Northamptonshire Archaeology

Archaeological excavation at Shefford Lower School, Shefford, Bedfordshire January 2012

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QUALITY CONTROL

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OASIS REPORT FORM 119883

PROJECT DETAILS		
Project name	Archaeological excavation at Shefford Lower School, Shefford, Bedfordshire	
Short description (250 words maximum)	A small archaeological excavation was undertaken at Shefford Lower School prior to the proposed construction of an extension of the current main school building. The only feature exposed was a late Roman ditch, which produced a small assemblage of pottery and roof tile. The rest of the site was disturbed by modern drains and the building of the present school buildings.	
Project type (eg DBA, evaluation etc)	Excavation	
Site status (none, NT, SAM etc)	Sensitive area of extensive Roman settlement	
Previous work (SMR numbers etc)	Evaluation, Excavation	
Current Land use	School play/seating area	
Future work (yes, no, unknown)	No	
Monument type/ period	Roman ditch	
Significant finds (artefact type and period)	Roman pottery	
PROJECT LOCATION		
County	Bedfordshire	
Site address (including postcode)	Shefford Lower School, Ampthill Road, Shefford	
Study area (sq.m or ha)	c 78sqm	
OS Easting & Northing (use grid sq. letter code)	TL 1377 3873	
Height OD	45m aOD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology	
Project brief originator	Central Bedfordshire`s Archaeological team CBC 2011	
Project Design originator	NA	
Director/Supervisor	Christopher Jones	
Project Manager	Anthony Maull	
Sponsor or funding body	Porter Consulting and Management Services	
PROJECT DATE		
Start date	10/01/12	
End date	11/01/12	
ARCHIVES	**Location (Accession no.)**	**Content (eg pottery, animal bone etc)**
Physical	BEDFM. 2011. 90	Pottery, tile
Paper		Site file, plans, section
Digital		Mapinfo plans, Word report
BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report (NA report)	
Title	Archaeological excavation at Shefford Lower School, Shefford, Bedfordshire	
Serial title & volume	12/ 04	
Author(s)	Christopher Jones	
Page numbers	11	
Date	23/02/12	

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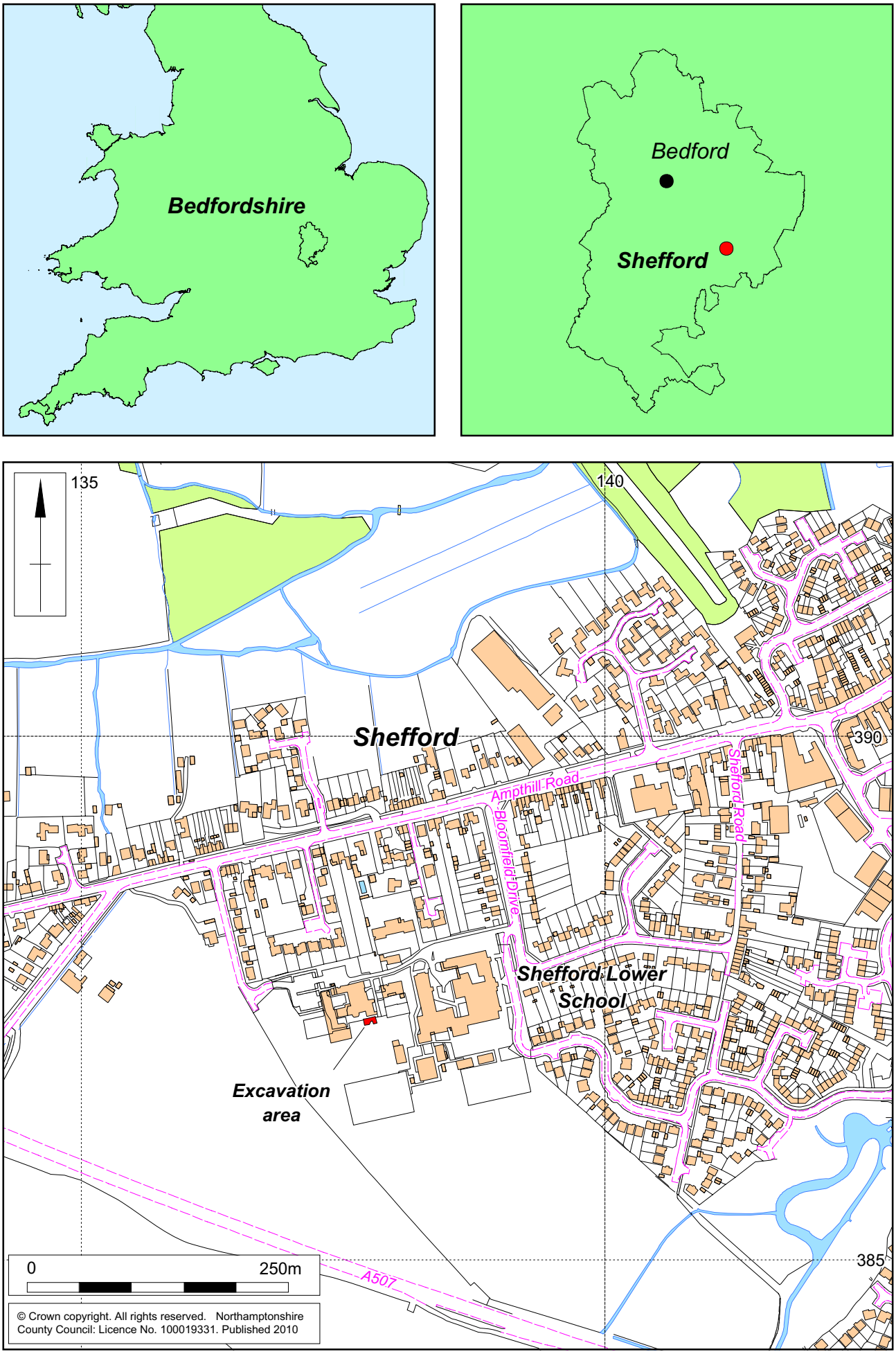


