

Northamptonshire Archaeology

An archaeological evaluation at Newton Leys, Milton Keynes Buckinghamshire August-September 2006



Adrian Burrow November 2006 Report 06/139

Northamptonshire Archaeology 2 Bolton House Wootton Hall Park Northampton NN4 8BE t. 01604 700493 f. 01604 702822 e. sparry@northamptonshire.gov.uk w. www.northantsarchaeology.co.uk



NORTHAMPTONSHIRE ARCHAEOLOGY NORTHAMPTONSHIRE COUNTY COUNCIL

NOVEMBER 2006

ARCHAEOLOGICAL EVALUATION

AT NEWTON LEYS, MILTON KEYNES

BUCKINGHAMSHIRE

AUGUST-SEPTEMBER 2006

06/139

Project Manager	Adam Yates BA, AIFA
Fieldwork	Adrian Burrow MA
	Nathan Flavell BA PGDip
	Jennifer Kinsman BA
	Rhiannon Mann BSc
	Andrew Parkyn BSc
	Elizabeth Verrinder MA
Text	Adrian Burrow
Animal Bone	Stephanie Vann BSc MA
Pottery	Andy Chapman BSc MIFA
Environmental Samples	Val Fryer BA MIFA
Illustrations	Jacqueline Harding BA HND

STAFF

QUALITY CONTROL

	Print name	Signed	Date
Checked by	P Chapman		
Verified by	A Yates		
Approved by	S Parry		

OASIS REPORT FORM

PROJECT DETAILS

PROJECT DETAILS							
Project title	An Archaeological Ev	aluation at Newton Leys, Milton Keynes, Buckinghamshire					
Short description (250 words maximum)	An archaeological evaluation at Newton Leys, Milton Keynes defined an area of Iron Age occupation in the floor of a stream valley in the southern part of the site. This comprised at least one circular enclosure interpreted as either a roundhouse or stock enclosure, and a series of ditches, gullies and small pits and postholes as well as several spreads of occupation deposits. The remnants of medieval furrows were also present in some fields but no other areas of archaeology were located.						
Project type (e.g. desk-based, field evaluation etc)	Field Evaluation (Site	Code: MNL06)					
Previous work							
(reference to							
organisation or SMR numbers etc)							
Future work	Unknown						
(yes, no, unknown)							
Monument type							
And period							
Significant finds	Iron Age pottery						
(artefact type and period)							
PROJECT LOCATION							
County	Milton Keynes						
Site address	Witton Keynes						
(including postcode)							
	486900						
Easting Northing	231500						
•	231500 80m OD						
Height OD PROJECT	80m OD						
CREATORS							
Organisation	Northamptonshire Arc	haalagy					
Project brief originator	Normanipionsine Are	inaeology					
Project Design originator	CgMs						
Director/Supervisor	Adrian Burrow						
Project Manager	Adam Yates (NA) Rol	Dour (CoMa)					
Sponsor or funding body	George Wimpey South						
PROJECT DATE	George while y south	i Milulalius					
Start date	July 2006						
End date	August 2006						
ARCHIVES	Location	Content (e.g. pottery, animal bone etc)					
	(Accession no.)						
Physical	2006.180	Pottery, animal bone					
Paper							
Digital							
BIBLIOGRAPHY	1						
Title							
Serial title & volume							
Author(s)							
Page numbers							
Date							

Contents

1	INTRODUCTION	1
2	TOPOGRAPHY AND GEOLOGY	1
3	ARCHAEOLOGICAL BACKGROUND	2
4	METHODOLOGY	2
5	RESULTS OF FIELDWORK	3
6	THE POTTERY	9
7	THE ANIMAL BONE	10
8	ENVIRONMENTAL SAMPLES	11
9	DISCUSSION	14
APPENI	DIX A1: SITE DATA	17

TABLES

Table 1:	Total Number of animal bone fragments per species	10
Table 2:	Summary of sample assessment results	12

FIGURES

Site location (1:15000)
Trench locations, Blocks B, C, D, E and I (1:5000)
Trench locations in Block B (1:1000)
Plans of trenches in Block B
Sections 1-8

PLATES

Plate 1: Trench 1, ditch [110], Section 1 looking east Plate 2: Trench 3, ditch [307], Section 5 looking south Plate 3: Trench 6, ditch [606], Section 7 looking north-west Plate 4: Trench 16, (610), Section 8 looking south

AN ARCHAEOLOGICAL EVALUATION AT NEWTON LEYS, MILTON KEYNES BUCKINGHAMSHIRE AUGUST-SEPTEMBER 2006

ABSTRACT

An archaeological evaluation at Newton Leys, Milton Keynes defined an area of Iron Age occupation in the floor of a stream valley in the southern part of the site. This comprised at least one circular enclosure interpreted as either a roundhouse or stock enclosure, and a series of ditches, gullies and small pits and postholes as well as several spreads of occupation deposits. The remnants of medieval furrows were also present in some fields but no other areas of archaeology were located.

1 INTRODUCTION

Northamptonshire Archaeology carried out an archaeological evaluation on behalf of CgMs Consulting during August and September 2006 on land proposed for residential, community and commercial development at Newton Leys in Milton Keynes, (NGR SP 869 315, Fig 1). The evaluation met the requirements of a specification prepared by CgMs (Bourn 2006) acting as consultants on behalf of their clients, George Wimpey South Midlands.

2 TOPOGRAPHY AND GEOLOGY

The development area occupies an area of approximately 40ha south of Bletchley, Milton Keynes, and to the east of the village of Newton Longville. It is bounded by the Water Eaton-Drayston Padlow road to the south-east, by the London-Birmingham railway to the east and by the former Newton Longville brickworks to the north.

The site is divided into a number of Blocks for development, Blocks B, C, D and E for Residential use and Block(s) I for Industrial purposes (Fig 2). The bulk of the site, including all the Blocks, is situated within the boundaries of Milton Keynes while the extreme south and west parts, including those areas designated for access construction and allotments.are within Buckinghamshire

Current land use comprises a series of arable fields ranging in elevation from around 84m above Ordnance Datum in the south to 98m AOD at the north-west side, with a stream valley running south-west to north-east through the eastern part of the site. The underlying geology predominately comprises Chalky Boulder Clay with outcrops of Oxford Clay and Lacustrine deposits (Bourn 2006, 2).

3 ARCHAEOLOGICAL BACKGROUND

The general archaeological background is summarised in previous publications (eg Croft and Maynard 1993 and Ivens *et al* 1995). The archaeological background to the development area is summarised in previous reports including a desk-based assessment (Oxford Archaeological Associates 2002) which incorporated a fieldwalking programme undertaken by Buckinghamshire County Museum Service in 1995. In 2006 Northamptonshire Archaeology undertook a geophysical survey of the site. This identified a series of circular and linear anomalies in the south-western corner of the site, thought to comprise an area of prehistoric or Roman settlement (Holmes 2006). Two areas of additional geophysical survey were undertaken on the access and allotment areas at the request of the Buckinghamshire County Archaeologist, but neither area contained any anomalies interpreted as possible archaeological features.

4 METHODOLOGY

A total of 92 trenches, each measuring 50m long by 2m wide, were excavated (Fig 2) using a mechanical digger fitted with a 2m wide toothless ditching bucket, under archaeological supervision. The specification called for 91 trenches; however, an extra trench was dug at the request of the Buckinghamshire County Archaeologist to test for features extending to the south of Block B. In addition, two trenches were slightly re-located from the original plan, no 14 because of extensive tree cover, and no 81, to avoid an area disturbed by the former brick works. In Block B to the south, many of the trenches were targeted over sub-surface anomalies detected during the geophysical survey (Holmes 2006). Mechanical excavation proceeded as far as the first significant archaeological layer or in its absence, the surface of the natural horizon.

The trenches were laid out and located relative to Ordnance Survey using a Leica System 1200 GPS system operating in RTK mode. Levels were taken and related to Ordnance Datum.

An excavation strategy was agreed upon onsite with CgMs and Milton Keynes Archaeological Officer, whereby a sample of the features in each trench was excavated and fully recorded, whilst the remainder were planned and given a unique context number but not excavated. Standard Northamptonshire Archaeology recording procedures were employed. Trenches containing archaeology were planned at 1:100 while all sections were recorded at 1:10 or 1:20. Environmental samples were taken from 14 secure contexts in Block B to recover paleobotanical and paleozoological evidence.

All procedures complied with the Northamptonshire County Council Health and Safety provisions and Northamptonshire Archaeology Health and Safety at Work Guidelines (NA 2003). Works were monitored by Rob Bourn (CgMS on behalf of George Wimpey), Nick Crank (Milton Keynes Archaeological Officer) and Sandy Kidd (Buckinghamshire County Archaeologist)

5 **RESULTS OF FIELDWORK**

5.1 Block B (Figs 2-5)

This was located in a field on the extreme southern part of the development area on the bottom of a stream valley and covering 3.19ha. The geophysical survey had indicated that a concentration of archaeological remains existed in this Block, including three sub-circular ditched enclosures. Sixteen trenches were excavated in this Block, plus one additional trench in the field to the south (see Methodology).

The natural substrate was mainly light yellowish grey clays with gravel patches throughout. This was overlain in several places by an alluvial spread of silts and clays into which several of the archaeological features were cut. Subsoil and topsoil deposits were consistent across this field. Subsoil (02) consisted of a yellow brown silty clay with pebble inclusion 0.3m thick which sealed all the archaeological deposits. Topsoil (01) comprised a mid grey brown silty clay with frequent pebble inclusion between 0.25m-0.3m thick. The average elevation of this field was 85m AOD. Archaeology was present in eight trenches; nos 1, 3, 4, 5, 6, 13, 15 and 16. The remaining trenches contained no archaeological features and are not described in the main text. A full context index is included as Appendix A1.

Trench 1

Aligned north-west to south-east, this trench was targeted on geophysical anomalies (Fig 3). A ditch at the south end of the trench may form part of one of the circular enclosures identified by geophysical survey. Nine features were present, including several parallel ditches towards the north, none of which could be conclusively related to the geophysical anomalies (Fig 4).

At the south-east end of the trench, ditch [110] was 1.5m wide and 0.64m deep, it had a V-shaped profile containing two fills, the upper (108) and the lower (109), both light grey/brown silty clays very similar to the natural substrate, with gravel inclusions (Fig 5, section 1, Plate 1). Iron Age pottery was recovered from (108).

