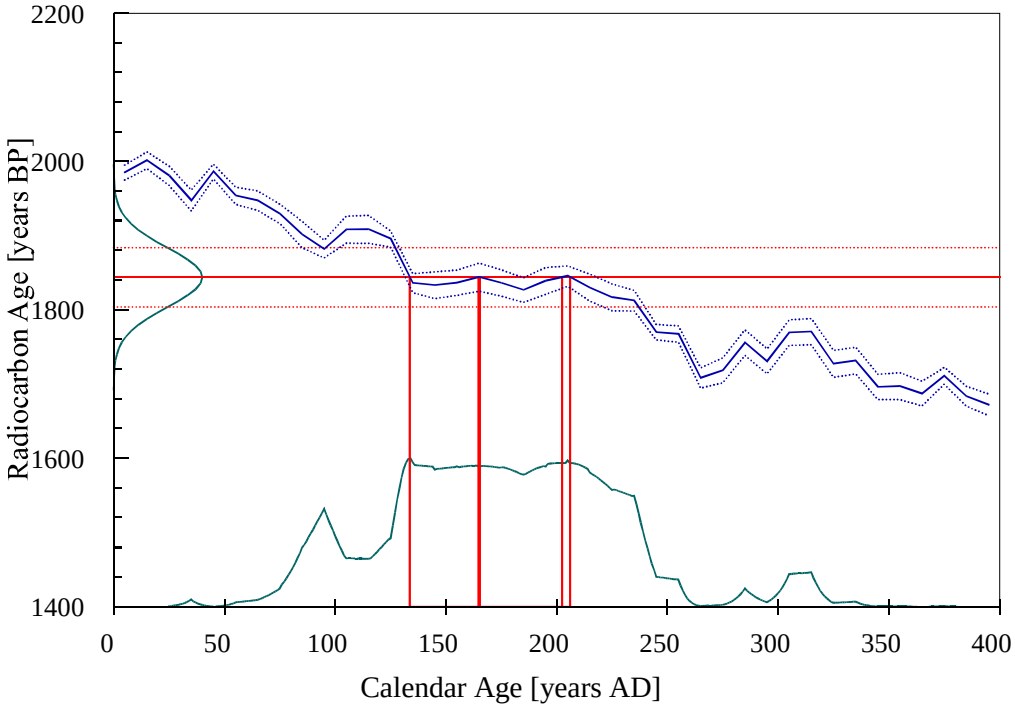
‡ Please note that the $\delta\ ^{13}C$ includes the fractionation occurring in the sample preparation as well as in the AMS measurement and therefore cannot be compared to a mass-spectrometer measurement.

KIA22560 BH02 <37> (194)

4 carbonised Hordeum grains, Lancaster University, sample depth: 0,50 m

Fraction	Corrected pMC†	Conventional Age	$\delta^{13}C$(‰)‡
carbonized seeds, alkali residue, 5.6 mg C	79.49 ± 0.40	1845 ± 40 BP	-21.88 ± 0.03

Radiocarbon Age: BP 1844 ± 40
Calibrated Ages: cal AD 134, 165, 165, 202, 206
One Sigma Range: cal AD 129 - 227 (Probability 68.3 %)
Two Sigma Range: cal AD 78 - 254 (Probability 93.5 %)
(Probability 95,4 %) 304 - 316 (Probability 1.9 %)



References for calibration:
The calibrated age is according to “CALIB rev 4.3” (Data set 2),
Stuiver et al., Radiocarbon **40**, 1041 - 1083, 1998

† “Corrected pMC" indicates the percent of modern (1950) carbon corrected for fractionation using the ^{13}C measurement. The indication “> 1950*” denotes the influence of bomb ^{14}C

