## West Row Primary School, West Row, Mildenhall

MNL 612
M. Muldowney
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## Summary

An archaeological evaluation, followed immediately by an excavation was carried out on land to the rear of West Row Primary School, West Row, Mildenhall and identified a series of ditches, two pits and a posthole, all dating to between the mid 2nd to late 3rd or 4th century. One of these ditches was also identified during an evaluation (and subsequent monitoring) immediately adjacent to the school itself (MNL 613). A large irregular hollow and a tree bole, pre-dating the Roman ditches and a medieval ditch were also identified along with a small number of layers thought to relate to recent landscaping of the area.





## 1. Introduction

On 16th February 2009 an evaluation was undertaken on land to the rear of West Row Primary School, West Row, in advance of a planning application (F/20080776/CCA). This was carried out in accordance with a Brief and Specification (evaluation) produced by Dr. Jess Tipper (SCCAS/CT) (Appendix 1). The work was commissioned by Suffolk County Council and took place in advance of the proposed construction of a modular building. It was clear on excavation of the trench that archaeological deposits were present (Plate 1) and after consultation with Jude Plouviez (SCCAS/CT) and Mrs Geraldine Ciantar (Headmistress, West Row Primary School) it was agreed that the archaeological evaluation should cease and an excavation begin immediately.

This report describes the subsequent excavation that took place between 16th and 23rd February 2009.

## 2. The excavation

### 2.1 Site location

West Row Primary School is located at the north end of the village on the corner of Beeches Road and The Green, and the development area itself is situated in the northeast corner of the playing field at the rear of the school (Fig. 1).

### 2.2 Geology and topography

The site is located on the Fen margin, on chalky drift and chalk (loam over chalk) and lies on relatively flat ground in a shallow linear hollow running parallel with The Green at just under 6 mOD . At the time of excavation, grass covered the playing field and the site was bounded bya hedge and wire fence to the north, the school buildings to the east and further hedging to the south and west.

### 2.3 Archaeological and historical background

Prehistoric finds are scarce at the north end of West Row and comprise a rolled, slightly ovate Acheulean hand-axe (MNL 202) found just over 300m to the north-east of the school and a flint knife and thin white flint axehead of Neolithic date (MNL 312), that


Figure 1. Site location
was found on land to the north of Chapel Road, approximately 270 m to the south-east The small number of prehistoric finds in this area suggest little regular activity was occuring here in that period.

Later finds are all from the Roman period and dominate the archaeological record here. The most significant of these finds was the Mildenhall Treasure (MNL 231) - alleged to have been recovered from the field on the north side of The Green - consisting of 34 silver objects dating to the late 4th century. The same area is also known to contain the remains of a villa (MNL 064). Other Roman remains include a finds scatter (MNL 146) to the north, pottery and coins to the north west (MNL 176), a pottery tile and shell scatter to the south-west (MNL 193) and a dense area of ditches and gullies, cut by large pits with a large assemblage of late Roman pottery (MNL 514) located less than 100m to the south (Gill 2001). Most recently, an evaluation at the rear of the Primary School (MNL 613) identified a single east-to-west oriented ditch which contained pottery sherds of mid 2nd century to 4th century date.

No Saxon or medieval artefacts or features are recored in the Historic Environment Record (HER) in close proximity to the primary school, but there are a small number of properties in the village itself which are of medieval origin and Listed Buildings (for example 21 Beeches Road is late 16th century and Listed Grade II).

Post-medieval finds are also few in number and consist of a quantity of platform gunflint production waste located 140 m to the north-east and four Listed buildings.

## 3. Methodology

The evaluation trench measured 15 m by 2 m wide and was located centrally within the footprint of the proposed building, whilst the excavation area was determined by the size of the proposed building and measured 15 m by 9 m . Both areas were mechanically excavated using a JCB fitted with a toothless ditching bucket. Overburden was removed to the level of the underlying chalk natural or upper surface of the archaeological deposits, whichever was encountered first. All mechanical excavation was constantly supervised by an experienced archaeologist.

A high-resolution digital colour photographic record was taken of the trench and excavation area and all exposed deposits, supplemented by hand-drawn sections at 1:10 or 1:20, as appropriate. Written descriptions were recorded on SCCAS pro forma sheets. A plan of the trench and excavation area was drawn at scale $1: 50$ and Ordnance Datum levels were taken using a Leica GPS.

All topsoil and subsoil deposits were excavated and stored separately on the site and were thoroughly examined for finds. Metal-detecting of all overburden and excavated deposits was also undertaken (Alan Smith). Thirteen environmental samples were taken.

The site archive is kept in the SCCAS main store at Bury St Edmunds under HER no. MNL 612 and a digital copy of the report has been submitted online to the Archaeological Data Service at: http://ads.ahds.ac.ưk/catalogue/library/greylit

## 4. Results

### 4.1 Introduction

The excavation identified six ditches, two pits and a posthole (Fig. 2) all dated to the Roman period. A large hollow and a tree bole (Fig. 3) in the north half of the excavation area were though to be of pre-Roman origin, possibly Iron Age. A seventh ditch was of probable medieval origin. Some make-up or levelling layers were also identified on the south side of the area, which may relate to recent landscaping.

All features overlay or cut the underlying natural chalk (0081) which was encountered at a height of 4.45 m OD, 0.86 m below the ground level.

The results of the excavation are presented in order of stratification (earliest to latest) by feature fype, commencing with ditches. Natural or non-archaeological features are considered last. Full context descriptions can be found in Appendix 2 and a table showing equivalent context numbers is presented in Appendix 3. See Appendix 4 for the site matrix.


Figure 2. Excavation plan

### 4.2 Ditches

All the ditches identified in the excavation area were linear and aligned east to west, with the exception of ditch 0012, which was curvilinear and aligned north to south. Ditch 0067 (Fig. 3, S.13) was located at the south edge of the excavation area, It was over 10 m long by more than 0.80 m wide and up to 0.27 m deep. It had a shallow profile with a predominantly flat base and contained a single fill from which three sherds of intrusive post-Roman pottery were recovered. The terminus of ditch 0067 was located 4.5 m from the east edge of excavation.

Ditches 0045 (Fig. 3, S.17) and 0042 were part of a segmented boundary, the termini of which were located approximately 3 m from the west edge of excavation. They were located immediately north of, and cut ditch 0067 at its west end (0045) and extended the full length of the site. In section, the ditches were fairly similar with u-shaped profiles, and were most shallow at their termini ( 0.18 m ). As both ditches were cut along their length by ditch 0074 it was not possible to determine their full dimensions, but they were at least 1.20 m wide by 0.70 m deep. A maximum of two fills were identified from which Roman and medieval pottery, CBM, animal bone and mussel shell were recovered.

Ditch 0074 (Fig. 3, S.17) was severely cut by ditch 0055 (see below) and was only visible in plan towards the west end of site. It was up to 0.84 m wide by 0.48 m deep and had a u-shaped profile which widened towards the top of the cut. One fill was identified along its length from which medieval and Roman pottery and oyster and mussel shell were recovered.

Ditch 0073 (Fig. 3, S.17) was also cut by ditch 0055 and was just less than 2 m wide by 0.9 m deep. It had a large, slightly uneven, u-shaped profile and became progressively wider towards the east (over 2.5 m ). The number of fills varied along its length from two to three and their overall colour became darker, again towards the east. A good finds assemblage was recovered from the ditch comprising late 3rd/4th century pottery, CBM, animal bone, flint and oyster shell.

Ditch 0055 cut both ditches 0073 and 0074 and was 1.48 m wide by 0.50 m deep. It had a slightly uneven v-shaped profile and contained a single fill from which Roman and medieval pottery, CBM, animal bone, flint, oyster shell and other shells were recovered.

Ditch 0012 (Fig. 3, S.3) also cut ditch 0073 (near its west end) and was 1 m wide by 0.13 m deep. It had a shallow, flat-based, u-shaped profile and contained a single fill from which a single sherd of Roman pottery and animal bone was recovered. Although not clear in plan, ditch 0012 appeared to continue southwards (as 0050), truncating the upper fill of ditch 0073 (0051) and may terminate there (Fig. 3, S.17),

### 4.3 Pits

Two pits were identified in the excavation area, both of which were located near the north-east corner of site, on the edge of and truncating hollow 0038 (see below).

Pit 0024 was the earlier of the two pits and was 1.40 m wide by 0.4 m deep. It was oval in plan and had a wide, u-shaped profile. It contained a single fill, which merged with the lower fill of pit 0022, and was only distinguishable due to the presence of small chalk fragments. No finds were recovered.

Pit 0022 cut pit 0024 on its north side and was also oval in plan. It was 1.40 m long by 0.4 m deep and had a similar profile to pit 0024 . Two fills were identified, the upper of which was very dark and indicated the presence high quantities of humic or burnt material, although no finds were recovered.

Both pits were overlain by 0019, a dark deposit that was indistinguishable in plan from the deposits infilling the hollow.

### 4.4 Posthole

Posthole 0010 was located less than 0.20 m south-west from pit 0024, also truncating hollow 0038, and was circular in plan. It was 0.35 m in diameter by 0.07 m deep and had a shallow, u-shaped profile. One fill was identified from which no finds were recovered.

### 4.5 Layers

Across the south side of the excavation area two layers were seen to overlie the ditches described above. 0080 was the lowest of these layers and was approximately 0.48 m thick. It was overlain by redeposited chalk layer 0079, which was up to 0.22 m thick. No finds were recovered from either layer.


Figure 3. Selected sections, scale 1:40 on A4

A third layer, 0048 (Fig. 3, S.3) was identified overlying hollow 0038 and directly underlying subsoil 0009. It was at least 0.34 m deep but was not clearly definable in plan. No finds were recovered. Although much paler in colour, layer 0048 may be equivalent to layer 0080 (on the north side of site).

### 4.6 Natural Features

Two features of non-archaeological origin were identified. The earlier feature, 0034, was a tree bole, located in the corner formed by ditch 0012 and 0073. It was sub-circular in plan and had uneven sides and was approximately 1.15 m wide by more than 0.34 m deep. The single fill (0033) was not homogenous and became increasingly orange in colour towards the base of the feature. It was not fully excavated and no finds were recovered.

Hollow 0038 was located on the north side of site and covered an area of just less than 50 m sq. It was irregular in plan, but had a slightlinear trend on a north-west to southeast alignment. It was cut by ditches 0012 and 0073, by pits 0022 and 0024 and by posthole 0010. Three interventions were excavated into the hollow which identified up to three fills, the lowest of which consisted of weathered or degraded chalk.

An additional layer 0032 was identified on the south-west side of the hollow, overlying tree bole 0034 and the hollow itself. It was up to 0.16 m deep and similar to 0019 , which overlay pits 0022 and 0024 and again its extent was not clear in plan. No finds were recovered.

Subsoil layer 0009 overlay layer 0048 and below topsoil 0002. It was 0.17 m deep and was identified on the north side of site only. Topsoil 0002 was 0.37 m deep and extended across the entire excavated area. The eight small finds (SF1001-1007 and 1017) recovered from this layer during metal detecting were predominantly copper alloy objects. Other finds recovered from the topsoil included Roman and medieval pottery, CBM, animal bone and flint.

## 5. The Finds and Environmental evidence

Cathy Tester

### 5.1 Introduction

Table 1 shows the quantities of finds collected during the excavation. A full quantification by context is included as Appendix 5.

| Find type | No. | Wt/g |
| :--- | ---: | ---: |
| Pottery | 100 | 1048 |
| CBM | 26 | 2366 |
| Stone | 1 | 158 |
| Worked flint | 8 | 400 |
| Burnt flint/stone | 1 | 14 |
| Iron nails | 2 | 38 |
| Copper alloy | $y$ |  |
| Silver | 2 |  |
| Animal bone | 300 | 4387 |
| Oyster | 6 | 111 |
| Mussel | 41 | 177 |
| Snail | 3 | 16 |

Table 1. Finds quantities.