Scale 1:5,000

Site Location Fig 1

ARCHAEOLOGICAL EXCAVATION AT

SHEFFORD LOWER SCHOOL, SHEFFORD, BEDFORDSHIRE

JANUARY 2012

ACCESSION NO. BEDFM 2011. 90

Abstract

A small archaeological excavation was undertaken by Northamptonshire Archaeology at Shefford Lower School prior to the proposed construction of an extension of the current main school building. The only feature exposed was a late Roman ditch, which produced a small assemblage of pottery and roof tile. The rest of the site was disturbed by modern drains and the building of the present school buildings.

1 INTRODUCTION

In January 2012, an archaeological excavation was carried out by Northamptonshire Archaeology (NA) at Shefford Lower School, Shefford, Bedfordshire (TL 1377 3873; Fig 1). Central Bedfordshire Council (CBC) have been granted planning permission (CB/11/03350/FULL) for construction of a classroom extension to the rear of Shefford Lower School. The work was commissioned by Porter Consulting and Management Services (PCMS), in advance of the proposed extension to the main school building.

The site lies within an area of significant archaeological interest and sensitivity, subsequent a programme of archaeological excavation within the footprint of the proposed building was implemented following consultation with the Central Bedfordshire Archaeologist.

The excavation was carried out to the requirements of the brief for archaeological excavation issued by CBC (2011) and the specification prepared by NA (2011). This report considers evidence from both the evaluation and excavation stages.

The specific aims of the project were to:

- establish the date, nature and extent of activity or occupation within the development site;
- establish the relationship of any remains found to the surrounding contemporary landscapes;
- recover palaeo-environmental remains to determine local environmental conditions

The national framework for research is set out by English Heritage (EH 1997). The broad research frameworks for the eastern counties of England are set out by Brown and Glazebrook (2000).

The site had the potential to add to our knowledge of:

- Origins of the Roman settlement at Shefford, its nature, change overtime and quality of its survival;
- Roman building types (ie substantial farm or ‘villa’, and materials – (Dawson in Oake 2007, 73);
- Iron Age – Roman transition (Medlycott 2011,31) and Romanisation (Medlycott 2011, 47);
- Associated burial space and rites of burial, changes in form of disposal of the deceased;
- The wider questions concerning the mechanism of the Roman economy on

a small scale, including; trade links and economic production (Brown and Glazebrook 2000, 31).

