



Northamptonshire Archaeology

An archaeological evaluation of land at Howes Lane, Bicester, Oxfordshire



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QUALITY CONTROL

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OASIS REPORT FORM

PROJECT DETAILS		OASIS No: 144800	
Project name	An archaeological evaluation of land at Howes Lane, Bicester, Oxfordshire		
Short description (250 words maximum)	<p>Northamptonshire Archaeology was commissioned by Albion Land Ltd to conduct an archaeological evaluation on land at Howes Lane, Bicester. Previous geophysical survey by Northamptonshire Archaeology identified a group of boundary and enclosure ditches of probable Iron Age and Romano-British date, and other features of less certain archaeological significance.</p> <p>The excavation confirmed the results of the geophysical survey, with the identification of a small group of Iron Age features in one field and Romano-British ditches dated to the 1st-4th century, probably representing enclosure systems in another. Site investigations were severely hampered by wet ground conditions and flooded trenches.</p>		
Project type	Trial trench evaluation		
Site status	None		
Previous work	Aerial photograph interpretation (Cox 2010) and geophysical survey (Walford 2013)		
Current Land use	Arable		
Future work	Unknown		
Monument period	Iron Age/Roman		
Significant finds	None		
PROJECT LOCATION			
County	Oxfordshire		
Site address	Howes Lane, Oxfordshire		
Study area (sq.m or ha)	19.8ha		
OS Easting & Northing	SP 564 231		
Height OD			
PROJECT CREATORS			
Organisation	Northamptonshire Archaeology		
Project brief originator	Planning Archaeologist, Oxfordshire County Council		
Project Design originator	Northamptonshire Archaeology		
Director/Supervisor	James Burke		
Project Manager	Adam Yates		
Sponsor	Albion Land		
PROJECT DATE			
Start date	February 2013		
End date	February 2013		
ARCHIVES	Location	Content (eg pottery, animal bone etc)	
Physical	OXCMS.2013.28	Pottery, tile, quern, animal bone	
Paper	OXCMS.2013.28	Record sheets, drawings	
Digital	OXCMS.2013.28	Digital mapping, photos	
BIBLIOGRAPHY			
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**AN ARCHAEOLOGICAL EVALUATION OF LAND AT
HOWES LANE, BICESTER, OXFORDSHIRE
FEBRUARY 2013**

Abstract

Northamptonshire Archaeology was commissioned by Albion Land to conduct an archaeological evaluation on land at Howes Lane, Bicester. Previous geophysical survey by Northamptonshire Archaeology identified a group of boundary and enclosure ditches of probable Iron Age or Romano-British date, and other features of less certain archaeological significance.

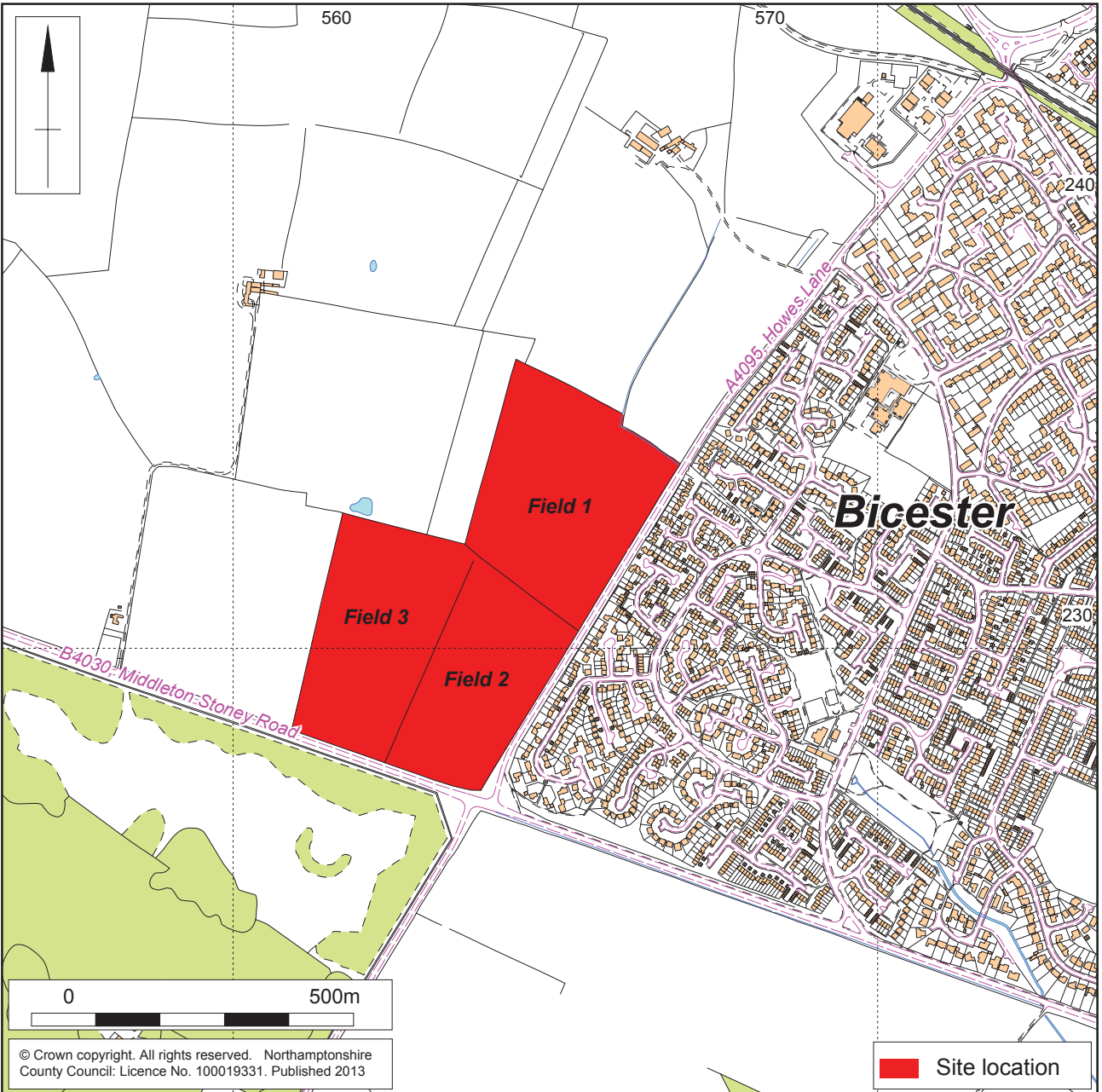
The excavation confirmed the results of the geophysical survey, with the identification of a small group of Iron Age features, including a probable ring ditch, in one field and Romano-British ditches, probably representing enclosure systems, in another. Pottery from the Romano-British features was broadly dated between the 1st and 4th centuries, indicating that activity here may have extended throughout the Roman period. Site investigations were severely hampered by wet ground conditions and flooded trenches.

1 INTRODUCTION

Northamptonshire Archaeology (NA) was commissioned by Albion Land to carry out archaeological trial trenching on a proposed development site at Howes Lane, Bicester, Oxfordshire (NGR SP 564 231; Fig 1). The proposed development site lies within the south-eastern corner of the area proposed for the 'Bicester Eco Town' development. The results of the trial trenching will be used to formulate further mitigation strategies. The work has been undertaken in accordance with *the National Planning Policy Framework* (DCLG 2012).

A magnetometer survey was undertaken of the whole site in November 2012 (Walford 2013). This stage of the evaluation comprised the excavation of a total of forty-three trial trenches, which were excavated between 4th-12th February in compliance with a brief produced by the Planning Archaeologist at Oxfordshire County Council (OCC 2012).

The accession number for this stage of investigation is OXCMS.2013.28.



Scale 1:10,000

Site Location Fig 1

2 BACKGROUND

2.1 Archaeological background

The archaeology of the proposed development area has previously been investigated by a programme of cropmark mapping and interpretation (Cox 2010). This led to the identification of “*a complex of very clearly defined ditches, possible double ditched boundary, track way and enclosures*”, and two other groups of features of possible, though less certain, archaeological significance (Fig 4). Traces of ploughed-out medieval ridge and furrow were also noted.

To the north and west of the proposed development area, across the site of the proposed ‘Bicester Eco Town’, further groups of enclosures and boundary ditches have been identified through cropmark interpretation and geophysical survey (Cox 2010; Butler and Walker 2012). Although none of these features has been closely dated, the majority probably relate Iron Age or Romano-British settlement and agricultural activity.

Approximately 1.5km to the south east of the proposed development area, excavations at the Whitelands Farm site have identified extensive archaeological remains, including prehistoric ring ditches and settlement remains of Iron Age, Roman and Anglo-Saxon date (Martin 2011).

