

Wash Pits Field, Euston EUN 035

Archaeological Evaluation Report

SCCAS Report No. 2012/151

Client: Euston Estate

Author: Rob Brooks

March/2013

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HER Information

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Project Officer: Rob Brooks
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Any opinions expressed in this report about the need for further archaeological work are those of the Field Projects Team alone. Ultimately the need for further work will be determined by the Local Planning Authority and its Archaeological Advisors when a planning application is registered. Suffolk County Council's archaeological contracting services cannot accept responsibility for inconvenience caused to the clients should the Planning Authority take a different view to that expressed in the report.

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Date: 11/03/2012

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Summary











An evaluation was carried out at Euston Estate, near Fakenham Magna in Suffolk, following a desk-based assessment and geophysical survey. A total of forty-five trenches were excavated, targeting an area for a proposed reservoir, on a site known as Wash Pits field. The works revealed that the site had been used in the mid-late 17th and early 18th centuries for the quarrying of clay and subsequent firing of bricks, with various quarry pits and two kilns being recorded, with the eponymous Wash Pits forming part of the clay purification process. Two field drainage systems may have been associated with this phase of activity. The main finds from this period consisted of misfired brick and tile fragments. Several other post-medieval ditches and non-quarry pits, thought to be associated with the brick-making activity, were also recorded.

Earlier features were found on the northern and southern edges of the site and consisted of Roman ditches, producing Roman pottery, as well as two undated ditches and an undated pit, which are assumed to either be later prehistoric or Roman.




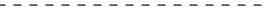







The features were all well preserved as the site had not been heavily ploughed, having been planted with trees in the post-medieval period.

Drawing Conventions

Plans

- Limit of Excavation 
- Features 
- Break of Slope 
- Features - Conjectured 
- Natural Features 
- Sondages/Machine Strip 
- Intrusion/Truncation 
- Illustrated Section  S.14
- Cut Number 
- Archaeological Features 

Sections

- Limit of Excavation 
- Cut 
- Modern Cut 
- Cut - Conjectured 
- Deposit Horizon 
- Deposit Horizon - Conjectured 
- Intrusion/Truncation 
- Top of Natural 
- Top Surface 
- Break in Section 
- Cut Number 
- Deposit Number 0007
- Ordnance Datum $\frac{18.45\text{m OD}}{\wedge}$

1. Introduction

An archaeological evaluation was carried out prior to the excavation of a reservoir, at the site known as Wash Pits Field on Euston Estate, Suffolk (Fig. 1). The work was carried out to a Brief and Specification issued by Dr Abby Antrobus, (Suffolk County Council Archaeological Service Conservation Team – Appendix 1). The landowners, Euston Estate, funded the work that was carried out on 17th-26th September 2012. The site was an area of uncultivated grassland, with woodland on its north-east and south-east sides and farmland to the north-west and south-west. Located at TL 922 771, the reservoir, including its surrounding bund, will cover 6ha in total. The area for evaluation was 4.4ha, excluding the area of the bund, where ground levels will be raised, not reduced. A desk-based assessment and a geophysical survey were both carried out prior to this evaluation (Craven, 2012 and Schofield, 2012, respectively).

2. Geology and topography

The site's topography is fairly flat with a series of spot heights at ground level recorded at between 48m and 50m above the OD, indicating a gentle slope down to the northern corner of the site. Beyond the south-west limits of the proposed reservoir the ground slopes away.

The recorded geology of the area consists of superficial deposits of Lowestoft Formation diamicton chalky till, together with outwash sands and gravels, silts and clays. This material overlies bedrock formations of undifferentiated Lewes Nodular Chalk, Seaford Chalk, Newhaven Chalk and Culver Chalk (BGS, 2012). On site the geology was recorded as predominantly orange sandy-clay and grey clay. Along the north-west and south-east edges of the site the clay was replaced by a pale orangish-greyish-yellow silty-sand, often heavily stained by natural iron residue.

3. Archaeology and historical background

The site lies in an area that was formerly part of the post-medieval Euston Park and is located immediately east of the area still recorded in the Historic Environment Record (HER) as the registered park and garden associated with Euston Hall (EUN 019, Fig. 1). It is known that a settlement existed at Euston in the Anglo-Saxon period, and a manor

was recorded in the Little Domesday book of 1086. A manor house has always been present in various forms since this time, and the present house was substantially remodelled in the 1660s, with building works to improve the church and other estate buildings running into the 1670s. Substantial renovations were also carried out on the house in the mid 18th century. Some further works were carried out to modify the house and grounds from this point onwards, but a large part of the house was destroyed in 1902 by a fire, although it was then rebuilt in a similar style and layout (HLM, 2011).

The evaluation site is flanked to the north and east by Fakenham Wood, which is registered as an ancient manorial woodland (EUN 022). Other known sites within one kilometre of the site include SAP 001 to the south-east, which is recorded as 'dark areas and burnt flints' within the HER, and SAP 012 730m to the south, where Late Neolithic/Early Bronze Age features and finds, as well as earlier to middle Iron Age occupation were recorded.

The site is known as Wash Pits field, and one of the extant ponds on the site is recorded as 'Wash Pit' on the Lenny estate maps of 1828 and 1836 (HLM, 2011). The 1828 map also marks the area of woodland immediately to the east as 'Brick Kiln Cover(?)' and indicates the position of a brick kiln, which still reputedly exists. None of the early edition Ordnance Survey maps record the site as Wash Pits field, although the two ponds are clearly marked. Wash pits were a part of the brick-making industry. Clay was dug up in the winter and manually wetted and worked to help remove stones and other objects that might affect the strength of the bricks. The resultant slurry of clay was screened off into ponds, known as wash pits, to sit until spring when it was once again excavated. An example of such activity is recorded at Little Cornard in Suffolk (Lynch, 2007), whilst map evidence from Overstrand in Norfolk also lists brick kilns in conjunction with wash pits (NRO/UEA, 2012). It is notable that a series of similar ponds extend to the south and south-east of the site towards Sapiston and Bowbeck, as well as to the north-east towards Coney Weston, possibly indicating an extensive area of brick-making. Some of these other ponds are marked on Figure 1. After the purification of the clay, it was shaped and dried and eventually fired in substantial kilns, or temporary clamps, although the latter were unpredictable, often producing a lot of wastage and unevenly fired bricks.

The 16th century is seen by some as the start of the first great age of English brickwork, by which time the material was valuable, well made and used in structural as well as decorative applications. The best quality bricks were being produced in the east of England and it was in the counties of Suffolk, Norfolk and Essex that manufacture was most widespread, although even here there is little evidence of independent manufacture or the use of bricks in houses below the status of a country house. In order to make the bricks for such structures, the production was usually carried out on site or near to it in order to reduce transportation costs and to allow for the supervision of the firing by the builder or architect. To fire the kilns wood was often used, although coal was increasingly employed, possibly because it gave a more consistent temperature. Much of the production work was carried out by unskilled labourers, who were given part time work, whilst the equipment such as moulds was supplied by the builders. However there are records of specialised brick makers travelling around some parts of the country in the 16th and 17th centuries (Airs, 1998). Most pre-19th century kilns were intermittently fired, although they were usually permanent. The most widespread type was the Scotch kiln, which was an open-topped rectangular structure with a lean-to roof. The Suffolk kiln was also rectangular, although it had parallel flues underneath the ground and often had a vaulted roof. This was smaller than the Scotch kiln and was widespread in East Anglia, where building stone was scarce (Palmer, Nevell and Sissons, 2012). However few of these structures appear to exist today or to have been archaeologically excavated or documented.

Very little archaeological work has been carried out in close proximity to the site, although a desk-based assessment of the proposed development area lists it as having moderate to high potential for uncovering prehistoric, Roman and Anglo-Saxon activity (Craven, 2012). A geophysical survey was also carried out prior to the evaluation (Fig. 2). This revealed a series of 'discrete positive anomalies', which included both linear features and circular or oval forms. These areas were thought to have the highest potential to be archaeological features or deposits and were sampled within the trenching. Other large spreads of 'magnetic disturbance' covered a wide area of the site. These were thought to be areas of modern activity, but were still often uncovered by the trench pattern and were found to be deposits relating to the brick making activities uncovered across the site.

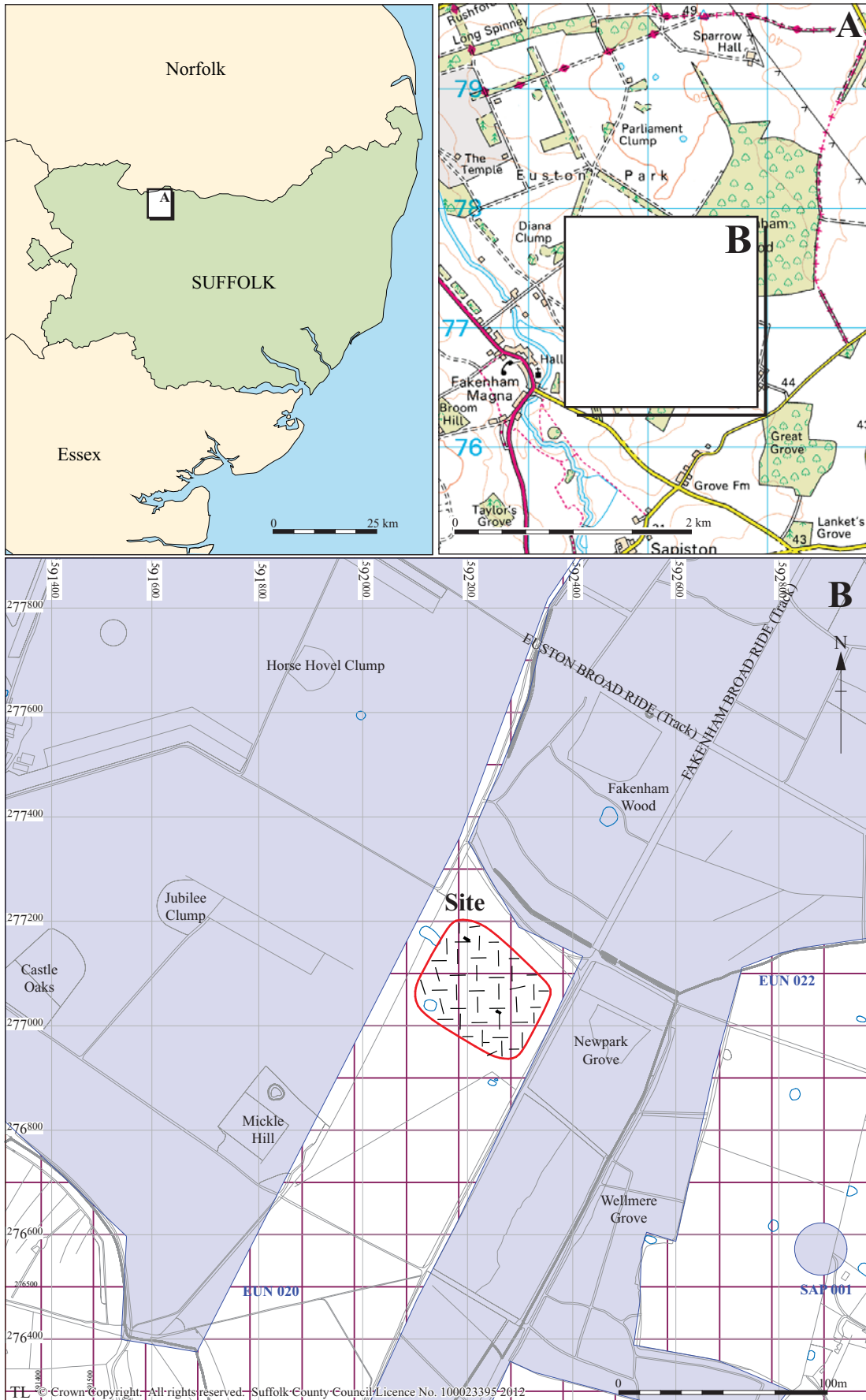


Figure 1. Location map with HER entries mentioned in the text

4. Methodology

The trenches were excavated using a machine equipped with a 1.8m wide toothless bucket and this was constantly monitored by an experienced archaeologist, with the topsoil being removed, followed by the subsoil (where present) to expose the natural geological layer. All upcast spoil was constantly monitored for finds and was metal-detected. The trenches were positioned systematically to sample all areas of the site, although some were slightly manipulated from the original pattern in order to more effectively sample results identified in the geophysical survey. An extra trench, recorded as 43, was added to sample a geophysical anomaly, whilst Trench 42 was angled to avoid a tree stump (Fig. 2). The trenches were at least 1.8m wide and varied from 12m to 30m long. Two trenches, 15 and 35, were expanded to uncover the full extents of the brick kiln structures.