The project was to address the research aims and make reference to the following documents, as appropriate:

- *Research and Archaeology, A Framework for the Eastern Counties: 1, Resource Assessment* (Glazebrook 1997)
- *Research and Archaeology, A Framework for the Eastern Counties: 2, Research Agenda and Strategy* (Brown and Glazebrook 2000)
- *Standards for Field Archaeology in the East of England* (Gurney 2003)
- *Bedfordshire Archaeology, Research and Archaeology: Resource Assessment, Research Agenda and Strategy* (Oake *et al* 2007)
- *Research and Archaeology Revisited: a revised framework for the East of England* (Medlycott 2011)

This report complies with the framework for archaeological reports set out in Appendix 7 of *Management of Archaeological Projects 2* (EH 1991).

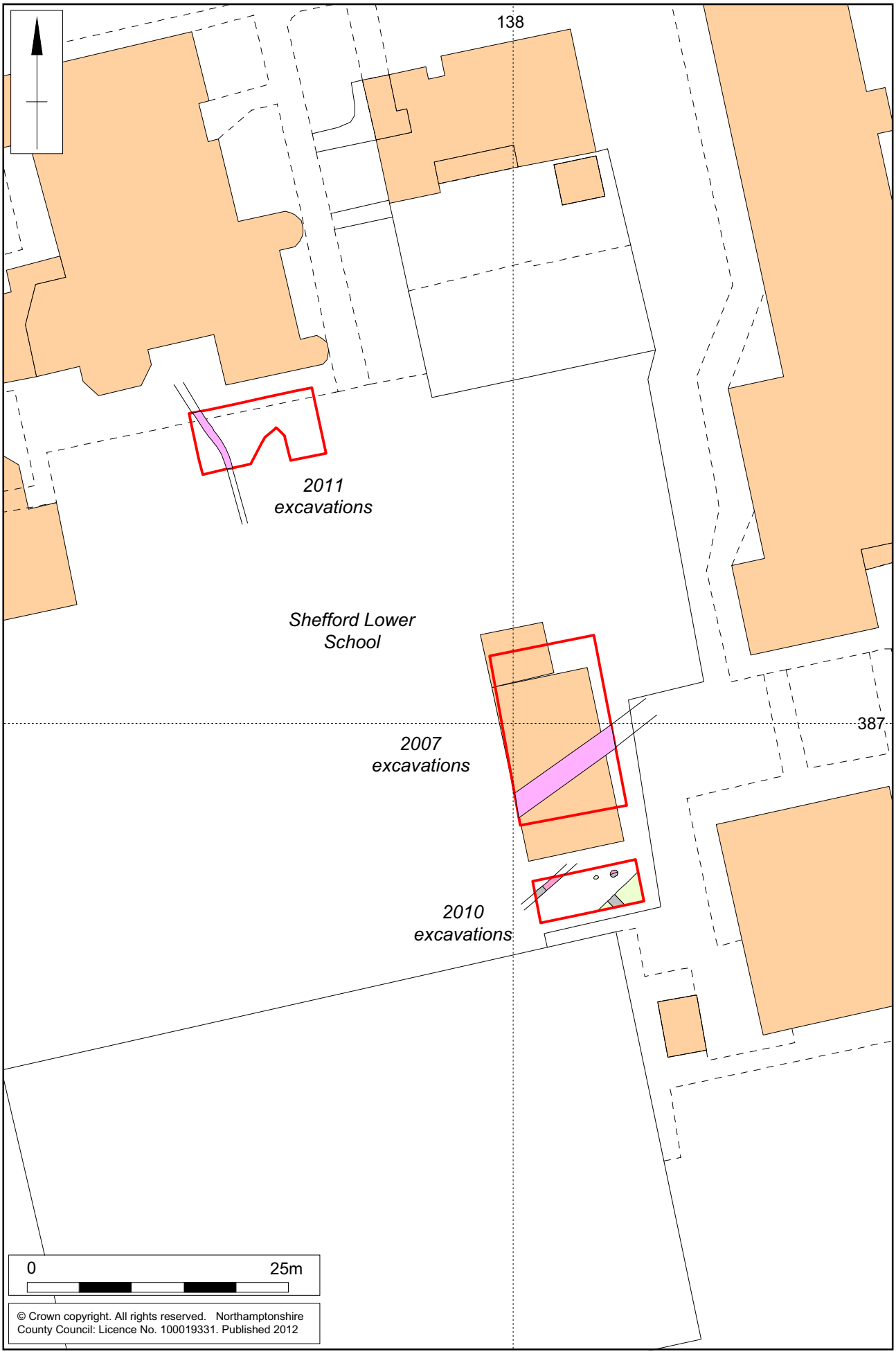
2 BACKGROUND

2.1 Topography and geology

The proposed development site lies to the west of the small town of Shefford, south of Ampthill Road. It is located within the grounds of Shefford Lower School to the rear of the main school building. In its wider setting, the site is located close to the western margins of the town, between the A507 and Ampthill Road, on the north-facing slope of an east to west ridge that lies between the River Flit to the north and a small tributary stream to the south.

The site is currently used as a play/seating area just to the south of the main school building. There is a single tree inside the area as well as a manhole cover. This is not marked on service information for the site and is likely to be a drain or soak away.

The underlying geology is Lower Greensand with superficial deposits of Boulder Clay; alluvium and gravel deposited by the River Flit occur to the north of Ampthill Road (BGS 1996). The soils are of the Evesham 3 (411c) soil association, comprising slowly permeable calcareous clayey and fine loamy over clayey soils (SSEW 1983). The site lies at c 45m aOD.



Scale 1:500

Previous archaeological investigations amd development area Fig 2

2.2 Historical and archaeological background

A desk-based study of sites listed in the Historic Environment Record was undertaken prior to the excavation (Walker 2011). A number of sites are located in the vicinity dating from the prehistoric to modern periods (Fig 2).

Evidence for the Roman period is well represented, especially within the immediate confines of the school and its surrounding area. The proposed development site is situated within an archaeologically sensitive area which has been subject to archaeological investigation since the early 19th century, when Thomas Inskip, a local antiquarian, located a Roman cremation cemetery in the area now occupied by Shefford Lower and Middle Schools. The finds included a wide range of artifacts, including high quality pottery, glass vessels and coins. Subsequent investigations identified a rectangular stone building, initially described as a temple. During the building of the school in 1940s, the 'temple' was re-interpreted as a probable villa building with a hypocaust (Simco 1984).