Geophysical survey undertaken by Northamptonshire Archaeology identified a group of boundary and enclosure ditches of probable Iron Age or Romano-British date, and other features of less certain archaeological significance (Walford 2013). The findings were in broad agreement with the results from the previous programme of archaeological cropmark interpretation.

2.2 Topography and geology

The proposed development area consists of three arable fields located on the west side of Bicester in the parishes of Ambrosden and Chesterton, bounded to the east by the A4095 Howes Lane and to the south by the B4030 Middleton Stoney Road (Fig 2). It lies within the south-eastern corner of the area proposed for the ‘Bicester Eco Town’ development.

The proposed development area lies on a very shallow east-facing slope, straddling the 85m contour line. Its geology is mapped as Cornbrash limestone (BGS 2012).



Field 3 prior to excavation, looking south-west Fig 2

3 OBJECTIVES

The main aim of the investigation was to determine if archaeological remains were present within the application area.

The specific objectives of the project were to provide further information on the following:

- location, extent, nature, and date of any archaeological features or deposits that may be present at the proposed development site;
- integrity and state of preservation of any archaeological features or deposits that may be present at the proposed development site.

The project addressed the research aims and referenced the Solent Thames Research Frameworks as appropriate (www.thehumanjourney.net/index).

4 METHODOLOGY

Trial trenches were positioned in accordance with the WSI (NA 2013) and in accordance with the trench plan agreed with the Planning Archaeologist for Oxfordshire County Council (Fig 5). The evaluation comprised the excavation of forty-three (43) trial trenches, each 50m long and 1.8m wide. A further proposed trial trench could not be excavated due to excessively wet conditions. Total length of trenching was 2150m, amounting to approximately 2% of the 19.8ha site.

Trenches were targeted on geophysical anomalies and to investigate potentially blank areas.

Trenches were positioned using Leica System 1200 Global Positioning System (GPS) survey equipment using SMARTNET real-time corrections, operating to a 3D tolerance of $\pm 0.05\text{m}$. Trenches were excavated by machine using a toothless bucket to reveal archaeological remains or, where these were absent, undisturbed natural horizons. All works were monitored by an archaeologist. The topsoil was stacked separately from the subsoil.

Where possible, each trench was hand cleaned sufficiently to enhance the definition of features, unless it was certain that there were no archaeological remains present. Discrete features (pits and postholes) were subject to 50% excavation. Linear features were examined by the excavation by sections of a minimum of 1.0m in width and 20% of their length. Excavation did not compromise the integrity of the archaeological record. All archaeological deposits and artefacts excavated during the course of evaluation were recorded following standard Northamptonshire Archaeology procedures (NA 2011). Trenches with archaeological features were planned at a scale of 1:50, the trench sections and profiles through features were drawn at a scale of 1:10. Levels were related to the Ordnance Datum.

Heavy snow and rain towards the end of the project flooded most of the trenches (Fig 3). This hampered the excavation and recording of some of the features and further excavation was halted with the agreement of the Planning Archaeologist. A number of possible features were therefore not investigated.

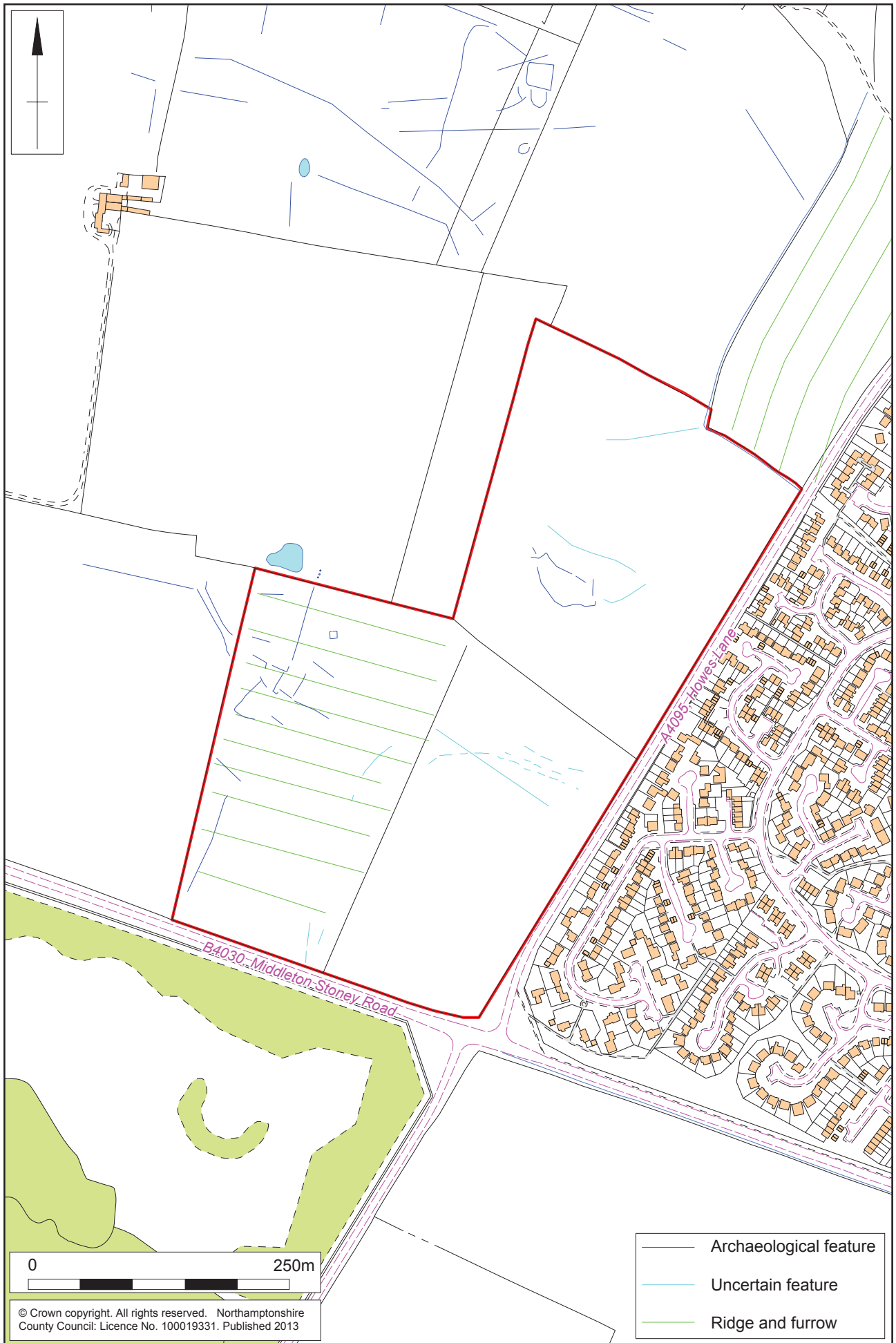


Trench 36 flooded, looking south-west Fig 3

Artefacts were collected from archaeological deposits but unstratified bone and modern material was not retained. Photographs were taken as 35mm

monochrome negatives and digital photos. The excavated area and spoil heaps were scanned by metal detector.

The evaluation conformed to the Institute for Archaeologists' *Standard and guidance for archaeological field evaluation* (revised Oct 2008). All stages of the project were undertaken in accordance with English Heritage, *Management of Research Projects in the Historic Environment* (MoRPHE) (EH 2006).