When the trench excavations were finished profiles were cleaned and then recorded on SCCAS *pro forma* record sheets, including soil descriptions and measurements. Colour digital photographs at resolutions of 4288 x 2848 pixels were taken of features and the trenches. Plans of the site were made using a GPS (working within accuracy tolerances of 0.05m) and this was also used to take level information. Hand plans were drawn at 1:50 of trenches with more complex archaeological deposits. Sections of features were drawn at a scale of 1:20.

Site data has been input onto an MS Access database and recorded using the County HER code EUN 035 (Appendix 2). An OASIS form has been completed for the project (reference no. suffolkc1-133462, Appendix 3) and a digital copy of the report submitted for inclusion on the Archaeology Data Service database (<http://ads.ahds.ac.uk/catalogue/library/greylit>). The site archive is kept in the main store of Suffolk County Council Archaeological Service at Bury St Edmunds under HER code EUN 035.

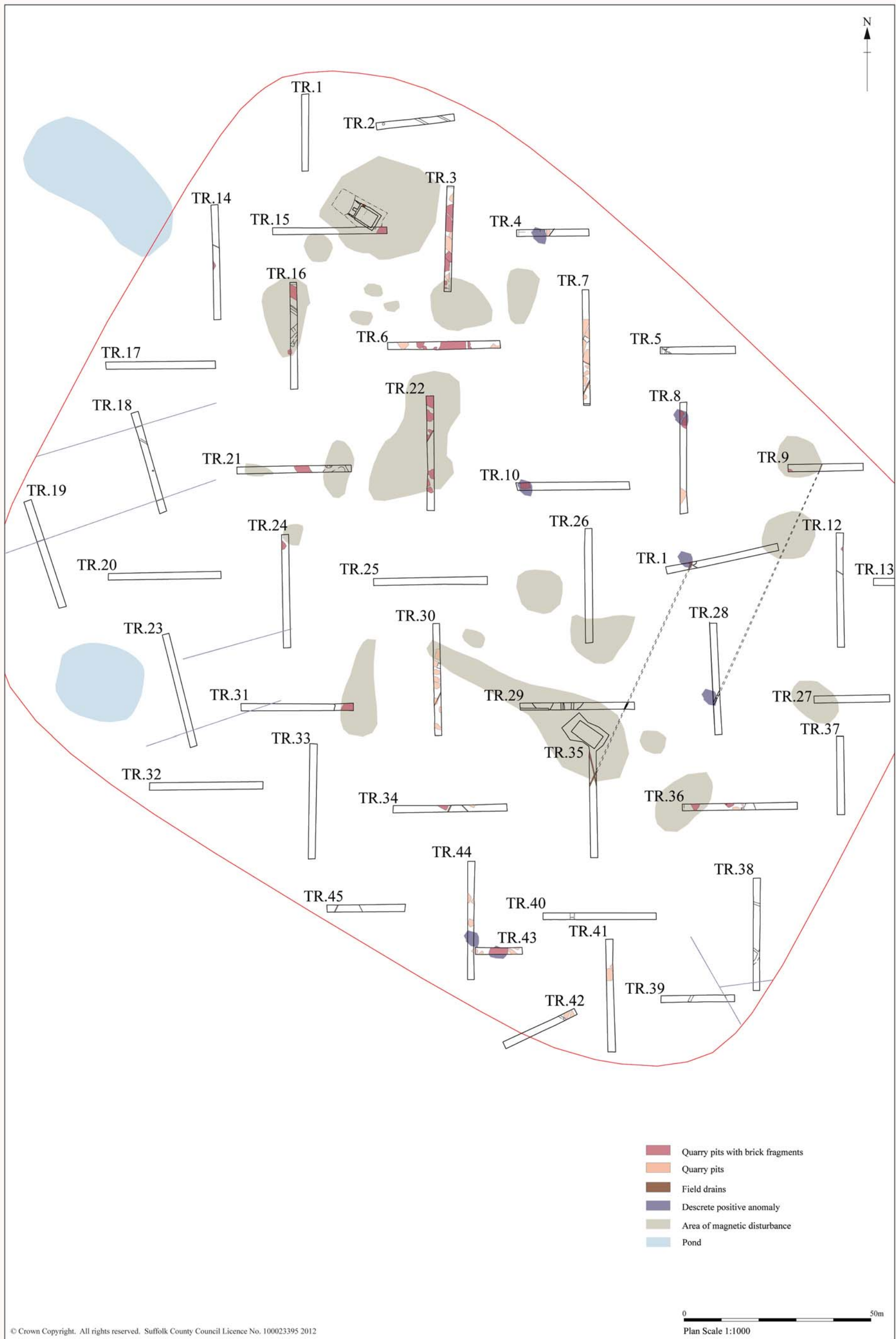


Figure 2. Trench plan, showing features, geophysics results and wash pits

5. Results

5.1 Introduction

The majority of the archaeological deposits recorded throughout the evaluation appear to relate to clay quarrying and processing, brick-making and other associated activity, which dates to the 17th and 18th centuries. This mainly takes the form of pits, deposits of misfired bricks and burnt clay, and two kilns with their associated rake-out pits. However there are also several linear features of unclear function, which may relate to the brick industry. Earlier features on the site appear to mainly be Roman, consisting of ditches, whilst there is one undated pit. Prehistoric material from the site is limited, recorded as a number of redeposited or residual finds.

Across the site, topsoil was recorded overlying either a subsoil B-horizon, a redeposited worked soil containing brick fragments, or immediately above the superficial geology. The latter usually consisted of orange sandy-stony-clay or grey chalky-clay, although along the north-west and south-east edges of the evaluation area a pale orangish-greyish-yellow silty-sand was sometimes recorded. It is notable that any features pre-dating the post-medieval clay quarrying and brick-making activities tended to focus on the areas of sandy geology, whilst the industrial activities were located on the area of clay geology. The archaeological levels were well preserved.

5.2 Features

Clay quarrying and brick-making features

Quarry pits and brick deposits

Across the site multiple clay quarry pits were uncovered and these are detailed more fully in Appendix 4 and on Figures 2 - 5. These were typically sub-square, or sub-rectangular. They tended to have steep-sides and flat, sometimes stepped, bases. Other quarry features, which were invariably in close proximity with the sub-square cuts, were elongated and looked like ditches, though when excavated they also had noticeably irregular/stepped bases, e.g. cut 0019 in Trench 16 and cut 0074 in Trench 30. The cuts were all filled with brownish-grey silty-sandy material and some of them also contained brick fragments and burnt clay. No finds were recovered directly from the

pit features, although unstratified brick samples from Trench 3 (of 17th to 18th century date) are thought to be from the quarry features in this area. The pits are generally found within and surrounding the areas marked as magnetic disturbances on the geophysical survey, whilst some were also located in the areas identified as discrete positive anomalies.

Kilns

Two brick kilns were recorded within the evaluation, believed to be of a type known as the Suffolk Kiln, which was similar to, but smaller and more fuel efficient than the more widespread Scotch Kiln (Neaverson, 1994). Kiln 0036, in the northern end of Trench 15 measured >7.5m x 4.7m and was on a north-west to south-east alignment (Figs. 2 and 4). The main surviving structure consisted of four brick walls (0.5-0.65m thick), which formed an oblong containing the below-ground structure for housing the fire itself (Pl. 1). Any above-ground walls had been razed. The traces of two further walls extended from the north-west end of the structure, up to an area where a substantial quantity of burnt clay and brick fragments from the raking out of the kiln was deposited. Within the north-west end of the structure a 1m deep machine slot was excavated. At this depth two arches were partially exposed, which although partially infilled with rubble, still clearly continued as chambers running to the north-west (Pl. 2). These presumably formed the access to the kiln for fuelling the fire and raking it out afterwards. Within the base of the slot several recurring walls, c.0.2m thick, partially survived on a north-east to south-west alignment. As was indicated by the pattern of sooting on the vertical walls of the kiln, these internal walls had originally been built up to ground level and would have formed a series of individual archway structures, mirroring in form those that still existed at the north-west end of the kiln (Pl. 3). They would have formed the support for the brick loads that were to be fired. Abutting the north-west end of the kiln was an oblong brick structure, measuring 0.75m x 1.1m and recorded as 0035. It was built from the same bricks as the kiln and was clearly associated, but its function was unclear.

A further kiln was recorded in Trench 35. This was only partially uncovered and appeared to measure approximately 4m x 7.65m. This structure clearly also retained its internal arches, but in this instance they had survived to the height of the existing walls (Pl. 4). To the west of this structure, within Trench 29, a raking-out pit was recorded as cut 0076.