### 5.2 Pottery

## Introduction and methodology

A total of 100 sherds of pottery weighing $1,048 \mathrm{~g}$ was recovered from 16 contexts, all of them ditch fills or open features (layers, spreads) which appear to be the product of a long deposition cycle. The condition of the pottery is often abraded and broken with the result that few forms could be identified. The majority of the pottery is Roman, dating from the 2nd century onwards. The quantities by period are summarised in Table 2 below and the full catalogue by context is in Appendix 6.

| Period | No. | \% No. | Wt./g | \% Wt |
| :--- | ---: | ---: | ---: | ---: |
| Roman | 88 | 88 | 850 | 81.1 |
| Medieval | 12 | 12 | 198 | 18.9 |
| Total | 100 | 100 | 1048 | 100 |

Table 2. Pottery quantities by period
The pottery was quantified by count and weight and estimated vessel equivalent (Eve). Fabric codes were assigned from the Suffolk Roman and post-Roman fabric series. A x10 binocular microscope was used to identify the fabrics. Details of fabric, form and form element were recorded and decoration and surface treatment were also noted. Roman wares were classified using the 'Pakenham' type series (unpublished) which is standard for all SCCAS excavations. Each 'sherd family' was given a separate entry on an Access database table and an individual spotdate when possible.

## Roman pottery

In total, 88 sherds of Roman pottery weighing 850 g and with an Eve of 0.95 based on ten measurable rims were collected from fourteen contexts. Thirteen fabrics or fabric groups were identified which include local, regional and imported finewares and coarsewares. The majority of the assemblage, approximately $83 \%$, consists of local or regional coarsewares. The fabric quantities by category are summarised in Table 3.

| Fabric | Code | No | \% No |  | Wt./g | \% Wt | Eve |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Central Gaulish samian (Lezoux) | SACG |  | 1 | 1.1 | 1 | 0.1 |  |
| Total imported fineware |  |  | 1 | 1.1 | 1 | 0.1 |  |
| Cherry Hinton white fineware | CHWF |  | 1 | 1.1 | 3 | 0.4 |  |
| Total local or regional fineware |  |  | 1 | 1.1 | 3 | 0.4 |  |
| Black-surfaced wares | BSW |  | 6 | 6.8 | 87 | 10.2 | 31 |
| Grey micaceous wares (black-surfaced) | GMB |  | 6 | 6.8 | 46 | 5.4 | 10 |
| Grey micaceous wares (grey-surfaced) | GMG |  | 5 | 5.7 | 38 | 4.5 |  |
| Miscellaneous sandy grey wares | GX |  | 31 | 35.2 | 192 | 22.6 | 15 |
| Horningsea grey wares | HOG |  | 9 | 10.2 | 72 | 8.5 |  |
| Horningsea grey wares (black-surfaced ) | HOGB |  | 6 | 6.8 | 171 | 20.1 | 24 |
| Miscellaneous red coarse wares | RX |  |  | 1.1 | 25 | 2.9 |  |
| Verulamium-region white ware | VRW |  |  | 4.5 | 35 | 4.1 | 9 |
| White-slipped oxidised wares | WSO |  | 5 | 5.7 | 34 | 4.0 | 6 |
| Total local or regional coarsewares |  |  | 73 | 83.0 | 700 | 82.4 | 95 |
| Late shell-tempered wares | LSH |  | 11 | 12.5 | 140 | 16.5 |  |
| Nene Valley colour-coated wares | NVC |  | 2 | 2.3 | 6 | 0.7 |  |
| Total late specialist wares | \% |  | 13 | 14.8 | 146 | 17.2 |  |
| Total Roman pottery |  |  | 88 | 100.0 | 850 | 100.0 | 95 |

Table 3. Roman fabric quantities.

## Imports

A single sherd of Central Gaulish samian (SACG) of mid to late 2nd century date was an unstratified find (0001) and the only imported ware in the assemblage.

## Local and Regional wares

A small fragment of a Cherry Hinton white fineware (CHWF) recovered from ditch 0068 (0069) is from a globular beaker with barbotine dot panel decoration and is late 1st or early 2 nd century in date.

The majority of the assemblage, approximately $83 \%$, consists of local or regional coarsewares which include several broad greyware fabric groups which are typically predominant in rural assemblages in this part of the county. Few forms are identified within each group as much of the material consists of abraded bodysherds that have been through a long deposition cycle.

Six Black-surfaced ware (BSW) sherds are present and forms identified are BB1/BB2style dishes and a jar. A straight-sided bead-rimmed dish, Type 6.18 from ditch 0068 (0069) is mid 2nd to mid 3rd century and a flange-rimmed dish Type 6.17 from ditch 0073 (0051) is late 3rd or 4th century. An uncertain jar with a rim diameter of 200 mm was also found in ditch 0073 (0050).

Micaceous wares in the black-surfaced (GMB) and grey-surfaced (GMG) variants account for $12.5 \%$ of the sherds and $10 \%$ of the assemblage weight. A finely burnished GMB uncertain jar and a GMG Type 6.18 dish from ditch 0005 (0004) were identified and non-diagnostic bodysherds, many very abraded, were also found.

Horningsea wares in the standard grey (HOG) and black-slipped (HOGB) variants account for $17 \%$ of the sherds, $28.6 \%$ of the weight and a quarter of the assemblage Eves. All of the sherds identified as Horningsea ware are from standard-sized vessels rather than from the classic large storage jars which Horningsea is best known for. All HOG sherds are non-diagnostic bodysherds, three have buff/white slip and one has a single band of wavy-line decoration. HOGB forms identified include a high-shouldered 'Braughing' type jar from ditch 0008 (0006) with rilled decoration on its shoulder and an Evans' (1991) Type 17-23 jar from ditch 0073 (0050) with an everted rim and a bead cordon at the base of its neck. The Braughing jar is an early Roman form and the vessel here could be early because although Horningsea's period of wider distribution was from the mid 2nd century onwards, the kilns are within 15 miles of the site and can be regarded as a 'local’ supplier.

Miscellaneous sandy greywares (GX) are also common and account for $35.2 \%$ of the sherd count and $22.6 \%$ of the assemblage weight. Rims from two uncertain jars with diameters of 160 mm and 180 mm , an uncertain dish base which is 2 nd century or later as well as miscellaneous undiagnostic bodysherds, some very abraded, were recorded

The rest of the fabrics are oxidised and represent minor elements of the assemblage. A White-slipped oxidised ware (WSO) straight-sided dish Type 6.19 from ditch 0073 (0052) may possibly be a Horningsea product. A Verulamium-region white ware (VRW) jar 200mm diameter from ditch 0073 and a flagon sherd from ditch 0068 (0069) are of probable late 1st or 2nd century date. A single red coarseware (RX) bodysherd was also found.

## Late specialist wares

Late specialist wares which characterise the late and latest Roman period were unstratified (0001) or collected from the topsoil (0002) and fills of ditches 0068 and 0073 . Two fabric goups, Late shell-tempered wares (LSH) and Nene Valley colourcoated wares (NVC), which both date broadly to the late 3rd or 4th century, were identified.

Late shell-tempered wares (LSH) are non-diagnostic bodysherds, probably from jars, including a base sherd from a very large storage jar from ditch 0073. Nene Valley colour-coated wares (NVC) are represented by a single abraded beaker sherd from ditch 0073.

## Medieval pottery

Twelve sherds of medieval pottery weighing 198g were collected from six contexts, five ditches and the topsoil layer. Two broad fabric groups were identified, both of late 12th to 14 th century date. The fabric quantities are shown below.

| Fabric | Code | No | \%No |  | Wt |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| \%Wt |  |  |  |  |  |  |
| Medieval coarsewares | MCW | 9 | 9.0 | 174 | 16.6 |  |
| Unprovenanced glazed ware | UPG | 3 | 3.0 | 24 | 2.3 |  |
| Total |  | 12 | 12.0 | 198 | 18.9 |  |

Table 4. Medieval fabric quantities
Medieval coarsewares (MCW) consist of a jug handle from the topsoil (0002) and nondiagnostic bodysherds, mostly abraded, from ditches 0015 (0018), 0040 (0041), 0061 (0060), 0063 (0062) and 0065 (0064). Unprovenanced glazed wares (UPG) are represented by two non-diagnostic bodysherds from ditch 0040 (0041) and a small abraded bodysherd from ditch 0061 (0060).

### 5.3 Ceramic Building Material (CBM)

Twenty-six fragments of CBM weighing $2,366 \mathrm{~g}$ were collected from eight contexts. The CBM was quantified by count and weight by context, and fabric and form types were recorded. General fabric codes were assigned from the Suffolk CBM fabric types which are based on the coarseness of the matrix and by the main inclusions. Details of abrasion, burning or other features were also recorded and a date was assigned if possible. The fabric descriptions are shown in Table 5 and the catalogue descriptions by context are shown in Table 6.

| Fabric | Code |
| :--- | :--- |
| Fine sandy with clay pellets | fscp |
| Fine sandy with ferrous pieces | fsfe |
| Medium sandy with few other inclusions | ms |
| Medium sandy with clay pellets | mscp |
| Medium sandy with flint | msf |
| Medium sandy with ferrous pieces | msfe |
| Estuarine clay | est |

Table 5. CBM fabric descriptions

| Ctxt | Fabric | Form | No | Wt | Notes | Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0001 | fscp | TEG | 1 | 206 | Dense fabric, reduced core. Th 21 mm Flange ht $46 \mathrm{~mm}, \mathrm{~W}$ 35 mm | Rom |
|  | ms | RBT | 1 | 21 | Abraded | Rom |
|  | msfe | IMB | 1 | 86 | Thickness 16mm, abraded | Rom |
| 0002 | fsfe | RBT | 1 | 15 | Abraded | Rom |
|  | msfe | RT | 2 | 151 | 14 mm thick | PMed |
| 0041 | est? | EB? | 1 | 330 | Fine buff poorly mixed purple and dk grey bands. ?Estuarine fabric, medieval or later | Med+ |
|  | msfe | UN | 1 | 4 | Abraded brick or floor tile |  |
| 0050 | fscp | RBT | 2 | 22 | Reduced core, abraded. Very dense fabric | Rom |
|  | msf | RBT | 1 | 478 | Very abraded. 33mm thick. Some chalk | Rom |
| 0051 | fscp | RBT | 1 | 62 | 22 mm thick | Rom |
|  | fscp | TEG | 2 | 122 | Very dense fabric, reduced core, some chalk. laminated \& abr | Rom |
|  | msf | RBT | 1 | 99 | Burnt, 23mm thick. Some clay pellets | Rom |
| 0054 | msfe | RBT | 1 | 208 | Some clay pellets, 32 mm thick. Abraded. | Rom |
| 0056 | est? | EB? | 1 | 34 | Poorly mixed, abraded. Estuarine fabric, medieval or later | Med+ |
|  | fscp | RBT | 1 | 12 | Dense fabric. Abraded | Rom |
| 0069 | ms | RBT | 1 | 41 | Burnt and abraded. Th 16mm | Rom |
|  | mscp | RBT | 7 | 475 | ?TEG, Th 32 mm . Red clay pellets and silty bands Abraded | Rom |

Table 6. CBM descriptions

The majority of the CBM fragments (21) are Roman and of those, most are Roman tile of uncertain form (RBT). A few roofing tiles were also identified including an imbrex (IMB) tile and tegulae (TEG). The majority of the Roman tiles were in fine or medium sandy clay fabrics with clay pellets (fscp and mscp). The finer version was very dense and hard. Similar fabrics dominated the much larger CBM assemblage at MNL 193 (Anderson, forthcoming).

Post-Roman tile was collected from three contexts, two ditches and the topsoil. Two early brick (EB) fragments made in estuarine clay fabric (est) which may be medieval or later were identified in ditches 0040 (0041) and 0055 (0056). Two post-medieval roof tiles (RT) came from the topsoil (0002).