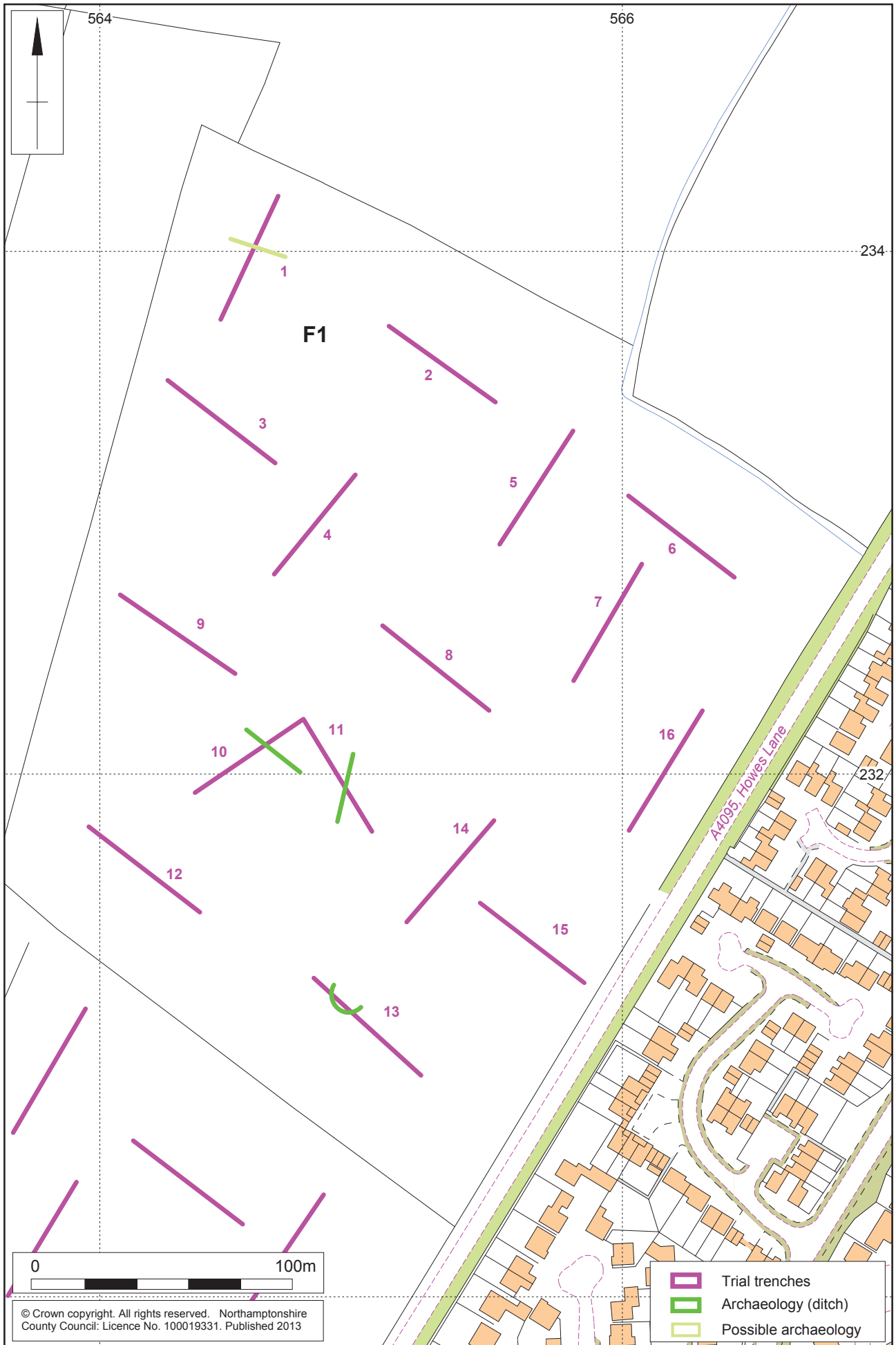
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Cropmark interpretation plot (after Cox 2010) Fig 4



Scale 1:5000 (A4)

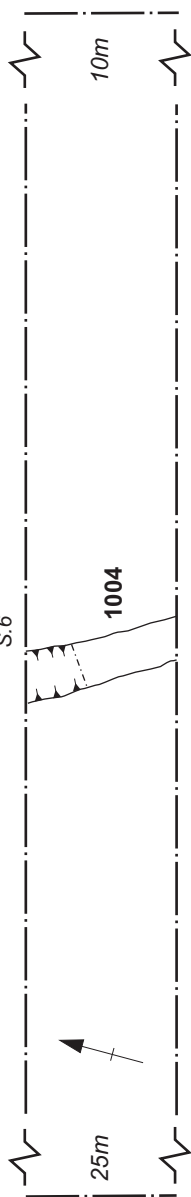
Location of trial trenches with geophysical survey results Fig 5



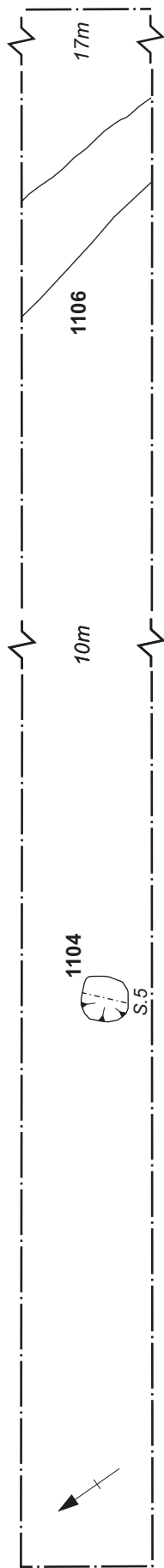
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Location of archaeological features in Field 1 Fig 6

Trench 10



Trench 11



5 THE EXCAVATED EVIDENCE

5.1 General comments

The natural geology was largely consistent across the site, comprising pale yellow cornbrash limestone with frequent patches of light brown-yellow sandy clay and sandy gravels. About 0.20m below the cornbrash limestone was solid limestone. Subsoils were present only in Trenches 34, 36 and 37 and comprised thin layers no more than 0.18m thick, similar in composition to the topsoil. The topsoil deposits were generally 0.25-0.40m thick consisting of mid orange-brown sandy silt.

Archaeological features of Iron Age date were found in Trenches 10, 11 and 13 in Field 1. Features of Romano-British date were found in Trenches 30, 34, 35 and 36 in Field 3. Further possible features, which could not be investigated due to the weather conditions were found in Trenches 1, 26, 27, 28, 32, 33, 37, 39 and 41. Features in Trenches 33, 37 and 39 correspond with geophysical anomalies and cropmarks and it is therefore likely that these ditches relate to the Roman activity to west. Of the other possible features is likely that at least some were archaeological features and others remnant furrows from medieval ridge and furrow cultivation or natural fissures.

5.2 The Iron Age activity

In Trench 10, ditch [1004], aligned north-west to south-east, was 0.90m wide and 0.60m deep with irregular edges due to the limestone bedrock and a flat base (Figs 6, 7 and Fig 10, Section 6). The fill (1003) was hard dark grey silty clay, with Iron Age pottery.

In Trench 11, posthole [1104] was 0.63m in diameter and 0.25m deep with a wide U-shaped profile (Figs 6, 7 and Fig 10, Section 5). The fill (1103) was friable mid brown-grey silty sand with moderate charcoal and limestone and some large sherds of shell-gritted pottery dating to the Iron Age. Ditch [1106], aligned north-south, was 1.20m wide but was not excavated. It corresponded to an anomaly on the geophysical survey.

In Trench 13, there was a curvilinear gully [1304] which a diameter of c 10m (Fig 6). The gully was not excavated but a sherd of pottery from the surface of the fill, is dated to the Iron Age.