Two parallel ditches [105 and 114] aligned north-east to south-west had flattened V-shaped profiles. Ditch [105] was 0.54m wide and 0.26m deep while [114] was rather larger at 0.88m wide by 0.25m deep. Both had similar grey-brown silty clay fills, (104) and (113) respectively, which contained Iron Age pottery. (Fig 5, section 2)

To the north-west of these were two further ditches on similar but slightly different north-east to south-west alignments. Ditch [107] was 0.4m wide and 0.18m deep with a rounded profile whilst ditch [112] was a broader, shallow feature 0.72m wide and 0.18m deep. Both features contained dark grey silty clay fills, (106) and (111) respectively, each containing Iron Age pottery (Fig 5, section 3).

At the north-west end of the trench three parallel linear features ran on a north-east to south-west alignment (Fig 5, section 4). Gully [120] was 0.42m wide by 0.17m deep containing grey silty clay (119) with burnt stone and charcoal inclusions. It was cut on the north-west edge by ditch [118]. Ditch [118] had a very broad asymmetrical profile. The lower fill (117) comprised dark grey silty clay with charcoal and flint inclusions, whilst the upper fills, (116) and (115) were also grey-brown silty clays with frequent flint, charcoal and burnt stone and Iron Age pottery. On the other side of [120] was ditch [123], steep sided and concave measuring 0.95m wide and 0.35m deep containing a single silty clay fill (122).

The north-west edge was cut by a small pit [127], 0.60m wide with a shallow profile 0.13m deep. The fill (126) was dark brownish grey silty clay with orange mottling, containing charcoal, chalk and flint inclusions.

Trench 3

Orientated north-east to south-west, this trench was targeted on geophysical anomalies. A single curvilinear ditch and one pit were present (Fig 4).

Ditch [307] measured at least 1.7m wide by 0.8m deep. It was filled by orange mottled mid grey silty clay (305), very similar to the natural substrate, and contained Iron Age pottery. It was re-cut as ditch [310], which measured 1.3m wide and 0.45m deep, the lower fill of which was very dark silty clay (306), 0.05m thick, which contained significant amounts of charcoal and large pieces of Iron Age pottery. This was overlain by light grey brown silty clay (304), which also produced Iron Age pottery (Fig 5, section 5, Plate 2).

Unexcavated pit [309] was located on the north end of the trench.

Trench 4

Positioned to the west side of Trench 3 on a north-west to south-east orientation, this trench contained seven features; two gullies, one ditch, three pits and a posthole (Fig 4).

The base of the trench contained a thin alluvial/colluvial layer (418) of mottled grey/brown silt, clay and gravel between 0.05-0.10m thick into which several of the features were cut.

At the south-eastern end of the trench were two small curvilinear gullies, [405] and [407]. Gully [407] was the earlier of the two, on a north-west to south-east alignment with a southern terminal. It was 0.64m wide by 0.97m deep, and contained a fill of grey silty clay with charcoal inclusions.

It was truncated on its north edge by gully [405], which was of similar size and alignment. These two features corresponded to where the geophysical survey suggested a small circular enclosure was located.

Pit [409] was ovoid in plan, with a flat base and steep sided profile, 0.56m by 0.90m wide and 0.37m deep. The fill (408) was dark grey brown silty clay with limestone and charcoal inclusion and Iron Age pottery. A second pit [417] extended beyond the northern edge of the trench. It had a similar silty clay fill (416), which also contained Iron Age pottery.

Pit [411] was an ovoid, 0.54m long and 0.16m deep. It was very irregular in profile with steep sides and flat base. It contained a grey silty clay fill (410) containing pottery.

A small posthole [413] was 0.32m wide and 0.16m deep and was filled with grey silty clay (412) containing charcoal flecks.

Ditch [415] (Fig 5, section 6) was orientated north-east to south-west, and measured 0.90m wide by 0.27m deep and was filled by dark grey silty clay fill (414), which contained charcoal, Iron Age pottery and a single sherd from a Roman channel-rim jar.

Trench 5

A mottled grey/brown silty clay alluvial/colluvial layer (504) was present across the northern part of the trench on top of the natural gravel (Fig 4). A series of sondages revealed it to be between 0.10-0.25m thick. No artefactual material was present in this layer.

Aligned north-south, this trench contained a single feature, ditch [506], which was orientated north-east to south-west, and was 0.92m wide and 0.24m deep, filled with mid brown silty clay with orange flecking (505). No dating evidence was present, however it was clearly seen in section cut from the topsoil indicating it was a much more recent feature, probably a former field boundary. It corresponded to the strong linear anomaly seen in the geophysical survey.

Trench 6

Orientated east-west, this trench contained ten features; four ditches and six pits, of which a total of five were excavated (Fig 4).

In the mid part of the trench were two parallel curvilinear ditches, [606] and [616] (Fig 4). Ditch [606] was aligned north-east to south-west and was 0.95m wide by 0.4m deep (Fig 5, section 7, Plate 3). Its fills, (604) and (605), both comprised brown silty clay, fill (604) contained Iron Age pottery. Ditch [616] was not excavated.

To the west of ditch [606] was a small ditch [608], on a north-east to south-west alignment. It measured 0.6m wide and 0.19m deep with a single fill of grey-brown silty clay (607) containing Iron Age pottery.

Two small circular pits [612] and [614], abutted each other. Pit [612] was the smaller of the two, being 0.45m wide by 0.05m deep; pit [614] was 0.9m by 0.15m. Both had very shallow, irregular profiles and contained grey brown silty clay fills (613 and 615). Fill (613) of pit [612] contained Iron Age pottery.

At the south end of the trench was an oval pit [610] with a very shallow flat profile 1.8m by 1.2m wide and 0.08m deep. The grey silty clay fill (611) contained no artefactual material. Three further pits [618], [620] and [622] and one linear feature [620] were recorded in plan but not excavated.

Trench 13

This east-west aligned trench contained four small ditches (Fig 3). Ditches [1305] and [1307] were aligned north-east to south-west about 3m apart. Ditch [1305] was 0.45m wide by 0.15m deep whilst ditch [1307] was 0.73m wide and 0.3m deep. Both had U-shaped, flat-based profiles and contained fills of mid grey brown silty clay, (1304) and (1306) respectively. Neither contained dating evidence.

To the north were two similar parallel unexcavated ditches [1309] and [1311], aligned north-west to south-east alignment 6m apart. The fills, (1308) and (1310) respectively, were mid grey brown silty clay, similar in composition to (1304) and (1306).

Trench 15

Aligned north-south on the western part of the Block, this trench (and Trench 16) was notable for containing several broad, shallow spreads of occupation deposits, in addition to two small pits and a ditch (Fig 4).

Towards the southern part of the trench was layer (1511), a broad deposit of dark brown grey silty clay with limestone fragment and charcoal inclusion. Extending 8.5m wide and with a maximum thickness of 0.10m, this spread appeared to be enclosed within a shallow natural depression rather than a deliberate cut. Compared to the natural alluvial spreads as seen in Trenches 1, 4 and 5, this material was considerably darker and contained charcoal, burnt stone and large amounts of the same highly fragmented Iron Age pottery seen in most of the other features in Block B.

A small oval pit [1507], 0.7m wide by 0.06m deep was cut into (1510), filled by brown silty clay (1506) with charcoal flecking but no dating evidence.

Layer (1510) was similar to (1510), but smaller in size, measuring some 2m in width and with a maximum depth of 0.10m. Layers (1510) and (1511) most likely represent occupation material deposited into natural hollows into which the material accumulated, either through natural or artificial processes.

A small bowl-shaped pit [1509], 0.73m wide by 0.17m deep, was located towards the north end of

the trench. Irregular in profile it contained a grey silty clay fill (1508) which produced no dating evidence.

A small gully [1505] was present at the southern end of the trench aligned north-east to southwest. It was 0.7m wide by 0.35m deep with an irregular profile containing a fill of mid brown silty clay (1504). To the north was the same former field boundary ditch seen in Trench 5.

Trench 16

Located to the west of Trench 15 and aligned north-south, this trench contained two extensive layers of occupation deposits, similar to those in Trench 15, and several small pits.

In the mid part of the trench, layer (1611) was a deposit of dark brown grey silty clay with limestone and charcoal fragments, burnt stone and Iron Age pottery. Measuring 5m wide by 0.08-0.12m deep, this deposit was within a shallow sided, irregular natural depression rather than a cut. Another smaller deposit of similar material (1612) to the immediate south was not excavated.

Layer (1610) covered the entire northern part of the trench base. Extending intermittently to at least 20m wide, several hand dug sondages revealed that its depth never exceeded 0.12m. This deposit comprised the same material as (1611), also with considerable amounts of burnt stone and Iron Age pottery (Fig 5, section 6, Plate 4). As with all the deposits in Trenches 15 and 16, there was no evidence that this deposit overlay other features; all sondages came down onto the underlying natural clay or gravel substrate.

A small pit [1605] was cut into layer (1610) on the northern end of the trench. It measured 0.8m wide and was 0.11m deep with a fill of dark grey silty clay (1604) containing significant quantities of burnt stone.

Two more pits were present in this trench, [1607] and [1609]. Pit [1607] was the larger of the two, sub-circular in plan with shallow sides and a concave base 1.3m wide and 0.2m. Pit [1609] extended beyond the east side of the trench and the visible profile measured 1.6m wide by 0.16m deep. Both contained dark grey silty clay fills (1606 and 1608 respectively) which produced Iron Age pottery.

5.2 Block C (Fig 2)

Twenty trenches were excavated in this wheat field, situated on the north side of a stream valley on the south of the site. Sloping to the south-east, the elevation ranged from 98m AOD to the west to 85m AOD on the east. The underlying geology was the same boulder clays seen across the rest of the site, present at a depth of between 0.5-0.6m, overlain by subsoil and topsoil similar to those in Block B. The remnants of medieval furrows, detected in the geophysical survey (Holmes 2006) running on a north-west to south-east alignment were present in a number of trenches. No other archaeology was present in any of the trenches. A full context index is included as Appendix A1.

5.3 Block D (Fig 2)

Twenty eight trenches were excavated in five fields occupying the central part of the site at an elevation of around 85m AOD. All the fields contained either wheat or bean crop except the one containing Trenches 61, 77, 78, 79 and 80 which was ploughed. The natural geology here alternated between grey boulder clay in the large central field and yellow/orange sand and gravels in the eastern fields. All the fields in this Block displayed largely consistent subsoil and topsoil horizons spanning between 0.3-0.4m thick and 0.2-0.3m thick respectively. The topsoil was dark brown silty clay and subsoil was mid brown silty clay as seen elsewhere on site.