Plate 1. Kiln 0036, main surviving structure, facing south-west, 2m and 1m scale



Plate 2. Kiln 0036, archways leading to north-west, facing north-west, 2m and 1m scale



Plate 3. Kiln 0036, sooted walls indicating internal archways, facing north, 2m scale



Plate 4. Kiln 0081, corner of structure, with traces of internal arches surviving, 1m scale

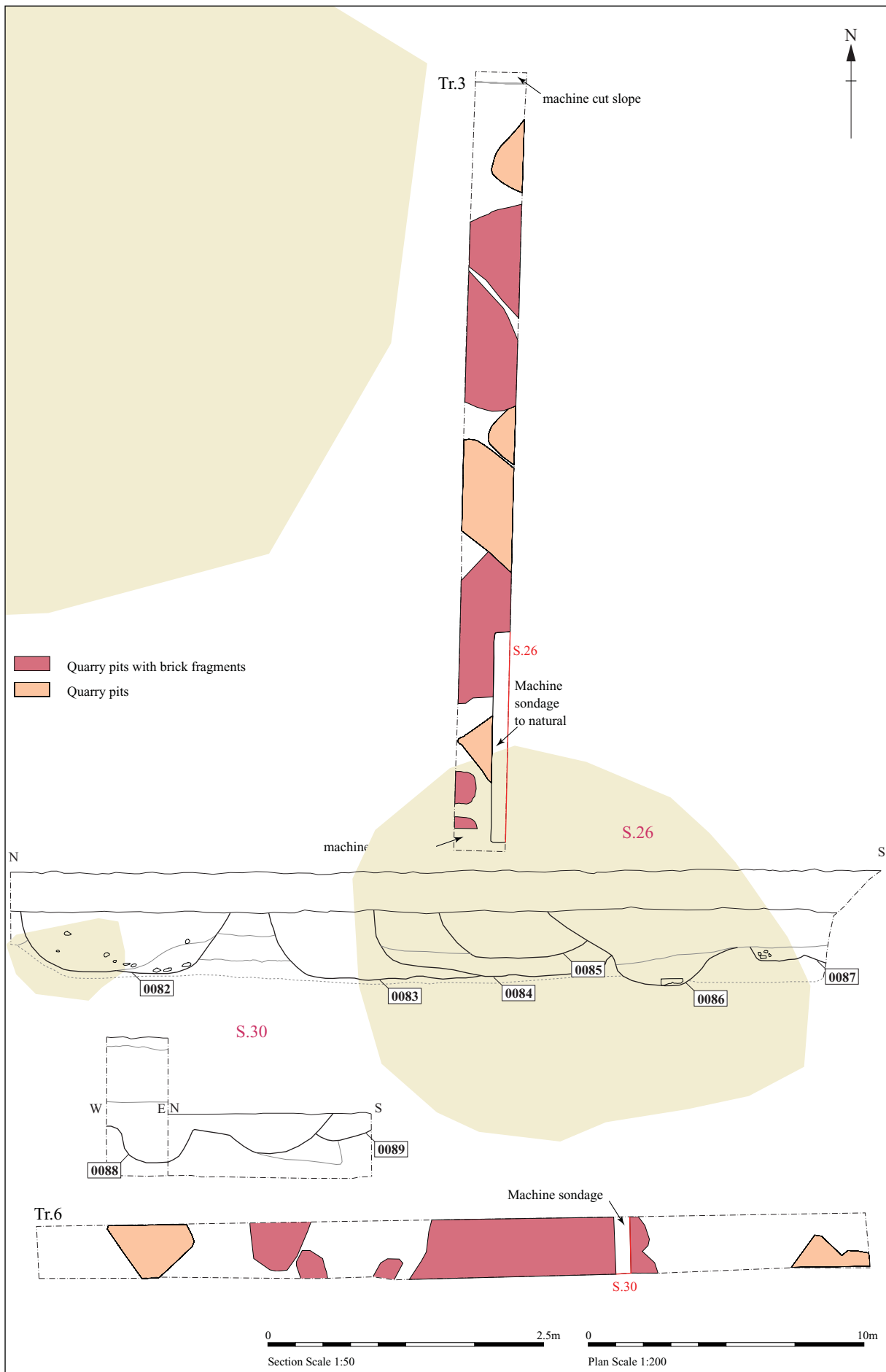


Figure 3. Plans and sections of quarrying features

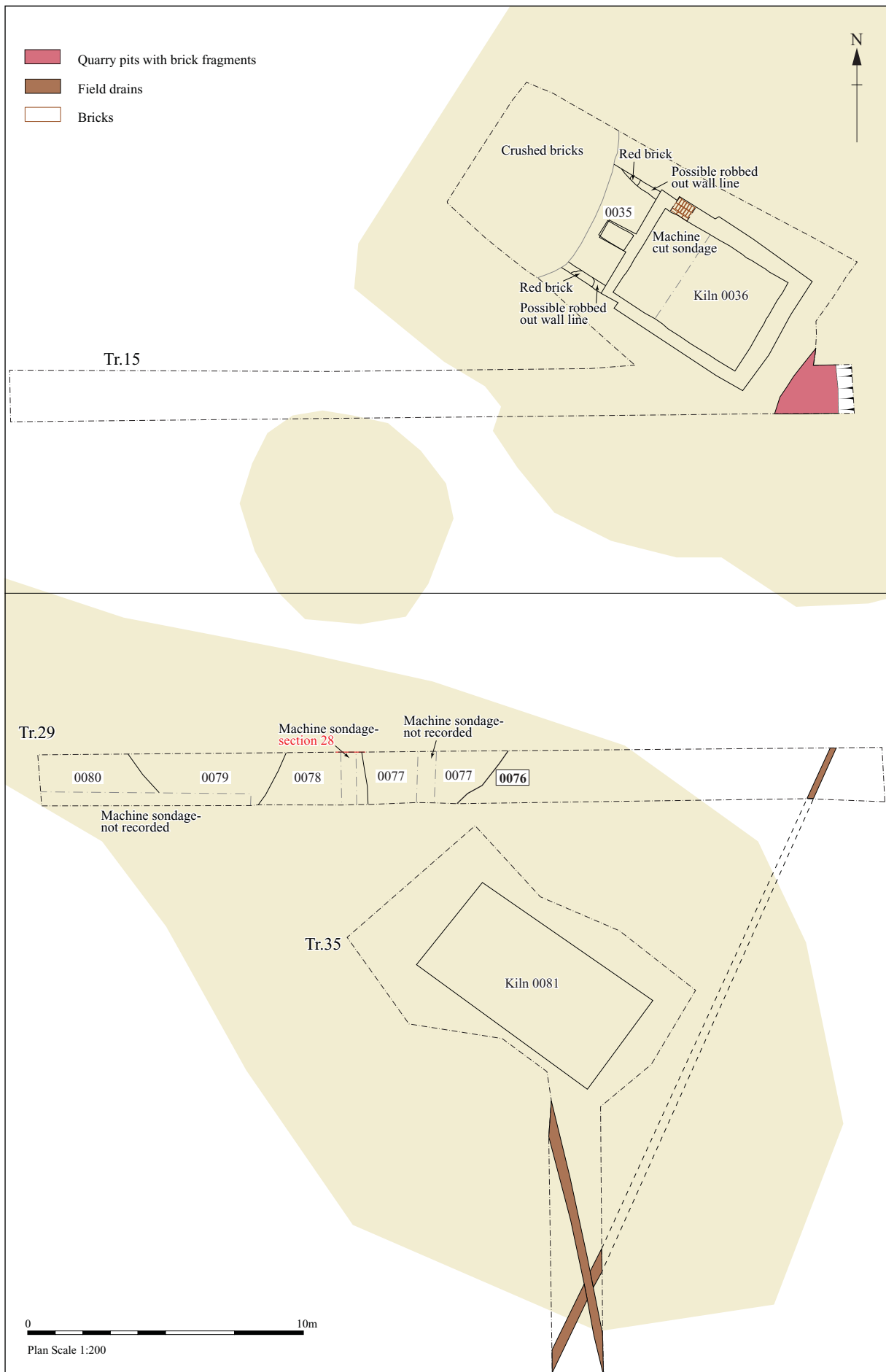


Figure 4. Plans of kilns

Rake-out pits

Associated with both kilns were two large spreads of ash, burnt clay and brick fragments within fairly shallow pits. Whilst only partially uncovered in Trench 15, the first of these features measured >6.15m x >4.8m and had a curving eastern edge (Figs. 2 and 4). The second was more extensively revealed in Trench 29, where it was recorded as cut 0076 and measured >17m x >1.8m x up to 0.55m deep (Figs. 2 and 4). Three slots were dug through this deposit to ascertain its depth and one of these was recorded as section 28. Four fills, 0077-0080, were recorded within the pit and these were a mixture of dark grey ashy-sandy-silts and clays with varying levels of burnt clay fragments and broken brick pieces. Notably, both rake-out pits were positioned to the west of their respective kilns, presumably indicating the direction of the prevailing winds, which would have helped to keep the kilns burning consistently.

Features contemporary to and associated with brick-making

Several unusual features were recorded in both Trenches 16 and 21 that are thought to be associated with the brick-making activity on site because of the presence of brick fragments in their fills and their close proximity to quarry features (Figs. 2 and 5). However, they are not quarry pits and are not directly related to the kilns. There were also two extensive drainage systems on the site, thought to drain the field and wash pits (with the result of making the brick-making more practical), or as a later attempt to make the field agriculturally viable.

Trench 16

Ditches 0009 and 0013

Ditches 0009 and 0013 were recorded on a north-west to south-east alignment in Trench 16 (Fig. 5). They both had similar profiles of steep, straight sides and slightly concave bases, although ditch 0009 was larger, being 0.7m wide x 0.82m deep, whilst cut 0013 was 0.42m wide x 0.3m deep. Both ditches were overlaid by the topsoil, cutting into the subsoil, and as a result of this had been largely machine excavated before they had become visible. The cuts contained yellowish-brownish-grey silty-sandy-clay fills. Fills 0010, 0011 and 0012 from ditch 0009 also produced finds, recorded as 0029, and these consisted of 17th to 18th brick fragments and burnt clay.

Feature 0021 and pit 0023

Two other features in Trench 16 were interpreted as being associated with brick-making activity. The first of these was the slightly ephemeral linear cut 0021, aligned north-east to south-west. This was 0.8m wide x 0.15m deep and had gently sloping concave sides and a concave base. It was filled with redeposited yellow clay and grey clay, as well as silt and occasional 17th to 18th century brick and tile fragments. Cutting the south-west end of cut 0021 was pit 0023. This was shallow and oval, measuring 1.1m x 0.9m x 0.2m deep, with moderately sloping sides curving imperceptibly to the concave base. The fill, 0024, was mottled mid-light grey clayey-silty-sand with some clay inclusions. It produced two fragments of 17th to 18th century CBM.

Trench 21

Pits 0039, 0041 and 0045

Pit 0039 was recorded cutting pit 0041 in section 18 (Fig. 5). In plan these two features appeared to form a semi-circle that ran under the trench baulk, but they were thought to be individual oval cuts, with 0039 measuring 1.1m x >0.6m x 0.18m, whilst cut 0041 was >0.8m x 0.6m x 0.2m. Each profile was slightly irregular, although they had generally concave sides and irregular bases. The fills, 0038 and 0040, were either dark or very dark greyish-brown silty-sand, making them distinctive from the usual quarry pits on the site, and fill 0040 from cut 0041 produced three pieces of post-medieval CBM.

Pit 0045 also contained distinctly different fills to those seen within the other quarry pits on site. These were recorded as 0042, a yellowish-greyish-brown silty-sand, 0043, greyish-brown silty-sand with CBM and frequent coal flecks, and 0044, which was very dark greyish-brown silty-sand with frequent CBM and coal flecks and lumps. Fill 0044 produced three fragments of 17th to 18th century CBM. In plan the cut appeared to be rounded or oval/linear and had moderate-steep, concave sides and a somewhat irregular base. It measured >3m x >1.6m x 0.4m.