Between 1993 and 2005 the area has been subject to various archaeological investigations (Albion 2001, 2003 and 2005; Archaeological Solutions 2003; BCAS 1993, 2000a, b and c). One of the earliest features was a large ditched enclosure which was probably created during the late Iron Age period just prior to the conquest, but which persisted into the early 1st to early 2nd centuries. A possible internal, east-west aligned sub-division was also observed. An aisled building was constructed within the enclosure in the same location as one of the earlier domestic foci with a cobbled yard to the east. There were also a number of smaller, post-built buildings. A later enclosure was probably created in the 4th century, although little evidence of domestic activity has yet been found. Ditches forming the southern limit of the settlement have been found to the south-east (Carlyle 2007 and Flavell 2010).

The site appears to lie outside the most densely occupied part of the enclosure, although several domestic foci have been identified within 50m dating from the late Iron Age to the 2nd/3rd centuries AD.

3 EXCAVATION METHODOLOGY

The footprint of the proposed area was excavated using a JCB fitted with a 1.8m wide toothless ditching bucket. The area measured 13m by 6m (*c* 78sqm in total). The topsoil and subsoil were removed under archaeological supervision to reveal significant archaeological remains or, where these were absent, the natural substrate. The topsoil and subsoil were stacked separately at the side of the excavated area. All procedures complied with Northamptonshire County Council Health and Safety provisions and Northamptonshire Archaeology Health and Safety at Work Guidelines.

The excavated area was cleaned sufficiently to define any features and the features were then excavated by hand to determine their date and character. The excavated area and spoil heaps were scanned with a metal detector to ensure maximum finds retrieval.

All archaeological deposits encountered during the course of the excavation were fully recorded, following standard NA procedures (NA 2006). All archaeological features and deposits were given a separate context number in a sequence continuing from those allocated during the evaluation. They were described on *pro-forma* context sheets to include details of the context, its relationships and interpretation. Artefacts and ecofacts were collected by hand and retained, receiving appropriate care prior to removal from site (Watkinson and Neal 1998). Unstratified animal bones and modern material were not retained.

