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Archaeological Field Evaluation

On behalf of:

GALLAGHER ESTATES Part of the L&Q Group

Concerning:

Whitehouse Secondary School
MK Western Expansion Area
Milton Keynes
MK19 6EU

HER Number: **EMK1301**

September 2017

REPORT SPECIFICATION

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Contents

1 Non-Technical Summary

This report presents the results of a programme of Archaeological Field Evaluation on behalf of Gallagher Estates at a site designated for the construction of Whitehouse Secondary School.

Fifty-seven trenches were opened on land utilised for arable (maize) production.

Sixteen trenches contained features of varying archaeological significance, largely dating to the Iron Age and/or Romano-British period and comprising ditches, pits and post/stake holes. Its proximity to significant Iron Age/Romano-British activity currently under investigation by Border Archaeology to the Northwest further emphasises the potential importance of the archaeology identified during the evaluation.

Features and activity identified included:

- *North-Northwest-South-Southeast aligned ditches traversing the northernmost field of the site that are suggestive of droveways or squared stock enclosures.*
- *Palaeoenvironmental evidence (particularly molluscan) suggesting a grazed grass environment at the time the fills were deposited. Dry pastoral land, with seasonally standing water in ditches, seems likely.*
- *Evidence for iron smithing, which correlated well to the previous geophysical survey, may hint at the function of (at least partly domestic) nearby activity/occupation.*
- *Post medieval ridge and furrow as noted on the geophysical survey.*

2 Introduction

Border Archaeology (BA) were instructed by Gallagher Estates (GE) to undertake a programme of Archaeological Field Evaluation (AFE) on the site designated as Whitehouse Secondary School, part of the Milton Keynes Western Expansion Area (Area 10). The site occupies parts of four fields, comprising 106,400m², situated to the NE of Oakhill Lane at MK19 6EU and within NGR SP 808377 (*fig. 1*).

Fifty-seven trenches, constituting 3.2% of the proposed development area, were opened between April and May 2017.

This report is for submission to Nick Crank BSc MCI*f*A, Senior Archaeological Officer for Milton Keynes Council (SAOMKC), and GE.

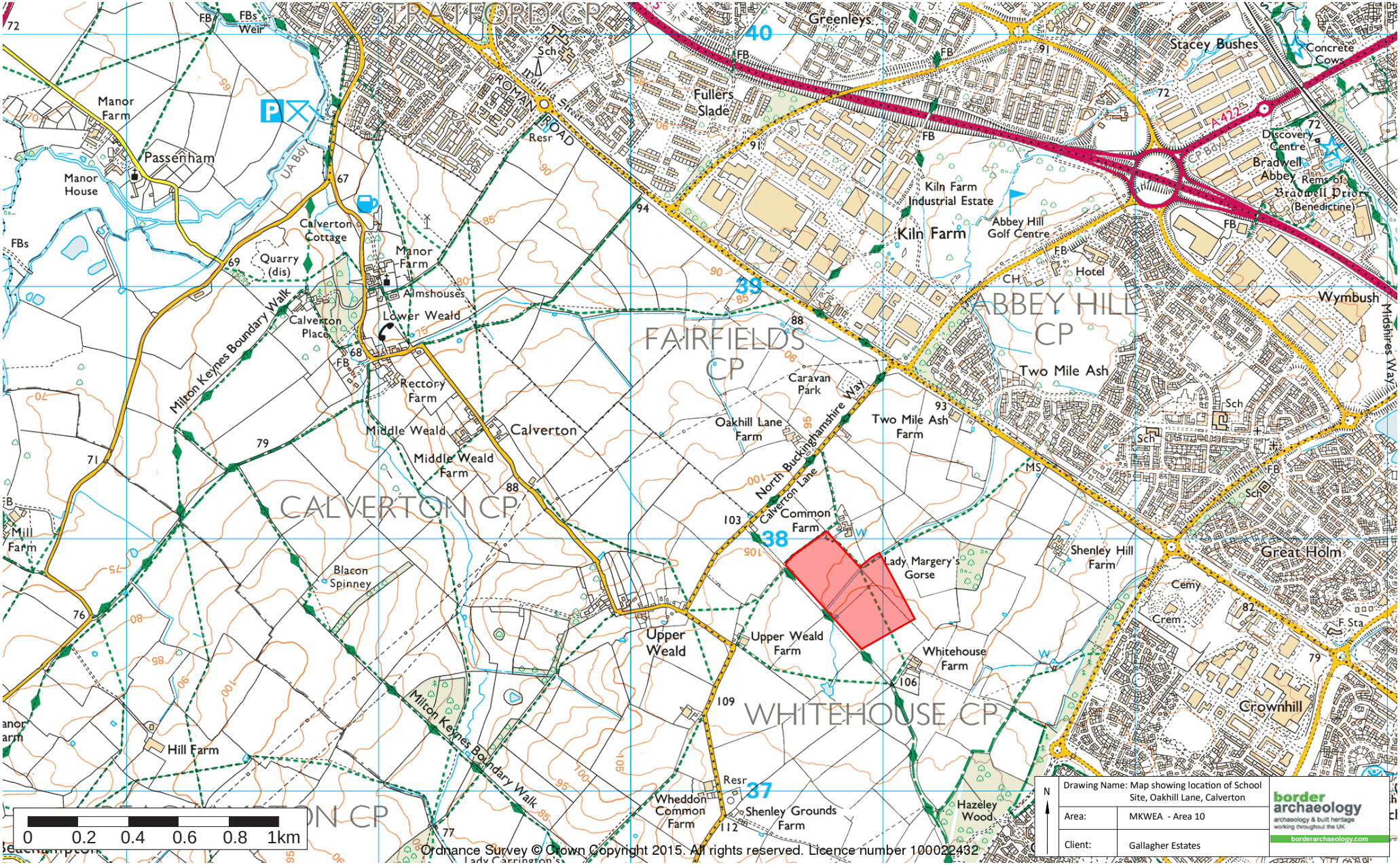


Fig. 1 Site location (marked in red)

3 Site Description

Land use comprises arable (maize) farming, except for the most NE strip of field that has lain to grass since delineation by newt fencing had made cultivation impossible. The area consists of two complete fields in the western part of the site and parts of two further fields in the E.

The site of Whitehouse Secondary School (106,400m²) is bisected by a watercourse that respects the current field boundaries and, additionally, by a long established public right of way (now cancelled). Whitehouse Secondary School occupies the central area of the plateau of Area 10 of the Milton Keynes Western Expansion Area (MKWEA) and the land ultimately falls away to the SW towards Whaddon.

3.1 Soils & Geology

The site comprises an extensive tract of typical calcareous pelosols of the HANSLOPE series (411d) which may be characterised as slowly permeable calcareous clayey soils with some slowly permeable non-calcareous clayey soils overlying chalky till. Smaller areas of typical stagnogley soils of the WICKHAM 2 series (711f) and pelo-stagnogleys of the DENCHWORTH series (712d) intrude at the NE and SW extents of the MKWEA, respectively. The WICKHAM 2 soils slowly permeable seasonally waterlogged fine loamy over clayey, fine silty over clayey and clayey soils overlying drift over Jurassic and Cretaceous clay or mudstone. The DENCHWORTH series comprises slowly permeable seasonally waterlogged clayey soils with similar fine loamy over clayey soils over Jurassic and Cretaceous clay (SSEW 1983).

4 Aims and Objectives

The overall aim of the AFE was to characterise, as fully as possible within the parameters of the project, the extant archaeological resource as established within the Written Scheme of Investigation (WSI) (BA 2017). This is to inform any potential mitigation strategy with full reference to the relevant research priorities outlined in the *Solent-Thames Research Framework* (STRF) (Hey & Hind 2014).

5 Historical, Archaeological and Geophysical Background

As detailed in the WSI (BA 2017), a previous geophysical survey has been conducted on the Milton Keynes Western Expansion Area and one field of the area designated as Whitehouse Secondary School had been subjected to further survey (Haddrell 2007); this revealed activity of possible archaeological significance to the N of the area.

For the compilation of the WSI (BA 2017), LiDAR data was consulted and revealed evidence for ploughed-out ridge and furrow in addition to the modern intrusions of a service pipe and newt fencing. The LiDAR data further confirmed historical mapping suggesting the route of the current trackway to Common Farm previously extended to join the North Buckinghamshire Way at Whitehouse Farm. This routeway predates Common Farm and the construction of Oakhill Lane.

Ongoing archaeological excavation immediately to the NW of the area investigated during the course of the AFE has revealed significant evidence for Iron Age/Romano-British occupation and activity and this was further considered in the WSI (BA 2017).

Parts of the southernmost two fields have been previously archaeologically assessed by Albion Archaeology (2008), while the fields immediately to the N and NW have been investigated by BA (2015).

Works to the N and E revealed no significant archaeology; to date, no archaeological investigation has taken place to the W and S, on the other side of Oakhill Lane.

Close to the site lies both Whitehouse Farm and the more recently established Common Farm, Oakhill Lane appearing to have come into existence around the time that Common Farm was established and the previous routes to Whitehouse Farm (both that extending through Common Farm and that extending from Upper Weald Farm to the SW) were replaced in the landscape by footpaths.

6 Methodology

The programme of AFE was mandated by the WSI (BA 2017) and the works were carried out in accordance with practices set out in *Standard and Guidance for archaeological field evaluation* (CIfA 2014). BA adheres to the CIfA *Code of Conduct* (2014) and to *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide* (Lee 2015).

The HER event number assigned is EMK1301. An OASIS online record will be initiated.

Trench positions were determined by survey grade GPS to the trench plan allocated in the WSI (BA 2017). The WSI sought to achieve at least 3% evaluation of the area through regular placement of the trenching with the influence of geophysical, archaeological, LiDAR and historical data. A further 2% contingency was allowed for the full characterisation of features.

54 trenches of 30m length were outlined in the WSI (BA 2017). No trenches needed repositioning in the field. However, reconsideration of the site boundary with GE led to the placement of three further trenches within an area not previously considered part of Whitehouse Secondary School but subject to related development. The resultant 106,400m² was therefore evaluated by 3,420m² of trenching, producing more than 3.2% coverage.

The 57 trenches were excavated by a 360° tracked machine equipped with a grading/ditching (toothless) bucket. Mechanical excavation was to the first significant archaeological horizon or geological natural under archaeological supervision. Archaeological excavation proceeded by hand.

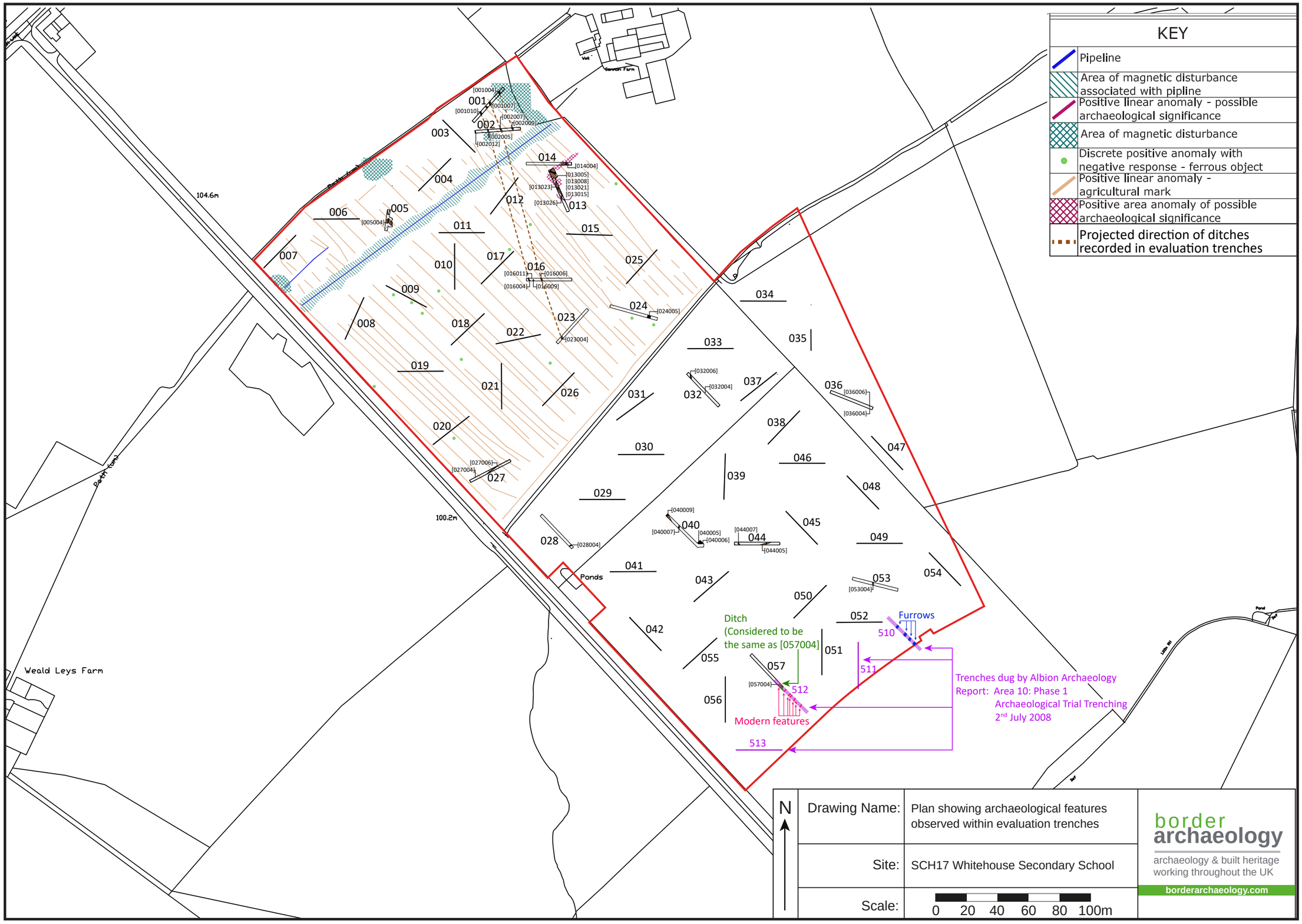


Fig. 2: Plan showing trenches and archaeology

6.1 Recording

Full written, drawn and photographic records were made in accordance with BA's *Archaeological Field Recording Manual* (2014). In the absence of archaeological deposits, the written record comprised a *pro-forma* trench recording sheet and representative section for each excavated trench.

The drawn record was produced on gridded, archive stable polyester film. Sections were illustrated at 1:10, feature plans were illustrated at 1:20 and trench plans were illustrated at 1:20 or 1:50 as appropriate. Temporary benchmarks (TBM) were established at appropriate locations and plans, elevations and sections contain grid and level information relative to OS data. All drawings were numbered and listed in a drawing register, these drawing numbers being cross-referenced to written site records.

A photographic record of all stratigraphic units was made using a high-resolution digital camera, comprising photographs of archaeological features and appropriate groups of features and structures. An appropriate scale was included in each photograph and photographic records were indexed and cross-referenced to written site records. Details concerning subject and direction of view were maintained in a photographic register, indexed by frame number, in addition to photoboards. A representative photographic record of the progress of the archaeological work was also made.

6.2 Palaeoenvironmental/palaeoeconomic sampling

Samples for palaeoenvironmental/palaeoeconomic purposes were collected according to guidance set out by Historic England in *Environmental Archaeology* (Campbell *et al.* 2011) and the *Palaeoenvironmental Department Manual* (BA 2017).

7 Results

Of the 57 trenches, 16 contained archaeology of note and are detailed in Section 7.1; full tabulated results of non-archaeological trenches are shown in Appendix 7 (see p.120-131) including two trenches containing features which were recorded but considered not to be of archaeological significance.

All trenches exhibited topsoil and subsoil before the geological strata into which archaeological features were cut. In almost all cases, the subsoil had a graduated appearance and this was sometimes pronounced enough for the designation of two subsoils. Only in Trench 024 was there evidence of an additional fluvial deposition.

Throughout the site, ceramic land drains were encountered within the subsoil; these were frequently higher than the archaeological horizon and, for this reason, often appeared only in section or as traces in plan. In addition, stone drains covered the site sharing a broadly similar alignment to the ceramic land drains. The stone drains were truncated by the ceramic land drains and are therefore considered the earliest land-drainage on site. Traces of agricultural ridge and furrow were present and, when encountered (usually after weathering within an open trench), they predominantly bore the same alignment as suggested by the geophysical survey and were thus sample-excavated to ensure the interpretation was valid.

Trench extensions to better characterise archaeology was necessitated at Trenches 005, 013 and 040 as detailed below.

7.1 Archaeological trenches

7.1.1 Trench 001

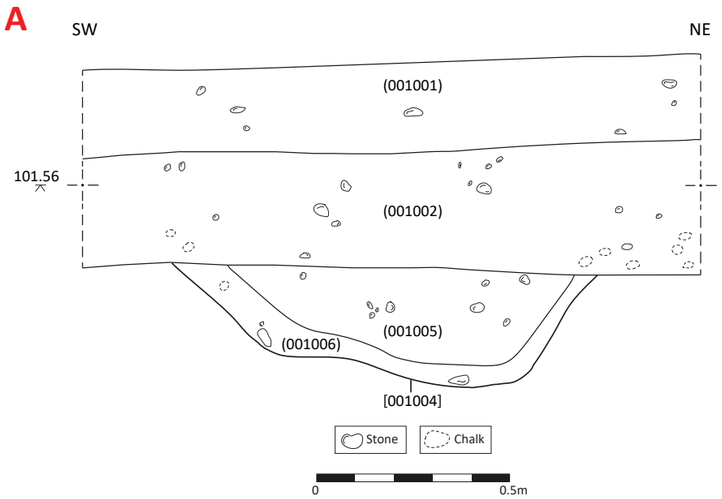
Trench 001 was orientated NE-SW and located over an area identified through geophysical survey as having a high magnetic signal (Haddrell 2007). This may partly have been influenced by the modern field entrance, although archaeometallurgical material retrieved from the palaeoenvironmental sampling of (001005) from ditch [001004] revealed hammerscale interpreted as evidence of iron smithing in the locality of the deposit formation (Starley 2017).

Three broadly N-S ditches were identified and strong correlations between these and ditches in Trenches 002, 016 and 023 were noted; specifically, continuations that have been suggested are: [001010]=[002005]=[016004], [001007]=[002007]=[016006]=[023004] & [001004]=[002009]. It is noteworthy that these ditches do not appear in Trench 012 and the orientations, if they are continuations of each other, would appear to change further to the S to become more NNW-SSE.

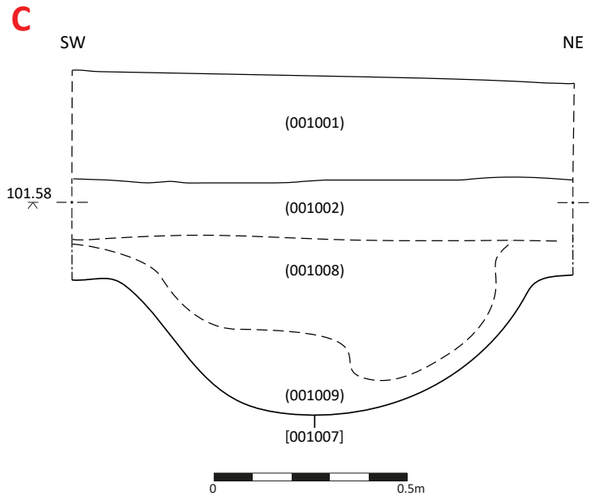
Pottery from all three ditches was dated to the late Iron Age to mid 1st century AD (Perrin 2017); this date is entirely in keeping with the archaeology recognised nearby, where parallel ditches have traversed the landscape and been provisionally identified as droveways, boundaries or stock management features (BA forthcoming). In addition, a residual flint bladelet was recovered from ditch [001004], but this does not contradict this dating (Devaney 2017).

Palaeoenvironmental evidence suggested that the upper fills contained limited domestic material although a small quantity of hammerscale was retrieved from the sampling process (Andrews 2017). Faunal remains were recovered from the palaeoenvironmental samples, but were too small to be identified (Faine 2017).

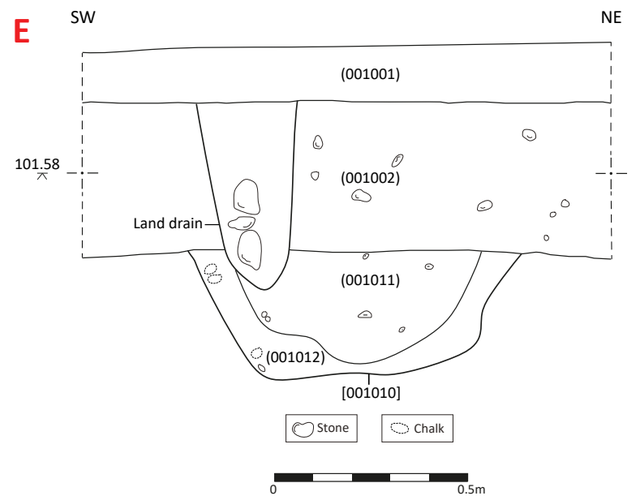
Plate 1: SE-facing section of [001007]



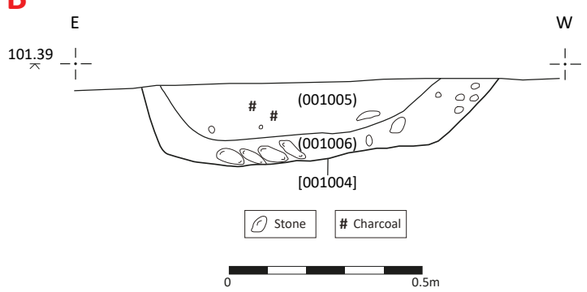
SE-facing section of [001004]



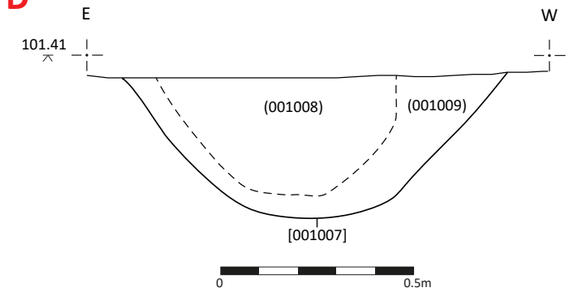
SE-facing section of [001007]



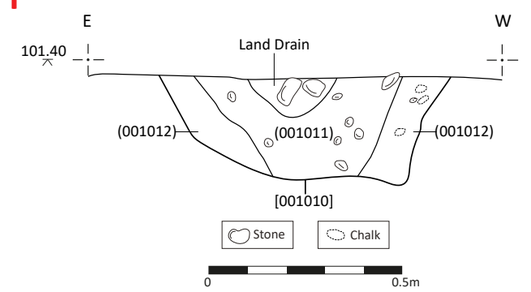
SE-facing section of [001010]



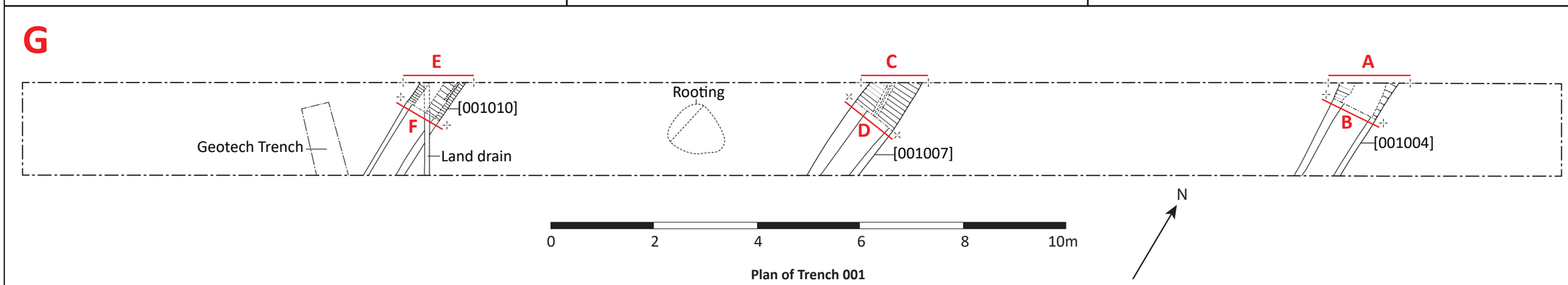
N-facing section of [001004]



N-facing section of [001007]



N-facing section of [001010]



Plan of Trench 001

Fig. 3: Sections and plan of features in Trench 001

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
001	(001001)	Deposit	-	-	Dark grey brown silty clay; occ. small stones; 0.23m deep; overlies (001002).	Topsoil	-	-	Modern	
	(001002)	Deposit	-	-	Mid grey brown silty clay; 0.34m deep; underlies (001001), overlies (001003).	Subsoil	-	-	Post medieval	
	(001003)	Deposit	-	-	Mid orange grey sandy clay; freq. chalk; underlies (001002).	Geology	-	-	-	
	[001004]	Cut	(001005), (001006)	-	Linear shape in plan; N-S orientation; steep to mod. sides; broad, near flat base; >1.80m long, 1.11m wide, 0.30m deep; cuts (001003).	Cut of ditch	-		Late Iron Age / mid C1st	Same as [002009]
	(001005)	Fill	-	[001004]	Loose to moderately compacted mid brown grey silty clay; occ. charcoal, mod. small to medium sub-angular stones; 0.90m wide, 0.25m deep; overlies (001006).	Upper fill of ditch [001004]	Pottery; flint bladelet; Pottery frags from sample	28	Late Iron Age / mid C1st	
	(001006)	Fill	-	[001004]	Firmly compacted mid orange brown silty clay; mod. chalk, mod. small to large stones; 1.11m wide, 0.15m deep; underlies (001005).	Lower fill of ditch [001004]	-	-	Late Iron Age / mid C1st	
	[001007]	Cut	(001008), (001009)	-	Linear shape in plan; N-S orientation; mod. sides; concave base; >1.80m long, 1.08m wide, 0.36m deep; cuts (001003).	Cut of ditch	-		Late Iron Age / mid C1st	Same as [002007], likely same as [016006] & [023004]
	(001008)	Fill	-	[001007]	Firmly compacted mid brown silty clay; occ. small to medium sub-angular/sub-rounded stones; 0.79m wide, 0.36m deep; overlies (001009).	Upper fill of ditch [001007]	Pottery frags from sample	29	Late Iron Age / mid C1st	
	(001009)	Fill	-	[001007]	Firmly compacted light grey brown with orange mottles silty clay; occ. small to medium sub-angular/sub-rounded stones, occ. chalk flecks; 0.41m wide, 0.30m deep; underlies (001008).	Lower fill of ditch [001007]	-	-	Late Iron Age / mid C1st	
	[001010]	Cut	(001011), (001012)	-	Linear shape in plan; N/S orientation; steep sides; broad, near flat base; >1.80m long, 0.86m wide, 0.33m deep; cuts (001003).	Cut of ditch	-		Late Iron Age / mid C1st	Same as [002005], likely same as [016004]
	(001011)	Fill	-	[001010]	Moderately compacted mid brown grey silty clay; mod. small stones; 0.56m wide, 0.22m deep; overlies (001012).	Upper fill of ditch [001010]	Pottery / CBM frags from sample	30	Late Iron Age / mid C1st	

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
001	(001012)	Fill	-	[001010]	Firmly compacted mid orange brown silty clay; occ. small stones; 0.22m wide, 0.27m deep; underlies (001011).	Lower fill of ditch [001010]	-	-	Late Iron Age / mid C1st	

7.1.2 Trench 002

Trench 002 was orientated ENE-WSW over an area identified by the geophysical survey as being of high magnetic signal (Haddrell 2007); it was located a short distance to the S of Trench 001. Four roughly NNW-SSE aligned ditches were identified and strong correlations between these (particularly [002005] and [002007]) and ditches in Trenches 001, 016 and 023 were noted (see Trench 001).

Pottery from three of the four ditches was dated to the late Iron Age to mid 1st century AD, while the fourth ditch, [002005], was assigned a broader late Iron Age/Romano-British date (Perrin 2017); however, [002005] aligned well with the other more precisely dated ditches; as with Trench 001, a flint bladelet was also recovered from one of the ditches, [002005], but this may be residual (Devaney 2017).

Where the ditches exhibited singular fills (in the case of [002005] and [002007]), their palaeoenvironmental recovery was limited which supports the suggestion that initial filling into the ditches comprised slumped backfill, potentially from a bank. The upper fill of [002009] and both fills of [002012] showed similar palaeoenvironmental signatures and correlated well to the upper fills sampled in Trench 001. This may suggest that the two fills of [002012] were slightly anomalous and were both sampled due to archaeologically recognised similarities (Andrews 2017). While bone fragments were recovered from the palaeoenvironmental samples, they could not be identified (Faine 2017).

Although these ditches are considered to continue into Trenches 001 and 016 (and possibly 023), it is noteworthy that they are not seen within Trench 012.

Plate 2: Plan of [002009]

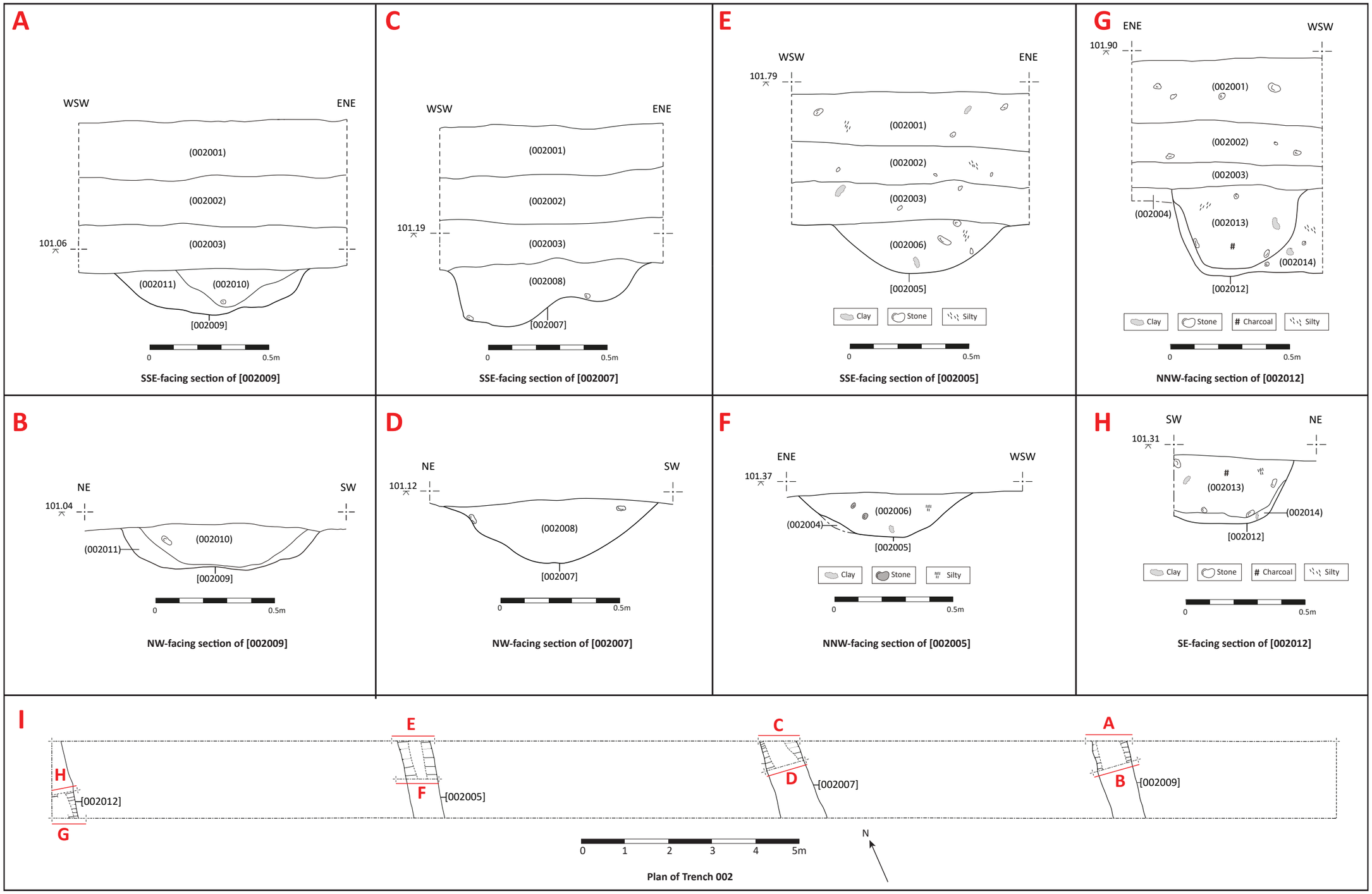


Fig. 4: Sections and plan of features in Trench 002

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
002	(002001)	Deposit	-	-	Mid grey brown clayey silt; occ. small stones; 0.21m deep; overlies (002002).	Topsoil	-	-	Modern	
	(002002)	Deposit	-	-	Brown grey silty clay; occ. chalk flecks; 0.21m deep; underlies (002001), overlies (002003).	Subsoil	-	-	Post medieval	
	(002003)	Deposit	-	-	Brown grey silty clay; freq. chalk; 0.21m deep; underlies (002002), overlies (002004).	Subsoil	-	-	Post medieval	
	(002004)	Deposit	-	-	Orange grey clay; freq. chalk flecks; underlies (002002).	Geology	-	-	-	
	[002005]	Cut	(002006)	-	Linear shape in plan; NNW-SSE orientation; mod. sides; concave base; >2.20m long, 0.74m wide, 0.21m deep; cuts (002004).	Cut of ditch	-	-	Late Iron Age / mid C1st	Same as [001010], likely same as [016004]
	(002006)	Fill	-	[002005]	Firmly compacted mid brown grey silty clay; occ. angular stones; 0.74m wide, 0.21m deep.	Singular fill of ditch [002005]	Pottery; flint bladelet	27	Late Iron Age / mid C1st	
	[002007]	Cut	(002008)	-	Linear shape in plan; NNW-SSE orientation; mod. to steep sides; concave base; >1.90m, 0.90m wide, 0.26m deep; cuts (002004).	Cut of ditch	-	-	Late Iron Age / mid C1st	Same as [001007], likely same as [016006] & [023004]
	(002008)	Fill		[002007]	Loose to moderately compacted dark brown silty clay; occ. sub-angular/sub-rounded stones, occ. charcoal flecks; 0.90m wide, 0.26m deep.	Singular fill of ditch [002007]	Pottery; pottery / CBM frags from sample	23	Late Iron Age / mid C1st	
	[002009]	Cut	(002010), (002011)	-	Linear shape in plan; NNW-SSE orientation; gradual sides; concave base; >1.94m long, 0.84m wide, 0.23m deep; cuts (002004).	Cut of ditch	-	-	Late Iron Age / mid C1st	Same as [001004]
	(002010)	Fill	-	[002009]	Loose to moderately compacted dark brown clayey silt; occ. small sub-rounded/sub-angular stones, occ. charcoal flecks; 0.71m wide, 0.20m deep; overlies (002011).	Upper fill of ditch [002009]	Pottery; pottery from sample	24	Late Iron Age / mid C1st	
	(002011)	Fill	-	[002009]	Loose to moderately compacted light orange brown silty clay; occ. charcoal flecks & chalk; 0.27m wide, 0.19m deep; underlies (002010).	Lower fill of ditch [002009]	-	-	Late Iron Age / mid C1st	
	[002012]	Cut	(002013), (002014)	-	Linear shape in plan; NNW-SSE orientation; near vertical sides; concave base; >1.84m long, 0.63m wide, 0.36m deep; cuts (002004).	Cut of ditch	-	-	Late Iron Age / mid C1st	

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
002	(002013)	Fill	-	[002012]	Firmly compacted dark brown grey silty clay; occ. stones; 0.56m wide, 0.34m deep; overlies (002014).	Upper fill of ditch [002012]	-	25	Late Iron Age / mid C1st	
	(002014)	Fill	-	[002012]	Firmly compacted light brown orange silty clay; occ. rounded stones; 0.62m wide, 0.38m deep; underlies (002013).	Lower fill of ditch [002012]	Pottery; pottery frags from sample	26	Late Iron Age / mid C1st	

7.1.3 Trench 005

Trench 005 was orientated NNE-SSW and contained one large linear feature interpreted as a post-medieval hedgerow [005004].

Its later dating was confirmed from rim, neck and shoulder fragments of wine bottle glass of mid 17th to 18th century date (McLeish 2017). There is no documentary or topographic evidence to support the hedgerow interpretation, although it is not considered a long-established boundary and had no observable accompanying ditch or bank.

Trench 005 was extended to the E to better characterise the hedgerow feature.

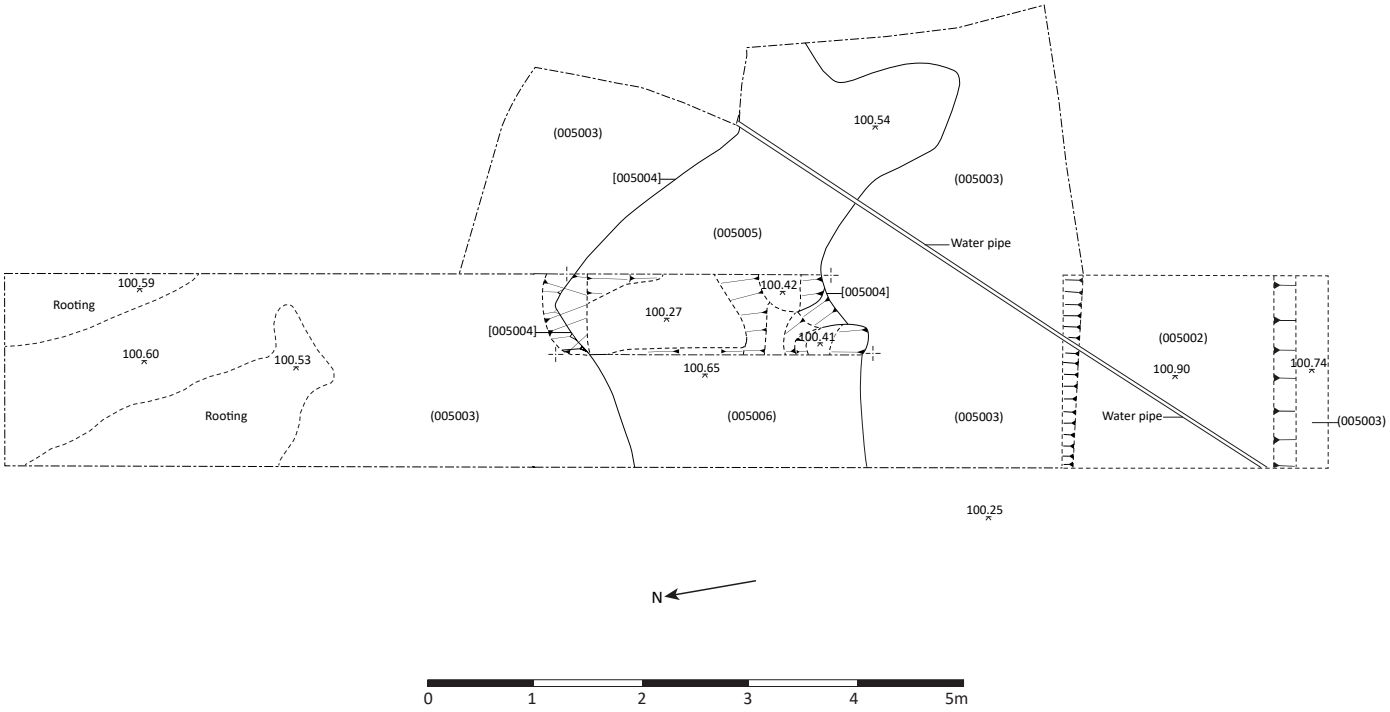


Fig 5: Plan of Trench 005

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
005	(005001)	Deposit	-	-	Dark brown silty clay; occ. stones; 0.21m deep; overlies (005002).	Topsoil	-	-	Modern	
	(005002)	Deposit	-	-	Grey brown silty clay; occ. Stones & chalk; 0.51m deep; underlies (005001), overlies (005003).	Subsoil	-	-	Post medieval	
	(005003)	Deposit	-	-	Orange grey clay; freq. chalk, mod. small sub-rounded/sub-angular stones; underlies (005002).	Geology	-	-	-	
	[005004]	Cut	(005005), (005006)	-	Linear shape in plan; E-W orientation; irregular, mod. sides; irregular, flat to concave base; >4.00m long, 2.84m wide, 0.31m deep; cuts (005003).	Edge of hedgerow	-	-	Mid C17th/C18th	
	(005005)	Fill	-	[005004]	Moderately compacted grey with brown mottles silty clay; occ. charcoal, occ. small sub-rounded/sub-angular stones; 2.70m wide, 0.23m deep; underlies (005006).	Lower fill of hedgerow [005004]	-	-	Mid C17th/C18th	
	(005006)	Fill	-	[005004]	Moderately compacted mid brown sandy clay; rare small sub-rounded/sub-angular stones, occ. chalk flecks; >0.65m wide, 0.17m deep; overlies (005005).	Upper fill of hedgerow [005004]	Mid C17th/ C18th glass	-	Mid C17th/C18th	

7.1.4 Trench 013

Trench 013 was orientated NW-SE and, with Trench 014, was targeted towards an area of intense geophysical activity of probable archaeological interest (Haddrell 2007); it encountered significant archaeology that matched the geophysical anomalies almost precisely. Trench 013 revealed one large broadly NE-SW orientated ditch, which exhibited two recuts, a smaller N-S aligned ditch and a curvilinear.