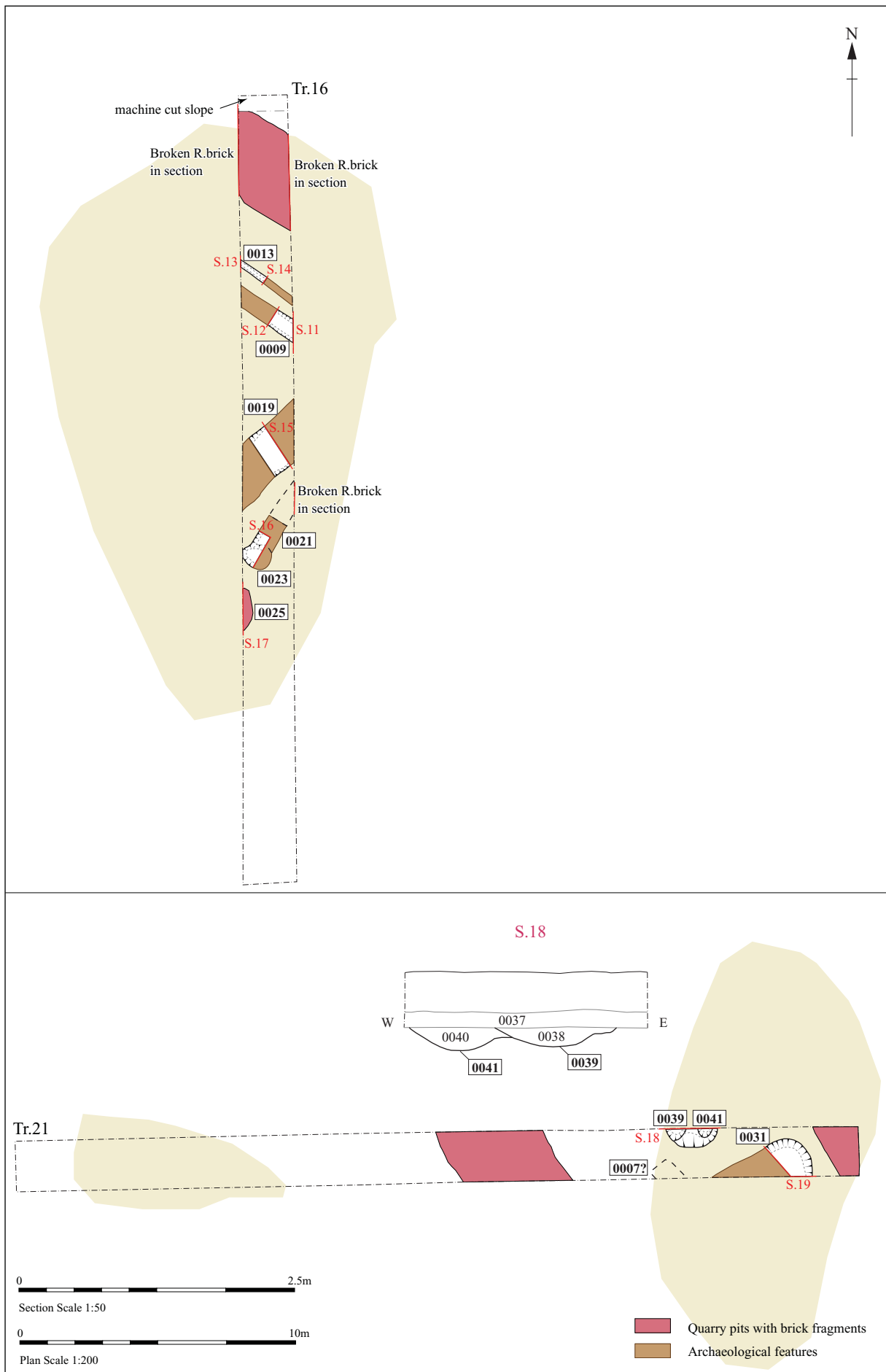


Figure 5. Plans and section of features relating to brick-making activity

Field drainage systems

Across the site various field drainage system features were recorded (Fig. 2). Two of these thin linear cuts were excavated in the western end of Trench 5 and recorded as cuts 0016 and 0018. These measured 0.25-0.35m wide and one was aligned north-east to south-west, whilst the other ran at a right angle to it. These both had very steep sides and concave bases were initially thought to be older ditches. However their profiles and alignments with other similar features on the site would appear to indicate that they were post-medieval drainage systems. Similar thin linear features on parallel alignments, some with ceramic field drains within them, were also recorded in Trenches 4, 7, 9, 11, 12, 14, 20, 22, 27, 28, 33, 34, 35 and 45. Several of these features were excavated but not recorded, having the same profiles as those within Trench 5.

A series of other field drains aligned west-south-west to east-north-east and south-south-east to north-north-west were also present in Trenches 18, 19, 20, 36, 39 and 45. These frequently had ceramic pipes still visible, and some of them also aligned with discrete positive anomalies indicated by the geophysical survey.

Trenches containing features not related to clay quarrying and brick making

Trench 2

Ditches 0003 and 0007, and pit 0006

Two parallel ditches on a north-west to south-east alignment were present in the eastern end of Trench 2 (Fig. 6). These were both 0.6m wide and 0.4m deep with shallow profiles, concave sides and bases, and contained mid-dark brownish-grey silty-sand fills 0004 and 0008. Fill 0004 from cut 0003 produced one piece of post-medieval CBM. The fill from cut 0007, recorded as 0008, produced one piece of abraded pottery and one worked flint, which are of Late Bronze Age to early Iron Age date and are thought to be residual. At the western end of Trench 2 was pit 0006. This was a small round cut, with 45°-60° sides and a flat base. The mid brownish-grey silty-sand fill produced no finds, but was notably similar to the fill in ditches 0003 and 0007.

Trench 18

Pit/posthole 0028 and ditch 0031

Pit/posthole 0028 was a small oval cut with steep sides and a concave base. It measured 0.45m x 0.35m x 0.16m deep and contained dark greyish-brown silty-sand fill 0027, which contained no finds. To the north-west of this cut was east to west aligned ditch 0031. It had 45° sides and a concave base and was filled with a pale greyish-brown silty-sand that was recorded as 0030 and was in places hard to distinguish from the natural geology. The cut measured 0.42m wide x 0.12m deep and produced some burnt flint.

Trenches 28 and 29

Ditches 0057 and 0059

Within Trench 28 a ditch was excavated as cut 0057. This was 0.32m wide x 0.17m deep and had fairly steep sides and a flat base. It contained brown silty-clay fill 0058, with occasional CBM flecks, but no other finds. The cut was aligned closely with a feature thought to be related to field drainage in Trench 9 and also ran parallel to a ditch recorded in Trench 29 as 0059. This feature was 0.4m wide x 0.34m deep, had steep sides with a flat base and appeared to continue into Trenches 11 and 35. It contained mid brown silty-clay fill 0060, with high levels of CBM fragments and burnt clay, which had presumably become incorporated in the ditch as a result of its close proximity to kiln 0081.

Trenches 38, 39, 40 and 41

Ditches 0052, 0054 and 0056

Three ditches, 0052, 0054 and 0056, were present in Trench 38 and these are thought to be Roman (Fig. 6). The cuts are notably different to those of the post-medieval ditches on site, being broad and shallow, with 35-45° sides and concave bases. They varied in width from 0.54-0.75m and in depth from 0.1-0.3m. Each cut contained either orangish-greyish-brown or greyish-brown silty sand, and fill 0051 from cut 0052 produced one later prehistoric worked flint, whilst fill 0055 from cut 0056 produced ten sherds of Roman pottery. Cut 0052 was aligned west to east, whilst 0054 was south-west to north-east and 0056 was north-west to south-east.

Ditch 0069

Within Trench 39 a single ditch was recorded as cut 0069, which measured 0.76m wide x 0.22m deep. This had a similar profile to the features in Trench 38, with 45° sides and a concave base, and was aligned north-east to south-west. It was also filled mid grey silty-sand fill 0070 and produced one later prehistoric flint.

Ditch 0062

Aligned north to south in Trench 40 was ditch cut 0062. This had a broad shallow cut similar to those in Trenches 38 and 39, with 45° sides and a concave base. Fill 0061 was made up of yellowish-greyish-brown silty-sand and produced ten sherds of Roman pottery. The cut was 1.24m wide x 0.28m deep.

Ditch 0072

Ditch 0072 was recorded in Trench 42 and was aligned north-west to south-east. The profile had 60° sides leading to a concave base and measured 0.82m wide x 0.26m deep. Mid greyish-brown silty-sand fill 0071 produced no finds.

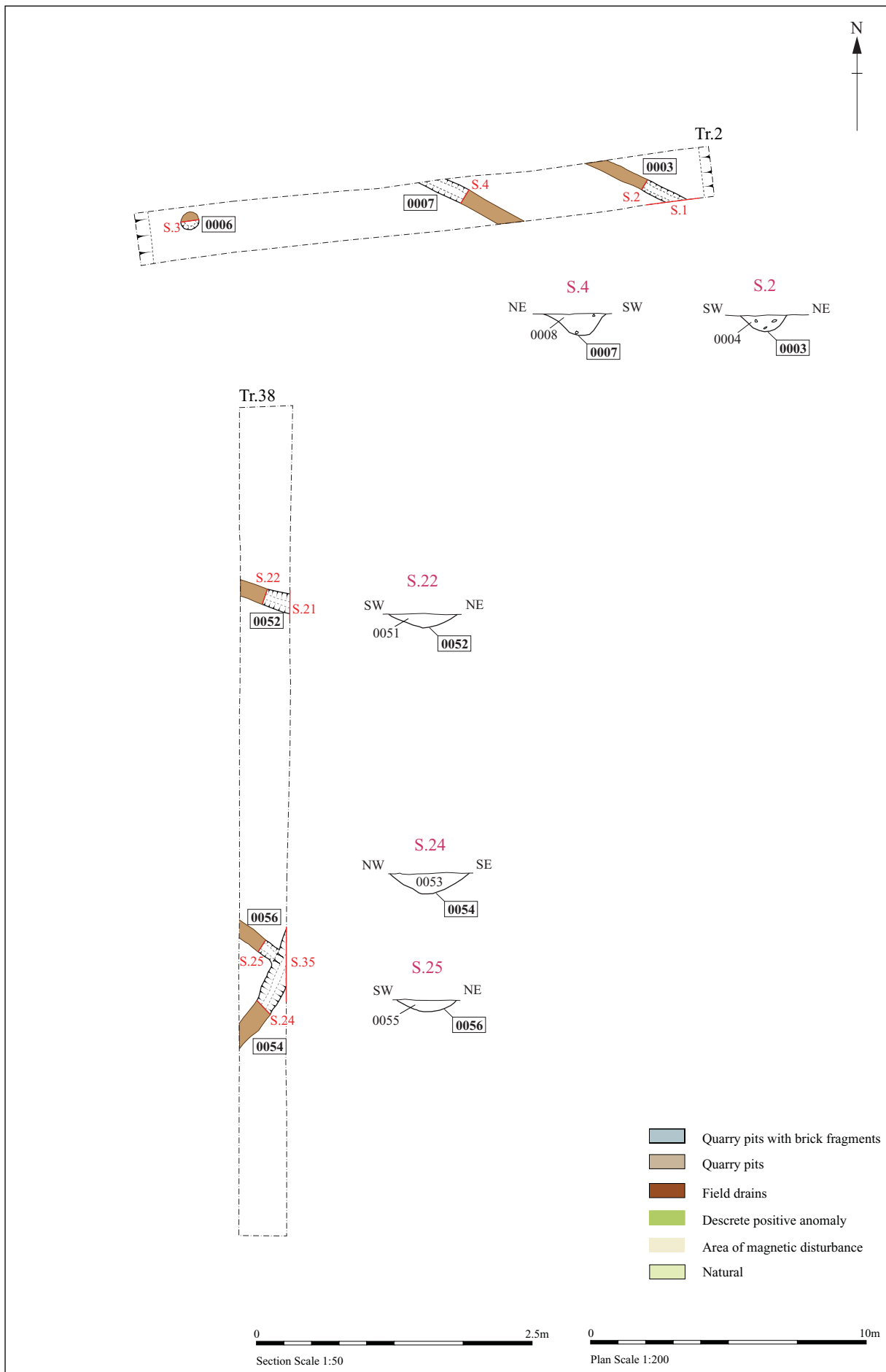


Figure 6. Plans and sections of earlier features

6. Finds and environmental evidence

Andy Fawcett

6.1 Introduction

Table 1 shows the quantities of finds collected from the evaluation. The finds were retrieved from fifteen contexts in eight trenches out of forty-five (2, 3, 15, 16, 21, 38, 39 and 40). These include six ditch, three pit, and two linear fills, one kiln feature and three unstratified contexts. A full contextual breakdown of the bulk finds can be seen in Appendix 5.