### 5.4 Small finds and metalwork <br> Introduction

A total of 17 items was recorded as small finds and two iron nails were also recorded. Almost all were unstratified (0001) or from the topsoil (0002) and recovered by metal
detecting the spoil from machined trenches and topsoil stripping. They include Roman, medieval, post-medieval and unknown-dated materials which are discussed by period and category in the section below. The quantities by material and period are summarised in the table below and the full list in small find number order is in Appendix 7. Nine of the copper alloy objects and one iron object will require radiography.

| Material | ROM | MED | MED+ | PMED | UNK | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| Copper alloy | 7 | 2 | 2 | 2 | 1 | 14 |
| Iron |  |  |  |  | 1 | 1 |
| Silver |  | 2 |  |  |  | 2 |
| Total no of SF | 7 | 4 | 2 | 2 | 2 | 17 |

Table 7. Small finds quantities (count) by material and period

## Roman

Coins
Andrew Brown

Five Roman coins were recovered, of which three could be identified with a date range of issue from 275 to 350 . The unidentified pieces are probably from within the same late 3 rd and 4 th century range. All of the coins are copper alloy and show a variable amount of wear and corrosion, whilst two are heavily encrusted and could not be identified closely. The coins are catalogued below in Appendix 7.

A worn barbarous radiate, c.275-285 has a diameter of 13.68 mm and weight 0.71 g . The obverse legend is illegible, with radiate bust right. The reverse is illegible. SF1011 (0001).

A worn nummus of the House of Constantine, c. 330-340 has a diameter of 18.34 mm and weighs 2.72 g . The obverse reads: VRBS-ROMA, with a helmeted bust of Roma left. The reverse shows a she-wolf suckling twins and two stars above. Mint: []/[]TRS[], Trier mint. SF1016 (0001).

An incomplete and slightly worn nummus of Constans, c. 348-350 (As LRBC II nos. 1117 or $1121-1122$ ) has a diameter of 20.7 mm and weight 2.21 g . Approximately a third of the coin is missing due to old breaks. The obverse reads: D N CONSTA-NS P F AVG, with diademed and draped bust left. The reverse reads: FE[L TEMP REPAR]ATIO, with soldier holding spear advancing right and leading small figure from hut. Mint: [ ]//ASIS[], Siscia mint. SF1014 (0001).

A very worn and encrusted coin is probably a Roman nummus of 4th century date, diameter 15.24 mm , weight 1.36 g . The obverse legend is uncertain, with laureate(?) bust right. The reverse is Illegible SF1005 (0002).

A heavily encrusted copper-alloy object, possibly a coin and perhaps Roman in date has an oval shaped flan measuring 23.89 mm in length by 22.08 mm in width and 4.23 g in weight (encrusted). It is possibly a Roman radiate or nummus of 3rd to 4th century date, although this remains uncertain due to the preservation of the object. SF1004 (0002).

## Dress accessories

## Brooch <br> Jude Plouviez

A copper alloy disc brooch has a raised cupped centre and six small projections around the outer edge which is 32 mm in diameter. The pin is probably hinged but is obscured at present. This type, often known as a 'buckler' or 'tutulus,' is found widely on the Continent and is Hull's type T269 (Bayley and Butcher 2004, 178 fig. 152). It broadly dates from the late 1st to 3rd century. SF1001 (0002).

## Bracelet

A copper alloy bracelet fragment with panels of transverse grooved decoration was also found. SF1013 (0001).

## Medieval

## Coins and jetton

Andrew Brown

A worn silver medieval halfpenny of Edward III, Star-Marked coinage, c.1335-1343 (As Withers and Withers, 2005: Types 1-3, pp. 17-19.) has a diameter of 15.67 mm and weight 0.50 g . The obverse reads: [EDWAR]DVS REX ANG* with crowned bust facing within an inner circle. The reverse reads: *CIVI/TAS/[LON]/DON, with a long cross dividing the legend, three pellets in each angle of the cross, all within an inner circle. Mint: London. SF1015 (0001).

A silver medieval penny of Edward III, Florin coinage, c.1344-1351 (As Wren, 1995: p
88 ) has a diameter of 19.14 mm and weight 1.30 g . The obverse reads: EDW R ANGL DNS HyB (reverse barred N's), with crowned bust facing within an inner circle. The reverse reads: CIVI/TAS/EBO/RACI, with a long cross dividing the legend, quatrefoil with pellet at its centre, three pellets in each angle of the cross, all within an inner circle. Mint: York. SF1008 (0041).

A copper-alloy French Crown issue stock jetton struck for the Queen and her almonry, c.14th-15th century (As Mitchiner 1988: no. 379) has a diameter 21.47 mm and weight 0.90 g . The obverse reads: +AVE MARIA+GRACIA[]PLENA, a crown with large central lis and three rosettes on its body, within an inner circle. The reverse reads:
$++\mathrm{A}+/+\mathrm{VE}+/+\mathrm{MA}+/+\mathrm{RI}+$, a double-stranded arcuate cross fleurette with lis at the centre and six pointed stars/mullets in each angle. SF1003 (0002).

## Other medieval finds

Other medieval copper alloy finds include a buckle which is 14 th century (SF1009) and a decorative bar mount (SF1012) and a scabbard chape (SF1017) which are medieval or early post-medieval.

## Post-medieval and unknown dated

Post-medieval or undated finds include a hexagonal mount or escutcheon (SF1010), a curved sheet fitting (SF1006) and a stamped or pressed object (SF 1007), all copper alloy. An iron knife (SF1002) and two iron nails from ditch 0055 (0056) and ditch 0073 (0051) were also found.

### 5.5 Miscellaneous

## Quernstone

A small fragment (158g) of Millstone Grit quernstone with a full thickness of 41 mm was recovered from ditch 0073 (0051). The grinding surface is grooved and the non-grinding surface is pecked. It was found in association with Roman pottery and CBM and is most likely to be Roman as well.

### 5.6 Worked flint <br> Colin Pendleton

Eight pieces of struck flint weighing 40 g were collected from four contexts. All were found in contexts with later-dated Roman or medieval finds. The flint was recorded by type and other descriptive comments about appearance, condition and technology were noted and a date suggested. Descriptions by context are shown in the table below. All of the flint is patinated.

| Ctxt | Type | No | Notes | Date |
| :--- | :--- | ---: | :--- | :--- |
| 0002 | blade | 1 | Small blade | Meso or Neo |
| 0050 | flake | 2 | Two small flakes with hinge fractures | L Preh |
|  | blade | 1 | Small blade | Meso or Neo |
| 0051 | scraper | 1 | Endscraper | Meso or Neo |
|  | flake / blade | 1 | Flake or blade with thick cross-section. | Meso or L Preh |
| 0052 | flake | 1 | Thick squat flake mainly cortex on dorsal face | Meso or L Preh |
|  | flake | 1 | Squat flake | Meso or L Preh |

Table 8. Worked flint descriptions

There are three pieces, two small blades and the endscraper which are almost certainly Mesolithic or Neolithic and the other pieces could be as well, but are not as closely datable.

Burnt flint
A fragment of burnt flint (14g) was recovered from ditch 0073 (0052).

### 5.7 Faunal remains

## Animal bone

Julie Curl

## Introduction and methodology

In total, 300 fragments of animal bone weighing $4,387 \mathrm{~g}$ were recovered. The assemblage was recorded using a modified version of guidelines by English Heritage (Davis, 1992). All the bone was examined to determine range of species and elements present. Counts and weights were noted for each context and the number of individual species elements present (NISP) in each context was recorded. A note was made of butchering and any indications of skinning, horn working or other modifications. When possible, a record was made of ages and any other relevant information, such as pathologies. The data was input directly into a Microsoft Excel database for quantification and analysis. A catalogue of the data by context is included in Appendix 8.

## Deposition

Bone was collected from 17 contexts with associated Roman and medieval dated material. The weights by feature type are summarised in Table 9. The majority of the assemblage (89.3\%) came from the fills of ditches and the bulk of that material was derived from contexts with associated pottery of late 3rd or 4th century date. The rest of the bone came from the topsoil and other layers or was unstratified.

| Feature type | $\mathbf{W t} / \mathbf{g}$ | $\boldsymbol{c}$ \% Wt |
| :--- | ---: | ---: |
| Ditch | 3919 | 89.3 |
| Layer | 68 | 1.6 |
| Topsoil | 332 | 7.6 |
| Unstratified | 68 | 1.6 |
| Total | 4387 | 100.0 |

Table 9. Animal bone weight by feature type

## Species

At least six species were identified from this assemblage, with some bone too fragmentary to positively identify to species. Species recovered appear to be largely domestic and dominated by the main domestic stock of cattle and sheep/goat. The number of individual species elements present (NISP) are summarised in Table 10.

| Species | No. | \% No. |
| :--- | ---: | ---: | ---: |
| Bird/small mammal | 1 | 0.3 |
| Cattle | 38 | 12.7 |
| Dog/fox | 4 | 1.3 |
| Dog/wolf | 1 | 0.3 |
| Equid | 4 | 1.3 |
| Mammal | 240 | 80.0 |
| Pig | 2 | 0.7 |
| Sheep/goat | 10 | 3.3 |
| Total | 300 | 100.0 |
| Table 10 Quantification (count) of species |  |  |

The cattle bone was mainly derived from adult animals, with one juvenile, indicative of on-site breeding. Mature animals are shown with well worn teeth and periodontal disease, which could suggest older animals kept for traction. This is further supported by a femur with pathological distortion from a Late Roman context. A metacarpal from a Roman ditch fill shows a short and robust individual, suggesting a bull of the Celtic Short-Horn-type, which were commonly kept during this period.

The sheep/goat remains are likely to have been derived solely from sheep as no goat elements were positively identified. These ovi-caprid remains were largely one or two
bones from good cuts of meat. These bones were from mostly adult animals, with one juvenile bone in a late Roman fill, which suggests on-site breeding at this time.

Single pieces of pig/boar bone were recovered from two contexts. One is from a juvenile animal in ditch 0063 (0062). The presence of boar from hunting is always a possibility in pre-16th century deposits, but this cannot be determined from such sparse remains. Canid remains were recovered from two contexts, with the remains of a small dog (or fox) from medieval ditch 0055 (0056) and a tooth from a larger dog or wolf in the topsoil (0002). Three contexts produced teeth from equids. A single, undiagnostic bird or small mammal fragment was found in ditch 0040 (0041).

## General butchering and elements present

A good deal of the faunal assemblage had been butchered, with plentiful evidence of the main domestic mammals. Chops were seen on larger elements and from dismemberment of carcasses. Smaller knife cuts from meat removal and from skinning were seen on some cattle remains. Some primary butchering waste elements were recorded amongst the cattle remains, but more secondary waste and better quality meat-bearing bones were seen.

## Pathologies

A mature cattle mandible from ditch 0061 (0060) showed full wear on teeth and periodontal disease. A juvenile cattle femur from ditch 0068 (0069) showed severe pathology with distortion at the proximal end of the bone.

## Conclusion

The bulk of this relatively small assemblage was derived from the primary and secondary waste from the main domestic mammals. A greater number of better quality meat-bearing bones was recorded, suggesting that this assemblage is derived from the dumping of domestic food waste. The site is adjacent to MNL 193, a previously studied site with a much larger faunal assemblage than MNL 612, approximately five times the size ( 1393 pieces, $24,516 \mathrm{~g}$ ). The MNL 193 assemblage (Curl, forthcoming) was dominated by cattle, with evidence of mature animals and traction use surmised from the pathological conditions seen. It also had a significant amount of red deer antler working waste and horn working waste which was absent in this collection.

## Shell

Six oyster shells (111g) were recovered from four contexts, three ditches, all with medieval and Roman-dated finds. Forty-one mussel shells (177g) were collected from three ditches and unstratified with a concentration of 28 in ditch 0063 (0062)

Three snail shells identified as helix aspersa, a terrestrial species, were recovered from ditches 0061 (0060) and 0063 (0062), both with associated pottery of medieval date.