Trench 59 contained a large pit measuring 7m across with a depth of 0.5m. It contained mid brown/grey silty clay with flint nodules and gravel inclusion. Within this were numerous large cattle bones, probably from an individual animal. No diagnostic dating evidence was present. Several trenches on the western side of this block contained small straight parallel linear features containing redeposited subsoil, interpreted as the scars from post-medieval mechanical ploughing. No other archaeological features were present in this block. A full context index is included as Appendix A1.

5.4 Block E (Fig 2)

Comprising the far western field, at an elevation of between 86-95m AOD, twelve trenches were excavated in this Block. The natural substrate and plough-soil horizons were the same as those of Block C, with subsoils 0.15-0.25m thick and topsoil 0.25m thick. Several modern boundary ditches were noted in several trenches but no archaeology was present in this field. A full context index is included as Appendix A1.

5.5 Block I (Fig 2)

Encompassing parts of four fields on the eastern part of the development area at an elevation of approximately 80m AOD, eleven trenches were excavated in this Block. The geology and overlying soil horizons were the same as in Block D but noticeably thicker, with subsoils 0.4-0.6m thick and topsoil 0.3m thick. Again, no archaeological features were present.

6 THE POTTERY

by Andy Chapman

A total of *c*538 sherds of pottery weighing 2598g were recovered from features in trenches within Block B during the trial trenching. The material has an average sherd weight of 4.83g, and is dominated by numerous small sherds, with a limited number of contexts producing small primary groups comprising both smaller and larger sherds. In many of the contexts it is apparent that at least a proportion of the smaller sherds are from a limited number of vessels and derive from the fragmentation of poorly fired larger sherds.

Three distinct fabrics are present. The majority of the assemblage is in a sandy fabric, usually containing dense fine to coarse quartz grains, up to 1mm diameter, with some grog also present. A smaller group, perhaps 10% of the assemblage, is in a grog rich fabric, with frequent small pellets of grog, and containing only a little sand, with sparse small quartz grains visible. A similar small proportion, perhaps some 5-10% of the assemblage, is in a shelly fabric that contains sparse to moderate inclusions of coarse shell.

The core and inner surfaces of all sherds are typically grey to black, while the external surfaces are either oxidised to orange or red-browns, or are also grey to grey-black. The sherds containing grog typically have the lighter external surfaces, some of which are a pale orange, speckled with either the darker or lighter coloured pellets of the grog.

Despite the number of sherds present, there are few diagnostic features. The material is too fragmentary to allow for the definition of vessel forms, but the presence of both thinner walled sherds and of sherds up 10mm thick, would suggest that a range of smaller bowls and jars are present as well as some larger storage jars. There are a small number of rim sherds, and these include simple upright rounded and flat-topped rims, and some slightly everted rims. A single everted rim from a small rounded bowl has been decorated along the top with broadly spaced and deeply incised fingernail impressions. There are a few sherds from flat-bottomed bases. The body sherds are all plain and undecorated, although a few have well smoothed surfaces or have faint parallel incisions from light brushing, but none have any more prominent scoring.

Given the lack of diagnostic features, it is only appropriate to conclude that the assemblage is broadly datable to the middle to late Iron Age.

A single context (414) the fill of a ditch [415] in Trench 4, contained a small group of probable Iron Age sherds and also a single sherd, in a coarse sandy fabric, that is evidently from a channel-rim jar of Roman date. This suggests that at least some activity at the site continued into at least the second half of the 1st century AD.

7 THE ANIMAL BONE

by Stephanie Vann

Method

The animal bone was subjected to macroscopic examination and identifiable bone was noted and quantified by context. A summary of the results is presented in Table 1. Age was calculated where possible from bones where fusion was discernible.

Results

Preservation of the animal bone at this site was poor to moderate. Fragmentation was moderate to high and surface abrasion was moderate to high with bone exhibiting signs of erosion, weathering and other taphonomic damage in many instances. Fragmentation was the result of both old and fresh breaks. There was evidence of burning on only two bones. There was no evidence of butchery, gnawing or pathology.

Table 1: Total number of animal bone fragments per species

Species	Bos (Cattle)	Ovicaprid (Sheep/Goat)	EquusSus(Horse)(Pig)		Large Mammal	Small Mammal	Unid.
Total	7	17	1	2	7	5	136

The total number of fragments was 175, of which 39 (22.3 %) were identifiable. The species present were cattle, ovicaprid (sheep/goat), pig and horse. No wild species were present, nor was there any evidence of bird or fish remains.

Only one bone, a cattle metapodial from context (408), showed evidence of a lack of bone fusion, suggesting that this specimen represented a juvenile individual. All other elements were fully fused where it was possible to discern such. No teeth or mandibles were sufficiently well-preserved to permit analysis of tooth wear.

Discussion

Whilst it is true that the small size of the assemblage and its poor condition makes it difficult to draw any significant conclusions, there is nothing about the assemblage that is in any way extraordinary for one of this period. Cattle and ovicaprids are regularly exploited throughout the Iron Age and Romano-British periods, as is the horse and pig, albeit not generally in the same numbers as ovicaprids (sheep/goat) or cattle (Maltby 1981). The dominance of such remains within the assemblage is therefore not unusual. The survivability of large, strong bones such as those of cattle and horse when compared to those of smaller mammals does also need to be taken into consideration, however, as this dominance may be a reflection of preservation rather than husbandry practices at this site.

Only one element at this site showed an unfused epiphysis. This cattle distal metapodial is likely to be from an individual between 24 and 36 months of age (Reitz and Wing 1999: Table 3.5).

The unusually large and well-preserved bones from context (5904) are also worthy of comment. Primarily cattle in origin, although one pelvis is equid, these differ significantly in preservation and appearance from the rest of the assemblage. It is true that the size of many domestic breeds does increase during the Roman period (Clutton-Brock 1989; Jewell 1962), which may explain the cattle femur whose overall length was an estimated 400mm. However, without dating evidence from that context, it is equally possible that this individual is more modern in origin.

8 ENVIRONMENTAL SAMPLES

by Val Fryer

Introduction

Samples were taken from Iron Age features including ditches, gullies, a possible round house and other discrete features for the retrieval of the plant macrofossils were taken in order that the content and preservation of the assemblages could be evaluated. Fourteen samples were submitted for evaluation.

The samples were bulk floated by Northamptonshire Archaeology and the flots were collected in a 500 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16, and the plant macrofossils and other remains noted are listed in Table 1. Nomenclature within the table follows Stace (1997). All plant remains were charred. Modern contaminants including fibrous roots, straw/chaff, grains, seeds, leaf fragments and arthropods were abundant throughout, and formed the main component of most assemblages.

Results

With the exception of charcoal fragments, which are present at a low to moderate density in all fourteen samples, charred plant remains are exceedingly scarce (Table 2). Preservation is poor, with all specimens being very fragmented. Individual barley (*Hordeum* sp.) and wheat (*Triticum* sp.) grains are recorded along with a small number of indeterminate fragmentary grains and a single wheat glume base. A medick/clover/trefoil (*Medicago/Trifolium/Lotus* sp.) seed is present within sample 5 and vetch/vetchling cotyledons are recorded from samples 1 and 12. A single bramble (*Rubus* sp.) type 'pip' is present within sample 10.

Table 2: Summary of sample assessment results

Sample No.	1	2	5	9	10	11	6	13	3	4	12	14	7	8
Context No.	104	106	109	111	121	115	305	304	414	414	604	1306	1610	1611
Feature No.	105	107	110	112		118	307	310	415	415	606	1307		
Feature type	Ditch	Ditch	Ditch	Ditch		Ditch	Layer	Layer						
Trench	1	1	1	1	1	1	3	3	4	4	6	13	16	16
Cereals														
Hordeum sp. (grain)		х												
Triticum sp. (grain)	xcf													
(glume base)	X													
Cereal indet. (grain frags.)	X										Х			х
Herbs														
Medicago/Trifolium/Lotus sp.			x											
Vicia/Lathyrus sp.	xcoty										xcoty			
Tree/shrub macrofossils														
Rubus sp.					Х									
Other plant macrofossils														
Charcoal <2mm	XX	XX	xx	xx	Х	X	XX	xx	X	XX	XX	X	x	XX
Charcoal >2mm	х	х			х			х			х			х
Charred root/stem			х											х
Mollusc shells														
Terrestrial species														
Carychium sp.			х					х						
Trichia hispida group								х						
Vallonia sp.			Х				х	X					х	
<i>Vertigo</i> sp.								X						
Freshwater obligate species														
Anisus leucostoma			XX				х	x						

NEWTON LEYS, MILTON KEYNES

<i>Lymnaea</i> sp.								x						
Planorbis planorbis			Х											
Other remains														
Black porous 'cokey' material	X										х			Х
Black tarry material	Х													
Ferrous concretion/artefact	Х	х												
Small mammal/amphibian bone		xpmc						xpmc						
Sample volume (litres)	20	20	20	20	20	20	10	20	10	10	20	20	40	40
Volume of flot (litres)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
% flot sorted	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Key to Table

- x = 1 10 specimens xx = 10 50 specimens cf = compare coty = cotyledon pmc = possible modern contaminant

Small assemblages of terrestrial and freshwater obligate mollusc shells are present within samples 5, 6, 7 and 13, although it is not certain whether they are contemporary with the features from which the samples were taken.

Other remains are also scarce, comprising fragments of black porous and tarry material (possible residues of the combustion of organic remains at very high temperatures) and two small pieces of ferrous concretion or fragmentary artefact.

Conclusions and recommendations for further work

In summary, the assemblages are particularly sparse and are almost certainly wholly or partly derived from small quantities of scattered detritus, which accidentally became incorporated within the feature fills. It appears very unlikely that any of the excavated features are close to a main focus of occupation. While cereals may have been of some importance to the local economy, it would appear that cereal processing was not being undertaken on or near the site.

Similar low densities of charred crop remains have been noted at other contemporary sites within East Anglia and the east Midlands (for example Stansted ACS, Essex (Murphy 1990) and Fison Way, Thetford, Norfolk (Murphy 1992)), particularly those situated on either heavy clays (as at Newton Leys) or lighter sandy soils. In such areas, tillage and summer soil moisture deficits would have made agricultural production difficult and the small assemblages have, therefore, been interpreted as evidence of a largely pastoral regime where the cereal requirements of the settlement would have been met by imported batches of semi-cleaned or prime grain.

9 **DISCUSSION**

The archaeological evaluation at Newton Leys defined a concentration of Iron Age features in part of Block B on the south of the development area. These features comprised a series of ditches and gullies with a scattering of small pits and postholes. The remainder of the development area was devoid of significant archaeological features, confirming the results of the geophysical survey.

