Archaeological Field Unit

Land at Butterfield Green, Luton, Bedfordshire: An Archaeological Evaluation

S Kenney

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Cambridgeshire County Council

Report No. 790

Commissioned by CPM on behalf of Easter Developments

Land at Butterfield Green, Luton, Bedfordshire: An Archaeological Evaluation (TL 1096/2506)

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SUMMARY

The Archaeological Field Unit of Cambridgeshire County Council has conducted a fieldwalking survey and an archaeological evaluation on 1.18ha of land at Butterfield Green, Luton, Bedfordshire (TL 1096/2506). This was in advance of a proposed industrial development.

The evaluation revealed Iron Age and undated features including several ditches of various sizes in six of the ten trenches. Postholes and a pit were also observed in Trench 5, while a single posthole was seen in Trench 2. One ditch in Trench 4 produced most of the pottery from the site, although sherds were recovered from a total of 8 contexts. All of the pottery recovered from features has been spot-dated to the early to middle Iron Age. Worked and burnt flint was also recovered from a number of features as well as the ploughsoil.

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1 INTRODUCTION

Between the 28th of January and 2nd of March 2005, a fieldwalking survey and an archaeological evaluation were undertaken by Cambridgeshire County Council Archaeological Field Unit (AFU) on a plot of land 1.18ha in area at Butterfield Green, Luton, Bedfordshire (TL 1096/2506) (Fig. 1). The work was commissioned by CPM on behalf of Easter Developments in response to a planning condition set by the archaeological advisor to the planning authority, and carried out in advance of a new industrial development.

The development site lies on the north-eastern edge of Luton, to the north of the A505. It is roughly rectangular in plan, approximately 1.18ha in area and has been under an agricultural regime until recently. The site of this evaluation comprises a single plot within a larger proposed development, and is located immediately to the north-west of a previous evaluation carried out by Pre-Construct Archaeology (PCA).

The presence of archaeological remains was considered likely by the BHES on the basis of information contained in the Luton Historic Environment Record (LHER). It records prehistoric and Roman remains at several find spots within the vicinity.

2 GEOLOGY AND TOPOGRAPHY

2.1 Geology

According to the British Geological Survey, Butterfield Green sits on the stratum known as Clay with Flints (BGS). During the evaluation, it was noted that there are numerous localised variations in the natural geology, including silty channels and patches of sand and gravels.

2.2 Topography

Butterfield Green lies on the north-eastern edge of Luton, at a height ranging from 168m OD in the southern part of the development area to 177m OD towards the north-western edge. The area of this evaluation lies at around 170-173m OD.

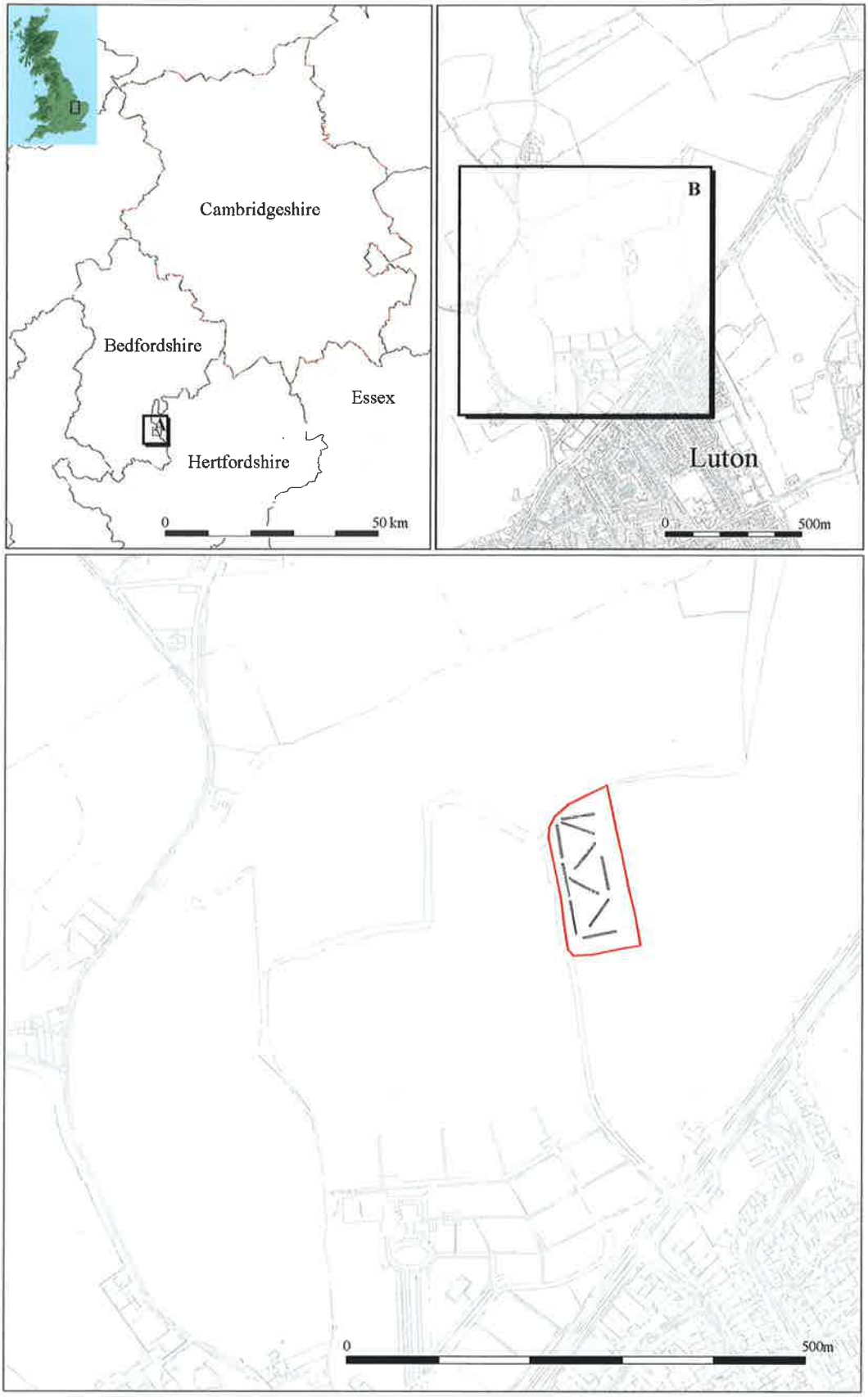

Figure 1 *Location of trenches with development area outlined in red*

3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

3.1 Introduction

The proposed development is located within an archaeologically sensitive area. Evidence of Prehistoric and Roman archaeology is known from the surroundings. Notably, both the Icknield Way and the Edeway prehistoric routeways run close to the north of the wider development area and a number of ritual and burial monuments of the prehistoric period are also known to lie within the local landscape.