The two smaller ditches in the SE end of the trench presented a stratigraphic relationship whereby curvilinear [013023] was cut by N-S linear [013026], although both were dated to the late Iron Age to mid 1st century AD (Perrin 2017); they appeared to reflect the Iron Age and Romano-British archaeology found to the NW (BA forthcoming). Upper fill (013025) of curvilinear [013023] contained a piece of metallic debris considered to relate to metal working (Starley 2017) and this may tentatively suggest that the limit of the metalworking activity identified in Trench 001 (and shown in the geophysical survey) was more extensive and could hint at the function of the archaeology found within Trenches 013 and 014.

In the NW end of the trench and very much reflecting the geophysical data was the sequence of ditch cuts. This sequence started with [013015] which was likely to represent a linear ditch that had infilled (potentially deliberately, as suggested by (013007), which was very similar to natural in composition) before being recut by [013005], another probable linear ditch that may have been a reestablishment of the original ditch [013015].

Following complete infilling of the ditches, they were cut by linear ditch [013008]; this second reestablishment of the cut appears to reflect continual occupation and/or use of the area. Following probable consolidation and sinking of the fills over this large sequence of features, deposit (013029) accumulated in the depression, although it could also be considered a fill of the latest ditch [013008].

Of significant interest is that the pottery evidence from the ditch sequence suggests all fills accumulated in the late Iron Age to mid 1st century AD, with notable early deposits from each cut being dated to this era (Perrin 2017). This intensity of activity is likewise reflected in the archaeology to the NW (BA forthcoming). The latest ditch [013008] showed evidence of iron smithing in the form of hammerscale retrieved from the palaeoenvironmental sampling of (013017) (Starley 2017). This suggests iron hot-working in the vicinity of the fill formation and may be the reason for such large, potentially enclosing, features.

The sequence of ditches [013015], [013005] and [013008] were of particular note in the palaeoenvironmental analysis, with the first two cuts [013015] and [013005] demonstrating very little palaeoenvironmental recovery, but with the latest recut [013008] showing a domestic signature (Andrews 2017). This may suggest that the ditch was first cut and then recut at a time when habitation was not close by and that it was only with the third iteration of the ditch that domestic and small scale industrial waste started to be deposited from nearby activity. However, the close pottery dating of the sequence of ditches may render this palaeoenvironmental interpretation invalid.

The fills of the curvilinear [013023] and linear [013026] produced significant molluscan assemblages that pointed to an environment of short grassland, ostensibly pastoral farmland. This was most emphasised in these ditches, but was prevalent across the site. Aside from the molluscan evidence, they returned a generally domestic signal and indicators of a pastoral landscape (Andrews 2017).

Trench 013 produced the most identifiable assemblage of faunal material, some of which was burnt, consisting of cattle and sheep/goat bone (some of the latter of which exhibited signs of butchery) amongst a larger number of bones considered to be from large/medium mammals; therefore, the assemblage was considered to be most likely domestic, although field vole molars were also noted (Faine 2017).

Trench 013 was extended to the NE to better characterise the stratigraphy of the sequence of ditches [013015], [013005] and [013008].

Plate 3: N-facing section of [013015] showing recuts [013005] & [013008]

B

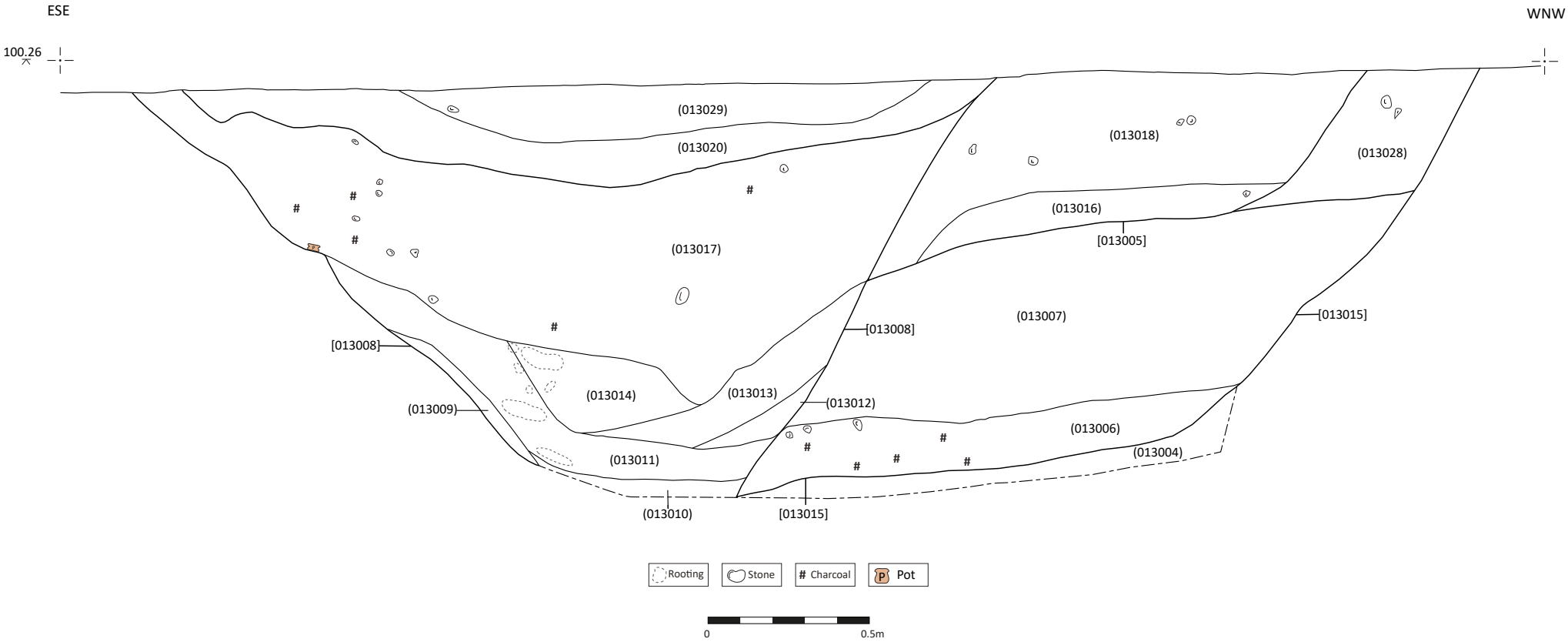


Fig. 6: NNE-facing section of [013008], [013003] & [013015]

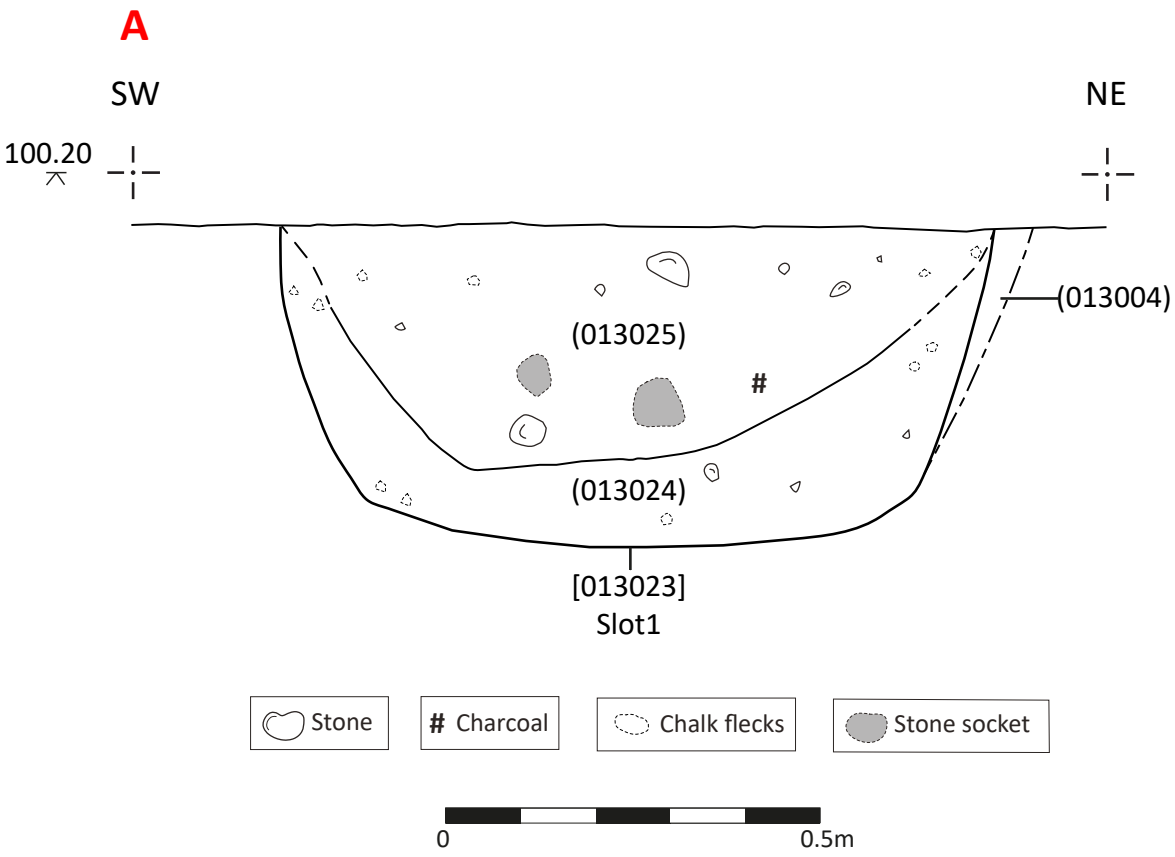


Fig. 7: SE-facing section of [013023]

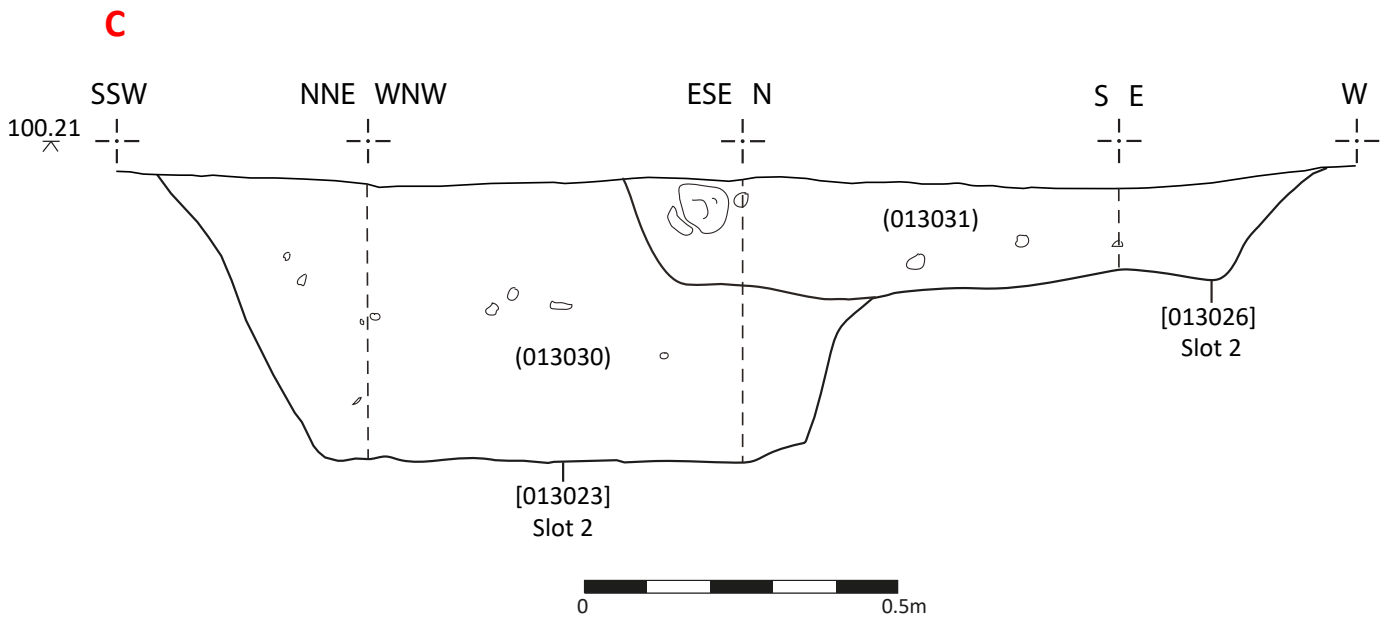


Fig. 8: Relationship slot between [013026] & [013023]

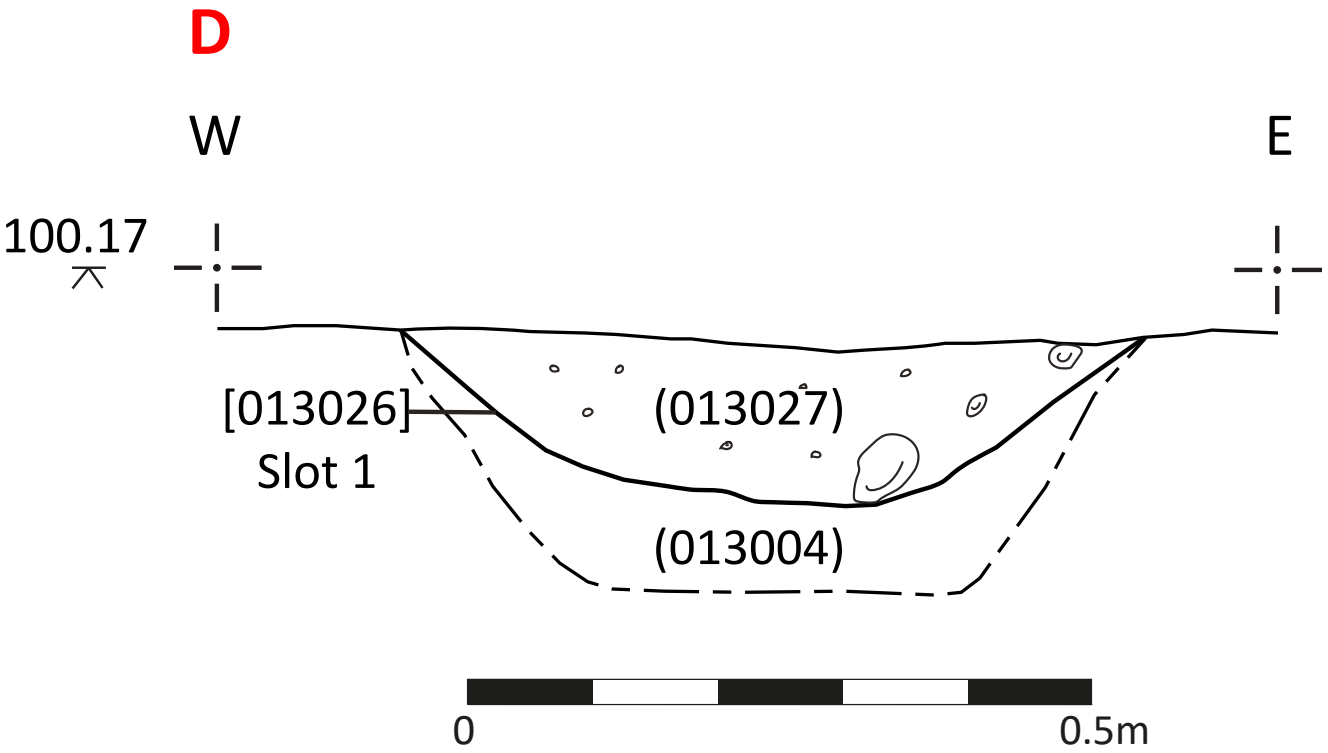


Fig. 9: S-facing section of [013026] showing overcut

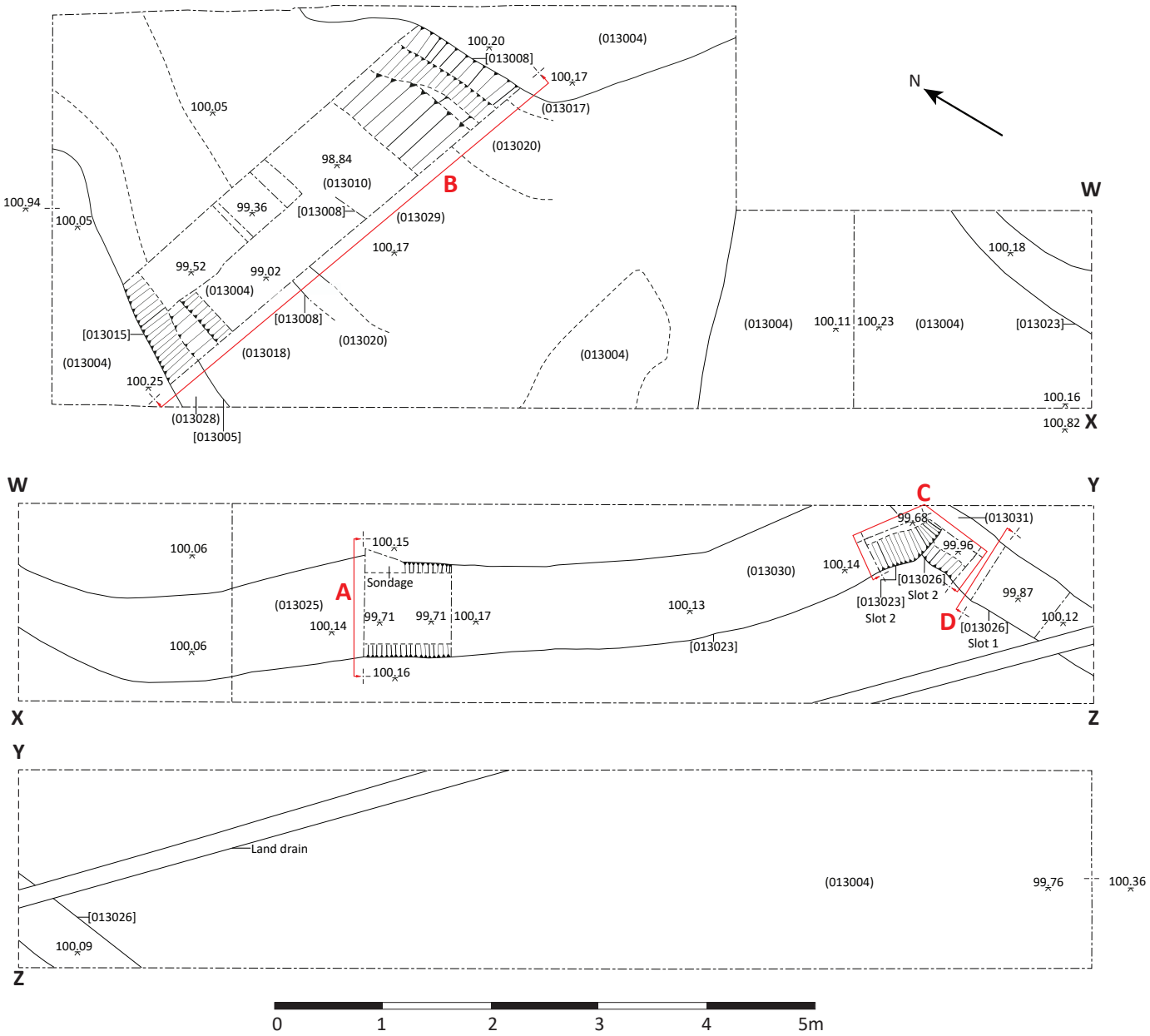


Fig. 10: Plan of Trench 013

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
013	(013001)	Deposit	-	-	Mid brown grey clayey silt; 0.30m deep; overlies (013002).	Topsoil	-	-	Modern	
	(013002)	Deposit	-	-	Mid yellow brown silty clay; 0.24m deep; underlies (013001), overlies (013003).	Subsoil	-	-	Post medieval	
	(013003)	Deposit	-	-	Mid grey yellow silty clay; occ. chalk flecks; 0.15m deep; underlies (013002), overlies (013004).	Subsoil	-	-	Post-Medieval	
	(013004)	Deposit	-	-	Light grey yellow clay; occ. chalk flecks; underlies (013003).	Geology	-	-	-	
	[013005]	Cut	(013016), (013018)	-	Probable linear shape in plan; NE-SW orientation; steep sides; flat base; >3.60m long, >1.15m wide, >0.60m deep; truncates fills of [013015], truncated by [013008].	Cut of probable linear ditch	-	-	Late Iron Age / mid C1st	Re-cut into [013015]; second cut in sequence of [013015], [013005] & [013008]
	(013006)	Fill	-	[013015]	Firmly compacted light blue grey silty clay; freq. chalk, mod. charcoal, occ. stones; >1.24m wide, >0.18m deep; underlies (013007), truncated by [013008].	Basal fill of probable linear ditch [013015]	-	-	Late Iron Age / mid C1st	
	(013007)	Fill	-	[013015]	Firmly compacted mottled red grey silty clay; occ. charcoal & chalk; >1.44m wide, >0.55m deep; underlies (013028), overlies (013006), truncated by [013005] & [013008].	Main fill of probable linear ditch [013015], possible deliberate backfill	Pottery	35	Late Iron Age / mid C1st	
	[013008]	Cut	(013009), (013010), (013011), (013012), (013013), (013014), (013017), (013020), (013029)	-	Probable linear shape in plan; NE-SW orientation; steep sides; base unexcavated; >5.60m long, 1.64m wide, >1.28 m deep; truncates fills of [013015] & [013005].	Cut of probable linear ditch	-	-	Late Iron Age / mid C1st	Latest cut in sequence of [013015], [013005] & [013008]
	(013009)	Fill	-	[013008]	Moderately compacted mid yellow grey silty clay; 2.68m wide, 0.63m deep, 0.07m wide; underlies (013010) & (013011).	Slumping deposit in probable linear ditch [013008]	-	-	Late Iron Age / mid C1st	

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
013	(013010)	Fill	-	[013008]	Moderately compacted mid grey blue silty clay; 0.64m wide, >0.05m deep; underlies (013011).	Lowest observed fill of probable linear ditch [013008]	Pottery; bone	-	Late Iron Age / mid C1st	
	(013011)	Fill	-	[013008]	Moderately compacted mid brown grey silty clay; occ. chalk flecks & small stones; 0.74m wide, 0.25m deep; overlies (013010), underlies (013012).	Fill of probable linear ditch [013008]	Pottery; bone	39	Late Iron Age / mid C1st	
	(013012)	Fill	-	[013008]	Firmly compacted mottled red grey silty clay; 0.16m wide, 0.10m deep; overlies (013011), underlies (013013).	Slumping deposit in probable linear ditch [013008]	-	-	Late Iron Age / mid C1st	
	(013013)	Fill	-	[013008]	Moderately compaction mid brown grey silty clay; occ. chalk flecks; mod. iron panning; 0.46m wide, 0.19m deep; overlies (013012), underlies (013014).	Slumping deposit in probable linear ditch [013008]	-	-	Late Iron Age / mid C1st	
	(013014)	Fill	-	[013008]	Moderately compacted mid brown grey silty clay; 0.47m wide, 0.25m deep; overlies (013013), underlies (013017).	Upper fill of probable linear ditch [013008]	-	-	Late Iron Age / mid C1st	
	[013015]	Cut	(013006), (013007), (013028)	-	Probable linear shape in plan; probable NE-SW orientation; steep sides; flat base; >2.80m long, >2.30m wide, >1.28m deep; truncated by [013005] & [013008].	Cut of probable linear ditch	-	-	Late Iron Age / mid C1st	Earliest cut in sequence of [013015], [013005] & [013008]
	(013016)	Fill	-	[013005]	Moderately compacted mid brown grey silty clay; mod. iron staining; 1.15m wide, 0.13m deep; underlies (013018).	Lower fill probable linear ditch [013005]	Bone	38	Late Iron Age / mid C1st	
	(013017)	Fill	-	[013008]	Moderately compacted mid red brown silty clay; freq. iron staining, occ. charcoal, bone & pottery; 1.64m wide, 0.76m deep; overlies (013014), underlies (013020).	Fill of probable linear ditch [013008]	Pottery; bone; daub; pottery frags from sample	37	Late Iron Age / mid C1st	
	(013018)	Fill	-	[013005]	Firmly compacted mottled grey brown silty clay; occ. charcoal; >1.15m wide, >0.60m deep, overlies (013016), truncated by [013008].	Upper fill of probable linear ditch [013005]	-	34	Late Iron Age / mid C1st	

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
013	(013019)	-	-	-	VOID	-	-	-	-	
	(013020)	Fill	-	[013008]	Moderately compacted dark blue grey silty clay; freq. iron staining, occ. charcoal; 2.52m wide, 0.18m deep; overlies (013017), underlies (013029).	Upper fill of probable linear ditch [013008]	Pottery; bone; pottery / CBM frags from sample	36	Late Iron Age / mid C1st	
	[013021]	-	-	-	VOID	-	-	-	-	-
	(013022)	Fill	-	-	Same as (013020).	-	Pottery; bone	-	Late Iron Age / mid C1st	
	[013023]	Cut slot 1	(013024), (013025)	-	Curvilinear shape in plan; steep to near vertical sides; flat base; >5.00m long, 0.97m wide, 0.43m deep; cuts (013004).	Cut of curvi-linear ditch	-	-	Late Iron Age / mid C1st	Cut by ditch [013026]
		Cut slot 2	(013030)	-	Curvilinear shape in plan; steep sides; flat base; >5.00m long, 0.64m wide, 0.45m deep; cuts (013004).		-	-		
	(013024)	Fill	-	[013023] slot 1	Firmly compacted light to mid yellow brown silty clay; rare small angular stones & chalk; 0.97m wide, 0.22m deep; underlies (013025).	Lower fill of curvi-linear ditch [013023] at slot 1	Bone	31	Late Iron Age / mid C1st	
	(013025)	Fill	-	[013023] slot 1	Firmly compacted mid grey brown silty clay; mod. small to medium angular to sub-rounded stones, rare charcoal flecks & chalk flecks; 0.77m wide, 0.32m deep; overlies (013024).	Upper fill of curvi-linear ditch [013023] at slot 2	Pottery; bone; pottery / CBM frags from sample; nail / hobnail from sample	32	Late Iron Age / mid C1st	
	[013026]	Cut slot 1	(013027)	-	Linear shape in plan; N-S orientation; gradual sides; flat base; >3.10m long, 0.60m wide, 0.12m deep; cuts (013004).	Cut of linear gully	-	-	Late Iron Age / mid C1st	Cuts ditch [013023]
		Cut slot 2	(013031)	-	Linear shape in plan; N-S orientation; steep to gradual sides; flat base; >3.10m long, 0.56m wide, 0.19m deep; cuts (013004) & truncates [013023] at slot 2.		-	-		
	(013027)	Fill	-	[013026] slot 1	Firmly compacted mid yellow brown silty clay; occ. small to medium stones; 0.60m wide, 0.12m deep.	Singular fill of linear gully [013026] at slot 1	-	40	Late Iron Age / mid C1st	

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
013	(013028)	Fill	-	[013015]	Firmly compacted mottled yellow grey silty clay; mod. chalk & charcoal; 0.43m wide, 0.40m deep; overlies (013007), truncated by [013005].	Upper fill of probable linear ditch [013015]	Pottery frags from sample	33	Late Iron Age / mid C1st	
	(013029)	Fill	-	[013008]	Moderately compacted mid yellow brown silty clay; freq. chalk flecks, occ. small stones; 1.65m wide, 0.18m deep; overlies (013020).	Uppermost fill of [013008], probable consolidation deposit	-	-	Undated	
	(013030)	Fill	-	[013023] slot 2	Firmly compacted light yellow brown silty clay; occ. small sub-angular stones; >0.33m wide, 0.45m deep; truncated by [013026].	Singular fill of curvi-linear ditch [013023] at slot 2	Pottery	41	Late Iron Age / mid C1st	
	(013031)	Fill	-	[013026] slot 2	Firmly compacted mid yellow brown silty clay; occ. small to medium stones; >0.32m wide, 0.19m deep.	Singular fill of linear gully [013026] at slot 2	Pottery; bone; pottery frags from sample	42	Late Iron Age / mid C1st	

7.1.5 Trench 014

Trench 014 was orientated E-W and targeted towards an area of intense geophysical signal, which was of probable archaeological interest (Haddrell 2007). In this respect, Trench 014 shared some similarities with the archaeology in Trench 013, but may be considered to be at the periphery of this activity, as no archaeology beyond one probable curvilinear boundary ditch [014004] was revealed.

The large curvilinear ditch [014004] was located at the E end of the trench and correlated almost precisely to the geophysical anomaly. The lower fills were dated to the late Iron Age to mid 1st century AD from pottery evidence (Perrin 2017). A retouched flint flake was also present in the middle fill (014006) (Devaney 2017). Although difficult to align to the ditch sequence from Trench 013, it was almost certainly related and may be a continuation of one of the ditches.

The palaeoenvironmental material from ditch [014004] was broadly similar to that from the archaeology of Trench 013, showing a generally domestic profile with a strong molluscan assemblage. In the case of ditch [014004], the molluscan remains suggested that the ditch had been frequently water-filled (Andrews 2017).

The animal bone assemblage was predominately indeterminate due to fragment size, although the presence of field vole molars was noted (Faine 2017).

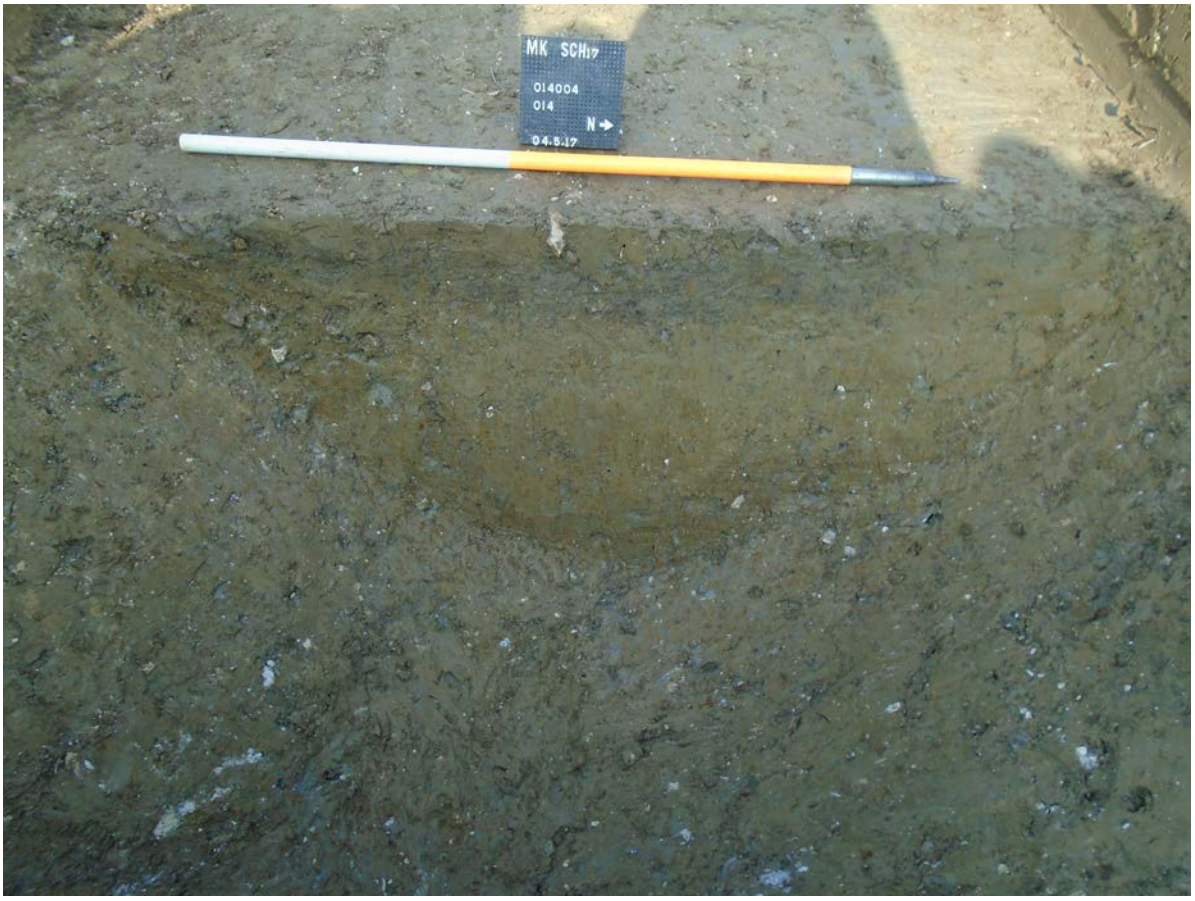


Plate 4: E-facing section of curvilinear [014004]

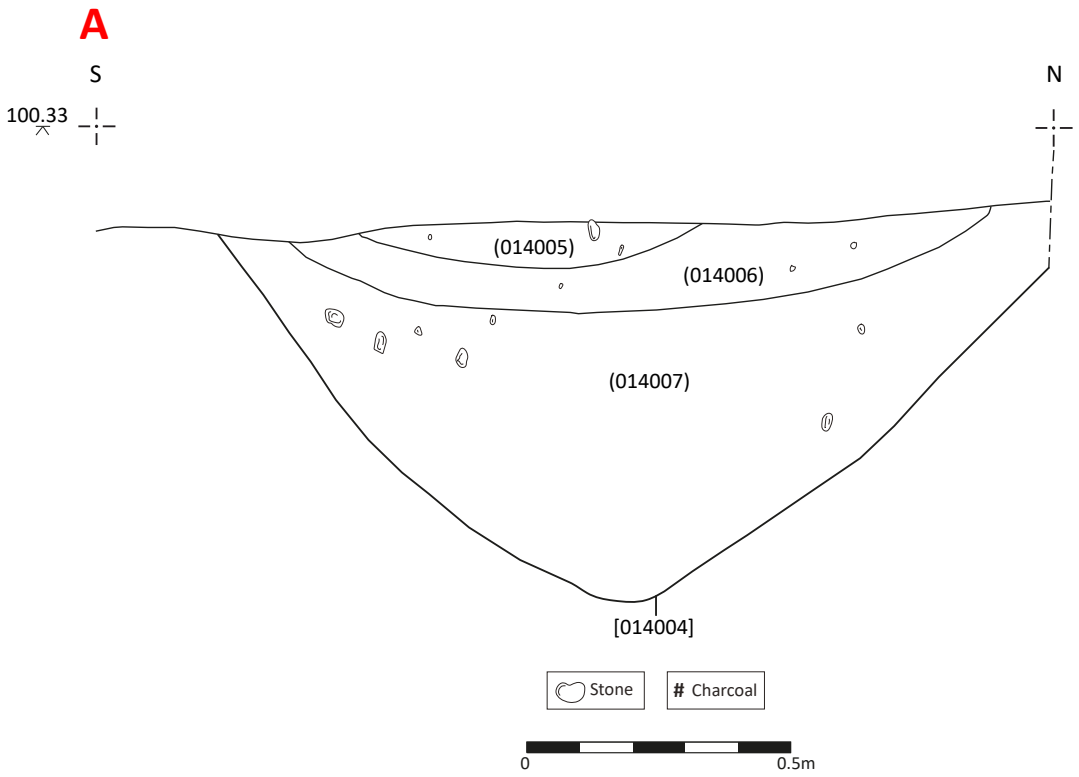


Fig. 11: E-facing section of [014004]

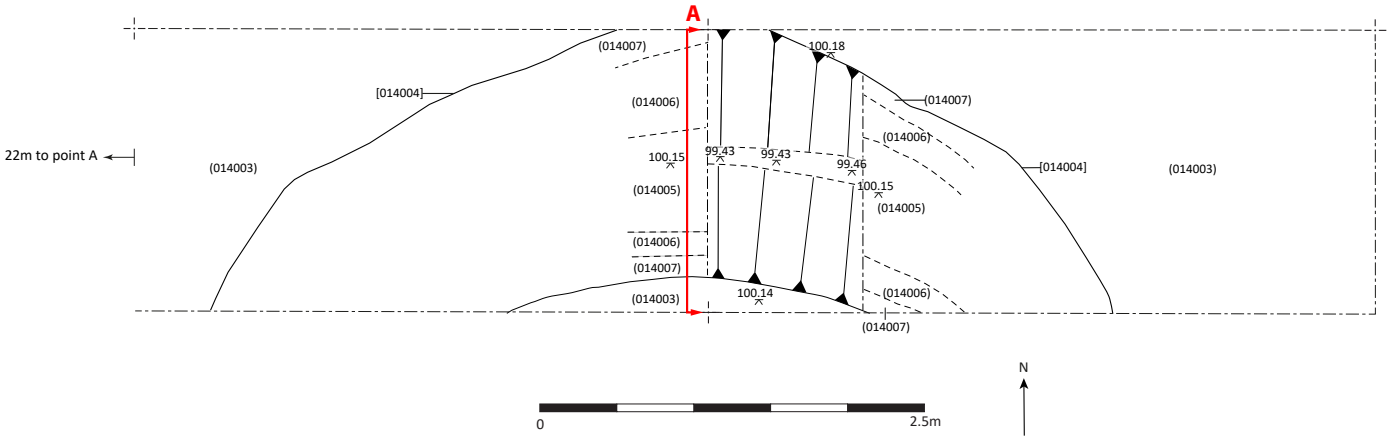


Fig. 12: Plan of [014004]

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
014	(014001)	Deposit	-	-	Mid to dark brown silty clay; occ. stones; 0.36m; overlies (014002).	Topsoil	-	-	Modern	
	(014002)	Deposit	-	-	Mid to orange brown silty clay; occ. Stones & charcoal; 0.34m deep; underlies (014001), overlies (014003).	Subsoil	-	-	Post medieval	
	(014003)	Deposit	-	-	Yellow brown sandy clay; freq. chalk; underlies (014002).	Geology	-	-	-	
	[014004]	Cut	(014005), (014006), (014007)	-	Sharp curvilinear shape in plan; steep sides; V-shaped base; >5.60m long, 1.82m wide, 0.71m deep; cuts (014003).	Cut of curvi-linear ditch	-	-	Late Iron Age / mid C1st	
	(014005)	Fill	-	[014004]	Moderately compacted mid brown silty clay; occ. sub-rounded/sub-angular stones/flints; 0.62m wide, 0.09m deep; overlies (014006).	Upper fill of curvi-linear ditch [014004]	-	20	Late Iron Age / Romano-British	
	(014006)	Fill	-	[014004]	Moderately compacted blue grey silty clay; occ. small sub-rounded/sub-angular stones, occ. charcoal & chalk; 1.38m wide, 0.16m deep; underlies (014005), overlies (014007).	Middle fill of curvi-linear ditch [014004]	Pottery; metal disc; flint retouched flake; pottery frags from sample	21	Late Iron Age / mid C1st	
	(014007)	Fill	-	[014004]	Moderately compacted dark brown with red brown streaks and grey mottles silty clay; freq. charcoal flecks, chalk, manganese & sub-rounded/angular stones/flint; 1.33m wide, 0.54m deep; underlies (014006).	Lower fill of curvi-linear ditch [014004]	Pottery	22	Late Iron Age / mid C1st	

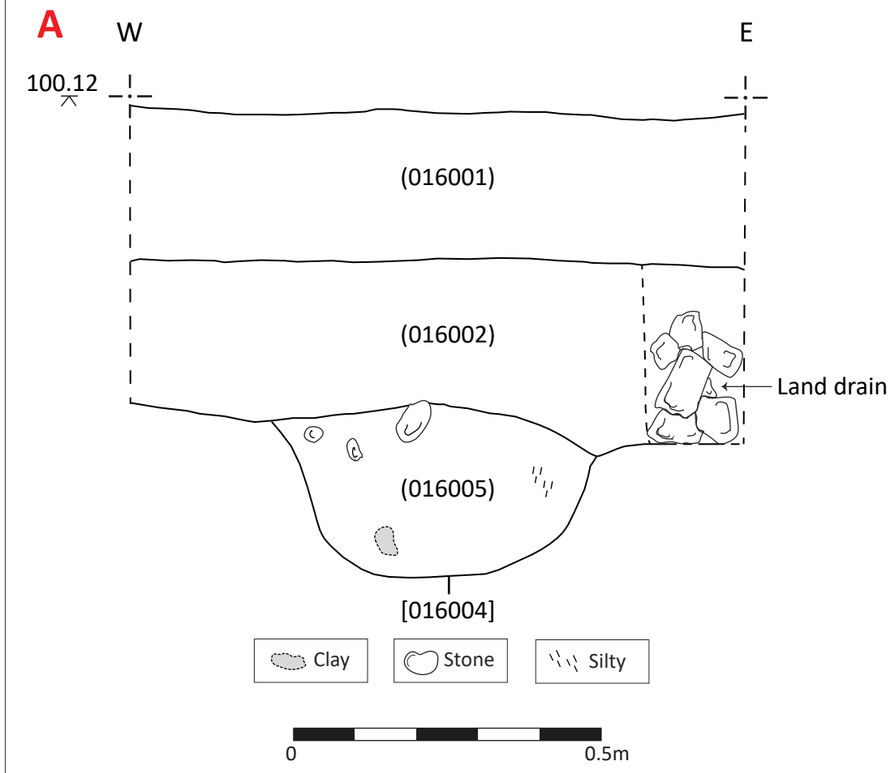
7.1.6 Trench 016

Trench 016 was orientated E-W and was found to contain four features including the probable continuation of two NNW-SSE aligned ditches from Trenches 001 and 002 (and possibly 023) (see Trench 001). It also contained one pit and one probable pit that was, potentially, another N-S ditch that terminated within Trench 016.