### 5.8 Plant macrofossils and other remains

Val Fryer

## Introduction and method statement

Excavations at West Row recorded a small number of features including pits, ditches, post-holes and an in-filled natural hollow. Although most contexts were un-dated, the fills within ditches 0068 and 0073 (Samples 12 and 13 respectively) did contain Roman pottery, and it is perhaps most likely that all features probably contained material of this date. Samples for the retrieval of the plant macrofossil assemblages were taken from across the excavated area, and twelve were submitted for assessment.

The samples were processed by manual water flotation/washover and the flots were collected in a 300 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to $\times 16$ and the plant macrofossils and other remains recorded are listed the tables in Appendix 9: Plant Macrofossils and Molluscs and other remains. Nomenclature within the table follows Stace (1997) for the plant macrofossils and Kerney and Cameron (1979) and Macan (1977) for the molluscs. All plant remains were charred. Modern contaminants including woody roots and seeds were present throughout.

The non-floating residues were collected in a 1 mm mesh sieve and will be sorted when dry. All artefacts/ecofacts will be retained for further specialist analysis.

## Results

Cereal grains/chaff and seeds of common segetal weeds were recorded, mostly at low to moderate densities, from all twelve assemblages. Preservation was generally very poor, with a high density of the grains and seeds being severely puffed and distorted, probably as a result of combustion at very high temperatures.

Barley (Hordeum sp.) and wheat (Triticum sp.) grains were noted, although most grains could not be closely identified. A single possible oat (Avena sp.) grain was present within the assemblage from Sample 13, and the same assemblage also contained a possible asymmetrical lateral grain of six-row barley (H. vulgare). Cereal chaff, most notably spelt wheat (T. spelta) glume bases, was recorded from hollow 0049 and was especially common within the fills of ditches 0068 and 0073 . Weed seeds were scarce, with all occurring as single specimens within the assemblages. All were of common crop weeds including brome (Bromus sp.), black bindweed (Fallopia convolvulus), goose grass (Galium aparine), ribwort plantain (Plantago lanceolata), grasses (Poaceae) and dock (Rumex sp.). Two small and very abraded fragments of possible hazel (Corylus avellana) nutshell were noted within the assemblages from Samples 9 (hollow 0049) and 12. Charcoal/charred wood fragments were present throughout, although always at a low to moderate density.

The major component of all twelve assemblages was shells of both terrestrial and freshwater obligate molluscs. Three of Evans (1972) ecological groups of terrestrial molluscs were represented (namely woodland/shade loving species, open country species and catholic species), with the open country species occurring most frequently. A limited range of shells of freshwater obligate species was noted within five of the ditch fills (Samples 3, 4, 8, 11 and 12).

The fragments of black porous and tarry material, which were present within all but two assemblages, were all probable residues of the combustion of organic remains (including cereal grains) at very high temperatures. Coal fragments and small mammal or amphibian bones were also present throughout, although it was unclear whether these were contemporary with the contexts or intrusive within the features from which the samples were taken. Other remains were very scarce, but did include fragments of bone, eggshell and fish bone, possible faecal concretions and a fragment of burnt organic material.

## Discussion

Of the twelve assemblages studied, only two (Samples 12 and 13) contain a moderate to high density of plant macrofossils, most of which would appear to be derived from cereal processing or storage waste of mid to late Roman (2nd to 4th century) date.

However, it should be noted that even these assemblages are small, with neither exceeding 0.1 litres in volume. It is assumed that this material was either burnt as refuse or used as fuel for domestic or light 'industrial' purposes, but it is currently unclear why this burnt material was ultimately deposited within two ditch fills which, in terms of the other remains recorded, would appear to have been peripheral to any main focus of activity. As elements within each of the ten remaining assemblages are similar to the remains within Samples 12 and 13, it is assumed that all are derived from material scattered or spread from ditches 0068 and 0073. The composition of the mollusc assemblages would appear to indicate that the local habitat largely consisted of dry, open, short-turfed grassland with only minimal areas of shade or open woodland. Ditches 0012 (Sample 3), 0015 / 0027 (Samples 4 and 8) and 0040 (Sample 11) all appear to have been damp or possibly seasonally filled with shallow, standing water, while ditches 0068 and 0073 were probably either slightly overgrown or filled with leaf litter.

## Conclusions and recommendations for further work

In summary, two assemblages appear to be derived from charred agricultural or domestic refuse of probable Roman date. This material was discretely disposed of within the fills of two ditches and it is assumed that, by means of either wind dispersal or subsequent disturbance, a proportion of the material was spread across the site, accidentally becoming incorporated within a number of other features.

Although the assemblages from Samples 12 and 13 do contain a sufficient density of material for quantification (i.e. 100+ specimens), analysis of two samples in isolation would add very little to the data already contained within this assessment. Therefore, no further work is recommended at this stage. However, a written summary of this report should be included within any publication of data from the site.

### 5.9 Discussion of the finds and environmental evidence

The excavation produced a modest group of finds from nineteen contexts which represent activity on this site mainly during the Roman period, with limited activity during the prehistoric and medieval periods. There is a 'background scatter' of prehistoric worked flint of Mesolithic or Neolithic date which was all redeposited in later-dated features and does not indicate intense activity during the prehistoric period.

The majority of the finds date to the mid and late Roman period suggesting that occupation was most intensive during the 2nd to 4th century. The pottery supply is dominated by local or regional coarsewares which include broad greyware fabric groups which are typically predominant in rural assemblages in this part of the county. Few forms are identified as the pottery was mainly derived from ditches and open features and was the product of a long deposition cycle. With a broad date range of 2nd to 4th century, the pottery assemblage includes only a few pieces that could be earlier, late 1st or early 2 nd century. It also includes fabrics and forms which belong to the late and latest Roman period. The Roman CBM assemblage includes roofing tiles and it is notable that the fabrics are very similar to those from nearby MNL 193. The coins date from the late 3 rd to the mid 4 th century

More than $75 \%$ of the animal bone assemblage was found in association with Romandated finds and is probably Roman as well. Preservation is fairly good and is typical of a rural assemblage with the greater number of better quality meat-bearing bones suggesting that this assemblage represents the dumping of domestic food waste.

Two of the plant macrofossil assemblages from Roman-dated ditches contained a moderate to high density of specimens, interpreted as charred agricultural or domestic refuse which appear to be derived from cereal processing or storage waste.

Previous work at nearby MNL 193 (Craven, forthcoming) produced a finds assemblage which was much larger overall, and included a wider range of types. The Roman pottery assemblage was ten times the size but had the same broad date range of 2nd to 4th century with only a few pieces that could be considered earlier (Tester, forthcoming). The few differences such as the wider range of fabrics present and a higher proportion of late specialist wares in the larger assemblage are not really significant and can be explained by the size of the samples. In any case, the two assemblages are from small areas of a larger Roman settlement at West Row and one would not expect homogeneity throughout. Although the assemblage is small, the data and the material from MNL 612 have potential to contribute quantified information to any wider study of the economy and industry of rural settlements in the surrounding area and for establishing the character of the activities carried out there. It should be considered in any future analysis or synthetic overview.

Later finds are few but include medieval and post-medieval pottery, tiles and metalwork. A small amount of medieval coarseware pottery was recovered from five ditches. Early brick in estuarine fabric which may be medieval or later came from two ditch fills and post-medieval roof tiles from the topsoil. Metalwork includes a few medieval coins and a token. None of the later finds reflect intense activity on this site during the medieval and post-medieval periods and it is most likely that they reached the site through casual loss or low level activity such as manuring.

## 6. Discussion

The earliest features on the site are hollow 0038 and tree bole 0034. Whilst the tree bole can only be broadly dated to the prehistoric period, it is likely that the hollow was backfilled in the Iron Age period. Although formed naturally, solution hollows such as this are commonly found to have been used in the Iron Age period, such as at Sawston, Cambridgeshire (Mortimer, pers comm) and Hemsworth Relief Road, West Yorkshire (WYAS forthcoming). Truncation by at least two ditches (0012 and 0073) also suggests an Iron Age, or at the very least, pre-Roman date for the hollow.

During the Roman period, ditches were the principal feature type in the excavation area, with a total of seven identified, five of which (0042, 0045, 0067, 0073 and 0074) formed a boundary that over the course of one hundred to one hundred and fifty years was reestablished and shifted slightly along its line. Although undated, pits 0022 and 0024 and posthole 0010 were probably also Roman as they truncate the hollow.

Based on stratification (Appendix 4) and similarity of fills (very dark blue/grey and clayrich) ditches 0067 and 0073 were the earliest ditches (although whether contemporary is not apparent), which were later replaced by the segmented boundary formed by 0045 and 0042, followed by 0074. 0055, the latest east to west aligned ditch is of probable medieval date and indicates the continued use, or re-establishment of the boundary into a much later period. It contained seven sherds of medieval pottery (the largest number found in any feature) and the only fragments of medieval rooftile (as well as some Roman pottery sherds). It was also a different colour from the Roman ditches. It is worth noting that SF1008, a silver penny of Edward III, (c. AD 1344-1351) was also found in this ditch and that all the other medeival coins (although from modern or unstratified contexts) were all 14th century in date suggesting that there may have been another
peak in activity in this period. Ditch 0012, the only north to south aligned ditch, postdated (cut) ditch 0073, but it is unclear whether it also post-dated the remaining ditches as there was no direct physical relationship with them.

Ditch 0073 is of particular interest, as it was very similar in form and size to a partially exposed ditch (0006) identified during an evaluation and monitoring immediately behind the school (MNL 613, Muldowney 2009). Both ditches had a common (east to west) alignment, contained similarly composed fills and had almost identical profiles, which strongly suggests that the ditches were contemporary and may have formed part of the same boundary. It would appear however, that this boundary was in fact segmented as no trace of the ditch was observed in the westernmost part of the footings trench (see Fig. 3, Muldowney 2009).

The remaining activity on the site consisted of 0079 an undated disturbed chalk layer, which was deposited in the recent past to create a raised area within the playing field south of the development area. It did not occur on the north side of the site. This partial landscaping of the field is reflected in the present ground levels, which along the north edge of the field (where the development area is located) is markedly lower over a 15 m to 20 m wide area.

The finds assemblages indicates that the site was predominantly in use between the 2nd and 4th centuries and this supports the evidence of the features, which present a picture of a boundary cut and re-established over a long period of time. In fact, the boundary is extant and in use today as The Green, which forms the present east to west aligned road just to the north of the site. Both the finds and environmental evidence suggest that the site was situated some distance from any specific activities, such as the animal processing in the form of antler and horn working at MNL 193 (see 5.7) and that the material accumulating in the ditches was derived from manuring and the general movement of objects through the soil by ploughing. Of note within the assemblages however, are the imbrex and tegula fragments - suggesting a roofed Roman building is located nearby- and the large quantities of mollusç shells denoting that the area was predominantly open and that most, if not all of the ditches were damp or possibly seasonally filled with shallow, standing water.

It is worth noting that medieval pottery was recovered from both Roman and medieval features and that this may lead to ambiguity regarding interpretation of the site. Such a situation can be accounted for by the intercutting nature of the features, where one ditch line is continually re-established and re-cut thus disturbing and mixing any finds within the fills. However, in this circumstance, it is most likely that the majority of ditches were indeed of Roman date because of their proximity to Roman remains to the south (MNL 514) and also because they are located within a wider Roman landscape of intermittent settlement. These factors are presented in addition to those described above, regarding the similarity of fills.

## 7. Conclusions and significance of the fieldwork

Archaeological remains on the site were predominantly dated to the Roman period (with some minor activity in the medieval period) and took the form of a boundary ditch, the line of which was frequently re-established over the period the site was in use. The majority of features are contemporary with those identified south of the school during an open area excavation (MNL 514, Gill 2001), which identified a series of ditches and pits dating to the mid 2 nd to late 3 rd or 4 th centuries and may have enclosed them. It would appear that the subject site is part of the same wider complex of remains as that to the south, but it stood apart from the processing activities, perhaps marking the northern limit.

