SUFFOLK ARCHAEOLOGY

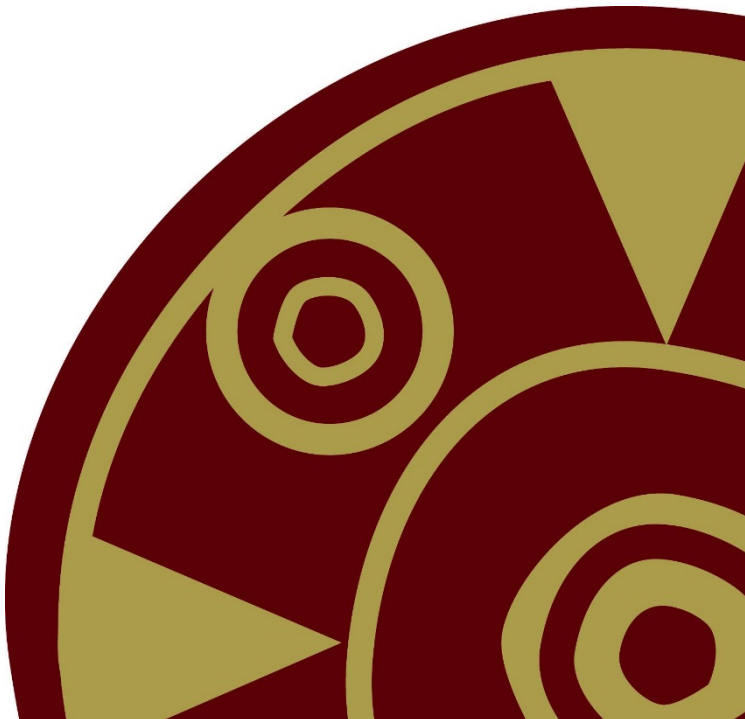
• A HISTORY OF EXPERTISE •

West Row Primary School,
Mildenhall, Suffolk

Client:
Concertus Design & Property Consultants Ltd

Date:
July 2015

MNL 745
Archaeological Evaluation Report
SACIC Report No. 2015/050
Author: John Craven



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MNL 745

Archaeological Evaluation Report

SACIC Report No. 2015/050

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HER Information

Site Code:	**MNL 745**
Event No:	**ESF23130**
Site Name:	**West Row Primary School**
Report Number	**2015/050**
Planning Application No:	**Pre-planning**
Date of Fieldwork:	**09/07/2015**
Grid Reference:	**TL 6722 7612**
Oasis Reference:	**216435**
Curatorial Officer:	**Judith Plouviez (Suffolk County Council Archaeological Service)**
Project Officer:	**John Craven**
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Digital report submitted to Archaeological Data Service:
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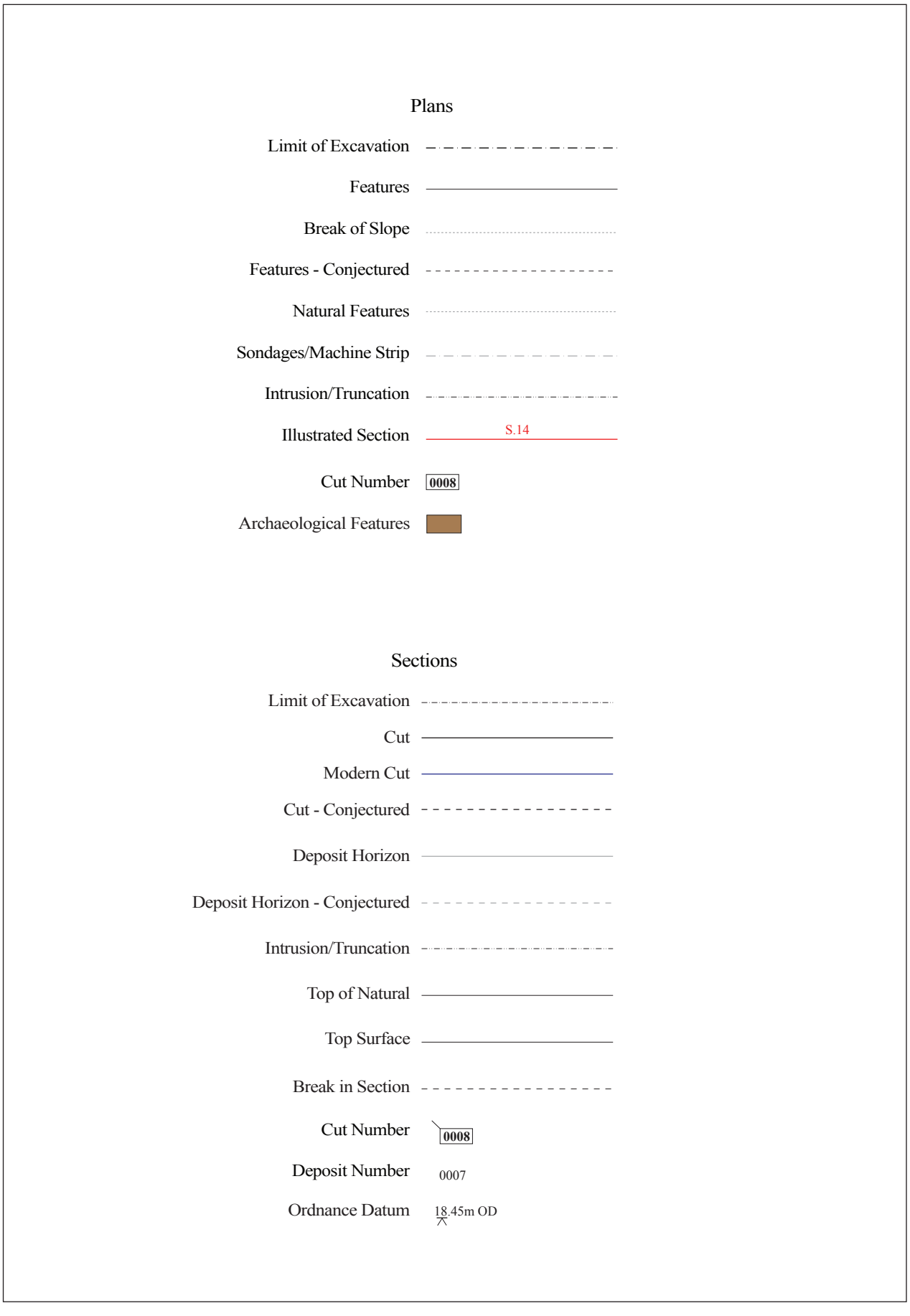
Summary

An archaeological evaluation was carried out on a part of the playing field at West Row Primary School, Mildenhall, Suffolk, in advance of a planning application for a new double classroom unit.