The Luton Historic Environment Record identifies lithic find spots, as well as pottery and other stray finds within the wider development area (LHER 15528) and specifically the eastern field has evidence of Neolithic/Bronze Age lithic scatters (LHER 15847).

The density of field recovery of Romano-British pottery would suggest the possible presence of a settlement of this period within the immediate vicinity. Similarly the area is known for medieval activity and evidence of activity of this period may also reasonably be expected (LHER 12399).

3.2 Prehistoric

Fieldwalking has identified a Neolithic and Bronze Age flint scatter covering part of the area evaluated (LHER 15847). This is in the northern part of the field called the Innings. Towards the northwest side of the site is a scatter of mid to late Iron Age pottery (LHER 15528) that also includes Roman pottery and tile. It may indicate the position of a small settlement occupied from the Middle Iron Age to the Roman period. In the field immediately to the north of the site, and to the east of Whitehill Farm, fieldwalking has produced a scatter of flintwork of Mesolithic, Neolithic and Bronze Age date. Another scatter of Neolithic and Bronze Age flintwork was detected by fieldwalking, about 200m to the northwest of the site (LHER 15226). Large scatters of burnt flint have been found near Whitehill Farm and may denote prehistoric occupation.

The Icknield Way and the Edeway run to the northwest of the site. Dray's Ditches, an Iron Age linear earthwork, is also located in this area. Ritual and burial monuments of the earlier prehistoric period are present within the landscape around the site. A number of barrows or ring ditches are concentrated to the northwest of the site at Galley Hill, on the north and northwest facing slopes facing towards the Icknield Way. A Neolithic long barrow once existed to the west of Galley Hill, but was destroyed *c.*1900. Lynchets have been recorded to the northeast of the site, at Lilley, and to the southwest, on the edge of Luton.

3.3 Roman

As noted above, a small settlement occupied from the middle Iron Age to the Roman period may have given rise to the scatter of mid to late Iron Age pottery and Roman pottery and tile (LHER 15528).

3.4 Medieval

The name Luton is recorded in 914 in the Anglo-Saxon Chronicle as *Ligtun*, and appears in Domesday Book in 1086 as *Loitone*. By 1288, the modern spelling was in use. The name means 'Farm by the River Lea' (Mawer & Stenton 1926).

Typically, the medieval settlement pattern in this part of the Chilterns was dispersed and based on a series of greens. No greens lie within the site, but Butterfield Green (LHER 12399) abuts the western boundary of the wider development area. Occupation around the Green is likely from at least the 14th century and any buildings on its eastern side may lie within the wider site's western boundary. On the 1842 Tithe map a field called White Hill Piece is shown in this area and may have contained a number of building plots fronting onto this side of the Green. Earthworks were visible here until ploughing in the 1970s, which has brought medieval and later pottery to the surface. A probable site of medieval occupation (LHER 12401) lies about 200m to the south of the site at Swifts Green, on the A505 Hitchin Road.

The field on the south east side of the wider development area is called the Innings, which means enclosed land, and may indicate relatively early enclosure, and so relatively early field boundaries. The bank and ditch along the eastern side of this field may form part of an historic parish boundary. This would be classified as an important hedgerow under the Hedgerow Regulations 1997, on cultural criteria irrespective of ecological considerations.

Manor Farm is adjacent to the southwest corner of the wider development area (LHER 10816). It appears to have been the principal agricultural holding in the area, originating in the 12th century. By the late 15th century it was attached to Luton Manor. As noted above, a scatter of medieval pottery was found by fieldwalking about 200m to the north west of the site (LHER 15226).

3.5 Post-Medieval

The Thatched Cottage, 111 Butterfield Green Road, is a grade II listed building dating to the 17th century or earlier, and stands just to the south of the wider development area, near Manor Farm (LHER 10431). A dovecote is also present further to the south (LHER 12358).

During this period the site lay within the parish of Stopsley. There was no parliamentary enclosure within this parish and hence no enclosure map. The process of enclosure was carried on by mutual consent and largely complete by 1800. A Tithe map was drawn in 1842 that shows no buildings on the site, but does show a number of field boundaries that have since disappeared, and may well have derived from the medieval pattern of strip fields. Recently ploughed out earthworks near Whitehill Farm, which extend onto the north side of the site, correspond with field boundaries on the 1842 Tithe map (LHER 5474). They are likely therefore to originate in the enclosure period. About 200m to the south of the site there are other earthworks (LHER 3341).

3.6 Previous Archaeological Work

In 2004 a field evaluation was undertaken within the area designated for Phase 1A access road (Carew 2004). This investigation demonstrated that Mesolithic and Neolithic activity lay within the development area. Features of this date are significant as they are identified as a high research priority within the local research agendas (Brown & Glazebrook 2000).

4 METHODOLOGY

A geophysical survey was undertaken on the site prior to the fieldwalking phase. The report concludes that the survey did not identify any archaeological features (WYAS 2004). Fieldwalking was carried out using the line walking method with 20m spacing between lines and a stint length of 20m. The field was freshly ploughed and conditions for fieldwalking were less than ideal, therefore only moderate confidence could be placed in the results. At the same time, a metal detector survey was undertaken using the same grid. The fieldwalking and metal detector surveys did not identify any significant concentrations, beyond the expected background finds typical of this area. Using the results from geophysical survey and fieldwalking, a trenching scheme was devised that offered good general coverage, while affording the opportunity to test the geophysical results.

Ten trenches were opened by a JCB using a flat-bladed ditching bucket 1.6m wide, under the supervision of an archaeologist. No unforeseen difficulties were encountered and the trench layout conformed closely to that in the original proposed scheme. The total length of the trenches was 365m and constitutes a 5% sample of the development area. All potential features were tested by hand excavation.

Features were recorded using the AFU's single context recording system, while trenches were planned at a scale of 1:50 as single entities. Sections were drawn at 1:20 or 1:10. Photographs using monochrome, slide and colour print film were complemented by digital images. The trenches were tied in three-dimensionally to the Ordnance Survey using a Leica TST.