The site was planned at a scale of 1:50 and the location of the trench was surveyed and related to the Ordnance Survey National Grid. Sections or profiles through

features were drawn at a scale of 1:10 or 1:20, as appropriate, and related to Ordnance Datum. A full photographic record comprising both 35mm black and white negatives and colour transparencies was maintained, supplemented with digital images. The field data, including that from the evaluation, has been compiled into a site archive with appropriate cross-referencing.

Monitoring of the programme of fieldwork was carried out by Central Bedfordshire Archaeologist. All works were conducted in accordance with the *Standard and guidance for archaeological field excavation* (IfA1994, revised 2008) and the *Code of Conduct* of the Institute for Archaeologists (1985, revised 2010). In addition, all works complied with the guidelines detailed in *Standards for Field Archaeology in the East of England* (Gurney 2003).

4 EXCAVATION RESULTS

The building footprint was 13m long and 6m wide (Fig 3).

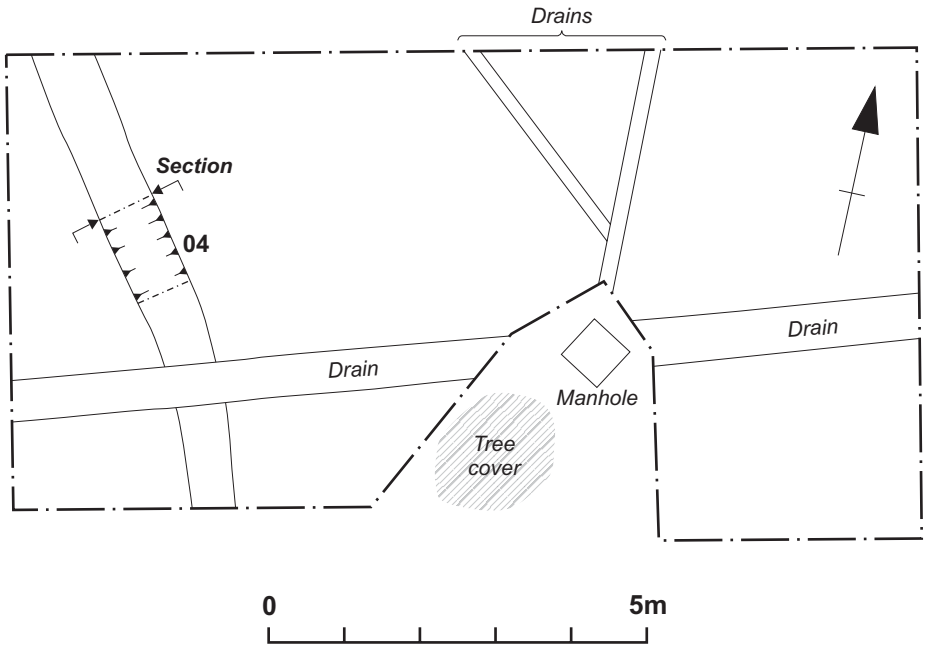
The natural substrate (03) was glacial till (Boulder Clay), a light to mid brownish-yellow clay, containing shattered flint nodules and chalk flecks. It occurred at approximately 0.50m below the present ground level. Slight differentiations in the natural were noticed across the site due to the modern disturbance of drains.

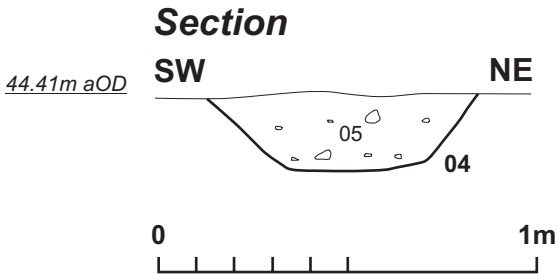
The subsoil (02) was 0.20m thick and consisted of light brown sandy clay mixed with modern brick and plastic.