The evaluation trench has added to the evidence seen in previous projects at the school and neighbouring properties identifying two ditches and a pit of Roman date. Of these one ditch forms a substantial boundary and, in conjunction with previous results, appears to mark the western edge of the Roman settlement area which is known to underlie much of the school site and neighbouring properties.

Drawing Conventions



1. Introduction

An evaluation to assess the archaeological potential of land at West Row Primary School, Mildenhall, Suffolk (Fig. 1) was carried out in advance of a proposed planning application for a school in accordance with paragraph 141 of the National Planning Policy Framework. The evaluation was requested by the archaeological advisor to the local planning authority, Judith Plouviez of Suffolk County Council Archaeological Service Conservation Team (SCCAS/CT), and detailed in a Brief (dated 09/06/2015). The project was commissioned by Concertus Design and Property Consultants on behalf of the developer Suffolk County Council.

The proposed development for a temporary double classroom unit sited on foundation pads lies in a part of the playing field at West Row Primary School and consists of an area measuring 19 by 9m, aligned east to west. The school lies in the settlement of West Row in the parish of Mildenhall at the junction of Beeches Road and The Green (Fig. 1).

The evaluation was required as the proposed development lies in an area of archaeological importance, as defined in the Suffolk Historic Environment Record (HER), within the dense band of prehistoric and Roman activity that exists along the edge of the fens. Accordingly an assessment of the site was required to determine whether the development would have any detrimental impact upon any existing archaeological or palaeoenvironmental deposits.

2. Geology and topography

The site lies on an area of broadly level ground at a height of *c.*6m AOD, *c.*1.3km to the north of the River Lark and overlooking the fen-edge to the west and north.

There is no superficial geology recorded for the site, whilst the bedrock is recorded as Zig Zag chalk formation (British Geological Survey website).

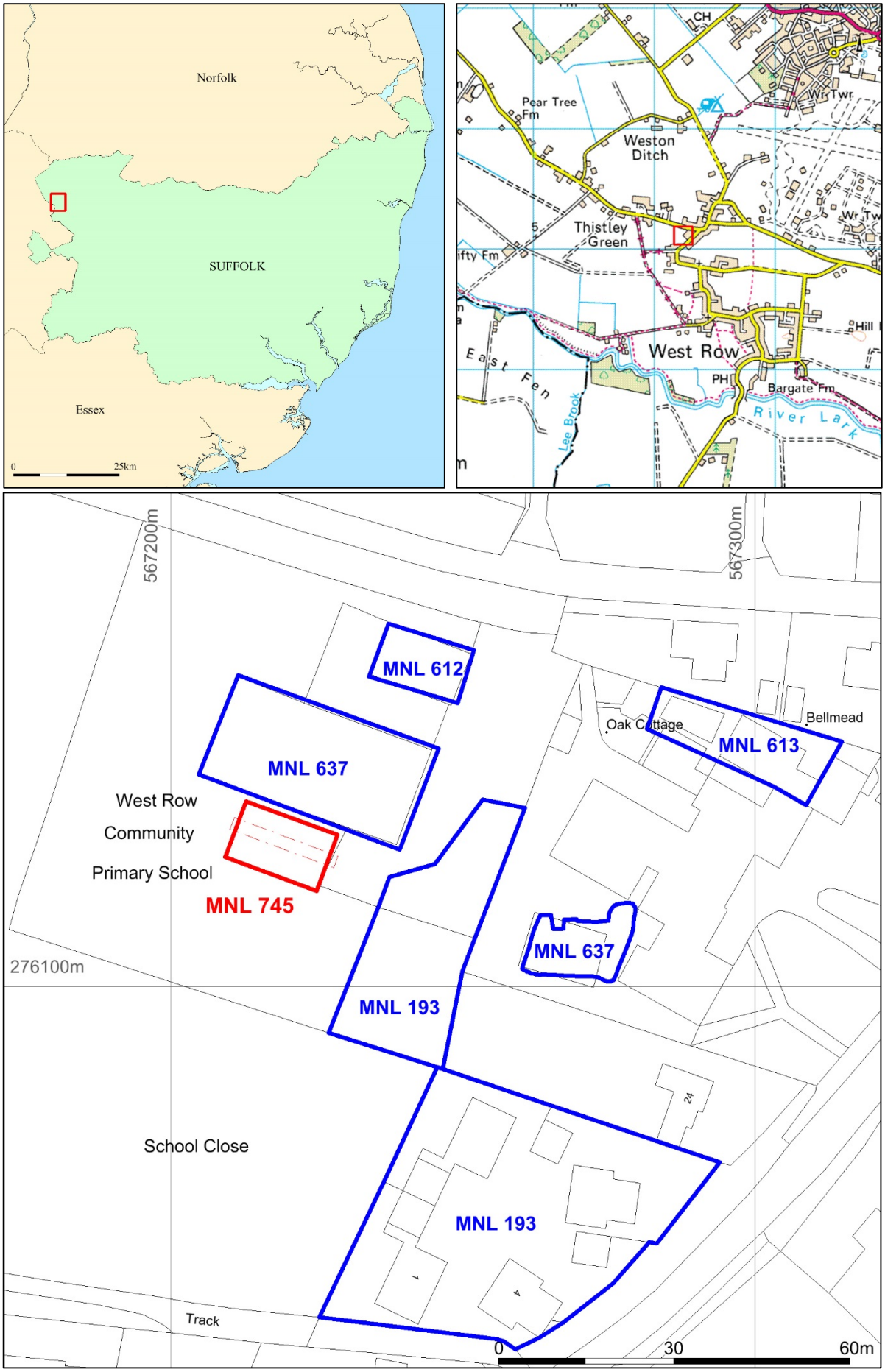


Figure 1. Location map showing site (red) and selected local HER entries (blue)

3. Archaeology and historical background

As described above the site lies within the dense band of prehistoric and Roman activity that exists along the edge of the fens and the main evidence for past activity in the area relates to the Roman period. A dense spread of Roman occupation lies c.500m to the north, centered around the site of a Roman villa (Suffolk HER Ref No. MNL 064) and the findspot of the late 4th century Mildenhall Treasure (MNL 231).

Several programs of archaeological work have previously taken place within and immediately adjacent to the school grounds (Fig. 1). Evaluation and excavation in advance of the construction of a pre-school building, 30m to the north of the proposed classroom identified a series of ditches, two pits and a posthole (MNL 612, Muldowney 2010). Although most of the finds were Roman, the ditches which are parallel to the present road are likely to be medieval or later in date. Further evaluation and monitoring on the north side of the school identified another ditch that was probably a continuation of a feature from MNL 612 (MNL 613, Muldowney 2009).