5 RESULTS

5.1 Trench 1

Trench 1 was 36m long and contained four ditches. 0.2-0.3m of dark brownish grey sandy silty clay topsoil overlay the upper fills of the features.

From the west, the features were as follows:

Ditch **6** was straight in plan within the trench and oriented N-S. The visible portion was 1.7m long, 0.5m wide and 0.28m deep. The sides were quite steeply sloping and slightly concave, merging smoothly into the concave base. The fill, 5, was a brown silty clay with frequent charcoal flecks and flints. No finds were recovered from the fill.

Ditch **8** was straight in plan within the trench and oriented NNW-SSE. The visible portion was 1.6m long, 0.75m wide and 0.21m deep. The sides were gently sloping and slightly concave, merging smoothly into the concave base. The fill, 7, was a brown silty clay with frequent flints. No finds were recovered from the fill.

Ditch **12** was straight in plan within the trench and oriented NNW-SSE. The visible portion was 1.6m long, 0.65m wide and 0.36m deep. The sides were steeply sloping and slightly concave, merging smoothly into the concave base. The fill, 11, was a pale olive brown sandy silty clay with frequent flints. No finds were recovered from the fill.

Ditch **14** was straight in plan within the trench and oriented NNW-SSE. The visible portion was 1.6m long, 2.0m wide and 0.24m deep. The sides were gently sloping and slightly concave, merging smoothly into the flat base. The fill, 13, was an olive brown silty clay with frequent flints. No finds were recovered from the fill.

5.2 Trench 2

Trench 2 was 37m long and contained a single posthole. 0.2-0.3m of dark brownish grey silty clay topsoil overlay the upper fills of the features.

Posthole **4** was subcircular in plan with almost vertical sides and a concave base. It measured 0.53m in diameter and 0.54m deep. The upper fill, 2, was a pale brownish grey silty clay with moderate flints. Lower fill 3 was a pale grey silty clay with moderate flints. No finds were recovered from either fill.

5.3 Trench 3

Trench 3 was 36m long and contained no archaeology. 0.2-0.3m of dark brownish grey sandy silty clay topsoil overlay the natural.

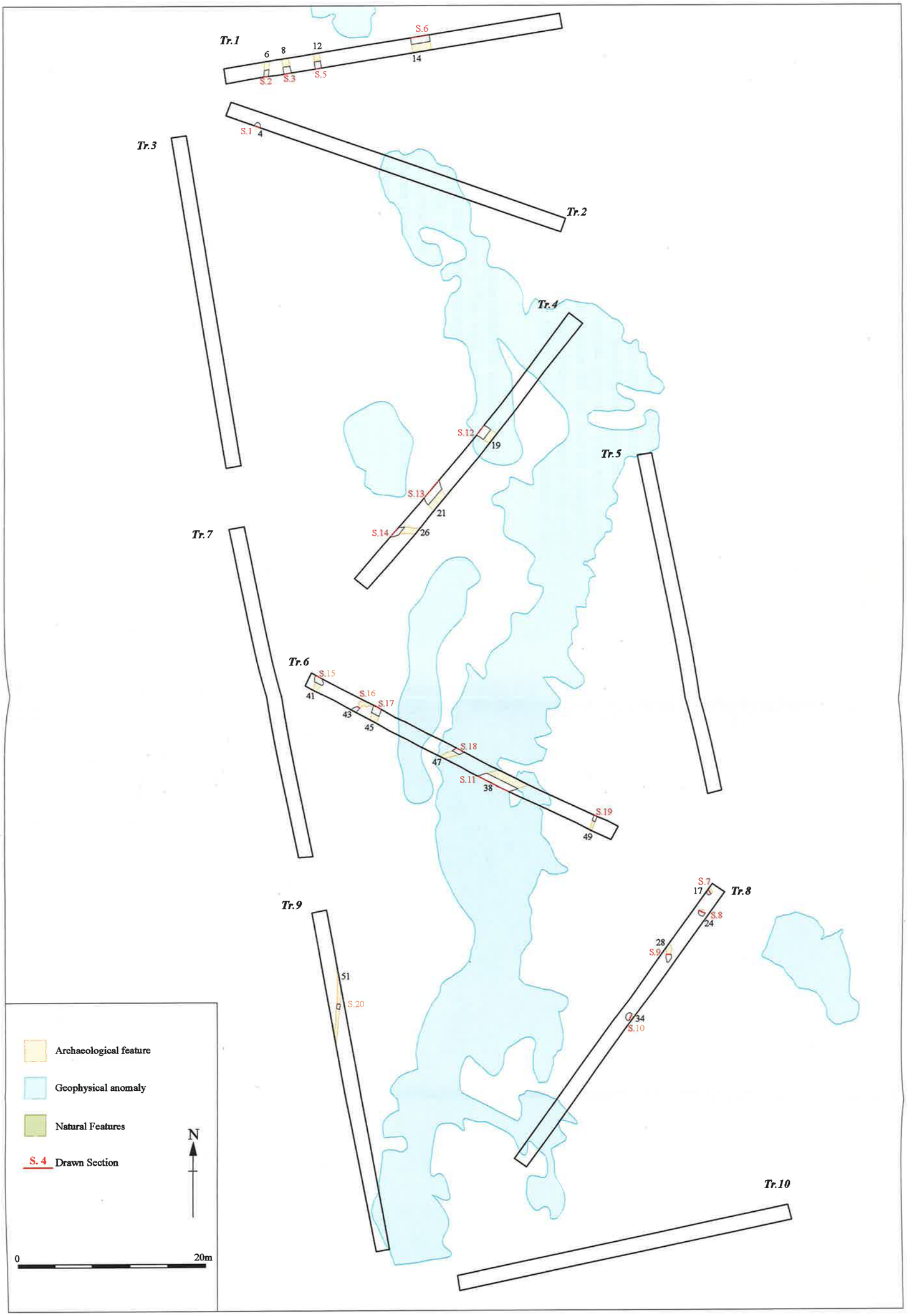

***Figure 2** Trench plans*

5.4 Trench 4

Trench 4 was 37m long and contained three ditches. 0.2-0.3m of dark brownish grey sandy silty clay topsoil overlay up to 0.2m of pale brownish grey silty clay subsoil. This in turn overlay the upper fills of the features.