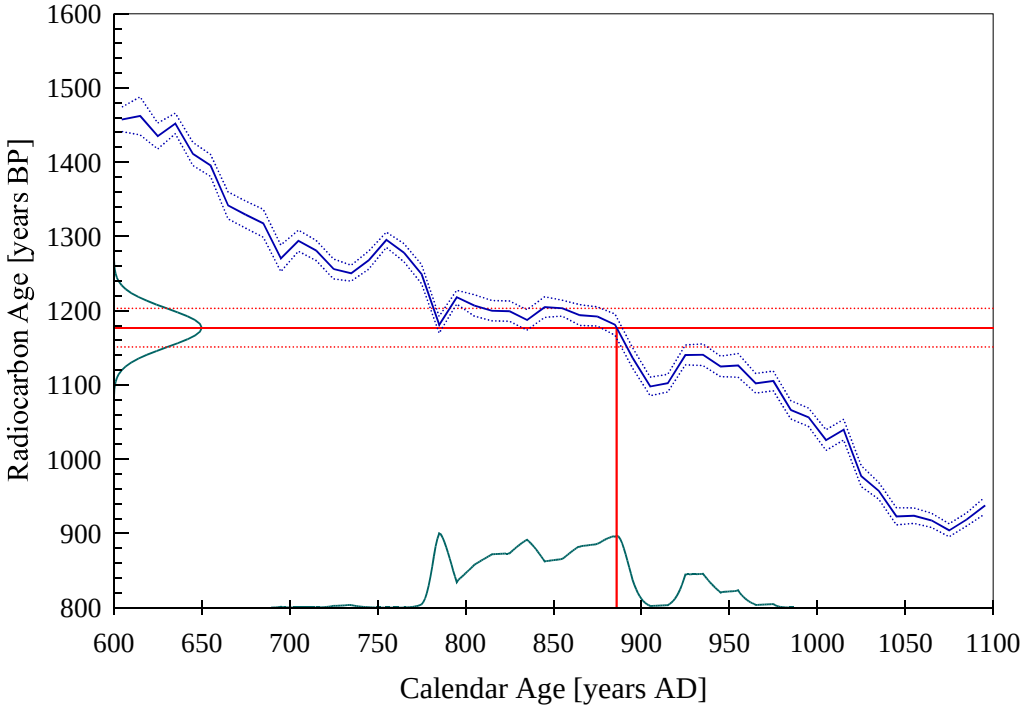
‡ Please note that the $\delta\ ^{13}C$ includes the fractionation occurring in the sample preparation as well as in the AMS measurement and therefore cannot be compared to a mass-spectrometer measurement.

KIA22561 BH02 <36> (263)

carbonised catkin axis and diffuse porous roundwood, Lancaster University, sample depth: 0,50 m

Fraction	Corrected pMC†	Conventional Age	$\delta^{13}C$(‰)‡
carbonized plant material, alkali residue, 5.7 mg C	86.37 ± 0.28	1175 ± 25 BP	-26.08 ± 0.10

Radiocarbon Age: BP 1177 ± 26
Calibrated Age: cal AD 886
One Sigma Range: cal AD 782 - 791 (Probability 8.2 %)
(Probability 68,3 %) 810 - 844 (Probability 26.6 %)
851 - 892 (Probability 33.5 %)
Two Sigma Range: cal AD 778 - 898 (Probability 84.9 %)
(Probability 95,4 %) 921 - 945 (Probability 8.6 %)
946 - 956 (Probability 1.9 %)



References for calibration:
The calibrated age is according to “CALIB rev 4.3” (Data set 2),
Stuiver et al., Radiocarbon **40**, 1041 - 1083, 1998

† “Corrected pMC" indicates the percent of modern (1950) carbon corrected for fractionation using the ^{13}C measurement. The indication “> 1950*” denotes the influence of bomb ^{14}C

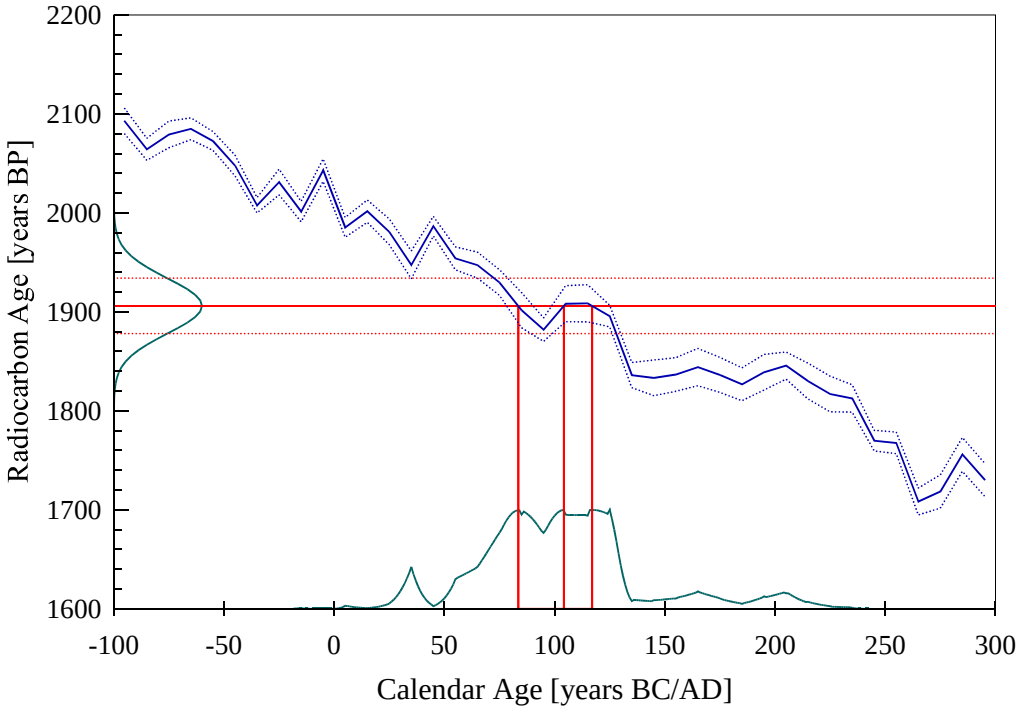
‡ Please note that the $\delta\ ^{13}C$ includes the fractionation occurring in the sample preparation as well as in the AMS measurement and therefore cannot be compared to a mass-spectrometer measurement.