Find type	No	Wgt/g
Pottery	21	126
CBM	57	10188
Fired clay	1	7
Worked flint	5	27
Totals	84	10348

Table 1. Finds quantities

6.2 The pottery

Introduction

Only three contexts (0008 in Tr.2, 0055 in Tr.38, 0061 in Tr.40) of the total number with finds contained pottery. The assemblage includes pottery that is dated to both the prehistoric and Roman periods. A complete contextual breakdown of the pottery assemblage forms part of the site archive.

Methodology

All of the pottery has been examined at x20 vision and allocated to fabric groups. Codes have been assigned to these groups using the Suffolk fabric series (SCCAS) and form types (where possible) have been catalogued using the Suffolk form type series (unpublished) which is supplemented by Going's catalogue (1987). All of the pottery has been recorded by sherd count, weight and EVE.

Prehistoric

One small (1g) and abraded body sherd of flint-tempered pottery (HMF) was recorded in ditch fill 0008 (Tr.2). The fabric is patchily reduced and contains abundant ill sorted flint. It is dated from the Late Bronze to Early Iron Age.

Roman

Two contexts contained Roman pottery, ditch fills 0055 (Tr.38) and 0061 (Tr.40). The first held ten joining base sherds (83g) of Grey micaceous ware (GMG) which are very abraded. The second also contained ten sherds (42g). Two of these are abraded body sherds of Buff/oxidised micaceous ware (GMO). The remaining eight are all Black surfaced grey micaceous wares (GMB). These sherds display only slight abrasion, and are all part of the same jar, which has an everted and beaded rim (4.5). None of the sherds are closely datable within the Roman period itself.

6.3 Ceramic building materials (CBM)

Introduction

The CBM assemblage is entirely dated to the post-medieval period and is chiefly composed of late brick (LB) fragments. These have been recovered from nine contexts in five trenches which include pit fills 0024 (Tr.16), 0040, 0044 (Tr.21), ditch fill 0004 (Tr.2), linear fills 0020, 0022, 0029 (Tr.16), kiln context 0036 (Tr.15) and the unstratified contexts 0029 (Tr.16) and 0075 (Tr.3). A full contextual breakdown of the assemblage can be seen in Appendix 6.

Methodology

The CBM assemblage has been recorded by fragment number and weight. Dimensions (depth, length and width) were also noted, and Drury's catalogue of CBM from Norwich was used as the main reference for this material. The CBM was also examined briefly at x20 vision and divided by fabric, and codes were then assigned to these groups, based upon those used by SCCAS.

The assemblage

Roof tile

Only two abraded fragments of post-medieval roof tile were recorded (259g). These were both noted in ditch(?) fill 0022 (Tr.16). The pieces are oxidised and in a medium sandy fabric which contains ferrous inclusions (msfe) as well as sparse large ill sorted flint. They have depth range of 11mm and 14mm.

Late brick

The late brick assemblage is chiefly composed of abraded fragments which vary considerably in size. However they are consistent in both form and fabric.

On the majority of late brick fragments only depth measurements could be recorded and these are almost entirely between 60 and 65mm. A small number of width measurements were taken and these, apart from one example at 110mm, were all at 105mm. Only one whole brick was recorded, which had been removed from kiln structure 0036 (Tr.15). Its measurements are 225x105x60mm; dimensions which are comparable to Drury's LB 3 (1993, 165) which is dated from the 17th to 18th century. The measurements noted from the smaller fragments of late brick are all comparable to Drury types 3/6 with one example of a type 5 (1993, 165), and all are dated from the 17th to 18th century. None of the bricks are frogged, a feature which appeared from the early/mid 19th century onwards.

Analysis of the fabric has demonstrated a high degree of uniformity. The fabrics are all fully oxidised (ranging from orange to red). The late brick fragments, as well as the miscellaneous pieces (most of which are highly likely to be the remains of late brick) are all medium sandy fabric (ms) and predominantly contain ferrous inclusions (msfe). The smaller pieces have been recorded as medium sandy, but in reality are likely to be too small to display the ferrous element of their fabric. Another trait of the fabric is the presence of sparse ill sorted large flint.

Many of the late brick fragments are poorly made and had obviously been discarded from the kilns. Some of these had large crease like folds in them, others had broken at points where large voids occurred, or where the flint had been perhaps too big and

made the brick fragile. None of the fragments were vitrified, although some in the unstratified context 0029 (Tr.16) were clearly over-fired and shattered. A small number of pieces displayed partially burnt areas. None of the fragments exhibited mortar on their main surfaces or breaks, indicating that they had not been used in a primary or secondary building role.

The CBM fragments represent waste/debris from the kilns recorded on the site, and were virtually all distributed to the north-west of the site, being recovered from the trenches that surround, or are associated with the production areas.

6.4 Fired clay

A small and abraded fragment of fired clay was recorded as unstratified from Trench 16 (0029). The piece is completely burnt (black to grey in colour) and in a medium sandy fabric with chalk (msch).

6.5 Worked flint

Justine Biddle

Four ditch fills (0008 Tr.2, 0051 Tr.38, 0061 Tr.40 and 0070 Tr. 39) as well as one unstratified context (0001, Tr.2) contained single fragments of worked flint. The assemblage is made up of unpatinated dark grey flakes, most of which are small and thin, occasionally displaying some use wear. All of the individual flakes are dated to the later prehistoric period. A full contextual breakdown of the flint assemblage can be seen in Appendix 7. The flint is distributed mostly to the far south-east of the site with one example present to the north-west, where it occurs alongside prehistoric pottery, in ditch fill 0008 (Tr. 2). In only one instance does the flint occur alongside later material, and this is with Roman pottery in ditch fill 0061 (Tr. 40).

6.6 Small finds

A post-medieval iron hook (SF1001) was recorded as an unstratified find around the kiln context 0036. It is constructed from a rod of iron that is tapered at one end and then bent upwards to form a hook. The other end is rounded with a central hole to be used perhaps on a cord or rope.

6.7 Discussion of material evidence

Residual prehistoric activity on the site is limited to a small number of struck flakes dated to the later prehistoric period, as well as a single sherd of abraded pottery, dated from the Late Bronze to Early Iron Age. Some of these finds are located to the north-west edge of the site, but principally they are to the south-east of the trenched area. There are no prehistoric sites or find spots dated to this period within the immediate vicinity of the current site. The nearest recorded activity is about a kilometre to the south (SAP 012) where Early Iron Age activity was noted. Around two kilometres to the north-west (FKM 015) Late Bronze to Early Iron Age pottery was recovered from field walking.

The Roman period is represented by two small groups of pottery recorded from two ditch fills in two trenches to the south-east of the site. The nearest recorded Roman activity is over a kilometre away in all directions, and includes to the north-east, a section of Pedders Way (BAR 024), to the north-west a later Roman coin (EUN 009) and to the south-west early Roman pottery (FKM 111) as well as pottery and coins to the south (FKM 025) of the site.

Two post-medieval brick kilns have been located during the archaeological trial trenching, although only the one in Trench 15 has been investigated. It is likely, as the date of the brick fragments suggest, that it was built for the production of bricks for construction work on the hall (EUN 019 – erected around the mid 17th century) and its related buildings (EUN 016 and 020) as well as other projects around the grounds.

Although both the prehistoric and Roman finds both provide new evidence for activity in these periods for this area of the parish, the main focus of this site are the post-medieval brick kilns and their products. This small-scale localised production formed an important part of the estate's economy, thus both the kiln and its products are of significant interest, providing potentially new evidence relating to the construction of the hall. Post-medieval brick types typically have quite a long date range, and no pottery dated to the period in question was recovered from around the kiln area to assist in the dating process. A brief inspection of the bricks (for comparative purposes) used to build the hall and other structures would help to ascertain whether the products of these kilns were used, and perhaps at what stage of that construction.

7. Discussion

Evaluation of the Wash Pits field has revealed well preserved remains that mainly relate to the making of bricks in the mid/late 17th to early 18th century. The site has pits indicating the quarrying of the clay, the associated wash pits for the purifying of the material, and Suffolk kilns for firing the bricks. Although the date range for such structures has not yet been defined, they represent rare surviving examples, which appear to have seldom been recorded, despite once having been relatively common structures that would have been used on country estates. Whilst no other kilns were discovered during these works, the presence of widespread magnetic disturbance across the site could indicate that more are present within the proposed development area.

Typically, brick drying sheds would be associated with this industry, although none were recorded. However, these may have been temporary covers for stacks of bricks or would only have required a basic oblong posthole structure, which may not have been revealed in this phase of works. The bricks were presumably required for building works around the estate, possibly as part of the mid-late 17th century building works including those at the main house. However the presence of a further kiln to the east of the site, as well as a widespread pattern of small ponds (also possible wash pits), potentially indicates a localised industry brick-making industry. It has been noted that few post-medieval pottery and occupation finds were recovered from the site, and this may be indicative of its unsuitable position within the wet clay for habitation, with a local workforce travelling to the site to exploit the geological resource.

The drainage networks running across the site may have functioned to drain the field during the brick making process, making it more practical to work on and to drain the wash pits. Otherwise the small ditches and pipe systems may have been a later attempt at making the field agriculturally viable.

It is unclear what purpose the small number of post-medieval ditches and non-quarry pits across the site served. However the finds and the nature of their fills, as well as their close proximity to quarry pits and bricks deposits, indicate that they are both contemporary and associated with the brick-making industry.

Archaeological features thought to pre-date the post-medieval brick-making activity were recorded towards the north and south-east corners of the site where the geology was sandy and therefore drained better and was easier to dig. The features in the northern end of the site are not clearly dated and consist of two ditches and a pit. The alignment of the ditches would suggest that they are potentially part of the later drainage systems, but their profiles were more variable and the fills were more heavily leached. Although uncertain, it is likely that these features are Roman due to the presence of similar features to the south, and the proximity of the ditches to the pit would tend to indicate a limited area of short-term activity. The ditches found at the south corner of the site are more securely dated as Roman and the presence of several pot sherds within two of the recorded ditch cuts demonstrates probable occupation in the local area, although the levels of abrasion affecting the pottery sherds may also mean that they had been redeposited, possibly in the process of manuring field systems. Earlier prehistoric finds recovered from various parts of the site are probably residual, rather than indicating any preserved occupation.

8. Conclusions and recommendations for further work

Evaluation of Wash Pits field, part of the historic Euston Estate, has clearly demonstrated the presence of a surprisingly complete example of a local brick-making industry, with clay quarrying, processing and firing represented on the site. The presence of the two kilns is unusual and their varying states of repair would make it possible, through further phases of recording, to fully detail the surviving underground structures. The kilns would have been an important part of the local economy, providing various elements of the population with seasonal work, although they may have been somewhat short-lived, producing bricks for the rebuilding of the manor house and estate buildings in the 17th and 18th centuries. Their discovery highlights a largely unexplored part of the estate's history and they might also benefit from further documentary research in order to ascertain whether these are early examples and if they relate to more widespread economic activity that extends beyond the estate.