The similarities in ditch fills and pottery types, and the general paucity of inter-cutting features suggests either a single phase of occupation or a longer period of less intensive activity, although evidence for re-cutting does support the re-use or maintenance of at least some features over a longer period of time. The bulk of the pottery dates to the mid-late Iron Age, although a single Roman sherd indicates that activity may have continued beyond this. The artefactual material was generally in a poor condition. Curvilinear ditches and gullies may be indicative of small circular enclosures or roundhouse drip gullies, as identified by geophysical survey

(Holmes 2006). Other structural features comprised several isolated postholes.

Many of the linear ditches and gullies appeared to follow a rough north-east to south-west alignment, although no discrete ditches could be traced between trenches other than the recent field boundary in Trenches 5 and 15. The larger ditches encountered could be interpreted as enclosures, land divisions or agricultural boundaries, whereas the smaller gullies may have served as drains. Remnant soil layers, largely preserved within shallow hollows in the gravel, were present in several trenches and contained Iron Age occupation debris.

Ecofacts were sparsely represented, what material there was was aprobably accumulated from scattered detritus. The results of analysis indicated the site was not intensively occupied and there was little evidence for cereal processing.

Very little evidence for pre-19th century occupation was present in any of the other Blocks. Block C contained only the remnants of a ridge and furrow field system on a north-west to south-east alignment, whilst only a scattered pattern of undated but stratigraphically modern features were present across the rest of the development site, particularly in Block C.

BIBLIOGRAPHY

- Bourn, R, 2006 Specification for an Archaeological Evaluation, Newton Leys, Milton Keynes, CgMs Consulting
- Clutton-Brock, J, 1989 Five thousand years of livestock in Britain, *Biological Journal of the Linnean Society*, **38**, 31-37
- Croft, RA, & Mynard, DC, 1993 *The Changing Landscape of Milton Keynes*, Buckinghamshire Archaeol Soc Monog, **5**
- Holmes, M, 2006 Geophysical Survey of land at Newton Leys, Milton Keynes, Buckinghamshire, Northamptonshire Archaeology Report 06/71
- IFA 1995 Code of Conduct and Standards and Guidelines for Archaeological Evaluation, Institute of Field Archaeologists
- Jewell, P A, 1962 Changes in size and type of cattle from Prehistoric to Medieval times in Britain, *Zietschrift fur Tierzuchtung und Zuchtungsbiologie* **77** (2), 159-167
- Jones, M, and Dimbleby, G, (eds) 1994 *The Environment of Man: the Iron Age to the Anglo-Saxon Period*, British Archaeological Report British Series, **87**, Oxford BAR
- Ivens, R, Busby, P, and Shepherd, N, 1995 *Tattenhoe and Westbury, two deserted medieval settlements in Milton Keynes*, Buckinghamshire Archaeol Soc Monog, **8**
- Maltby, M, 1981 Iron Age, Romano-British and Anglo-Saxon animal husbandry–a review of the faunal evidence
- Murphy, P, 1990 Stansted Airport, Essex: carbonised plant remains. Ancient Monuments Laboratory Report 129/90. English Heritage, London
- Murphy, P, 1992 Plant remains and the environment' in Gregory, T., Excavations in Thetford 1980–1982, Fison Way. Volume 1 *East Anglian Archaeology* **53**, 175 181
- NA 2003 Policy and Guidance for Archaeological Fieldwork Projects in Northamptonshire
- Oxford Archaeological Associates 2002 Newton Leys, Environmental Statement Technical Appendix VII Cultural Heritage, Terrance O'Rourke
- Reitz, E J, and Wing, E S, 1999 *Zooarchaeology*, Cambridge Manuals in Archaeology, Cambridge: Cambridge University Press
- Stace, C, 1997 New Flora of the British Isles, Second edition, Cambridge University Press
- Stead, I M, and Rigby, V, 1986 Baldock, the excavation of a Roman and pre-Roman settlement, 1968-72, Britannia Monog Series, **7**

Northamptonshire Archaeology

Northamptonshire County Council

November 2006

APPENDIX A1: SITE DATA

Trench No	Context	Deposit Type	Description	Artefact types
1	101	Layer	Topsoil, mid-brown silty-clay with infrequent pebble inclusions, 0.30m thick	
	102	Layer	Subsoil, yellow-brown silty-clay with infrequent pebble inclusions 0.32 m thick	
	103	Layer	Natural grey-yellow-brown clay and orange gravels	
	104	Fill	Fill of [105] dark brown-grey silty-clay with charcoal, chalk flecks	Pottery
	105	Cut	Ditch aligned E-W shallow sides and concave base, 0.54m wide x 0.26m deep	
	106	Fill	Fill of [107] dark grey silty-clay with flint and pebble inclusions	Pottery
	107	Cut	Ditch aligned E-W shallow sides and concave base, 0.40m wide x 0.15m deep	
	108	Fill	Fill of [110] mid grey-brown silty-clay with chalk and charcoal flecks and flint inclusions	Pottery
	109	Fill	Fill of [110] mid grey-brown silty clay with orange mottling, chalk and flint inclusions	
	110	Cut	Ditch aligned NW-SE V-shaped profile 1.55m wide x 0.64 deep	
	111	Fill	Fill of [112] mid grey-brown silty-clay with burnt stone, charcoal and flint inclusions	Pottery
	112	Cut	Ditch aligned E-W, V-shaped profile, 0.72m wide x 0.18m deep	
	113	Fill	Fill of [114] light grey-brown silty-clay with orange mottling and charcoal, flint and stone inclusions	Pottery
	114	Cut	Ditch aligned E-W shallow sides and concave base, 0.88m wide x 0.25m deep	
	115	Fill	Fill of [118] dark grey-brown silty-clay with flint and burnt stone inclusions	Pottery
	116	Fill	Fill of [118] mid grey-brown silty clay with charcoal, burnt stone and flint inclusions	Pottery
	117	Fill	Fill of [118] dark grey silty-clay with charcoal and flint inclusions	
	118	Cut	Ditch aligned E-W steep slopes with concave base, 2.50m wide x 0.55m deep	
	119	Fill	Fill of [120] dark grey silty-clay with burnt stone and flint inclusions	

Trench No	Context	Deposit Type	Description	Artefact types
	120	Cut	Gully aligned E-W, U-shaped profile 0.42m wide x 0.17m deep	
	121	Fill	Fill of [123] mid grey-brown silty-clay with flint and pebble inclusions	
	122	Fill	Fill of [123] dark grey silty-clay with stone inclusions	
	123	Cut	Ditch aligned E-W steep sides and concave base, 0.95m wide x 0.32m deep	
	124	Fill	Fill of [125] dark brown silty-clay	
	125	Cut	Ditch aligned E-W steep sides and concave base, 1.5m wide x 0.40m deep	
	126	Fill	Fill of [127] dark brown-grey silty clay with orange mottling and charcoal, chalk and flint inclusions	
	127	Cut	Pit, sub-rounded, moderately sloping sides and concave base, 0.60m x 0.30m x 0.13m deep	
	128	Layer	Alluvial deposit, mid grey-brown silty-clay with stone inclusions 0.65m thick	
2	201	Layer	Topsoil, 0.28m-0.33m thick	
	202	Layer	Subsoil, 0.13m-0.18m thick	
	203	Layer	Natural orange-brown clay and gravels	
3	301	Layer	Topsoil 0.26m thick	
	302	Layer	Subsoil, 0.15m thick	
	303	Layer	Natural brown-yellow clay	
	304	Fill	Fill of [310] dark grey-brown silty clay with flint and charcoal inclusions.	Pottery
	305	Fill	Fill of [307] mid grey silty-clay with orange mottling with chalk and stone inclusions	Pottery
	306	Fill	Fill of [310] dark grey silty-clay with brown mottling and small stone inclusions. 0.05m thick	Pottery
	307	Cut	Curvi-linear enclosure ditch, V-shaped profile, 1.70m wide x 0.80m deep	
	308	Fill	Fill of [309]	
	309	Cut	Pit, unexcavated	
	310	Cut	Recut of ditch [307], 1.3m wide x 0.45m deep	
4	401	Layer	Topsoil, 0.31m thick	

Trench No	Context	Deposit Type	Description	Artefact types
	402	Layer	Subsoil, 0.24m thick	
	403	Layer	Natural brown-yellow clay	
	404	Fill	Fill of [405] dark grey silty-clay with gravel and flint inclusions	Pottery
	405	Cut	Ditch aligned N-S, shallow with steep sides 0.58m wide x 0.13m deep	
	406	Fill	Fill of [407] mid brown-grey silty-clay with charcoal and stone inclusions	
	407	Cut	Ditch aligned N-S, shallow V-shaped profile, 0.64m wide x 0.07m wide	
	408	Fill	Fill of [409] dark grey-brown silty-clay with limestone and charcoal inclusions	Pottery
	409	Cut	Pit, oval, steep sided with flat base, 0.56m x 0.92m x 0.37m deep	
	410	Fill	Fill of [411] dark grey silty-clay with stone and charcoal inclusions	Pottery, slag
	411	Cut	Pit, sub circular with steep sides, 0.54m x 0.48m x 0.36m deep	
	412	Fill	Fill of [413] dark grey silty-clay with flint and charcoal inclusions	
	413	Cut	Posthole, circular, steep sides and concave base, 0.20m x 0.32m x 0.16m deep	
	414	Fill	Fill of [415] dark grey silty-clay with flint and charcoal inclusions	Pottery
	415	Cut	Ditch aligned N-S steep sides and curved base, 0.90m wide x 0.27m deep	
	416	Fill	Fill of [417] mid grey silty-clay with flint and charcoal inclusions	Pottery
	417	Cut	Pit, circular with steep sides, 1.07m x 0.52m x 0.23m deep	
5	501	Layer	Topsoil 0.42m thick	
	502	Layer	Subsoil, 0.23m thick	
	503	Layer	Natural brown-yellow clay and gravels	
	504	Layer	Alluvium, dark grey-brown	
	505	Fill	Fill of [506] mid brown silty-clay with orange flecking and stone inclusions	
	506	Cut	Ditch aligned E-W, 0.92m wide x 0.24m deep	