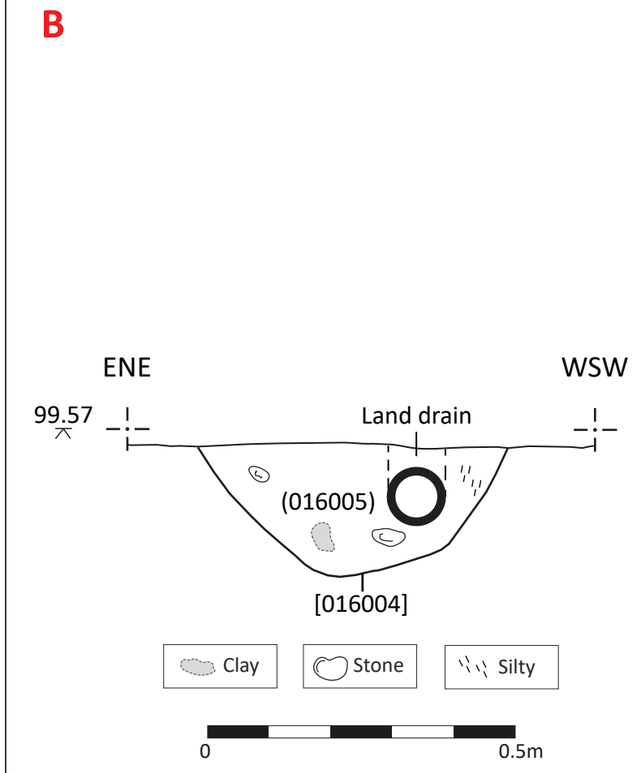
The NNW-SSE orientated ditches, [016004] and [016006], were likely continuations of ditches in Trenches 001, 002 and 023, although they now appear smaller and less distinct, which suggests a further remove from habitation; however, it is possible that ditch or pit [016011] may represent the terminus of one of these late Iron Age/Romano-British ditches, although it could be a pit similar to [016009]. Perhaps further reflecting the distance from habitation, dating evidence was sparse with just one ditch, [016004], returning a more specific date of late Iron Age to mid 1st century AD (Perrin 2017).

Although these NNW-SSE aligned ditches are recognised as being possible continuations of those found within Trenches 001 and 002 (and possibly 023), it is noteworthy that they are not seen within Trench 012.

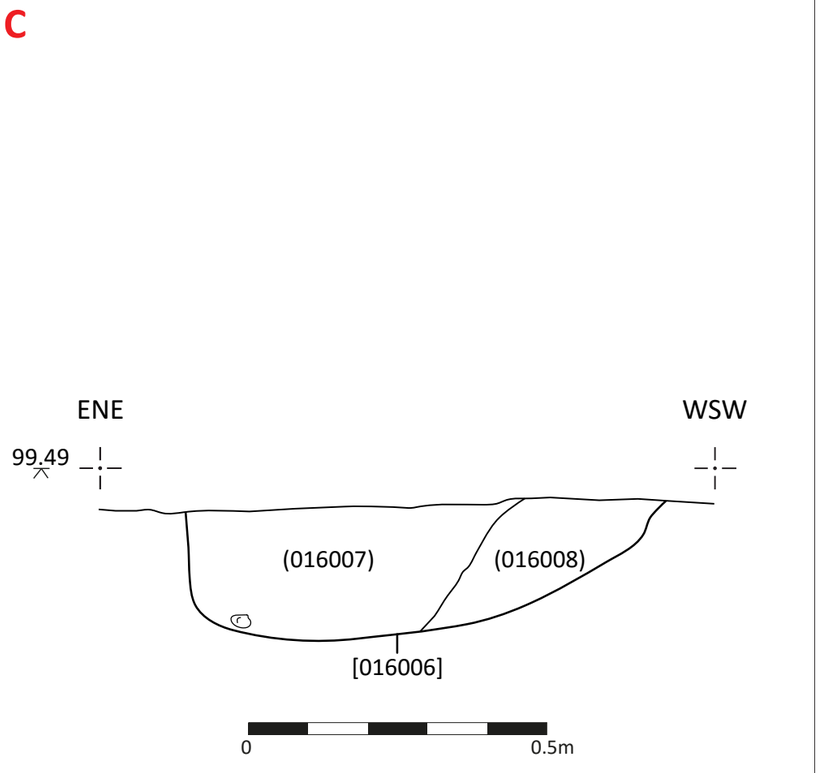
Pits [016009] and [016011] were devoid of meaningful palaeoenvironmental material, which may indicate a natural origin; however, ditches [016004] and [016006] shared similarities to the other NNW-SSE aligned ditches traversing the site, but in significantly smaller quantities suggesting a remove from archaeological activity (Andrews 2017).



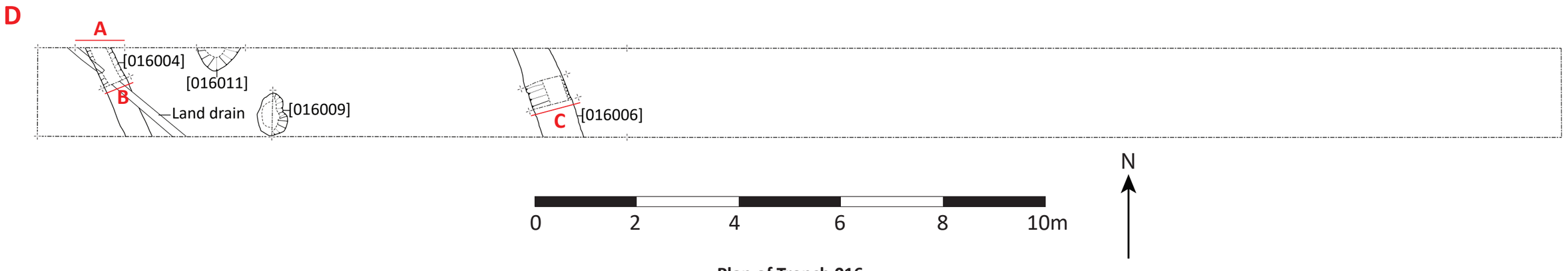
S-facing section of [016004]



NNW-facing section of [016004]



NNW-facing section of [016006]



Plan of Trench 016

Fig. 13: Sections and plan of features in Trench 016

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
016	(016001)	Deposit	-	-	Dark brown silty clay; occ. stones; 0.25m deep; overlies (016002).	Topsoil	-	-	Modern	
	(016002)	Deposit	-	-	Mid brown clayey silt; mod. stones; 0.31m deep; underlies (016001), overlies (016003).	Subsoil	-	-	Post medieval	
	(016003)	Deposit	-	-	Orange yellow sandy clay; freq. chalk, occ. stones; underlies (016002).	Geology	-	-	-	
	[016004]	Cut	(016005)	-	Linear shape in plan; NNW-SSE orientation; mod. sides; concave base; >1.96m long, 0.49m wide, 0.28m deep; cuts (016003).	Cut of ditch	-	-	Late Iron Age / mid C1st	Likely same as [001010] & [002005]
	(016005)	Fill	-	[016004]	Firmly compacted dark grey brown silty clay; occ. rounded stones; 0.50m wide, 0.28m deep.	Singular fill of ditch [016004]	Pottery; Pottery / CBM frags from sample	18	Late Iron Age / mid C1st	
	[016006]	Cut	(016007), (016008)	-	Linear shape in plan; NNW-SSE orientation; gradual sides; concave base; >1.40m long, 0.80m wide, 0.25m deep; cuts (016003).	Cut of ditch	-	-	Late Iron Age / mid C1st	Likely same as [001007] & [002007], also likely same as [023004]
	(016007)	Fill	-	[016006]	Moderately compacted dark brown clayey sand; occ. sub-rounded stones; 0.77m wide, 0.26m deep; overlies (016008).	Main fill of ditch [016006]	-	15	Late Iron Age / mid C1st	
	(016008)	Fill	-	[016006]	Loose to moderately compacted light brown with dark orange mottles clayey silt; occ. small stones; 0.23m wide, 0.18m deep; underlies (016007).	Slumping fill of ditch [016006]	-	14	Late Iron Age / mid C1st	
	[016009]	Cut	(016010), (016013)	-	Sub-circular shape in plan; mod. to steep sides; concave base; 0.87m long, 0.58m wide, 0.27m deep; cuts (016003).	Cut of pit	-		Undated; probably Late Iron Age / Romano-British	
	(016010)	Fill	-	[016009]	Loosely compacted dark brown clayey silt; freq. charcoal; 0.30m wide, 0.21m deep; overlies (016013).	Upper fill of pit [016009]	-	16	Undated; probably Late Iron Age / Romano-British	

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
016	[016011]	Cut	(016012)	-	Probable sub-circular shape in plan; gradual sides; concave base; >0.48m long, >0.86m wide, 0.22m deep; cuts (016003).	Cut of pit / ditch terminus	-	-	Undated; probably Late Iron Age / Romano-British	
	(016012)	Fill	-	[016011]	Firmly compacted dark grey brown silty clay; occ. small stones; >0.86m wide, 0.22m deep.	Singular fill of pit / ditch terminus [016011]	-	19	Undated; probably Late Iron Age / Romano-British	
	(016013)	Fill	-	[016009]	Moderately compacted light brown clayey silt; 0.58m wide, 0.22m deep; underlies (016010).	Lower fill of pit [016009]	-	17	Undated; probably Late Iron Age / Romano-British	

7.1.7 Trench 023

Trench 023 was orientated NE-SW and exhibited the final trace of the NNW-SSE late Iron Age to Romano-British ditches traversing the site and previously seen in Trenches 001, 002 and 016 (see Trench 001).

In Trench 023, ditch [023004] was finely dated to the late Iron Age to mid 1st century AD from pottery evidence (Perrin 2017) and, as with Trench 016, represented a lessening of these ditches in the landscape, potentially due to their remove from habitation.

The weak domestic palaeoenvironmental signature and presence of grassland molluscs further emphasises that the NNW-SSE orientated ditches are, at this point, some distance from habitation (Andrews 2017).

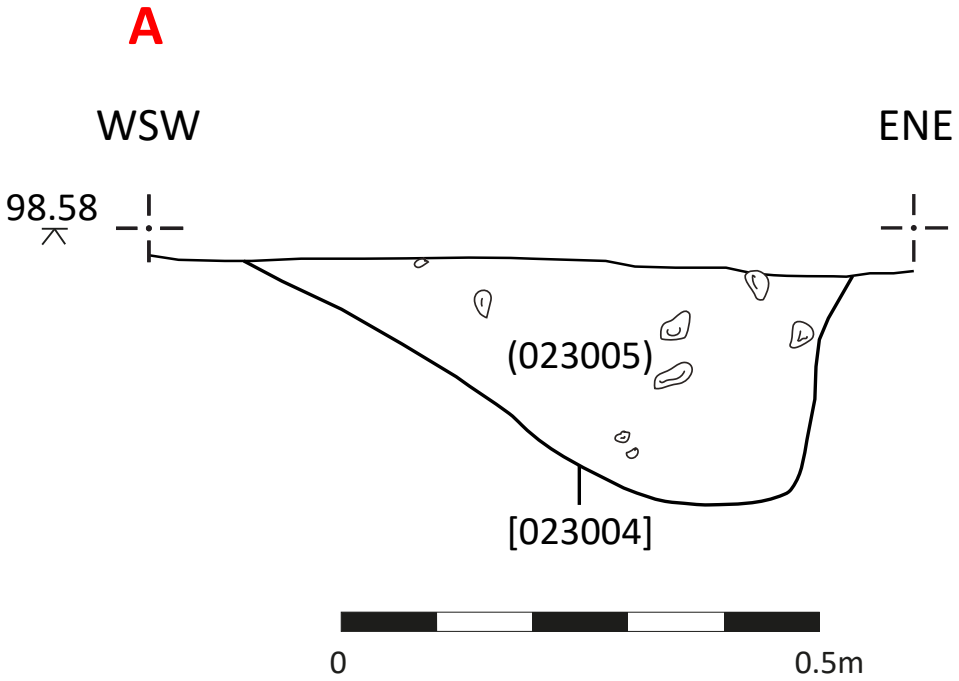


Fig. 14: SSE-facing section of [023004]

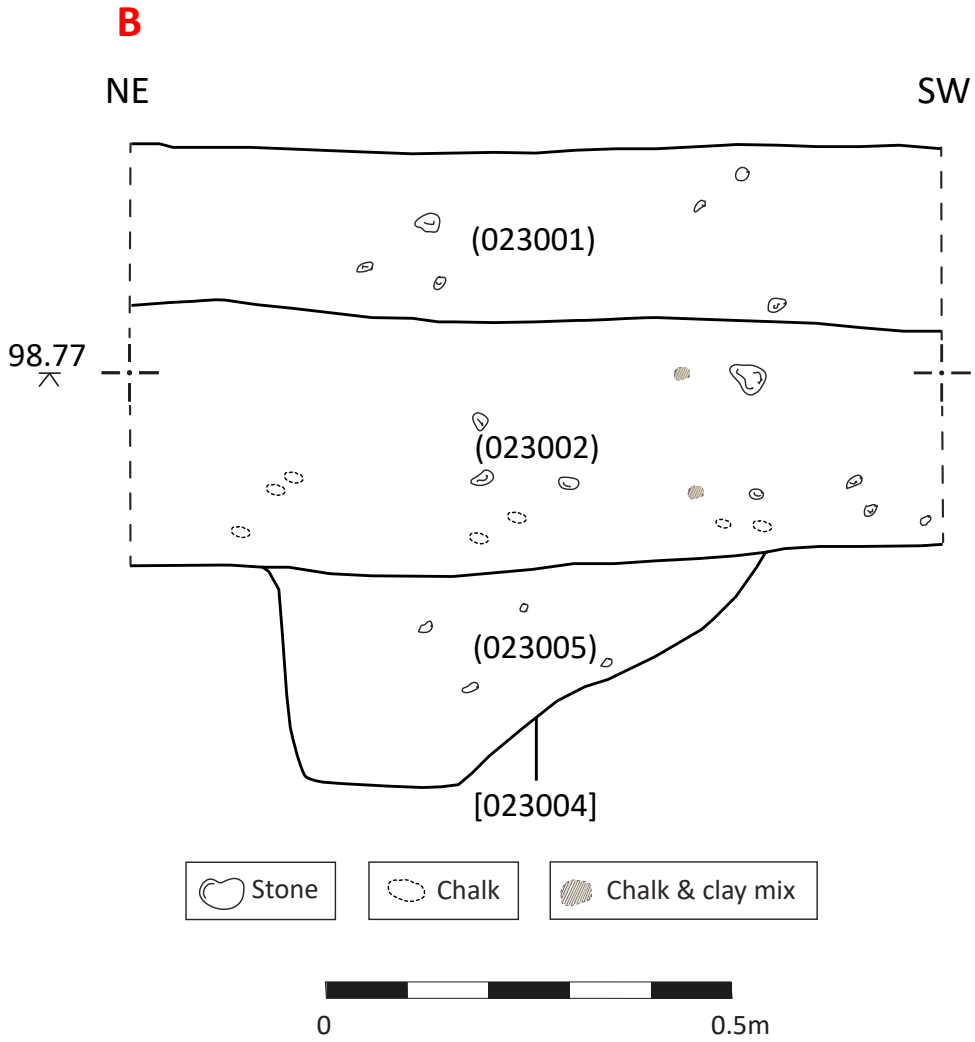


Fig. 15: NW-facing section of [023004]

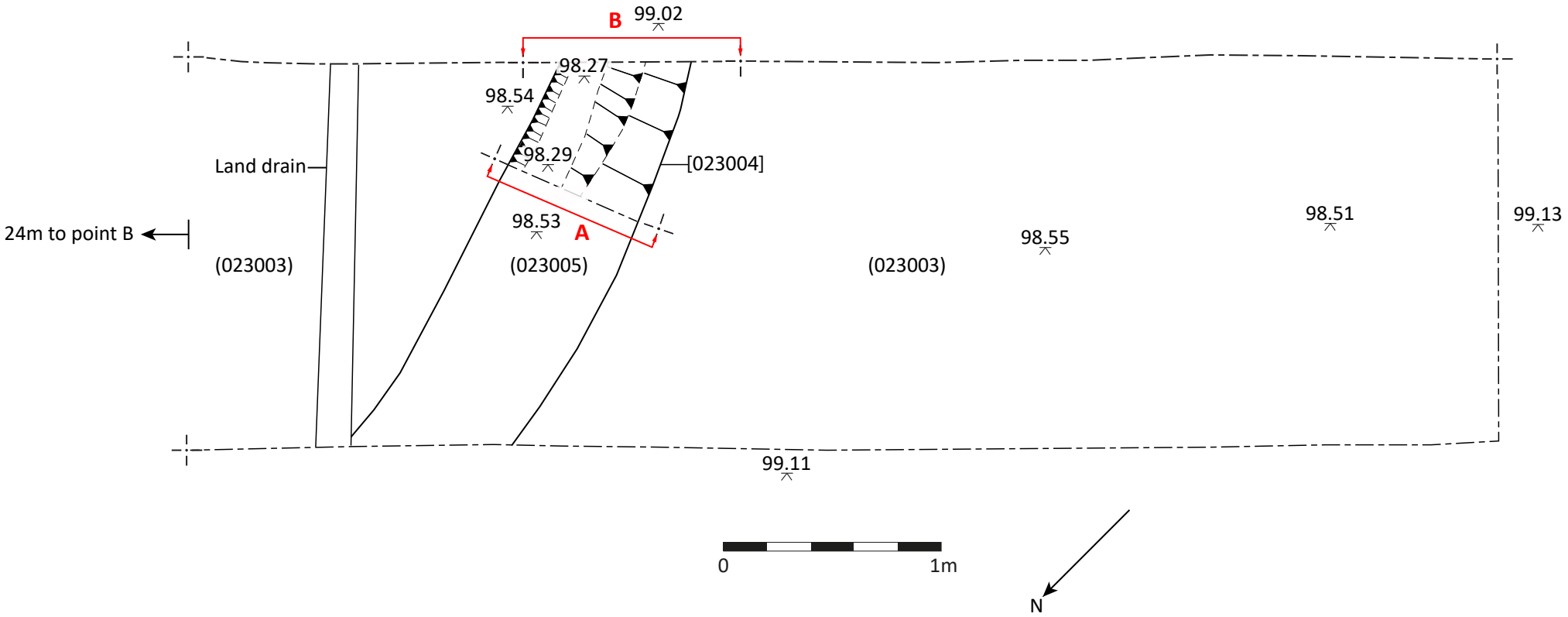


Fig. 16: Plan of [023004]

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
023	(023001)	Deposit	-	-	Dark brown silty clay; 0.22m deep; overlies (023002).	Topsoil	-	-	Modern	
	(023002)	Deposit	-	-	Orange brown silty clay; occ. chalk; 0.32m deep; underlies (023001), overlies (023003).	Subsoil	-	-	Post medieval	
	(023003)	Deposit	-	-	Mid orange grey silty clay; freq. chalk; underlies (023002).	Geology	-	-	-	
	[023004]	Cut	(023005)	-	Linear shape in plan; NNW-SSE orientation; near vertical sides; flat base; >2.00m long, 0.63m wide, 0.26m deep; cuts (023003).	Cut of ditch	-	-	Late Iron Age / mid C1st	Likely same as [016006], [002007] & [001007]
	(023005)	Fill	-	[023004]	Moderate to firmly compacted dark brown grey silty clay; occ. to mod. small to medium sub-angular stones, occ. charcoal flecks; 0.63m wide, 0.26m deep.	Singular fill of ditch [023004]	-	13	Late Iron Age / mid C1st	

7.1.8 Trench 024

Trench 024 was orientated WNW-ESE and exhibited a probable palaeochannel relating to the original natural course of the stream prior to its canalisation. No features of archaeological origin were revealed.

The canalisation was likely implemented at the formation of Common Farm when boundaries in this area were altered and routeways realigned.

Palaeoenvironmental analysis supports its natural origin, with wind-blown charcoal the only environmental indicator (Andrews 2017).

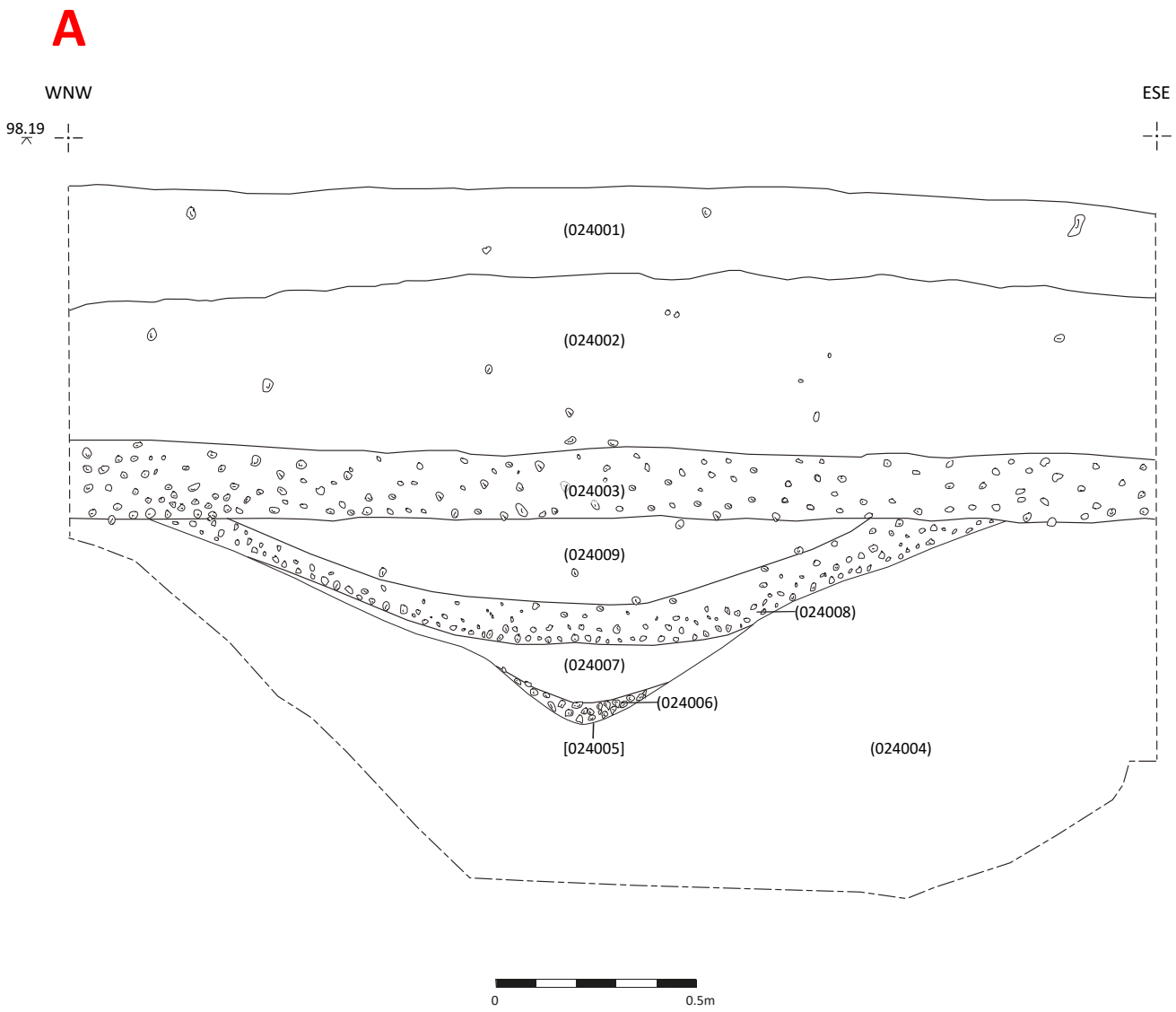


Fig. 17: SSW-facing section of [024005]

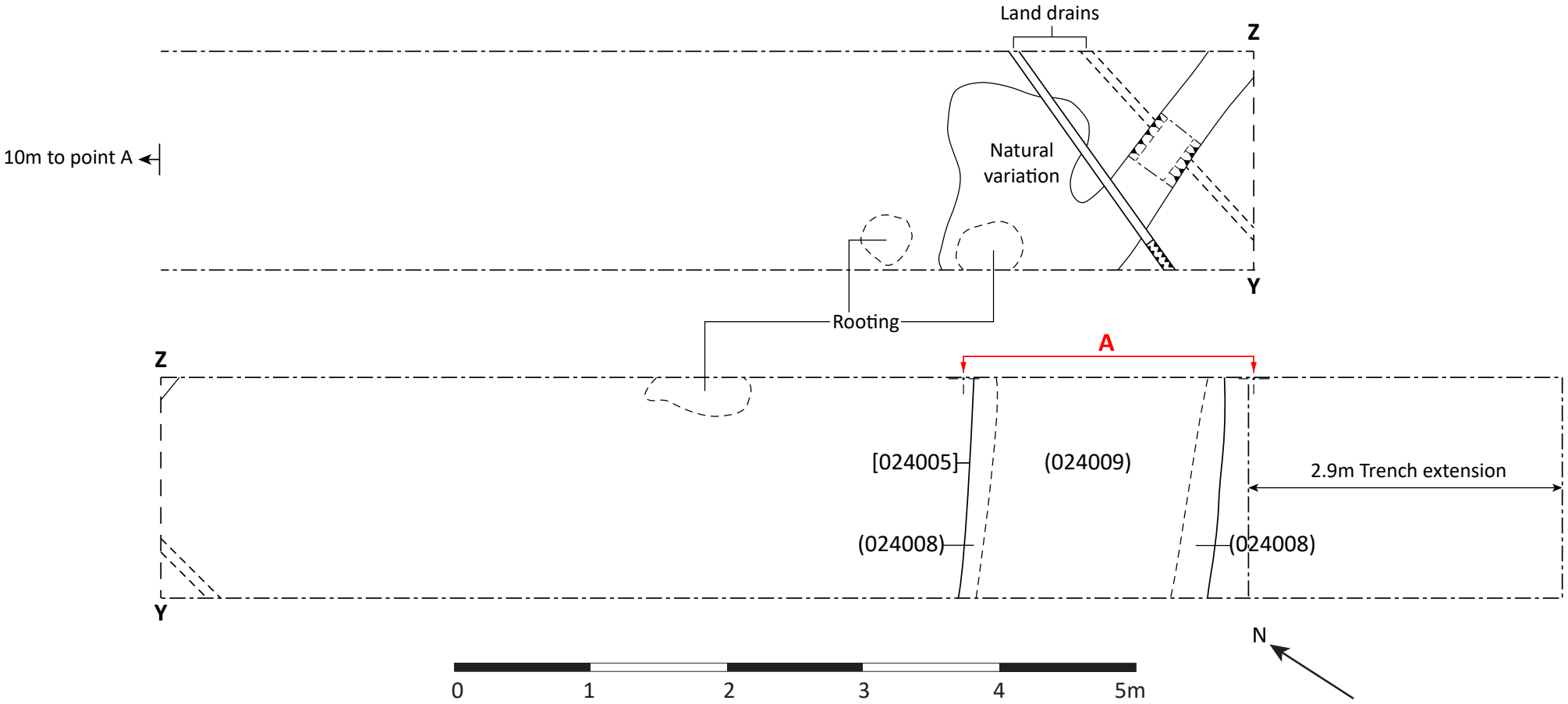


Fig. 18: Plan of Trench 024

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
024	(024001)	Deposit	-	-	Dark grey brown clayey silt; occ. small stones; 0.24m deep; overlies (024002).	Topsoil	-	-	Modern	
	(024002)	Deposit	-	-	Mid yellow brown silty clay; occ. small stones; 0.26m deep; underlies (024001), overlies (024010).	Subsoil	-	-	Post medieval	
	(024003)	Deposit	-	-	Mid yellow brown with red mottles silty clay; freq. angular/sub-rounded stones, mod. gravel; 0.19m deep; underlies (024010), overlies (024004).	Subsoil	-	-	Post medieval	
	(024004)	Deposit	-	-	Light yellow brown with light blue grey mottles clay; underlies (024003).	Geology	-	-	-	
	[024005]	Cut	(024006), (024007), (024008), (024009)	-	Linear shape in plan; NE-SW orientation; stepped mod. to steep sides; pointed base; >2.00m long, 2.15m wide, 0.52m deep; cuts (024004).	Edge of probable palaeochannel	-	-	Undated	
	(024006)	Fill	-	[024005]	Firmly compacted mid yellow brown gravels in silty clay; 0.33m wide, 0.05m deep; underlies (024007).	Fill of probable palaeochannel [024005]	-	-	Undated	
	(024007)	Fill	-	[024005]	Firmly compacted mid yellow brown silty clay; freq. gravel; 0.83m wide, 0.15m deep; underlies (024008), overlies (024006).	Fill of probable palaeochannel [024005]	-	-	Undated	
	(024008)	Fill	-	[024005]	Firmly compacted mid yellow brown gravels in silty clay; 2.15m wide, 0.15m deep; underlies (024009), overlies (024007).	Fill of probable palaeochannel [024005]	-	-	Undated	
	(024009)	Fill	-	[024005]	Firmly compacted mid yellow brown silty clay; occ. small sub-angular stones; 1.6m wide, 0.22m deep; overlies (024008).	Fill of probable palaeochannel [024005]	-	11	Undated	

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
024	(024010)	Deposit	-	-	Orange brown with light grey mottles silty clay; mod. gravel & sub-rounded/sub-angular stones; 0.12m deep; underlies (024002), overlies (024003).	Subsoil	-	-	Post medieval	

7.1.9 Trench 027

Trench 027 was orientated NE-SW and was influenced by its proximity to existing field boundaries in the form of extensive rooting. One rooting feature was recorded, as well as an archaeological gully.

The small linear gully, [027006], orientated NNE-SSW, was unable to be dated and is likely to relate to the existing field boundaries and field entrances nearby. It equally returned no palaeoenvironmental indicators beside wind-blown charcoal (Andrews 2017).

Plate 5: NE-facing section of [027006]

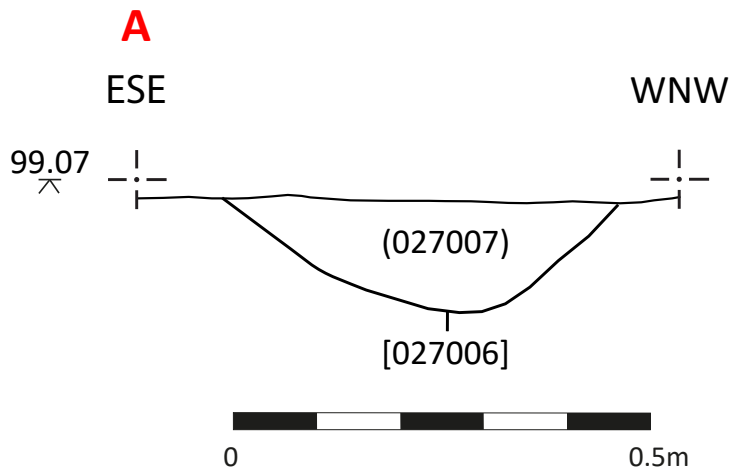


Fig. 19: NNE-facing section of [027006]

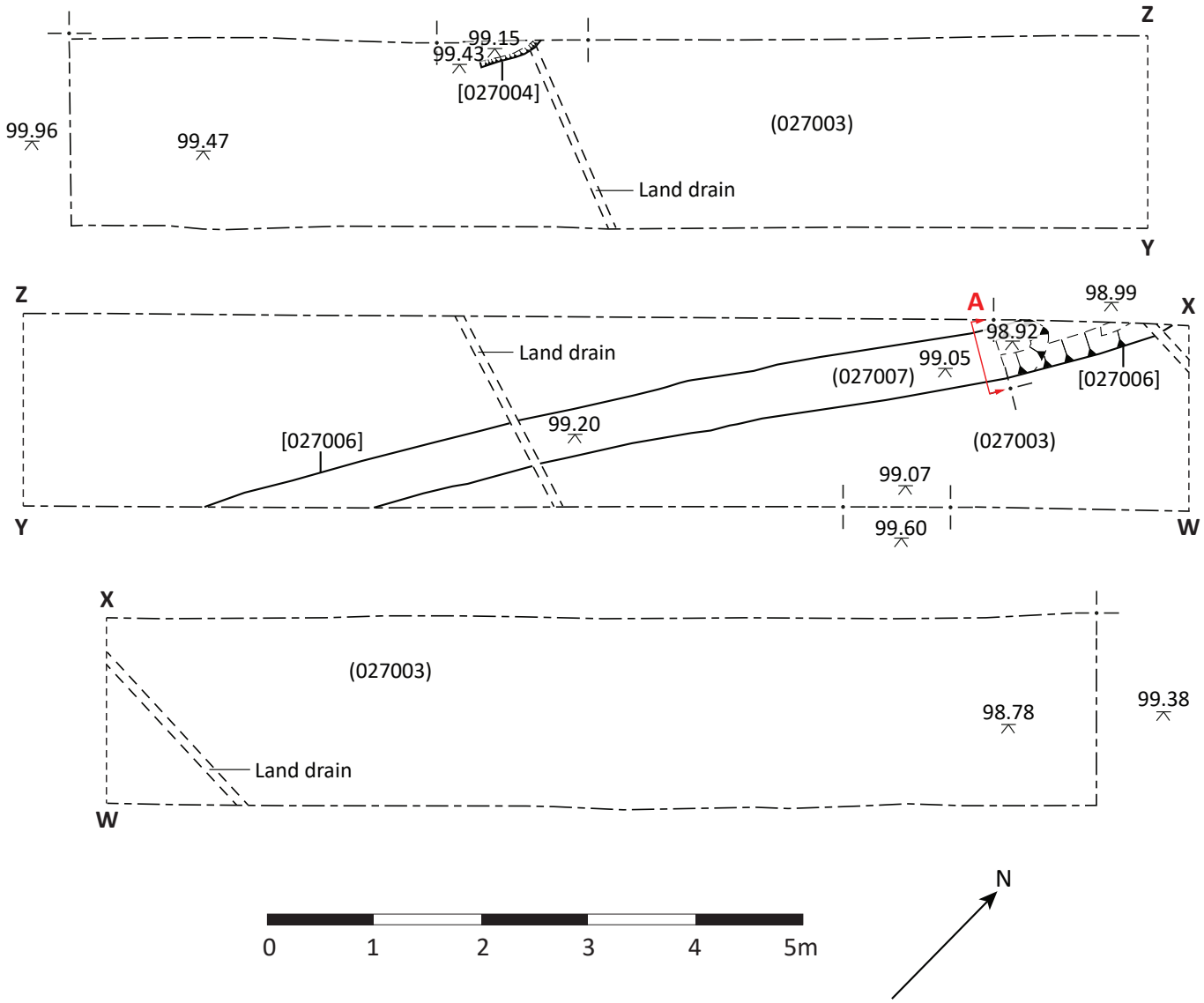


Fig. 20: Plan of Trench 027

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
027	(027001)	Deposit	-	-	Dark brown silty clay; 0.25m deep; overlies (027005).	Topsoil	-	-	Modern	
	(027002)	Deposit	-	-	Mid grey brown silty clay; 0.30m deep; underlies (027001), overlies (027003).	Subsoil	-	-	Post medieval	
	(027003)	Deposit	-	-	Light grey sandy clay; underlies (027002).	Geology	-	-	-	
	[027004]	Cut	(027005)	-	Irregular shape in plan; irregular, steep to vertical sides; unknown base; >1.06m diameter, >0.63m deep; cuts (027002) & land drain.	Edge of rooting	-	-	Post medieval / modern	
	(027005)	Fill	-	[027004]	Moderate to firmly compacted mixed brown grey silty clay; freq. charcoal & chalk; mod. small to large stones; >1.06m wide, >0.63m deep.	Singular fill of rooting [0270004]	-	-	Post medieval / modern	
	[027006]	Cut	(027007)	-	Linear shape in plan; NNE-SSW orientation; gradual sides; concave base; >8.70m long, 0.58m wide, 0.13m deep; cuts (027003).	Cut of linear gully	-	-	Undated	
	(027007)	Fill	-	[027006]	Firmly compacted mid orange brown silty clay; small sub-angular/sub-rounded stones; 0.58m wide, 0.13m deep.	Singular fill of linear gully [027006]	-	12	Undated	

7.1.10 Trench 028

Trench 028 was orientated NW-SE and contained one ditch, [028004], which contained closely dated gritty buff ware pottery of the late 1st century AD, potentially originating from *Verulamium* (Perrin 2017).