Evaluation and excavation works ahead of a building extension and new playground (MNL 637, Craven 2010, Brooks & Tester 2011) revealed well preserved and intensive use of the eastern part of the school grounds throughout the Roman period, indicated by a large quarry pit, a surviving soil layer and a range of pits and small linear features. This project suggests that a domestic structure of some importance is likely to have been located close to or on the school site but also established a potential western boundary for the Roman settlement within the eastern part of the playing field, with a defined absence of archaeological features in the western part of the playground area trench.

Fieldwalking has identified a large scatter of Roman pottery and flue tile 50m to the south-west of the school buildings (MNL 193) and a subsequent evaluation and excavation at School Close identified fairly dense Roman ditches and finds, as well as a post-medieval chalk quarry pit and ditch (Gill, 2001). A pond and four test pits were also monitored as MNL 193 within the school, south-west of the school building and north-west of School Close. This work was carried out voluntarily by Roger Pigerham. Whilst some of the deposits recorded were mixed with post-medieval material, a probable ditch was excavated and found to contain 4th century pottery and animal bone

(predominantly cattle, with evidence for butchery) in substantial quantities, as well as roof, floor or wall tiles and decorated plaster. The ditch was thought to represent an enclosure, whilst the CBM is evidence of a nearby building, possibly of timber construction incorporating tiles and plaster (Plouviez, pers. comm.).

There is little evidence of activity in the vicinity in the post-Roman period, although the settlement of West Row presumably has medieval/post-medieval origins. In addition to the medieval or later ditches at MNL 612 evidence of post-medieval settlement has been identified at at several locations and there are several listed buildings of post-medieval date within the settlement.

4. Methodology

A single trench, measuring 18m in total length and 2.1m wide was excavated along the length of the proposed development site by a mechanical excavator equipped with a toothless ditching bucket, under the supervision of an archaeologist.

The trench was excavated to the top of the undisturbed natural subsoil or archaeological levels. This involved the removal of a thin modern topsoil and an underlying subsoil deposit. Where required the trench was cleaned, and potential features investigated, by hand. This comprised of 1m sections across the two observed ditches. The trench and spoilheap were scanned and metal-detected for artefactual material. An environmental bulk sample was taken from one feature.

A single continuous numbering system was used to record all layers, features and other deposits on SACIC *pro forma* sheets. Trench data was entered onto separate SACIC *pro-forma* sheets and photographic, drawing and soil sample registers were maintained. Site data has been input onto an MS Access database, labelled with the HER site code.

The trench position was located by hand in relation to planning points laid out using an RTK GPS. A hand drawn plan of the trench was made at a scale of 1:50, and feature or trench sections at 1:20, on an A3 *pro-forma* pregridded permatrace sheet. Site levels were recorded by dumpy level in relation to the RTK GPS planning points. Digital colour photographs were taken of all stages of the fieldwork, and are included in the digital archive. All site drawings have been scanned and are included in the digital archive.

An OASIS form (Appendix 6) has been completed for the project (Reference No.216435) and a digital copy of the report has been submitted for inclusion on the Archaeology Data Service database (http://ads.ahds.ac.uk/catalogue/library/greylit).

The site archive is kept in the main store of Suffolk County Council Archaeological Service at Bury St Edmunds under Suffolk HER No. MNL 745.

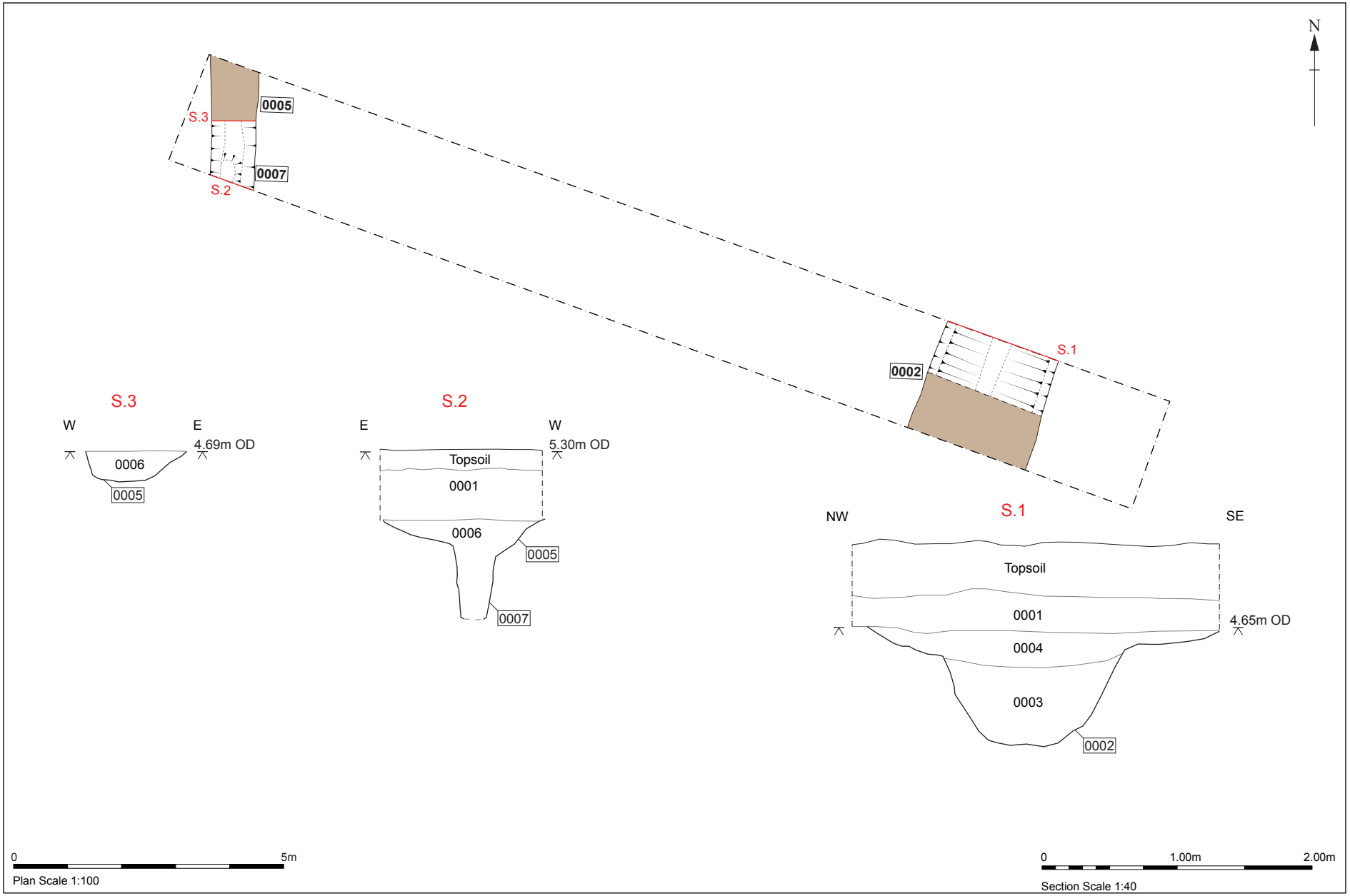


Figure 2. Trench plan and sections

5. Results

5.1. Introduction

Trench 01 was excavated to a depth of 0.5m to 0.55m deep and showed a consistent soil profile throughout with a thin topsoil, *c.*0.15m thick, overlying a subsoil, 0001, of mid/dark grey/brown dense silt/sand with frequent chalk flecks and fragments. The interface between topsoil and subsoil was diffuse suggesting that 0001 was, prior to the creation of the playing field, a ploughsoil deposit. 0001 in turn overlaid the natural chalk geology which had a slightly broken/weathered surface. The geological surface was broadly flat but had occasional shallow small hollows infilled with subsoil. There was no indication of any modern disturbance or truncation below the level of the topsoil throughout the trench.