It would be prudent to limit speculation about the function of the site in this report, as the excavation area was small and located directly over the boundary line. As indicated in the specialist reports (section 5.7 and 5.8 ) it would be more beneficial to place and discuss the significance of this site with MNL 193 (and other interventions in the immediate area) in a wider study of the area, perhaps in any future publication on RomanWest Row.

Further excavation in the intervening area between the subject site and MNL 193 may help to understand the type of activity taking place here on a wider scale. Excavation to the north of the subject site would also prove useful to determine whether these ditches really do enclose the activity to the south or merely divide two (or more) areas of activity. There is also potential for pre-Roman remains to be identified nearby as evidenced by the infilling of the solution hollow. Should any further development take
place between MNL 612 and MNL 613, particular attention should be placed on determining the continuing presence of any of the east to west ditches identified in MNL 612.

## 8. Archive deposition

Paper and photographic archive: SCCAS Bury St Edmunds T:Arcl\ALL_sitelMildenhall, West RowlMNL 612 West Row Primary School

Finds and environmental archive: SCCAS Bury St Edmunds.

Small Finds: Sensitive Store; Miscellaneous Small sites box A-M at: SS / 11 / 5
Bulk Finds: Bury bulk store; one box at I / 97 / 3

## 9. List of contributors and acknowledgements

The excavation was carried out by a number of archaeological staff (Abby Antrobus, Beth Barham, Andy Beverton and Jonathon van Jennians) all from Suffolk County Council Archaeological Service, Field Team. Metal detecting was carried out by Alan Smith.

The project was directed by Mo Muldowney and managed by Jo Caruth.

Finds processing was carried out by Rebekah Pressler, and the specialist finds report by Cathy Tester. Other specialist identification and advice was provided by Andrew Brown and Jane Carr (PAS finds recording officers), Colin Pendleton, Julie Curl and Val Fryer. The report was edited by Richenda Goffin.

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Plate 1. Evaluation trench, facing east
${ }^{2}$


Plate 2. Roman boundary ditch 0073, facing west


Plate 3. Medieval ditch 0055 (left), truncating shallow Roman ditch 0042 (right), facing east




## Appendix 1. Brief and Specification

## Brief and Specification for Trenched Evaluation

WEST ROW PRIMARY SCHOOL, BEECHES ROAD, MILDENHALL, SUFFOLK

The commissioning body should be aware that it may have Health \& Safety responsibilities.

## 1. The nature of the development and archaeological requirements

1.1 Planning permission for the erection of a new building at West Row Primary School, Beeches Road, West Row, Mildenhall (TL 6726 7641) has been granted by Suffolk County Council conditional upon an acceptable programme of archaeological work.
1.2 The Planning Authority has been advised that any consent should be conditional upon an agreed programme of work taking place before development begins (PPG 16, paragraph 30 condition).
1.3 The proposed development area is located on the south side of Beeches Road on the Fen margin, on chalky drift and chalk (loam over chalk) at c. 6.00 m AOD. The area affected by development measures $15.00 \times 9.60 \mathrm{~m}$ in area.
1.4 This site lies in an area of archaeological importance, recorded in the County Historic Environment Record. It is situated within a known Roman settlement and within the immediate vicinity of Roman features and find spots (MNL 193). These are indicative of further Roman occupation deposits within this area. There is, therefore, high potential for archaeological deposits to be disturbed by this development. The proposed works would cause significant ground disturbance that has potential to damage any archaeological deposit that exists.
1.5 A linear trenched evaluation is required of the development area, before any groundworks take place. The results of this evaluation will enable the archaeological resource, both in quality and extent, to be accurately quantified, informing both development methodologies and mitigation measures. Decisions on the need for, and scope of, any further work should there be any archaeological finds of significance will be based upon the results of the evaluation and will be the subject of an additional brief.
1.7 All arrangements for the field evaluation of the site, the timing of the work, access to the site, the definition of the precise area of landholding and area for proposed development are to be defined and negotiated with the commissioning body.
1.8 Detailed standards, information and advice to supplement this brief are to be found in Standards for Field Archaeology in the East of England, East Anglian Archaeology Occasional Papers 14, 2003.

10 In accordance with the standards and guidance produced by the Institute of Field Archaeologists this brief should not be considered sufficient to enable the total execution of the project. A Written Scheme of Investigation (WSI) based upon this brief and the accompanying outline specification of minimum requirements, is an essential requirement. This must be submitted by the developers, or their agent, to the Conservation Team of the Archaeological Service of Suffolk County Council (Shire Hall, Bury St Edmunds IP33 2AR; telephone/fax: 01284 352443) for approval. The work must not commence until this office has approved both
the archaeological contractor as suitable to undertake the work, and the WSI as satisfactory. The WSI will provide the basis for measurable standards and will be used to satisfy the requirements of the planning condition.
1,10 Before any archaeological site work can commence it is the responsibility of the developer to provide the archaeological contractor with either the contaminated land report for the site or a written statement that there is no contamination. The developer should be aware that investigative sampling to test for contamination is likely to have an impact on any archaeological deposit which exists; proposals for sampling should be discussed with the Conservation Team of the Archaeological Service of SCC (SCCAS/CT) before execution.
1.11 The responsibility for identifying any constraints on field-work, e.g. Scheduled Monument status, Listed Building status, public utilities or other services, tree preservation orders, SSSIs, wildlife sites \& c., ecological considerations rests with the commissioning body and its archaeological contractor. The existence and content of the archaeological brief does not override such constraints or imply that the target area is freely available.
1.12 Any changes to the specifications that the project archaeologist may wish to make after approval by this office should be communicated directly to SCCAS/CT and the client for approval.

## 2. Brief for the Archaeological Evaluation

2.1 Establish whether any archaeological deposit exists in the area, with particular regard to any which are of sufficient importance to merit preservation in situ [at the discretion of the developer].
2.2 Identify the date, approximate form and purpose of any archaeological deposit within the application area, together with its líkely extent, localised depth and quality of preservation.
2.3 Evaluate the likely impact of past land uses, and the possible presence of masking colluvial/alluvial deposits.

### 2.4 Establish the potential for the survival of environmental evidence.

2.5 Provide sufficient information to construct an archaeological conservation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of cost.
2.6 This project will be carried through in a manner broadly consistent with English Heritage's Management of Archaeological Projects, 1991 (MAP2), all stages will follow a process of assessment and justification before proceeding to the next phase of the project. Field evaluation is to be followed by the preparation of a full archive, and an assessment of potential. Any further excavation required as mitigation is to be followed by the preparation of a full archive, and ans assessment of potential, analysis and final report preparation may follow. Each stage will be the subject of a further brief and updated project design; this document covers only the evaluation stage.
2.7 The developer or his archaeologist will give SCCAS/CT (address as above) five working days notice of the commencement of ground works on the site, in order that the work of the archaeological contractor may be monitored.
2.8 If the approved evaluation design is not carried through in its entirety (particularly in the instance of trenching being incomplete) the evaluation report may be rejected. Alternatively the
presence of an archaeological deposit may be presumed, and untested areas included on this basis when defining the final mitigation strategy.
2.9 An outline specification, which defines certain minimum criteria, is set out below.

## 3. Specification: Field Evaluation

3.1 A single trial trench is to be excavated to cover all parts of the site affected by the development, amounting to 15.00 m in length: A single trench 15.00 m in length x 1.80 m in width across the area of the new building, which measures $15.00 \times 9.60 \mathrm{~m}$ in area;
3.2 If excavation is mechanised a toothless 'ditching bucket' at least 1.20 m wide must be used. A scale plan showing the proposed locations of the trial trenches should be included in the WSI and the detailed trench design must be approved by SCCAS/CT before field work begins.
3.3 The topsoil may be mechanically removed using an appropriate machine with a back-acting arm and fitted with a toothless bucket, down to the interface layer between topsoil and subsoil or other visible archaeological surface. All machine excavation is to be under the direct control and supervision of an archaeologist. The topsoil should be examined for archaeological material.
3.4 The top of the first archaeological deposit may be cleared by machine, but must then be cleaned off by hand. There is a presumption that excavation of all archaeological deposits will be done by hand unless it can be shown there will not be a loss of evidence by using a machine. The decision as to the proper method of excavation will be made by the senior project archaeologist with regard to the nature of the deposit.
3.5 In all evaluation excavation there is a presumption of the need to cause the minimum disturbance to the site consistent with adequate evaluation; that significant archaeological features, e.g. solid or bonded structural remains, building slots or post-holes, should be preserved intact even if fills are sampled. For guidance:
For linear features, 1.00 m wide slots (min.) should be excavated across their width. For discrete features, such as pits, $50 \%$ of their fills should be sampled (in some instances $100 \%$ may be requested).
3.8 There must be sufficient excavation to give clear evidence for the period, depth and nature of any archaeological deposit. The depth and nature of colluvial or other masking deposits must be established across the site.
3.9 Archaeological contexts should, where possible, be sampled for palaeoenvironmental remains. Best practice should allow for sampling of interpretable and datable archaeological deposits and provision should be made for this. The contractor shall show what provision has been made for environmental assessment of the site and must provide details of the sampling strategies for retrieving artefacts, biological remains (for palaeoenvironmental and palaeoeconomic investigations), and samples of sediments and/or soils (for micromorphological and other pedological/sedimentological analyses. Advice on the appropriateness of the proposed strategies will be sought from J. Heathcote, English Heritage Regional Adviser for Archaeological Science (East of England). A guide to sampling archaeological deposits (Murphy, P.L. and Wiltshire, P.E.J., 1994, A guide to sampling archaeological deposits for environmental analysis) is available for viewing from SCCAS.
3.10 Any natural subsoil surface revealed should be hand cleaned and examined for archaeological deposits and artefacts. Sample excavation of any archaeological features revealed may be necessary in order to gauge their date and character.
3.11 Metal detector searches must take place at all stages of the excavation by an experienced metal detector user.
3.12 All finds will be collected and processed (unless variations in this principle are agreed SCCAS/CT during the course of the evaluation).
3.13 Human remains must be left in situ except in those cases where damage or desecration are to be expected, or in the event that analysis of the remains is shown to be a requirement of satisfactory evaluation of the site. However, the excavator should be aware of, and comply with, the provisions of Section 25 of the Burial Act 1857.
3.14 Plans of any archaeological features on the site are to be drawn at 1:20 or 1:50, depending on the complexity of the data to be recorded. Sections should be drawn at 1:10 or 1:20 again depending on the complexity to be recorded. All levels should relate to Ordnance Datum. Any variations from this must be agreed with SCCAS/CT.
3.15 A photographic record of the work is to be made, consisting of both monochrome photographs and colour transparencies and/or high resolution digital images.
3.16 Topsoil, subsoil and archaeological deposit to be kept separate during excavation to allow sequential backfilling of excavations.
3.17 Trenches should not be backfilled without the approval of SCCAS/CT.

## 4. General Management

4.1 A timetable for all stages of the project must be agreed before the first stage of work commences, including monitoring by SCCAS/CT. The archaeological contractor will give not less than five days written notice of the commencement of the work so that arrangements for monitoring the project can be made.
4.2 The composition of the archaeology contractor staff must be detailed and agreed by this office, including any subcontractors/specialists. For the site director and other staff likely to have a major responsibility for the post-excavation processing of this evaluation there must also be a statement of their responsibilities or a CV for post-excavation work on other archaeological sites and publication record. Ceramic specialists, in particular, must have relevant experience from this region, including knowledge of local ceramic sequences.
4.3 It is the archaeological contractor's responsibility to ensure that adequate resources are available to fulfill the Brief.
4.4 A detailed risk assessment must be provided for this particular site.
4.5 No initial survey to detect public utility or other services has taken place. The responsibility for this rests with the archaeological contractor.
4.6 The Institute of Field Archaeologists' Standard and Guidance for archaeological field evaluation (revised 2001) should be used for additional guidance in the execution of the project and in drawing up the report.