However, no other features related to this ditch and any archaeology it relates to may be present to the SW, on the other side of Oakhill Lane.

Although the ditch [028004] contained the only identifiable instance of wheat, there was no further palaeoenvironmental evidence and no conclusions can be drawn (Andrews 2017).

Plate 6: SW-facing section of [028004]

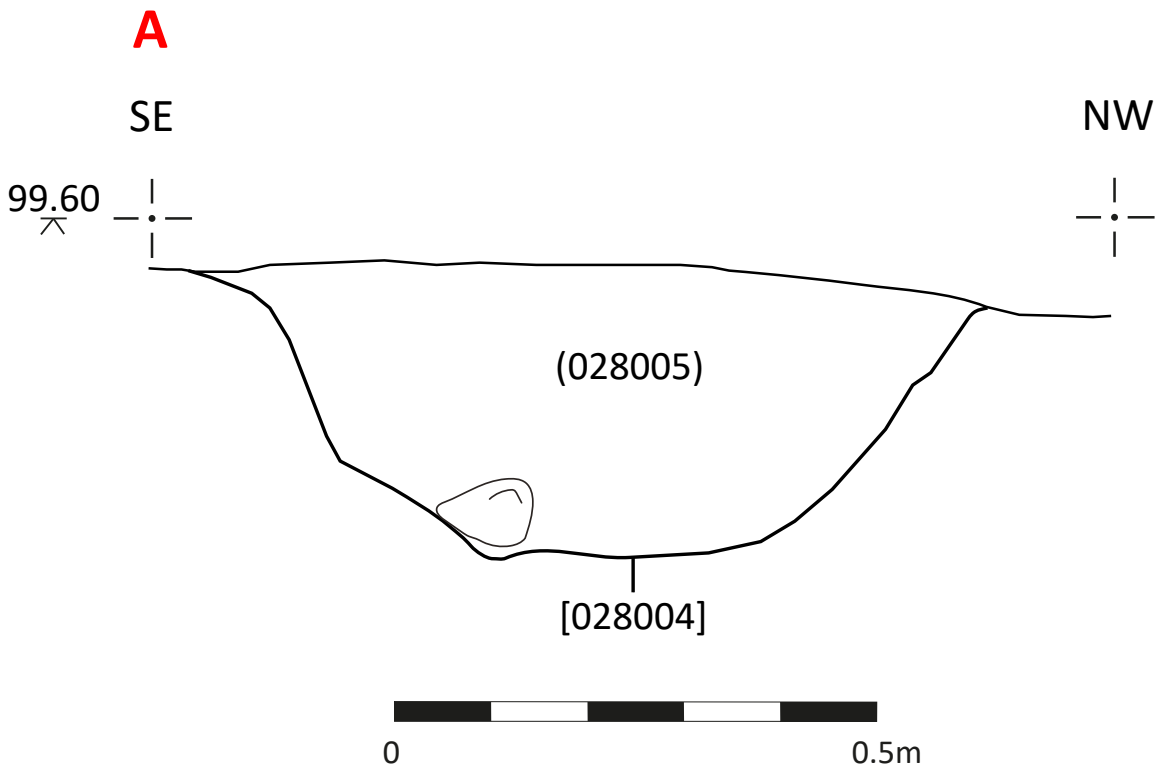


Fig. 21: NE-facing section of [028004]

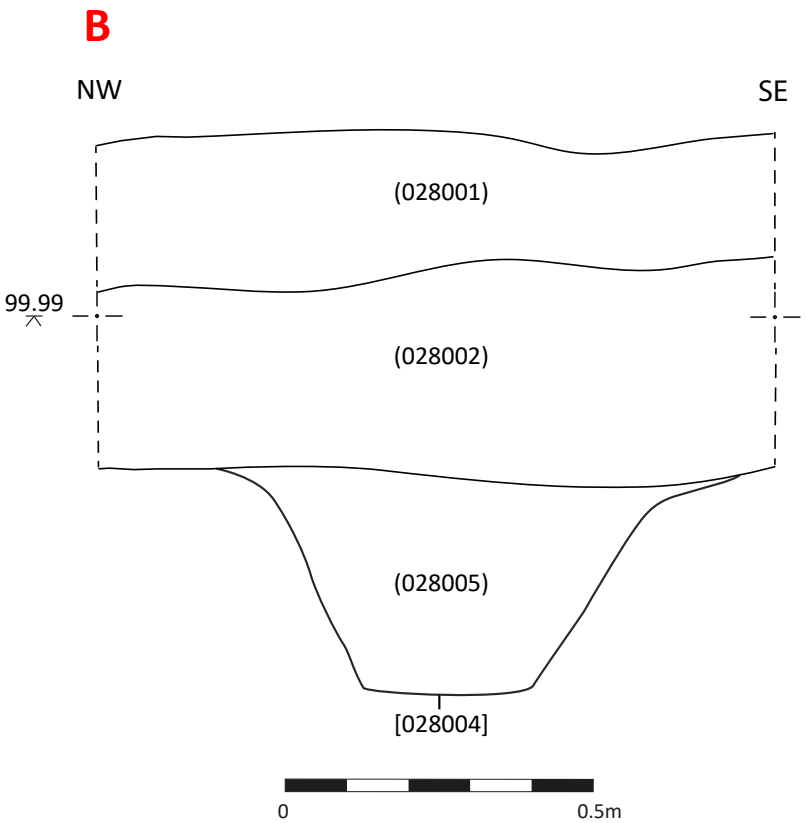


Fig. 22: SW-facing section of [028004]

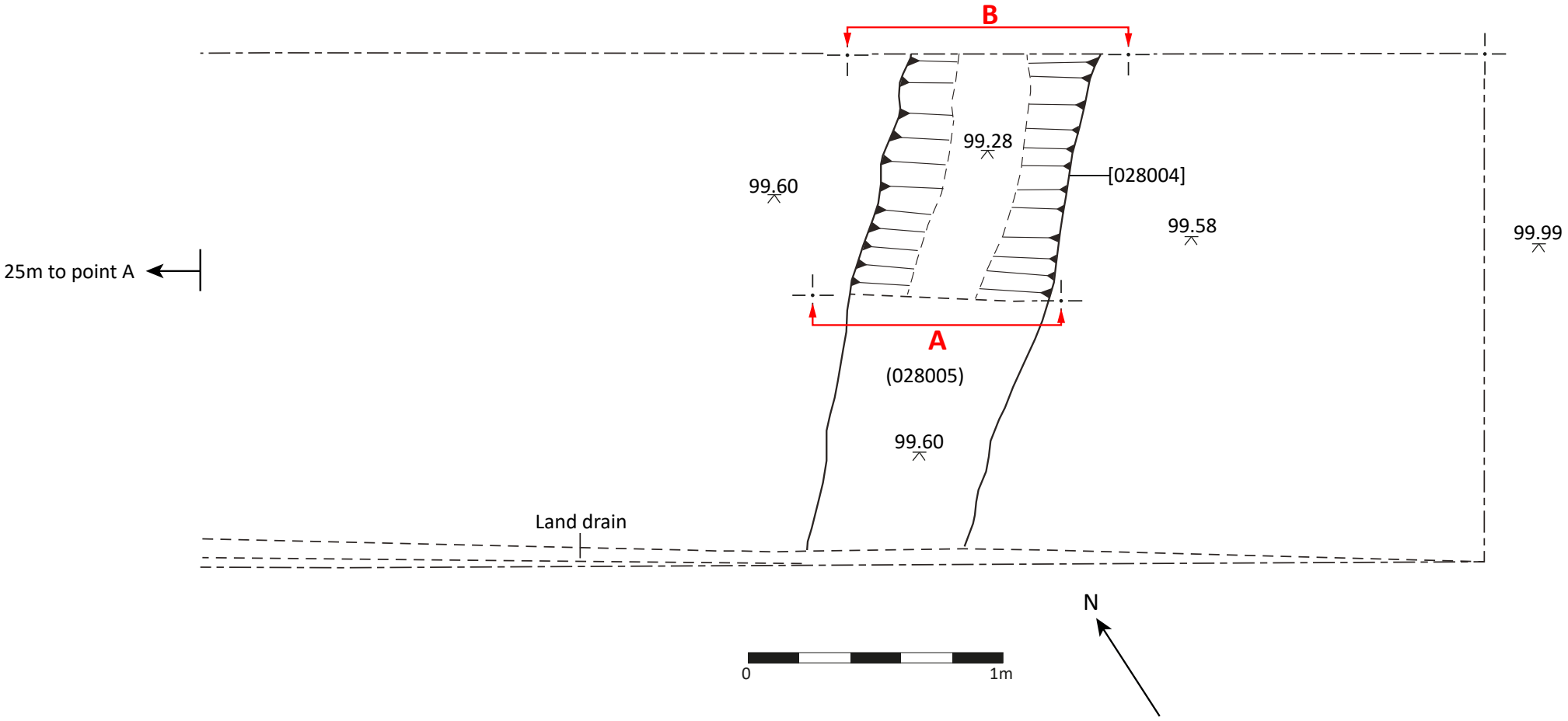


Fig. 23: Plan of [028004]

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
028	(028001)	Deposit	-	-	Dark brown sandy clay; 0.27m deep; overlies (028002).	Topsoil	-	-	Modern	
	(028002)	Deposit	-	-	Mid brown sandy clay; 0.28m deep; underlies (028001), overlies (028005).	Subsoil	-	-	Post medieval	
	(028003)	Deposit	-	-	Mid to light brown clay; freq. chalk & pebbles; underlies (028002).	Geology	-	-	-	
	[028004]	Cut	(028005)	-	Linear shape in plan; NE-SW orientation; steep sides; concave base; >2.00m long, 0.82m wide, 0.33m deep; cuts (028003).	Cut of ditch	-	-	Late C1st	
	(028005)	Fill	-	[028004]	Loosely compacted dark grey with orange mottles sandy clay; occ. pebbles, chalk & charcoal; 0.82m wide, 0.33m deep.	Singular fill of ditch [028004]	Pottery	5	Late C1st	

7.1.11 Trench 032

Trench 032 was orientated NW-SE and revealed a feature recorded as rooting and a broadly N-S aligned ditch, [032006], which contained a significant quantity of charcoal and bone.

The archaeologically observed charcoal and bone created an assumption that [032006] related to habitation, although there were no other archaeological features nearby. This assumption was, however, put into doubt by the palaeoenvironmental and faunal analysis, which revealed no charred archaeobotanical macro-remains and bone too fragmentary for diagnostic analysis (Andrews 2017; Faine 2017), which suggests the isolated dumping of charcoal and larger bones. Additionally, the absence of pottery dating for the fill (032008) may suggest a pre-Iron Age or non-domestic origin for the feature.

Plate 7: View W of of [032006]

Plate 8: View SE general shot of [032006]

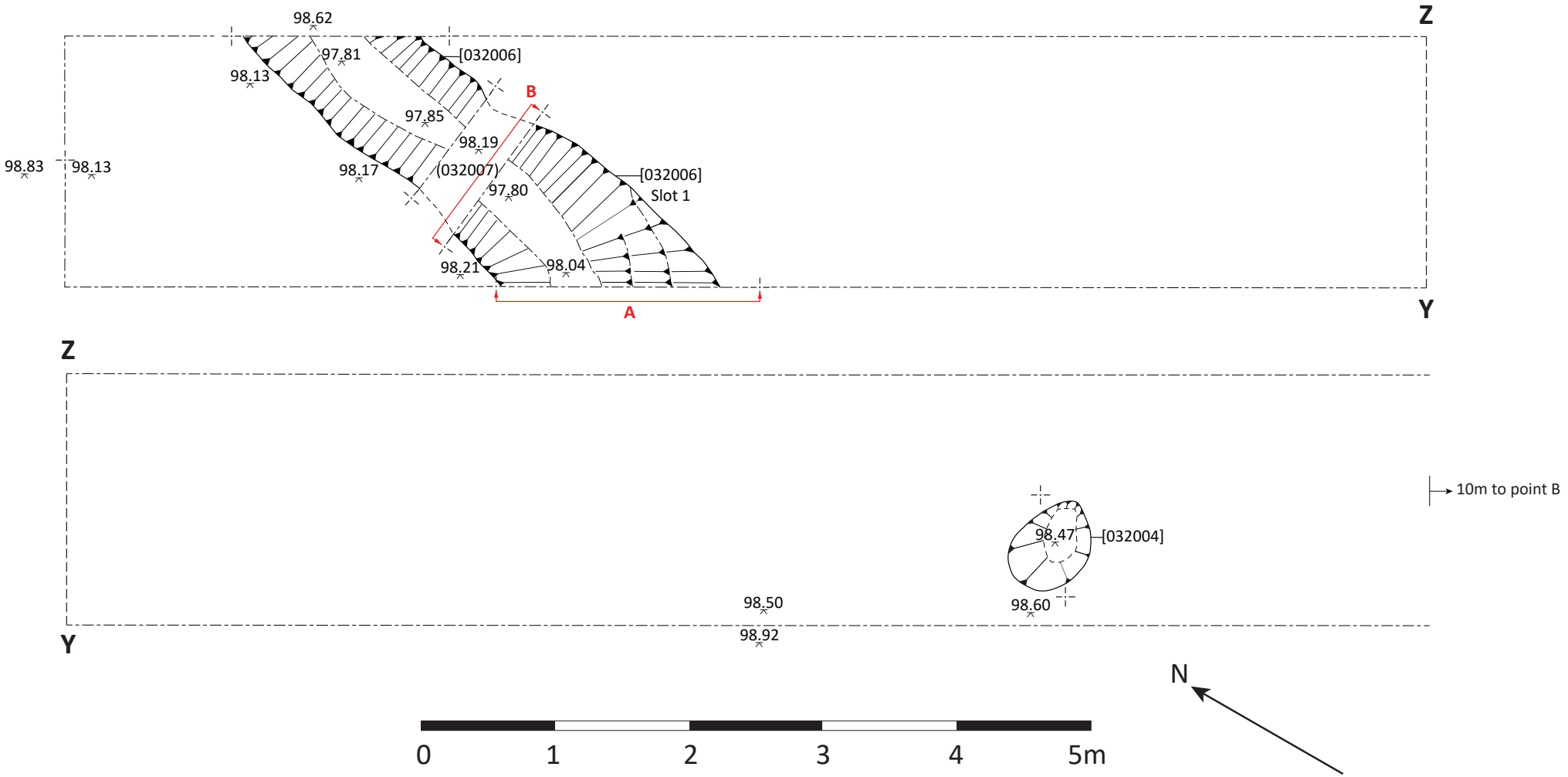


Fig. 24: Plan of Trench 032

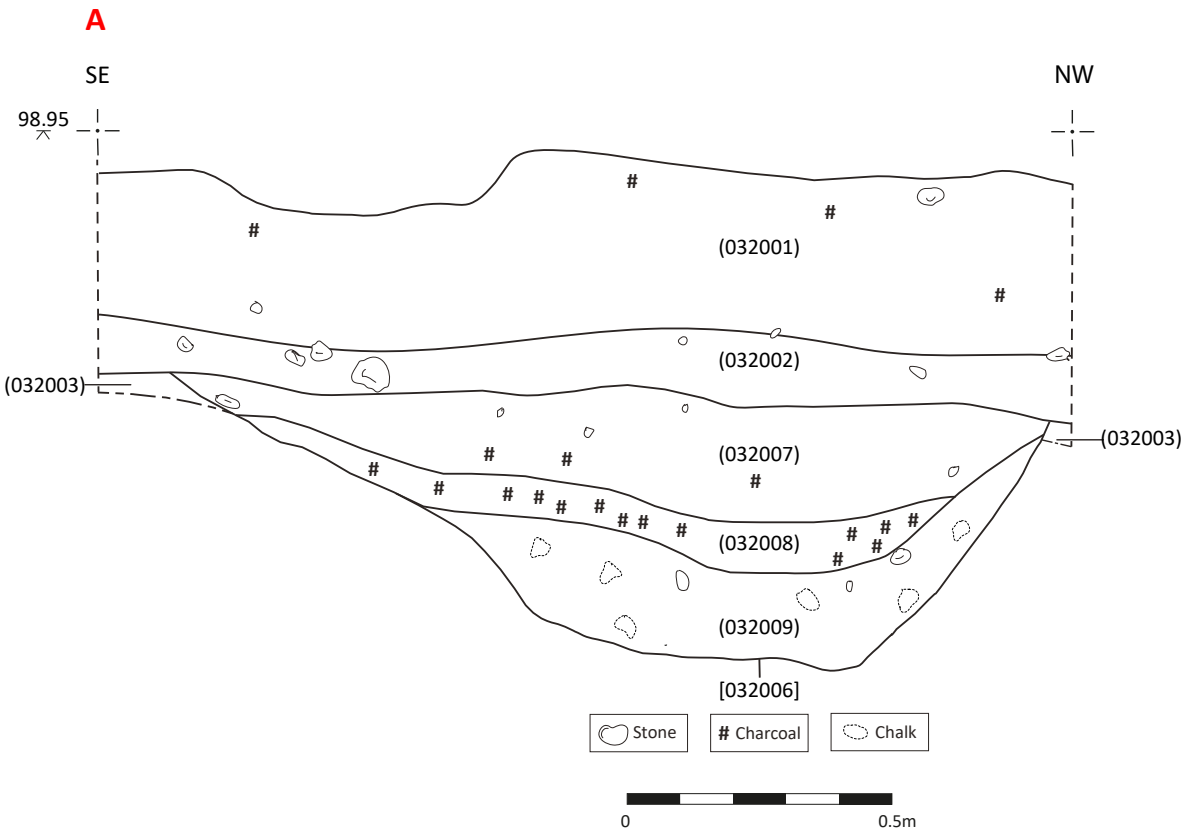


Fig. 25: NE-facing section of [032006]

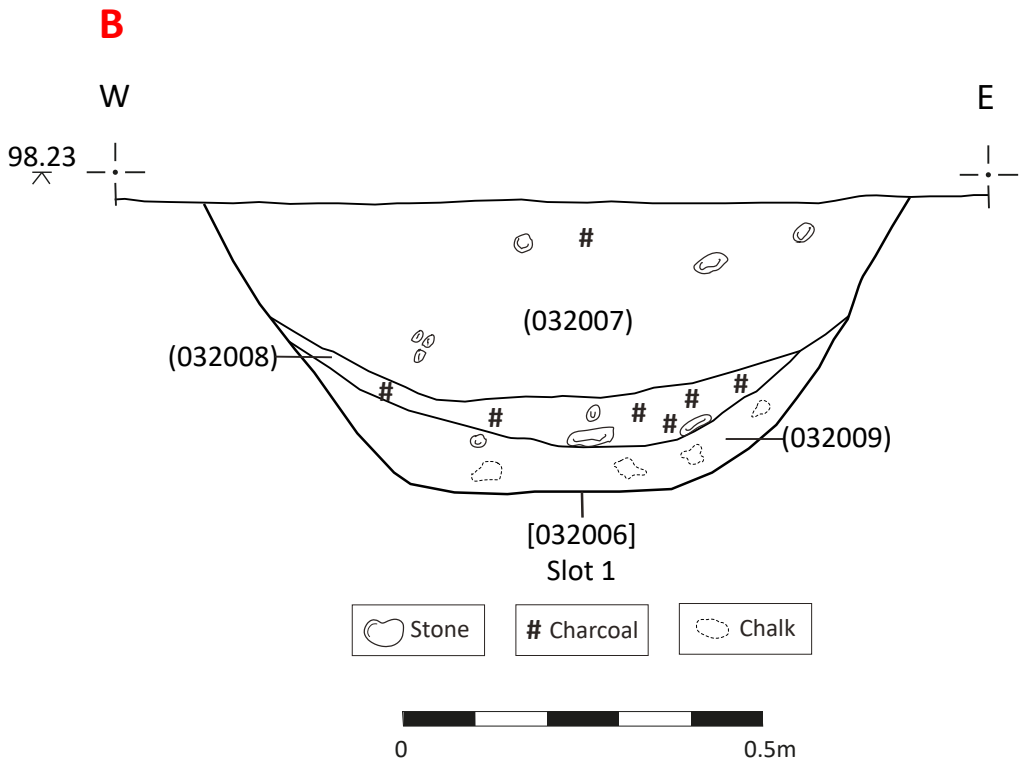


Fig. 26: S-facing section of [032006]

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
032	(032001)	Deposit	-	-	Dark grey brown silty clay; 0.37m deep; overlies (032002).	Topsoil	-	-	Modern	
	(032002)	Deposit	-	-	Mid grey brown silty clay; 0.15m deep; underlies (032001), overlies (032003).	Subsoil	-	-	Post medieval	
	(032003)	Deposit	-	-	Mid orangey grey silty clay; occ. chalk; underlies (012002).	Geology	-	-	-	
	[032004]	Cut	(032005)	-	Sub-circular shape in plan; gradual sides; irregular base; 0.59m long, 0.57m wide, 0.11m deep; cuts (032003).	Edge of rooting	-	-	Modern	
	(032005)	Fill	-	[032004]	Loosely compacted dark grey brown with black flecking silty clay; occ. charcoal flecks & stones; 0.59m long, 0.57m wide, 0.11m deep.	Singular fill of rooting [032004]	-	-	Modern	
	[032006]	Cut slot 1	(032007), (032008), (032009)	-	Linear shape in plan; N-S orientation; mod. sides; flat base; >1.80m long, 1.55m wide, 0.50m deep; cuts (032003).	Cut of ditch	-	-	Undated; probably Late Iron Age / Romano-British	
		Cut slot 2	(032007), (032008), (032009)	-	Linear shape in plan; N-S orientation; mod. sides; flat base; >1.80m long, 0.88m wide, 0.84m deep; cuts (032003).		-	-		
	(032007)	Fill	-	[032006] slot 1 & 2	Moderately compacted mid grey brown silty clay; occ. charcoal flecks, mod. stones; 1.55m wide, 0.28m deep; overlies (032008).	Upper fill of ditch [032006]	-	2	Undated; probably Late Iron Age / Romano-British	
	(032008)	Fill	-	[032006] slot 1 & 2	Moderately compacted dark brown to black charcoal (80%) in silty clay; 1.00m wide, 0.10m deep; underlies (032007), overlies (032009).	Middle fill of ditch [032006]	Bone	1	Undated; probably Late Iron Age / Romano-British	

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
032	(032009)	Fill	-	[032006] slot 1 & 2	Firmly compacted light grey brown silty clay; occ. small stones & charcoal, freq. chalk; 0.97m wide, 0.40m deep; underlies (032008).	Basal fill of ditch [032006]	-	3	Undated; probably Late Iron Age / Romano-British	

7.1.12 Trench 036

Trench 036 was orientated WNW-ESE and located in the field under pasture as opposed to maize cultivation. Two post or stake holes, [036004] and [036006], were revealed.

The excavation of post/stake hole [036004] revealed archaeological material that could not be dated. No further information was obtainable from the palaeoenvironmental sampling and it is considered that, if the post/stake holes formed a structure, it was not domestic in nature (Andrews 2017).

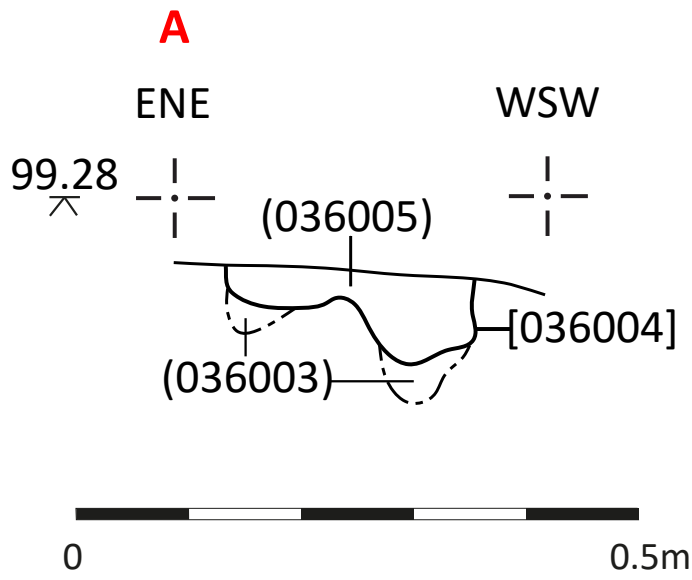


Fig. 27: NNW-facing section of [036004]

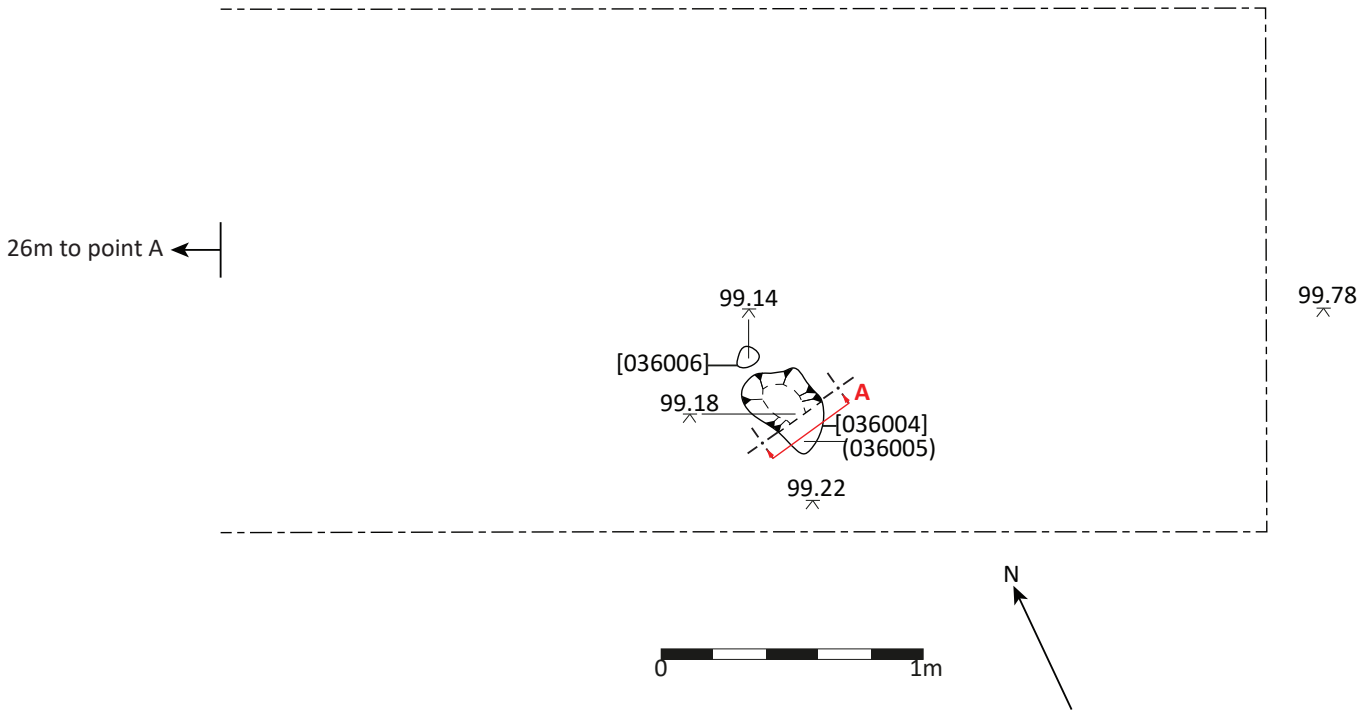


Fig. 28: Plan of [036004]

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
036	(036001)	Deposit	-	-	Dark brown sandy clay; 0.37m deep; overlies (036002).	Topsoil	-	-	Modern	
	(036002)	Deposit	-	-	Mid brown sandy clay; occ. pebbles; 0.43m deep; underlies (036001), overlies (036003).	Subsoil	-	-	Post medieval	
	(036003)	Deposit	-	-	Light brown sandy clay; occ. chalk & pebbles; underlies (036002).	Geology	-	-	-	
	[036004]	Cut	(036005)	-	Sub-circular shape in plan; vertical sides; irregular base; 90° inclination of axis; 0.34m long, 0.22m wide, 0.08m deep; cuts (036003).	Cut of post/stake hole	-	-	Undated; probably Late Iron Age / Romano-British	
	(036005)	Fill	-	[036004]	Moderately compacted mid brown sandy clay; rare medium stones, occ. charcaol flecks; 0.34m long, 0.22m wide, 0.08m deep.	Singular fill of post/ stake hole [036004]	Pottery / CBM frags from sample	7	Undated; probably Late Iron Age / Romano-British	
	[036006]	Cut	(036007)	-	Circular shape in plan; irregular sides; irregular base; <45° inclination of axis; 0.08m diameter, unknown depth; cuts (036003).	Cut of stakehole	-	-	Undated; probably Late Iron Age / Romano-British	
	(036007)	Fill	-	[036006]	Moderately compacted mid brown silty clay; occ. charcoal flecks; 0.08m diameter, unknown depth.	Fill of stakehole [036006]	-	8	Undated; probably Late Iron Age / Romano-British	

7.1.13 Trench 040

Trench 040 was orientated NW-SE and contained significant archaeology of a somewhat indeterminate nature. Two ditches, one aligned N-S and one orientated NNE-SSW, and a large deposit (040004) (or ditch [040005]) were revealed. Two land drains, one stone and one ceramic, were recorded due to their interference with the archaeology.

The large silty deposit (040004) occupied the SE end of the trench, with clear boundaries unable to be revealed within the confines of the AFE; there is a possibility that it fills a linear cut [040005]. Deposit (040004) was truncated by field drains, including a ceramic drain and a stone drain of earlier date. This stratigraphic dating coupled with pottery of 2nd or 3rd century AD date suggests a conclusive Romano-British date (Perrin 2017).

In the NW end of the trench, two linears, [040007] and [040009], orientated NNE-SSW and N-S, respectively, were also considered to be of Romano-British date, with ditch [040009] dated to the 2nd or 3rd century AD (although ditch [040007] was undated) (Perrin 2017).

While (040004) and ditch [040007] returned no palaeoenvironmentally significant data, ditch [040009] contained a molluscan assemblage of note, which suggested a grazed landscape with standing water seasonally occupying the ditches. (Andrews 2017).

Archaeometallurgical identification from (040004) included possible vitrified hearth lining and cinders, although no definitive conclusions can be drawn as to its origin (Starley 2017).

Faunal material included butchered cattle from (040010) of [040009] and horse teeth from (040004) of [040005], strongly suggesting domestic occupation or waste (Faine 2017).

The trench was extended to the E in an attempt to clarify the boundaries of possible ditch [040005] and the possible relationship to archaeology in Trench 044.

Plate 9: Plan shot of [040009]

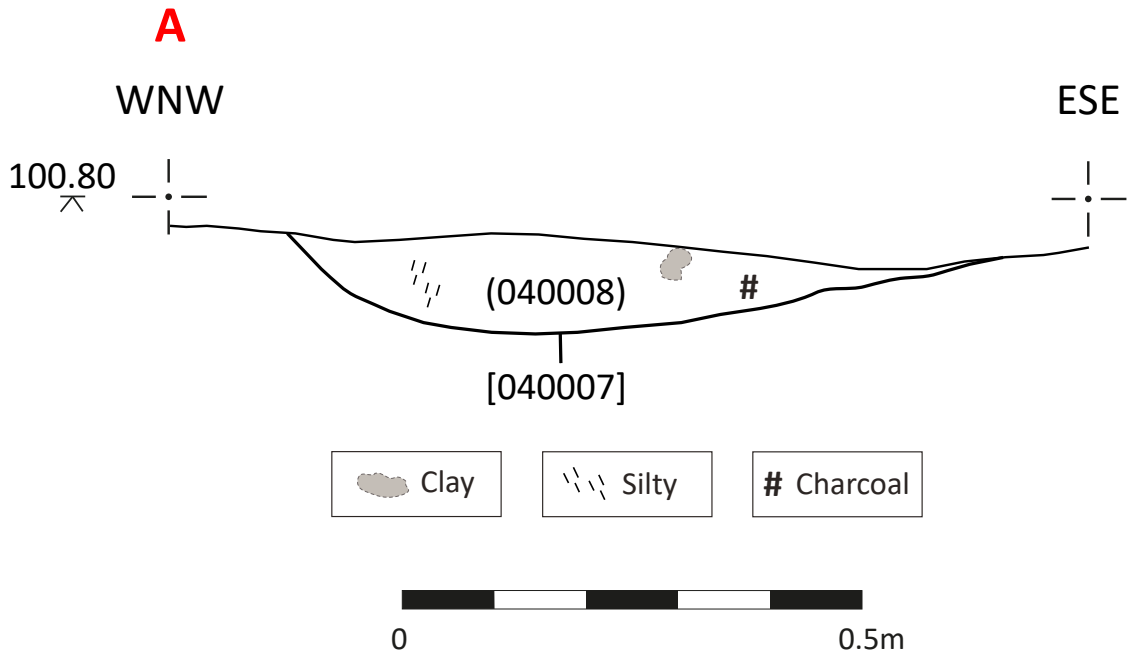


Fig. 29: SSW-facing section of [040007]

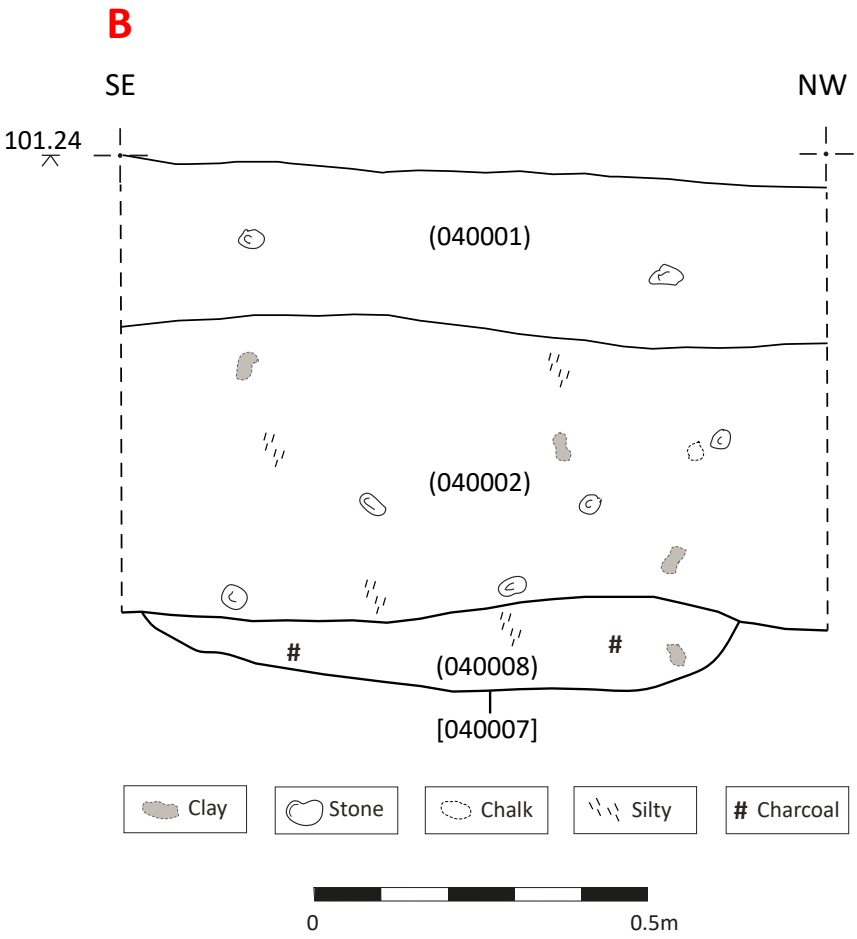


Fig. 30: NE-facing section of [040007]