KIA22562 BH02 <20> (192)

1 carbonised Hordeum grain, Lancaster University, sample depth: 0,50 m

Fraction	Corrected pMC†	Conventional Age	$\delta^{13}C$(‰)‡
carbonized seeds, alkali residue, 3.3 mg C	78.88 ± 0.28	1905 ± 30 BP	-21.77 ± 0.06

Radiocarbon Age: BP 1906 ± 28
Calibrated Ages: cal AD 84, 104, 117
One Sigma Range: cal AD 72 - 128 (Probability 68.3 %)
Two Sigma Range: cal AD 27 - 42 (Probability 4.7 %)
(Probability 95,4 %) 49 - 135 (Probability 81.2 %)
145 - 178 (Probability 5.7 %)
191 - 212 (Probability 3.8 %)



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References for calibration:
The calibrated age is according to “CALIB rev 4.3” (Data set 2),
Stuiver et al., Radiocarbon **40**, 1041 - 1083, 1998

† “Corrected pMC" indicates the percent of modern (1950) carbon corrected for fractionation using the ^{13}C measurement. The indication “> 1950*” denotes the influence of bomb ^{14}C

‡ Please note that the $\delta\ ^{13}C$ includes the fractionation occurring in the sample preparation as well as in the AMS measurement and therefore cannot be compared to a mass-spectrometer measurement.

APPENDIX 7: TASK LIST

Task No	Task	Days	Resources
Task 1:	Project Set up	1	JQ
	Contact / Liaise with Project Team	0.5	JQ/ CHD / MB / AB
Task 2:	Upgrading of context database	4	PS
Task 3:	Refine Phasing / Edit Matrix	7	MB
Task 4:	Production of Site Narrative	15	MB
Task 5:	Research	8	MB
Task 6:	Stratigraphic illustrations	10	Illust
Task 7:	Preparation of C14 dates	2	EH
Task 8:	Finds Analysis	7	CHD
Task 9:	Finds Research	4	CHD
Task 10:	Palaeoenvironmental Analysis	12	EH/DC
Task 11:	Finds illustrations	4	Illust
Task 12:	Publication Compilation	15	MB / CHD
Task 13:	Reconstruction drawings for publication	5	Illust
Task 14:	Editing	2	JQ
Task 15:	Quality assessment of Publication	1	RMN
Task 16:	Integrate Edits into Text	2	MB
Task 17:	Prepare Archive for Deposition	1	PS

APPENDIX 8: FINANCIAL BREAKDOWN

SOUTH WEST CAMPUS, LANCASTER UNIVERSITY, POST-EXCAVATION COSTINGS

The total cost quoted for the post-excavation is a fixed price which is inclusive of all management, overheads, and other disbursement costs (travel and expenses), to undertake the programme of work as defined in this project assessment. Any other variations from this programme of work at the clients' direction will require recosting. All staff costs are inclusive of holiday entitlement, as well as NI and Superannuation.

- All costs are exclusive of VAT
- Salaries and wages inclusive of NI, Superannuation and overheads
- Project duration beyond 31-03-2005 will require adjustment for inflation

The costs for publication assume that the results will be disseminated in an occasional paper published by Oxford Archaeology North. The costs for printing, desk top publishing and distribution costs are not included below, but a ball park estimate is offered and will be refined once the publication text has been completed.

Post-Excavation Analysis and Preparation of Publication Text	£ 16930.00
Radiocarbon dates (x5)	£ 1800.00
TOTAL COSTS	£18,730.00