## 5. Report Requirements

5.1 An archive of all records and finds must be prepared consistent with the principles of English Heritage's Management of Archaeological Projects, 1991 (particularly Appendix 3.1 and Appendix 4.1).
5.2 The report should reflect the aims of the WSI.
5.3 The objective account of the archaeological evidence must be clearly distinguished from its archaeological interpretation.
5.4 An opinion as to the necessity for further evaluation and its scope may be given. No further site work should be embarked upon until the primary fieldwork results are assessed and the need for further work is established.
5.5 Reports on specific areas of specialist study must include sufficient detail to permit assessment of potential for analysis, including tabulation of data by context, and must include non-technical summaries.
5.6 The Report must include a discussion and an assessment of the archaeological evidence, including an assessment of palaeoenvironmental remains recovered from palaeosols and cut features. Its conclusions must include a clear statement of the archaeological potential of the site, and the significance of that potential in the context of the Regional Research Framework (East Anglian Archaeology, Occasional Papers 3 \& 8, 1997 and 2000).
5.7 The results of the surveys should be related to the relevant known archaeological information held in the County Historic Environment Record (HER).

### 5.8 A copy of the Specification should be included as an appendix to the report.

5.9 The project manager must consult the County HER Officer (Dr Colin Pendleton) to obtain an HER number for the work. This number will be unique for each project or site and must be clearly marked on any documentation relating to the work.
5.10 Finds must be appropriately conserved and stored in accordance with UK Institute of Conservators Guidelines.
5.11 The project manager should consult the SCC Archive Guidelines 2008 and also the County HER Officer regarding the requirements for the deposition of the archive (conservation, ordering, organisation, labelling, marking and storage) of excavated material and the archive.
5.12 The WSI should state proposals for the deposition of the digital archive relating to this project with the Archaeology Data Service (ADS), and allowance should be made for costs incurred to ensure the proper deposition (http://ads.ahds.ac.uk/project/policy.html).
5.13 Every effort must be made to get the agreement of the landowner/developer to the deposition of the finds with the County HER or a museum in Suffolk which satisfies Museum and Galleries Commission requirements, as an indissoluble part of the fullsite archive. If this is not achievable for all or parts of the finds archive then provision must be made for additional recording (e.g. photography, illustration, analysis) as appropriate. If the County HER is the repository for finds there will be a charge made for storage, and it is presumed that this will also be true for storage of the archive in a museum.
5.14 The site archive is to be deposited with the County HER within three months of the completion of fieldwork. It will then become publicly accessible.
5.15 Where positive conclusions are drawn from a project (whether it be evaluation or excavation) a summary report, in the established format, suitable for inclusion in the annual 'Archaeology in Suffolk' section of the Proceedings of the Suffolk Institute for Archaeology, must be prepared. It should be included in the project report, or submitted to SCCAS/CT, by the end of the calendar year in which the evaluation work takes place, whichever is the sooner.
5.16 County HER sheets must be completed, as per the County HER manual, for all sites where archaeological finds and/or features are located.
5.17 Where appropriate, a digital vector trench plan should be included with the report, which must be compatible with MapInfo GIS software, for integration in the County HER. AutoCAD files should be also exported and saved into a format that can be can be imported into MapInfo (for example, as a Drawing Interchange File or .dxf) or already transferred to .TAB files.
5.18 At the start of work (immediately before fieldwork commences) an OASIS online record http://ads.ahds.ac.uk/project/oasis/must be initiated and key fields completed on Details,
Location and Creators forms.
5.19 All parts of the OASIS online form must be completed for submission to the County HER. This should include an uploaded .pdf version of the entire report (a paper copy should also be included with the archive).

Specification by: Dr Jess Tipper
Suffolk County Council
Archaeological Service Conservation Team
Environment and Transport Service Delivery
Shire Hall
Bury St Edmunds
Suffolk IP33 2AR Tel: 01284352197
Email: jess.tipper@et.suffolkcc.gov.uk
Date: 4 February 2009 Reference: / WestRowSchool-Mildenhall2009

This brief and specification remains valid for six months from the above date. If work is not carried out in full within that time this document will lapse; the authority should be notified and a revised brief and specification may be issued.
Appendix 2. Context list

| Context | Cut | Type | Category | Description | Width | Length | Depth | Section no | Sample no | Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0002 | 0002 | Layer | Deposit | Dark greyish brown sandy clay. Friable. Topsoil |  |  | 0.37 m | 4;9 |  |  |
| 0004 | 0005 | Ditch | Fill | Mid greenish grey sandy clay. Friable. Single fill of shallow ditch [0005]. Little organic material, some cess, not as much as in 0006 [0008]. Same as 0013 |  |  | 0.17 m | 1 |  |  |
| 0005 | 0005 | Ditch | Cut | Linear. Approx North-South. Sharp break from surface with gradual break to base. Gently curving sides. Base presumed flat, but uneven at this point. Not fully exc at this point. Not cut. Cut of shallow ditch. Same as 0012 | 0.80m | 1.60m | 0.12m | 1 |  |  |
| 0006 | 0008 | Ditch | Fill | Mid grey with less staining so greenish sandy clay.. Upper fill of ditch [0008]. Cess present. Probable backfill, after period of open cess. |  |  | 0.39m | 1 |  |  |
| 0007 | 0008 | Ditch | Fill | Light whitish grey fading to light greyish white at edges. Friable but sticky. Lower fill of ditch [0008]. Also backfill mingled with some weathering of the edges. |  |  | 0.22m | 1 |  |  |
| 0008 | 0008 | Ditch | Cut | Linear. Approx East-West. Full profile not seen, but likely U-shaped. Sharp break from surface. Steep sided concave edges, gradual break to base. Base not seen cut by [0005] at right angles. Boundary ditch. - see [0073]. Same as [0073], 0068 | 0.35m+ |  | 0.59m | 1 |  |  |
| 0009 | 0009 | Layer | Deposit | Mid yellowish brown sandy clay. Seemingly located on North side of area but not south does ground slope up to south as seen on grass to west? Subsoil deposit. |  |  | 0.17m | 9 |  |  |
| 0010 | 0010 | Posthole | Cut | Shape in plan circular; shape in section = bole with concave sides onto rounded clay base. Shallow, possibly cut posthole | 0.30m | 0.35m | 0.07m | 2 | 2 |  |
| 0011 | 0010 | Posthole | Fill | Tightly compacted mid grey clay with small chalk pieces. Fill of [0010]. Single fill of shallow posthole. | 0.35 m | 0.35m | 0.07m | 2 | 2 |  |
| 0012 | 0012 | Ditch | Cut | Cut of ditch. Linear; approx North-South alignment runs off under northern site edge. Break of slope at top sharp. Gradual break to a flat base. Gentle sloping sides, shallow. 2 m length excavated. Same as 0005 | 1.00 m |  | 0.13m | 3 |  |  |
| 0013 | 0012 | Ditch | Fill | Single fill of [0012]. Greenish grey sandy clay. $2 m$ long excavated. Same as 0004. | 1.00 m |  | 0.13m | 3 | 3 |  |
| 0015 | 0015 | Ditch | Cut | Ditch running parallel to south edge/bank. Firmly compacted mid grey clay loam i/c pieces of chalk. Terminus end at w of feature to imposed section at east @ 1.75m. Shallow ditch filled by 0018. Same as [0025], 0027, 0067 . | $0.50 \mathrm{~m}$ | $.75 \mathrm{~m}$ | 0.10m | 4 | 4 |  |
| 0016 | 0016 | Layer | Deposit | Layer of tightly compacted yellow brown chalk. Below (0002) topsoil and above (0017) deposit. Forming part of southern edge/bank. Uneven redeposited mixed chalk and topsoil/ 0016 deposit. Likely leveling layer to create slope raised and flat for sports field. | $e^{2}$ |  | 0.25m | 4 |  |  |
| 0017 | 0017 | Layer | Deposit | Layer of black loamy silt, firmly compacted. Beneath deposit (0016) and |  |  | 0.38m | 4 |  |  |


| Context | Cut | Type | Category | Description | Width | Length | Depth | Section no | Sample no | Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0018 | 0015 | Ditch | Fill | above ( 0018 ) fill of ditch. Forming part of southern edge/bank. Earlier levelling layer? Or possibly 0048 having sloped upwards to the south. Firmly compacted grey/black loamy silt with chalk pieces. Situated below (0017) deposit. Ranging in depth from terminus end (central $=0.28$ at deepest) to east end $=0.1 \mathrm{~m}$. Single fill of shallow ditch [0015]. Had odd whiteish element, sort of mouldy decomposed stuff? | $0 \mathrm{Cl}^{2}$ |  | 0.07m | 4 | 4 |  |
| 0019 | 0019 | Spread | Deposit | Mid brown silty clay. | 1.30 m | 1.70m | 0.12 m | 5 | 5 |  |
| 0020 | 0022 | Pit | Fill | Dark grey silty clay. | 0.35m | 0.70m | 0.34 m | 5 | 6 |  |
| 0021 | 0022 | Pit | Fill | Mid-light grey silty clayey chalk | 0.60m | 1.00 m | 0.15 m | 5 |  |  |
| 0022 | 0022 | Pit | Cut | Oval shaped pit. Flat based $U$ in section with North edge at c. $30 \%$. Slightly concave base. Located on East edge of brown splodge, north of black ditch. Hard to see in plan because north edge and west side merge with the brown deposit over this part of the site. Pit-dark fill (0020) suggests organic/burnt deposit. Intercuts pit [0024] - similarity between fills suggests they are related. Layer 0019 seems to have slumped into depression. | 1.10 m | 1.40m | 0.40m | 5 |  |  |
| 0023 | 0024 | Pit | Fill | Mid-light grey silty clayey chalk. Moderate. Entire fill of pit. Stonier than fill (0021) to north greyer than chalk. Fill of pit - quite chalky with large chalk lumps fill from vicinity. Some mixing with natural chalk. Metal detected. | 1.30 m | 1.40 m | 0.40m | 5 |  |  |
| 0024 | 0024 | Pit | Cut | Oval pit. Gentle break of slope, edges c 40 degrees, U shape. Concave base. Cut by pit [0022] to the north. To north of ditch (black), to the east of brown splodge. Pit fill is quite chalky (like the natural). | 1.30 m | 1.40m | 0.40m | 5 |  |  |
| 0025 | 0025 | Ditch | Cut | Linear. In section: semi bole with concave north edge and horizontal south edge butting on to south bank. Flattened base. Aligned northsouth. Same as [0015]. Continuation of shallow ditch [0015] | 0.40m |  | 0.33m | 6 |  |  |
| 0026 | 0025 | Ditch | Fill | Tightly compacted grey brown loamy silt. Same as 0018 |  |  | 0.27 m | 6 |  |  |
| 0027 | 0027 | Ditch | Cut | Continuing linear ditch from [0015] into [0025]. Baulk retained at west edge. Nos for slot excavated to take sample 8. Same as [0015] and [0025] |  |  |  |  | 8 |  |
| 0028 | 0027 | Ditch | Fill | Grey brown loamy silt continuing from (0016) into (0026) |  |  |  |  | 8 |  |
| 0029 | 0049 | Layer | Deposit | Mid grey brown silty sandy clay with orange patches |  |  | 0.24 m | 8/9 | 7 |  |
| 0030 | 0049 | Layer | Fill | Mid-light grey silty sandy chalky clay | 0.36m |  | 0.14m | 8,9 | 9 |  |
| 0031 | 0049 | Layer | Deposit | Dark grey brown sandy silty clay |  |  | 0.12m | 8,9 | 10 |  |
| 0032 | 0038 | Layer | Deposit | Mid orange grey sandy clay. Friable. Uneven deposit, slightly undulating. Layer covering a possible solution hollow or natural depression in the chalk. Possible disturbance to chalk. Same as 0029? |  |  | 0.16 m | 7 |  |  |
| 0033 | 0034 | Tree bole | Fill | Mid greyish orange clay sand. Friable. Single fill of potential tree bole. |  |  | 0.26 m | 7 |  |  |
| 0034 | 0034 | Tree bole | Cut | Oval. U shaped profile; sharp break from top, steepish curving sides to base which dips on east side. Full base not seen. Probable tree bole. | $1.15 \mathrm{~m}$ |  | 0.34 m | 7 |  |  |
| 0035 | 0035 | Layer | Deposit | Light whiteish grey. Chalky clay. Probably weathered or redeposited natural. Sitting within a hollow? [0038] |  |  | $0.44 \mathrm{~m}+$ | 7 |  |  |