A small quantity of material was collected during the machining from layer 0001, consisting of five sherds of pottery, three fragments of Ceramic Building Material (CBM) and stone, four pieces of sheet lead waste and animal bone and shell.

A total of three archaeological features, all sealed by 0001 and clearly visible cutting into the chalk geology (Fig. 2), were identified and are listed in Appendix 1.

5.1. Roman

0002 was a broad ditch, aligned north-east to south-west, towards the eastern end of the trench. Measuring 2.6m wide and 0.88m deep the top of its cut had moderately sloping sides which then steepened before reaching a concave base. The main basal fill, 0003, was a mid/dark brown/grey sandy silt with frequent chalk flecks and fragments. Above this, where the cut broadened out, was a deposit of light/mid grey sandy silt, 0004, with occasional chalk and flints. Eleven sherds of pottery, together with nine fragments of CBM, animal bone and shell were collected from 0003. A further six sherds of pottery, four fragments of CBM, two pieces of lead, and stone and animal bone were collected from 0004.

0005 was a small ditch, aligned north to south, at the western end of the trench. Measuring 0.8m wide and 0.2m deep it had moderate sloping sides and a slightly concave base. Its fill, 0006, was a mid/dark grey/brown dense silt/sand with frequent

chalk that was very similar to the overlying subsoil 0001. A small pit or posthole, 0007, was set into the base of the ditch within the section and was excavated in full. This feature, which measured 0.4m by 0.3m and 0.7m deep had steep, near vertical sides and a flat base. It was also infilled with 0006, there being no visible relationship between the two features. Four sherds of pottery sherds were collected from the upper part of the features and are perhaps more likely to come from 0005 than 0007.

Plate 1. Facing north-west along trench. Ditch 0002 in foreground

Plate 2. Ditch 0002

6. Finds and environmental evidence

6.1. Introduction

Table 1 shows the types and quantities of finds collected during the evaluation. A full quantification by context is included as Appendix 2. All of the closely dated finds are of Roman date.

Finds Type	No	Wt/g
Pottery*	29	450
CBM	15	1169
Quernstone	1	103
Shell	3	37
Animal bone	38	1029

Table 1. Bulk finds quantities

* excludes many tiny fragments from Sample 1 0003

6.2. The pottery

Steve Benfield

6.2.1. Introduction and recording method

In total there are 29 pottery sherds together weighing 450g and with a combined estimated vessel equivalent (EVE) of 0.41. The pottery was recorded using the Suffolk Roman pottery fabric series and vessel forms refer to the Suffolk Roman pottery type series (see Lyons & Tester 2014).

The pottery fabrics from the site are listed in Table 2.

Code	Fabric
SACG	Central Gaulish samian
AA	*Amphorae*
BSW	Black surface wares
BUF	Buff wares
GMB	Grey micaceous wares (Black surface)
GMG	Grey micaceous wares
GX	Greywares/miscellaneous coarsewares
HOG	Horningsea grey wares
HOGB	Horningsea greywares (Black surface)
NVG	Nene Valley grey wares
NVC	Nene Valley Colour-coated wares
NVM	Nene Valley *mortaria*

Table 2. Pottery fabrics present at MNL 745

Table 3 shows the assemblage broken down into major ceramic types and the quantity of pottery for each fabric type. All of the pottery is listed by fabric and by form (where identifiable) for each context in Appendix 3. An additional number of very small fragments of pottery recovered from a sample taken from fill 0003 of ditch 0002 have not been included in the main quantification.

Fabric code	No	% No	Wt/g	% Wt	EVE
Imported fine wares					
SACG	1	*3.4*	1	0.2	
Imported coarsewares					
AA	1	*3.4*	52	12.0	
Local & regional coarsewares					
BSW	5	*17.2*	34	7.5	0.08
BUF	1	*3.4*	21	4.6	
GMB	1	*3.4*	3	0.6	
GMG	2	*6.8*	22	4.8	0.04
GX	7	*24.1*	41	9.1	0.10
HOG	5	*17.2*	102	22.6	0.11
HOGB	2	*6.8*	41	9.1	
NVG	1	*3.4*	7	1.5	
Late Roman specialist wares					
NVC	1	*3.4*	16	3.5	0.08
NVM	2	*6.8*	110	24.4	
Total	*29*	*99.3*	*450*	*99.9*	*0.41*

Table 3. Quantity of pottery by fabric type

6.2.2. The assemblage

All of the small assemblage of pottery is of Roman date and was recovered from subsoil 0001 and the fill of two ditches, 0002 (0003, 0004) and 0005 (0006). The more closely dated pieces indicate that overall the assemblage is of 2nd- 4th century date with the majority dating to the period of the 2nd-3rd century. The two latest dated sherds (products of the Nene Valley pottery industry) were both recovered from one ditch, 0002; otherwise there does not appear to be any great difference in the nature of the pottery in terms of fabric types from the subsoil layer or the two ditches.

The earliest closely dated pottery is a small sherd (possibly residual) of imported samian (main fill 0003 of ditch 0002) which is of 2nd century date and may date to early in the 2nd century. There also one other imported sherd, from a Dressel 20 Spanish Oil *amphora* in subsoil layer 0001. This is in a fine, red coloured fabric associated with late amphora rim types and is likely to date to the period of the 2nd-mid 3rd century rather than earlier (Tomber and Dore 1998, 85 Fabric BAT AM 2). The majority of the pottery consists of local or regional coarsewares. None appears to date earlier than the 2nd century, although one rim sherd from a bowl (fill 0006 of

ditch 0005) might possibly date from as early as the late 1st century. Prominent among the coarsewares are sherds which can be attributed to the Horningsea pottery industry (Fabrics HOG & HOGB) located approximately 25km to the southwest. Pottery from this source makes up approximately 24% by count and 32% by weight of the assemblage. The main period of production of Horningsea pottery dates to the early-mid 2nd-3rd century (Evans 1991). The sherds indicate they are mostly from medium-large size jars, although one may be from the base of a dish or open bowl. None of the sherds are decorated.