5.3 The Romano-British activity

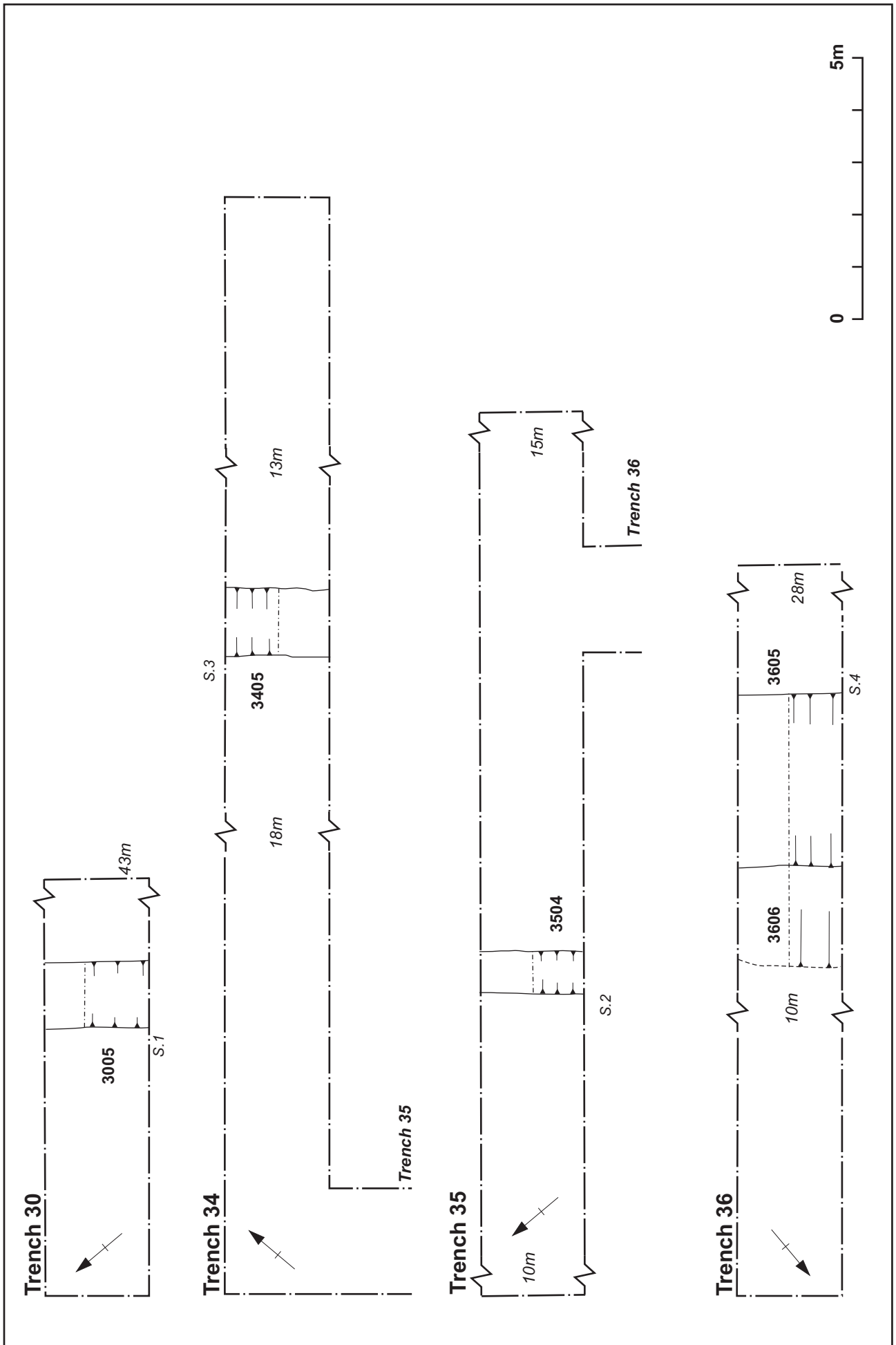
In Trench 30, ditch [3005], aligned north-east to south-west, was 1.30m wide and 0.40m deep, with shallow edges and a flat base (Figs 8, 9 and Fig 10, Section 1). The primary fill (3004) comprised dark brown-grey clay silt containing frequent pottery dating to the 1st to 4th centuries AD and animal bone, suggesting that the ditch lay close to an area of activity during this period. The upper fill (3003) was mid brown silty sandy clay and contained no artefacts. The ditch corresponded to an anomaly on the geophysical survey.

In Trench 33, there were three ditches, all aligned north-west to south-east and closely spaced at the south end of the trench (Fig 8). None were excavated since the trench quickly flooded, but it is likely that they corresponded with cropmarks and geophysics anomalies.



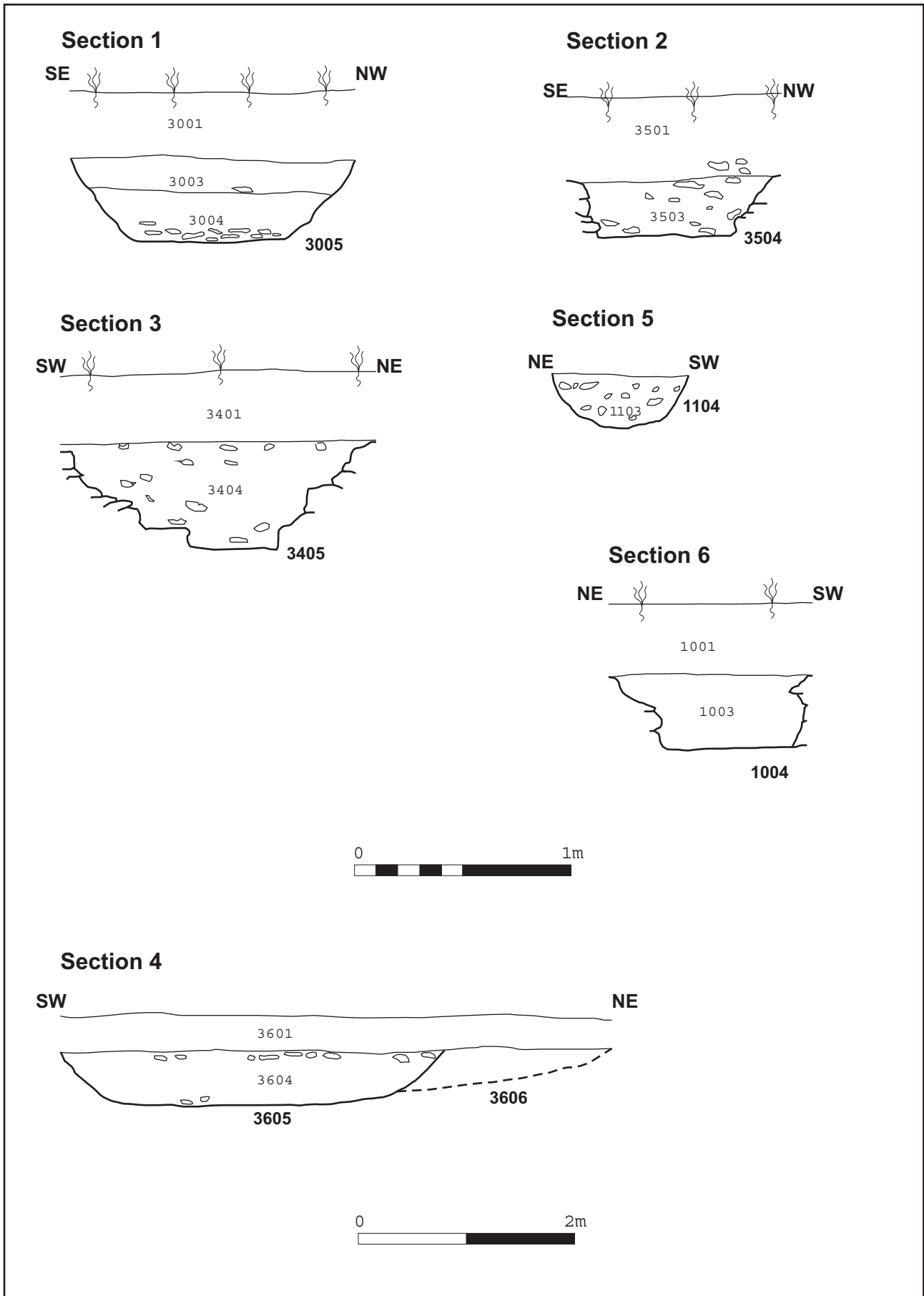
Scale 1:2000 (A4)

Location of archaeological features in Field 3 Fig 8



Scale 1:100 (A4)

Trenches 30, 34, 35 and 36 Fig 9



Scale 1:25 and 1:50 (A4)

Sections of features, trenches and pits 3001, 3003, 3004, 3005, 3501, 3503, 3504, 3401, 3404, 3405, 1103, 1104, 1001, 1003, 1004, 3601, 3604, 3605, 3606 Fig 10



Trench 34, ditch [3405], looking south-east Fig 11

In Trench 34, ditch [3405], aligned north-west to south-east, was 1.30m wide and 0.80m deep, with irregular edges due to the limestone bedrock, and a flat base (Figs 8, 9, 10, Section 3 and 11). The fill (3404) was compact light brown silty clay with frequent limestone.



Trench 35, ditch [3504], looking south-west Fig 12

In Trench 35, ditch [3504], aligned north-east to south-west, was 1.00m wide and 0.66m deep with steep edges and a flat base (Figs 8, 9, 10, Section 2 and 12). The fill (3503) comprised compact light brown-orange silty clay with frequent limestone which was concentrated on the north-western edge of the ditch. A small number of shell-gritted pottery sherds probably dated to the earlier Roman period.

In Trench 36, broad, shallow ditch [3605], aligned west to east, was at least 3.30m wide and 0.50m deep with steep edges and a wide, flat base. The fill comprised friable dark brown-grey clay silt and contained large quantities of pottery and animal bone. The pottery from this ditch had a wide potential date range, with South Gaulish Samian ware dating to the 1st century and Lower Nene Valley Colour Coat wares dating no earlier than the 3rd century.

It appeared to truncate a possible spread of occupation material comprising mid dark brown-grey clay silt [3606], although the origin of the material was not certain.

In Trench 37, possible ditch [3704] was aligned north-west to south-east. It corresponded to a cropmark and geophysical anomaly but was not excavated due to the wet conditions (Fig 8).

6 THE FINDS

6.1 The Iron Age and Romano-British pottery by Rob Perrin

A total of 458 sherds weighing just over 4.8kg and with an estimated vessel equivalent of around 6.25 was recovered from the fills of various ditches. Between two-thirds and four-fifths of the pottery came from a single ditch [3605] in Trench 36.