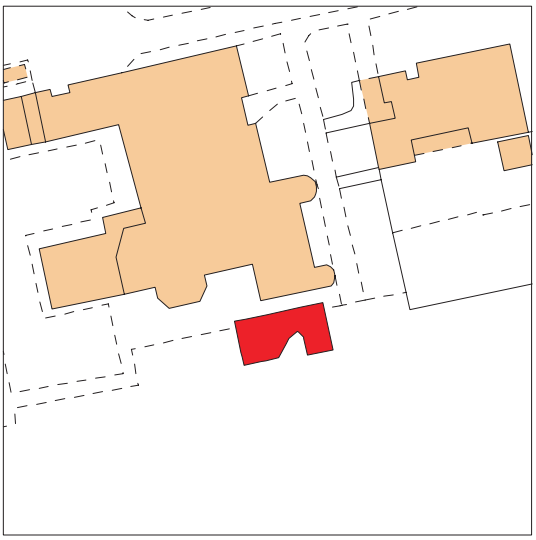
The topsoil (01) was approximately 0.30m thick and consisted of dark brownish clay loam mixed with modern debris.

A ditch [04], aligned north-west to south-east, crossed the western end of the area, cutting the natural (Fig 3). The ditch was 0.70m wide by 0.20m deep, with a steep-sided U-shaped profile. The fill (05) was compacted dark brown clay with frequent limestone flecks and occasional pieces of gravel. Roman pottery and Roman ceramic roof tile were also recovered from this deposit. The presence of pottery dated to the late 2nd-4th centuries indicates that the ditch was open in the late Roman period.

The Roman ditch was cut on its southern edge by a modern slot for a land drain.







Scales, Plan 1:100, Section 1:20 (A4)

Fig 3

5 FINDS AND ENVIRONMENTAL EVIDENCE

5.1 The pottery by Tora Hylton

The fieldwork produced 17 sherds of pottery (Table 1) with a combined weight of 335g. The entire assemblage was recovered from the fill of ditch [04]. The overall condition of the pottery is good, resulting in a relatively high average sherd weight of 19.7g. Where possible the pottery has been assigned codes relating to the Bedfordshire Type Series (cf Parminter and Slowikowski 2004, 442ff).

This small assemblage comprises mainly undiagnostic body sherds in locally produced coarsewares. The earliest form is a rim sherd from a jar with lid-seating, a form which dates to the late 1st-2nd century. Other forms are represented, but these appear to be of 2nd-4th century date. They include a base sherd in a gritty blackware fabric (R07), presumably from a shallow dish. The base is ornamented with a burnished line motif, it displays similarities to those seen on Black-burnished ware forms. In addition, there is a deep-sided flanged bowl in greyware (R06), the latter, a form which dates to the late 2nd-4th centuries.

Table 1: Quantification of the Roman pottery

Fabric (Beds fabric code)	Number	Weight (g)
Greyware (R06)	9	210
Gritty blackware (R07)	3	90
Orange sand-tempered ware (R05)	5	35

5.2 The ceramic tile by Pat Chapman

Fill (05) of ditch [04] contained 17 roof tile sherds, weighing 3833g. Fourteen sherds are made from hard fine sandy orange to brown with some tiny grog and gravel and occasional larger angular flint temper, the *Grog and sand* fabric of the Bedfordshire Ceramic Type Series and three sherds are made from sandy orange to brown *Blue-grey-cored sandy* fabric and similar to those excavated from the aisled building south of Ampthill Road (Wells 2010, 343 appendix 2).

There are three *tegula* sherds, two with bodies 18-20mm thick, with flanges 15-18mm thick rising to 40-50mm high, the third sherd is just a flange fragment. The two flanges correspond to types 3 and 8 (Wells 2010, 306-9, figure 16). One *tegula* is stained black, as is one body sherd, both made from the *Blue-grey-cored sandy* fabric. Two other sherds have the groove that lies in front of the flange and are 20-22mm thick. A body sherd, 21mm thick, is most likely also *tegula*.

Ten sherds are from *imbrex* tiles. Six are 15mm thick with narrow and wide curves, depending upon which end of the tile they came from, as they often taper, and the sherds have the shallow distinctive finger grooves running along the top of the tile. Another sherd is unusually thin, only 10m thick. Three other *imbrex* sherds are 20mm thick with a broad curve, perhaps coming from ridge tiles.

These sherds are a reasonable size, up to 170mm by 120mm, and show few signs of abrasion, suggesting that they are fairly close to their point of origin, and most likely are associated with the aisled building and settlement close by.