Apart from one sherd (from upper fill 0004 of ditch 0002) which is probably a Nene Valley greyware (Fabric NVG), the remainder of the coarse pottery is not closely sourced, but is likely to be of local or regional origin. A number of sherds are distinctly micaceous (Fabrics GMB and GMG) and these are commonly associated with the Wattisfield pottery industry located in the Waveney Valley (Moore 1988, 60). These include a sherd from a bead-rim bowl of mid 2nd-3rd century date (main fill 0003 of ditch 0002), while most of the sherds indicate they are from jars or deep bowl/jar forms. There is a single sherd in an unsourced buff fabric from fill 0006 of ditch 0005.

There are sherds from two pots which can be attributed to the late Roman Nene Valley industry. Both pots come from the fill of ditch 0002. There are two sherds from an ironstone-gritted *mortarium*, recovered from the upper ditch fill 0004 and the rim from a dish or bowl from the lower fill 0003. Both can be dated to the period of the late 3rd-4th century.

6.2.3. Conclusion

The small size of the assemblage makes meaningful discussion difficult, but overall the conclusions which could be drawn from it are supported by a larger assemblage from a small monitoring and excavation (MNL 637) located immediately to the north and east (Brooks and Tester 2012, 29-31). The Roman pottery there spans the period of the late 1st/early 2nd century-4th century. Similarly, imported pottery (including samian) makes up only a small percentage of the assemblage and the largest group of sourced coarseware products are those of the Horningsea industry, which is clearly a significant source of pottery at Mildenhall. Nene Valley products

are also well represented among pottery identified from the Late Roman industries there, although other sources are also present there including Hadham (Hertfordshire) and Late Shell-tempered ware. While Shell-tempered wares have a longer currency in the Midlands and might not necessarily date to the late 4th century here, as would be expected in areas further east and south, the presence of Hadham pottery suggests a more certain 4th century date relating to continued Roman activity in this area than otherwise might be able to be assessed by the small assemblage here alone.

6.3. Ceramic building material

Stephen Benfield

6.3.1. Introduction

All of the ceramic building material (CBM) can be identified as Roman. In total there are fifteen pieces with a combined weight of 1169g. All of the pieces were quantified by type and fabric. Cut-aways and signature marks were recorded together with the thickness. The quantity of each type of tile recorded is listed in Table 4.

CBM type	Code	No	Wt/g
Roman tegula tile	RT	4	657
Roman imbrex tile	RI	1	96
Roman brick or tile (general)	RBT	10	416
Total		*15*	*1169*

Table 4. Quantity of CBM by fabric

The tile fabrics are listed by quantity in Table 5. All of the CBM is listed by type and fabric for each context in Appendix 4.

Fabric	Code	No	Wt/g
Red, fine sand	R FS	6	410
Red, medium sand	R MS	6	174
Red, medium sand, occasional stone	R MS ST	1	118
Reddish-brown, medium sand	R/B MS	1	18
Reddish-brown, medium sand, occasional stone, sparse small chalk/shell	R/B MS ST CH/SH	1	449
Total		*15*	*1169*

Table 5. Quantity of CBM by fabric

6.3.2. The assemblage

All of the ceramic building material can either be closely dated to the Roman period or is almost certainly Roman and all was recovered from ditch 0002. Most appear to be pieces from Roman roof tiles. Pottery associated with the CBM suggests a late 3rd-4th century date for the contexts from which they were recovered.

The majority of the CBM is made up of flat pieces of brick/tile in orange/red coloured, fine-medium sandy fabrics. The thickness varies between 18mm-23mm. These are likely to be pieces from the base of *tegula* roof tiles, although only two certain *tegula* could be identified, one being a flange piece (main fill 0003 of ditch 0002) and another a larger piece with a lower cut-away (upper fill 0004 of ditch 0002). The lower cut-away (0004) is of Type D1, which is a simple angled cut passing through the top of the flange (Warry 2006, fig1.3). Warry suggests that this type dates to the mid 3rd century and later. It should be noted that this dating scheme is not considered proven and reliable but may indicate types common or more commonly in use during particular periods. A piece from an *imbrex* roof tile that had been discoloured from burning along one edge was also recovered (0003).

The *tegula* with the lower cut-away is in a fabric which appears distinct from the sandy orange/red common to most pieces here. The fabric is a dull reddish-brown colour, sandy with occasional small stones and rare, small white calcareous flecks/pieces which appear to be chalk rather than shell. A second small piece of similar appearance was recovered from another context (main fill 0003 of ditch 0002).

6.4. Quernstone

Steve Benfield

A small piece of gritty sandstone (103g), almost certainly a Millstone Grit, was recovered from subsoil layer 0001. The edges have been slightly rounded-off by abrasion in the soil. One surface, although slightly uneven, is distinctly flat in relation to the other broken edges and is probably an older surface. The remaining thickness of the piece (measured from the surface down) is 45mm.

Although gritstone is used for querns in the prehistoric period, the piece is most likely to

be from a Millstone Grit quern of Roman date, coming from a quarry source in the Pennine hills. Roman Millstone Grit querns found in Essex are most common from the 2nd century onwards, but appear probably to reach that area in small numbers in the early Roman period (Major 2004, 284). Although a broken and slightly abraded piece, on balance appears likely that the piece here comes from a quern dating probably to the 2nd century or later.

In addition it can be noted that a small, pinkish-red coloured stone (11g) was collected from the fill of ditch 0002 (0004). The colouration may be due to heating, but the archaeological significance of this otherwise natural stone is doubtful.

6.5. Small finds

Steve Benfield

Three small finds were recovered from the evaluation. The objects have been catalogued and the data is shown in Appendix 5.

Four fragments of lead waste were found in subsoil deposit 0001. They are likely to be scrap fragments or offcuts. A second fragment of cast lead from the upper fill 0004 of ditch 0002 may represent the repair to a Roman vessel. Another irregular fragment of probably lead waste was found in the same context.

6.6. Shell

Parts of three oyster (marine) shells, total weight 37g, were recovered; two from subsoil layer 0001 and one from ditch 0002 (0003). There seems little doubt but that they represent food remains imported from the coast in the Roman period.

6.7. Animal bone

Laszlo Lichtenstein

6.7.1. Introduction

A total of 38 animal bone elements and fragments, together weighing 1029g, was hand

collected from three contexts dated to the Roman period. An evaluation of the assemblage was carried out to establish the condition and level of preservation of the bone and the species present, together with the potential for recording the material following guidelines set out by English Heritage (2014). A summary of the quantification by context is included below as Table 6 and a more detailed catalogue by context is available on an MS Excel spreadsheet in the project archive.

6.7.2. Results

The bones were found to be in good condition; the fragmentation was moderate with surface abrasion at a low level although some of the bones show signs of weathering. No evidence of pathology, bone working, burning or other bone modifications was noted.