Earlier occupation on the site appears to be limited to two small areas, located around the edges of the proposed development area. These consist of deposits of probable Roman date that indicate an as yet unrecorded phase of activity in the local area.

Whilst preservation of the archaeological features *in situ* is not merited, further fieldwork may be necessary to record the site's surviving evidence for post-medieval activity and Roman occupation. The two kilns, ditches, pits and other deposits highlighted by the geophysics results will be totally removed by the reservoir's development and further programmes of fieldwork will therefore be required in order to preserve these features by record, particularly the kilns, which appear to be rarely studied structures that would have had a significant visual and economic impact on the local area. Across much of the site, magnetic disturbance was recorded and is similar to that within which the kilns were uncovered. This suggests that further structures may be present that would require archaeological recording. However, a comprehensive record of one of the kilns might reduce the need to record all of them at the same level of detail. Ultimately the nature and scale of this work will be decided upon by SCCAS Conservation Team.

9. Archive deposition

Paper and photographic archive: SCCAS Bury St Edmunds

Digital archive: SCCAS R:\Environmental Protection\Conservation\Archaeology\Archive\Euston\ EUN 035 Wash pits field reservoir\Evaluation

Digital photographic archive: SCCAS R:\Environmental Protection\Conservation\Archaeology\Catalogues\Photos\HQA-HQZ\HQN 18-99 and HQO 1-40

Finds and environmental archive: SCCAS Bury St Edmunds. Store Location: I/92/2

10. Acknowledgements

The fieldwork was carried out by John Sims, Steve Manthorpe, Simon Picard, Alan Smith and Rob Brooks and directed by Rob Brooks. Project management was undertaken by John Craven who also provided advice during the production of the report.

Post-excavation management was provided by Richenda Goffin. Finds processing was undertaken by Jonathan van Jennians. The specialist finds report was produced by Andy Fawcett, with additional specialist advice provided by Justine Biddle.

The report illustrations were created by Beata Wieczorek-Olesky and the report was edited by Richenda Goffin.

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Appendix 1. Brief and specification



The Archaeological Service

Economy, Skills and Environment
9–10 The Churchyard, Shire Hall
Bury St Edmunds
Suffolk
IP33 1RX

Brief for Desk Based Assessment, Geophysical Survey and a Trenched Archaeological Evaluation

AT

Wash Pits Field, Bardwell Road, Fakenham Magna (Euston)

PLANNING AUTHORITY:	St Edmundsbury Borough Council
PLANNING APPLICATION NUMBER:	Wash Pits Field Fakenham Magna EIA
HER NO. FOR THIS PROJECT:	To be arranged
GRID REFERENCE:	TL 922 771
DEVELOPMENT PROPOSAL:	Agricultural Reservoir
AREA:	c 6 ha.
CURRENT LAND USE:	Agricultural land
THIS BRIEF ISSUED BY:	Abby Antrobus Assistant Archaeological Officer Conservation Team Tel. : 01284 741231 E-mail: abby.antrobus@suffolk.gov.uk
Date:	12 July 2012

Summary

- 1.1 The Local Planning Authority (LPA) has been advised that the location of the proposed development could affect important below-ground heritage assets of archaeological importance.
- 1.2 The applicant is required to undertake an archaeological field evaluation prior to consideration of the proposal to the reservoir, in accordance with a Written Scheme of Investigation. This is in line with paragraphs 128 and 129 of the National Planning Policy Framework. Information should be incorporated in the Environmental Impact Assessment. This will enable the LPA to take into account the particular nature and the significance of any below-ground heritage assets at this location.
- 1.3 The archaeological contractor must submit a copy of their Written Scheme of Investigation (WSI) or Method Statement, based upon this brief of minimum requirements (and in conjunction with our standard Requirements for a Trenched Archaeological Evaluation 2011 Ver 1.3 and Requirements for a

Geophysical Survey 2011 Ver 1.1), to the Conservation Team of Suffolk County Council's Archaeological Service (SCCAS/CT) for scrutiny; SCCAS/CT is the advisory body to the LPA on archaeological issues.

- 1.5 The WSI should be approved before costs are agreed with the commissioning client, in line with Institute for Archaeologists' guidance. Failure to do so could result in additional and unanticipated costs.
- 1.6 Following acceptance, SCCAS/CT will advise the LPA that an appropriate scheme of work is in place.
- 1.7 The WSI will *provide the basis for measurable standards* and will be used to establish whether the requirements of the planning condition will be adequately met. If the approved WSI is not carried through in its entirety (particularly in the instance of trenching being incomplete) the evaluation report may be rejected.

Archaeological Background

- 2.1 The site of the proposed reservoir has high potential for the discovery of important hitherto unknown archaeological remains in view of a) its location to the northwest of prehistoric occupation sites in similar topographical positions (Suffolk Historic Environment Record numbers SAP 001 and SAP 012), and b) its large size (c 6 ha site). The proposed development will cause total destruction of any underlying heritage assets of archaeological interest. However, the site has not been the subject of previous systematic investigation.

Requirements for Archaeological Investigation

- 3.1 To inform field investigation, desk-based assessment is required to assess the potential for unrecorded archaeological sites within the application area, to assess the likely impact of past land uses, and to assess the potential quality of preservation of below ground deposits (modelling those deposits where possible). This will involve:
 - Consultation of the County Historic Environment Record (HER) to collate and assess the existing information regarding archaeological and historical remains within and adjacent to the site. A sufficiently large area around the target area should be studied to give adequate context and impact on the setting of any heritage assets; in this instance between 2.5 and 3km in all directions is considered appropriate, depending on the nature of heritage assets.
 - Examination of all readily available cartographic sources (e.g. those in the County Records Office and other appropriate documentary repositories) to record evidence for historic or archaeological sites within the development area and history of previous landuses, boundaries, buildings, topography and geology. Where permitted, photographs, photocopies or traced copies should be presented in the report.
 - Assessment of the potential for documentary research that would contribute to the archaeological investigation of the site
 - Examination of available geotechnical information to assess the condition and status of buried deposits and to identify local geological conditions. Relevant geotechnical data should be included as appendices to the report.
 - Establishing whether there are other constraints on the site (e.g. SSSI, County Wildlife Site, AONB, etc).

3.2 A geophysical survey is required of the development area to assess the nature and extent of the archaeological resource.

- A systematic fluxgate gradiometer survey is to be undertaken across the site of the proposed reservoir, c 6ha minimum.

3.3 Trial Trenching is required to enable the quality and extent of archaeological resource, both in quality and extent, to be accurately quantified. This should

:

- Identify the date, approximate form and purpose of any archaeological deposit, together with its likely extent, localised depth and quality of preservation.
- Evaluate the likely impact of past land uses, and the possible presence of masking colluvial/alluvial deposits.
- Establish the potential for the survival of environmental evidence.
- Establish the suitability of the area for development.
- Provide sufficient information to construct an archaeological conservation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of cost.

Trial trenches should be excavated to cover 5% of the area that will be impacted upon by the reservoir (based on the irregular shape of the cut area, and discounting the area of the bank and existing ponds, 5% is c.2201 m²: this will result in an anticipated maximum of c.1222m of trenching at 1.8m in width. Linear trenches are thought to be the most appropriate sampling method, in a systematic grid array positioned to sample all parts of the site. Trenches are to be 30m long and a minimum of 1.80m wide unless special circumstances can be demonstrated; this will give 40 trenches.

However, the trench layouts should be reviewed once the results of the DBA/geophysical survey are reported; the layout may need to be adjusted to test geophysical anomalies. The quantity of trenching may also be reviewed.

A scale plan showing the proposed location of the trial trenches should be included in the WSI and the detailed trench design must be approved by SCCAS/CT before fieldwork begins.

Arrangements for Archaeological Investigation

4.1 The composition of the archaeological contractor's staff must be detailed and agreed by SCCAS/CT, including any subcontractors/ specialists. Ceramic specialists, in particular, must have relevant experience from this region, including knowledge of local ceramic sequences.

4.2 All arrangements for the evaluation of the site, the timing of the work and access to the site, are to be defined and negotiated by the archaeological contractor with the commissioning body.

4.3 The project manager must also carry out a risk assessment and ensure that all potential risks are minimised, before commencing the fieldwork. The responsibility for identifying any constraints on fieldwork (e.g. designated status, public utilities or other services, tree preservation orders, SSSIs, wildlife sites and other ecological considerations rests with the commissioning body and its archaeological contractor.

Reporting and Archival Requirements

- 5.1 The project manager must consult the Suffolk HER Officer to obtain an event number for the work. This number will be unique for each project or site and must be clearly marked on all documentation relating to the work.
- 5.2 A comprehensive list of all sources consulted (with specific references) should be included in the report.
- 5.3 An archive of all records and finds is to be prepared and must be adequate to perform the function of a final archive for deposition in the Archaeological Service's Store or in a suitable museum in Suffolk.
- 5.4 It is expected that the landowner will deposit the full site archive, and transfer title to, the Archaeological Service or the designated Suffolk museum, and this should be agreed before the fieldwork commences. The intended depository should be stated in the WSI, for approval.
- 5.5 The project manager should consult the intended archive depository before the archive is prepared regarding the specific requirements for the archive deposition and curation (including the digital archive), and regarding any specific cost implications of deposition.
- 5.6 A report on the fieldwork and archive must be provided. Its conclusions must include a clear statement of the archaeological value of the results, and their significance. The results should be related to the relevant known archaeological information held in the Suffolk HER.
- 5.7 An opinion as to the necessity for further evaluation and its scope may be given, although the final decision lies with SCCAS/CT. No further site work should be embarked upon until the evaluation results are assessed and the need for further work is established.
- 5.8 Following approval of the report by SCCAS/CT, a single copy of the report should be presented to the Suffolk HER as well as a digital copy of the approved report.
- 5.9 All parts of the OASIS online form <http://ads.ahds.ac.uk/project/oasis/> must be completed and a copy must be included in the final report and also with the site archive. A digital copy of the report should be uploaded to the OASIS website.
- 5.10 Where positive results are drawn from a project, a summary report must be prepared for the *Proceedings of the Suffolk Institute of Archaeology and History*.
- 5.11 This brief remains valid for 12 months. If work is not carried out in full within that time this document will lapse; the brief may need to be revised and re-issued to take account of new discoveries, changes in policy and techniques.

Standards and Guidance

Detailed requirements are to be found in our Requirements for a Trenched Archaeological Evaluation 2011 ver 1.3, Requirements for a Geophysical Survey 2011 ver 1.1 and in SCCAS Archive Guidelines 2010

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.

The Institute for 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 and the *Standard and Guidance for Archaeological Desk-based Assessments* (revised 2011) should be used for additional guidance in the execution of the project and in drawing up the report.

Notes

The Institute for Archaeologists maintains a list of registered archaeological contractors (www.archaeologists.net or 0118 378 6446). There are a number of archaeological contractors that regularly undertake work in the County and SCCAS will provide advice on request. SCCAS/CT does not give advice on the costs of archaeological projects.