Ball park estimate for publication costs	£ 5000.00

ILLUSTRATIONS

LIST OF FIGURES

LIST OF PLATES

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0 5000
metres

Figure 1: Location map

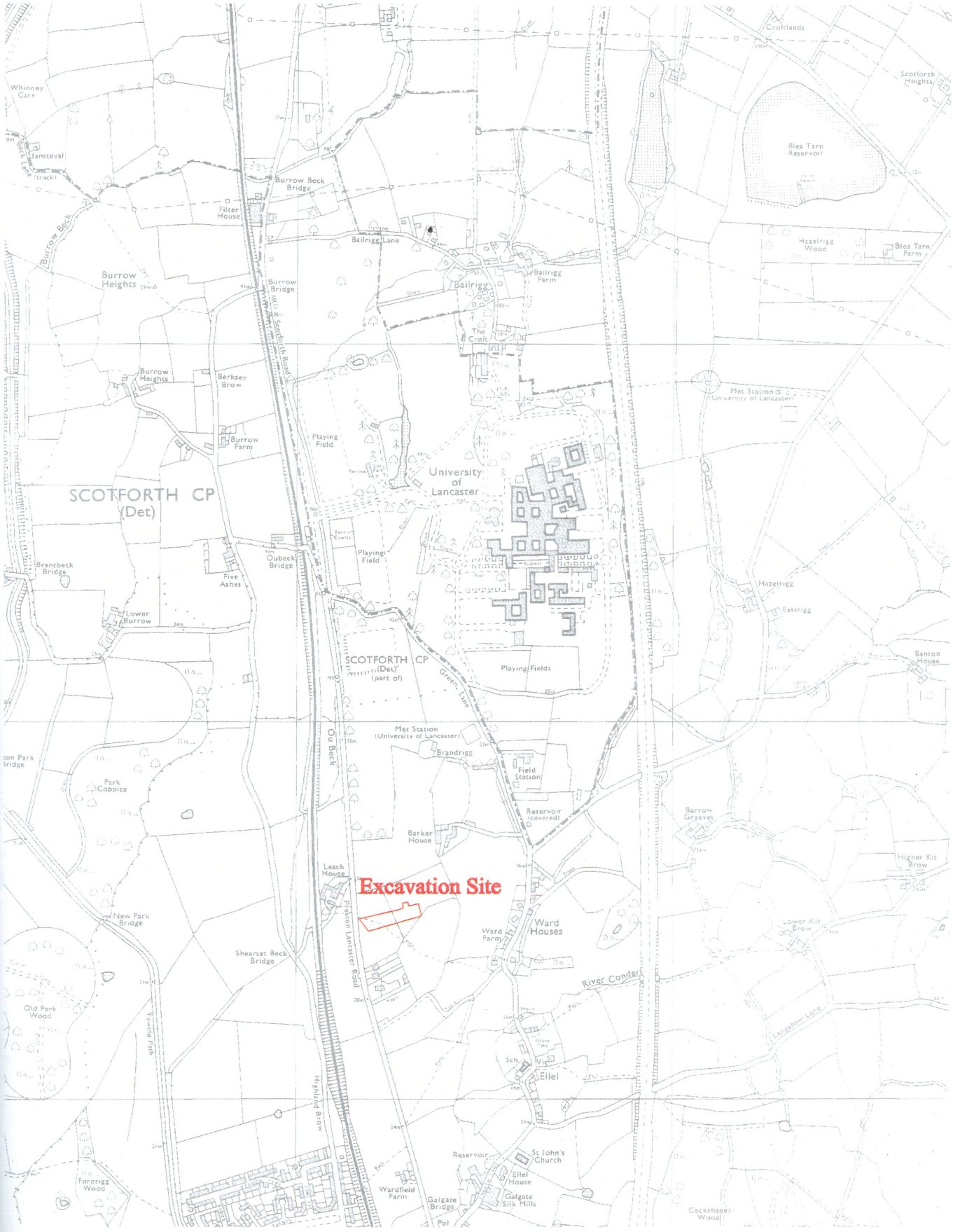

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Figure 2: Detailed Location Map