5.3 **The charred plant remains** by Val Fryer

A single soil sample for the retrieval of the plant macrofossil assemblage was taken from fill [05] within ditch [04].

The sample was bulk floated by NA and the flot was collected in a 300 micron mesh sieve. The dried flot was scanned under a binocular microscope at magnifications up to x 16 and the plant macrofossils and other remains noted are listed in Table 2. Nomenclature within the table follows Stace (1997). All plant remains were charred. Modern seeds and fibrous roots were also recorded, with the latter forming a major component within the assemblage.

Table 2: Charred plant macrofossils and other remains

Sample No.	**1**
Context No.	**05**
Feature No.	**04**
Feature type	**Ditch**
Date	**R/B**
Plant macrofossils	
Hordeum sp. (grain)	xcf
Triticum sp. (grains)	x
Cereal indet. (grains)	xx
Large Poaceae indet.	x
Charcoal <2mm	xxxx
Charcoal >2mm	xxx
Charcoal >5mm	x
Other remains	
Black tarry material	x
Small coal frags.	x
Small mammal/amphibian bones	xpmc
Vitreous material	x
Sample volume (litres)	**40**
Volume of flot (litres)	**<0.1**
% flot sorted	**100%**

Key to Table
x = 1 – 10 specimens xx = 11 = 50 specimens xxx = 51 – 100 specimens
xxxx = 100+ specimens
cf = compare pmc = possible modern contaminant R/B = Romano-British

Results
Grains of wheat (*Triticum* sp.) and possibly barley (*Hordeum* sp.) were recorded along with a small number of indeterminate larger grass (Poaceae) fruits. However, preservation was very poor; most grains were puffed and distorted, probably as a result of combustion at very high temperatures, and a high percentage of the cereals could not be closely identified. Charcoal/charred wood fragments, including some larger pieces, were abundant.

Other remains were scarce, comprising fragments of black tarry residue, small pieces of coal and a vitreous globule. The assemblage also contained a moderate density of shells of common terrestrial molluscs (not tabulated). These appeared to indicate that the ditch was partially shaded, slightly damp at its base and was situated within an area of open, short-turfed grassland. However, it should be noted that the assemblage also contained a large number of shells of the burrowing snail *Cecilioides acicula*. The disturbance caused by this burrowing activity could have resulted in a high level of intrusivity by other, later molluscan remains.

Conclusions and recommendations for further work

In summary, the assemblage is small and very limited in composition. However, it is tentatively suggested that the predominance of grain and absence of chaff may indicate material derived from a domestic context, possibly in the form of hearth or midden waste. Primary deposition within the ditch fill is probably not indicated, and it is considered far more likely that the remains are derived from scattered refuse, which was accidentally incorporated within the feature fill.

As the assemblage does not contain a sufficient density of material for quantification (ie 100+ specimens), no further analysis is recommended.

6 DISCUSSION

A length of a Romano-British ditch, possibly a field or enclosure boundary ditch was recorded during the excavation, situated within the large enclosure ditch. A quantity of Roman pottery and ceramic roof tile was recovered, suggesting that the ditch is possibly near to the main area of settlement associated with Roman buildings and a cemetery and building to the north, known from previous excavations. The pottery from the ditch indicates a late Roman date, with the ditch open in the 3rd century AD and perhaps even into the 4th century AD.

There was considerable modern disturbance within the excavation area and it is possible more ephemeral features had been destroyed.

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Maps

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APPENDIX 1: CONTEXT INVENTORY

Building footprint	**Length, width & alignment**	**NGR**	**Surface height**	**Depth & height of natural**
	13m x 6m	**TL 1377 3873**	**44.91m aOD**	**0.50m, 44.41m aOD**
Context	***Context type***	***Description***	***Dimensions***	***Artefacts/Samples***
01	Topsoil	Dark brown clay loam mixed with modern debris	0.30m thick	
02	Subsoil	Light brown sandy clay with modern brick and plastic	0.20m thick	
03	Natural	Light to mid brown-yellow clay with shattered flint and chalk	_	
04	Ditch	Aligned NW-SE, steep U-shaped profile	0.70m wide and 0.20m deep	
05	Fill of [04]	Compact dark brown clay with limestone flecks	0.20m thick	Roman pottery and ceramic roof tile

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