From the north, the features were as follows:

Ditch **19** was straight in plan within the trench and oriented NW-SE. The visible portion was 1.7m long, 1.3m wide and 0.34m deep. The sides were quite steeply sloping and slightly concave, merging smoothly into the flat base. The fill, 18, was a pale brownish grey silty clay with occasional flints. Pottery spot-dated to the early to middle Iron Age was recovered from the fill.

Ditch **21** was fairly straight in plan within the trench and oriented NNW-SSE. The visible portion was 2.3m long, 2.1m wide and 0.6m deep. The sides were moderately steeply sloping and concave, merging smoothly into the concave base. Upper fill, 20, was a pale brownish grey silty clay with moderate charcoal flecks and occasional flints. Lower fill 52 was an orange-brown sandy silty clay containing moderate flints. Pottery spot-dated to the early to middle Iron Age was recovered from fill 20, as well as a quantity of burnt flint.

Ditch **26** was fairly straight in plan within the trench and oriented E-W. The visible portion was 3.1m long, 0.75m wide and 0.6m deep. The sides were quite steeply sloping and slightly concave, merging smoothly into the narrow flat base. Upper fill, 25, was a brownish grey silty clay with occasional charcoal flecks. Lower fill 53 was a yellowish brown sandy silty clay containing moderate flints. Pottery spot-dated to the early to middle Iron Age was recovered from fill 25.

5.5 Trench 5

Trench 5 was 37m long and contained no archaeology. 0.2-0.3m of dark brownish grey sandy silty clay topsoil overlay the natural.

5.6 Trench 6

Trench 6 was 36m long and contained six ditches. 0.2-0.3m of dark brownish grey sandy silty clay topsoil overlay up to 0.1m of pale brownish grey silty clay subsoil. This in turn overlay the upper fills of the features.

From the north, the features were as follows:

Ditch **41** was roughly straight in plan within the trench, but with irregular sides, and was oriented generally NNE-SSW. The visible portion was 1.7m long, 0.5-0.9m wide and 0.34m deep. The sides were quite steeply sloping and slightly concave, merging smoothly into the concave base. In particular, the eastern side was somewhat irregular, with a stepped profile. The fill, 40, was a

pale yellowish brown clay with occasional flints. No finds were recovered from the fill.

Ditch **43** was somewhat irregular in plan within the trench, with a general NE-SW trend. The visible portion was 2.2m long, 0.5m wide and 0.26m deep. The sides were quite steeply sloping and slightly concave, merging smoothly into the concave base. The fill, 42, was a pale yellowish brown silty clay with occasional charcoal flecks. No finds were recovered from the fill.

Ditch **45** was straight in plan within the trench and oriented NNE-SSW. The visible portion was 1.8m long, 0.85m wide and 0.2m deep. The sides were gently sloping and concave, merging smoothly into the concave base. The fill, 44, was a pale yellowish brown silty clay with occasional flints. No finds were recovered from the fill

Ditch **47** was straight in plan within the trench and oriented ENE-WSW. The visible portion was 2.5m long, 0.7m wide and 0.3m deep. The sides were gently sloping and slightly concave, merging smoothly into the flat base. The fill, 46, was a yellowish brown silty clay with occasional flints. Pottery spot-dated to the early to middle Iron Age was recovered from the fill.

Ditch **38** was straight in plan within the trench and oriented ENE-WSW. The visible portion was 4.0m long, 3.0m wide and 0.72m deep. The sides were quite steeply sloping and slightly concave, merging smoothly into the concave base. Upper fill, 37, was an orange brown silty clay with occasional flints. Lower fill 39 was a dark greyish brown silty clay with moderate flints and charcoal flecks. Pottery spot-dated to the early to middle Iron Age was recovered from fill 37.

Ditch **49** was straight in plan within the trench and oriented NNE-SSW. The visible portion was 1.8m long, 0.3m wide and 0.08m deep. The sides were gently sloping and concave, merging smoothly into the concave base. The fill, 48, was a pale greyish brown silty clay with occasional flints. No finds were recovered from the fill

5.7 Trench 7

Trench 7 was 36m long and contained no archaeology. 0.2-0.3m of dark brownish grey sandy silty clay topsoil overlay 0.1m of pale brownish grey silty clay subsoil. This in turn overlay the natural.

5.8 Trench 8

Trench 8 was 36m long and contained two postholes, a possible ditch and a pit. 0.2-0.3m of dark brownish grey sandy silty clay topsoil overlay up to 0.1m of pale brownish grey silty clay subsoil. This in turn overlay the upper fills of the features.