The pottery was recorded using simple fabric classifications, based on principal inclusion or firing technique, together with known regional or imported wares. The quantification comprised numbers of rim, body and base sherds, together with rim percentages (estimated vessel equivalents – EVE). Vessel forms were recorded per fabric using simple form letter codes and this also provided an extra quantification measure of minimum number of vessels.

Fabrics

Table 1 shows the pottery assemblage by fabric type. The main fabrics are various grog-tempered, reduced and oxidised wares.

Table 1: Pottery assemblage by fabric type

Fabric	No	% site	Wt (g)	% site	R%	% site
Shell, fine	8	2	25	-	0	-
Shell	63	14	596	12	26	4
Grogs	51	11	1502	31	76	12
Dark brown	1	-	6	-	0	-
Reduced	139	30	1218	25	193	31
Oxidised	137	30	847	17.5	227	36
OXWH	4	-	140	3	9	-
OXOX	1	-	26	-	0	-
OXCC	9	2	102	2	22	3.5
LNVCC	11	2.5	78	1.5	0	-
CC	3	-	6	-	6	-
BB1	25	5.5	230	5	48	7.5
SGS	3	-	22	-	2	-
CGS	3	-	38	-	17	3
Total	458		4836		626	

The shell-gritted ware occurs as two different types, one with a fine shell temper and the other with larger inclusions. Most of the grog-tempered pottery conforms to the fabric commonly known as ‘pink grog-tempered’ ware (Booth and Green 1989; Marney 1989; Taylor 2004; Tomber and Dore 1998, 210 [PNK GT]). The reduced and oxidised wares comprise a range of quartz-gritted fabrics with varying colours, surface treatment and texture. The colours in which the reduced wares occur are various shades of grey, dark grey and grey-brown and some have different coloured cores. The oxidised fabrics are buff, pink or reddish-yellow in colour, some with darker coloured cores. The assemblage includes products from regional production sites in the Lower Nene Valley (LNVCC and CC?), South Dorset (BB1) and near Oxford (OXOX, OXWH, OXCC and CC?), together with a small amount of imported continental pottery comprising South and Central Gaulish samian ware (SGS, CGS).

Forms

The recording of vessel forms, based on rims or other sherds where form identification was certain, identified some 49 different vessels. Table 2 gives the vessel type per fabric.

Table 2: Vessel type per fabric

Fabric	J	J/B	J/BKR	BKR	B	D	M	Misc	Total
Shell	2	-	-	-	-	-	-	-	2
Grogs	3	1	-	-	1	-	-	-	5
Reduced	10	-	2	-	-	1	-	-	13
Oxidised	14	-	2	-	1	-	-	-	17
OXWH	-	-	-	-	-	-	1	-	1
OXOX	-	-	-	-	-	-	1	-	1
OXCC	-	-	-	-	2	2	-	-	4
LNVCC	-	-	-	-	-	-	-	Box	1
CC	-	-	-	1	-	-	-	-	1
BB1	-	-	-	-	-	2	-	-	2
SGS	-	-	-	-	-	1	-	-	1
CGS	-	-	-	-	-	1	-	-	1
Total	29	1	4	1	4	7	2	1	4

Jars are by far the most common vessel type, occurring in all the main fabrics. The two in shell-gritted ware have simple curved rims, while those in grog-tempered ware have curved or triangular rims (*cf* Booth and Green 1989, fig 2, 13-14). One other grog-tempered ware is the well-known storage jar type (*ibid* fig 1, 2 and fig 2, 4-6). The jars in reduced grey wares and the oxidised wares have curved, bead and undercut rims; some oxidised jars also have triangular rims. The grog-tempered ware bowl is very wide and has curved sides; the rim is thick like those on the storage jars. The bowl in oxidised ware is of the flanged type. The fabric is coarser than the other oxidised wares and the vessel may have been burnt. The two bowls in OXCC are imitations of samian ware form 38 and the two dishes in the same fabric are imitations of samian ware forms 31 and 36. The SGS and CGS dishes are from forms 18 or 18/31 and 31, respectively. The reduced grey ware dish is thin-walled and has a flat-topped rim while the two dished in BB1 are both from plain-rimmed vessels with external burnished intersecting arc decoration. The OXOX mortarium may once have been colour-coated and the OXWH mortarium is a flanged type, but the flange has broken off. The CC beaker has a funnel neck and a bead rim and the box has a wide base.

Sources

The shell-gritted wares may have been made locally or could be products of the kilns at Harrold, Bedfordshire (Brown 1994). The source of the 'pink grog-tempered' ware is not known, but a study of its distribution suggests that Bicester lies just outside its 'heartland' zone (Taylor 2004, fig 3). Various vessels are definitely products of the Oxfordshire regional pottery production centre based around Oxford, not far away from the site, and it is likely that most of the reduced and oxidised vessels were also produced there. Certainly, some of the vessel types can be paralleled (*cf* Young 1977, fig. 71, O10, O18, O27 and O30; R24, R34, R38 and R46).

Dating

The shell-gritted ware with the fine shell temper and a sherd in a softish dark brown ware are probably Iron Age in date. The South Gaulish samian ware dates to the later 1st century and the Central Gaulish samian ware vessel is probably of Hadrianic - Antonine date. Pink grogged ware appears to have had a long duration in its core usage area (Booth and Green 1989, 82; Taylor 2004, 60) but it achieved its maximum distribution in the later 3rd to 4th centuries. Certainly, the storage jar type mainly occurs in the 4th century, and the wide bowl is likely to be similarly dated, but the other jars could be earlier. The OXCC, OXWH and OXOX vessels are likely to be of mid 3rd to 4th century in date, and the LNVCC and BB1 are no earlier than the 3rd century and may belong to the 4th century. The other probable Oxfordshire industry products have varying date ranges with some belonging to the 1st or the 2nd centuries, others being later in date and some having been types that were produced throughout the life of the industry.

Assemblage characteristics

The preponderance of jars and grog-tempered and reduced wares and, perhaps to a lesser extent, the oxidised wares, suggests that the activities from which the pottery derived were basic rural utilitarian and agricultural. It is also usual for such occupation to include the use of some fine ware fabrics and vessel types and the amounts of these present in the assemblage do not suggest any activity of a noticeable higher status, especially as there are no flagons or amphora.

6.2 Roman ceramic tile by Pat Chapman

Two tile sherds, weighing 766g, come from fill (3604), of ditch [3605]. The flat *tegula* roof tile sherd is 20mm thick and made from hard fine sandy dark orange-brown clay with a medium grey core, but has lost most of the flange. The body sherd, 25mm thick, is made from hard fine silty bright orange clay.

6.3 Querns by Andy Chapman

From the topsoil in Trench 26, there is a fragment from a flat rotary quern in Old Red Sandstone, from the Forest of Dean or south Wales, distinguished by the presence of large quartz and other pebble inclusions. The fragment measures 140 by 110mm and is up to 50mm thick, with a portion of a central eye surviving and with a worn concave surface. The use of Old Red Sandstone for the manufacturing of rotary querns had an origin in the early Roman period.

6.4 The other finds by Tora Hylton

A small group of finds were recovered from Trenches 30, 34 and 36. The assemblage is represented by nails and undiagnostic fragments in iron and a shard of glass. All the finds were recovered from deposits containing large amounts of Roman pottery.

In total there are nine hand forged nails, seven have been classified according to Mannings Typology (1985, fig 32). Three types of nail are represented, one has a large flat circular head (Dia 28mm) and a large square-sectioned shank (Manning Type 1a), it may have been used for fixing large timbers etc. Three nails have small flat circular heads and complete examples range from 25-40mm in length (Manning Type 1b); they may have been used for light structural fixings. Finally

three nails have domed heads and short square-sectioned shanks (Type 8); they are hobnails for footwear.

A single fragment of blue/green glass (Dimensions: 26 x 23mm Th: 5mm) was recovered from fill (3604), ditch [3605]. It appears to be a fragment from the base of a bottle/flask. The presence of a right-angled edge suggests that it may be part of a square or hexagonal bottle; a vestige of a circular relief design is visible on the underside. A 1st-2nd century date is suggested.

7 FAUNAL AND ENVIRONMENTAL EVIDENCE

7.1 The animal bone by Stephanie Vann

An assemblage of 267 fragments was recovered from two ditches of Roman date, and consisted of cattle, sheep, ovicaprid, pig, horse, medium mammal and large mammal.