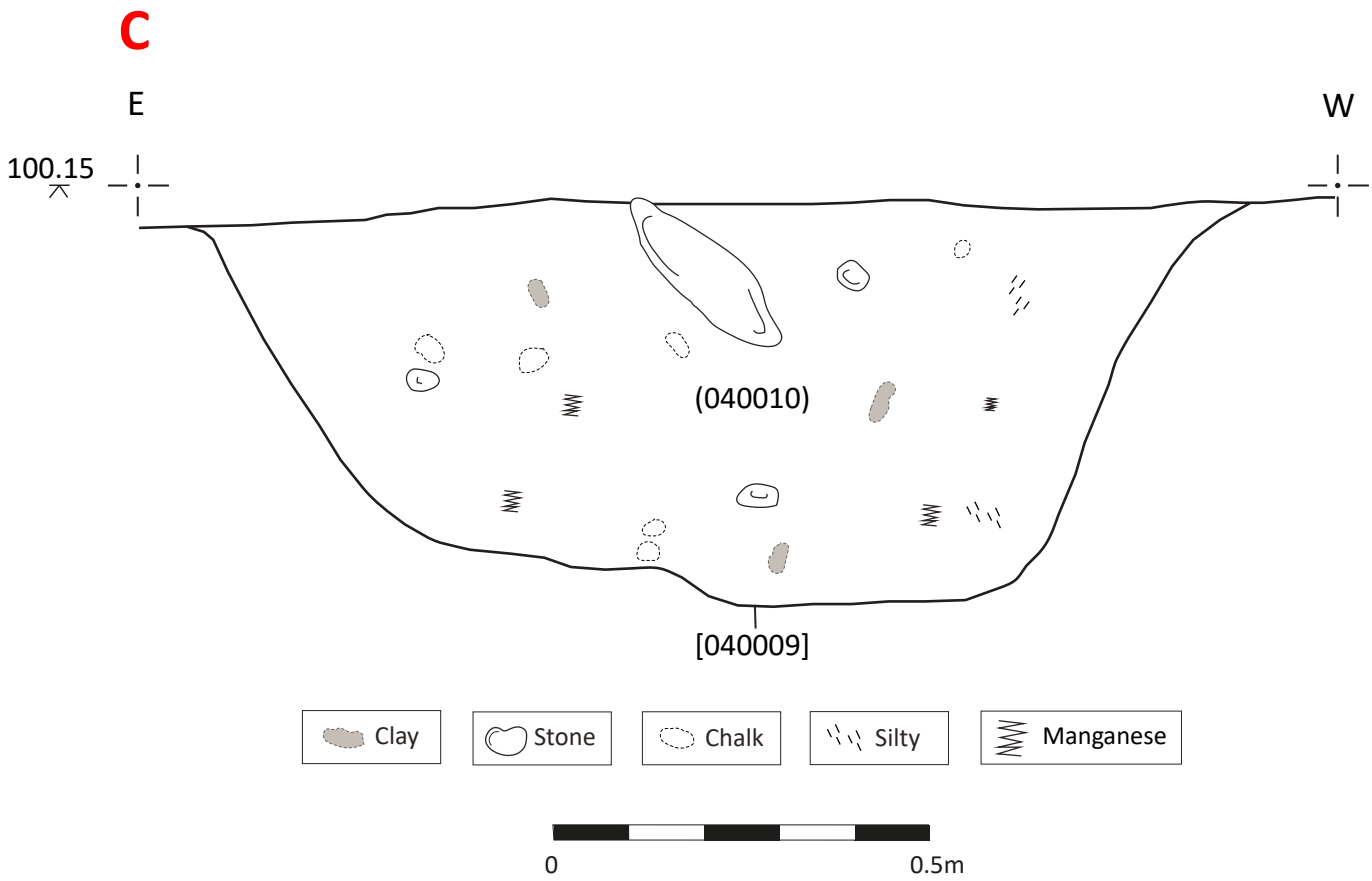


Fig. 31: N-facing section of [040009]

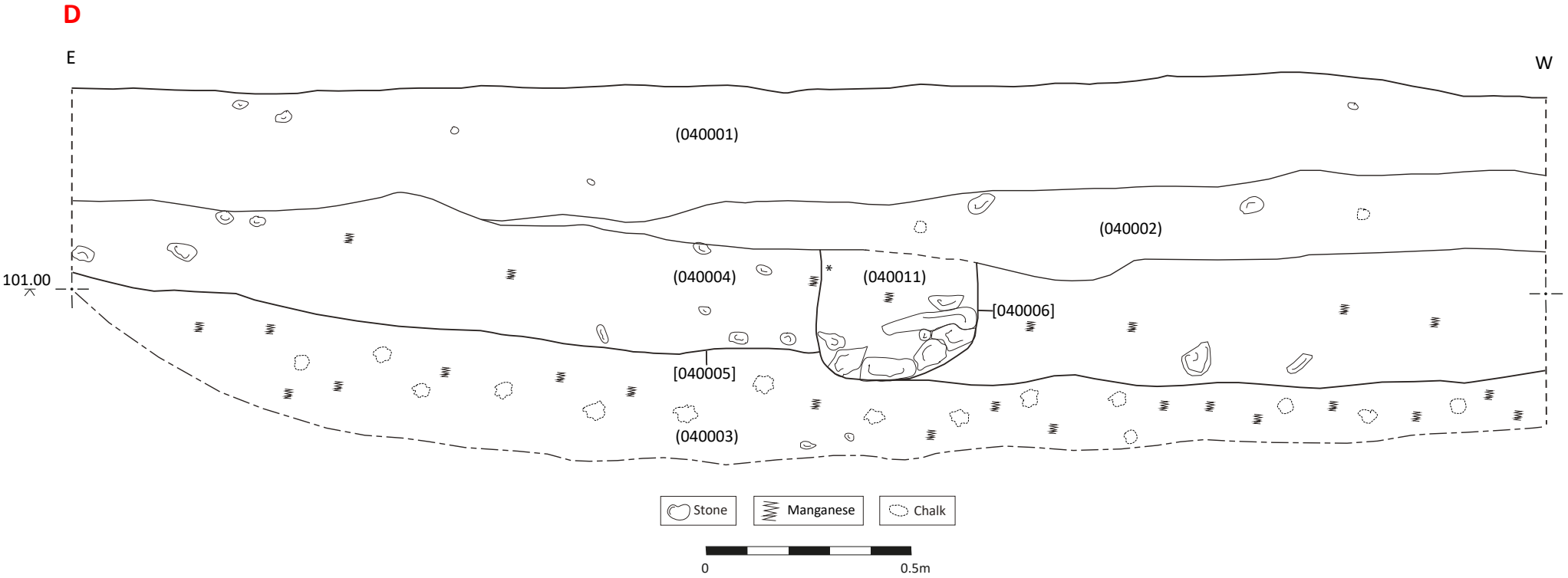


Fig. 32: N-facing section of Trench 040 extension showing deposit (040004) and land drain [040006]

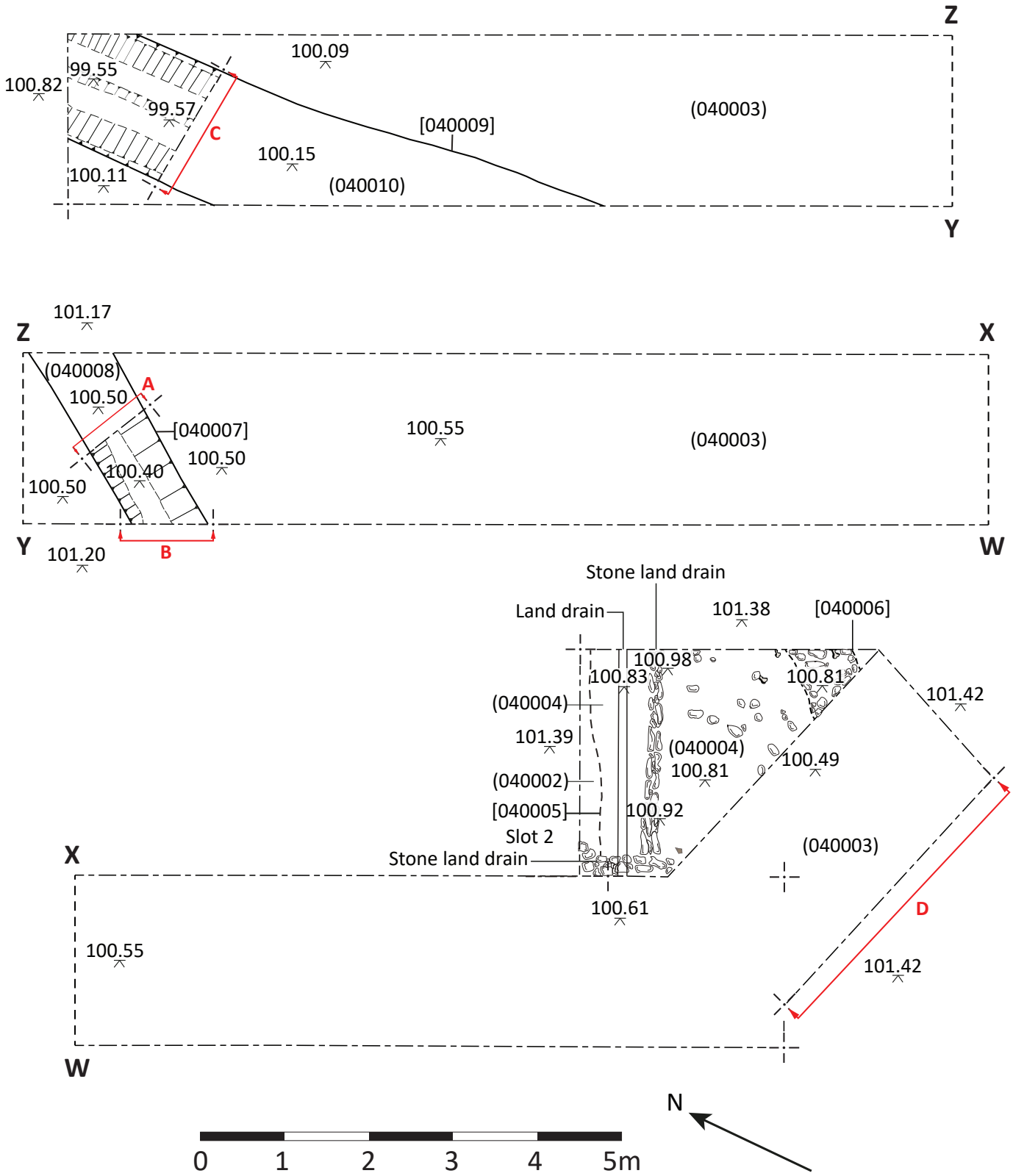


Fig. 33: Plan of Trench 040

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
040	(040001)	Deposit	-	-	Dark brown silty clay; occ. rounded stones; 0.33m deep; overlies (040002).	Topsoil	-	-	Modern	
	(040002)	Deposit	-	-	Light brown orange silty clay; occ. stones; 0.46m deep; underlies (040001), overlies (040003).	Subsoil	-	-	Post medieval	
	(040003)	Deposit	-	-	Yellow blue silty clay; occ. chalk; underlies (040002).	Geology	-	-	-	
	(040004)	Fill	-	[040005]	Moderately compacted dark brown silty clay; mod. stones; 3.6m wide, 0.32m deep.	Fill of possible ditch [040005]	Pottery; bone; slag	6	C2nd / C3rd	
	[040005]	Cut	(040004)	-	Possible linear shape in plan; possible E-W orientation; gradual sides; flat base; >4.65m long, 3.6m wide, 0.73m deep; cuts (040003).	Cut of possible ditch	-	-	C2nd / C3rd	
	[040006]	Cut	(040011)	-	Linear shape in plan; N-S orientation; vertical sides; flat base; >3.00m long, 0.39m wide, 0.32m deep; cuts (040004).	Cut of land drain	-	-	Post medieval	
	[040007]	Cut	(040008)	-	Linear shape in plan, NNE-SSW orientation; gradual sides; flat base; >2.40m long, 0.89m wide, 0.14m deep; cuts (040003).	Cut of ditch	-	-	Undated; probably Late Iron Age / Romano-British	
	(040008)	Fill	-	[040007]	Moderately compacted blue brown silty clay; occ. charcoal; 0.89m wide, 0.14m deep.	Singular fill of ditch [040007]	-	10	Undated; probably Late Iron Age / Romano-British	
	[040009]	Cut	(040010)	-	Linear shape in plan; N-S orientation; steep sides; flat base; >6.00m long, 1.41m wide, 0.54m deep; cuts (040003).	Cut of ditch	-	-	C2nd / C3rd	
	(040010)	Fill	-	[040009]	Moderately compacted grey brown silty clay; mod. chalk & stones; 1.41m wide, 0.54m deep.	Singular fill of ditch [040009]	Pottery; bone	9	C2nd / C3rd	
	(040011)	Fill	-	[040006]	Moderately compacted light brown silty clay; freq. stones & manganese; 0.39m wide, 0.32m deep.	Singular fill of land drain [040006]	-	-	Post medieval	
	[040012]	Cut	(040013)	-	Linear shape in plan; NE-SW orientation; vertical sides; flat base; >4.65m long, 0.09m wide, 0.24m deep; cuts (040002).	Cut of land drain	-	-	Modern	

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
040	(040013)	Fill	-	[040012]	Moderately compacted light brown silty clay; freq. stones, ceramic land drain; 0.09m wide, 0.24m deep.	Singular fill of land drain [040012]	-	-	Modern	

7.1.14 Trench 044

Trench 044 was orientated E-W and had strong correlations to the archaeology of Trench 040. A post-medieval agricultural furrow was recorded in addition to a possible NW-SE ditch terminus.

Limited palaeoenvironmental material meant no conclusions could be drawn (Andrews 2017).

A probable pit or terminus for a NW-SE aligned ditch [044007] at the W end of the trench may have been related to the features in Trench 040. A single pig molar was recovered from this trench (Faine 2017).

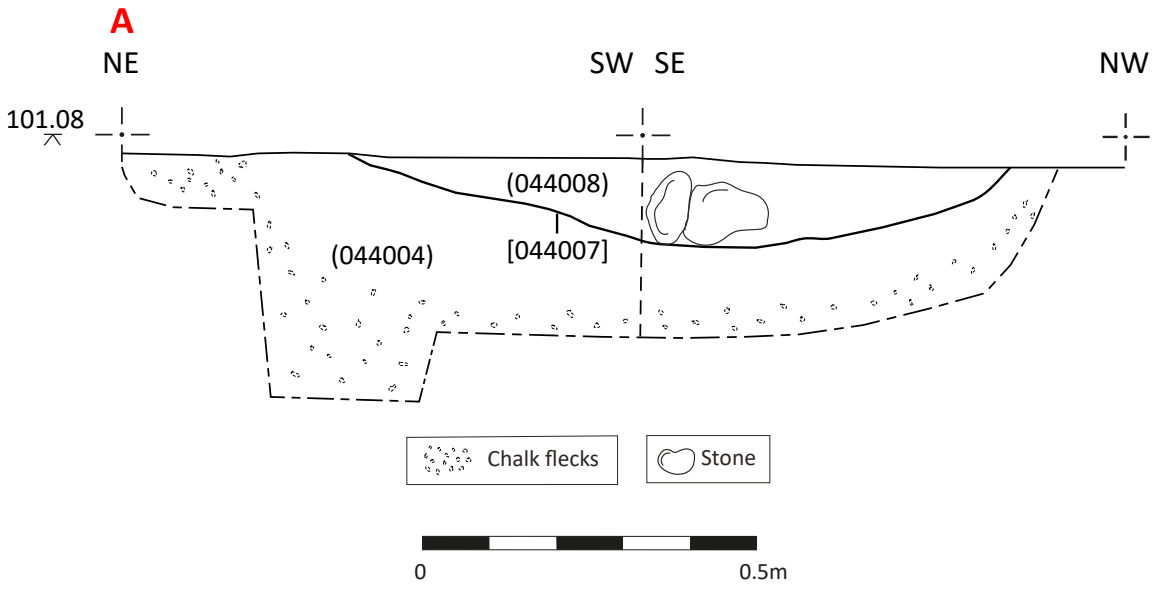


Fig. 34: Running section of [044007]

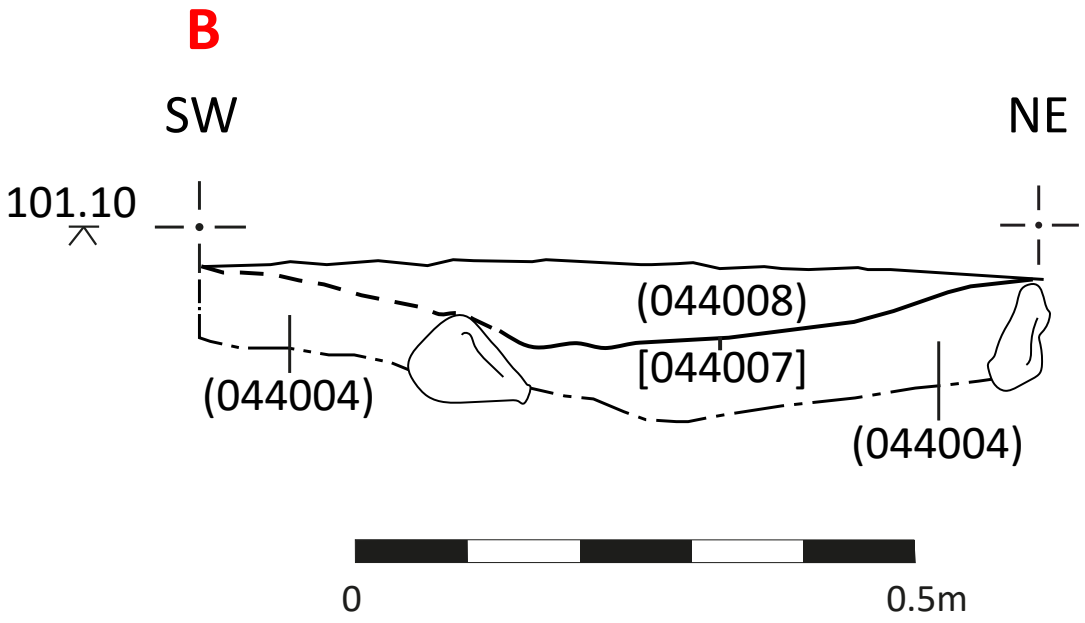


Fig. 35: SE-facing section of [044007]

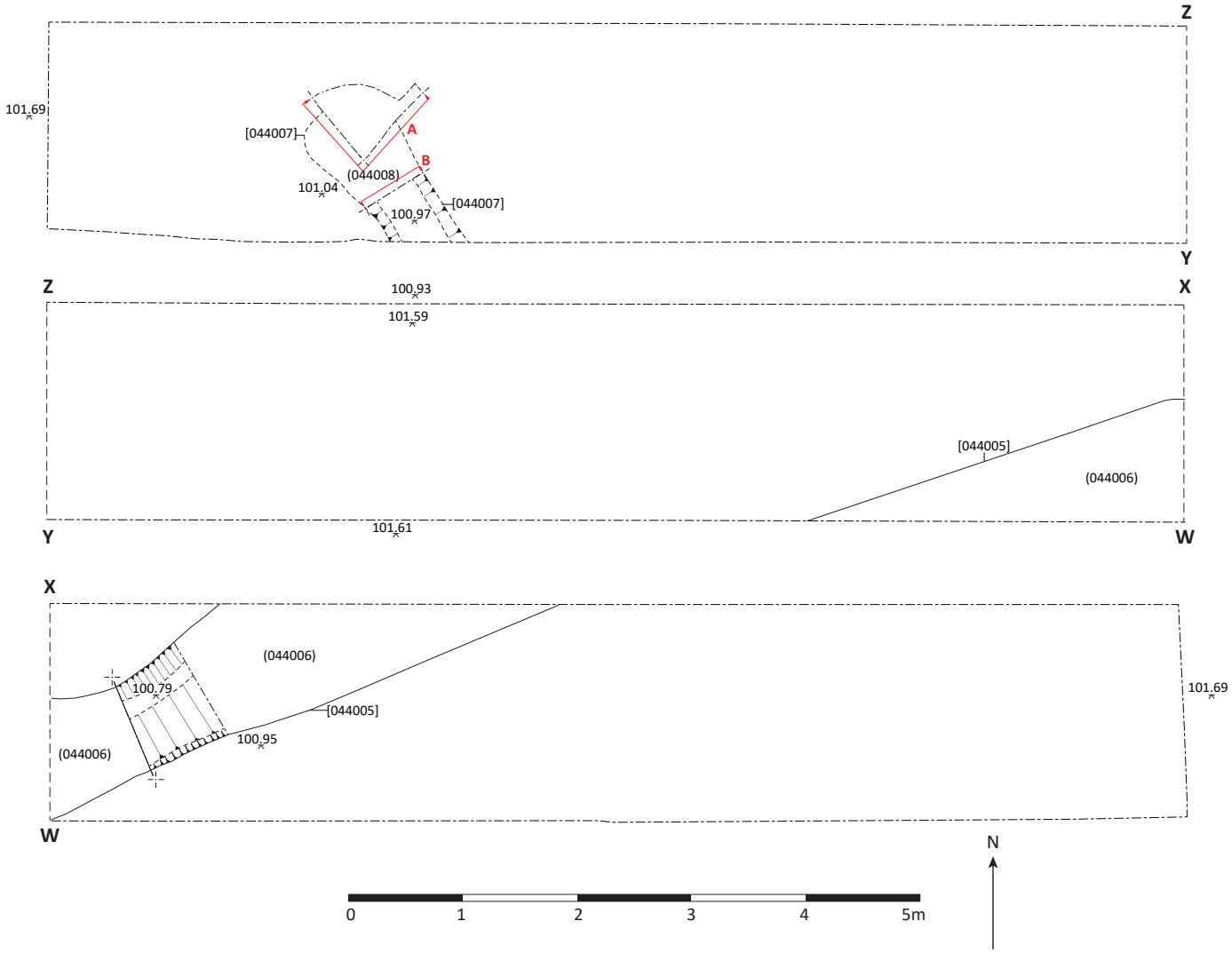


Fig. 36: Plan of Trench 044

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
044	(044001)	Deposit	-	-	Dark brown grey clayey silt; 0.28m deep; overlies (044002).	Topsoil	-	-	Modern	
	(044002)	Deposit	-	-	Mid brown with red mottles silty clay; 0.23m deep; underlies (044001), overlies (044003).	Subsoil	-	-	Post medieval	
	(044003)	Deposit	-	-	Mid brown silty clay; occ. chalk; 0.27m deep; underlies (044002), overlies (044004).	Subsoil	-	-	Post medieval	
	(044004)	Deposit	-	-	Mid brown grey clay; occ. chalk; underlies (044003).	Geology	-	-	-	
	[044005]	Cut	(044006)	-	Linear shape in plan; NE-SW orientation; gradual sides; flat base; >7.80m long, 1.16m wide, 0.14m deep; cuts (044004).	Cut of furrow	-	-	Post medieval	
	(044006)	Fill	-	[044005]	Loose to moderately compacted mid yellow grey silty clay; occ. small to medium pebbles; 1.16m wide, 0.14m deep.	Singular fill of furrow [044005]	-	-	Post medieval	
	[044007]	Cut	(044008)	-	Semi-circular shape in plan, either circular shape in plan or terminating linear shape in plan; NW-SE orientation for linear; gradual sides; flat base; >1.60m long, 0.84m wide, 0.14m deep; cuts (044004).	Cut of pit / ditch terminus	-	-	Undated	
	(044008)	Fill	-	[044007]	Moderately compacted dark grey brown silty clay; occ. small pebbles, charcoal flecks, burnt clay & bone fragments; 0.84m wide, 0.10m deep.	Singular fill of pit / ditch terminus [044007]	Bone	4	Undated	

7.1.15 Trench 053

Trench 053 was orientated WNW-ESE and confirms the interpretation of the post-medieval agricultural ridge and furrow.

7.1.16 Trench 057

Trench 057 was orientated NW-SE and encountered a continuation of a ditch previously identified by Albion Archaeology when their 2008 test-trenching exceeded the Phase 1 boundaries (Albion Archaeology 2008).

Ditch [057004] was in all ways identical to Albion Archaeology's ditch [51203] and was similarly undated, although it was considered to relate to Iron Age to Romano-British boundaries, droveways and stock enclosures seen frequently in the Western Expansion Area rather than the previous interpretation as bedding trenches (Albion Archaeology 2008). BA discovered flint chips within the palaeoenvironmental sampling (Devaney 2017) which cannot be used to give a more conclusive interpretation for the feature besides its general proximity to occupation.

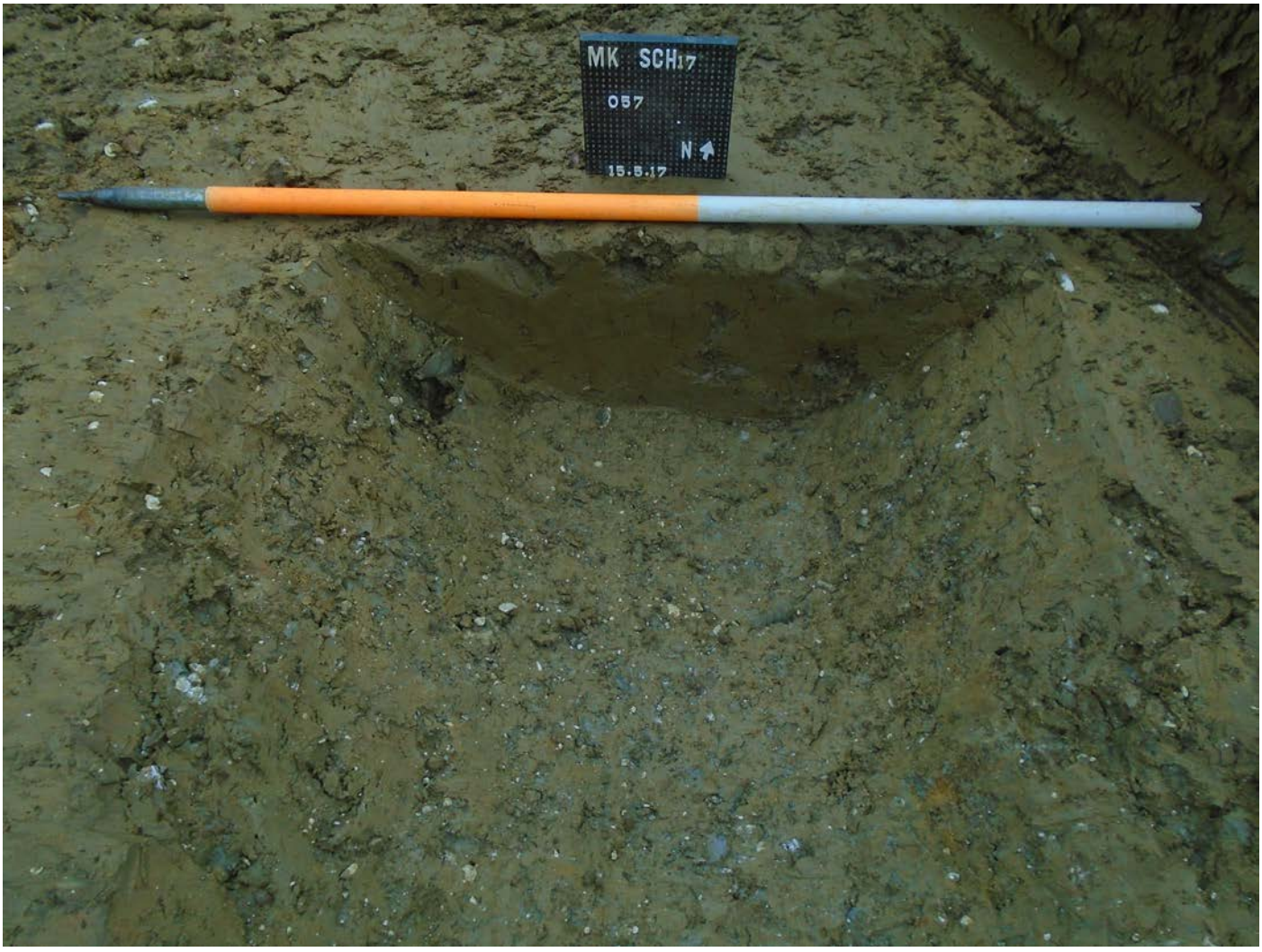


Plate 10: S-facing section of [057004]

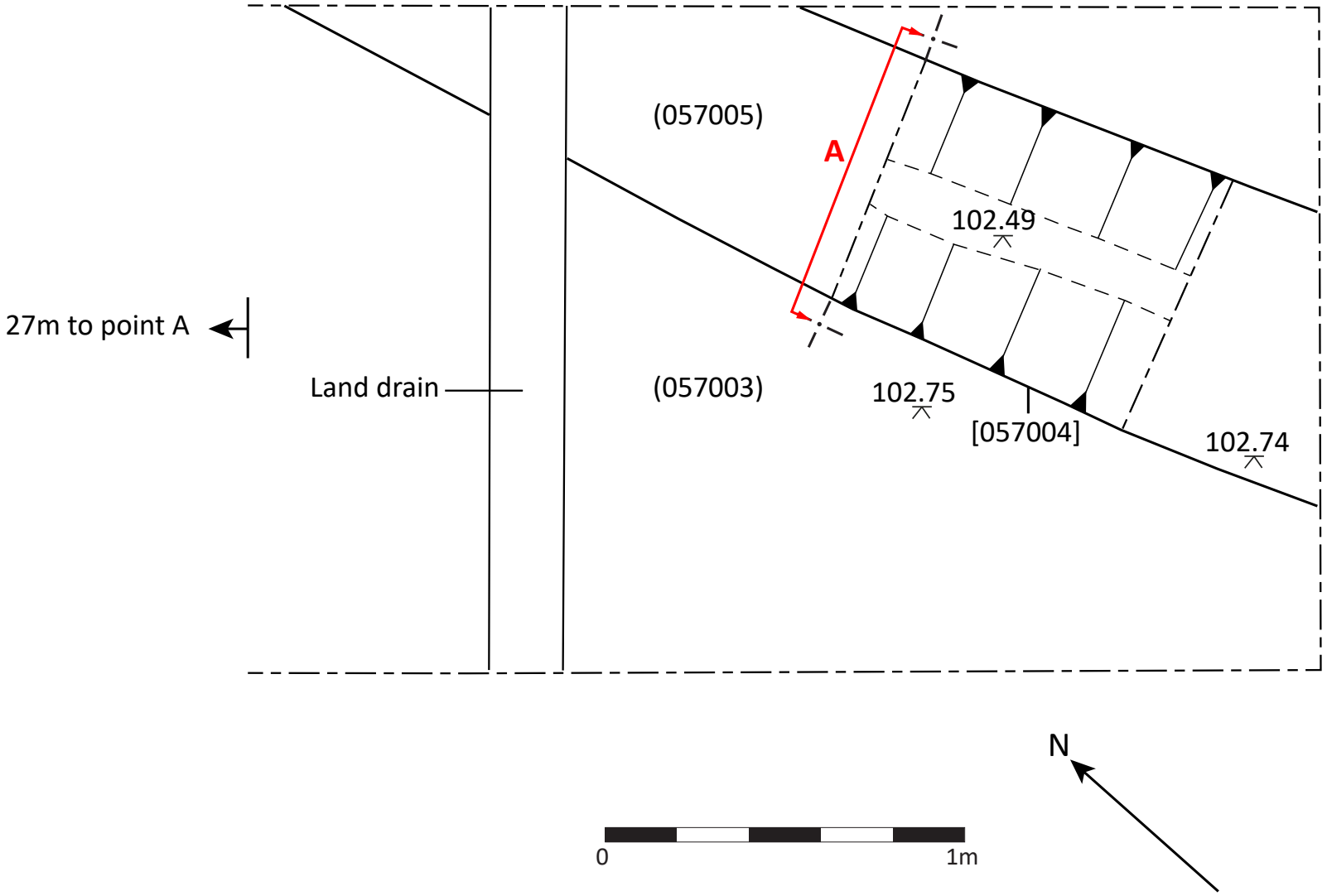
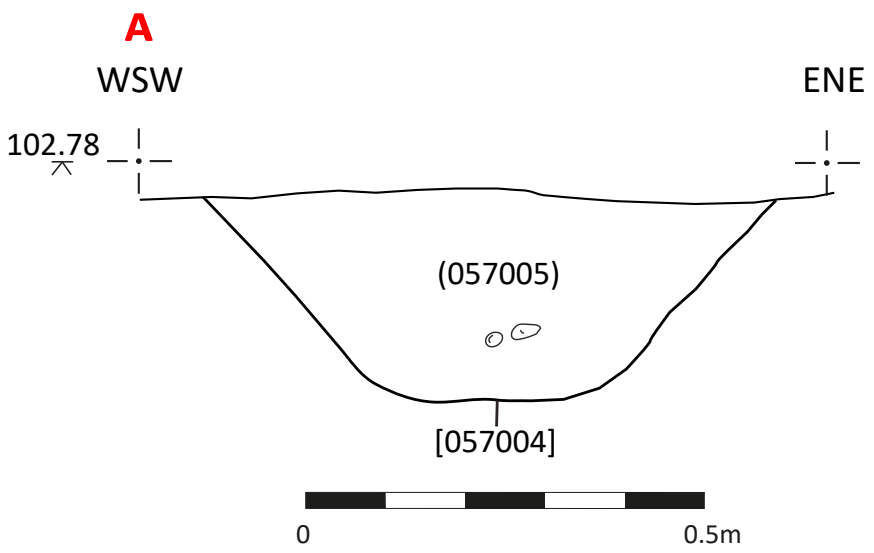
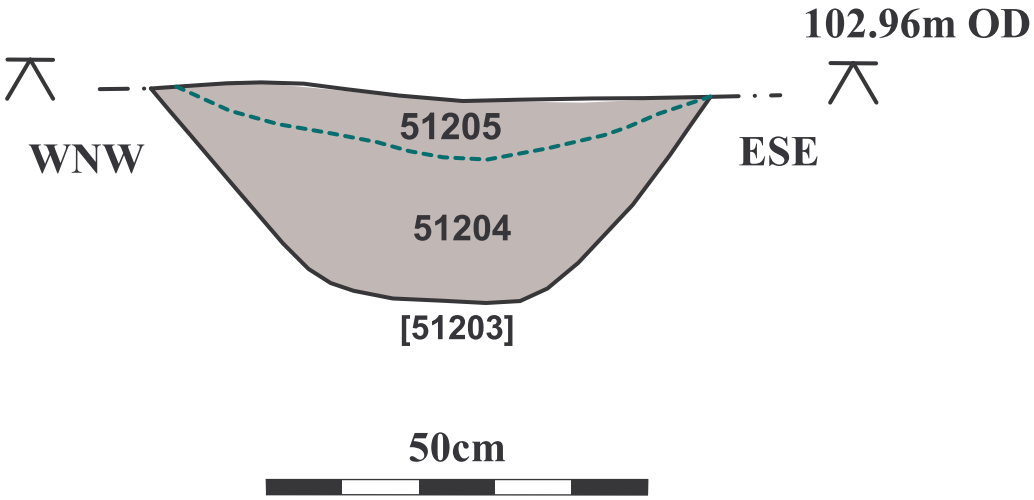


Fig. 37: Plan of [057004]



Ditch [057004] recorded in Trench 057 by Border Archaeology in 2017



Ditch [51203] recorded in Trench 512 by Albion Archaeology in 2008
Report: Trial trenching MK West Area 10 Phase 1

Fig. 38: Comparison between ditch [057004] recorded by Border Archaeology 2017 and ditch [51203] recorded by Albion Archaeology in 2008, believed to be the same ditch

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period	Comments
053	(053001)	Deposit	-	-	Dark brown silty clay; 0.32m deep; overlies (053002).	Topsoil	-	-	Modern	
	(053002)	Deposit	-	-	Mid brown silty clay; 0.42m deep; underlies (053001), overlies (053003).	Subsoil	-	-	Post medieval	
	(053003)	Deposit	-	-	Light brown sandy clay; underlies (053002).	Geology	-	-	-	
	[053004]	Cut	(053005)	-	Linear shape in plan; N/S orientation; mod. to steep sides; concave base; >2.00m long, 0.90m wide, 0.37m deep; cuts (053002).	Cut of furrow	-	-	Post medieval	
	(053005)	Fill	-	[053004]	Moderately compacted dark brown grey sandy clay; occ. sub-angular pebbles; 0.90m wide, 0.37m deep.	Singular fill of furrow [053004]	-	-	Post medieval	
057	(057001)	Deposit	-	-	Dark brown silty clay; 0.25m deep; overlies (057002).	Topsoil	-	-	Modern	
	(057002)	Deposit	-	-	Mid grey brown silty clay; 0.36m deep; underlies (057001), overlies (057003).	Subsoil	-	-	Post medieval	
	(057003)	Deposit	-	-	Light grey orange clay silt; occ. chalk; underlies (057002).	Geology	-	-	-	
	[057004]	Cut	(057005)	-	Linear shape in plan; NNW-SSE orientation; steep sides; flat base; >3.20m long, 0.72m wide, 0.27m deep; cuts (057003).	Cut of ditch	-	-	Undated; probably Late Iron Age / Romano-British	Same as Albion Archaeology's [51203] in trench 512
	(057005)	Fill	-	[057004]	Firmly compacted light grey brown silty clay; mod. sub-angular stones & chalk; 0.72m wide, 0.27m deep.	Singular fill of ditch [057004]	-	43	Undated; probably Late Iron Age / Romano-British	

8 Conclusion

Of the 57 trenches excavated, 16 revealed potentially significant archaeological activity, the results of which are summarised below:

The predominately North-Northwest-South-Southeast orientated ditches traversing the northernmost field of the site, found in Trenches 001, 002, 016 and 023, may indicate a droveway or sequence of squared stock enclosures. The archaeological and palaeoenvironmental evidence suggested that they were not continually recut or maintained and were not particularly close to domestic waste disposal, suggesting that they formed part of the wider farming landscape at a remove from a nearby focus of occupation.

Previous and ongoing works around Common Farm suggest that Iron Age and Romano-British occupation was domestic in nature, with considerable evidence for farming, particularly relating to pastoral cattle-raising.

While arable cultivation almost certainly took place within the Iron Age and Romano-British period, there is no evidence for it within the material from this site; indeed, the molluscan evidence from across the site points to a short-tufted grassland, representing perfect grazing territory.

The evaluation results from Trenches 001 and 013 also provide evidence for iron smithing, although no conclusive location for this was revealed. Production of metal tools and implements would have further bolstered the community's independence and ability to achieve efficient food and craft output. The archaeological features identified closely matched the geophysical anomalies, which may therefore suggest that the area of magnetic disturbance suggested on the geophysical survey may relate to an area of hot iron working; archaeometallurgical evidence was recovered from as far South as Trench 040, but no conclusions can be drawn from this.

Some tight dating of the features was achieved from the pottery analysis. This suggested that the North-Northwest-South-Southeast orientated ditches that traversed the northern part of the site and the archaeology identified in Trenches 013 and 014 were of late Iron Age to mid 1st century AD date, while the isolated ditch in Trench 028 suggests a late 1st century AD date; by contrast, the archaeology found within Trenches 040 and 044 was likely to have been of 2nd to 3rd century AD date (although no ceramic remains were recovered from Trench 044).

Later recognisable anthropogenic activity on the site was represented by the post-medieval period ridge and furrow. Much later, the construction of Common Farm led to a reconfiguration of the field boundaries and a probable canalisation of the stream which crosses the site, as well as the establishment of Oakhill Lane and an abandonment of an old routeway leading from Watling Street towards Whitehouse Farm. The longevity of this routeway in the landscape may have been the reason for the siting of any Iron Age and Romano-British farming and small-scale industrial communities suggested by the Archaeological Field Evaluation congregating at this point near Watling Street.

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10 Bibliography

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SSEW, 1983, *Soil Survey of England and Wales,* 3rd edition

Starley, D., 2017, *The Assessment of Metalworking Debris from Milton Keynes Western Expansion Area 10, SCH17 Evaluation Trenches 1-57, (A*ppendix 3)

11 Appendix 1: Flint Analysis

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Freelance Specialist

Five pieces of worked flint were recovered from five trenches during the archaeological intervention at Land Adjacent to Common Farm (*Table 1*).

Table 1. Summary of worked flint by type and trench

Flint type	1	2	14	16	57	Total
Bladelet	1	1				2
Retouched flake			1			1
Sieved chips				1	1	2
Total	**1**	**1**	**1**	**1**	**1**	**5**

The retouched flake from Trench 014 has abrupt and slightly invasive inverse retouch (on the ventral surface) along the left lateral edge. The retouch is slightly irregular but creates a sharp cutting edge that may have been used and discarded in the form of an expedient tool. The flake has a hinge termination, exhibits light cortication and has suffered slight post-depositional damage. The bladelet from Trench 001 has a break at the proximal end and also exhibits a light cortication. The other pieces of microdebitage suggest knapping may have taken place at the site.