| Context | Cut | Type | Category | Description | Width | Length | Depth | Section no | Sample no | Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0036 | 0036 | Layer | Deposit | Light grey sandy clay. Large root drag of layer 0032? Or bunny activity. |  |  | $0.24 \mathrm{~m}+$ | 7 |  |  |
| 0037 | 0037 | Layer | Deposit | Mid brownish grey. Sandy clay. Weathered edge of hollow [0038] (interface). |  |  | 0.10 m | 7 |  |  |
| 0038 | 0038 | Hollow | Interface | Large irregular: circular. Uneven where excavated here. No base seen. Hollow naturally occuring/formed. Same as 0049:0070. |  |  | 0.50m+ | 7 |  |  |
| 0040 | 0040 | Ditch | Cut | Linear. Irregular section, north side is convex with a clear, shallow break of slope and abrupt slightly angular BoB. South side is stepped with average, diffuse break of slope break of base is smooth and shallow. Base is fairly narrow, regular and inclines eastwards. No truncation. Aligned East-West. Runs across south end of site. Probably a boundary ditch. | 0.90m |  | 0.45m | 2 | 10 |  |
| 0041 | 0040 | Ditch | Fill | Silty clay ( $35: 65$ ), mid grey brown. | 0.90m |  | 0.40m | 10 | 11 |  |
| 0042 | 0042 | Ditch | Cut | Linear plan. Shallow $U$ shape section with an average, break of slope and gradual break to base. Slightly concave base. North side is completely cut by [0040]. East-west aligned. At south edge of [0040]. Filled by 0043 and 0044 . Original cut of boundary no finds. Terminus | 0.50m | 12.00m | 0.18m | 10 |  |  |
| 0043 | 0042 | Ditch | Fill | Lightish/mid brownish-grey. Clay silt (40:60). Fairly compact, firm and cohesive with a slightly friable quality. Basal fill of 0042 | 0.30m |  | 0.20m | 10 |  |  |
| 0044 | 0042 | Ditch | Fill | Mid brownish grey silty clay (30-70) | 0.20 m |  | 0.20 m | 10 |  |  |
| 0045 | 0045 | Ditch | Cut | Linear plan. U shaped section. Steep break of slope ( $\sim 80$ degrees), concave sides and gradual break to base. Concave base. Trunc'd by [0074]. Aligned east-west. Terminal end of linear. Sketch on sheet. | 0.40 m |  | 0.34 m | 17 |  |  |
| 0046 | 0045 | Ditch | Fill | Mid/light browny-yellowy-grey. Clay-silt (30/70). Mod compact friable. Basal, slump fill. More likely weathered or upcast, mixed mat. Level taken | 0.40m |  | 0.10 m | 17 |  |  |
| 0047 | 0045 | Ditch | Fill | Mid/light brownish-grey. Clayey silt. No inc's. Quite compact. 2nd fill of 0045 | 0.60m |  | 0.34 m | 17 |  |  |
| 0048 | 0048 | Layer | Deposit | Mid grey brown silty sandy clay. |  |  | 0.34 m | 9 |  |  |
| 0049 | 0049 | Hollow | Interface | The chalk has an undulating surface that slopes towards the west. Chalk quite mixed/disturbed in appearance. Weathered edge of a hollow? |  |  | 0.46m |  |  |  |
| 0050 | 0073 | Ditch | Fill | Mid/dark brownish grey clay-silt. No incs. Firm friable. Top fill of [0073]? High possibility that this is the fill of [0012] continuing over ditch 0073, but its unclear in plan | 0.70m |  | 0.12 m | 15 |  |  |
| 0051 | 0073 | Ditch | Fill | Mid brownish grey, Silty clay (30:70). Quite compact, firm. Main fill of [0073] | $1.85 \mathrm{~m}$ |  | 0.80 m | 17 | 13 |  |
| 0052 | 0073 | Ditch | Fill | Mid/light whitish-brownish-grey clay silt. Compact, crumbly. Tumble fill of [0073]. Possible fill of earlier ditch 0073. a re-cut only evident here. | $0.10 \mathrm{~m}$ | $a^{5 e}$ |  | 17 |  |  |
| 0053 | 0053 | Ditch | Cut | Shape in section = oval with concave sides on to rounded base. Shape in plan = linear. North-South aligned. Fill becoming more homogenous at this point along its length. Same as 0042 | $0,51 \mathrm{~m}$ |  | 0.32m | 11 |  |  |
| 0054 | 0053 | Ditch | Fill | Firmly compacted, mid grey clayey silt with orange brown mottling. More homogenous fill of ditch 0053 |  |  | 0.32m | 11 |  |  |
| 0055 | 0055 | Ditch | Cut | Shape in plan $=$ linear; shape in section $=\mathrm{v}$ shaped with convex sides | 1.48 m | 1.50m | 0.48m | 11 |  |  |


| Context | Cut | Type | Category | Description | Width | Length | Depth | Section no | Sample no | Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | onto pointed chalk base. North-south aligned. Appearing to continue through to [0041]. Main brown ditch continuing along length of site. Same as 0040/0061 |  |  |  |  |  |  |
| 0056 | 0055 | Ditch | Fill | Firmly compacted mid grey clayey silt. Single fill of ditch [0055]. Homogenous. Few inclusions. |  |  | 0.50m | 11 |  |  |
| 0057 | 0057 | Ditch | Cut | Shape in plan = linear. Shape in section =oval due to under [0053] and [0055] on to rounded chalk base. | 0.27 m | 0.20m | 0.15m | 11 |  |  |
| 0058 | 0057 | Ditch | Fill | Pale grey, tightly compacted clayey silt. Single fill of early ditch. |  |  | 0.12m | 11 |  |  |
| 0060 | 0061 | Ditch | Fill | $\mathrm{Mid} / l i g h t$ slightly brown-grey clayey silt (40:60). Oyster shell, snail shell, mussel shell. Fairly compact, firm, slightly friable. South-west corner. samian ware at very base of fill. Fill of [0061]. Sketch section and matrix on sheet. |  |  | 0.50m | 12+13 |  |  |
| 0061 | 0061 | Linear | Cut | Linear plan. Dish shaped section with slightly convex sides and ave Break of slope. Slightly concave base inclined westwards. No trunc. EW aligned. Part of segmented ditch. Level taken. Sketch plari on sheet. | 0.52m |  | 0.50 | 12+13 |  |  |
| 0062 | 0063 | Ditch | Fill | Mid/light brownish-grey clayey silt with dark orangey brown mottling. No inc's. Firm, friable. Fill of [0063]. Level taken. | 0.25m |  |  | 13 |  |  |
| 0063 | 0063 | Ditch | Cut | Linear plan. Heavily cut, only southern edge surviving. Concave u shaped, slightly concave base. Trunc'd by [0061]. East-west aligned. Probable recut of [0065], preceding [0061], another probable recut. | 0.84m |  | 0.48m | 12+13 |  |  |
| 0064 | 0065 | Ditch | Fill | $\mathrm{Mid} / l i g h t$ whitish-grey clayey silt. Fairly compact, firm, friable. Fill of [0065]. Primary fill. | 0.60m |  | 0.50m | 13+12 |  |  |
| 0065 | 0065 | Ditch | Cut | Linear plan. U shape section with flared break of slope, concave side and concave base, inclined westwards. Trunc'd by [0061] @ north edge. Runs east-west. Ditch - (butt end of which is 0045)- ditch gets deeper from butt to west | 1.20 m |  | 0.70 m | 12+13 |  |  |
| 0066 | 0067 | Ditch | Fill | Mid brownish-grey clayey-silt (40-60). Snail shells and mussel shells (gives fill a blueish silver tinge). Firm, friable. South-west corner. Fill v similar to 0062. fill of 0067 |  |  | 0.20 m | $12+13$ |  |  |
| 0067 | 0067 | Linear | Cut | Linear plan. Unknown section shape (visible side is cut by 0065). Flat base. Trunc'd by [0065] at northside. East-west aligned. Labelled as a cut, but seems like a layer. No it's a cut. | 0.80m |  | 0.20 m | $\begin{aligned} & 12,13, \\ & 14 \end{aligned}$ |  |  |
| 0068 | 0068 | Ditch | Cut | Linear. Sharp break of slope. Steep slightly curving sides with, slight step at top of slope. Gradual break to base largely flat. East-west aligned. Ditch $v$ dark fill. Roman boundary to activity to the south-east |  |  | 0.92m |  |  |  |
| 0069 | 0068 | Ditch | Fill | Dark blueish grey. Silty clay. Slightly paler towards edges. Compact. Main fill of ditch 0068 - backfill |  |  | 0.86 m | 15 | 12 |  |
| 0070 | 0070 | Hollow | Interface | Irregular. Shallow, gently sloping down from south-north. Grad. Break from where cut by ditch [0068]. Where seen slightly sloping but may not be actual base. Cut by [0068]. Hollow interface. | $2^{1} 0^{0}$ |  | 0.30m | 15 |  |  |
| 0071 | 0071 | Layer | Deposit | Mid grey-brown clay-silt. No inclusions. Firm fairly compact. Layer across north side of trench. Similar to 0029 and 0048 but unclear which. |  |  | 0.20 m | 15 |  |  |
| 0072 | 0072 | Layer | Deposit | $\mathrm{Mid} / \mathrm{slightly} \mathrm{dark} \mathrm{greyish-brown} .\mathrm{Clay} \mathrm{silt} .\mathrm{No} \mathrm{inc's} .\mathrm{Quite} \mathrm{compact}$. |  |  | 0.12m | 15 |  |  |








## Appendix 3. Equivalent Cut Numbers

| Cut no. used in text | Equivalent cut no. | Feature type |
| ---: | ---: | :--- |
| 0067 | $0015 ; 0025 ; 0027$ | Ditch |
| 0045 | 0065 | Ditch |
| 0042 | 0053 | Ditch |
| 0074 | $0057 ; 0063 ; 0083$ | Ditch |
| 0073 | $0008 ; 0068$ | Ditch |
| 0055 | $0040 ; 0061$ | Ditch |
| 0012 | 0005 | Ditch |
| 0038 | $0049 ; 0070$ | Hollow |
| 0080 | 0017 | Layer |
| 0079 | 0018 | Layer |






Appendix 4. Site matrix






## Appendix 5. Bulk finds

| Ctxt | Pottery |  | CBM |  | Animal bone |  | Oyster |  | Miscellaneous | Spotdate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| , | No. | Wt./g | No. | Wt./g | No. | Wt./g | No. | Wt./g |  |  |
| 0001 | 12 | 84 | 1 | 319 | 10 | 68 |  |  | Mussel 5-22g | LC3/4 |
| 0002 | 6 | 109 | 3 | 166 | 17 | 332 |  |  | Flint 1-2g | PMed, Med, LC3/4 |
| 0004 | 1 | 7 |  |  | 3 | 55 |  |  |  | Rom |
| 0006 | 4 | 103 |  |  | 2 | 25 |  |  |  | Rom |
| 0007 | 1 | 3 |  |  | 2 | 20 |  |  |  | Rom |
| 0013 |  |  |  |  | 6 | 26 |  |  |  |  |
| 0018 | 2 | 4 |  |  |  |  |  |  |  | Med |
| 0026 | 1 | 4 |  |  | 4 | 96 |  |  |  | Rom? |
| 0031 |  |  |  |  | 11 | 68 |  |  |  |  |
| 0041 | 5 | 40 | 2 | 330 | 6 | 129 | 1 | 16 |  | Med, Rom |
| 0050 | 12 | 104 | 3 | 500 | 93 | 681 |  |  | Flint 3-3g | LC3/4 |
| 0051 | 18 | 237 | 4 | 283 | 48 | 1068 |  |  | Flint 4-50g, Stone 1-138g, Iron $1-55 \mathrm{~g}$ | LC3/4 |
| 0052 | 12 | 98 |  |  | 5 | 52 |  |  | Flint 2-25g, B flint 1-14g | Rom |
| 0054 |  |  | 1 | 208 |  |  |  |  |  |  |
| 0056 | 5 | 13 | 2 | 46 | 19 | 175 |  |  | Iron 1-3g | Med+, Rom |
| 0060 | 4 | 14 |  |  | 6 | 358 | 1 | 6 | Mussel 3-13g, Snail 2-7g | Med |
| 0062 | 2 | 7 |  |  | 11 | 158 | 2 | 58 | Mussel 29-128g; Snail 1-8g | Med, Rom |
| 0064 | 3 | 98 |  |  | 2 | 8 |  |  | Mussel 4-14g (disc) | Med, Rom |
| 0069 | 12 | 123 | 8 | 516 | 55 | 1068 | 2 | 31 | $0^{6}$ | LC3/4 |