A range of common domesticates are present, of which cattle bones were the most numerous, followed by lower numbers of sheep/goat and pig.

Context	Feature	Context date	Cattle	Pig	Sheep/ goat	Large ungulate size	Small ungulate size	Count	Wt/g
0001	Subsoil deposit	Rom	8					8	249
0003	Ditch fill 0002	Rom	6		4	5		15	432
0004	Upper ditch fill 0002	Rom	3	2	3	6	1	15	348
Total			*17*	*2*	*7*	*11*	*1*	*38*	*1029*

Table 6. Quantification of the animal bone assemblage by species, NISP and deposition by feature type

The species recorded are known to have been consumed on regular basis in the Roman period. Evidence of canid gnawing and butchery was observed on cattle and sheep bones. The species present and their relative proportions appear to be typical for the Roman period. All of the identified bones belong to domestic mammal species.

6.7.3. Potential

Although the size of the assemblage is not enough for conclusive analysis, it can be recognised as discarded food debris from stages of meat preparation and consumption

such as butchering, kitchen and table waste. This statement is supported by the observation of some dog gnawing on the bone fragments.

The level of preservation and identifiability suggests that the animal bone could provide information on animal husbandry and the economy of the site. If further animal remains were collected during the course of any subsequent excavation, the animal husbandry of the site could be characterised and compared with this previous work.

6.8. Plant macrofossils

Anna West

6.8.1. Introduction and methods

A single 40 litre sample was taken from fill 0003 of ditch 0002 during the evaluation. The sample was processed in order to assess the quality of preservation of plant remains and their potential to provide useful data as part of further archaeological investigations.

The sample was processed using manual water flotation/washover and the flot was collected in a 300 micron mesh sieve. The dried flot was scanned using a binocular microscope at x16 magnification and the presence of any plant remains or artefacts are noted on Table 7. Identification of plant remains is with reference to *New Flora of the British Isles,* (Stace).

The non-floating residue was collected in a 1mm mesh and sorted when dry. All artefacts/ecofacts were retained for inclusion in the finds total.

6.8.2. Quantification

For the purpose of this initial assessment, items such as seeds, cereal grains and small animal bones have been scanned and recorded qualitatively according to the following categories:

= 1-10, ## = 11-50, ### = 51+ specimens

Items that cannot be easily quantified such as charcoal, magnetic residues and

fragmented bone have been scored for abundance:

+ = rare, ++ = moderate, +++ = abundant

6.8.3. Results

SS no	Context no	Feature/ cut no	Feature type	Approx date of deposit	Flot contents
01	0003	0002	Ditch	Roman	charred cereal grains ## cereal chaff # charred legumes # charcoal ++ amphibian/small mammal bone fragments # snails +++ fibrous rootlets +++

Table 7. Plant macrofossils and other remains from sample

6.8.4. Discussion

The sample produced 200ml of flot material, which is moderate to small, all of the flot was rapid scanned for the purposes of this report.

The bulk of the material was made up of fibrous rootlets, these are considered modern and intrusive within the archaeological deposit. Wood charcoal was also present but was highly fragmented, although there may be a small number of fragments present which could be suitable for species identification or radiocarbon dating if required. The preservation of all other plant macrofossils was also through charring and was generally fair to good.

Charred cereal caryopses were present in moderate numbers the majority of which appeared to be wheat (*Triticum* sp.). Spelt (*Triticum spelta* L.) appears most frequently along with a small number of grains that appear to be a naked wheat and few possible Rye (Secale cereal) grains. Many cereal grains were also too puffed and fragmented to identify at this stage. Spelt glume bases were present, suggesting the later stages of cereal processing, when cereals are heated, or parched, and then pounded in order to release them from their spikelet, may have been taking place on site.

A single pea (*Pisum sativum* L.) cotyledon was present within the flot. The small number

of legumes recovered is un-representative of their importance within the diet. As pulses do not need to be processed using heat in the same way as cereals, they are less likely to be exposed to chance preservation through charring and so are often under represented within archaeological deposits. The presence of legumes may indicate that either small scale garden-type production of food crops or larger crop rotation was taking place nearby.

Conclusions and recommendations for further work

On the whole the sample was fair to good in terms identifiable material. It is likely that the activities indicated by the material recovered from Sample 1, took place within the local vicinity and the waste material was deliberately deposited within the archaeological feature.

If necessary, it may be possible in the future to obtain species identification or radiocarbon dates from some of the charcoal fragments within the deposit. The plant macro fossils recovered were all reasonably well preserved and identifiable to an archaeobotanist.

It is not recommended that any further work is carried out on the flot material at this stage. However if further intervention is planned on this site it is recommended that further sampling should be carried out with a view to investigation of the nature of the possible cereal waste to provide an insight into the utilisation of local plant resources, agricultural activity and economic evidence. It is recommended that any further samples taken are combined with the flots from the sample taken during this evaluation and submitted to an archaeobotanist for species identification and interpretation.

7. Discussion

The evidence from the evaluation trench has added to that seen in previous projects at the school and neighbouring properties for settlement in the Roman period during the 2nd to 4th centuries.

The intact archaeological horizon, which was identified across the development area at a depth of 0.5m, is in a good state of preservation although the presence of Roman material in the subsoil indicates a certain level of truncation to archaeological deposits, likely by post-medieval agricultural activity. There was no evidence of modern disturbance to either the subsoil or archaeological features.

Of primary interest is ditch 0002 which appears to be a continuation of ditch 0021 in MNL 637. Together these two observed sections of ditch mark the course of a substantial north to south boundary. At MNL 637 (Fig. 3) this ditch clearly marked the point where the level of the largely undisturbed chalk geology to the west dropped below a Roman occupation layer and was cut by a dense spread of archaeological features to the east. The scatter of metal-detected finds in the topsoil and subsoil collected during the playground monitoring is also noticeably situated largely to the east of the ditch and of course dense archaeological deposits were seen in the excavation area further to the east and are known at MNL 193. Accordingly it seems that the ditch is likely a boundary marking the western edge of the known Roman settlement.

Although other Roman features such as ditch 0005 lie to the west of 0002 the density is much reduced. 0005 also contained relatively less occupation material such as pottery, CBM or faunal remains. Together this implies that such features lie outside of the main settlement area, with a ditch such as 0005 likely marking a field boundary on the settlement periphery.

The course of ditch 0005 appears to have been tentatively identified in the MNL 637 playground monitoring, although the development formation level was evidently not deep enough to fully expose it and confirm its nature at that time.