The assemblage was subjected to macroscopic examination. Species identification was undertaken at a context level. Fragments of mammal bone that could not be attributed to a taxonomic group equal or lower than genus were categorised as either 'large mammal' or 'medium mammal'. A summary of the results is presented in Table 3. Fused and unfused elements were recorded. For the main domestic species – cattle, sheep/goat and pig – tooth wear on mandibles was recorded to calculate age where possible. Measurements were taken where appropriate following Von den Driesch (1976).

Results

Preservation of the animal bone at this site was moderate to good. Fragmentation was moderate and surface abrasion was moderate with bone exhibiting signs of erosion, weathering and other taphonomic damage in some instances. Fragmentation was the result of both old and fresh breaks. Two bone fragments showed evidence of burning, four showed evidence of canid gnawing, four exhibited butchery marks and one showed potential pathology.

The total number of fragments was 267, of which 170 (64 %) were identifiable. The species present were cattle, sheep, ovicaprid, pig, horse, medium mammal and large mammal. There was no evidence of bird or fish remains.

Table 3: Total number of fragments per species per period

Species	3004	3604	Total
Cattle (<i>Bos taurus</i>)	9	8	17
Sheep (<i>Ovis aries</i>)	0	1	1
Sheep/Goat (Ovicaprid)	43	0	43
Pig (<i>Sus scrofa</i>)	2	0	2
Horse (<i>Equus caballus</i>)	0	3	3
Large Mammal	2	26	28
Medium Mammal	78	0	78
Total identified	132	38	170
Unidentified	88	9	97
Total	220	47	267

Tooth wear was recorded for the mandibles that were complete enough to permit it following Grant (1982) and the results are shown in Table 4. This is a widely used, published procedure that records the stage of tooth eruption and wear based on a series of defined stages, enabling an age to be assigned to individual animals and thus analysis of age at death patterns to be undertaken.

Those skeletal elements complete enough to be measured for total length is shown in Table 5. The total length was then used to estimate the height at the withers based upon factors devised by Teichert (1975) for sheep. Such

calculations help with the visualisation of the size of a single animal and the variation of animals within a population, although it should be noted that the height calculated is approximate; the dimensions of a long bone are dependent on many factors, including genes, age, sex and nutrition.

Table 4: Ageing of Species by tooth wear (Grant 1982)

Context	Species	DP4	M1	M2	M3
3604	Ox	-	-	k	f
3604	Ox	-	l	k	g
3604	Sheep	-	k	h	f

Table 5: Measurable Elements

Context	Species	Element	Total Length (mm)	Withers Height (mm)
3004	Sheep/Goat	Radius	150	603
3004	Sheep/Goat	Metacarpal	128.1	626.4
3004	Sheep/Goat	Tibia	205	617.1
3004	Sheep/Goat	Metatarsal	143	649.2
3004	Sheep/Goat	Metatarsal	138.9	630.6

Discussion

Whilst it is true that the small size of the assemblage makes it difficult to draw any significant conclusions, there is nothing about it that is in any way extraordinary for a domestic assemblage of Romano-British date. Cattle are regularly exploited throughout the Iron Age and Romano-British periods, along with other domestic species such as ovicaprids (sheep/goat) and pigs (Maltby 1981). The dominance of such remains within the assemblage from Bicester is therefore not unusual. The good survivability of large, strong bones such as those of cattle and horse 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.

Following the York System (Table 6), the cattle mandibles from context 3604 would be classified as adult (stage A3). The sheep mandible would also be classified as adult (stage A3).

Table 6: Definitions of dental eruption and attrition stages used in analysis of age at death

Cattle and Sheep Mandibles		
N	Neonatal	DP4 Unerupted or just in the process of eruption
J	Juvenile	DP4 in wear, M1 not in wear
I	Immature	M1 in wear, M2 not in wear
SA	Subadult	M2 in wear, M3 not in wear
SA1		M3 forming, to just erupting
SA2		M3 erupting
A	Adult	M3 in wear
A1		M3 up to minor dental exposure (stages a and b)
A2		M3 dentine exposure across central column (stages c and d)
A3		M3 dentine exposure on distal column (stages e to h)
E	Elderly	Dentine exposure to or beyond stage j

Pig Mandibles		
N	Neonatal	DP4 Unerupted or just in the process of eruption
J	Juvenile	DP4 in wear, M1 not in wear
I	Immature	M1 in wear, M2 not in wear
I1		M2 present in crypt
I2		M2 erupting
SA	Subadult	M2 in wear, M3 not in wear
SA1		M3 present in crypt
SA2		M3 erupting
A	Adult	M3 in wear
A1		M3 with enamel attrition only (stage a)
A2		M3 with minor dentine exposure (stages b to d)
A3		M3 dentine exposure merging on mesial cusps (stages e to h)
E	Elderly	Three main zones of dentine exposure across M3 merging (stage j)

Note: Age at death using mandibles with at least one recordable molar or 4th premolar. Adult stages are defined by reference to Tooth Wear Stage sensu Grant (1982; also Reitz and Wing 1999: 163-5). After O'Connor (2003: Table 31)

Following the fusion stages described by Reitz and Wing (1999) the total number of fused and unfused skeletal elements for the main domesticates (Table 7) shows that all were above the early fusing stage at the time of death. The middle and late-fusing elements of both cattle and sheep/goat are mostly fused indicative of animals over the age of 42 – 48 months (3.5 – 4 years) (Reitz and Wing). This is compatible with the tooth wear data and suggests that cattle and ovicaprids at the site may not have been slaughtered until they were adult.

Table 7: Total number of fused and unfused skeletal elements for main domesticates (after Reitz and Wing 1999)

	Early Fusing		Middle Fusing		Late Fusing	
	Unfused (No)	Fused (No)	Unfused (No)	Fused (No)	Unfused (No)	Fused (No)
Cattle	-	1	-	-	-	-
Ovicaprid	-	18	1	11	1	9
Pig	-	2	-	-	-	-
Total	-	21	1	11	1	9

The skeletal elements represent a variety of parts of the body, including the axial skeleton (cranium, pelvis, scapula and vertebrae), the feet (metapodials, tarsals and phalanges) and the limbs (humerus, radius, ulna, femur, and tibia). This distribution pattern, combined with the presence of chop marks on some elements, may indicate that this is normal butchery waste, rather than the result of some other industrial process. Four elements (two cattle, two ovicaprid) show evidence of butchery. These were chopped through midshaft or broken open to extract the marrow (Binford 1981).

The ovicaprid withers height range of 603 – 649.2mm (or 0.6 – 0.65m) from the Roman ditches at Howes Lane, Bicester, is taller than the mean withers height of 0.56m from the early Roman phases at Causeway Lane in Leicester, but comparable to the mean withers height of 0.62 m from the later Roman phases of the same site (Gidney 1999; 315). The animals from Bicester are, therefore, comparable with animals from other sites dated to the Roman period.

The lone example of pathology from the site was on a large mammal tarsal from the fill of ditch [3605]. This had a very porous, 'holey' appearance on the distal surface and small rounded nodules of new bone formation around the edge of that surface. There was no evidence of eburnation or 'polishing', which makes it difficult to state categorically that this is an example of osteoarthritis, although that is a possibility. Alternatively, it could be evidence of infection or inflammation in the ankle (Vann 2008).

7.2 The charred plant remains by Val Fryer

Samples for the retrieval of the plant macrofossil assemblages were taken from the fills of ditches recorded within Trenches 10 and 36 were submitted for assessment. The samples were bulk floated by NA and the flots were collected in a 300 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x16 and the plant macrofossils and other remains noted are listed in Table 8. Nomenclature within the table follows Stace (1997). All plant remains were charred. Modern roots, seeds and straw fragments were also recorded within both assemblages.

The assemblage from Sample 1 (fill (1003), ditch [1004]) was extremely small and sparse, containing little other than occasional pieces of charcoal/charred wood and a minute fragment of calcined bone. In contrast, Sample 2 (from fill [3604] ditch [3605]), although still small, contained a moderate density of cereal grains/chaff as well as seeds of common weeds and wetland plants. Preservation was moderately good, although some grains and seeds were puffed and distorted, probably as a result of combustion at very high temperatures.

Oat (*Avena* sp.), barley (*Hordeum* sp.) and wheat (*Triticum* sp.) grains were recorded, with wheat occurring most frequently. Of the wheat grains, most were of an elongated 'drop' form typical of spelt (*T. spelta*), and spelt glume bases were also recorded. The weed seeds were all of common segetal species, with taxa noted including small legumes (Fabaceae), black bindweed (*Fallopia convolvulus*), grasses (Poaceae) and dock (*Rumex* sp.). A single spike-rush (*Eleocharis* sp.) nutlet, indicative of marginal wet grassland conditions, was also recorded. Charcoal/charred wood fragments were abundant, and small fragments of bone and eggshell were also noted.