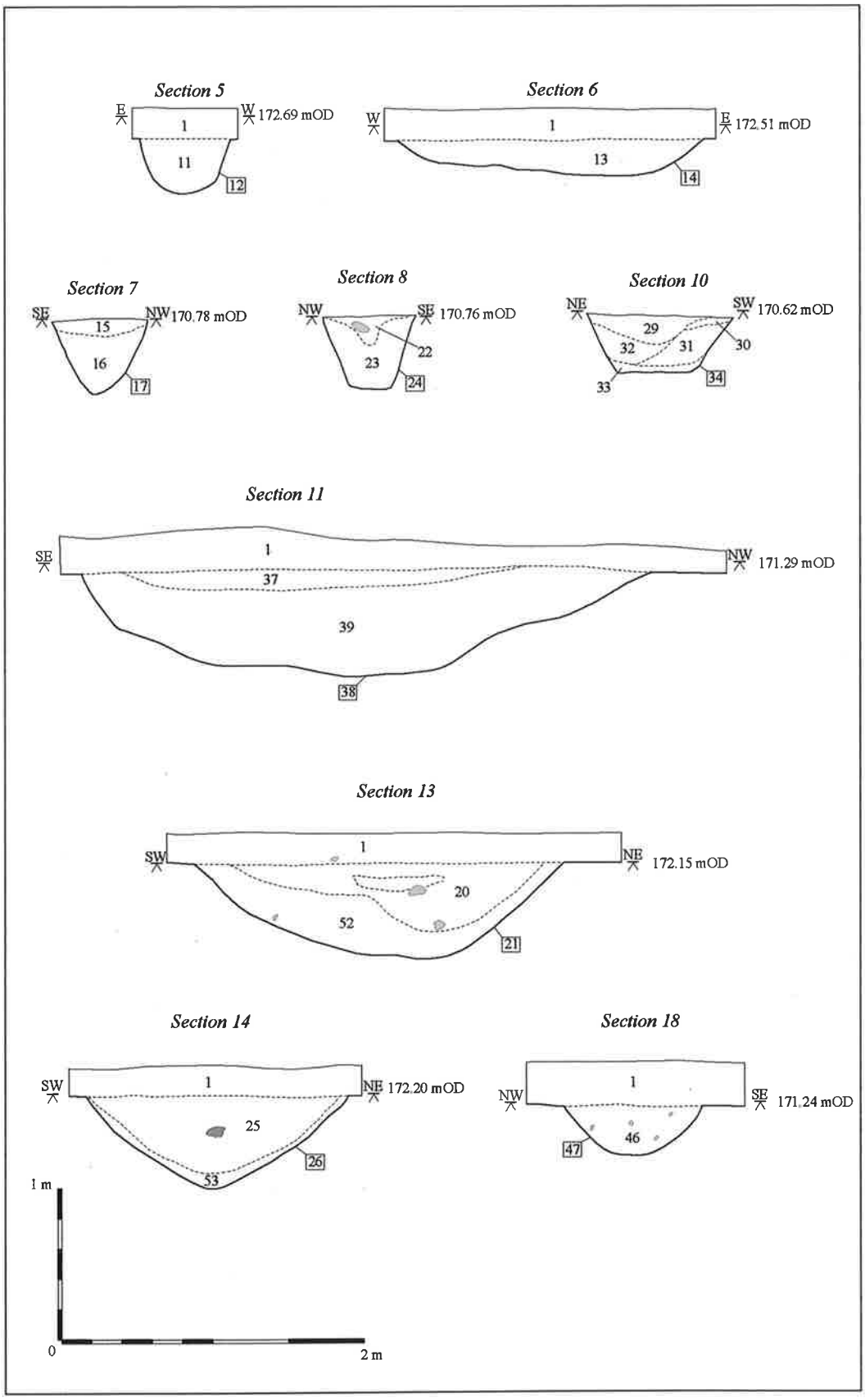

Figure 3 *Sections*

From the north, the features were as follows:

Posthole **17** was oval in plan with almost vertical sides and a flat base. It measured 0.65m x 0.6m in plan and 0.48m deep. Upper fill, 15, was a greyish brown silty clay with no significant inclusions. Lower fill, 16, was a pale brown silty clay containing no significant inclusions. No finds were recovered from the fill.

Posthole **24** was oval in plan with almost vertical sides and a flat base. It measured 0.6m x 0.55m in plan and 0.5m deep. Upper fill, 22, was a greyish brown silty clay with occasional flints. Lower fill, 23, was a pale brown silty clay containing occasional flints. No finds were recovered from either fill.

Ditch **28** was straight in plan within the trench, oriented N-S and terminating to the south. The visible portion was 1.9m long, 0.5m wide and 0.21m deep. The sides were quite steeply sloping and slightly concave, merging smoothly into the slightly concave base. The fill, 27, was a brown silty clay with frequent flints. No finds were recovered from the fill.

Pit **34** was oval in plan with steep, slightly concave sides breaking gently to a slightly concave base that sloped down from north to south. It measured 0.95m x 0.85m in plan and 0.38m deep. Upper fill, 29, was a greyish brown silty clay with moderate flints. Below this was 30, an orange silty clay containing no significant inclusions, and 32, a dark greyish brown silty clay with occasional charcoal and flints. Below both of these was 31, a greyish brown silty clay with occasional charcoal and flints. Below this was basal fill 33, a brownish orange silty clay with frequent flints. Fill 29 produced worked flint and Early to Middle Iron Age pottery, while fill 30 also produced worked flint.

5.9 Trench 9

Trench 9 was 37m long and contained a single ditch. 0.2-0.3m of dark brownish grey sandy silty clay topsoil overlay 0.1m of pale brownish grey silty clay subsoil. This in turn overlay the upper fill of the feature.

Ditch **51** was fairly straight in plan within the trench and oriented NNW-SSE. The visible portion was 9m long, 0.3m wide and 0.12m deep. The sides were quite gently sloping and slightly concave, merging smoothly into the concave base. The fill, 50, was a pale greyish brown silty clay with occasional flints. No finds were recovered from the fill.

5.10 Trench 10

Trench 10 was 37m long and contained no archaeology. 0.2-0.3m of dark brownish grey sandy silty clay topsoil overlay up to 0.3m of pale brownish grey silty clay subsoil. This in turn overlay the natural.

6 DISCUSSION

Although non-intrusive surveying techniques initially proved largely unhelpful in determining the location and extent of the archaeology, this evaluation has revealed a concentration of features dating to the early to middle Iron Age, running through Trenches 1,2,4,6,8 and 9. These features were mostly ditches, but also included four pits or postholes. When comparing the results of the evaluation to the geophysical plot, the conclusion could be drawn that the area of magnetic enhancement broadly corresponds to the location of the archaeological features. Further work in the vicinity may prove or disprove this hypothesis.

The relatively substantial depth of the supposed postholes may indicate that they are in fact small pits. The environmental evidence indicates cereal processing was taking place and adds weight to the hypothesis that an Iron Age settlement lies nearby. The ditches, while of varying widths and depths, may represent part of a field system adjacent to the settlement. Although no clear pattern emerges when they are viewed in plan, the ditches are probably part of a much more extensive system, as is common with settlements of this period.

In terms of finds, the site produced early to middle Iron Age pottery and both worked and burnt flint. This is the kind of assemblage that would usually indicate the presence of occupation nearby, however, no evidence of the classic Iron Age roundhouses or other clearly structural evidence was found during the evaluation. The unusual thing about the finds assemblage is that no bone was recovered, despite favourable soil conditions for preservation. This potentially indicates that a concentrated disposal site for this type of material lies elsewhere within, or adjacent to, the settlement. Although several of the features produced no datable finds whatsoever and therefore have not been securely dated, it is likely that they belong to the same period as the other features. There is some suggestion from the pottery assemblage that more than one phase of activity might be represented on the site, and this may be borne out by the variety of orientations that various ditches have.