Appendix 2. Context list

Context No	Feature No	Grid Sq.	Feature Type	Description	Length	Width	Depth	Small Finds	Cuts	Cut by	Over	Under	Finds	Sample	Group No	Phase	Spotdate
0001			Finds Other	Unstrat finds from trench 2.									Yes	No			
0002			Subsoil Layer	Mottled dark brownish grey silty sand and mid yellowish brown silty sand. Friable in nature. Cut by ditch [0003]. 0.16m deep to the west and 0.2m deep to the east. Mixed natural and topsoil.			0.2					0003, 0007	No	No			
0003	0003		Ditch Cut	Linear in plan, north-west to south east orientated. U-shaped profile, 45 degree sloping slightly concave sides with a slight break of slope to concaved base. Filled by (0004). Cuts "dirty natural" sub-soil (0002). Some root and animal disturbance. Probably associated with ditch of similar character and same alignment to the wet.		0.6	0.4				0002	0004	No	No			
0004	0003		Ditch Fill	Mid-dark brownish grey friable silty sand mottled with light grey and yellow sands. Occasional to moderate small-medium round pebbles fairly well sorted. 2 x very small CBM/fired clay fragments recovered. Some root/animal disturbance. Single ditch fill.	1.3 slot	0.6	0.4					0003	Yes	No			
0005	0006		Pit Fill	Mid brownish grey friable silty sand. Occasional small sub-angular flints. Horizon clear. Only fill. Fill of pit			0.16				0006		No	No			
0006	0006		Pit Cut	Circular in plan. Broad and shallow profile, break of slope generally 60 degrees with steep concave sides, occasionally shallow convex slope (probably due to disturbance, roots). The base is flat. Cut of pit.	0.68	0.66	0.16					0005	No	No			
0007	0007		Ditch Cut	Linear in plan, aligned north-west to south-east. U shaped profile, slightly convex and concave sloping 40 degree sides, slight-moderate break of slope to concave base. Filled by 0008. Cuts subsoil layer 0002. Some animal disturbance. Photo only of ditch in trench baulk. Similar character and same alignment as ditch [0003] to the east, probably contemporary. Both seem top run adjacent to and approximately 30m south of current track. May have formed in earlier phase.	1.3 slot	0.6	0.39				0002	0008	No	No			
0008	0007		Ditch Fill	Mid-dark brownish grey friable silty sand mottled with lighter grey silty sand and yellow sand. Moderate small-medium round pebbles, well sorted but some tending towards base. Abraded pot fragment found on surface and may be intrusive. Some animal disturbance. Single ditch fill.	1.3 slot	0.6	0.39				0007		Yes	No			
0009	0009		Ditch Cut	Linear in plan north-west to south-east. U-shaped profile, 80 degree sides with a sharp break of slope to base. Slightly concaved flattish base. Filled by 0010, 0011 and 0012. Unstrat finds i.e. faced brick from all fills (0029). Ditch? Cuts subsoil.		0.7	0.82					0010	No	No			

Context No	Feature No	Grid Sq.	Feature Type	Description	Length	Width	Depth	Small Finds	Cuts	Cut by	Over	Under	Finds	Sample	Group No	Phase	Spotdate
0010	0009		Ditch Fill	Mixed mid greyish brown fairly firm clayey sandy silt. Occasional CBM fragments and lenses of yellow sand. Moderate small-medium round and sub angular pebbles. Occasional-moderate charcoal. Finds under 0029 faced brick fragments kept only. Basal fill.			0.25				0009	0011	No	No			
0011	0009		Ditch Fill	Mixed fill of firm yellow sandy clay with lenses (some large) of mid greyish brown clayey sandy silt. Silty lenses contain occasional CBM fragments, moderate charcoal and occasional-moderate small-medium round and sub-angular pebbles. Finds in 0029, faced brick fragments kept only. Middle fill.			0.4				0010	0012	No	No			
0012	0009		Ditch Fill	Mid greyish brown firm but friable clayey sandy silt. Occasional-moderate CBM fragments, occasional-moderate charcoal, Moderate mixed small-medium round and sub-angular pebbles. Finds in 0029, face fragments kept only. Upper fill.			0.38				0011		No	No			
0013	0013		Ditch/gully Cut	Linear in plan, aligned north-west to south-east. U shaped profile, steep 80 degree sloping sides, sharp break of slope to base, flattish/slightly concave base. Mostly truncated by machine. Filled by 0014. Adjacent to ditch 0009 and same alignment. Ditch/gully. Fill 0014 possibly sealed by subsoil, but more likely to be a root disturbed topsoil lens above fill 0014.	1	0.42	0.3					0014	No	No			
0014	0013		Ditch/gully Fill	Pale light brown (slightly greyish) loose/friable slightly silty sand. Bands/tips of mid brown very silty sand sloping down from south-west to north-east. Occasional small round pebbles. No finds, mostly machine excavated. Single ditch/gully fill. Sealed by subsoil.	>1	0.42	0.3				0013		No	No			
0015	0016		Ditch Fill	Mid yellowish grey brown firm silty sand. Occasional small angular and rounded flints. Horizon clear. Single fill. Fill of ditch.			0.14				0016		No	No			
0016	0016		Ditch Cut	Linear in plan, aligned NW-SE. No full profile, but appears to be "U" shaped with steep near straight sides and a concave base. Possibly cuts [0018] but very unclear. Filled by 0015. Cut of ditch/gully.	>3	0.25	0.14					0015	No	No			
0017	0018		Ditch Fill	Mid yellowish grey brown firm silty sand. Occasional small sub-angular flints. Horizon clear. Single fill. Fill of ditch.			0.28				0018		No	No			
0018	0018		Ditch Cut	Linear in plan, aligned NE-SW. Profile "U" shaped, very steep near straight sides and a concave base. Filled by (0017). Possibly cut by [0016] - very unclear!!!! Sealed by topsoil. Cut of ditch. Steep angle of cut could suggest this was a structural feature, but this seems unlikely given the prevalence of other such features across the site, which appear to be some sort of early field drains.	>1.9	0.35	0.28					0017	No	No			

Context No	Feature No	Grid Sq.	Feature Type	Description	Length	Width	Depth	Small Finds	Cuts	Cut by	Over	Under	Finds	Sample	Group No	Phase	Spotdate
0019	0019		Ditch Cut	Linear in plan, aligned NE-SW. Broad U like profile, slightly irregular sloping sides, with a moderate break of slope to irregular undulating base. Filled by 0020. Excavated and recorded at machine level, seen in baulk to continue to topsoil level. Possible ditch? Wet channel?		1.7	0.22					0020	No	No			
0020	0019		Ditch Fill	Friable mid grey silty-sand mottled with orangey mineral staining - Fe panning? Some firm orangey-yellowish sandy-clay lensing. Occasional-moderate small-medium round and sub-angular pebbles, fairly well sorted. Occasional CBM fragments. Single fill of linear feature.	0.7 slot	1.7	0.22				0019		Yes	No			
0021	0021		Ditch? Cut	Linear in plan, aligned NNE-SSW. Shallow concaved profile. Whole cross section not excavated), 40 degree sloping sides (slightly concaved), slight break of slope to flattish base. Filled by 0022. Hard to define to NNE but brick seen in section. Excavated and recorded at machine surface level. Linear feature unknown function, possibly a ditch. Cut by probable pit [0023]	0.5 exc	0.8	0.15					0022	No	No			
0022	0021		Ditch? Fill	Firm mix of light grey clayey silty sand and yellow clay. Occasional-moderate small-medium sub-angular and angular pebbles. Very occasional red brick and tile fragments (all kept). Truncated by probable pit 0023 to SW. Single fill of linear feature.	0.5 exc	0.8	0.15				0021	0023	Yes	No			
0023	0023		Pit Cut	Slightly oval in plan, aligned NW-SE, partially obscured under western baulk. Concaved bowl like profile, slight break of slope at top, concaved sides and base, no break of slope at the bottom. Cuts linear 0021. Filled by 0024. Excavated and recorded at machine surface level. Probable pit, unknown function.	1.1	0.9	0.2				0022	0024	No	No			
0024	0023		Pit Fill	Mid-light grey friable slightly clayey silty sand mottled with mid brown silt and yellow clay patches. Moderate small-medium round pebbles. Occasional red brick fragments (all kept). Single probable pit fill.	1.1	0.9	0.2				0023		Yes	No			
0025	0025		Pit Cut	Un-excavated pit cut. Unknown shape and form, continues under western baulk. Possibly ovoid NW-SE. Filled by 0026. Same as 0032. Pit cut? Same fill, with brick fragments, as others. Cuts subsoil?							0033	0026	No	No			
0026	0025		Pit Fill	Mid-dark greyish brown fairly firm clayey sandy silt with dark brown lenses of charcoal and silt. Moderate small-medium angular and sub-angular pebbles. Occasional-moderate red brick fragments (none kept). Unexcavated pit fill.							0025		No	No			
0027	0028		Pit/posthole Fill	Dark greyish brown friable silty sand. Frequent small charcoal lumps and flecks. Occasional small angular and rounded flints. Horizon clear. Single fill. Fill of pit/posthole.			0.16				0028	0034	No	No			

Context No	Feature No	Grid Sq.	Feature Type	Description	Length	Width	Depth	Small Finds	Cuts	Cut by	Over	Under	Finds	Sample	Group No	Phase	Spotdate
0028	0028		Pit/posthole Cut	Oval in plan, aligned NW-SE. "U" shaped profile with very steep slightly concave sides, curving to a concave base. Sealed by 0034???	0.45	0.35	0.16					0027	No	No			
				Cut of pit/posthole.													
0029	0009		Pit Finds	Mixed finds from fills 0010, 0011, 0012 in pit 0009. Faced red brick fragments only, approx. 20% of fragments from all fills of pit. All fragments of black (unsuccessfully fired?) brick collected.									Yes	No			
0030	0031		Ditch Fill	Pale greyish brown friable silty sand. Occasional/rare very small flints. 3 pieces of burnt flint. Horizon clear. Single fill.			0.12				0031	0034	No	No			
				Fill of ditch.													
0031	0031		Ditch Cut	Linear in plan, aligned approx. E-W. Broad and shallow profile, break of slope approx. 45 degrees, concave sides and a broad slightly concave base. Very ephemeral but I think real, contained burnt flint. Filled by 0030.	>2.5	0.42	0.12					0030	No	No			
				Cut of ditch													
0032	0032		Pit Cut	Un-excavated pit (?) cut. Unknown shape and form, continues under western baulk. Filled by 0033. Same as pit 0025.								0033	No	No			
				Same as 0025.													
0033	0032		Pit Fill	Mixed firm yellow clay and mid grey brown clayey sandy silt with some lenses of charcoal. Moderate small-medium rounded and sub-angular pebbles. Occasional-moderate red brick fragments. No finds kept.							0032	0025	No	No			
0034	0034		Subsoil Layer	Mid/pale yellowish brown friable silty sand. Horizon clarity is clear with underlying natural geology.			0.18				0027, 0030	0054	No	No			
				Buried plough soil/subsoil.													
0035			Kiln Other	Rectangular red brick structure 1.08mx0.71m, north-west to south-east aligned. Bricks are 22.5cm x 5cm and unfrogged. Mid brownish yellow clayey sand mortar with few inclusions. Height unknown, coursing unknown. Built against 0036 on its north western edge. Small brick structure built against the main kiln.							0036		No	No			