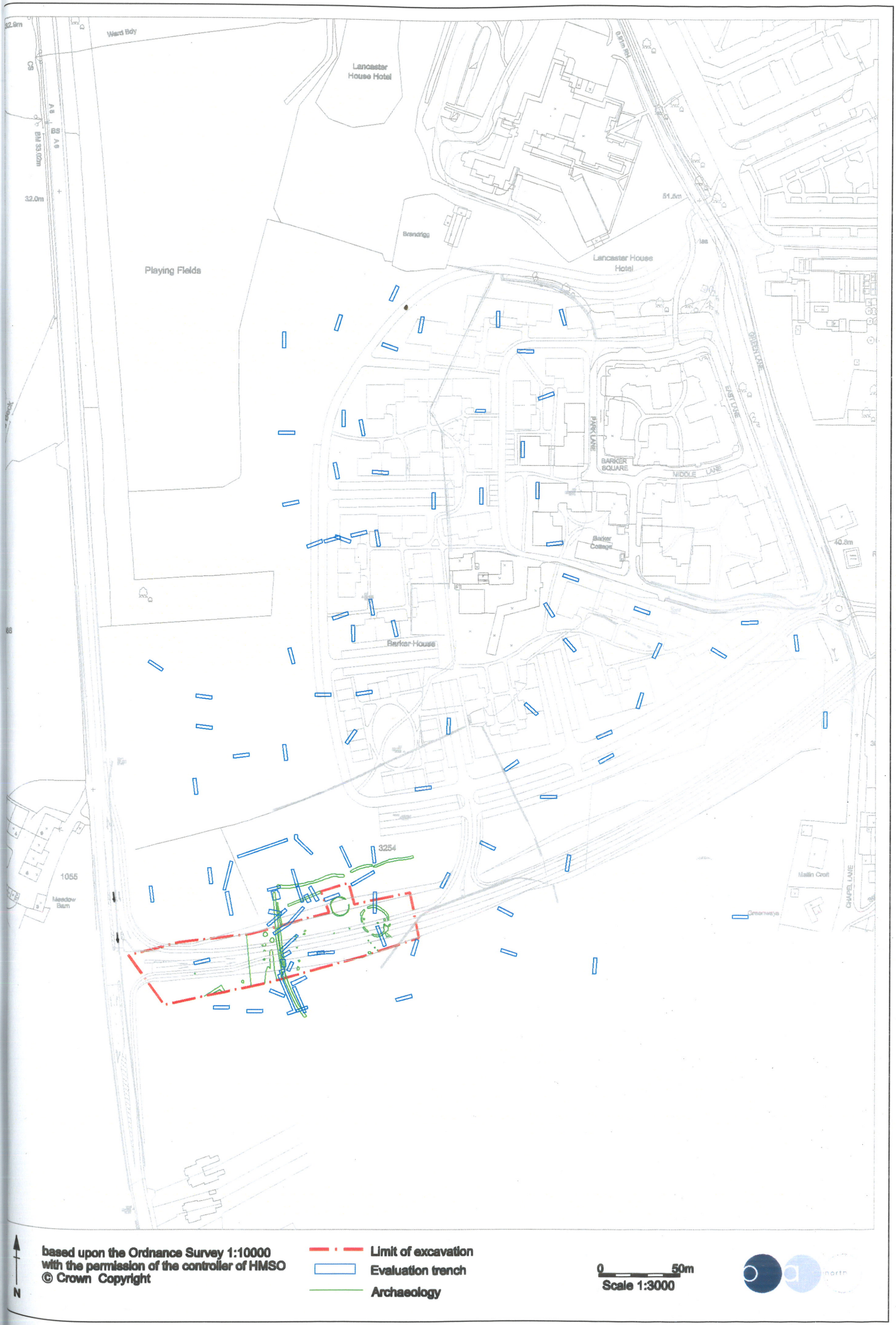

Figure 3: Location of site, showing evaluation trenches

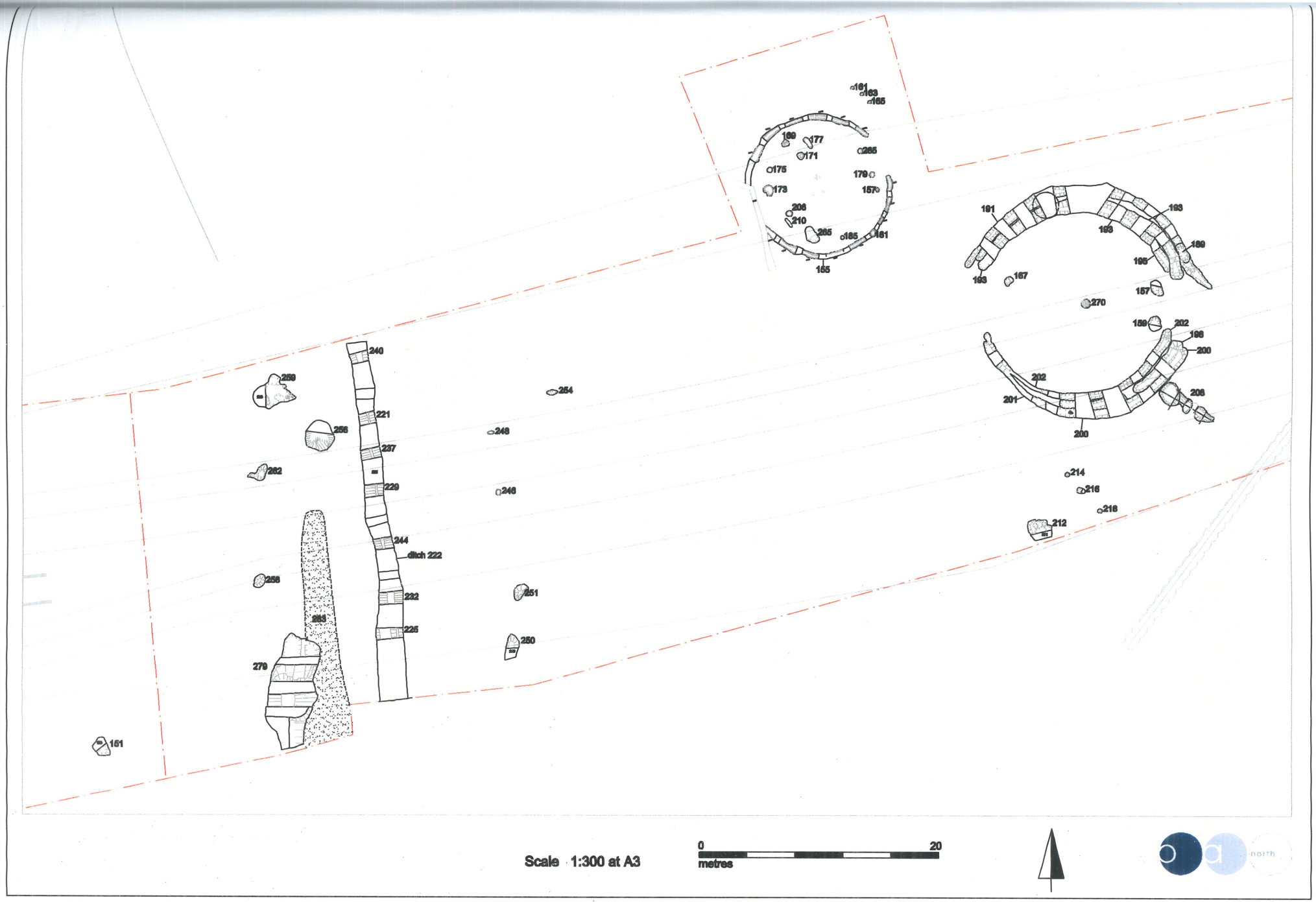

Figure 4: Plan of all excavation features

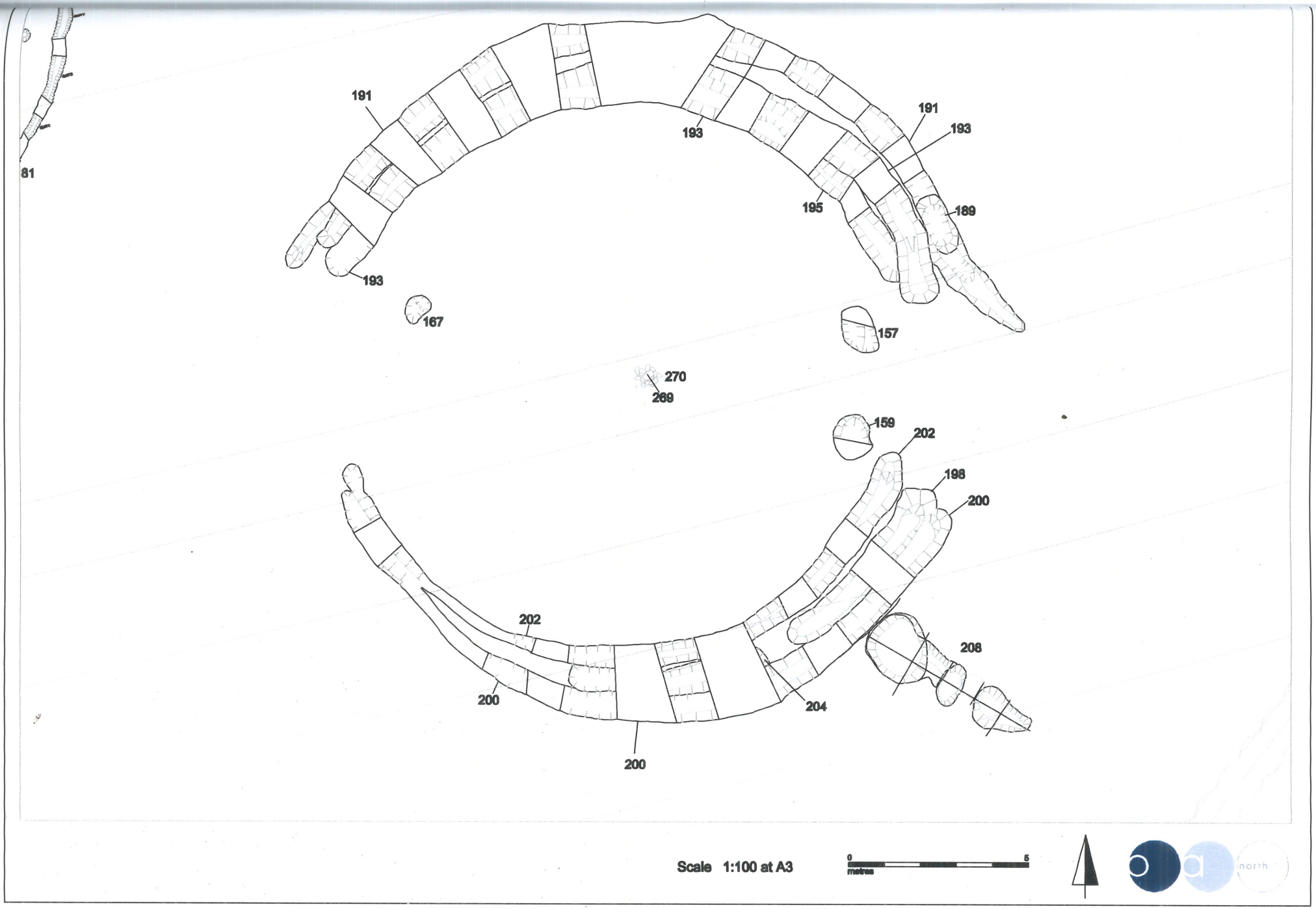