7 CONCLUSIONS

This evaluation indicates that an occupation site of the early to middle Iron Age is likely to be close by. Given the known find spots in the surrounding and immediate areas, and taking into account the results of the neighbouring archaeological investigation, it is not surprising that this evaluation revealed archaeology of the prehistoric period. What is perhaps more surprising is the reasonable concordance between the magnetic anomalies recorded in the geophysical survey and the location of archaeological features within the evaluation trenches. These results suggest that geophysical survey may be a useful tool to indicate the location and extent of archaeology in any future work in the vicinity.

ACKNOWLEDGEMENTS

The author wishes to thank CPM for commissioning the work and Easter Developments for funding it. Particular thanks go to Sally Randell of CPM, and Stephen Macaulay for managing the project for the AFU. Thanks are also due to the specialists who contributed their knowledge-Jackie Wells of Albion Archaeology, Barry Bishop and Rachel Fosberry of the AFU. This project was carried out in response to a brief drawn up by the Bedfordshire Historic Environment Section and the work was monitored by Lesley-Ann Mather.

BIBLIOGRAPHY

Brown, N., and Glazebrook, J., (eds.) 2000. *Research and Archaeology: A Framework for the Eastern Counties 1. research agenda and strategy.* EAA Occasional Papers 8

Carew, T, 2004. *An Archaeological Evaluation at Butterfield Green, Luton, Bedfordshire*, Pre-Construct Archaeology Report

Mawer, A, & Stenton, FM, 1926. *The Place-Names of Bedfordshire and Huntingdonshire*, English Place-Name Society No 3, Cambridge

WYAS 2004. *Land at Butterfield Green Near Luton Bedfordshire, Geophysical Survey*, WYAS Report No 1320

Cartographic Sources

Ordnance Survey digital maps 2005. TL 1024, 1025, 1124, 1125

APPENDIX 1
Ceramic Finds
By Jackie Wells

Introduction

A small ceramic assemblage, comprising pottery, roof tile and miscellaneous fired clay fragments, was recorded (Table A1.1).

Context	Spotdate*	Pottery	Other Finds
01	Post-medieval	5:62	Flat roof tile (53g)
16	Early to middle Iron Age	2:20	-
18	Early to middle Iron Age	4:8	-
20	Early to middle Iron Age	178:914	Fired clay (54g)
23	Early to middle Iron Age	3:18	-
25	Early to middle Iron Age	19:88	Fired clay (5g)
29	Early to middle Iron Age	4:11	-
37	Early to middle Iron Age	18:88	-
46	Early to middle Iron Age	24:27	-
	Total	**257:1236**	

* spotdate based on date of latest artefact in context

Table A1.1: Ceramic finds by context (sherd count:weight in g).

Pottery

Two hundred and fifty-seven pottery sherds, weighing 1.2kg were recovered. These were examined by context and quantified using minimum sherd count and weight. Sherds are generally abraded and small (average sherd weight 5g), with few vessels represented by more than a single sherd. Ten fabric types were identified using common names and type codes in accordance with the Bedfordshire Ceramic Type Series (Table A1.2).

Fabric Type	Common Name	Total Sherd No.	Context/Sherd No.
Type F01B	Fine flint	**2**	(20):1, (37):1
Type F03	Grog and sand	**52**	(01):2, (20):33, (25):17
Type F04	Organic	**1**	(16):1
Type F17	Grog	**4**	(29):4
Type F19	Sand and organic	**78**	(18):1, (20):71, (37):6
Type F28	Fine sand	**20**	(20):18, (23):2
Type F29	Coarse sand	**49**	(20):49
Type F35	Fine micaceous	**48**	(01):2, (16):1, (18):3, (20):6, (23):1, (37):11, (46):24
Type F	Non-specific Iron Age	**2**	(25):2
UNID	Unidentified	**1**	(01):1

Table A1.2: Pottery fabric types and contexts

The pottery is broadly datable to the early to middle Iron Age period (*c.* 650-350 BC). Diagnostic forms are poorly represented, and their absence precludes more accurate dating of the assemblage. Two examples of simple upright rounded rims and a single flattened, slightly everted rim occur. A fragment of a flat base and two small shoulder sherds were also noted. The pottery is generally undecorated, although several sherds are burnished. A possible finger tip impression was noted on a sherd from 20.

A notable exception are four sherds with heavy scoring, a surface treatment characteristic of the middle Iron Age, recovered from 37. They derive from a single vessel, and their presence suggests a definite later element to the assemblage.

Fabric types are predominantly sand tempered, reflecting the influence of local geology upon pottery manufacture. All sherds are hand-made and generally well fired. Vessel wall thicknesses range between 3-13mm, with thin-walled vessels generally occurring in finer fabric types (F28 and F35).

A hard fired, wheel-thrown sand tempered rim sherd of probable late medieval/post-medieval date was recovered from 01.

Roof tile

Four fragments of flat roof tile (53g) in a hard fired, oxidised, sand tempered fabric were recovered from 01. They range in thickness between 11-13mm and are datable to the late medieval/post-medieval period.

Fired clay

Fired clay comprises five amorphous, abraded fragments, weighing 59g. All occur in a fine sand tempered fabric, and have oxidised surfaces and reduced cores. One fragment recovered from 20 bears a possible thin wattle impression.

APPENDIX 2
Lithic Assessment
By Barry John Bishop

Introduction

Fieldwalking and an Archaeological Evaluation project at the above site recovered 29 struck flints and 830g of burnt flint fragments.

This report quantifies the material by context according to a basic technological/typological scheme (see Table A2.1), assesses its ability to contribute to further understanding of the nature and chronology of the activities identified during the project, and recommends any further work required.

No statistically based technological, typological or metrical analyses were attempted and a more detailed examination may alter or amend any of the interpretations offered here.

Quantification

Context	Grid ref.	Preparation/mass reduction Flake	Irregular Flake	Rejuvenation flake	Potentially useable flake	Core	Concoidal Shatter	Retouched	Burnt No	Burnt (Wt:g)	Stone (No.)	Stone (wt.:g)	Comments
01	-		1	1	3								
01	A2					1							
01	B1	2											
01	C2				1								
01	H3							1					Possible irreg. scraper
20		5	1		3		4		1	5	4	245	Some flakes from same nodule?
23								1					Edge trimmed on right dorsal
29		1	1										
30		1											
37								1					Edge trimmed on right ventral
46		1							14	825	1	90	

Table A2.1: Quantification of Lithic Material by Context

Burnt Flint

Burnt flint weighing 830g was recovered, virtually all from context 46. This assemblage was composed of large fragments, often over 100g in weight, which had been intensely burnt to a uniform grey/white colour. It was apparent that large

nodules, similar to those used for the struck material (see below), had been selected and deliberately burnt, typical of 'pot-boilers' rather than incidentally burnt flint from simple hearth use. 'Potboilers' are associated with the systematic production of burnt flint and often equated with cooking processes, although it was unclear if the hot flints had been actually immersed in water or used for dry-heating. Many other possible uses for deliberately burnt flint have also been suggested, including for uses in saunas or industrial processes (eg Barfield and Hodder 1987; Barfield 1991). One of the pieces, weighing 220g, exhibited a few indications of pre-burning concoidal fracture and although too damaged to be confident, may have represented a single platform core. The small quantity from context 20 most probably represents general 'background' waste from simple hearth-use.