Table 8: Charred plant remains

Sample No.	1	2
Context No.	1003	3604
Feature No.	1004	3605
Trench No.	10	36
Date	IA	ROM
Cereals		
<i>Avena</i> sp. (grains)	-	x
<i>Hordeum</i> sp. (grains)	-	x
<i>Triticum</i> sp. (grains)	-	xx
(glume bases)	-	x
(spikelet bases)	-	x
<i>T. spelta</i> L. (glume bases)	-	xx
Cereal indet. (grains)	-	xx
(detached sprouts)	-	x
Herbs		
Fabaceae indet.	-	x
<i>Fallopia convolvulus</i> (L.)A. Love	-	x
<i>Galium aparine</i> L.	-	xcf
<i>Medicago/Trifolium/Lotus</i> sp.	-	xcf
Small Poaceae indet.	-	x
<i>Rumex</i> sp.	-	x
Wetland plants		
<i>Eleocharis</i> sp.	-	x
Other plant macrofossils		
Charcoal <2mm	x	xxxx
Charcoal >2mm	xx	xxx
Charcoal >5mm	-	x
Charred root/stem	-	x
Indet.inflorescence frags.	-	x
Indet.seeds	-	x
Other remains		
Bone	xb	x
Eggshell	-	x
Small coal frag.	x	-
Small mammal/amphibian bone	-	xpmc
Mollusc shells		
Woodland/shade loving species		
<i>Carychium</i> sp.	x	-
<i>Clausilia</i> sp.	-	x
<i>Trichia striolata</i>	x	-
<i>Vitrea</i> sp.	-	x
Open country species		
<i>Pupilla muscorum</i>	-	x
<i>Vallonia</i> sp.	x	x

Sample No.	1	2
Context No.	1003	3604
Feature No.	1004	3605
Trench No.	10	36
Date	IA	ROM
<i>Vertigo pygmaea</i>	-	x
Catholic species		
<i>Cepaea</i> sp.	-	x
<i>Cochlicopa</i> sp.	-	x
Freshwater species		
<i>Anisus leucostoma</i>	x	-
<i>Lymnaea</i> sp.	x	-
Sample volume (litres)	40	40
Volume of flot (litres)	<0.1	<0.1
% flot sorted	100%	100%

x = 1 – 10 specimens xx = 11 – 50 specimens xxx = 51 – 100 specimens xxxx = 100+ specimens
 cf = compare b = burnt pmc = possible modern contaminants IA = Iron Age ROM = Roman

Although shells of terrestrial and freshwater molluscs were present within both assemblages, their excellent state of preservation possibly indicated that they were all later contaminants within feature fills.

Conclusions

In summary, the few remains recorded within the assemblage from Sample 1 are almost certainly derived from wind-dispersed detritus, which was accidentally incorporated within the feature fill. Whilst the same may be true for the assemblage from Sample 2, it is, perhaps, more likely that this material is derived from a small quantity of refuse, which was deliberately placed within the ditch fill. The composition of the assemblage suggests that cereal processing debris, domestic detritus and hearth waste are all present. However, as processing waste was commonly used as tinder or kindling within the domestic context, it is probably most likely that the material is largely derived from midden refuse.

8 CONCLUSIONS

The evaluation identified two distinct areas of archaeological activity. In the central part of Field 1 an area of Iron Age activity is represented by two ditches and one possible ring ditch. In the western part of Field 3 an area of Romano-British activity dating to the 1st-4th centuries AD is present. A series of ditches produced significant quantities of finds, particularly pottery and animal bone, suggesting that they are close to an area of settlement activity.

The adverse weather conditions during the course of the evaluation severely hampered excavation and recording of many of the features. However, geophysical survey anomalies have largely been proved.

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APPENDIX: CONTEXT TABLES

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
1	50m x 2m N-S	SP 5645 2340	85.20 aOD	0.34m, 84.86m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
101	Topsoil	Friable dark grey-brown sandy loam with frequent limestone	0.34m thick	—
102	Natural	Mid orange-brown sand and limestone	—	—
103	Linear feature	Cut of possible E-W aligned linear. Unexcavated - flooded	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
2	506m x 28m NW-SE	SP 5653 2335	84.00m aOD	0.26m, 83.74m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
201	Topsoil	Friable dark grey-brown silty sand with frequent limestone	0.26m thick	—
202	Natural	Yellow-brown limestone	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
3	50m x 2m NW-SE	SP 5643 2334	85.30m aOD	0.40m, 84.90m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
301	Topsoil	Friable dark grey-brown sandy loam with frequent limestone	0.40m	—
302	Natural	Mid orange-brown sand and limestone	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
4	50m x 2m N-S	SP 5648 2329	84.30m aOD	0.31m, 83.99m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
401	Topsoil	Friable dark grey-brown sandy loam with frequent limestone	0.31m thick	—
402	Natural	Mid orange-brown sand and limestone	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
5	50m x 2m NE-SW	SP 5658 2333	83.20m aOD	0.24m, 82.96m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
501	Topsoil	Mid brown-grey silty sand with frequent limestone and gravel	0.24m thick	—
502	Natural	Mixed cornbrash with green-yellow clay	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
6	50m x 2m NW-SE	SP 5662 2328	82.60m aOD	0.28m, 82.32m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
601	Topsoil	Friable mid grey-brown sandy loam with frequent limestone	0.28m thick	—
602	Natural	Mixed limestone cornbrash with green-yellow clay	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
7	50m x 2m NE-SW	SP 5659 2325	83.10m aOD	0.42m, 82.68m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
701	Topsoil	Friable mid grey-brown sandy loam with frequent limestone	0.33m thick	—
702	Natural	Mixed limestone cornbrash with green-yellow clay	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
8	50m x 2m E-W	SP 5652 2323	83.60m aOD	0.30m, 83.30m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
801	Topsoil	Friable mid grey-brown sandy loam with frequent limestone	0.30m thick	—
802	Natural	Mid brown-orange sand and limestone	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
9	50m x 2m E-W	SP 5642 2324	84.60m aOD	0.30m, 84.30m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
901	Topsoil	Friable mid grey-brown sandy loam with frequent limestone	0.30m thick	—
902	Natural	Limestone with areas of orange sand	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
10	50m x 2m NE-SW	SP 5645 2320	84.00m aOD	0.30m, 83.70m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
1001	Topsoil	Friable mid grey-brown sandy loam with frequent limestone	0.30m thick	—
1002	Natural	Mid brown-orange sand and limestone	—	—
1003	Fill of [1004]	Hard dark grey silty clay with frequent limestone	—	Iron Age pottery, Sample 1
1004	Ditch	Aligned NW-SE, irregular sides, flat base	0.90m wide 0.60m deep	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
11	50m x 2m NW-SE	SP 5649 2319	83.60m aOD	0.32m, 83.28m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
1101	Topsoil	Friable mid grey-brown sandy loam with frequent limestone	0.32m thick	—
1102	Natural	Mid brown-orange sand and limestone	—	—
1103	Fill of [1104]	Friable mid brown-grey silty sand	—	Iron Age pottery
1104	Posthole	Circular, steep sides, uneven base	0.63m in diameter 0.25m deep	—
1105	Fill of [1106]	—	—	—
1106	Ditch?	Aligned N-S. Flooded	1.10m wide	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
12	50m x 2m E-W	SP 5640 2316	84.00m aOD	0.28m, 83.72m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
1201	Topsoil	Friable mid grey-brown sandy loam with frequent limestone	0.33m thick	—
1202	Natural	Mid brown-orange sand and limestone	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
13	50m x 2m SW-NE	SP 5650 2310	82.70m aOD	0.28m, 82.42m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
1301	Topsoil	Friable mid grey-brown sandy loam with frequent limestone	0.28m thick	—
1302	Natural	Mid brown-orange sand and limestone	—	—
1303	Fill of [1304]	—	—	Iron Age pottery
1304	Gully	Curvilinear gully. Flooded	0.60m wide	