The flint cannot be dated; however, its significance lies in its demonstration of prehistoric activity at the site.

SITE CODE	FLINT ID	AREA	TRENCH	CONTEXT	SAMPLE NO.	FLINT CATEGORY	FLINT TYPE	TOTAL	BURNT	BROKEN	WEIGHT (g)	COMMENTS	CORTICATION	POST-DEPOSITIONAL DAMAGE
MKWE17 AREA 10 SCH17	1		14	*014006		34	Retouched flake	1				Hinge termination, abrupt & slightly invasive inverse retouch on left lateral edge, bit irregular but elsewhere mostly undamaged	Light	Slight
MKWE17 AREA 10 SCH17	2	E9805	1	*001005	28	3	Bladelet	1		1		Proximal break	Light	Fresh
MKWE17 AREA 10 SCH17	3	E9809	57	*057005	43	7	Sieved chips	1				Very glossy	Uncorticated	Slight
MKWE17 AREA 10 SCH17	4	E9822	2	*002006	27	3	Bladelet	1		1		Tiny	Uncorticated	Slight
MKWE17 AREA 10 SCH17	5	E9869	14	*014006	21	81	Natural	1						
MKWE17 AREA 10 SCH17	6	E9626	16	*016007	15	7	Sieved chips	1					Uncorticated	Fresh
MKWE17 AREA 10 SCH17	7	E9613	23	*023005	13	81	Natural	1						

12 Appendix 2: Glass Analysis

Janice McLeish MA Hons
Border Archaeology Ltd

12.1 Introduction

During May 2017, Border Archaeology Ltd undertook a programme of Archaeological Field Evaluation of land adjacent to Common Farm, Calverton Lane, Milton Keynes, MK19 6EU (centered on NGR: SP 808377).

The evaluation revealed archaeological features identified primarily as ditches with an area of bioturbation in Trench 005.

The finds recovered in general overall were of a low volume and quality and predominantly Romano-British in date with some post medieval activity. Two sherds of glass (80g) probably from a single post-medieval bottle were recovered from the bioturbation area within Trench 005 (005006).

12.2 Methodology

The glass sherds were examined by eye and recorded with reference to the general standards and guidance for the reporting of archaeological materials (CI*f*A 2014).

12.3 Results

The larger sherd is part of a green wine storage bottle retaining most of the rim and neck with a partial shoulder section. The surface displays iridescent weathering and the neck is slightly twisted with an applied slightly flared collar set below the rim. A smaller fragment of body sherd is likely to derive from the same vessel although no surface weathering is noted.

The neck/shoulder zone measures 3.33mm thick and the distal end of the remaining body measures 3.38mm, with the smaller sherd measuring 3.17mm – 3.91mm, illustrating the varying thickness of a body sherd. Both pieces of glass are blown.

12.4 Conclusion

As no other finds were recovered from this context, no associated pottery dates can be attributed to the glass. Although based on the characteristics of the larger sherd, it is highly likely that the glass from (005006) is mid 17th-18th century in date.

The recovered assemblage is very small and therefore has little potential within the site narrative. It is domestic in nature and has probably resulted from discarded refuse within the locale.

12.5 Bibliography

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http://archive.museumoflondon.org.uk/ceramics/pages/subcategory.asp?subcat_id=768&subcat_name=Wine+bottles&page=1 accessed 18th July 2017

13 Appendix 3: Archaeometallurgical Analysis

David Starley
Freelance Specialist

13.1 Summary

Very small quantities of industrial debris were recovered during the evaluation at SCH17, the most significant being a few flakes and spheres of hammerscale, which indicate iron smithing. The location of these in ditches to the north of the site may tie in with magnetic disturbances identified during geophysics, which might indicate that further magnetic debris lay within the subsoil.

13.2 Background to the excavation

This assessment relates to Archaeological Field Evaluation carried out by Border Archaeology Ltd between April and May 2017. The site is part of the Milton Keynes Western Expansion Area (MKWEA) and is centred on NGR: SP808377, adjacent to Common Farm, Milton Keynes. The site, on pastoral farmland occupies a raised plateau above the Calverton Brook and lies 0.8km to the SW of Watling Street.

The material examined in this assessment derived entirely from ditches in three evaluation trenches: 001, 013 and 040. It may be significant that geophysical survey had detected an area of magnetic disturbance where Trench1 was subsequently positioned. The ditches of nearly adjacent Trenches 001 and 013 were dated, on the basis of their ceramics to the Late Iron Age / mid 1st century AD and Trench 040 to the 2nd/3rd century AD.

13.3 Methodology for assessment of metalworking debris

The small amount of metalworking debris, including bulk finds and residues from soil samples, was visually examined during this assessment. This material was classified into the standard categories used by the specialist, based on those developed by the former English Heritage Ancient Monuments Laboratory. Visual observation of the exterior was backed up, where necessary, by examination under low magnification, the use of a geological streak plate and a magnet. A full listing, by context, is given in Table 1.

13.4 Classification of debris

Table 1. Metalworking debris from SCG17, by activity and type

Activity	Classification	Context	Trench	Sample	Mass (g)
Iron smithing	Flake hammerscale	001005	001	28	<<1
	Spheroidal hammerscale	001005	001	28	<<1
		013017	013	37	<<1
Metalworking or other high temperature processes	Cinder	040004	040		9
	Vitrified hearth lining	040004	040		10
Non slag	Iron waste/object	013025	013	32	<1

1. Diagnostic – iron smithing

No bulk metalworking debris such as **Smithing hearth bottoms** were present in the assemblage. However, micro slags in the form of **hammerscale** were recovered from soil samples. This material is regarded as a good indicator of the actual site of the smithing activity as it tends to remain *in situ*, whilst larger fragments may be removed for disposal (or use) elsewhere (Starley 1995). Two forms of hammerscale were present: **flake hammerscale** and **spheroidal hammerscale**. The difference between the two types relates to their origins: Flake hammerscale is the oxide skin that forms on iron during hot working but breaks away when the iron is hammered or quenched. Spheroidal hammerscale is slag from the interior of the metal which is squeezed out during hammering.

2. Undiagnostic – metalworking or other high temperature process

Under this heading are considered the various categories of heat-transformed clay. The quantities at SCH17 were minimal and both derived from ditch fill (040004) in Trench 040. One fragment of **vitrified hearth lining** and another of **cinder** where recovered. The materials are related. In the former just one surface has been vitrified and in the second the transformation was more extensive, where clay had spalled away from the lining.

3. Products/waste products

Attraction to a magnet indicated that one small fragment contained metallic iron. The shape suggested a small tack, but its association, in the same context, with hammerscale, raised the possibility that it could be an off-cut or other form of metallic waste. It was therefore classed as **Iron waste/object.**

13.5 Conclusions

The assemblage of debris from MKSCH17 provided diagnostic evidence of only one 'industrial' process; that of the forging of iron. The samples which produced this evidence derived from the fills of ditch [001004] in Trench 001 and ditch [013023] in Trench 013. The non-diagnostic evidence included fragments of hearth lining from fill (040004) of ditch [040005]. This material could have resulted from the same smithing operation as the hammerscale. However, the physical distance (of 250m) and the later dating of its context suggest a later phase of iron smithing or perhaps another metalworking process. The scale of activity, judged by the quantities of debris, might be considered minimal. However, it could be that the magnetic 'disturbance ' located by the magnetometer survey in the area of Trench 001, (and near to Trench 013), resulted from greater quantities of hammerscale or other iron or magnetite-rich debris which had been ploughed out from its original deposit into the topsoil.

13.6 Suggestions for future work

No further examination of the debris is suggested.

13.7 Retention of finds

It is recommended that all finds be saved.

13.8 Reference

Starley, D, 1995, *Hammerscale*, Historical Metallurgy Society Datasheet **10.**

14 Appendix 4: Pottery Analysis

Rob Perrin
Freelance Specialist

A pottery assemblage amounting to 94 sherds weighing 630g and with an estimated vessel equivalent (EVE), based on rims, of 0.19 was recovered from eight of the 57 trenches. All of the features encountered were ditches, with that crossed by Trenches 013 and 014 containing the most pottery (Table 1).

Trench	NoSh	Wgt (g)	Rim EVE
1	5	8	0
2	6	12	0.11
13	56	261	0.08
14	13	263	0
16	3	2	0
23	3	2	0
28	1	2	0
40	7	80	0
Total	94	630	0.19

With the exception of one sherd in a gritty buff ware from Trench 028, all of the pottery is either grog-tempered or shell-gritted, or a combination of both (Table 2). The grog-tempered and grog and shell-tempered pottery varies in colour from reddish-yellow to dark grey, with three sherds from Trench 040 being reddish-yellow in colour with a grey core. The shell-gritted ware is mainly reddish-brown in colour with inclusions of probably burnt shell. Four shell-gritted ware sherds from Trench 040, however, are pink-buff in colour and contain unburnt inclusions.

Fabric	NoSh	Wgt (g)	Rim EVE
Grog	40	118	0.19
Grog, reddish-yellow, grey core	3	6	0
Grog and shell	20	33	0
Shell	26	397	0
Shell, pink-buff, grey core	4	74	0
Buff, gritty	1	2	0
Total	94	630	0.19

The only recognisable forms are a grog-tempered jar or bowl with a plain rim and a possible jar in shell-gritted ware, both in Trench 013 and a shell-gritted jar with external horizontal rilled decoration in Trench 040.

All of the pottery is likely to have been produced locally apart from the buff, gritty ware sherd which may be a product of the kilns at Verulamium; similar pottery was, however, also made locally. The pottery is mainly of late Iron Age to mid-1st century AD date, though the buff, gritty ware sherd is more likely to be of late 1st century AD date and the reddish-yellow grog-tempered ware with a grey core and the pink-buff shell-gritted ware from Trench 040 could be 2nd or 3rd century AD in date.

The low average size of the sherds suggests that the pottery had been lying around for a long time and had been much disturbed before it was deposited in the various ditches. The assemblage is not of a sufficient size or quality to be able to comment on the type of occupation or activity from whence it derived. No further analysis is required.

Trench	Context	Ftre	Fabric	Rim	Body	Base	NoSh	Wgt	Rim %	Form(s)	Decoration	Comment	Date
Tr 1	1005	Ditch	Grog and shell	0	3	0	3	2	0			inc sample scraps	LIA/MC1
Tr 1	1008	Ditch	Grog	0	1	0	1	1	0			sample scrap	LIA/MC1
Tr 1	1011	Ditch	Grog	0	1	0	1	5	0			sample sherd	LIA/MC1
Tr 2	2006	Ditch	Grog	0	1	0	1	1	0				
Tr 2	2006	Ditch	Grog, grey, pale core edges	1		0	1	6	11	DBR		GB?	
Tr 2	2008	Ditch	Grog	0	1	0	1	2	0			sample sherd	LIA/MC1
Tr 2	2010	Ditch	Grog	0	1	0	1	2	0			sample sherd	LIA/MC1
Tr 2	2014	Ditch	Grog	0	2	0	2	1	0			sample scraps	LIA/MC1
Tr 13	13007	Ditch	Grog	0	3	0	3	5	0				

Trench	Context	Ftre	Fabric	Rim	Body	Base	NoSh	Wgt	Rim %	Form(s)	Decoration	Comment	Date
Tr 13	13010	Ditch	Shell	0	1	0	1	6	0			burnt shell	LIA/MC1
Tr 13	13011	Ditch	Grog,buff, grey core	0	9	0	9	64	0			thick	LIA/MC1
Tr 13	13011	Ditch	Shell	0	4	0	4	27	0			burnt shell	LIA/MC1
Tr 13	13017	Ditch	Grog, reddish yellow, dark grey core	2		0	2	6	8	J/BPR			
Tr 13	13017	Ditch	Shell	0	7	0	7	80	0	J?		burnt shell, inc sample scraps	LIA/MC1
Tr 13	13017	Ditch	Daub x 1										
Tr 13	13020	Ditch	Grog	0	7	0	7	7	0			inc sample scraps	LIA/MC1
Tr 13	13020	Ditch	Shell	0	9	0	9	45	0			inc sample scraps	LIA/MC1
Tr 13	13022	Ditch	Grog, reddish yellow, dark grey core	0	3	0	3	8	0				
Tr 13	13025	Ditch	Grog and shell	0	10	0	10	8	0			inc sample scraps	LIA/MC1

Trench	Context	Ftre	Fabric	Rim	Body	Base	NoSh	Wgt	Rim %	Form(s)	Decoration	Comment	Date
Tr 13	13028	Ditch										sample scrap	LIA/MC1
Tr 13	13030	Ditch	Grog	0	1	0	1	5	0				
Tr 13	13031	Ditch										sample scrap	LIA/MC1
Tr 14	14006	Ditch	Grog	0	1	0	1	1	0			sample scrap	LIA/MC1
Tr 14	14007	Ditch	Grog and shell	0	7	0	7	23	0				
Tr 14	14007	Ditch	Shell	0	4	1	5	239	0				
Tr 16	16005	Ditch	Grog	0	3	0	3	2	0			sample scraps	LIA/MC1
Tr 23	23005	Ditch	Grog	0	3	0	3	2	0			sample scraps	LIA/MC1
Tr 28	28005	Ditch	Buff, gritty	0	1	0	1	2	0				?LC1
Tr 40	40004	Ditch	Grog, reddish yellow, grey core	0	3	0	3	6	0				2nd or 3rd C

Trench	Context	Ftre	Fabric	Rim	Body	Base	NoSh	Wgt	Rim %	Form(s)	Decoration	Comment	Date
Tr 40	40010	Ditch	Shell, pink buff, grey core	0	4	0	4	74	0	J	rilling		2nd or 3rd C
				3	90	1	94	630	19				

15 Appendix 5: Faunal Analysis

Chris Faine
Border Archaeology Ltd

15.1 Introduction

858 grams of faunal material was recovered from the evaluation at The Whitehouse Secondary School site yielding 28 "countable" bones (see below). A further 50 bones were classed as "Large or Medium-sized mammal", with 400 fragments being unidentifiable. Only context consisting entirely of large/medium mammal fragments are shown in Table 4. The majority of these were recovered from environmental samples. All bones were collected by hand and from environmental samples. Only identifiable fragments from samples are considered in the tables below. Faunal remains were entirely recovered from linear features dating from the Late Iron Age/Early Roman and Later Roman periods (2nd-3rd centuries AD). No information regarding residuality or contamination is available to the author at this time. The bones are washed and bagged by context and are stored at Border Archaeology's facility in Milton Keynes.

15.2 Methodology

All data was initially recorded using a specially written MS Access database. Bones were recorded using a version of the criteria described in Davis (1992) and Albarella & Davis (1994). Criteria for ageing mandibles were taken from Payne (1973) and (1987) for sheep, Grant (1982) and Halstead (1992) for pigs, Grant (1982) and Halstead (1985) for cattle and Levine, (1982) for horses. Completeness was expressed in terms of percentage and zones present (after Dobney & Reilly 1988). Epiphyseal fusion data was also noted (after Silver 1969). The entire identifiable assemblage was quantified in terms of number of individual fragments (NISP) and number of individuals (MNI).

15.3 The Assemblage

Tables 1-4 show the assemblage in its entirety and by phase. The majority of the assemblage by weight was recovered from Trenches 40 & 44 (59.7% of the sample), but this is largely due to the presence of single shattered cattle femur and horse teeth from contexts [040010)] & [040009] respectively. The vast majority of identifiable fragments (84.6%) were recovered from ditches located in trenches 13 & 14.

As one would expect the sample is dominated by domestic mammals, with cattle and sheep/goat remains being present in the Late Iron Age/Early Roman assemblage in equal numbers. The cattle assemblage largely consists of shattered portions of acetabulum, along with lower limb elements and single adult molar from [013025]. The ovicaprid assemblage also largely consists of adult loose molars along with lower limb elements. A single instance of butchery was noted on a humerus (chopped midshaft) from [013024]. The only other taxon present from this phase were a series of 6 field vole molars. Field voles are found in a range of habitats including meadows, field borders, plantations, woodland verges, clearings, upland heaths, dunes, marshes, bogs and river banks and tends to prefer wet areas.

The later Roman (2nd-3rd century AD) assemblage consist entirely of a butchered adult cattle femur from [040010], and a horse 2nd and 3rd molars from [040004]. Although a more complete mandible is required from exact age both suggest an adult animal.

A single identifiable fragment of unworn pig molar was recovered from an undated context [044008].

15.4 Conclusions/recommendations

Taken in isolation this is a small assemblage, most likely representing general settlement waste. Due to its fragmentary nature, there is little potential for any additional ageing and sexing data. However, given the large amount of past and future work in the immediate area, even this limited amount of data could be usefully included in any future study of the wider landscape.

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Species	NISP	NISP %	MNI	MNI %
Cattle (*Bos*)	9	34.8	5	31.2
Sheep/Goat (*Ovis/Capra*)	8	30.8	5	31.2
Pig (*Sus scrofa*)	1	3.8	1	6.3
Horse (*Equus*)	2	7.6	1	6.3
Field Vole (*Microtus Agrestis*)	6	23	4	25
Unid Large mammal	41*	0	0	0
Unid Medium mammal	9*	0	0	0
Total:	**26**	**100**	**16**	**100**

Table 1: Species distribution for the assemblage

Species	NISP	NISP %	MNI	MNI %
Cattle (*Bos*)	8	36.4	5	35.7
Sheep/Goat (*Ovis/Capra*)	8	36.4	5	35.7
Field Vole (*Microtus Agrestis*)	6	27.2	4	28.6
Unid Large mammal	28*	0	0	0
Unid Medium mammal	9*	0	0	0
Total:	**22**	**100**	**14**	**100**

Table 2: Species distribution for the Late Iron Age/Early Roman sample

Species	NISP	NISP %	MNI	MNI %
Cattle (*Bos*)	1	25	1	50
Horse (*Equus*)	2	75	1	50
Unid. Large mammal	12*	#REF!	0	0
Total:	**3**	**100**	**2**	**100**

Table 3: Species distribution for the Later Roman sample

16 Appendix 6: Palaeoenvironmental Analysis

Luke Andrews
Border Archaeology Ltd

16.1 Non-Technical Summary

This report has been prepared by the Palaeoenvironmental Department at Border Archaeology Ltd (BA) to facilitate and elucidate the palaeoeconomic interpretations of a sequence of features discovered during Archaeological Field Evaluation at land designated for the construction of Whitehouse Secondary School at Calverton Lane MK19 6EU, forming part of the Milton Keynes Western Expansion (Area 10).

In accordance with the WSI (BA 2017), 40ℓ or 100% of the deposits were sampled. This resulted in 43 samples comprising 1400ℓ of material being received by the Palaeoenvironmental Department and processed through flotation with the resultant archaeological and archaeobotanical material sorted and identified.

The 43 samples originated from a sequence of features identified as Iron Age to Romano-British ditches, pits and post/stake holes. Although small, the post/stake holes contained proportionately very little archaeological or palaeoenvironmental material suggesting that, if they did represent a structure, it was unlikely to have been domestic in nature; the remainder of the palaeoenvironmental evidence (in conjunction with the archaeological and archaeometallurgical evidence from the palaeoenvironmental sampling) broadly mirrored the archaeological activity recognised in the fieldwork and suggested some form of prehistoric occupation with localised iron smithing to the N of the site.

Archaeobotanical and archaeomalacological evidence indicated environmental conditions characterised by open areas of short turfed, relatively dry grassland, with damper areas and occasionally areas of standing water, possibly within the ditches, at least for a part of the year. This, in combination with the faunal evidence, is suggestive of predominantly pastoral farming.

16.2 Introduction

This report details the results derived from 43 samples, constituting a total of 1400ℓ of soil, retrieved from late Iron Age to Romano-British ditches, pits, and post / stake-holes in addition to a geological palaeochannel identified during Archaeological Field Evaluation (AFE).

The samples were processed by means of flotation and any potential archaeobotanical remains from both the floating element and the heavier residue/retent were sorted and visually identified. Charcoal was almost ubiquitous across the site, likely due to the decay resistant properties of this material, although ceramic material, which shares this characteristic resistance to weathering, was uncommon; only rare occurrences of pottery and occasional ceramic building material (CBM) were identified. Of the additional artefactual materials recovered, a single nail or hobnail and very infrequent hammerscale was identified, as were a small number of potential worked stones, possible burnt stone and a possible fragment of mortar. Archaeobotanical remains were preserved infrequently and are represented by uncarbonised seeds of wild taxa that may represent contaminants, as well as the poorly preserved charred remains of cereals. Faunal remains occurred occasionally, although rarely in any abundance, with the exception of a few contexts where higher concentrations of mammal bone were found. Greater proportions of faunal material correlated well to the contexts that contained higher quantities of terrestrial snail shells, suggesting that alkaline/calcareous soil properties were responsible for the preservation of these materials. The nature of the recovered remains is detailed in Section 16.5.1 below.

The 43 samples were taken in multiples of 10ℓ sample buckets and derived from 43 contexts, from which between 10ℓ and the full 40ℓ were taken dependent on the ability to sample secure contexts. However, context (032008) produced 80ℓ due to the presence of charred material.
The contexts derived from 27 features which consisted of 21 ditches, one sequence of ditch recuts, two pits, two post / stake holes and one palaeochannel. Archaeological features of varying significance were present in 16 of the 57 trenches excavated as part of the AFE and 14 of those trenches contained features of palaeoenvironmental potential that were sampled. The significant results are presented by context in Section 16.6 below.

Conclusions for the Whitehouse Secondary School palaeoenvironmental assemblages come predominantly from the molluscan material due to preferential preservation. In general, the taphonomic conditions of the Milton Keynes Western Expansion Area do not favour archaeobotanical preservation, although the botanical assemblage, coupled with the faunal and archaeometallurgical material, does provide supporting evidence for the interpretation of pastoral farming and potentially industrial activity. Due to the taphonomic biases, it cannot be guaranteed that this represents an original depositional assemblage and conclusions cannot be drawn between features containing environmental evidence and those lacking. Domestic waste was moderately limited which, with the taphonomic biases in play, can only tentatively be used to suggest industry over habitation.

Interpretations of palaeoenvironments using mollusca are limited by taphonomic uncertainty, due to the effects of gravity, bioturbation and re-deposition by hydrological processes affecting the distribution of shells within sediments, processes which are understood only superficially (Lowe & Walker 1997). Additionally, only well-preserved shells are suitable for identification; therefore, the recovered fauna may not be representative of the true fauna, which the high number of fragmented shells recovered from Whitehouse Secondary School attests to. Limitations of autecology and synecology, relating to uniformitarianist assumptions, the poorly understood factors influencing the distribution of a particular species, the broad ranges of environments inhabited by many molluscan species (Davies 2008), unknown associations between past molluscan fauna (Bush 1988) and the lack of applicable modern analogues for past environments limits the extent with which palaeoenvironments can be reconstructed using this method.

16.3 Site Description

The land comprising the evaluation formed a part of the Milton Keynes Western Expansion area (Area 10) that had been designated for the construction of Whitehouse Secondary School. It comprised 106400m², formed parts of four fields and had been evaluated at 3.2% by 57 trenches. The site occupied a plateau of land and was bisected by a small watercourse that impacted little on the relatively dry site and likely contributed to efficient drainage rather than seasonal waterlogging.

At the time of evaluation, the land was utilised for arable (maize) and pastoral production, although all fields had been pastoral at points prior to the commencement of development works in the MK Western Expansion Area.

16.3.1 Soils and Geology

Although Whitehouse Secondary School was well drained, the geological profile of the site exhibits slowly permeable calcareous clayey soils with seasonally waterlogged soils over glacial till or Jurassic/Cretaceous clay or mudstone which would be expected to have significant taphonomic biases on the palaeoenvironmental material (SSEW 1983).

The absence of organic materials such as carbonised seeds and cereals, as well as the paucity of mammal bones in a number of the ditches is likely to indicate preservation bias, as where these materials survived, others such as molluscan shell and burnt mammal bone were also indicated. This differential preservation may relate to variations in the seasonally waterlogged nature of the soils.

Where the annual cycling of soil moisture occurs, intense flushes of microbial activity take place as the soil becomes wetter (Kibblewhite *et al*. 2015). The occasional occurrence of charred cereals supports the notion that these materials were once present but have not been preserved where any impact on taphonomy was in play. Furthermore, centuries of agricultural activity upon the site, including ploughing and drainage of the area during the post medieval period, has likely exacerbated the degradation of bioarchaeological materials. Mammal bone, both burnt and unburnt, as well as molluscan shell, survives in small to large quantities, where their preservation likely owes to the calcareous nature of the soils. The preservation of ceramic building material, pottery and charcoal is likely due to the material's resistance to chemical and biological weathering effects (Kibblewhite *et al*. 2015).

16.4 Methodology

16.4.1 Objectives of analysis

The purpose of the palaeoenvironmental sampling strategy implemented during AFE is the retrieval of non-specific palaeoenvironmental remains and the further characterisation of features that cannot be fully investigated due to the confines of the evaluation parameters. An additional purpose to palaeoenvironmental reporting in the case of AFE is the recommendation of further, potentially specific, palaeoenvironmental sampling in further archaeological mitigation.

16.4.2 Sampling methodology

Sampling methodology followed the *Palaeoenvironmental Department Manual* (BA 2017) for environmental sampling and processing and with reference to Historic England guidance (Campbell *et al.* 2011). On site, the samples were collected in sample buckets and identified by context and sample number. Following receipt into the Palaeoenvironmental Department, they were assigned bucket numbers for tracking purpose. The samples were not subject to sub-sampling and their entirety was processed by means of flotation.

Flotation was undertaken in Siraf-style tanks (Williams 1973) with a 1mm retent mesh and 250µm flot sieve. No refloating was required for these samples. Retents were initially scanned by magnet to retrieve any archaeometallurgical debris and a sieve bank was used to facilitate visual sorting with the smaller fractions sorted by means of magnifying lamp and/or illuminated stereo zoom microscopy (≤x10). The flots were sorted entirely by means of illuminated stereo zoom microscopy (≤x10). The results of this analysis are reported with the flot and retent data recombined; due to limited to no variance in the species being reported.

16.4.3 Personnel

Flotation and primary analysis was undertaken by staff within BA's Palaeoenvironmental Department supervised by Robin Putland BSc MSc. The Palaeoenvironmental Department is managed under the post-excavation remit of Janice McLeish MA with support from Carolina Sanchez-Ignacio BSc. This work was further assisted by BA's field staff as part of a programme of Continuing Professional Development (CPD). Further analysis and identification was undertaken by Robin Putland BSc MSc, Luke Andrews BSc MSc and Amy Bunce BSc MA ACI*f*A, who additionally maintains directorial control over the Department.

External and internal specialists were consulted for all archaeological finds and faunal material recovered from palaeoenvironmental samples. Archaeological, archaeometallurgical and archaeozoological assemblages from the palaeoenvironmental material were recombined with the full site assemblage to ensure unbiased and broader specialist reporting on those materials.

16.5 Description of Results

16.5.1 Description and implications of materials recovered

Detailed below are the general implications of the discovery of certain materials within the palaeoenvironmental samples. Section 16.6 details such information by context. Of particular note is the abundance of clustering of materials in certain contexts which strongly suggests preferential depositional environments although may also reflect increased original deposition.

16.5.2 Finds

Archaeological finds within palaeoenvironmental samples are fairly common and help confirm that the sampling of the material was not biased in any manner.

In this case, the majority of the finds recovered consisted of ceramic materials such as pottery and CBM that, in many instances, were finely dated to the late Iron Age to mid 1st century AD, the late 1st century AD, or the 2nd to 3rd century AD. The majority of the pottery was heavily weathered and it is possible that the CBM recovered may actually represent pottery too heavily degraded in morphology for identification as pottery.

16.5.3 Bone

Both burnt and unburnt bone may be present within palaeoenvironmental samples with taphonomic conditions occasionally proportionately affecting their preservation. Burnt bone is reasonably conclusively of anthropogenic origin, deriving from domestic activities as well as some industrial and funerial practices. Unburnt bone may additionally have become incorporated due to animal death in the vicinity of the context while it was forming and, therefore, cannot always be used as an indicator of human activity. Incidences of the inadvertent inclusion of unburnt bone from decomposed individuals, especially of small mammals and reptiles, can highlight specific ecological niches. However, it is by no means the case that all unburnt bone derives from such cases and unburnt bone from large mammals is a good indicator of nearby settlement and potential butchery.

Samples from the site yielded a small amount of highly fragmentary bone, both burnt and unburnt, concentrated to the N part of the site where the greatest quantity of archaeology was discovered. This may, therefore, suggest a preservation bias caused by either environmental conditions or conditions produced by human activity although may also, potentially, reflect a greater original deposition.

Archaeozoological identification is undertaken in-house by Chris Faine MSc ACI*f*A and is detailed in a separate faunal report.

16.5.4 Shell

Terrestrial shell comprises that from snails that may have been present in the area during deposition of the fills. Identification of the species represented highlights any ecological niches preferred by certain species in the environments they inhabited. As a consequence of the processes of ditch-fill accumulation (Bell 1990),

ditch fills comprise a simple sedimentary sequence (Bell 1990; & Evans 1997) and can be sampled sequentially, in this case in bulk samples relating to each context identified. Changing environmental conditions that take place between the accumulation of each fill can be reflected in the changes in the molluscan assemblage recovered from each context.

Archaeomalacological identification is undertaken in-house by Robin Putland BSc MSc and Luke Andrews BSc MSc, additionally utilising reference texts (Cameron 2008; Evans 1972; Kerney & Cameron 1979; Welter-Schultes 2012). Environmental interpretations were based upon a combined autecological and synecological approach as advised by Davies (2008), using ecological groups for terrestrial and freshwater species as designated by Evans (1972) and Sparks (1961) respectively. The ecological preferences of each species were inferred by reference to Kerney and Cameron (1979) and Welter-Schultes (2012).

A total of 215 identifiable shells, consisting of 9 species, were retrieved. The large quantity of shell fragments recovered (396 fragments) illustrates the poor preservation of molluscan remains, even when the shell is not weathered. Most of the broken shell pieces consist of fragments of *Cepea nemoralis,* demonstrating a sizable yet unquantifiable presence of this catholic species. Preservation varied between each context, with the best concentrations of shells located in the N part of the site, although the overall low level of recovered shells suitable for identification and quantification hinders the sound interpretation of the environmental conditions from all contexts, therefore the interpretations offered here are tentative.

The snail assemblage identified during the analysis of the palaeoenvironmental samples from the AFE shows a relatively poor spread of shell numbers with only 4 species represented by more than 10 individuals, although 7 ecological groups are represented (*fig. 1*).

In figure 1 (below), open country species are represented in orange, slum dwelling species in dark purple, woodland in orange, marshland in light purple, catholic in red and standing water in blue. *Gyraulus leavis* is not grouped by Sparks (1961) but is associated with standing water environments as noted by Keen and Bridgland (1986).

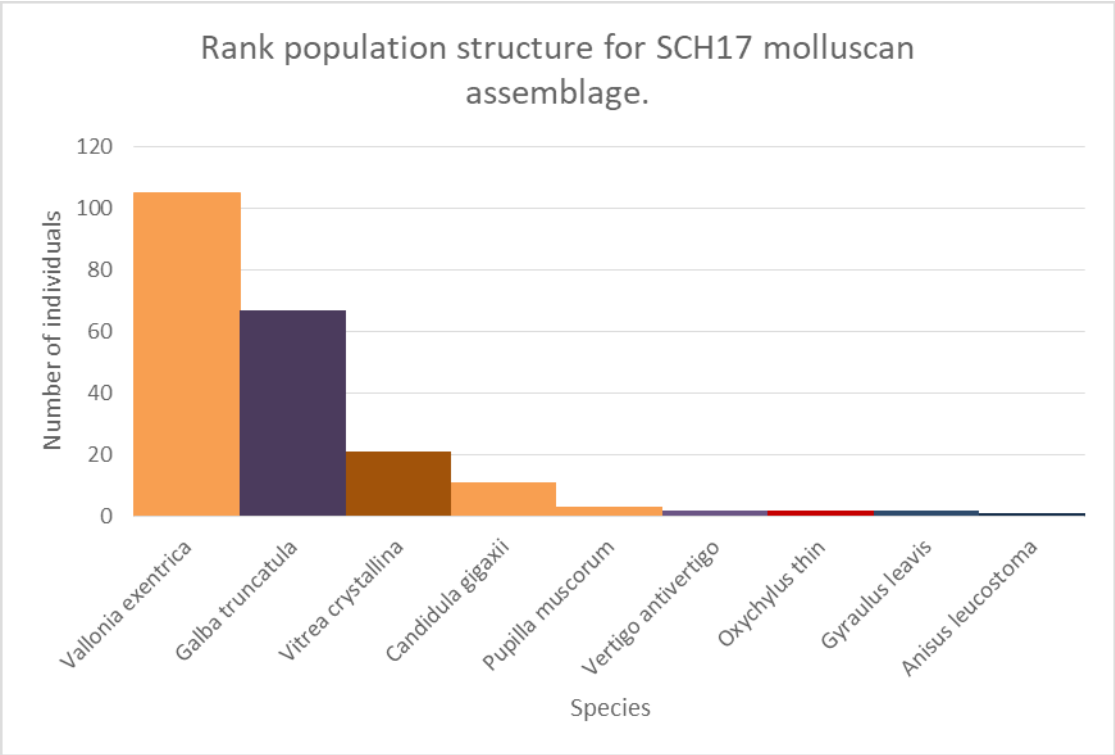

Figure 1: molluscan population structure

16.5.5 Charcoal

Charcoal is ubiquitous in palaeoenvironmental samples as it is used in domestic, funerary and industrial settings or may be present as a result of accidental firings. Identification of the wood species making up the charcoal assemblage can add valuable data as to wood selection for the varying purposes.

While often relied upon for dating, in particular C^{14}, charcoal is not the best material to use. Charcoal is subject to the 'Old Wood problem', whereby wood is known to be frequently reused and charcoal redeposited. In addition, wood grows over many years and it is not possible to know precisely where within the tree a charcoal fragment has derived.

Anthracological analysis is undertaken in-house by Amy Bunce BSc MA ACI*f*A additionally utilising reference keys (Hather 2000; Schweingruber 1990i; & Schweingruber 1990ii). Any waterlogged wood present will be presented in a separate Wood Identification and Technology report.

Charcoal was ubiquitous across the site and quantities recovered varied from rare to abundant; however, it was highly fragmentary and likely represented wind-blown dispersal or reworked redeposited. No fragments were large enough for identification and, therefore, charcoal analysis can only be used with a presence/ absence indication.

As discussed above, charcoal presence frequently coincided with the deposition of bone, molluscan remains, the occasional occurrence of archaeobotanical macro-remains and archaeological finds. For this reason, it is difficult to differentiate preservational bias with increased original deposition. It is, however, the case that archaeological deposits create microclimates beneficial for localised mitigation of the taphonomic impact of the soils.

16.5.6 Slag

Archaeometallurgical debris may be present in the form of unspecific slag fragments, diagnostic slag fragments, and vitrified structures and, more commonly for environmental samples, as hammerscale of the spheroidical or flake variety. Slag may be retrieved from both the flot and retent; this apparent contradiction, in that slag would normally be too heavy to float, is due to vesicles containing air in the spheroidical hammerscale and the smaller fragments of slag. Droplets of slag become spheroidical if they cool while travelling through the air after having been propelled during iron working.

Very rare quantities of hammerscale were identified and a metal object identified as a nail or hobnail was recovered, suggesting that some metallurgy was performed in the vicinity of the deposit formation, as such hammerscale is only transported larger distances within a soil matrix. As with the archaeological material, all archaeometallurgical material was assessed by separate specialists.

16.5.7 Uncharred archaeobotanical material

In the vast majority of instances of uncharred archaeobotanical material in palaeoenvironmental samples, it must be disregarded as of potentially modern origin. However, waterlogged conditions and some other preservational conditions can allow uncharred archaeobotanical remains or certain archaeobotanical remains within the assemblage to be considered.

It is almost certainly the case that the uncharred archaeobotanical material from the Whitehouse Secondary School site represents modern intrusion and contamination. This is due to the well-drained nature of the soils and the species represented being particularly prone to intrusion and contamination.

16.5.8 Charred archaeobotanical material

Charred archaeobotanical material is generally the most illustrative palaeoeconomic remnant. Charring is generally accepted to be almost solely of anthropogenic origin and the material can therefore be used to directly reconstruct the past agricultural or consumer economy and diet. Caution must be taken with the intrinsic bias a charred assemblage presents over the uncharred plant remains of palaeoeconomic utility. However, such variance is built into the study of charred plant remains.

Archaeobotanical identification is undertaken in-house by Robin Putland BSc MSc, Luke Andrews BSc MSc and Amy Bunce BSc MA ACI*f*A utilising reference texts that include the most valid to the British assemblages (Groningen Institute of Archaeology 2006-present; Jacomet 2006; Martin & Barkley 2000; Renfrew 1973; & Schoch *et al.* 1988) with classification following Stace (2010).

The charred plant remains recovered from Whitehouse Secondary School were sparse, rarely represented by more than a single poorly preserved, unidentifiable cereal grain; identification was not possible due to the degradation and fragmentation of the material, which is indicative of repeated redeposition meaning that the accuracy of using the material to interpret the context is limited. A single charred grain of *Triticum* sp. was identified within (028005), although this was not sufficient material for any sound conclusions to be drawn.

16.6 Description of palaeoenvironmental remains by selected context

Detailed below are the palaeoenvironmental remains of archaeological significance and whether archaeological conclusions or affirmations could be derived from such. Also detailed are contexts that were notable in their absence of palaeoenvironmental remains. In all cases, an assessment of the localised palaeoenvironment reconstruction is attempted. Results for all contexts can be observed in the tables in Section 16.7 below.

(001005), (001008) & (001011)

(001005), (001008) and (001011) represent the upper fills of N/S linear ditches [001004], [001007] and [001010] respectively. The lower fills were not sampled due to their smaller size and resemblance to the natural geology into which the ditches were cut suggesting rapid deposition such as bank slumping. Although any palaeoenvironmental material within the lower fills would have been of benefit, it is very unlikely they would have produced much for the sample quantities that would have been logistically viable.

Rare quantities of molluscs, mammal bone and indeterminate cereals were recovered. However, of especial note was the spheroidical and flake hammerscale present in (001005) of [001004] confirming that iron smithing occurred within immediate proximity to the deposit formation, migration of scale occurs only as part of a soil matrix although that situation is eminently possible. Pottery and ceramics were recovered and the contexts were dated, from pottery evidence, to the late Iron Age to mid 1st century AD. Frequent *Chenopodium album* was noted (especially in ditch [001007]) and, if not a contaminant, may represent the scrubby, unmaintained, open environment nature of the ditches.

(002006), (002008), (002010), (002013) & (002014)

(002006) and (002008) represent the singular fills of N/S linear ditches [002005] and [002007] respectively, while (002010) represents the upper fill of N/S linear ditch [002009]; (002013) and (002014) were the upper and lower fills of N/S linear ditch [002012].