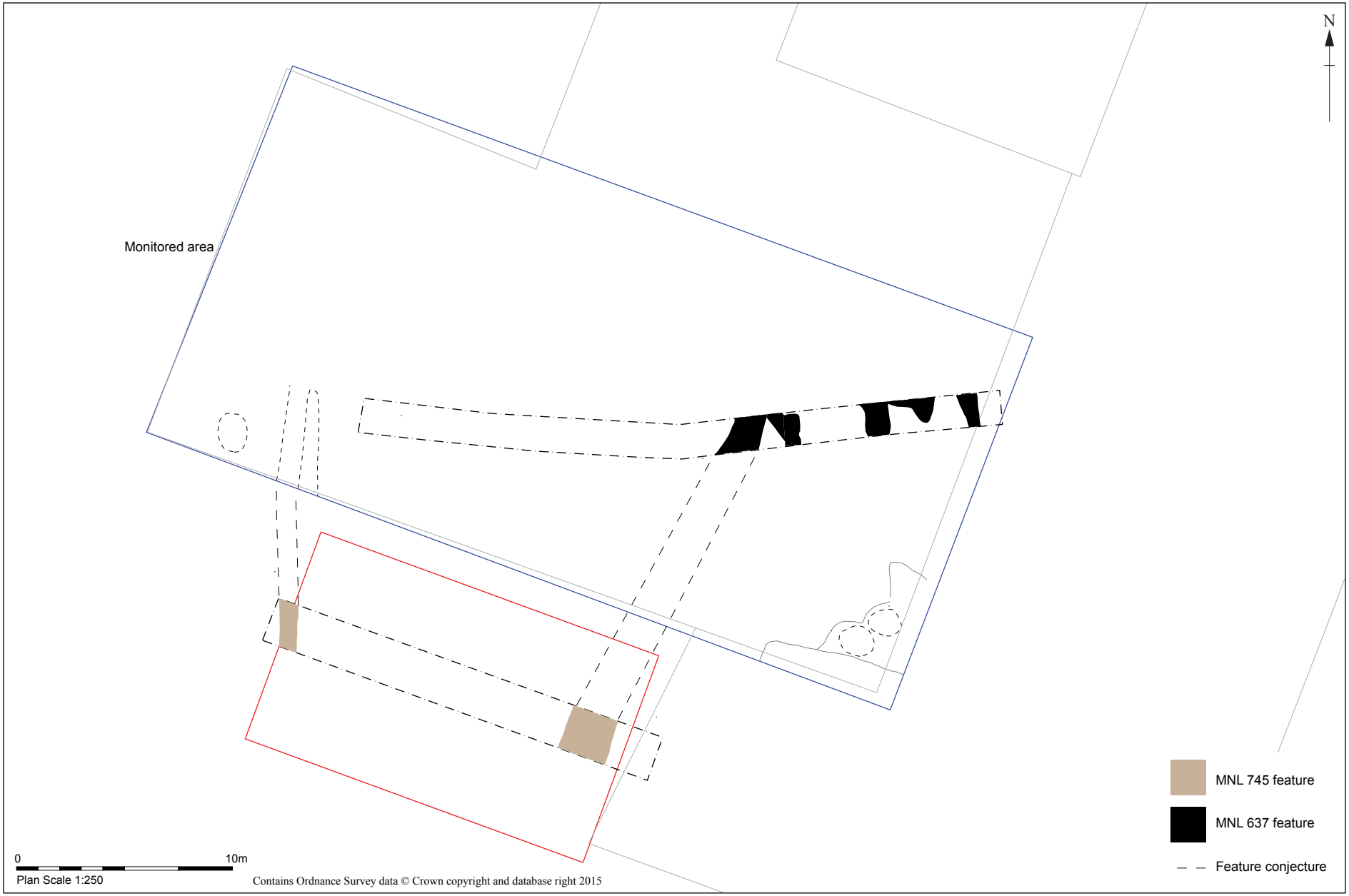


Figure 3. MNL 745 in relation to MNL 637 evaluation and monitoring

8. Conclusions

The evaluation has identified further evidence of Roman occupation in the area, possibly confirming a western boundary for the settlement which is known to underlie much of the school site and neighbouring properties.

The archaeological horizon across the site is well preserved and relatively shallow at *c.*0.5m deep and is therefore likely to be impacted upon by any groundworks such as building footings and service trenches for the proposed development. However the evaluation trench has exposed a substantial percentage of the development footprint and, with the archaeological features identified simply being ditches crossing the width of the site, has likely already investigated and recorded the archaeological deposits in full.

9. Archive deposition

The project archives, consisting of paper and digital records, and the finds and environmental archive, will be deposited with the Suffolk County Council Archaeological Service.

10. Acknowledgements

The project and was directed and managed by John Craven.

The fieldwork was carried out by John Craven and Timothy Carter.

Finds processing was carried out by Jonathan Van Jennians. The specialist finds analysis and report was produced by Stephen Benfield, with contributions from Laszlo Lichenstein. Environmental processing and reporting was carried out by Anna West.

Processing of digital survey data was carried out by John Craven and the digitisation of site drawings and production of report illustrations by Eleanor Cox. The report was edited by Richenda Goffin.

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Appendix 1. Context list

Context Number	Feature Number	Feature Type	Category	Description	Length	Width	Depth
0001	0001		Layer	Subsoil layer in Trench 01. Mid/dark grey/brown dense silt/sand with frequent chalk flecks and fragments.			
0002	0002	Ditch	Cut	Broad ditch, aligned north-east to south-west and clearly visible cutting chalk geology. Moderate upper slope before steepening to a concave base.		2.6m	0.88m
0003	0002	Ditch	Fill	Main basal fill of ditch 0002. Mid/dark brown/grey sandy silt with frequent chalk flecks and fragments.		1.32	0.6
0004	0002	Ditch	Fill	Upper fill of ditch 0002 where its cut broadens out. Light/mid grey sandy silt with occasional chalk and flints		2.6	0.28
0005	0005	Ditch	Cut	Small ditch, aligned north to south at western end of Trench 01. Clearly visible on surface cutting into chalk natural. Moderate sloping sides and a slightly concave base. In the excavated section the ditch contained an apparent pit or posthole [0007] - no visible relationship between the two.		0.8m	0.2m
0006	0005	Ditch	Fill	Mid/dark grey/brown dense silt/sand with frequent chalk. Very similalr to overlying subsoil 0001. Fill of both 0005 and 0007, there being no visible relationship between the two features. Finds all came from upper part of fill, so more likley form 0005?			
0007	0007	Pit	Cut	Small pit or posthole set into base of ditch 0005. No visible relationship between the features and their fills. Steep, near vertical sided cut with a flat base.	0.4m	0.3m	0.7m

Appendix 2. Catalogue of bulk finds

(Includes finds from environmental sample)