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
14	50m x 2m N-S	SP 5653 2316	83.00m aOD	0.28m, 82.72m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
1401	Topsoil	Friable mid grey-brown sandy loam with frequent limestone	0.28m thick	—
1402	Natural	Mid brown-orange sand and limestone	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
15	50m x 2m NW-SE	SP 5656 2313	82.60m aOD	0.30m, 82.30m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
1501	Topsoil	Friable mid grey-brown sandy loam with frequent limestone	0.30m thick	—
1502	Natural	Mid brown-orange sand and limestone	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
16	50m x 2m NE-SW	SP 5661 2320	82.60m aOD	0.30m, 82.30m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
1601	Topsoil	Friable mid grey-brown sandy loam with frequent limestone	0.28m thick	—
1602	Natural	Yellow-orange cornbrash limestone with orange sand	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
17	50m x 2m N-S	SP 5637 2308	83.60m aOD	0.30m, 83.30m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
1701	Topsoil	Loose dark brown-grey sandy loam with frequent limestone	0.30m thick	—
1702	Natural	Light yellow-orange clay sand and limestone	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
18	50m x 2m NW-SE	SP 5643 2303	82.70m aOD	0.24m, 82.46m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
1801	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.24m thick	—
1802	Natural	Mid orange clay sand and limestone	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
19	50m x 2m NE-SW	SP 5646 2301	82.40m aOD	0.26m, 82.14m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
1901	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.26m thick	—
1902	Natural	Mid orange clay sand and limestone	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
20	50m x 2m N-S	SP 5637 2302	83.20m aOD	0.32m, 81.88m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
2001	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.32m thick	—
2002	Natural	Mid orange clay sand and limestone, changing to limestone at S end	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
21	50m x 2m E-W	SP 5643 2295	82.20m aOD	0.30m, 81.90m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
2101	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.30m thick	—
2102	Natural	Mid orange clay sand and limestone	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
22	50m x 2m E-W	SP 5634 2295	83.50m aOD	0.50m, 83.00m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
2201	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.50m thick	—
2202	Natural	Cornbrash limestone with orange-red sand	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
23	50m x 2m NE-SW	SP 5640 2340	82.50m aOD	0.40m, 82.10m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
2301	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.29m thick	—
2302	Natural	Cornbrash limestone with orange-red sand	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
24	50m x 2m NE-SW	SP 5642 2290	81.80m aOD	0.30m, 81.50m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
2401	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.30m thick	—
2402	Natural	Mid orange-red sand and limestone	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
25	50m x 2m N-S	SP 5634 2290	83.10m aOD	0.30m, 82.80m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
2501	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.30m thick	—
2502	Natural	White-yellow limestone	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
26	50m x 2m E-W	SP 5630 2289	83.40m aOD	0.31m, 83.09m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
2601	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.31m thick	—
2602	Natural	Mid orange clay sand and limestone	—	—
2603	Linear feature	Cut of linear feature, N-S aligned. Not excavated - flooded	—	—
2604	Linear feature	Cut of linear feature, N-S aligned. Not excavated- flooded	—	—
2605	Circular feature	Possible posthole. Not excavated	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
27	50m x 2m N-S	SP 5630 2284	88.20m aOD	0.30m, 87.90m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
2701	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.30m thick	—
2702	Natural	Mid brown clay sand and limestone	—	—
2703	Cut of linear	Cut of possible linear feature, aligned E-W and wider at the E end. Unexcavated	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
28	50m x 2m NW-SE	SP 5638 2286	82.30m aOD	0.33m, 81.97m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
2801	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.30m thick	—
2802	Natural	Limestone with patches of orange-red sand	—	—
2803	Cut of linear	Cut of possible linear, NE-SW aligned	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
29	50m x 2m NW-SE	SP 5635 2281	82.30m aOD	0.36m, 81.94m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
2901	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.30m thick	—
2902	Natural	Limestone at N end, orange-brown sand and limestone at S	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
30	50m x 2m E-W	SP 5619 2316	86.00m aOD	0.30m, 85.70m aOD
Context	Context type	Description	Dimensions	Artefacts/Samples
3001	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.30m thick	—
3002	Natural	Light yellow-brown sandy clay and limestone	—	—
3003	Fill of [3005]	Friable mid brown silty sandy clay	0.18m	—
3004	Fill of [3005]	Friable dark brown-grey clay silt	0.23m	Roman pottery, bone
3005	Ditch	Aligned N-S, shallow sides, flat base		

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
31	50m x 2m N-S	SP 5628 2314	84.80m aOD	0.30m, 84.50m aOD
Context	Context type	Description	Dimensions	Artefacts/Samples
3101	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.30m thick	—
3102	Natural	Light yellow limestone and sandy gravel	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
32	50m x 2m E-W	SP 5625 2309	85.00m aOD	0.25m, 84.75m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
3201	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.25m thick	—
3202	Natural	Light yellow limestone and sandy clay	—	—
3203	Cut of linear	Cut of possible linear feature aligned N-S. Not excavated - flooded	—	—
3204	Cut of linear	Cut of possible linear feature aligned N-S. Not excavated - flooded	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
33	50m x 2m NE-SW	SP 5621 2309	85.70m aOD	0.40m, 85.30m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
3301	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.40m thick	—
3302	Natural	Mid orange clay sand and limestone	—	—
3303	Cut of linear	Cut of possible linear aligned NW-SE, probably related to geophysics anomaly. Not excavated- flooded	—	—
3304	Cut of linear	Cut of possible linear aligned NW-SE. Not excavated- flooded	—	—
3305	Cut of linear	Cut of possible linear aligned NW-SE. Not excavated- flooded	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
34	50m x 2m NE-SW	SP 5617 2311	86.30m aOD	0.38m, 85.92m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
3401	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.28m thick	—
3402	Subsoil	Mid orange-brown sand, occasional small stones	0.10m thick	—
3403	Natural	Light brown-yellow clay and limestone	—	—
3404	Fill of [3405]	Light brown silty clay	—	Roman pottery and bone
3405	Ditch	Aligned NW-SE. Irregular edges and flat base	1.30m wide 0.80m deep	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
35	50m x 2m NW-SE	SP 5617 2308	86.10m aOD	0.40m, 85.70m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
3501	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.40m thick	—
3502	Natural	Light yellow-brown sandy clay and limestone	—	—
3503	Fill of [3504]	Compact light brown-orange silty clay	—	Roman pottery
3504	Ditch	Aligned NE-SW. Steep edges, flat base	1.00m wide 0.66m deep	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
36	50m x 2m NE-SW	SP 5616 2305	86.00m aOD	0.44m, 85.56m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
3601	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.26m thick	—
3602	Subsoil	Friable mid grey-brown sandy silt	0.18m thick	—
3603	Natural	Light yellow-brown limestone	—	—
3604	Fill of [3605]	Friable dark brown-grey clay silt	—	Roman pottery, animal bone, Fe objects, glass and tile, Sample 2
3605	Ditch	Aligned NW-SE. Shallow edges, flat base. Flooded	3.30m wide 0.50m deep	—
3606	Spread	Possible spread of occupation material	1.90m wide 0.50m deep	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
37	50m x 2m NE-SW	SP 5615 2301	86.00m aOD	0.28m, 85.72m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
3701	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.26m thick	—
3702	Subsoil	Mid brown sandy silt	0.02m	—
3703	Natural	Light yellow-brown limestone	—	—
3704	Cut of linear	Cut of possible linear feature, aligned NW-SE. Unexcavated - flooded	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
38	50m x 2m NE-SW	SP 5626 2306	84.80m aOD	0.30m, 84.50m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
3801	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.30m thick	—
3802	Natural	Mid orange sandy clay and limestone	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
39	50m x 2m SE-NW	SP 5622 2301	84.80m aOD	0.28m, 84.52m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
3901	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.28m thick	—
3902	Natural	Mid orange clay sand and limestone	—	—
3903	Ditch?	Terminal of linear feature aligned NE-SW. Unexcavated - flooded	—	—
3904	Cut of linear	Cut of possible linear feature, aligned NE-SW. Unexcavated - flooded	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
40	50m x 2m NE-SW	SP 5622 2291	84.10m aOD	0.32m, 83.78m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
4001	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.32m thick	—
4002	Natural	Mid orange clay sand and limestone	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
41	50m x 2m SE-NW	SP 5617 2297	85.20m aOD	0.28m, 84.92m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
4101	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.28m thick	—
4102	Natural	Mid orange clay sand and limestone	—	—
4103	Cut of linear	Cut of possible linear, aligned NE-SW. Possible furrow? Unexcavated - flooded	—	—

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
42	50m x 2m NE-SW	SP 5612 2291	85.30m aOD	0.30m, 85.00m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
4201	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.30m thick	—
4202	Natural	Light brown-yellow limestone with clay patches	—	—

Trench 43 not excavated

Trench No	Length, width & alignment	NGR	Surface height	Depth & height of natural
44	50m x 2m E-W	SP 5616 2287	84.50m aOD	0.30m, 84.20m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
4401	Topsoil	Friable loose dark grey-brown sandy loam with frequent limestone	0.30m thick	—
4402	Natural	Light brown-yellow limestone	—	—



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