Struck Flint

Raw Material

The raw materials used consisted of medium to fine grained, opaque or semi-opaque grey/black flint, typical of that from the local Chilterns chalk. Many pieces displayed a thick, unrolled but weathered chalky cortex of variable thickness, as well as evidence of pre-knapping thermal shattering and occasional battering to nodular protuberances. The thermal and mechanical damage displayed by the material was suggestive of an origin within superficial (eg mass weathered) deposits found close to parent chalk (Gibbard 1986). Most of the flakes produced were relatively small, rarely exceeding 50mm in maximum dimension, but the presence of some flakes up to 110mm in dimension demonstrate that at least some reasonably large nodules were available.

Condition

Most of the struck flints from the sealed contexts were in a good, sharp condition, suggesting that they had experienced only minor post-depositional damage or movement, and a few of the flakes from context 20 were possibly from the same nodule and suggests that knapping may have been occurring close by, although in general there was little to suggest *in situ* knapping associated with the features.

The material from the fieldwalking (context 01) was noticeable more chipped and abraded, as would be consistent with having spent longer in the unstable topsoil environment.

Technology

No typologically diagnostic pieces were present and much of the assemblage consisted of chronologically undiagnostic preparation flakes and concoidal shatter. Nevertheless, consideration of the technological attributes of the material suggests it was chronologically mixed. A few pieces, including some of the pieces from the sealed features, were rather short and thick but a few had evidence of striking platform/core face angle trimming and parallel dorsal scars, indicating they may have been the product of a blade-based reduction strategy characteristic of Mesolithic or Early Neolithic industries. A rejuvenation flake consisting of a 67mm-long blade struck from the bottom of the core, probably to re-align and 'flatten' the core face was recovered from context 01 would also be characteristic of Mesolithic or Early Neolithic industries.

Most of the flakes, as well as an irregularly reduced multi-platformed core recovered during the fieldwalking, appeared to be the product or a cruder, more opportunistic reduction strategy. The flakes tending to be thicker and squatter, with wide, simple or cortical striking platforms and which, although there are too-few pieces to be confident, appeared more characteristic of Bronze Age industries.

Overall, the preponderance of decortication flakes and concoidal shatter would suggest that the assemblage represents the waste from the preliminary dressing of nodules, presumably with useful flakes and cores removed for use elsewhere, although two very similar retouched pieces, from contexts 25 and 37, were present. These consisted of flakes with slightly concave moderate scalar retouch on their lateral margins, possibly either for blunting or to provide a simple concave scraper edge.

Stone

Six fragments of non-flint stone were recovered. Two of these, from contexts 20 and 46 consisted of hard, red siliceous sandstone, typical of pieces from the Bunter Pebble Beds. The Bunter Beds are found in the Midlands but remnants from them have been moved as far south as the Thames Valley by glacial action, and are commonly found in the local glacial tills. The shapes of both were reminiscent of saddle quern fragments, but no traces of grinding or definite evidence of deliberate shaping were observed, and as this type of sandstone naturally fractures into a tabular shapes, their status as artefacts must remain in doubt. The other stone fragments, all from context 20, consisted of three fragments of similar, but more-friable, sandstone, which may have been burnt. None of these pieces appeared to have been deliberately altered in order to be used as grinding stones, although they could have been used for other purposes, such as for post-packing or hearth construction.

Discussion

The burnt flint from context 46 suggested the possibility that it represented the residues from food processing or other activities similar to those that lead to the formation of burnt mound sites, although the quantities here would be more consistent with small-scale domestic type activities than any 'industrial' processes.

The struck assemblage was largely undiagnostic although its limited technological attributes would suggest that it was not the product of a single industry. Some pieces may have represented the waste from blade or narrow flake production, typical of industries dateable to the Mesolithic or Early Neolithic, although others were more typical of Bronze Age industries. It predominantly comprised knapping waste indicating tool manufacture rather than use, although two possible concave scrapers of similar morphology were present. The limited quantity of struck flint so far recovered would suggest any activities involving flint tool manufacture or use were of limited duration.

These findings are consistent with the lithic material found at the adjacent site, which suggested the presence of Mesolithic or Early Neolithic flintworking activities of probable short duration (Bishop 2004).

Recommendations

Due to its size and paucity of chronologically diagnostic artefacts, this report is all that is required of the material for the purposes of the archive and no further analytical work is proposed. Nevertheless, the lithic assemblage is of some significance in that it provides further evidence for prehistoric activity in the area. It is therefore recommended that a short description of the assemblage, preferably including illustrations of the more technologically diagnostic pieces, should be included in any published account of the fieldwork.

Bibliography

Barfield, L and Hodder, M 1987. *Burnt Mounds as Saunas, and the Prehistory of Bathing,* Antiquity 61 (231), 370-379.

Barfield, L H 1991. *Hot Stones: hot food or hot baths?* In M. A. Hodder and L. H. Barfield, Eds., *Burnt Mounds and Hot Stone Technology: papers from the 2nd International Burnt Mound Conference, Sandwell, 12-14 October 1990*, 59 – 67. Sandwell Metropolitan Borough Council. Sandwell.

Bishop, B.J. 2004. *An Archaeological Field Evaluation at Butterfield Green, Luton, Bedfordshire. Site Code: FBUT 04. Lithic Assessment.* Unpublished Pre-Construct Archaeology Manuscript.

Gibbard, P.L. 1986. *Flint Gravels in the Quaternary of Southeast England.* In: G. De C. Sieveking and M.B. Hart (Eds) *The Scientific Study of Flint and Chert*, 141-149. Cambridge University Press. Cambridge.