Trench No	Context	Deposit Type	Description	Artefact types
6	601	Layer	Topsoil, 0.35m thick	
	602	Layer	Subsoil 0.23m thick	
	603	Layer	Natural brown-yellow clay and gravels	
	604	Fill	Upper fill of [606] light brown silty-clay with orange flecks and stone inclusions	Pottery
	605	Fill	Lower fill of [606] dark brown silty-clay with orange flecks and charcoal inclusions	
	606	Cut	Ditch aligned NE-SW, V-shaped profile, 0.95m wide x 0.40m deep	
	607	Fill	Fill of [608] grey-brown silty-clay with orange flecks	Pottery
	608	Cut	Ditch aligned NE-SW, 0.60m wide x 0.19m deep	
	609	Fill	Fill of [610] grey-brown silty-clay	
	610	Cut	Pit irregular, shallow, 1.8m x 0.08m deep	
	611	Fill	Fill of [612] grey-brown silty-clay with pebble inclusions	
	612	Cut	Pit, irregular, 0.45m x 0.05m deep	
	613	Fill	Fill of [614] Brown-grey silty-clay with stone inclusions	Pottery`
	614	Cut	Pit, irregular, shallow, 0.90m x 0.15m deep	
	615	Fill	Fill of [616]	
	616	Cut	Linear aligned NE-SW, 0.90m wide, unexcavated	
	617	Fill	Fill of [618]	
	618	Cut	Linear aligned NW-SE, 0.80m wide unexcavated	
	619	Fill	Fill of [620]	
	620	Cut	Linear aligned NE-SW, 0.90m wide, unexcavated	
	621	Fill	Fill of [622]	
	622	Cut	Pit, 1.1m wide, unexcavated	
	623	Fill	Fill of [624]	
	624	Cut	Pit, 1.3m wide, unexcavated	
7	701	Layer	Topsoil, 0.25m deep	
	702	Layer	Subsoil, 0.06m thick	

Trench No	Context	Deposit Type	Description	Artefact types
	703	Layer	Natural yellow-brown clay	
8	801	Layer	Topsoil, 0.22m deep	
	802	Layer	Subsoil, 0.10m thick	
	803	Layer	Natural yellow-brown clay	
9	901	Layer	Topsoil 0.32m deep	
	902	Layer	Subsoil 0.11m thick	
	903	Layer	Natural yellow-brown and blue-grey clay	
10	1001	Layer	Topsoil, 0.28 m deep	
	1002	Layer	Subsoil, 0.18m thick	
	1003	Layer	Natural yellow-brown and blue-grey clay	
11	1101	Layer	Topsoil, 0.26 deep	
	1102	Layer	Subsoil, 0.25m thick	
	1103	Layer	Natural yellow-brown clay	
12	1201	Layer	Topsoil, 0.28m deep	
	1202	Layer	Subsoil, 0.10m-0.18m thick	
	1203	Layer	Natural orange-brown clay	
	1204	Fill	Fill of [1205], light grey-brown silty-clay with charcoal inclusions	
	1205	Cut	Linear aligned NW-SE, 0.70m wide x 0.19m deep	
13	1301	Layer	Topsoil, 0.33m deep	
	1302	Layer	Subsoil, 0.31m thick	
	1303	Layer	Natural blue-grey clay	
	1304	Fill	Fill of [1305] mid grey-brown silty-clay with stone inclusions	
	1305	Cut	Ditch aligned NE-SW, moderate sides and concave base, 0.45m wide x 0.15m deep	
	1306	Fill	Fill of [1307] mid grey-brown silty-clay with stone inclusions	
	1307	Cut	Ditch aligned NE-SW, steep sides and flat base, 0.73m wide x 0.30m deep	
	1308	Fill	Fill of [1309]	

Trench No	Context	Deposit Type	Description	Artefact types
	1309	Cut	Linear aligned NW-SE, 0.90m wider unexcavated	
	1310	Fill	Fill of [1311]	
	1311	Cut	Linear aligned NW-SE, 0.90m wide unexcavated	
14	1401	Layer	Topsoil, 0.41m deep	
	1402	Layer	Subsoil, 0.29m thick	
	1403	Layer	Alluvial, 0.40m thick	
	1404	Layer	Natural, yellow-brown clay and gravel	
15	1501	Layer	Topsoil, 0.27m deep	
	1502	Layer	Subsoil, 0.32m thick	
	1503	Layer	Natural yellow-brown clay	
	1504	Fill	Fill of [1505], dark brown silty-clay with limestone inclusions	
	1505	Cut	Ditch aligned NE-SW, shallow sides and flat base, 0.7m wide x 0.35m deep	
	1506	Fill	Fill of [1507] mid brown silty-clay with charcoal and limestone inclusions	
	1507	Cut	Pit, circular, shallow sides and flat base, 0.70m x 0.06m deep	
	1508	Fill	Fill of [1509] mid grey silty-clay with charcoal and flint inclusions	
	1509	Cut	Pit, circular, shallow sides and concave base, 0.46m x 0.73m x 0.17m deep	
	1510	Layer	Occupation deposit, dark brown-grey silty-clay with limestone inclusions	Pottery
	1511	Layer	Occupation deposit, , dark brown-grey silty-clay with limestone inclusions, 2.00m wide x 0.08m deep	
16	1601	Layer	Topsoil, 0.30m deep	
	1602	Layer	Subsoil, 0.33m thick	
	1603	Layer	Natural yellow-brown clay	
	1604	Fill	Fill of [1605] dark grey silty-clay with very frequent burnt stone, charcoal and flint inclusions	
	1605	Cut	Pit, sub-rectangular, shallow sides and flat base, 0.80m x 0.70m x 0.11m deep	

Trench No	Context	Deposit Type	Description	Artefact types
	1606	Fill	Fill of [1607] dark grey silty-clay with charcoal and flint inclusions	Pottery
	1607	Cut	Pit, sub-circular, shallow sides and concave base, 1.2m x 0.20m deep	
	1608	Fill	Fill of [1609] dark grey silty-clay with charcoal inclusions	Pottery
	1609	Cut	Pit, sub-circular shallow sides and flat base, 1.6m x 0.65m x 0.16m deep	
	1610	Layer	Dark grey-brown silty clay deposit with orange mottling, charcoal and burnt stone inclusions, 4.2m wide x 0.10m deep	Pottery
	1611	Layer	Dark grey-brown silty-clay deposit with charcoal inclusions and burnt stone 5.3m wide x 0.12m deep	Pottery
	1612	Layer	Dark grey-brown silty-clay with charcoal inclusions, 4m by 1.5m wide, unexcavated	
17	1701	Layer	Topsoil, 0.34m deep	
	1702	Layer	Subsoil, 0.28m thick	
	1703	Layer	Natural yellow-brown clay	
18	1801	Layer	Topsoil, 0.31m deep	
	1802	Layer	Subsoil, 0.23 thick	
	1803	Layer	Natural yellow-brown and orange-brown clay	
19	1901	Layer	Topsoil, 0.30m – 0.35m deep	
	1902	Layer	Subsoil, 0.30m thick	
	1903	Layer	Natural brown-grey clay	
20	2001	Layer	Topsoil, 0.20m – 0.35m thick	
	2002	Layer	Subsoil, 0.30m – 0.35m thick	
	2003	Layer	Natural brown clay and orange sand	
21	2101	Layer	Topsoil, 0.25m thick	
	2102	Layer	Subsoil, 0.26m thick	
	2103	Layer	Natural, yellow-brown clay and orange gravel	
22	2201	Layer	Topsoil, 0.20m thick	
	2202	Layer	Subsoil, mid brown clay-silt 0.30m thick	
	2203	Layer	Natural brown clay	

Trench No	Context	Deposit Type	Description	Artefact types
23	2301	Layer	Topsoil 0.31m thick	
	2302	Layer	Subsoil yellow-brown silty-clay 0.22m thick	
	2303	Layer	Natural brown-blue-grey clay	
24	2401	Layer	Topsoil 0.28m thick	
	2402	Layer	Subsoil 0.14m thick	
	2403	Layer	Natural yellow-brown and orange-brown clay	
25	2501	Layer	Topsoil 0.22m thick	
	2502	Layer	Subsoil, 0.09m thick	
	2503	Layer	Natural yellow-brown and orange-brown clay	
26	2601	Layer	Topsoil, 0.28m thick	
	2602	Layer	Subsoil, 0.17m thick	
	2603	Layer	Natural yellow-brown and orange-brown clay	
27	2701	Layer	Topsoil, 0.25m thick	
	2702	Layer	Subsoil, 0.15m thick	
	2703	Layer	Natural yellow-brown and orange-brown clay	
28	2801	Layer	Topsoil, 0.30m thick	
	2802	Layer	Subsoil, mid brown clay-loam, 0.30m thick	
	2803	Layer	Natural light brown-grey clay	
29	2901	Layer	Topsoil, 0.30m thick	
	2902	Layer	Subsoil, mid brown clay-silt with gravel inclusions, 0.20m – 0.25m thick	
	2903	Layer	Natural, blue-grey clay	
30	3001	Layer	Topsoil, 0.29m thick	
	3002	Layer	Subsoil, mid orange-brown with limestone inclusions 0.12m thick	
	3003	Layer	Natural yellow-brown and orange-brown clay	
31	3101	Layer	Topsoil, 0.15m thick	
	3102	Layer	Subsoil, mid yellow-brown silty-clay with limestone inclusions, 0.11m thick	
	3103	Layer	Natural yellow-brown and orange-brown clay	

Trench No	Context	Deposit Type	Description	Artefact types
32	3201	Layer	Topsoil, 0.23m thick	
	3202	Layer	Subsoil, 0.16m thick	
	3203	Layer	Natural yellow-brown clay	
33	3301	Layer	Topsoil, 0.30m thick	
	3302	Layer	Subsoil, mid-brown silty-clay 0.30m – 0.40m thick	
	3303	Layer	Natural, mid brown-grey clay and orange sand	
34	3401	Layer	Topsoil, 0.30m thick	
	3402	Layer	Subsoil, 0.30m thick	
	3403	Layer	Natural brown-grey clay with chalk flecks	
35	3501	Layer	Topsoil, 0.25m thick	
	3502	Layer	Subsoil, 0.20m thick	
	3503	Layer	Natural yellow orange sands and gravels with grey clay patches	
36	3601	Layer	Topsoil. 0.25m – 0.30m thick	
	3602	Layer	Subsoil. 0.20m – 0.30m thick	
	3603	Layer	Natural brown-grey clay with chalk flecks	
37	3701	Layer	Topsoil. 0.30m thick	
	3702	Layer	Subsoil. 0.20m thick	
	3703	Layer	Natural brown-grey clay with chalk flecks	
38	3801	Layer	Topsoil. 0.30m thick	
	3802	Layer	Subsoil. 0.20m thick	
	3803	Layer	Natural brown-grey clay with chalk flecks	
39	3901	Layer	Topsoil. 0.30m thick	
	3902	Layer	Subsoil. 0.10m thick	
	3903	Layer	Natural brown-grey clay with chalk flecks and orange sand gravel	
40	4001	Layer	Topsoil, 0.30m thick	
	4002	Layer	Subsoil, 0.20m thick	
	4003	Layer	Natural, light brown-grey and orange sandy-clay	