Context	Sample no.	Pottery		CBM		Stone		Animal Bone		Shell		Overall Date
		No.	Wt/g	No.	Wt/g	No.	Wt/g	No.	Wt/g	No.	Wt/g	
0001		5	89	2	263	1	103	8	250	2	28	Rom
0003		11	132	9	438	0	0	15	428	1	10	Rom
0003	1	40	82	12	18	0	0	151	49	8	9	Rom
0004		6	181	4	484	1	12	19	345	0	0	Rom
0006		4	55	0	0	0	0	0	0	0	0	Rom
Total		**66**	**539**	**27**	**1203**	**2**	**115**	**193**	**1072**	**11**	**47**	

Appendix 3. Roman pottery catalogue

Context	Fabric	Period	Type	Form	No	Wt/g	EVE	Abr	Notes	Spot date
0001	AA	Rom		D20	1	52			later fabric type	2-M3C
0001	HOG	Rom		JAR	1	21		(*)		E/M2-3C
0001	GX	Rom			4	13		(*)	small sherd 3 from SV	Rom
0003	SACG	Rom			1	1			possibly SAMV (E2C)	2C
0003	NVC	Rom		DISH/BOWL 6.19	1	16	8			M/L3-4C
0003	HOG	Rom		JAR	1	38				E/M2-3C
0003	GX	Rom	R	JAR/BOWL	1	16	10			2-4C
0003	GX	Rom			2	12				Rom
0003	GMG	Rom	R	BOWL 6.19	1	13	4		broad bowl with small triangular rim	E/M2-3C
0003	GMB	Rom			1	3				Rom
0003	HOG	Rom	R	JAR/BOWL	2	20	11		undercut, flat rim, uneven cream wash on surface, possibly a Horningsea product	E/M2-3C
0003	GMG	Rom		JAR	1	9			firing mark across shoulder, possibly a Horningsea product but quite micaceous	Rom (2-3C?)
0004	NVM	Rom	B	MORTARIUM 7.3	2	110			SV, ironstone gritting, light orange-brown surface with white fabric	L3-4C
0004	HOG	Rom	B	JAR	1	23				E/M2-3C
0004	HOGB	Rom			1	30				E/M2-3C
0004	HOGB	Rom		JAR/BOWL	1	11		(*)	probably Horningsea	E/M2-3C
0004	NVG	Rom			1	7			very pale fabric, probably Nene Valley	Rom
0006	BUF	Rom			1	21			fine sand fabric	Rom (1-2/3C)
0006	BSW	Rom	R	BOWL 5.3	3	14	8		rim from deep bowl with post-firing hole made through neck, possibly 1/2-3C	Rom
0006	BSW	Rom			2	20			body sherds in similar fabric to rim from same context	Rom

Appendix 4. Catalogue of Roman ceramic building material

Context	Fabric	Form	No	Wt (g)	Length	Width	Height	Abr	Notes	Date
0001	R FS	RBT	2	261			18mm		probably *tegula* pieces, fine fabric, one with grey core	Rom
0003	R FS	RT	1	25					piece from a flange	Rom
0003	R MS ST	RT	1	118			23mm	(*)	probably t*egula*	Rom
0003	R FS	RT	1	65			23mm		probably *tegula*, part of an arch signature	Rom
0003	R MS	RI	1	96					*imbrex* tile, burnt at edge	Rom
0003	R FS	RBT	1	51						Rom
0003	R MS	RBT	3	59				(*)		Rom
0003	R/B MS	RBT	1	18				*	reddish-brown colour	Rom
0004	R/B MS ST C/S	RT	1	449			19mm	*	reddish-brown colour, lower cut away (LCA) Type D1	Rom
0004	R FS	RBT	1	8						Rom
0004	R MS	RBT	1	1						Rom
0004	R MS	RBT	1	18						Rom

Appendix 5. Small finds catalogue

Small Find No	Context No	Object Name	Material	Fragment Count	Weight (g)	Description	Depth (mm)	Width (mm)	Length (mm)	Period
1001	0001	Waste	Lead	4	45	Four amorphous pieces of sheet lead waste. Two of the pieces are folded over on themselves. One of these has transverse grooving on its surface. Possible scraps of binding or waste offcuts.	2	32	36	
1002	0004	Vessel repair?	Lead	1	16	Cast plug with sub-rectangular shaped plate. Circular ripples on interior surface shows force applied to affix the repair. Possibly a vessel repair.	8	17	35	Rom
1003	0004	Waste?	Lead	1	12	Flat piece of lead waste? Sub-rectangular in plan with a slight outturn at one end.	3	19	31	

Appendix 6. OASIS form

OASIS ID: suffolka1-216435

Project details	
Project name	West Row Primary School, Mildenhall
Short description of the project	An archaeological evaluation was carried out on a part of the playing field at West Row Primary School, Mildenhall, Suffolk, in advance of a planning application for a new double classroom unit. The evaluation trench has added to the evidence seen in previous projects at the school and neighbouring properties identifying two ditches and a pit of Roman date. Of these one ditch forms a substantial boundary and, in conjunction with previous results, appears to mark the western edge of the Roman settlement area which is known to underlie much of the school site and neighbouring properties.
Project dates	Start: 09-07-2015 End: 09-07-2015
Previous/future work	No / Not known
Any associated project reference codes	MNL 745 - Sitecode
Any associated project reference codes	MNL 637 - Related HER No.
Any associated project reference codes	ESF23130 - HER event no.
Type of project	Field evaluation
Current Land use	Other 14 - Recreational usage
Monument type	DITCH Roman
Significant Finds	POTTERY Roman
Methods & techniques	"Sample Trenches"
Development type	Public building (e.g. school, church, hospital, medical centre, law courts etc.)
Prompt	National Planning Policy Framework - NPPF
Position in the planning process	Pre-application
Project location	
Country	England
Site location	SUFFOLK FOREST HEATH MILDENHALL MNL 745 West Row Primary School, Mildenhall
Study area	170.00 Square metres
Site coordinates	TL 6722 7612 52.3571670583 0.455834268856 52 21 25 N 000 27 21 E Point
Height OD / Depth	Min: 5.00m Max: 6.00m

Project creators	
Name of Organisation	Suffolk Archaeology CIC
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Suffolk Archaeology CIC
Project director/manager	John Craven
Project supervisor	John Craven
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Suffolk County Council
Project archives	
Physical Archive recipient	Suffolk HER
Physical Contents	"Animal Bones","Ceramics","Environmental","Metal"
Digital Archive recipient	Suffolk HER
Digital Contents	"Animal Bones","Ceramics","Environmental","Metal"
Digital Media available	"Database","GIS","Images raster / digital photography","Text"
Paper Archive recipient	Suffolk HER
Paper Contents	"other"
Paper Media available	"Context sheet","Plan","Report","Section"
Project bibliography 1	
Publication type	Grey literature (unpublished document/manuscript)
Title	West Row Primary School, Mildenhall, MNL 745
Author(s)/Editor(s)	Craven, J. A.
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