APPENDIX 3
Environmental Assessment
By Rachel Fosberry

Introduction and methods

Four samples were taken from across the evaluated area and were submitted for an initial appraisal. 10 litres of each sample were processed by bucket flotation for the recovery of charred plant remains, dating evidence and any other artefactual evidence that might be present. The flot was collected in a 0.5mm nylon mesh and the residue was washed through a 1mm sieve. Both flot and residue were allowed to air dry. Any artefacts present were noted and reintegrated with the hand-excavated finds. The flot was examined under a binocular microscope at x16 magnification.

Results

Sample 1, Context 20
Moderate quantity of charcoal
1 x *Triticum spelta* glume base
1x *Phleum* sp
1 x *Prunella* sp
1x *Chenopodium* sp
possible bean fragment
few pieces of pottery recovered from residue

Sample 2, Context 37
1 possible *Brassica* seed
1 possible *Cerastium* sp seed

Sample 3, Context 29
2 wheat grains
1 x *Chenopodium*
2 x unid seeds

Sample 4, Context 23
2 x *Chenopodium* sp.
2 x *Stellaria* sp
Occasional flecks of charcoal

Preservation is by charring and is generally good. Charcoal fragments are present in most samples in varying quantities

Conclusions and recommendations

The assemblage appears to represent plant remains from local vegetation with scant evidence of agricultural activity. Glume bases indicate some cereal processing on site, but apparently not in close proximity to the features sampled. The charred weed seeds may well have been originally associated with the crops when harvested. The low density of charred plant macrofossils in this assemblage precludes the identification of any specific activity that may be associated with the features sampled.

APPENDIX 4
Context data

Context Number	Trench	Feature	Type	Description
1	All		Layer	Dark brownish grey sandy silty clay topsoil
2	2	4	Fill	Pale brownish grey silty clay with moderate flints
3	2	4	Fill	Pale grey silty clay with moderate flints
4	2	4	Pit	Subcircular, almost vertical sides and a concave base, 0.53m dia. x 0.54m deep
5	1	6	Fill	Brown silty clay with frequent charcoal flecks and flints
6	1	6	Ditch	Rounded V profile, straight in plan, 1.7m+ long x 0.75m wide x 0.28m deep
7	1	8	Fill	Brown silty clay with frequent flints
8	1	8	Ditch	Wide rounded V profile, straight in plan, 1.6m+ long x 0.75m wide x 0.21m deep
9				Not used
10				Not used
11	1	12	Fill	Pale olive brown slity clay with frequent flints
12	1	12	Ditch	Rounded U profile, straight in plan, 1.6m+ long x 0.65m wide x 0.36m deep
13	1	14	Fill	Olive brown silty clay with frequent flints
14	1	14	Ditch	Wide shallow U profile, straight in plan, 1.6m+ long x 2.0m wide x 0.24m deep
15	8	17	Fill	Greyish brown silty clay
16	8	17	Fill	Pale brown silty clay
17	8	17	Posthole	Oval, almost vertical sides and a flat base, 0.65m x 0.6m x 0.48m deep
18	4	19	Fill	Pale brownish grey silty clay with occasional flints
19	4	19	Ditch	Wide flat-based V profile, straight in plan, 1.7m+ long x 1.3m wide x 0.34m deep
20	4	21	Fill	Pale brownish grey silty clay with moderate charcoal flecks and occasional flints
21	4	21	Ditch	Wide rounded V profile, straight in plan, 2.3m+ long x 2.1m wide x 0.6m deep
22	8	24	Fill	Greyish brown silty clay with occasional flints
23	8	24	Fill	Pale brown silty clay with occasional flints
24	8	24	Posthole	Oval, almost vertical sides and a flat base, 0.6m x 0.55m x 0.5m deep
25	4	26	Fill	Brownish grey silty clay with occasional charcoal flecks
26	4	26	Ditch	Wide rounded V profile, straight in plan, 3.1m+ long x 0.75m wide x 0.6m deep
27	8	28	Fill	Brown silty clay with frequent flints
28	8	28	Ditch	Rounded V profile, straight in plan, 1.9m+ long x 0.5m wide x 0.28m deep
29	8	34	Fill	Greyish brown silty clay with moderate flints
30	8	34	Fill	Orange silty clay
31	8	34	Fill	Greyish brown silty clay with occasional charcoal and flints
32	8	34	Fill	Dark greyish brown silty clay with occasional charcoal and flints
33	8	34	Fill	Brownish orange silty clay with frequent flints
34	8	34	Pit	Oval, steep sides and a slightly concave base, 0.95m x 0.85m x 0.38m deep
35				Not used
36				Not used
37	6	38	Fill	Orange brown silty clay with occasional flints
38	6	38	Ditch	Wide rounded V profile, straight in plan, 4.0m+ long x 3.0m wide x 0.72m deep
39	6	38	Fill	Dark greyish brown silty clay with moderate flints and charcoal flecks
40	6	41	Fill	Pale yellowish brown clay with occasional flints
41	6	41	Ditch	Irregular profile, fairly straight in plan, 1.7m+ long x 0.5-0.9m wide x 0.34m deep
42	6	43	Fill	Pale yellowish brown silty clay with occasional charcoal flecks
43	6	43	Ditch	Rounded V profile, irregular in plan, 2.2m+ long x 0.5m wide x 0.26m deep
44	6	45	Fill	Pale yellowish brown silty clay with occasional flints
45	6	45	Ditch	Wide shallow rounded profile, straight in plan, 1.8m+ long x 0.85m wide x 0.2m deep
46	6	47	Fill	Yellowish brown silty clay with occasional flints
47	6	47	Ditch	Wide flat-based V profile, straight in plan, 2.5m+ long x 0.7m wide x 0.3m deep
48	6	49	Fill	Pale greyish brown silty clay with occasional flints
49	6	49	Ditch	Wide shallow rounded profile, straight in plan, 1.8m+ long x 0.3m wide x 0.08m deep
50	9	51	Fill	Pale greyish brown silty clay with occasional flints
51	9	51	Ditch	Wide rounded V profile, straight in plan, 9.0m+ long x 0.3m wide x 0.12m deep
52	4	21	Fill	Orange-brown sandy silty clay with moderate flints
53	4	26	Fill	Yellowish brown sandy silty clay with moderate flints
54	4, 6-10		Layer	Pale brownish grey silty clay subsoil

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