Trench No	Context	Deposit Type	Description	Artefact types
41	4101	Layer	Topsoil, 0.30m thick	
	4102	Layer	Subsoil, 0.10m thick	
	4103	Layer	Natural, mixed grey-brown clay with chalk flecks	
42	4201	Layer	Topsoil, 0.30m thick	
	4202	Layer	Subsoil, 0.10m thick	
	4203	Layer	Natural, mixed grey-brown clay with chalk flecks	
43	4301	Layer	Topsoil, 0.20m thick	
	4302	Layer	Subsoil, 0.15m thick	
	4303	Layer	Natural, orange-yellow clay-sand and gravels	
44	4401	Layer	Topsoil, 0.36m – 0.40m thick	
	4402	Layer	Subsoil, 0.27m - 0.33m thick	
	4403	Layer	Natural, light blue-brown silty-clay and sand	
45	4501	Layer	Topsoil, 0.32m – 0.37m thick	
	4502	Layer	Subsoil, 0.22m – 0.25m thick	
	4503	Layer	Natural, yellow-grey-brown silty-clay with orange sand	
46	4601	Layer	Topsoil, 0.30m thick	
	4602	Layer	Subsoil, 0.20m thick	
	4603	Layer	Natural, yellow clay and sand gravels	
47	4701	Layer	Topsoil, 0.30m thick	
	4702	Layer	Subsoil, 0.20m thick	
	4703	Layer	Natural brown and grey clay with chalk flecks	
48	4801	Layer	Topsoil, 0.30m thick	
	4802	Layer	Subsoil, 0.40m thick	
	4803	Layer	Natural, light brown clay with flint patches	
49	4901	Layer	Topsoil, 0.16m – 0.19m thick	
	4902	Layer	Subsoil, 0.14m – 0.17m thick	
	4903	Layer	Natural, yello-brown clay and orange-brown clay	
50	5001	Layer	Topsoil, 0.28m – 0.30m thick	

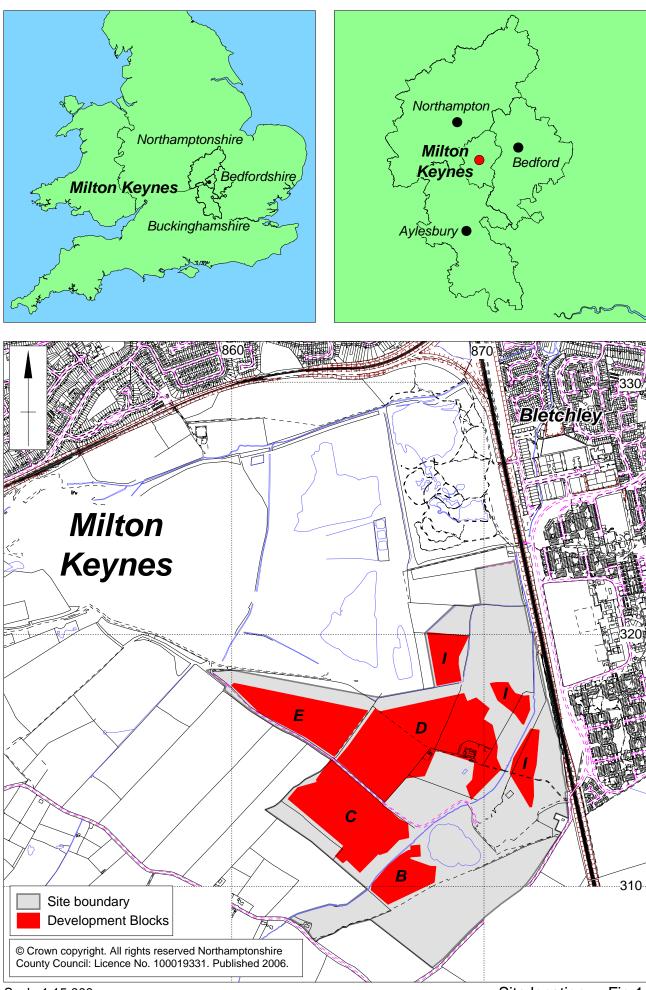
Trench No	Context	Deposit Type	Description	Artefact types
	5002	Layer	Subsoil, 0.24m – 0.26m thick	
	5003	Layer	Natural, yellow-brown clay with flint	
51	5101	Layer	Topsoil, 0.20m – 0.30m thick	
	5102	Layer	Subsoil, 0.18m – 0.20m thick	
	5103	Layer	Natural, yellow-brown clay and orange-brown sandy- clay	
52	5201	Layer	Topsoil, 0.32m thick	
	5202	Layer	Subsoil, 0.22m – 0.26m thick	
	5203	Layer	Natural, blue-grey-brown clay	
	5204	Fill	Fill of [5205] mid grey-brown silty-clay flint inclusions	
	5205	Cut	Ditch, aligned NE-SW, moderate sides and concave base, 0.55m wide x 0.17m deep	
	5206	Fill	Fill of [5207] mid grey-brown silty-clay flint inclusions	
	5207	Cut	Ditch, aligned NE-SW, moderate sides with concave base, 0.45m wide x 0.24m deep	
53	5301	Layer	Topsoil, 0.30m thick	
	5302	Layer	Subsoil, 0m – 0.30m thick	
	5303	Layer	Natural, blue-grey-brown clay	
54	5401	Layer	Topsoil, 0.25m thick	
	5402	Layer	Subsoil, 0.17m thick	
	5403	Layer	Natural, blue-grey-brown clay and orange sandy gravels	
55	5501	Layer	Topsoil, 0.20m – 0.23m thick	
	5502	Layer	Subsoil, 0.17m – 0.20m thick	
	5503	Layer	Natural, yellow-brown clay with orange-brown sandy- clay	
56	5601	Layer	Topsoil, 0.20m – 0.27m thick	
	5602	Layer	Subsoil, 0.20m – 0.25m thick	
	5603	Layer	Natural, yellow-brown clay with orange-brown sandy- clay	
57	5701	Layer	Topsoil, 0.22m – 0.24m thick	
	5702	Layer	Subsoil, 0.22m thick	

Trench No	Context	Deposit Type	Description	Artefact types
	5703	Layer	Natural blue-grey-brown clay	
58	5801	Layer	Topsoil, 0.30m thick	
	5802	Layer	Subsoil, 0.20m – 0.25m thick	
	5803	Layer	Natural, light grey-brown-orange silty-clay	
59	5901	Layer	Topsoil, 0.28m – 0.32m thick	
	5902	Layer	Subsoil, 0.24m – 0.28m thick	
	5903	Layer	Natural, mid blue-grey-brown clay	
	5904	Fill	Fill of [5904] mid grey-brown silty-clay with flint inclusions	
	5905	Cut	Pit, 8.5m x 0.55m deep	
60	6001	Layer	Topsoil, 0.29m thick	
	6002	Layer	Subsoil, 0.38m thick	
	6003	Layer	Natural, mid grey-brown clay	
61	6101	Layer	Topsoil, 0.30m – 0.40m thick	
	6102	Layer	Subsoil, 0.14m – 0.25m thick	
	6103	Layer	Natural, yellow-grey silty-clay	
62	6201	Layer	Topsoil, 0.34m thick	
	6202	Layer	Subsoil, 0.29m thick	
	6203	Layer	Natural, yellow-grey sandy-clay	
63	6301	Layer	Topsoil, 0.25m thick	
	6302	Layer	Subsoil, 0.19m – 0.23m thick	
	6303	Layer	Natural, blue-grey-brown clay	
64	6401	Layer	Topsoil, 0.25m thick	
	6402	Layer	Subsoil, 0.18m – 0.20m thick	
	6403	Layer	Natural, yellow-brown clay	
65	6501	Layer	Topsoil, 0.29m – 0.39m thick	
	6502	Layer	Subsoil, 0.22m – 0.35m thick	
	6503	Layer	Natural, blue-grey-brown clay with orange sandy-clay	
66	6601	Layer	Topsoil, 0.30m thick	