Figure 5: Plan of Enclosure

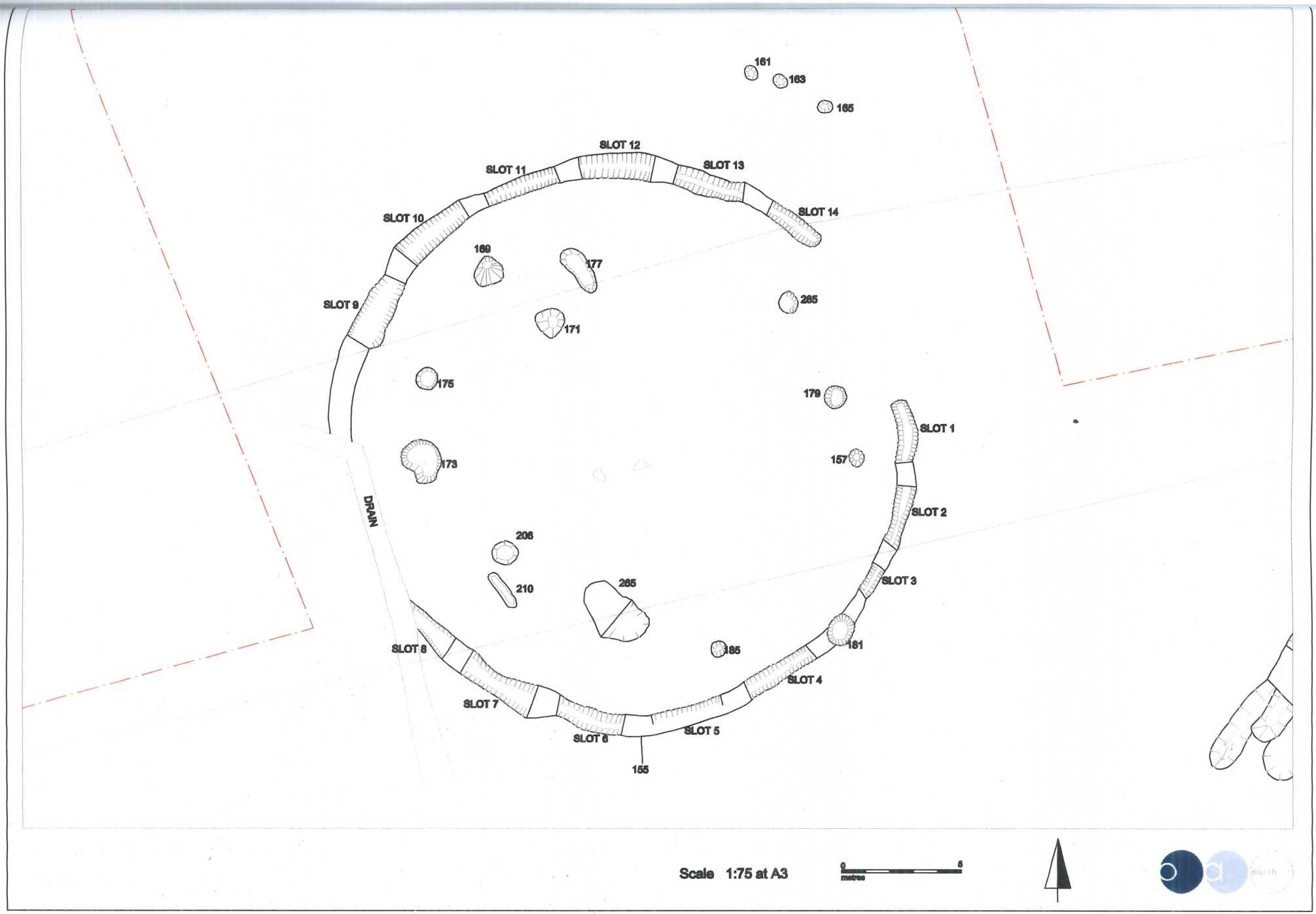

Figure 6: Roundhouse Plan

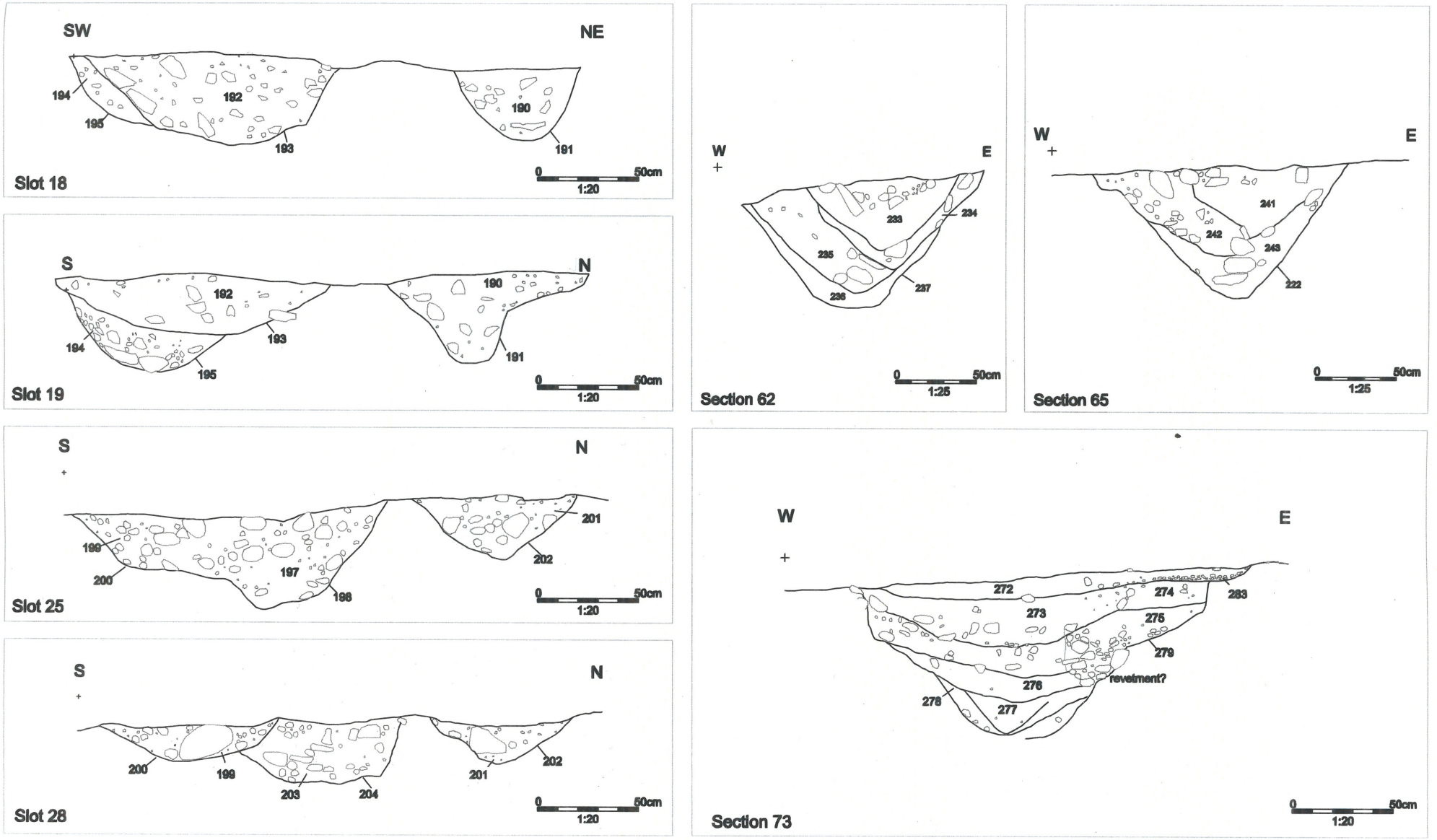

Figure 7: Sections through the enclosure ditches

Plate 1: Aerial view of excavation area along the line of the proposed South West campus access road, with partially excavated boundary ditch ***222*** in the foreground and the roundhouse and enclosure in the east of the area

Plate 2: View of roundhouse during excavation, looking south-west

Plate 3: View of enclosure, looking south

Plate 4: Stone-lined posthole ***270***, at the centre of the enclosure (scale: 0.5m)

Plate 5: Boundary ditch ***222***, looking south, with features to its west under excavation