## Appendix 6. Pottery







## Small finds <br> Appendix 7.

| Small | Context | Period | Material | Object | No | Wt./g | Comments 5 ed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1001 | 0002 | ROM | Cu alloy | brooch | 1 |  | Disc brooch w raised cupped centre and 6 small projections around outer edge. Diam. 32 mm . Pin probably hinged (obscured at present) Known as 'buckler' or 'tutulus' \& found widely on the continent. Hull's type T269 (Bayley \& Butcher 2004, 178 fig. 152) 1st to 3rd C |
| 1002 | 0002 | UNK | Iron | knife | 1 | 24.0 | Knife w broken off tip. L. 103mm, max. W. 12mm, rectangular section tang |
| 1003 | 0002 | MED+ | Cu alloy | jetton | 1 | 0.9 | French Crown issue stock jetton struck for the Queen and her almonry, c.14th-15th C. Diam 21.47 mm . As Mitchiner, 1988: no.379. Obv. +AVE MARIA+GRACIA[] PLENA, crown w large central lis and 3 rosettes on body, within an inner circle. Rev. ++A+/+VE+/+MA+/+RI+, Double stranded arcuate cross fleurette w lis at centre, 6 pointed stars/mullets in each angle. |
| 1004 | 0002 | ROM? | Cu alloy | coin | 1 | 4.2 | Heavily encrusted copper-alloy possible coin. Oval shaped flan L. 23.89 mm by W. 22.08 mm . ?Roman radiate or nummus of 3rd to 4th century AD date, |
| 1005 | 0002 | ROM | Cu alloy | coin | 1 | 1.4 | Very worn and encrusted copper-alloy coin, probably a Roman nummus of 4th century AD date. Diam. 15.24mm. Obv. Uncertain legend, Laureate(?) bust right. Rev. Illegible |
| 1006 | 0002 | UNK | Cu alloy | fitting | 1 | 6.9 | Curved sheet Trapezoid shaped with ? rivet holes around edges L. $57 \mathrm{~mm} \mathrm{~W} .23 \mathrm{~mm}-40 \mathrm{~mm}$. Wt. 6.87 g Med+ |
| 1007 | 0002 | UNK | Cu alloy | object | 1 | 1.2 | Circular object w perforation in centre stamped or pressed. Diameter 000mm |
| 1008 | 0041 | MED | Silver | coin | 1 | 1.3 | Silver penny of Edward III, Florin coinage, c.1344-1351 AD. Diam. 19.14mm. As Wren, 1995: p. 88; North, 1975 : no. 1130. Obv. EDW R ANGL DNS HyB (reverse barred N's), Crowned bust facing within inner circle. Rev. CIV/TAS /EBO/RACl, Long cross dividing legend, quatrefoil w pellet at centre, 3 pellets in each angle of cross, all within an inner circle. Mint: York. |
| 1009 | 0001 | MED+ | Cu alloy | buckle | 1 | 6.9 | Part of buckle frame and forked spacer c. 14th c.. |
| 1010 | 0001 | PMED | Cu alloy | mount | 1 | 11.8 | Hexagonal mount or escutcheon with shield-shaped central hole. Pmed |
| 1011 | 0001 | ROM | Cu alloy | coin | 1 | 0.7 | Worn Roman barbarous radiate, c.275-285 AD. Diameter 13.68mm. Obv.Illeg. legend, Radiate bust right. Rev. Illeg. |
| 1012 | 0001 | MED+ | Cu alloy | mount | 1 | 0.7 | Decorative bar mount w terminal and central lobes. L. $20 \mathrm{~mm}, \mathrm{~W} .11 \mathrm{~mm}$. Central lobe is sexfoil w dished lobes and centre has raised dot. Terminal lobes dished recesses with raised dot in centre. Med or early PMed |
| 1013 | 0001 | ROM | Cu alloy | bracelet | 1 | 4.2 | Bracelet fragment, Diameter c. 55 mm , D-shaped section, thickness c. 1.5 mm , height 4 mm , with panels of 4 transverse grooves/notches alternating with plain panels. |
| 1014 | 0001 | ROM | Cu alloy | coin | 1 | 2.2 | Incomplete, slightly worn nummus of Constans, c.348-350 AD. Approx. a third missing due to old breaks. Diam. 20.7 mm . As LRBC II nos. 1117 or 1121-1122. Obv.: D N CONSTA-NS P F AVG, Diademed draped bust left. Rev.: FE[L TEMP REPAR]ATIO, Soldier holding spear adv right, leading small figure from hut. Mint.: [ ]//ASIS[], Siscia mint. |
| 1015 | 0001 | MED | Silver | coin | 1 | $0.5$ | Worn silver halfpenny, Edward III, Star-Marked coinage, c.1335-1343 AD. Diam. 15.67mm. (Withers \& Withers, 2005 Types 1-3, pp.17-19). Obv. [EDWAR]DVS REX ANG*, Crowned bust facing within inner circle. Rev CIVI/TAS/ [LON]/DON, long cross dividing legend, 3 pellets in each angle of cross, all within an inner circle. Mint: London. |
| 1016 | 0001 | ROM | Cu alloy |  |  | 2.7 | A worn copper-alloy Roman nummus of the House of Constantine, c.330-340 AD. Diam. 18.34mm. Obv.: VRBSROMA, Helmeted bust of Roma left. Rev.: She-wolf suckling twins, two stars above. Mint: [//[]TRS[], Trier mint. |
| 1017 | 0002 | MED+ | Cu alloy | chape |  | 4.1 | Scabbard chape - broken and part missing. L. 45 mm Med or early PMed |







## Appendix 8, Faunal remains






Appendix 9. Plant macrofossils and other remains


| Sample No. | 2 | 3 (e) | 4 | 5 | 6 | 7 | 8 | $9{ }^{2}$ | 10 | 11 | 12 | 13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Indet.seeds |  |  |  |  |  |  | x |  |  |  |  |  |
| Sample volume (litres) | 20 , | 20 | 20 | 20 | 10 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Volume of flot (litres) | $<0.1$ | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | $<0.1$ | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| \% flot sorted | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% |
| Molluscs and other remains |  |  |  |  |  |  |  |  |  |  |  |  |
| Sample No. | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| Context No. | 0011 | 0013 | 0018 | 0019 | 0020 | 0029 | 0028 | 0030 | 0031 | 0041 | 0069 | 0051 |
| Feature No. | 0010 | 0012 | 0015 |  | 0022 | 0049 | 0027 | 0049 | 0049 | 0040 | 0068 | 0073 |
| Feature type | ph | Ditch | Ditch | Spread | Pit | Hollow | Ditch | Hollow | Hollow | Ditch | Ditch | Ditch |
| Molluscs <br> Woodland/shade loving species |  |  |  |  |  |  |  |  |  |  |  |  |
| Aegopinella sp. |  |  | xcf |  | (1) 5 |  |  |  |  |  |  |  |
| Clausilia sp. | x |  | x |  |  |  |  |  |  |  |  |  |
| Discus rotundatus | X | x | x | ${ }^{2}$ |  | X | x |  |  | x |  | xxxx |
| Ena sp. Oxychilus sp. |  |  |  | Sula |  | xcf |  | xcf |  | x | X |  |
| Pomatius elegans |  | x |  |  |  |  |  |  |  |  |  |  |
| Zonitidae indet. |  | x |  |  |  |  |  |  |  |  |  | x |
| Open country species |  |  |  |  |  |  |  |  |  |  |  |  |
| Helicella itala | x | x |  | x |  | x |  |  |  |  |  | x |
| Helicidae indet. | xx |  |  |  |  |  |  |  |  |  |  |  |
| Pupilla muscorum | x | x | x | x | x | xx | x | x | x | x | x | x |
| Vallonia sp. | X | xxxx | xx | x |  | X | X |  | x |  | x | xx |
| $V$. costata | xx | xxx | x | x |  | xx | x |  | x | x | xx | xx |
| $V$. pulchella | xcf |  |  |  |  |  | xcf | xcf |  | xcf |  |  |
| Catholic species |  |  |  |  |  |  |  |  |  |  |  |  |
| Cepaea sp. | xcf | xCf |  |  |  |  |  | ail $\mathrm{sed}^{\text {d }}$ |  |  | x | xX |
| Cochlicopa sp. | x | $x \times$ | x | x |  | x |  | $c^{2}$ | x | x | x | xx |
| Nesovitrea hammonis |  | $0 \times x$ | X |  |  |  |  |  |  |  | x |  |
| Trichia hispida group |  | xxxx | xxx | xx | x | xx | Sux | xx | xx | xx | xxx | xxxx |
| Freshwater obligate species |  |  |  |  |  |  |  |  |  |  |  |  |
| Anisus leucostoma |  | x | x |  |  |  | x |  |  | x |  |  |
| Bithynia sp. |  |  |  |  |  |  | xcf |  |  |  |  |  |


| Sample No. | 2 | $3$ | 4 | 5 | 6 | 7 | 8 | $9$ | 10 | 11 | 12 | 13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lymnaea sp. |  | $0 \times$ | X |  |  |  | $x_{0}$ |  |  |  |  |  |
| L. truncatula |  |  |  |  |  |  | su0 $0^{\circ}$ |  |  | x | x |  |
| Planorbarius corneus |  |  |  |  |  |  | $x$ |  |  |  |  |  |
| Planorbis planorbis |  |  | x |  |  |  | x |  |  | x |  |  |
| Succinea sp. |  | x | x |  |  |  | x |  |  |  |  |  |
| Valvata cristata |  |  | X |  |  |  |  |  |  |  |  |  |
| Other remains |  |  |  |  |  |  |  |  |  |  |  |  |
| Black porous 'cokey' material | X | X | x | xx | x | xx | x | x |  |  | xxxx | xxxx |
| Black tarry material | X | X |  | x |  | x | x |  |  |  |  | $x$ |
| Bone | xx | x |  | x | x | x | x |  | x |  | x | x xb |
| Brick/tile | X |  |  |  |  |  |  |  |  |  |  |  |
| Burnt/fired clay |  |  |  |  |  |  |  |  |  |  | x | x |
| Burnt organic concretion |  |  |  |  |  |  |  |  |  |  | x |  |
| Eggshell |  |  |  |  | ) |  |  |  |  |  |  | x |
| Fish bone |  |  |  |  |  |  |  |  |  |  |  | x |
| Mineralised faecal concretions |  | xcf |  |  |  |  |  |  |  |  |  |  |
| Small coal frags. | x | x | x |  | x | x | x | x | x | x | x |  |
| Small mammal/amphibian bones | x | x | x |  | x | X | x | x |  | x | X | x |
| White mineral concretions | xxxx |  |  |  |  |  |  | xxx |  |  | x |  |
| Vitreous material |  |  |  |  |  |  |  | x |  | x |  |  |
| Sample volume (litres) | 20 | 20 | 20 | 20 | 10 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Volume of flot (litres) | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| \% flot sorted | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% |