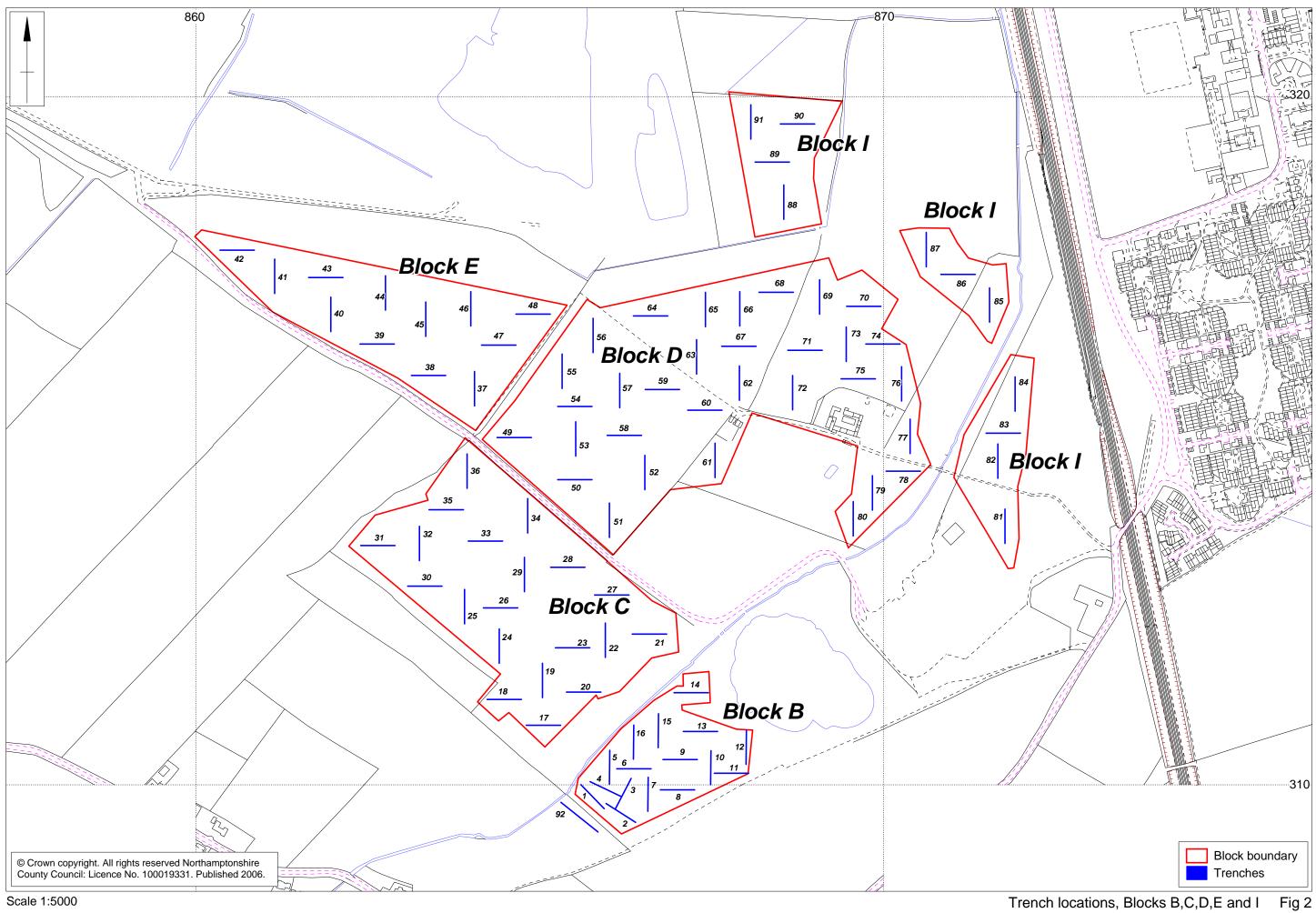
Trench No	Context	Deposit Type	Description	Artefact types
	6602	Layer	Subsoil, $0.21m - 0.28m$ thick	
	6603	Layer	Natural, mid grey-brown-yellow clay with orange sandy gravels	
67	6701	Layer	Topsoil, 0.20m – 0.30m thick	
	6702	Layer	Subsoil, 0.20m – 0.25m thick	
	6703	Layer	Natural, yellow-brown clay with red-orange sand	
68	6801	Layer	Topsoil, 0.25m thick	
	6802	Layer	Subsoil, 0.15m – 0.20m thick	
	6803	Layer	Natural, red gravel and sand	
69	6901	Layer	Topsoil, 0.20m thick	
	6902	Layer	Subsoil, 0.15m thick	
	6903	Layer	Natural, orange sand and gravels	
70	7001	Layer	Topsoil, 0.25m thick	
	7002	Layer	Subsoil, mid brown sandy-clay 0.15m thick	
	7003	Layer	Natural, Natural orange sand and gravels	
71	7101	Layer	Topsoil, 0.30m thick	
	7102	Layer	Subsoil, 0.10m thick	
	7103	Layer	Natural, orange sand and gravels	
72	7201	Layer	Topsoil, 0.10m thick	
	7202	Layer	Subsoil, 0.30m thick	
	7203	Layer	Natural, yellow-brown clay with chalk flecks	
73	7301	Layer	Topsoil, 0.19m – 0.27m thick	
	7302	Layer	Subsoil, orange-brown clay-silt, 0.12m – 0.20m thick	
	7303	Layer	Natural, orange-yellow clay-silt	
74	7401	Layer	Topsoil, 0.30m thick	
	7402	Layer	Subsoil, brown-orange clay, 0.25m thick	
	7403	Layer	Natural, orange sand and gravels	
75	7501	Layer	Topsoil, 0.25m thick	
	7502	Layer	Subsoil, orange clay-sand, 0.15m thick	

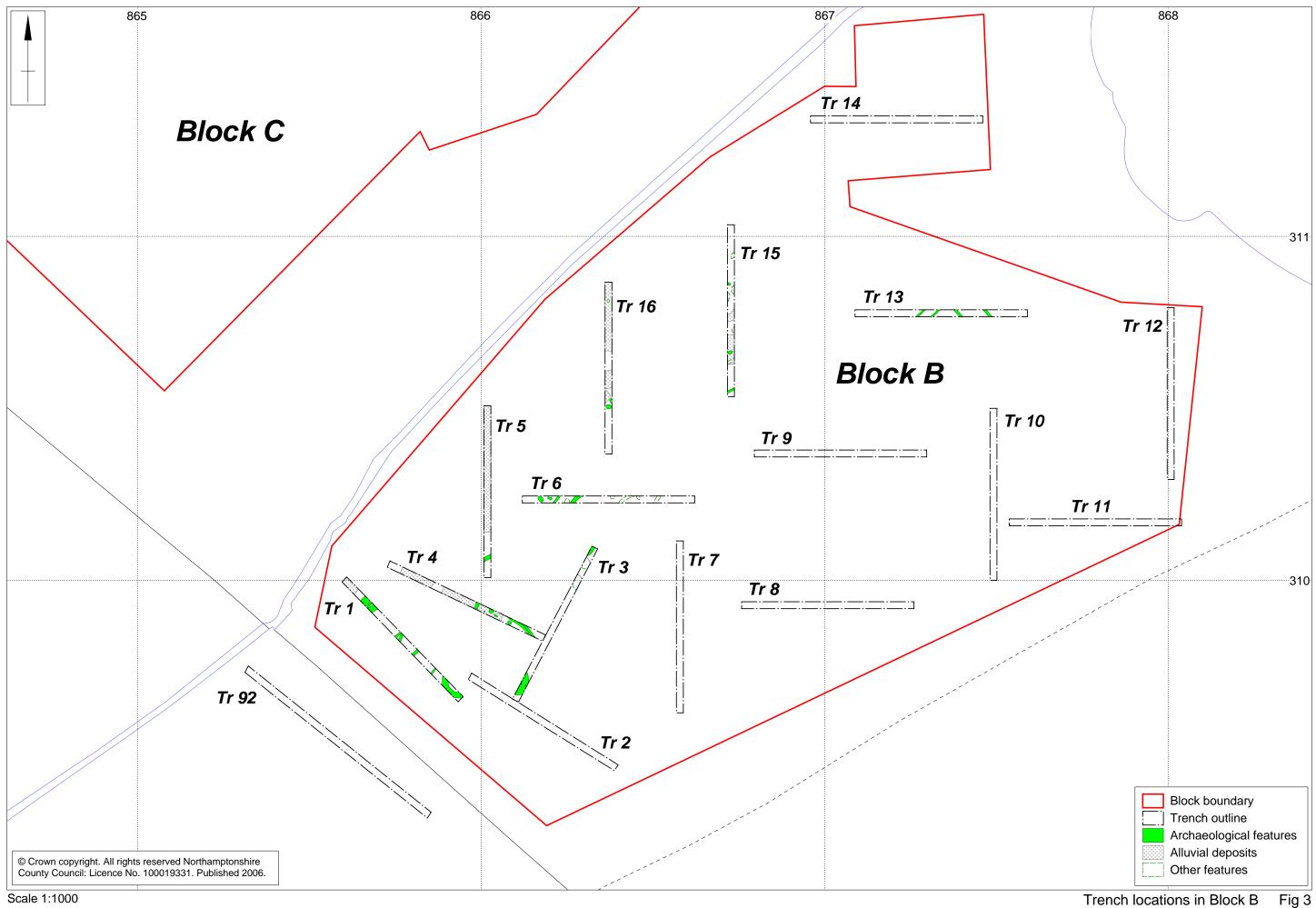
Trench No	Context	Deposit Type	Description	Artefact types
	7503	Layer	Natural, mixed grey clay and orange sand	
76	7601	Layer	Topsoil, 0.30m thick	
	7602	Layer	Subsoil, orangey sand, 0.20m thick	
	7603	Layer	Natural, orange sand and gravels	
77	7701	Layer	Topsoil, 0.30m thick	
	7702	Layer	Subsoil, orange-brown sandy-clay 0.40m thick	
	7703	Layer	Natural, orange sand and gravels	
78	7801	Layer	Topsoil, 0.40m thick	
	7802	Layer	Subsoil, mid brown clay 0.50m thick	
	7803	Layer	Natural, mixed clay and gravels	
79	7901	Layer	Topsoil, 0.40m thick	
	7902	Layer	Subsoil, 0.40m – 0.80m thick	
	7903	Layer	Natural, orange sand and gravels	
80	8001	Layer	Topsoil, 0.30m thick	
	8002	Layer	Subsoil, 0.35m thick	
	8003	Layer	Natural, orange sand and gravels	
81	8101	Layer	Topsoil, 0.40m thick	
	8102	Layer	Subsoil, yellow-brown clay, 0.30m thick	
	8103	Layer	Natural, brown-yellow, sandy-clay with chalk flecks	
82	8201	Layer	Topsoil, 0.40m thick	
	8202	Layer	Subsoil, yellow-brown clay, 0.50m thick	
	8203	Layer	Natural, orange-brown clay and gravels	
83	8301	Layer	Topsoil, 0.30m thick	
	8302	Layer	Subsoil, yellow-brown clay, 0.40m – 1m thick	
	8303	Layer	Natural, brown-grey chalk flecks and orange sand	
84	8401	Layer	Topsoil, 0.35m thick	
	8402	Layer	Subsoil, yellow-brown clay, 0.70m – 0.80m thick	
	8403	Layer	Natural, orange sand and gravels	