The singular fills of ditches [002005] and [002007] were smaller and with proportionately fewer palaeoenvironmental materials, which may suggest more rapid filling of accumulated soils as opposed to slumped backfills as the lower fills in the other N/S linear ditches appear to represent.

There was little differentiation between the upper and lower fills in ditches [002012], both sampled due to an archaeologically observed similarity. They, and the upper fill of [002009], exhibited a profile very similar to that found in the N/S linear ditches of trench 001 above. Like Trench 001, all ditches were dated by pottery evidence to the late Iron Age to mid 1st century AD.

(013007), (013011), (013016), (013017), (013018), (013020) & (013028)

These fills represent the sequence of recut ditches [013015], [013005] and [013008]. Pottery evidence from the sequence of recuts suggests they are tightly dated to the late Iron Age to mid 1st century AD with little variance in stratigraphic sequence.

Occupying the first ditch [013015] were (013007) and (013028). The earliest fill (013006) was not sampled due to depth. Middle fill (013007) returned a fairly sterile palaeoenvironmental profile, which may support the archaeological interpretation of a possible deliberate backfill event. Upper fill (013028) was the uppermost fill, the ditch having been allowed to completely fill before being recut; (013028) contained a broader range of materials with no especial considerations.

Occupying the second cut of the ditch sequence [013005] were (013016) and (013018), these two contexts comprising the totality of the fills of [013005]. Both contexts had a broadly similar and very limited palaeoenvironmental signature with only an uncharred occurrence of *Vicia* sp. of any note.

Occupying the third and final recut [013008] were (013011), (013017) and (013020). These represent the three non-slumping fills of the ditch that were therefore not composed of material very similar to the geological natural like the other fills of [013008].

Lower fill (013011) contained relatively high proportions of domestic waste and may indicate the period at which occupation was in effect. Of additional note for (013011) was the molluscan assemblage with *Vertigo antivertigo* and *Vitrea crystallina* occurring rarely and suggesting moist, vegetated conditions with minimal disturbance.

Like lower fill (013011), middle fill (013017) also contained relatively high proportions of domestic waste and was the richest sample from this concentration of archaeological features. (013017) contained rare unidentified charred cereal, occasional to frequent charcoal, rare hammerscale (spheroidical) as well as rare pottery and CBM, which may represent degraded pottery. The rare to occasional occurrences of mammal bone and small mammal bone, both represented as both burnt and unburnt material, strongly suggests nearby domestic activity in combination with the other archaeological finds. The addition of archaeometallurgical material may also indicate industrial practices. Additionally, the frequent molluscan remains of *Vallonia excentrica* and *Galba truncatula*, as well as the rare occurrence of *Gyraulus laevis* of the standing water ecological group, suggests far wetter conditions within this context than have been indicated previously within this site. Although only occurring as one individual, *Gyraulus laevis* is a pioneer species in Britain, known to occupy still standing water in artificially created pools. This suggests that, at least for part of the year, there was standing water within this ditch, possibly during the deposition of this fill, which is supported by the iron staining noted within this particular fill (Evans 1972). *Vallonia excentrica* are likely to represent the surrounding environments, becoming incorporated into the ditch fill by the process of siltation. They are likely to represent the relatively dry, short turfed grassland in the area surrounding the ditch.

In comparison to lower and middle fills, (013011) and (013017) respectively, upper fill (013020) contained less archaeological and palaeoenvironmental material, although it was still suggestive of the deposit having accumulated during the period of occupation. Additionally, rare *Candidula gigaxii*, *Vallonia excentrica* and *Galba truncatula* all suggest relatively moist, open areas with short cut or sparse grassland. These species are all tolerant to disturbance associated with farming, and their combined tolerances suggest a mix of arable and pastoral farming, as supported by the presence of mammal bone, burnt mammal bone and charred cereal within this context.

(013024), (013025) & (013030)

These three fills represent the fills of a curvilinear ditch [013023], associated with the more intense archaeology of Trenches 013 and 014. Curvilinear [013023] was the earlier of the two smaller ditches [013023] and [013026] towards the periphery of the archaeology of Trenches 013 and 014.

All fills showed a broadly domestic palaeoenvironmental signature but with (013030) demonstrating a significant molluscan assemblage (*fig. 2*). Despite (013030) containing abundant unidentifiable snail shell fragments, a snail assemblage constituting 6 different species was recovered. The majority of the assemblage constituted species of the open country type: *Pupilla muscorum* (2%), *Vallonia excentrica* (32%) and *Candidula gigaxii* (7%), with a significant portion of the assemblage occupied by the semi-terrestrial slum group species *Galba truncatula* (34%). Wetter conditions still are suggested by the presence of *Vertigo antivertigo* of the Marsh group species (4%). The final 21% of the assemblage was occupied by *Vitrea crystallina*, which, despite being designated as a species of the woodland group, Evans (1972) acknowledges that this species has many features in common with more catholic species, essentially preferring moist habitats over dryer conditions. This assemblage suggests wetter conditions then are observed for the rest of the site, with high numbers of *Galba truncatula* suggesting small bodies of stagnant water existed nearby, potentially within the ditch. *Candidula gigaxii*, *Vallonia excentrica* and *Galba truncatula* are tolerant of agricultural practices and disturbance, whereas *Pupilla muscorum*, which is only represented by a single individual, are less tolerant of intensive activity.

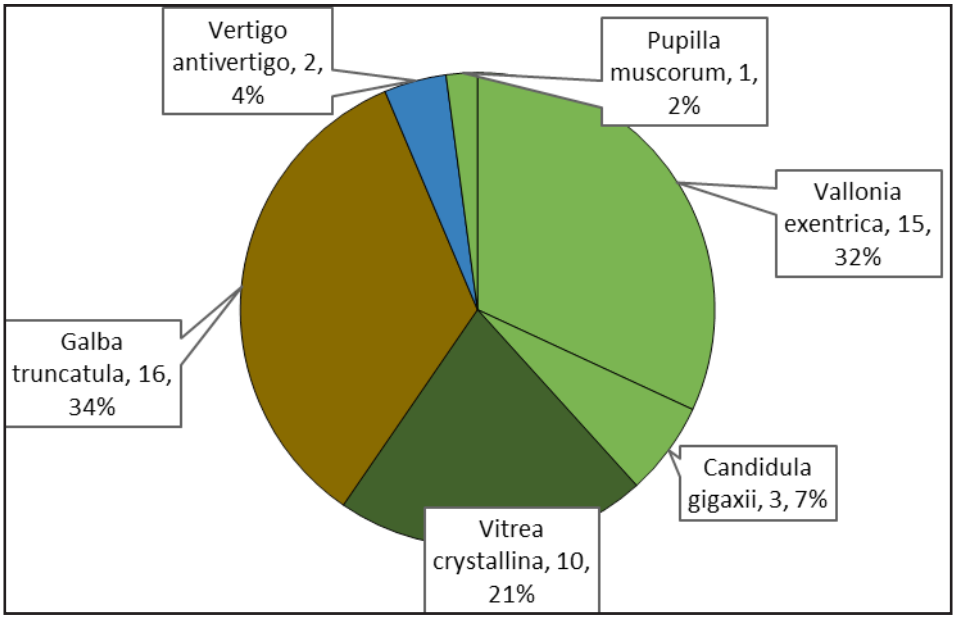

Figure 2: (013030) molluscan assemblage

(013027) & (013031)

These fills represent the fills of a linear gully [013026] that truncates curvilinear [013023], although both have been dated from pottery evidence to the late Iron Age to mid 1st century AD.

While fill (013027) was limited in sample quantity, the palaeoenvironmental remains appeared to be proportionately similar to fill (013031), which exhibited a domestic profile with significant molluscan evidence (*fig. 3*).

The molluscan fauna of (013031) indicates that open country species were most common, with *Vallonia excentrica* (62%) and *Candidula gigaxii* (6%) constituting the most represented group. Additionally, despite designation in the woodland group, *Vitrea crystallina* can be found in many environments, including wet grassland, and is likely to reflect these environments here, as *Vallonia excentrica* are not known in forested environments. *Galba truncatula* (12%) are the only member of the least represented group in this assemblage, the slum group, indicating that, although moist, conditions were mostly dry. This assemblage suggests that the majority of the landscape was dominated by short turfed, possibly grazed, damp grassland, with little to no existing tree cover.

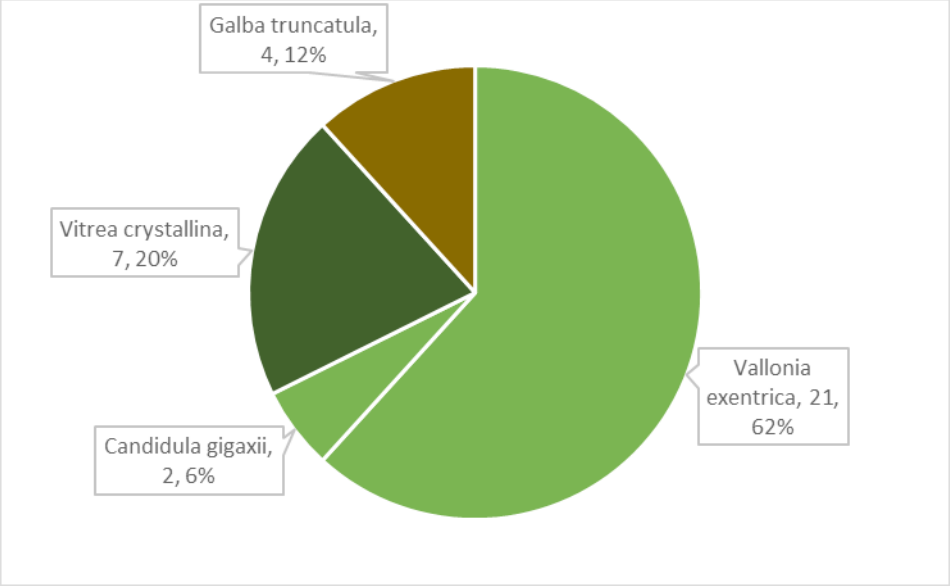

Figure 3: (013031) molluscan assemblage

(014005), (014006) & (014007)

All three contexts represent the three fills of the only feature within Trench 014, that of a large ditch [014004]. Ditch [014004] likely represents the periphery of the archaeological activity identified in Trenches 013 and 014.

All three contexts were broadly similar with the middle fill, (014006), showing proportionately less material but not of a significant quantity. They showed a generally domestic profile but with significant molluscan assemblages (*figs. 4 & 5*).

From lower fill (014007), 22 snail shells were recovered, consisting mainly of the open country species *Vallonia excentrica* (18 individuals, 82%) and an individual *Pupilla muscorum* shell (4%). *Vallonia excentrica* prefers to inhabit open areas, being virtually unknown from wooded or shaded areas (Evans, 1972) and is frequently found on moist grassland, in common with the habitat preferences of *Pupilla muscorum* (Kerney & Cameron, 1979), although this species is less tolerant of disturbances associated with intensive agriculture and prefers areas of bare earth (Evans 1972). Damp grassland is further suggested by the occasional presence of the semi-terrestrial *Galba truncatula* (3 individuals, 14%), a slum species that, like *Vallonia excentrica*, tolerates agricultural disturbance, and like *Pupilla muscorum*, will inhabit areas of poor vegetation (*fig. 4*).

From middle fill (014006), only two snails are preserved, single individuals of *Candidula gigaxii* and *Galba truncatula*. Both species are characteristic of arable, disturbed habitats, with *Galba truncatula* preferring wet environments (Welter-Schultes 2012).

From upper fill (014005) were 23 shells, dominated by *Vallonia excentrica* as well as *Candidula Gigaxii* of the open country group. This Roman introduction is a xerophile, associated with arable habitats (Evans 1972, p.179), and compliments the presence of *Vallonia excentrica* in suggesting environmental conditions of mainly short turfed, grassland or grazing. The increased percentage of *Galba truncatula* (43%) in this later context may attest to an increasingly wet environment in the area surrounding the ditch in comparison to its primary fill (*fig. 5*).

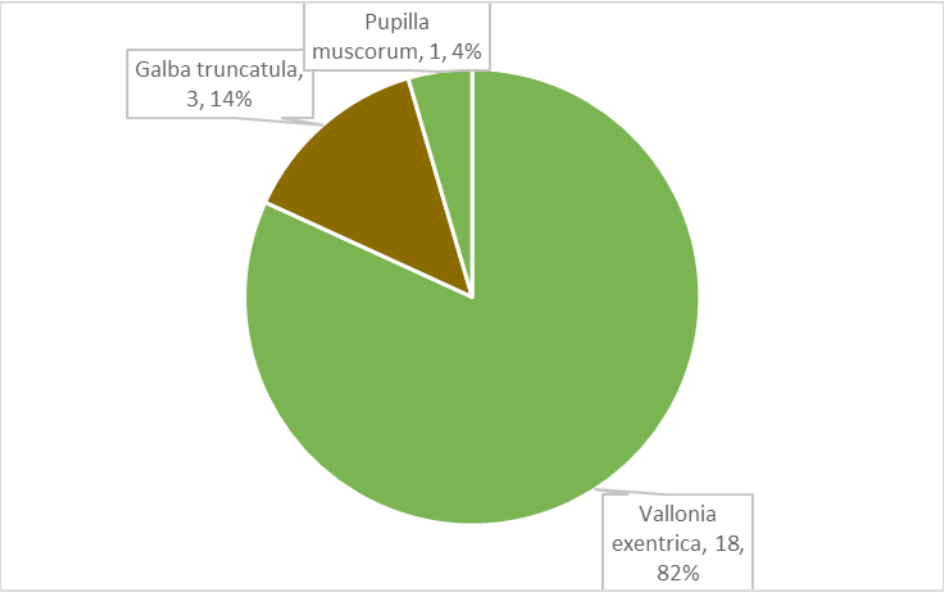

Figure 4: (014007) molluscan assemblage

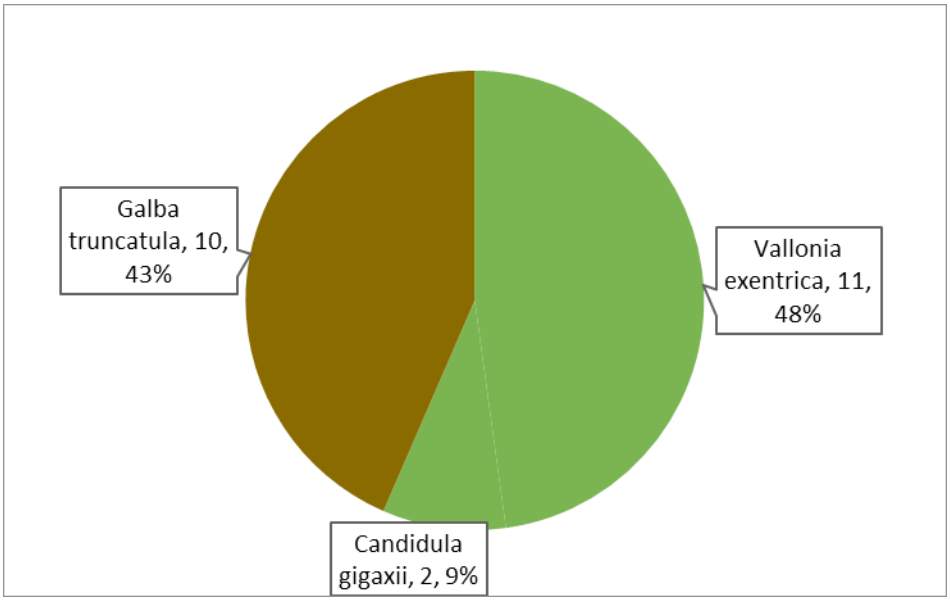

Figure 5: (014005) molluscan assemblage

(016005), (016007) & (016008)

(016005) represents the singular fill of a N/S linear ditch [016004], dated from pottery evidence to the late Iron Age to mid 1st century AD. Few palaeoenvironmental or archaeological materials were recovered which may reflect the archaeological interpretation that these ditches are increasingly at a further remove from occupation.

(016007) and (016008) represent fills of a N/S linear ditch [016006], with (016008) comprising a slumping deposit within the ditch. Both samples were smaller in size and had very little palaeoenvironmental or archaeological material which, again, likely reflects a distance from occupation during deposit formation.

(016010) & (016013)

(016010) and (016013) represent the upper and upper and lower (respectively) fills of pit [016009]. Due to the paucity of palaeoenvironmental recovery, it was impossible to draw any conclusions.

(016012)

(016012) represents the singular fill of pit [016011]. Again, the lack of palaeoenvironmental material precluded any conclusions and may suggest a natural origin for both pits [016009] and [016011].

(023005)

(023005) was the singular fill of ditch [023004] and returned a very weak domestic signature. The presence of *Vallonia excentrica* may suggest a dry to moderately wet, open and short-turfed grassland.

(024009)

(024009) was one of the fills of probable palaeochannel [024005] and the sole presence of wind-blown charcoal flecks fully supports this interpretation.

(027007)

(027007) was the singular fill of gully [027006]. This fill was bereft of any palaeoenvironmental or archaeological material with the exception of rare occurrences of wind-blown charcoal flecks.

(028005)

(028005) was the singular fill of ditch [028004], a single charred *Triticum* sp. was recovered, contesting to their use in the area, although due to the scarcity of cereals at this site, no further interpretations can be made as to the intended use of the cereal.

(032007), (032008) & (032009)

These three fills were the three fills of ditch [032006]. The middle fill (032008) contained high concentrations of charcoal, with (032008) being interpreted as a deposition of burnt material, noted as containing >80% charcoal. The absence of burnt mammal bone, ceramics (with the exception of a small quantity of CBM) and charred cereals from this context suggests that this material does not represent domestic waste but may, instead, be an isolated dump of charred material.

(036005) & (036007)

Both contexts represent the singular fills of post/stake holes; however, palaeoenvironmental proxies were absent, with [036004] containing pottery or CBM and [036006] just charcoal flecks.

(040004)

(040004) was the fill of [040005], a possible ditch dated by pottery evidence to the 2nd or 3rd century AD; the sample contained a single grain of indeterminate charred cereal and, as such, evades interpretation palaeoenvironmentally.

(040008) & (040010)

(040008) was the singular fill of [040007], an undated ditch feature to the NW of the deposit (040004) and its possible ditch cut [040005]. No palaeoenvironmental signature could be determined.

(040010) represents the singular fill of a ditch [040009], a significant ditch dated to the 2nd or 3rd century AD and therefore likely related to (040004) and [040005]. The palaeoenvironmental evidence consisted of molluscan remains of four individuals, representing the species *Pupilla muscorum, Vallonia excentrica*, *Vitrea crystallina* and *Anisus leucostoma*. Although this assemble is too small to generate a statistically significant analysis, the autecological preferences of each species can be considered as indicative of the broad environmental conditions present. *Pupilla muscorum* prefer dry, exposed areas including short turfed grassland (Kerney & Cameron 1979), in common with that of *Vallonia excentrica*, which can also tolerate wetter conditions (Evans 1972). *Vitrea crystallina* are also commonly associated with moist grassland. Finally, *Anisus leucostoma*, which is part of Sparks' (1961) slum group, are tolerant of stagnant water, and summer desiccation (Welter-Schultes 2012). Although this interpretation is highly tentative owing to the limited number of snails recovered, this small assemblage suggests a landscape with short cut, moist grassland, as well as the presence of a stagnant waterbody, possibly within the ditch, that may be prone to seasonal desiccation.

(044008)

(044008) was the singular fill of pit of ditch terminus [044007] and contained rare charcoal and rare *Polygonum aviculare* uncharred seeds, insufficient evidence to draw any conclusions beyond the presence of this species in the locality and of burning in the landscape.

(057005)

(057005) was the fill of [057004], a ditch that had previously been encountered by other archaeological contractors, although not sampled by them. However, the sampling was inconclusive.

16.7 Table of results

The following tables detail the abundance results from both the archaeobotanical material and the archaeological finds. Weight and quantity records have been recorded but are not presented here due to the variation between materials.

		Context no.	001005				001008				001011			
		Sample no.	028				029				030			
		Sample part	1/4	2/4	3/4	4/4	1/4	2/4	3/4	4/4	1/4	2/4	3/4	4/4
		Bucket no.	9804	9805	9806	9807	9824	9825	9826	9827	9828	9829	9830	9831
		Sample vol. (mℓ)	200	400	300	200	200	300	<100	200	500	<100	200	300
		% sample analysed	100	100	100	100	100	100	100	100	100	100	100	100
		Waterlogged?	N	N	N	N	N	N	N	N	N	N	N	N
		Refloated?	N	N	N	N	N	N	N	N	N	N	N	N
Latin name	Common name	Plant part												
Carbonised cereal														
Triticum sp.	Wheat	caryopsis												
Triticum sp. (cf)	Wheat	caryopsis												
Cereal indet.	Indeterminate	caryopsis		+							+			
Uncarbonised wild taxa														
Chenopodium album	Fat Hen	seed	++	+			++++	+	++	++++	+		+	++
Polygonum aviculare	Common Knotgrass	nutlet		+										
Polygonum sp.	Knotgrass	nutlet												
Vicia sp.	Vetch	seed												
Charcoal														
Undetermined	Undetermined	fragments		+	+++	++		++	+	+	++	+	+	++
Archaeometallurgical														
Spheroidical scale	-	-		+										
Flake hammerscale	-	-		+										
Artefactual														
Ceramic/pottery	-	-			+	+	+						+	
CBM	-	-										+		
Metal	-	-												
Mortar	-	-												
Worked stone	-	-		+										
Heat affected stone	-	-												
Faunal														
Mammal (unburnt)	Indeterminate	-				+								
Small mammal (unburnt)	Indeterminate	-												
Mammal (burnt)	Indeterminate	-												
Small mammal (burnt)	Indeterminate	-												
Molluscan														
Vertigo antivertigo	Marsh whorl snail	-												
Pupilla muscorum	Moss chrysalis snail	-												
Vallonia excentrica	The Eccentric vallonia	-												
Vitrea crystallina	Crystal snail	-				+								
Oxychilus alliarius	Garlic snail	-												
Candidula gigaxii	Hairy snail	-												
Galba truncatula	Dwarf pond snail	-												
Anisus leucostoma	White lipped ramshorn	-												
Gyraulus laevis	Smooth ramshorn	-												
Terrestrial	Indeterminate	-												
Terrestrial	Indeterminate	fragments				+					+			

			Context no.	002006		002008		002010				002013				002014			
			Sample no.	027		023		024				025				026			
			Sample part	1/2	2/2	1/2	2/2	1/4	2/4	3/4	4/4	1/4	2/4	3/4	4/4	1/4	2/4	3/4	4/4
			Bucket no.	9822	9823	9866	9867	9800	9801	9802	9803	9818	9819	9820	9821	9832	9833	9834	9835
			Sample vol. (mℓ)	200	<100	400	550	500	400	100	200	<100	200	100	100	500	300	200	100
			% sample analysed	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
			Waterlogged?	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
			Refloated?	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Latin name	Common name	Plant part																	
Carbonised cereal																			
Triticum sp.	Wheat	caryopsis																	
Triticum sp. (cf)	Wheat	caryopsis																	
Cereal indet.	Indeterminate	caryopsis		+															
Uncarbonised wild taxa																			
Chenopodium album	Fat Hen	seed						+	+	+++	++		++		+++	+	+		
Polygonum aviculare	Common Knotgrass	nutlet							+	+									
Polygonum sp.	Knotgrass	nutlet																	
Vicia sp.	Vetch	seed														+			
Charcoal																			
Undetermined	Undetermined	fragments		+	++	++	+				++			+		+	+	+	
Archaeometallurgical																			
Spheroidical scale	-	-																	
Flake hammerscale	-	-																	
Artefactual																			
Ceramic/pottery	-	-			+		+									+	++		
CBM	-	-			++												+		
Metal	-	-																	
Mortar	-	-																	
Worked stone	-	-	+			+													
Heat affected stone	-	-																	
Faunal																			
Mammal (unburnt)	Indeterminate	-										+			+	+			+
Small mammal (unburnt)	Indeterminate	-																	
Mammal (burnt)	Indeterminate	-																	
Small mammal (burnt)	Indeterminate	-																	
Molluscan																			
Vertigo antivertigo	Marsh whorl snail	-																	
Pupilla muscorum	Moss chrysalis snail	-																	
Vallonia excentrica	The Eccentric vallonia	-						+											
Vitrea crystallina	Crystal snail	-																	
Oxychilus alliarius	Garlic snail	-				+													
Candidula gigaxii	Hairy snail	-																	
Galba truncatula	Dwarf pond snail	-																	
Anisus leucostoma	White lipped ramshorn	-																	
Gyraulus laevis	Smooth ramshorn	-																	
Terrestrial	Indeterminate	-																	
Terrestrial	Indeterminate	fragments																+	

Context no.			013007				013011				013016				013017				013018			
Sample no.			035				039				038				037				034			
Sample part			1/4	2/4	3/4	4/4	1/4	2/4	3/4	4/4	1/4	2/4	3/4	4/4	1/4	2/4	3/4	4/4	1/4	2/4	3/4	4/4
Bucket no.			9862	9863	9864	9865	9850	9851	9852	9853	9880	9881	9882	9883	9872	9873	9874	9875	9854	9855	9856	9857
Sample vol. (mℓ)			<100	200	<100	200	400	800	800	300	200	200	200	50	300	200	300	200	<100	100	400	200
% sample analysed			100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Waterlogged?			N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Refloated?			N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Latin name	Common name	Plant part																				
Carbonised cereal																						
Triticum sp.	Wheat	caryopsis																				
Triticum sp. (cf)	Wheat	caryopsis																				
Cereal indet.	Indeterminate	caryopsis						+	+						+							
Uncarbonised wild taxa																						
Chenopodium album	Fat Hen	seed			+		+						+	++				+				
Polygonum aviculare	Common Knotgrass	nutlet													+							
Polygonum sp.	Knotgrass	nutlet																				
Vicia sp.	Vetch	seed																	+			
Charcoal																						
Undetermined	Undetermined	fragments	+				+	+++	+++	++++	++	+		+	+++	++	++++	++	+		+	+
Archaeometallurgical																						
Spheroidical scale	-	-													+							
Flake hammerscale	-	-																				
Artefactual																						
Ceramic/pottery	-	-													+			+				
CBM	-	-						+										+				
Metal	-	-																				
Mortar	-	-																				
Worked stone	-	-																				
Heat affected stone	-	-																				
Faunal																						
Mammal (unburnt)	Indeterminate	-			+		+	+	++	++					++		++				+	
Small mammal (unburnt)	Indeterminate	-							+		+				++							
Mammal (burnt)	Indeterminate	-						+	++						+	+	+					
Small mammal (burnt)	Indeterminate	-														+	++					
Molluscan																						
Vertigo antivertigo	Marsh whorl snail	-						+														
Pupilla muscorum	Moss chrysalis snail	-																				
Vallonia excentrica	The Eccentric vallonia	-						+	+						++		+++	+				
Vitrea crystallina	Crystal snail	-																				
Oxychilus alliarius	Garlic snail	-																				
Candidula gigaxii	Hairy snail	-																				
Galba truncatula	Dwarf pond snail	-													+		++++					
Anisus leucostoma	White lipped ramshorn	-																				
Gyraulus laevis	Smooth ramshorn	-															+					
Terrestrial	Indeterminate	-																				
Terrestrial	Indeterminate	fragments	+		+			+	+	+					++++	+	++++				+	

Context no.			013020				013024		013025				013027	013028				013030				013031		
Sample no.			036				031		032				040	033				041				042		
Sample part			1/4	2/4	3/4	4/4	1/2	2/2	1/4	2/4	3/4	4/4	1/1	1/4	2/4	3/4	4/4	1/4	2/4	3/4	4/4	1/3	2/3	3/3
Bucket no.			9876	9877	9878	9879	9840	9841	9836	9837	9838	9839	9842	9858	9859	9860	9861	9846	9847	9848	9849	9843	9844	9845
Sample vol. (mℓ)			200	100	100	200	400	600	500	400	400	700	500	500	400	200	300	300	300	700	600	400	700	200
% sample analysed			100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Waterlogged?			N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Refloated?			N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Latin name	Common name	Plant part																						
Carbonised cereal																								
Triticum sp.	Wheat	caryopsis																						
Triticum sp. (cf)	Wheat	caryopsis																				+		
Cereal indet.	Indeterminate	caryopsis		+				+								+		+	+		+	+		
Uncarbonised wild taxa																								
Chenopodium album	Fat Hen	seed	+	+		+	+	+			+	+	+							+			+	
Polygonum aviculare	Common Knotgrass	nutlet																				+		
Polygonum sp.	Knotgrass	nutlet						+																
Vicia sp.	Vetch	seed																						
Charcoal																								
Undetermined	Undetermined	fragments	+	+++	++	+++	+++	+++	+++	++	++	+++	++	++	+	+	+	+++	+	+	+++	++	+++	
Archaeometallurgical																								
Spheroidical scale	-	-																						
Flake hammerscale	-	-																						
Artefactual																								
Ceramic/pottery	-	-	+	++					+	++		+					+		+					
CBM	-	-		+	+				++		+													
Metal	-	-							+															
Mortar	-	-														+								
Worked stone	-	-					+																	
Heat affected stone	-	-			+																			
Faunal																								
Mammal (unburnt)	Indeterminate	-	+	+	++	+	++	++		+	+	++		+					+	+		+	++++	
Small mammal (unburnt)	Indeterminate	-	+	+		+				+				+				+						
Mammal (burnt)	Indeterminate	-		+	+		+	+		+	+	+							+			++		
Small mammal (burnt)	Indeterminate	-										+												
Molluscan																								
Vertigo antivertigo	Marsh whorl snail	-																		+				
Pupilla muscorum	Moss chrysalis snail	-																		+				
Vallonia excentrica	The Eccentric vallonia	-			+							+							+	++	+		++	+
Vitrea crystallina	Crystal snail	-																		++				+
Oxychilus alliarius	Garlic snail	-												+										
Candidula gigaxii	Hairy snail	-		+	+														+	+	+			+
Galba truncatula	Dwarf pond snail	-		+																++			+	+
Anisus leucostoma	White lipped ramshorn	-																			+			
Gyraulus laevis	Smooth ramshorn	-																						
Terrestrial	Indeterminate	-					+										+							
Terrestrial	Indeterminate	fragments		+++	+	+						+							++++	++++	++		++++	++

		Context no.	014005		014006				014007			
		Sample no.	020		021				022			
		Sample part	1/2	2/2	1/4	2/4	3/4	4/4	1/4	2/4	3/4	4/4
		Bucket no.	9810	9811	9621	9622	9623	9624	9812	9813	9814	9815
		Sample vol. (mℓ)	300	150	300	200	400	200	200	500	<100	200
		% sample analysed	100	100	100	100	100	100	100	100	100	100
		Waterlogged?	N	N	N	N	N	N	N	N	N	N
		Refloated?	N	N	N	N	N	N	N	N	N	N
Latin name	Common name	Plant part										
Carbonised cereal												
Triticum sp.	Wheat	caryopsis										
Triticum sp. (cf)	Wheat	caryopsis										
Cereal indet.	Indeterminate	caryopsis								+		
Uncarbonised wild taxa												
Chenopodium album	Fat Hen	seed		+						+		
Polygonum aviculare	Common Knotgrass	nutlet		+								
Polygonum sp.	Knotgrass	nutlet										
Vicia sp.	Vetch	seed										
Charcoal												
Undetermined	Undetermined	fragments	++	++	+		+	+		+++	+	++
Archaeometallurgical												
Spheroidical scale	-	-										
Flake hammerscale	-	-										
Artefactual												
Ceramic/pottery	-	-			+							
CBM	-	-			+		++					
Metal	-	-										
Mortar	-	-										
Worked stone	-	-										
Heat affected stone	-	-										
Faunal												
Mammal (unburnt)	Indeterminate	-	+								+	
Small mammal (unburnt)	Indeterminate	-	+	+						+		
Mammal (burnt)	Indeterminate	-	+	+						+		
Small mammal (burnt)	Indeterminate	-										
Molluscan												
Vertigo antivertigo	Marsh whorl snail	-							+			
Pupilla muscorum	Moss chrysalis snail	-										
Vallonia excentrica	The Eccentric vallonia	-	++	++					+	+	+	
Vitrea crystallina	Crystal snail	-		+								
Oxychilus alliarius	Garlic snail	-										
Candidula gigaxii	Hairy snail	-		+								
Galba truncatula	Dwarf pond snail	-	+	++	+							
Anisus leucostoma	White lipped ramshorn	-				+						
Gyraulus laevis	Smooth ramshorn	-										
Terrestrial	Indeterminate	-										
Terrestrial	Indeterminate	fragments		++++	+	++				+	++	

		Context no.	016005				016007		016008	016010	016012			016013
		Sample no.	018				015		014	016	019			017
		Sample part	1/4	2/4	3/4	4/4	1/2	2/2	1/1	1/1	1/3	2/3	3/3	1/1
		Bucket no.	9621	9622	9623	9624	9625	9526	9627	9628	9618	9619	9620	9629
		Sample vol. (mℓ)	300	200	400	200	500	500	500	500	200	300	300	400
		% sample analysed	100	100	100	100	100	100	100	100	100	100	100	100
		Waterlogged?	N	N	N	N	N	N	N	N	N	N	N	N
		Refloated?	N	N	N	N	N	N	N	N	N	N	N	N
Latin name	Common name	Plant part												
Carbonised cereal														
Triticum sp.	Wheat	caryopsis												
Triticum sp. (cf)	Wheat	caryopsis												
Cereal indet.	Indeterminate	caryopsis												
Uncarbonised wild taxa														
Chenopodium album	Fat Hen	seed		+++										+
Polygonum aviculare	Common Knotgrass	nutlet												
Polygonum sp.	Knotgrass	nutlet												
Vicia sp.	Vetch	seed												
Charcoal														
Undetermined	Undetermined	fragments	+		+	+	+		++	+			+	+
Archaeometallurgical														
Spheroidical scale	-	-												
Flake hammerscale	-	-												
Artefactual														
Ceramic/pottery	-	-	+											
CBM	-	-	+		++									
Metal	-	-												
Mortar	-	-												
Worked stone	-	-						+						
Heat affected stone	-	-												
Faunal														
Mammal (unburnt)	Indeterminate	-							+					
Small mammal (unburnt)	Indeterminate	-												
Mammal (burnt)	Indeterminate	-												
Small mammal (burnt)	Indeterminate	-												
Molluscan														
Vertigo antivertigo	Marsh whorl snail	-												
Pupilla muscorum	Moss chrysalis snail	-												
Vallonia excentrica	The Eccentric vallonia	-												
Vitrea crystallina	Crystal snail	-												
Oxychilus alliarius	Garlic snail	-												
Candidula gigaxii	Hairy snail	-												
Galba truncatula	Dwarf pond snail	-												
Anisus leucostoma	White lipped ramshorn	-												
Gyraulus laevis	Smooth ramshorn	-												
Terrestrial	Indeterminate	-												
Terrestrial	Indeterminate	fragments												

		Context no.	023005			
		Sample no.	013			
		Sample part	1/4	2/4	3/4	4/4
		Bucket no.	9610	9611	9612	9613
		Sample vol. (mℓ)	500	600	800	500
		% sample analysed	100	100	100	100
		Waterlogged?	N	N	N	N
		Refloated?	N	N	N	N
Latin name	Common name	Plant part				
Carbonised cereal						
Triticum sp.	Wheat	caryopsis				
Triticum sp. (cf)	Wheat	caryopsis				
Cereal indet.	Indeterminate	caryopsis				
Uncarbonised wild taxa						
Chenopodium album	Fat Hen	seed			+	++
Polygonum aviculare	Common Knotgrass	nutlet				
Polygonum sp.	Knotgrass	nutlet				+
Vicia sp.	Vetch	seed				
Charcoal						
Undetermined	Undetermined	fragments	+	+	+	++
Archaeometallurgical						
Spheroidical scale	-	-				
Flake hammerscale	-	-				
Artefactual						
Ceramic/pottery	-	-			+	
CBM	-	-				++
Metal	-	-				
Mortar	-	-				
Worked stone	-	-				+
Heat affected stone	-	-				
Faunal						
Mammal (unburnt)	Indeterminate	-				
Small mammal (unburnt)	Indeterminate	-				
Mammal (burnt)	Indeterminate	-				
Small mammal (burnt)	Indeterminate	-				
Molluscan						
Vertigo antivertigo	Marsh whorl snail	-				
Pupilla muscorum	Moss chrysalis snail	-				
Vallonia excentrica	The Eccentric vallonia	-	+			
Vitrea crystallina	Crystal snail	-				
Oxychilus alliarius	Garlic snail	-				
Candidula gigaxii	Hairy snail	-				
Galba truncatula	Dwarf pond snail	-				
Anisus leucostoma	White lipped ramshorn	-				
Gyraulus laevis	Smooth ramshorn	-				
Terrestrial	Indeterminate	-				
Terrestrial	Indeterminate	fragments				+

		Context no.	024009			
		Sample no.	011			
		Sample part	1/4	2/4	3/4	4/4
		Bucket no.	9602	9603	9604	9605
		Sample vol. (mℓ)	200	200	200	300
		% sample analysed	100	100	100	100
		Waterlogged?	N	N	N	N
		Refloated?	N	N	N	N
Latin name	Common name	Plant part				
Carbonised cereal						
Triticum sp.	Wheat	caryopsis				
Triticum sp. (cf)	Wheat	caryopsis				
Cereal indet.	Indeterminate	caryopsis				
Uncarbonised wild taxa						
Chenopodium album	Fat Hen	seed				
Polygonum aviculare	Common Knotgrass	nutlet				
Polygonum sp.	Knotgrass	nutlet				
Vicia sp.	Vetch	seed				
Charcoal						
Undetermined	Undetermined	fragments	+	++		+
Archaeometallurgical						
Spheroidical scale	-	-				
Flake hammerscale	-	-				
Artefactual						
Ceramic/pottery	-	-				
CBM	-	-				
Metal	-	-				
Mortar	-	-				
Worked stone	-	-				
Heat affected stone	-	-				
Faunal						
Mammal (unburnt)	Indeterminate	-				
Small mammal (unburnt)	Indeterminate	-				
Mammal (burnt)	Indeterminate	-				
Small mammal (burnt)	Indeterminate	-				
Molluscan						
Vertigo antivertigo	Marsh whorl snail	-				
Pupilla muscorum	Moss chrysalis snail	-				
Vallonia excentrica	The Eccentric vallonia	-				
Vitrea crystallina	Crystal snail	-				
Oxychilus alliarius	Garlic snail	-				
Candidula gigaxii	Hairy snail	-				
Galba truncatula	Dwarf pond snail	-				
Anisus leucostoma	White lipped ramshorn	-				
Gyraulus laevis	Smooth ramshorn	-				
Terrestrial	Indeterminate	-				
Terrestrial	Indeterminate	fragments				