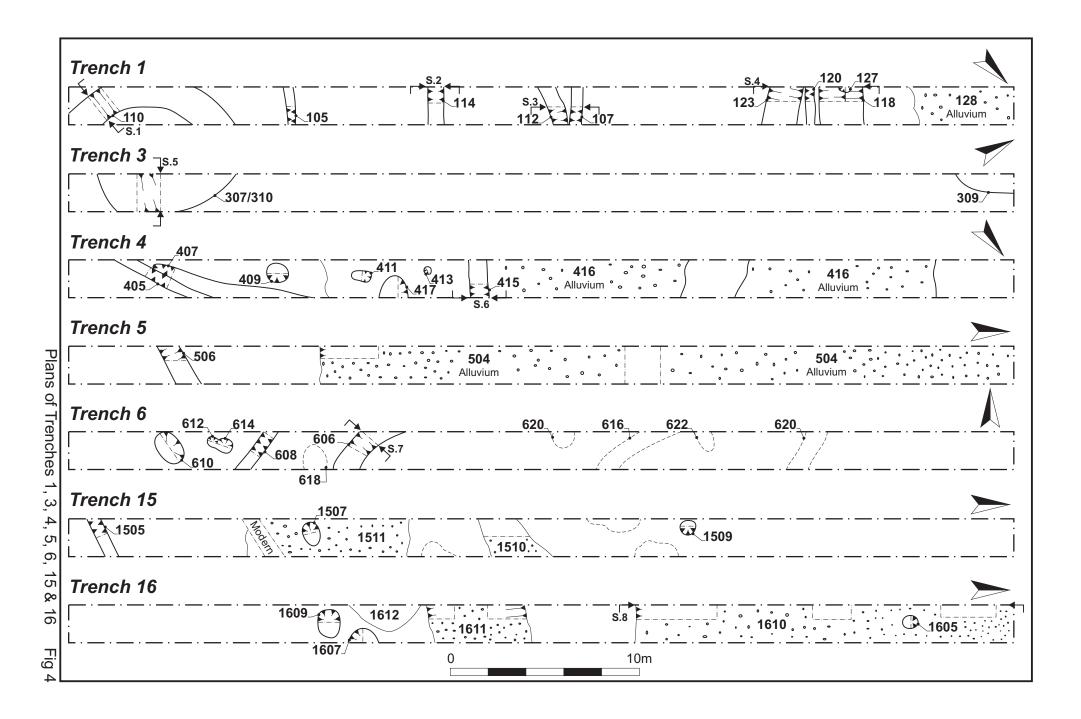
Trench No	Context	Deposit Type	Description	Artefact types
85	8501	Layer	Topsoil, 0.30m thick	
	8502	Layer	Subsoil, orange sand, 0.30m thick	
	8503	Layer	Natural, orange sand and gravels	
86	8601	Layer	Topsoil, 0.30m thick	
	8602	Layer	Subsoil, mid brown sandy-clay 0.40m thick	
	8603	Layer	Natural, orange-brown sandy-clay and gravels	
87	8701	Layer	Topsoil, 0.30m thick	
	8702	Layer	Subsoil, orange sand, 0.20m thick	
	8703	Layer	Natural, orange sand and gravels	
88	8801	Layer	Topsoil, 0.32m – 0.38m thick	
	8802	Layer	Subsoil, yellow-brown silty-clay, 0.27m – 0.40m thick	
	8803	Layer	Natural, yellow-brown clay	
89	8901	Layer	Topsoil, 0.32m thick	
	8902	Layer	Subsoil, 0.28m thick	
	8903	Layer	Natural, orange-yellow clay-silt	
90	9001	Layer	Topsoil, 0.25m thick	
	9002	Layer	Subsoil, 0.15m thick	
	9003	Layer	Natural, brown-yellow clay	
91	9101	Layer	Topsoil, 0.30m thick	
	9102	Layer	Subsoil, 0.25m thick	
	9103	Layer	Natural, brown-yellow clay	
92	9201	Layer	Topsoil, 0.15m thick	
	9202	Layer	Subsoil, 0.20m thick	
	9203	Layer	Natural, yellow-brown clay	

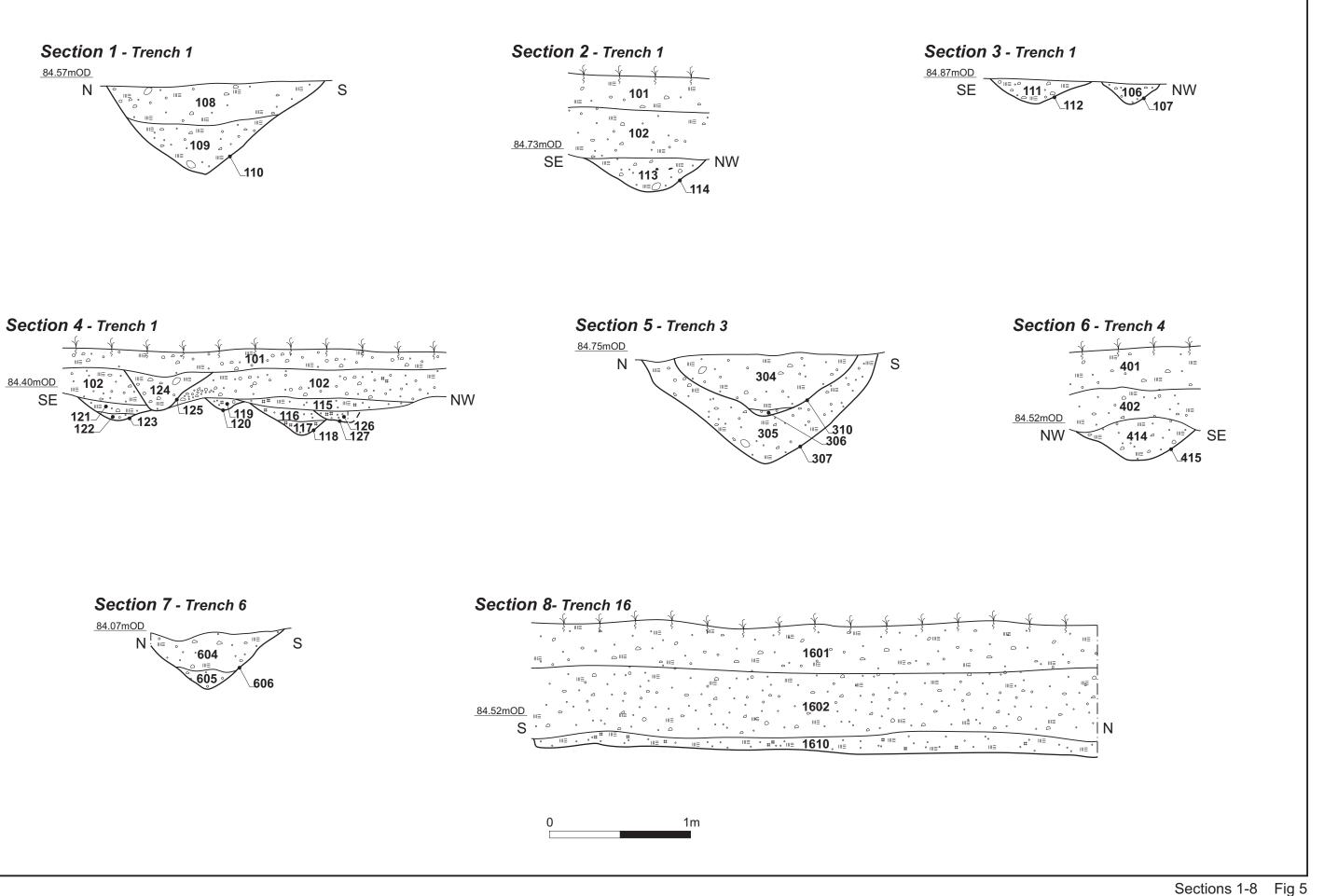


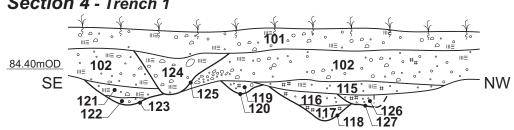
Scale 1:15,000

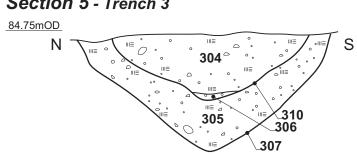


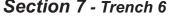


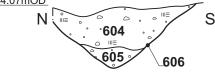












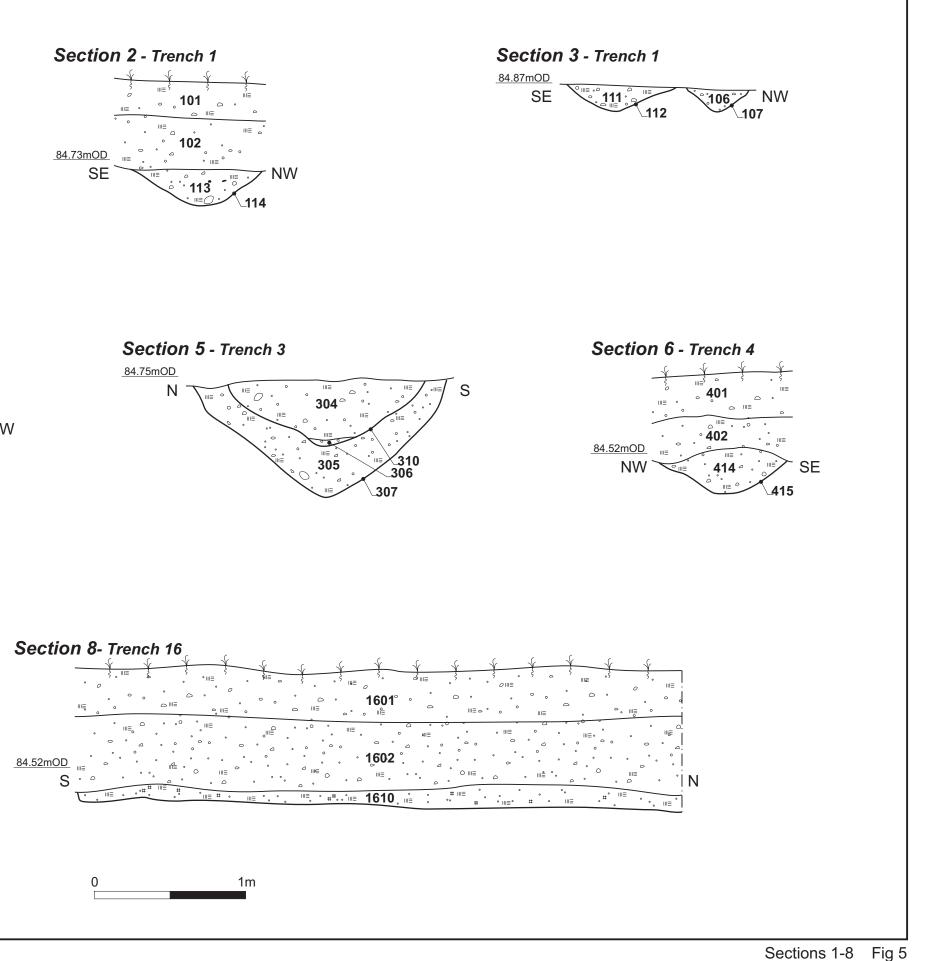






Plate 1: Trench 1, Ditch [110], Section 1 looking east



Plate 2: Trench 3, ditch [307], Section 5 looking south



Plate 3: Trench 6, ditch [606], Section 7 looking south west



Plate 4: Trench 16, (1610), Section 8 looking south-west