		Context no.	027007	
		Sample no.	012	
		Sample part	1/2	2/2
		Bucket no.	9586	9587
		Sample vol. (mℓ)	900	900
		% sample analysed	100	100
		Waterlogged?	N	N
		Refloated?	N	N
Latin name	Common name	Plant part		
Carbonised cereal				
Triticum sp.	Wheat	caryopsis		
Triticum sp. (cf)	Wheat	caryopsis		
Cereal indet.	Indeterminate	caryopsis		
Uncarbonised wild taxa				
Chenopodium album	Fat Hen	seed		
Polygonum aviculare	Common Knotgrass	nutlet		
Polygonum sp.	Knotgrass	nutlet		
Vicia sp.	Vetch	seed		
Charcoal				
Undetermined	Undetermined	fragments		+
Archaeometallurgical				
Spheroidical scale	-	-		
Flake hammerscale	-	-		
Artefactual				
Ceramic/pottery	-	-		
CBM	-	-		
Metal	-	-		
Mortar	-	-		
Worked stone	-	-		
Heat affected stone	-	-		
Faunal				
Mammal (unburnt)	Indeterminate	-		
Small mammal (unburnt)	Indeterminate	-		
Mammal (burnt)	Indeterminate	-		
Small mammal (burnt)	Indeterminate	-		
Molluscan				
Vertigo antivertigo	Marsh whorl snail	-		
Pupilla muscorum	Moss chrysalis snail	-		
Vallonia excentrica	The Eccentric vallonia	-		
Vitrea crystallina	Crystal snail	-		
Oxychilus alliarius	Garlic snail	-		
Candidula gigaxii	Hairy snail	-		
Galba truncatula	Dwarf pond snail	-		
Anisus leucostoma	White lipped ramshorn	-		
Gyraulus laevis	Smooth ramshorn	-		
Terrestrial	Indeterminate	-		
Terrestrial	Indeterminate	fragments		

		Context no.	028005			
		Sample no.	005			
		Sample part	1/4	2/4	3/4	4/4
		Bucket no.	9592	9593	9594	9595
		Sample vol. (mℓ)	<100	150	<100	200
		% sample analysed	100	100	100	100
		Waterlogged?	N	N	N	N
		Refloated?	N	N	N	N
Latin name	Common name	Plant part				
Carbonised cereal						
Triticum sp.	Wheat	caryopsis		+		
Triticum sp. (cf)	Wheat	caryopsis				
Cereal indet.	Indeterminate	caryopsis				
Uncarbonised wild taxa						
Chenopodium album	Fat Hen	seed	+	+	+	
Polygonum aviculare	Common Knotgrass	nutlet				
Polygonum sp.	Knotgrass	nutlet				
Vicia sp.	Vetch	seed				
Charcoal						
Undetermined	Undetermined	fragments	+	+		++
Archaeometallurgical						
Spheroidical scale	-	-				
Flake hammerscale	-	-				
Artefactual						
Ceramic/pottery	-	-				
CBM	-	-				
Metal	-	-				
Mortar	-	-				
Worked stone	-	-				
Heat affected stone	-	-				
Faunal						
Mammal (unburnt)	Indeterminate	-				
Small mammal (unburnt)	Indeterminate	-				
Mammal (burnt)	Indeterminate	-				
Small mammal (burnt)	Indeterminate	-				
Molluscan						
Vertigo antivertigo	Marsh whorl snail	-				
Pupilla muscorum	Moss chrysalis snail	-				
Vallonia excentrica	The Eccentric vallonia	-				
Vitrea crystallina	Crystal snail	-				
Oxychilus alliarius	Garlic snail	-				
Candidula gigaxii	Hairy snail	-				
Galba truncatula	Dwarf pond snail	-				
Anisus leucostoma	White lipped ramshorn	-				
Gyraulus laevis	Smooth ramshorn	-				
Terrestrial	Indeterminate	-				
Terrestrial	Indeterminate	fragments				

		Context no.	032007				032008								032009	
		Sample no.	002				001								003	
		Sample part	1/4	2/4	3/4	4/4	1/8	2/8	3/8	4/8	5/8	6/8	7/8	8/8	1/2	2/2
		Bucket no.	9638	9639	9640	9641	9630	9631	9632	9633	9634	9635	9636	9637	9588	9589
		Sample vol. (mℓ)	200	<100	400	300	800	300	300	500	600	400	200	300	300	100
		% sample analysed	100	100	100	100	100	30	100	100	100	100	80	30	100	100
		Waterlogged?	N	N	N	N	N	N	N	N	N	N	N	N	N	N
		Refloated?	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Latin name	Common name	Plant part														
Carbonised cereal																
Triticum sp.	Wheat	caryopsis														
Triticum sp. (cf)	Wheat	caryopsis														
Cereal indet.	Indeterminate	caryopsis														
Uncarbonised wild taxa																
Chenopodium album	Fat Hen	seed		+						+					+	
Polygonum aviculare	Common Knotgrass	nutlet														
Polygonum sp.	Knotgrass	nutlet														
Vicia sp.	Vetch	seed														
Charcoal																
Undetermined	Undetermined	fragments	++	+	++	+++	++++	++++	++++	++++	++++	++++	++++	++++	+++	+
Archaeometallurgical																
Spheroidical scale	-	-														
Flake hammerscale	-	-														
Artefactual																
Ceramic/pottery	-	-														
CBM	-	-						++								
Metal	-	-														
Mortar	-	-														
Worked stone	-	-														
Heat affected stone	-	-														
Faunal																
Mammal (unburnt)	Indeterminate	-														
Small mammal (unburnt)	Indeterminate	-														
Mammal (burnt)	Indeterminate	-														
Small mammal (burnt)	Indeterminate	-														
Molluscan																
Vertigo antivertigo	Marsh whorl snail	-														
Pupilla muscorum	Moss chrysalis snail	-														
Vallonia excentrica	The Eccentric vallonia	-														
Vitrea crystallina	Crystal snail	-														
Oxychilus alliarius	Garlic snail	-														
Candidula gigaxii	Hairy snail	-														
Galba truncatula	Dwarf pond snail	-														
Anisus leucostoma	White lipped ramshorn	-														
Gyraulus laevis	Smooth ramshorn	-														
Terrestrial	Indeterminate	-														
Terrestrial	Indeterminate	fragments														

		Context no.	036005	036007
		Sample no.	007	008
		Sample part	1/1	1/1
		Bucket no.	9591	9590
		Sample vol. (mℓ)	200	<100
		% sample analysed	100	100
		Waterlogged?	N	N
		Refloated?	N	N
Latin name	Common name	Plant part		
Carbonised cereal				
Triticum sp.	Wheat	caryopsis		
Triticum sp. (cf)	Wheat	caryopsis		
Cereal indet.	Indeterminate	caryopsis		
Uncarbonised wild taxa				
Chenopodium album	Fat Hen	seed	+	
Polygonum aviculare	Common Knotgrass	nutlet		
Polygonum sp.	Knotgrass	nutlet		
Vicia sp.	Vetch	seed		
Charcoal				
Undetermined	Undetermined	fragments		++
Archaeometallurgical				
Spheroidical scale	-	-		
Flake hammerscale	-	-		
Artefactual				
Ceramic/pottery	-	-		
CBM	-	-	+++	
Metal	-	-		
Mortar	-	-		
Worked stone	-	-		
Heat affected stone	-	-		
Faunal				
Mammal (unburnt)	Indeterminate	-		
Small mammal (unburnt)	Indeterminate	-		
Mammal (burnt)	Indeterminate	-		
Small mammal (burnt)	Indeterminate	-		
Molluscan				
Vertigo antivertigo	Marsh whorl snail	-		
Pupilla muscorum	Moss chrysalis snail	-		
Vallonia excentrica	The Eccentric vallonia	-		
Vitrea crystallina	Crystal snail	-		
Oxychilus alliarius	Garlic snail	-		
Candidula gigaxii	Hairy snail	-		
Galba truncatula	Dwarf pond snail	-		
Anisus leucostoma	White lipped ramshorn	-		
Gyraulus laevis	Smooth ramshorn	-		
Terrestrial	Indeterminate	-		
Terrestrial	Indeterminate	fragments		

		Context no.	040004				040008				040010			
		Sample no.	006				010				009			
		Sample part	1/4	2/4	3/4	4/4	1/4	2/4	3/4	4/4	1/4	2/4	3/4	4/4
		Bucket no.	9598	9599	9600	9601	9606	9607	9608	9609	9615	9616	9617	9618
		Sample vol. (mℓ)	200	400	200	<100	200	300	100	400	200	200	300	300
		% sample analysed	100	100	100	100	100	100	100	100	100	100	100	100
		Waterlogged?	N	N	N	N	N	N	N	N	N	N	N	N
		Refloated?	N	N	N	N	N	N	N	N	N	N	N	N
Latin name	Common name	Plant part												
Carbonised cereal														
Triticum sp.	Wheat	caryopsis												
Triticum sp. (cf)	Wheat	caryopsis												
Cereal indet.	Indeterminate	caryopsis		+										
Uncarbonised wild taxa														
Chenopodium album	Fat Hen	seed					+							
Polygonum aviculare	Common Knotgrass	nutlet				+								
Polygonum sp.	Knotgrass	nutlet												
Vicia sp.	Vetch	seed												
Charcoal														
Undetermined	Undetermined	fragments					++	+	+	++				++
Archaeometallurgical														
Spheroidical scale	-	-												
Flake hammerscale	-	-												
Artefactual														
Ceramic/pottery	-	-												
CBM	-	-										+		
Metal	-	-												
Mortar	-	-												
Worked stone	-	-												
Heat affected stone	-	-												
Faunal														
Mammal (unburnt)	Indeterminate	-											+	
Small mammal (unburnt)	Indeterminate	-												
Mammal (burnt)	Indeterminate	-												
Small mammal (burnt)	Indeterminate	-												
Molluscan														
Vertigo antivertigo	Marsh whorl snail	-												
Pupilla muscorum	Moss chrysalis snail	-										+		
Vallonia excentrica	The Eccentric vallonia	-									+			
Vitrea crystallina	Crystal snail	-									+	+		
Oxychilus alliarius	Garlic snail	-												
Candidula gigaxii	Hairy snail	-												
Galba truncatula	Dwarf pond snail	-												
Anisus leucostoma	White lipped ramshorn	-											+	
Gyraulus laevis	Smooth ramshorn	-												
Terrestrial	Indeterminate	-												
Terrestrial	Indeterminate	fragments		+								++	+	

		Context no.	044008	
		Sample no.	004	
		Sample part	1/2	2/2
		Bucket no.	9596	9597
		Sample vol. (mℓ)	100	250
		% sample analysed	100	100
		Waterlogged?	N	N
		Refloated?	N	N
Latin name	Common name	Plant part		
Carbonised cereal				
Triticum sp.	Wheat	caryopsis		
Triticum sp. (cf)	Wheat	caryopsis		
Cereal indet.	Indeterminate	caryopsis		
Uncarbonised wild taxa				
Chenopodium album	Fat Hen	seed		
Polygonum aviculare	Common Knotgrass	nutlet		+
Polygonum sp.	Knotgrass	nutlet		
Vicia sp.	Vetch	seed		
Charcoal				
Undetermined	Undetermined	fragments	+	+
Archaeometallurgical				
Spheroidical scale	-	-		
Flake hammerscale	-	-		
Artefactual				
Ceramic/pottery	-	-		
CBM	-	-		
Metal	-	-		
Mortar	-	-		
Worked stone	-	-		
Heat affected stone	-	-		
Faunal				
Mammal (unburnt)	Indeterminate	-		
Small mammal (unburnt)	Indeterminate	-		
Mammal (burnt)	Indeterminate	-		
Small mammal (burnt)	Indeterminate	-		
Molluscan				
Vertigo antivertigo	Marsh whorl snail	-		
Pupilla muscorum	Moss chrysalis snail	-		
Vallonia excentrica	The Eccentric vallonia	-		
Vitrea crystallina	Crystal snail	-		
Oxychilus alliarius	Garlic snail	-		
Candidula gigaxii	Hairy snail	-		
Galba truncatula	Dwarf pond snail	-		
Anisus leucostoma	White lipped ramshorn	-		
Gyraulus laevis	Smooth ramshorn	-		
Terrestrial	Indeterminate	-		
Terrestrial	Indeterminate	fragments		

		Context no.	057005			
		Sample no.	043			
		Sample part	1/4	2/4	3/4	4/4
		Bucket no.	9808	9809	9810	9811
		Sample vol. (mℓ)	200	500	100	100
		% sample analysed	100	100	100	100
		Waterlogged?	N	N	N	N
		Refloated?	N	N	N	N
Latin name	Common name	Plant part				
Carbonised cereal						
Triticum sp.	Wheat	caryopsis				
Triticum sp. (cf)	Wheat	caryopsis				
Cereal indet.	Indeterminate	caryopsis				
Uncarbonised wild taxa						
Chenopodium album	Fat Hen	seed				
Polygonum aviculare	Common Knotgrass	nutlet				
Polygonum sp.	Knotgrass	nutlet				
Vicia sp.	Vetch	seed				
Charcoal						
Undetermined	Undetermined	fragments	++	++	++	
Archaeometallurgical						
Spheroidical scale	-	-				
Flake hammerscale	-	-				
Artefactual						
Ceramic/pottery	-	-				
CBM	-	-				
Metal	-	-				
Mortar	-	-				
Worked stone	-	-		+		
Heat affected stone	-	-				
Faunal						
Mammal (unburnt)	Indeterminate	-				
Small mammal (unburnt)	Indeterminate	-				
Mammal (burnt)	Indeterminate	-				
Small mammal (burnt)	Indeterminate	-				
Molluscan						
Vertigo antivertigo	Marsh whorl snail	-				
Pupilla muscorum	Moss chrysalis snail	-				
Vallonia excentrica	The Eccentric vallonia	-				
Vitrea crystallina	Crystal snail	-				
Oxychilus alliarius	Garlic snail	-				
Candidula gigaxii	Hairy snail	-				
Galba truncatula	Dwarf pond snail	-				
Anisus leucostoma	White lipped ramshorn	-				
Gyraulus laevis	Smooth ramshorn	-				
Terrestrial	Indeterminate	-				
Terrestrial	Indeterminate	fragments				

16.8 Conclusions and recommendations

The intention of the non-specific palaeoenvironmental sampling at Whitehouse Secondary School was to retrieve non-specific palaeoenvironmental remains and to characterise features that, due to the confines of the evaluation parameters, could not be fully assessed.

An additional purpose to palaeoenvironmental reporting in the case of Archaeological Field Evaluations is the recommendation of further, potentially specific, palaeoenvironmental sampling in further archaeological mitigation. In this case, palaeoenvironmental evidence supports the archaeological interpretations but it emphasises that the archaeology concentrated to the N of the site is likely of greatest significance.

Preservation of mammal bone and terrestrial molluscan shells were highest in the N part of the site, although preservation was highly variable throughout. The majority of the features examined contained evidence for some level of activity in the form of a combination of charcoal, burnt and unburnt mammal bone, charred cereals and pottery. These remains predominantly came from within ditch fills. Many features contained only charcoal which may indicate deposition as the result of being proximal to the site of habitation/burning, rather that adjacent. The presence of small mammal bone, or higher than usual accumulations of materials potentially constituting domestic waste, are indicated within Trenches 013 and 014 and could indicate that human activity was concentrated in this area, potentially signifying that a habitation area existed nearby, although this may also be the result of preservational bias.

The post and stake holes [036006] and [036004] contained limited evidence for human habitation, except for a relatively high quantity of CBM/pottery within [036004] and rare evidence for charcoal within [036006]. This absence of domestic waste material suggests that these post and stake holes do not constitute a domestic structure, although there is the potential for preservational or taphonomic bias.

The botanical remains indicate that *Chenopodium album* was ubiquitous, with *Polygonum aviculare* also likely to have been common. Whether this was as an archaeological species or as modern intrusion or contaminant is impossible to state although modern interference seems likely in this case.

The molluscan interpretations are that the environment of the site was predominantly that of relatively dry to moist, short turfed grassland with some degree of disturbance resulting from non-intensive arable agricultural and/or pastoral activity, with wetter areas and potentially even standing water within the ditches during wetter seasons. The faunal evidence, although heavily degraded and fragmentary, appears to suggest the presence of medium-sized mammals that may have grazed the fields to maintain this type of environment.

Due to the evaluation nature of the archaeological works this assemblage has derived from, no further work is recommended.

Retention of the materials recovered as an incorporation of the site archive for deposition with the museum is recommended.

No especial sampling techniques are recommended in the case of future mitigation.

16.9 Copyright

16.10 Bibliography

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17 Appendix 7: Non-Archaeological Trenches

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period
003	(003001)	Deposit	-	-	Dark grey brown clayey silt; occ. small/med stones; 0.25m deep; overlies (003002).	Topsoil	-	-	Modern
	(003002)	Deposit	-	-	Mid yellowish brown clayey silt; rare charcoal, occ. small stones; 0.11m deep; underlies (003001), overlies (003003).	Subsoil	-	-	Post medieval
	(003003)	Deposit	-	-	Mid to light brown yellow silty clay; rare small stones; 0.20m deep; underlies (003002), overlies (002004).	Subsoil	-	-	Post medieval
	(003004)	Deposit	-	-	Light brown grey clay; mod. chalk flecks & small stones; underlies (003003).	Geology	-	-	-
004	(004001)	Deposit	-	-	Dark grey brown silty clay; 0.21m deep; overlies (004002).	Topsoil	-	-	Modern
	(004002)	Deposit	-	-	Mid grey brown silty clay; occ. chalk inclusions; 0.38m deep; underlies (004001), overlies (004003).	Subsoil	-	-	Post medieval
	(004003)	Deposit	-	-	Light grey/orange clayey silt; occ. chalk; underlies (004002).	Geology	-	-	-
006	(006001)	Deposit	-	-	Dark brown silty clay; occ. stones; 0.28m deep; overlies (006002).	Topsoil	-	-	Modern
	(006002)	Deposit	-	-	Orange grey silty clay occ. stones & chalk; 0.27m deep; underlies (006001), overlies (006003).	Subsoil	-	-	Post medieval
	(006003)	Deposit	-	-	Yellow grey sandy clay; freq. chalk; underlies (006002).	Geology	-	-	-

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period
006	[006004]	Cut	(006005)	-	Sub-circular shape in plan; c.2.32m diameter, 0.3m deep; slightly concave sides; irregular, flat base; cuts (006003).	Edge of rooting	-	-	Undated
	(006005)	Fill	-	[006004]	Moderately compacted mid brown with orange inclusions sandy clay; mod. manganese, occ. small sub-rounded/sub-angular stones, rare charcoal & chalk.	Singular fill of rooting [006004]	-	-	Undated
	[006006]	Cut	(006007)	-	Sub-circular shape in plan; >1.5m diameter; 0.25m deep; stepped sides; irregular, flat base; cuts (006003).	Edge of rooting	-	-	Undated
	(006007)	Fill	-	[006006]	Moderately compacted mid brown with orange streaks silty clay; occ. manganese, occ. sub-rounded/sub-angular flint/stones.	Singular fill of rooting [006006]	-	-	Undated
007	(007001)	Deposit	-	-	Dark brown silty clay mixed with modern hardcore; 0.27m deep; overlies (007002).	Topsoil	-	-	Modern
	(007002)	Deposit	-	-	Mid to dark brown silty clay; occ. small stones & chalk; 0.18m deep; underlies (007001), overlies (007004).	Subsoil	-	-	Post medieval
	(007003)	Deposit	-	-	Light orange with grey mottles clay; freq. chalk; underlies (007004).	Geology	-	-	-
	(007004)	Deposit	-	-	Light brown clayey silt; mod. to freq. chalk; 0.21m deep; underlies (007002), overlies (007003).	Subsoil	-	-	Post medieval
008	(008001)	Deposit	-	-	Dark brown silty clay; occ. small pebbles; 0.31m deep; overlies (008002).	Topsoil	-	-	Modern
	(008002)	Deposit	-	-	Mid brown silty clay; 0.34m deep; underlies (008001), overlies (008003).	Subsoil	-	-	Post medieval

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period
008	(008003)	Deposit	-	-	Light brown silty clay; occ. chalk; underlies (008002).	Geology	-	-	-
009	(009001)	Deposit	-	-	Grey brown silty clay; occ. small pebbles; 0.31m deep; overlies (009002).	Topsoil	-	-	Modern
	(009002)	Deposit	-	-	Mid brown silty clay; 0.3m deep; underlies (009001), overlies (009004).	Subsoil	-	-	Post medieval
	(009003)	Deposit	-	-	Dark orange clayey sand; occ. chalk; underlies (009004).	Geology	-	-	-
	(009004)	Deposit	-	-	Light brown silty clay; 0.31m deep; underlies (009002), overlies (009003).	Subsoil	-	-	Post medieval
010	(010001)	Deposit	-	-	Dark brown silty clay; occ. stones; 0.38m deep; overlies (010002).	Topsoil	-	-	Modern
	(010002)	Deposit	-	-	Mid brown clayey silt; occ. small stones; 0.34m deep; underlies (010001), overlies (010003).	Subsoil	-	-	Post medieval
	(010003)	Deposit	-	-	Orange brown clayey silt; occ. chalk flecks; underlies (010002).	Geology	-	-	-
011	(011001)	Deposit	-	-	Dark grey brown silty clay; 0.23m deep; overlies (011002).	Topsoil	-	-	Modern
	(011002)	Deposit	-	-	Mid grey brown silty clay; occ. chalk flecks; 0.32m deep; underlies (011001), overlies (011003).	Subsoil	-	-	Post medieval
	(011003)	Deposit	-	-	Light grey orange clayey silt; occ. chalk flecks; underlies (011002).	Geology	-	-	-
012	(012001)	Deposit	-	-	Dark grey brown silty clay; 0.26m deep; overlies (012002).	Topsoil	-	-	Modern

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period
012	(012002)	Deposit	-	-	Mid grey brown silty clay; occ. chalk flecks; 0.29m deep; underlies (012001), overlies (012003).	Subsoil	-	-	Post medieval
	(012003)	Deposit	-	-	Mid orange grey silty clay; occ. chalk; underlies (012002).	Geology	-	-	-
015	(015001)	Deposit	-	-	Dark brown silty clay; occ. sub-rounded/sub-angular stones; 0.31m deep; overlies (015002).	Topsoil	-	-	Modern
	(015002)	Deposit	-	-	Mid yellow brown silty clay; occ. sub-rounded/sub-angular stones; 0.29m deep; underlies (015001), overlies (015003).	Subsoil	-	-	Post medieval
	(015003)	Deposit	-	-	Light brown with grey mottles clay; underlies (015002).	Geology	-	-	-
017	(017001)	Deposit	-	-	Dark grey brown clayey silt; mod. stone, occ. CBM; 0.28m deep; overlies (017002).	Topsoil	-	-	Modern
	(017002)	Deposit	-	-	Mid yellow brown silty clay; occ. chalk, rare stones; 0.28m deep; underlies (017001), overlies (017003).	Subsoil	-	-	Post medieval
	(017003)	Deposit	-	-	Light yellow grey clay; occ. chalk; underlies (017002).	Geology	-	-	-
018	(018001)	Deposit	-	-	Dark brown silty clay; occ. small sub-rounded/sub-angular stones; 0.28m deep; overlies (018002).	Topsoil	-	-	Modern
	(018002)	Deposit	-	-	Mid brown to orange brown silty clay; occ. stones; 0.39m deep; underlies (018001), overlies (018003).	Subsoil	-	-	Post medieval

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period
018	(018003)	Deposit		-	Light blue grey clay; occ. chalk, small to medium stones; underlies (018002).	Geology	-	-	-
019	(019001)	Deposit	-	-	Dark brown silty clay; rare sub-rounded/sub-angular stones; 0.38m deep; overlies (019002).	Topsoil	-	-	Modern
	(019002)	Deposit	-	-	Mid brown silty clay; occ. sub-rounded/ sub-angular stones; 0.38m deep; underlies (019001), overlies (019003).	Subsoil	-	-	Post medieval
	(019003)	Deposit	-	-	Light grey sandy clay; underlies (019002).	Geology	-	-	-
020	(020001)	Deposit	-	-	Dark brown clayey silt; rare sub-angular/sub-rounded stones; 0.14m deep; overlies (020002).	Topsoil	-	-	Modern
	(020002)	Deposit	-	-	Mid brown clayey silt; rare sub-rounded/ sub-angular stones; 0.21m deep; underlies (020001), overlies (020003).	Subsoil	-	-	Post medieval
	(020003)	Deposit	-	-	Light grey sandy clay; underlies (020002).	Geology	-	-	-
021	(021001)	Deposit	-	-	Dark brown clayey silt; occ. sub-rounded/sub-angular stones; 0.23m deep; overlies (021002).	Topsoil	-	-	Modern
	(021002)	Deposit	-	-	Mid brown clayey silt; occ. sub-rounded/ sub-angular stones; 0.32m deep; underlies (021001), overlies (021003).	Subsoil	-	-	Post medieval
	(021003)	Deposit	-	-	Light grey sandy clay; underlies (021002).	Geology	-	-	-
022	(022001)	Deposit	-	-	Dark brown silty clay; occ. small stones; 0.26m deep; overlies (022002).	Topsoil	-	-	Modern

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period
022	(022002)	Deposit	-	-	Mid yellow brown silty clay; occ. small stones; 0.33m deep; underlies (022001), overlies (022003).	Subsoil	-	-	Post medieval
	(022003)	Deposit	-	-	Light grey sandy clay; occ. chalk flecks; underlies (022002).	Geology	-	-	-
025	(025001)	Deposit	-	-	Dark brown sandy clay; rare pebbles; 0.25m deep; overlies (025002).	Topsoil	-	-	Modern
	(025002)	Deposit	-	-	Mid brown sandy clay; occ. pebbles & chalk; 0.14m deep; underlies (025001), overlies (025003).	Subsoil	-	-	Post medieval
	(025003)	Deposit	-	-	Light brown sandy clay; freq. chalk; underlies (025002).	Geology	-	-	-
026	(026001)	Deposit	-	-	Dark brown clayey silt; occ. small sub-rounded/sub-angular stones; 0.31m deep; overlies (026002).	Topsoil	-	-	Modern
	(026002)	Deposit	-	-	Mid brown clayey silt; occ. small sub-rounded/sub-angular stones; 0.28m deep; underlies (026001), overlies (026003).	Subsoil	-	-	Post medieval
	(026003)	Deposit	-	-	Light grey sandy clay; occ. chalk; underlies (026002).	Geology	-	-	-
029	(029001)	Deposit	-	-	Dark brown sandy clay, occ. pebbles; 0.29m deep; overlies (029002).	Topsoil	-	-	Modern
	(029002)	Deposit	-	-	Mid brown sandy clay; occ. pebbles & chalk; 0.22m deep; underlies (029001), overlies (029003).	Subsoil	-	-	Post medieval
029	(029003)	Deposit	-	-	Mid to light brown sandy clay; freq. chalk; underlies (029002).	Geology	-	-	-

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period
030	(030001)	Deposit	-	-	Mid brown silty clay; 0.30m deep; overlies (030002).	Topsoil	-	-	Modern
	(030002)	Deposit	-	-	Mid yellow brown silty clay; 0.24m deep; underlies (030001), overlies (030003).	Subsoil	-	-	Post medieval
	(030003)	Deposit	-	-	Light yellow brown silty sand; underlies (030002).	Geology	-	-	-
031	(031001)	Deposit	-	-	Dark brown sandy clay; 0.22m deep; overlies (031002).	Topsoil	-	-	Modern
	(031002)	Deposit	-	-	Mid brown sandy clay; 0.12m deep; underlies (031001), overlies (031003).	Subsoil	-	-	Post medieval
	(031003)	Deposit	-	-	Light yellow grey sandy clay; freq. chalk; underlies (031002).	Geology	-	-	-
033	(033001)	Deposit	-	-	Dark brown sandy clay; 0.17m deep; overlies (033002).	Topsoil	-	-	Modern
	(033002)	Deposit	-	-	Light brown sandy clay; occ. gravel; 0.23m deep; underlies (033001), overlies (033003).	Subsoil	-	-	Post medieval
	(033003)	Deposit	-	-	Light grey silty clay; chalk; underlies (033002).	Geology	-	-	-
034	(034001)	Deposit	-	-	Dark brown sandy clay; 0.23-0.33m deep; overlies (034002).	Topsoil	-	-	Modern
	(034002)	Deposit	-	-	Mid orange brown sandy clay; 0.47m deep; underlies (034001), overlies (034003).	Subsoil	-	-	Post medieval
	(034003)	Deposit	-	-	Light grey brown clay; underlies (034002).	Geology	-	-	-

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period
035	(035001)	Deposit	-	-	Dark brown sandy clay; 0.33m deep; overlies (035002).	Topsoil	-	-	Modern
	(035002)	Deposit	-	-	Mid grey brown sandy clay; 0.36m deep; underlies (035001), overlies (035003).	Subsoil	-	-	Post medieval
	(035003)	Deposit	-	-	Light grey brown clay; underlies (035002).	Geology	-	-	-
037	(037001)	Deposit	-	-	Mid brown silty clay; 0.30m deep; overlies (037002).	Topsoil	-	-	Modern
	(037002)	Deposit	-	-	Mid orange brown silty clay; 0.16m deep; underlies (037001), overlies (037003).	Subsoil	-	-	Post medieval
	(037003)	Deposit	-	-	Light yellow brown silty clay; 0.20m deep; underlies (037002), overlies (037004).	Subsoil	-	-	Post medieval
	(037004)	Deposit	-	-	Light yellow blue silty clay; underlies (037003).	Geology	-	-	-
038	(038001)	Deposit	-	-	Dark grey brown sandy clay; 0.19m deep; overlies (038002).	Topsoil	-	-	Modern
	(038002)	Deposit	-	-	Mid grey brown sandy clay; 0.17m deep; underlies (038001), overlies (038003).	Subsoil	-	-	Post medieval
	(038003)	Deposit	-	-	Mid grey brown sandy clay; freq. chalk; 0.40m deep; underlies (038002), overlies (038004).	Subsoil	-	-	Post medieval
	(038004)	Deposit	-	-	Light grey brown clay; occ. chalk; underlies (038003).	Geology	-	-	-
039	(039001)	Deposit	-	-	Dark brown silty clay; 0.25m deep; overlies (039002).	Topsoil	-	-	Modern
	(039002)	Deposit	-	-	Mid yellow brown silty clay; 0.38m deep; underlies (039001), overlies (039003).	Subsoil	-	-	Post medieval

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period
039	(039003)	Deposit	-	-	Light yellow brown silty clay; underlies (039002).	Geology	-	-	-
041	(041001)	Deposit	-	-	Dark brown sandy clay; 0.18m deep; overlies (041002).	Topsoil	-	-	Modern
	(041002)	Deposit	-	-	Mid brown sandy clay, occ. stones & pebbles; 0.23m deep; underlies (041001), overlies (041003).	Subsoil	-	-	Post medieval
	(041003)	Deposit	-	-	Light brown clay; underlies (041002).	Geology	-	-	-
042	(042001)	Deposit	-	-	Dark grey brown sandy clay; 0.20m deep; overlies (042002).	Topsoil	-	-	Modern
	(042002)	Deposit	-	-	Mid grey brown sandy clay; 0.41m deep; underlies (042001), overlies (042003).	Subsoil	-	-	Post medieval
	(042003)	Deposit	-	-	Light grey brown clay; mod. chalk; underlies (042002).	Geology	-	-	-
043	(043001)	Deposit	-	-	Dark brown sandy clay; 0.23m deep; overlies (043002).	Topsoil	-	-	Modern
	(043002)	Deposit	-	-	Mid brown sandy clay; occ. pebbles; 0.34m deep; underlies (043001), overlies (043003).	Subsoil	-	-	Post medieval
	(043003)	Deposit	-	-	Light to mid brown clay; freq. chalk & gravel; underlies (043002).	Geology	-	-	-
045	(045001)	Deposit	-	-	Dark grey brown silty clay; 0.25m deep; overlies (045002).	Topsoil	-	-	Modern
	(045002)	Deposit	-	-	Mid yellow orange silty clay; 0.33m deep; underlies (045001), overlies (045003).	Subsoil	-	-	Post medieval
	(045003)	Deposit	-	-	Mid yellow blue silty clay; underlies (045002).	Geology	-	-	-

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period
046	(046001)	Deposit	-	-	Dark brown sandy clay; occ. gravel; 0.28m deep; overlies (046002).	Topsoil	-	-	Modern
	(046002)	Deposit	-	-	Mid yellow brown silty clay; rare pebbles; 0.45m deep; underlies (046001), overlies (046003).	Subsoil	-	-	Post medieval
	(046003)	Deposit	-	-	Mid yellow grey clay; freq. chalk flecks; underlies (046002).	Geology	-	-	-
047	(047001)	Deposit	-	-	Dark brown silty clay; 0.36m deep; overlies (047002).	Topsoil	-	-	Modern
	(047002)	Deposit	-	-	Mid orange brown silty clay; 0.47m deep; underlies (047001), overlies (047003).	Subsoil	-	-	Post medieval
	(047003)	Deposit	-	-	Light grey brown sandy clay; underlies (047002).	Geology	-	-	-
048	(048001)	Deposit	-	-	Grey brown silty clay; 0.20m deep; overlies (048002).	Topsoil	-	-	Modern
	(048002)	Deposit	-	-	Light yellow brown silty clay; 0.21m deep; underlies (048001), overlies (048004).	Subsoil	-	-	Post medieval
	(048003)	Deposit	-	-	Orange brown clay; underlies (048004).	Geology	-	-	-
	(048004)	Deposit	-	-	Mid grey brown silty clay; occ. chalk; 0.35m deep; underlies (048002), overlies (048003).	Subsoil	-	-	Post medieval
049	(049001)	Deposit	-	-	Dark brown silty clay; 0.23m deep; overlies (049002).	Topsoil	-	-	Modern
	(049002)	Deposit	-	-	Light yellow brown silty clay; 0.23m deep; underlies (049001), overlies (049003).	Subsoil	-	-	Post medieval
	(049003)	Deposit	-	-	Light yellow blue silty clay; underlies (049002).	Geology	-	-	-

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period
050	(050001)	Deposit	-	-	Dark grey brown silty clay; 0.27m deep; overlies (050002).	Topsoil	-	-	Modern
	(050002)	Deposit	-	-	Mid brown sandy clay; 0.25m deep; underlies (050001), overlies (050003).	Subsoil	-	-	Post medieval
	(050003)	Deposit	-	-	Light yellow brown sandy clay; occ. chalk; 0.38m deep; underlies (050002), overlies (050004).	Subsoil	-	-	Post medieval
	(050004)	Deposit	-	-	Light yellow brown clay; occ. gravel; underlies (050003).	Geology	-	-	-
051	(051001)	Deposit	-	-	Dark grey brown silty clay; occ. stone; 0.32m deep; overlies (051002).	Topsoil	-	-	Modern
	(051002)	Deposit	-	-	Light brown silty clay; occ. small stones; 0.22m deep; underlies (051001), overlies (051004).	Subsoil	-	-	Post medieval
	(051003)	Deposit	-	-	Yellow brown clay; occ. chalk; underlies (051004).	Geology	-	-	-
	(051004)	Deposit	-	-	Light brown silty clay; occ. chalk; 0.25m deep; underlies (051002), overlies (051003).	Subsoil	-	-	Post medieval
052	(052001)	Deposit	-	-	Dark brown silty clay; 0.29m deep; overlies (052002).	Topsoil	-	-	Modern
	(052002)	Deposit	-	-	Light yellow brown silty clay; 0.26m deep; underlies (052001), overlies (052003).	Subsoil	-	-	Post medieval
	(052003)	Deposit	-	-	Light yellow blue silty clay; occ. gravel; underlies (052002).	Geology	-	-	-
054	(054001)	Deposit	-	-	Dark grey brown clayey silt; 0.19m deep; overlies (054005).	Topsoil	-	-	Modern

Trench No	Context No	Type	F/B	F/O	Context Description	Interpretation	Finds	Sample No	Period
054	(054002)	Deposit	-	-	Light to mid brown silty clay; 0.09m deep; underlies (054001), overlies (054003).	Subsoil	-	-	Post medieval
	(054003)	Deposit	-	-	Light brown orange clay; underlies (054002).	Geology	-	-	-
	[054004]	Cut	(054005)	-	Linear shape in plan; N/S orientation; 0.75m wide; cut by plastic land drain, cuts (054002).	Cut of modern service trench	-	-	Modern
	(054005)	Fill	-	[054004]	Moderately compacted mixed blue grey & orange yellow silty clay; freq. sub-angular stones.	Fill of modern service trench [054004]	-	-	Modern
055	(055001)	Deposit	-	-	Dark brown clayey silt; 0.14m deep; overlies (055002).	Topsoil	-	-	Modern
	(055002)	Deposit	-	-	Light brown clayey silt; occ. gravel; 0.22m deep; underlies (055001), overlies (055003).	Subsoil	-	-	Post medieval
	(055003)	Deposit	-	-	Light yellow silty clay; occ. chalk; underlies (055002).	Geology	-	-	-
056	(056001)	Deposit	-	-	Dark grey brown silty clay; 0.29m deep; overlies (056002).	Topsoil	-	-	Modern
	(056002)	Deposit	-	-	Mid yellow brown silty clay; 0.3m deep; underlies (056001), overlies (056003).	Subsoil	-	-	Post medieval
	(056003)	Deposit	-	-	Light blue grey clay; underlies (056003).	Geology	-	-	-

18 Appendix 8: Finds Concordance

Context	Cut	Feature	Area	Trench	Slot	Pottery	Pottery		Animal Bone		CBM/ Daub		Flint		Fe		Stone		Shell		Other		Comments
No:	No:	Type		No:	No:	Date:	No:	(g)	No:	(g)	No:	(g)	No:	(g)	No:	(g)	No:	(g)	No:	(g)	No:	(g)	
001005	001004	ditch		Tr.1		LIA/MC1	1	1															
002006	002005	ditch		Tr.2		LIA/MC1	2	7															
005006	-	bioturbation		Tr.5																	2	80	glass x2 (onion bottle) post med
013007	013015	ditch		Tr.13		LIA/MC1	3	5	3	65													
013010	013008	ditch		Tr.13		LIA/MC1	1	6	5	6													
013011	013008	ditch		Tr.13		LIA/MC1	13	91	7	50													
013017	013005	ditch		Tr.13		LIA/MC1	8	85															
013020	013005	ditch		Tr.13		LIA/MC1	11	50	14	90													
013022	013021	ditch		Tr.13		LIA/MC1	3	8	2	7													
013025	013023	ditch		Tr.13	slot 1	LIA/MC1	4	6.5	12	39.5													inc. 1x charred? Bone frag
013030	013023	ditch		Tr.13	slot 2	LIA/MC1	1	5															
013031	013026	ditch		Tr.13	slot 2				9	8													
014006	-	ditch		Tr.14									1	7	1	1.8							Fe small perforated disc/ washer
014007	-	ditch		Tr.14		LIA/MC1	12	262															large pottery body sherds
028005	028004	ditch		Tr.28		?LC1	1	2															
032007	032006	ditch		Tr.32					12	23													
040004	040005	ditch		Tr. 40		2/3rd C	3	6	21	92											2	19	slag x2
040009				Tr.40					40	421													
040010	040009	ditch		Tr.40		2/3rdC	4	74															
044008	044007	linear		Tr.44					7	11													
																							Total (no.) / Total (g)
							67	608.5	132	812.5	0	0	1	7	1	1.8	0	0	0	0	4	99	205 / 1528.8

- Bioturbation

- Bioturbation

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