Context No	Feature No	Grid Sq.	Feature Type	Description	Length	Width	Depth	Small Finds	Cuts	Cut by	Over	Under	Finds	Sample	Group No	Phase	Spotdate	
0036			Kiln Structure	Rectangular structure, red bricks, bricks are 22cm x 10.5cm x 5.5cm and unfrosted. North-west to south-east aligned. Excavated to 1m deep in one sondage at north-west end, but not bottomed due to presence of surviving structures. Wall at northwest end has 2 arches in it, extending to the north-west under the current ground level (both showing signs of burning inside). North-east arch has continued to be used in a state of disrepair, south-west arch has been repaired. Exposed northern wall shows scars where other arches have run across and these line up with the central arch columns that still survive running down the centre of the structure. Walls facing into the centre of the structure show that burning has been present within the structure. Looking through the northern arch, brick vaulting can be seen under the unexcavated part of the trench to the north-west. Bricks are coursed with a row of stretchers over a row of headers, 4 courses measures 27.5cm. Mortar is mid pinkish brown clayey sand. Walls are 0.6m max thickness down to 0.3m in the south-west corner. Structure appears to be trench built but exterior edge of wall is unexcavated. Structure is filled with mid brown silty sand with lenses of crushed red brick and mid yellow soft clay, frequent broken and whole bricks and broken tiles, some of which show are heat altered on a single face suggesting they were part of the structure. Brick kiln.	>7.5	4.7		SF1001					0035	Yes	No			
0037			Layer	Mid greyish brown firm silty sand. Moderate CBM flecks and coal/ charcoal. Horizon diffuse. Layer above pits [0039 and [0041] possibly pit fill but cut could not be established so numbered separately.			0.16				0038		No	No				
0038	0039		Pit Fill	Very dark greyish brown firm silty sand. Moderate CBM flecks. Occasional small to medium sub-angular flints. Horizon clear. Single fill. Fill of pit, waste from kiln firing?			0.18				0039	0037	No	No				
0039	0039		Pit Cut	Shape in plan unclear, roughly semi-circular, but runs under baulk to N. Profile is shallow and slightly irregular, generally shallow concave sides and shallow concave base. Cuts pit [0041]. Filled with (0038). Cut of pit, rubbish from kiln?	1.1	>0.6	0.18				0040	0038	No	No				
0040	0041		Pit Fill	Dark greyish brown firm silty sand. Moderate CBM flecks. Only fill. Horizon clear. Pieces of brick recovered. Fill of pit, waste from kiln?			0.2				0041	0039	Yes	No				
0041	0041		Pit Cut	Shape in plan unclear, appears roughly semi-circular, although exits the trench to the north. Profile shallow and broad, 45 degree approx. concave sides and concave base. Cut by pit [0039]. Filled by 0040. Cut of pit - kiln waste.	>0.8	>0.6	0.2					0040	No	No				
0042	0045		Pit Fill	Mid yellowish greyish brown compact silty sand. Moderate small angular and rounded flints. Top fill. Horizon clear. Fill of pit.			0.32				0043		No	No				

Context No	Feature No	Grid Sq.	Feature Type	Description	Length	Width	Depth	Small Finds	Cuts	Cut by	Over	Under	Finds	Sample	Group No	Phase	Spotdate
0043	0045		Pit Fill	Mid greyish brown compact silty sand. Moderate CBM flecks. Frequent coal flecks. Horizon clear. Fill of pit.			0.4				0044	0042	No	No			
0044	0045		Pit Fill	Very dark greyish brown compact silty sand. Frequent CBM. Frequent coal flecks and small lumps. Horizon clear. Basal fill. Waste from kiln? Pit fill.			0.28				0045	0043	Yes	No			
0045	0045		Pit Cut	Possible linear with rounded terminus in plan, not enough visible in trench to say, exits to the south. Profile is broad and shallow, 45-60 degree concave sides leading to a flat irregular base. Filled with 0042, 0043 and 0044. Cuts subsoil 0034. Cut of pit.	>3	>1.6	0.4					0044	No	No			
0046	0046		Pit Cut	Large feature at west end of trench, shape in plan unknown, curving edge exposed 8.5m to east. Shallow profile, gentle convex to concaved edge with slight break of slope to flattish base. Top break of slope not excavated as truncated by field drain. Excavated using a 0.6m wide machine bucket. Filled by 0047, 0048 and 0049. Seems to cut subsoil 0050 but horizon is merged. Shallow "cut" pit? Fills are possibly dumped hard standing to consolidate wet ground/hollows may not be a cut at all.	>8.4	>1.8	0.8				0049, 0048, 0050	0047	No	No			
0047	0046		Large bricky fe Fill	Mid brownish grey fairly firm grey sandy clayey silt/silty clay (50:50). Occasional-moderate charcoal flecks and small CBM fragments/ flecks <20 x 20mm. Occasional-moderate small-medium round pebbles. All inclusions fairly well sorted. Clear upper and lower horizons. Machine excavated. Fill of hollow/pit.			0.24				0046	0048	No	No			
0048	0046		Large bricky fe Fill	Mid greyish brown fairly firm sandy clayey silt. Moderate small-medium brick fragments <50x40mm. Moderate charcoal flecking. Moderate small-medium round an sub-angular pebbles. All fairly well sorted. Machine excavated. Upper fill of large feature.			0.36				0047	0046, 0049	No	No			
0049	0049		bricky feature Fill	Mixed layer of fairly firm mid brown (slightly greyish hue) sandy clayey silt with medium-small CBM fragments and small-medium rounded and sub-angular pebbles all well sorted. Occasional small chalk nodules and flecks. Machine excavated, truncated by field drain. Upper fill of feature 0046.			0.2				0048	0046	No	No			
0050	0050		Deposit Layer	friable light brown silty sand mottled with mid brown silty sand. Occasional-moderate small-medium rounded and sub-angular well sorted pebbles. "Cut" by large feature [0046]. Truncated by field drain. Interface between upper fill 0049 and 0050 merge. Plough soil.			0.2					0046	No	No			

Context No	Feature No	Grid Sq.	Feature Type	Description	Length	Width	Depth	Small Finds	Cuts	Cut by	Over	Under	Finds	Sample	Group No	Phase	Spotdate
0051	0052		Ditch Fill	Mid greyish brown firm silty sand. Occasional small-medium angular and sub-angular flints. Horizon clear. Struck flint recovered. Fill of ditch.			0.24				0052		Yes	No			
0052	0052		ditch Cut	Linear in plan, aligned ESE-WNW. Profile is quite broad and shallow, break of slope approx. 45 degrees leading to slightly concave or convex sides and a concave base. Relationship with subsoil 0034 unclear. Cut of ditch.	>1.9	0.65	0.25					0051	No	No			
0053	0054		Ditch Fill	mid greyish brown firm silty sand. Occasional-moderate small angular and sub-angular flints. Horizon clear. No finds. Fill of ditch.			0.3				0054		No	No			
0054	0054		Ditch Cut	Linear in plan, aligned NE to SW. True profile seen in section 24, break of slope approx. 45 degrees, slightly concave sides leading to a concave base. Probably cuts ditch 0056. Cuts subsoil 0034. Cut of ditch.	>3.25	0.75	0.3				0034, 0055	0053	No	No			
0055	0056		Ditch Fill	Mid-dark greyish orange brown firm silty sand. Moderate small angular and sub-angular flints. Horizon clear. Some Roman (?) grey ware recovered. Fill of ditch.			0.1				0056	0054	Yes	No			
0056	0056		Ditch Cut	Linear in plan, aligned NW-SE. Profile is broad and shallow, break of slope approx. 35-40 degrees, slightly concave sides leading to a broad slightly concave base. Probably cut by ditch 0054. Cut of possible Roman ditch.	>1.2	0.54	0.1					0055	No	No			
0057	0057		Ditch Cut	NE-SW aligned ditch, linear in plan. Straight fairly steep sides, sharp break of slope to flat base. Cut of post medieval ditch.	>0.35	0.32	0.17					0058	No	No			
0058	0057		Ditch Fill	Mid reddish-brown firm silty clay. Moderate flecks of CBM. Rare small flints. Horizon clear. Fill of ditch.			0.17				0057		No	No			
0059	0059		Ditch Cut	Linear in plan, NE-SW aligned. Steep straight sides, sharp break of slope to flat base. Cut of ditch.		0.4	0.34					0060	No	No			
0060	0059		Ditch Fill	Mid brown silty clay. Moderate red CBM flecks and fragments. Occasional small angular and sub-angular pebbles. Fill of ditch.			0.34				0059		No	No			
0061	0062		Ditch Fill	Pale-mid greyish yellow brown firm silty sand. Occasional small angular and rounded flints. Horizon clear. Possible Roman pot recovered. Fill of ditch.			0.28				0062		Yes	No			
0062	0062		Ditch Cut	Linear in plan, aligned N-S. Profile broad and shallow, break of slope approx. 50 degrees, slightly concave sides and a broad slightly concave base. Cut of ditch.	>1.8	1.24	0.28					0061	No	No			

Context No	Feature No	Grid Sq.	Feature Type	Description	Length	Width	Depth	Small Finds	Cuts	Cut by	Over	Under	Finds	Sample	Group No	Phase	Spotdate
0063	0063		Quarry pit Cut	Semi circular in plan, runs under baulk to north. Profile unclear, appears to be squared, with steep straight sides and a near flat base. Sealed by topsoil. Cut of post medieval pit. Associated with kiln?	1.4	>0.95	0.32					0064	No	No			
0064	0063		Pit Fill	Mid grey sift silty clay, very occasional small sub-angular pebbles. No finds. Fill of post medieval pit.			0.32				0063		No	No			
0065	0065		Pit Cut	Semi circular in plan, runs under baulk to south. Profile unclear, appears to have steep sides with a sharp-gradual break to base, with a slightly concave base. Sealed by topsoil. Cut of pit.	1.3	>0.6	0.27					0066	No	No			
0066	0065		Pit Fill	Mid grey soft silty clay. Very occasional small sub-angular and rounded pebbles. No finds. Fill of pit.			0.27				0065		No	No			
0069	0069		Ditch Cut	Linear in plan, aligned NE-SW. Profile has a break of slope of approx. 45 degrees, slightly concave sides, leading to a concave base. Cut of ditch.	>1.9	0.76	0.22					0070	No	No			
0070	0069		Ditch Fill	Mottled mid grey silty sand with orange patches and Fe staining. Common small stones. Friable-firm. Clear horizon. Fill of ditch.			0.22				0069		Yes	No			
0071	0072		Ditch Fill	Mid greyish brown firm silty sand. Occasional small sub-angular flints. Horizon clear. Single fill. Fill of ditch.			0.26				0072		No	No			
0072	0072		Ditch Cut	Linear in plan, aligned NW-SE. Profile has approx. 60 degree concave sides leading to a concave base. Appears to cut sub-soil. Cut of ditch.	>2.1	0.82	0.26					0071	No	No			
0073	0074		quarry pit? Fill	Mid-pale greyish brown firm silty sand. Occasional small-medium sub-angular flints. No finds. Horizon clear. fill of quarry pit	>2	1.6	0.32				0074		No	No			
0074	0074		Pit Cut	Appears linear in plan from what is visible in trench, aligned NW-SE. Profile is slightly irregular, steep slightly concave sides leading to an irregular base. Sealed by topsoil. Cut of post medieval pit.	>2	1.6	0.32					0073	No	No			
0075			Finds Other	Unstratified bricks recovered from Trench 3. Presumably associated with the quarrying features and brick deposits within the base of the trench.									Yes	No			
0076	0076		Pit Cut	Large feature. Shape only partially uncovered within trenching. Curving south-eastern edge. Cut of large rake-out pit from kiln 0081 in Trench 35. Only partially investigated within this trench due to the limited opportunity to excavate it properly.	>17	>1.8	>0.35					0077	No	No			
0077	0076		Pit Fill	Dark brownish-grey silty-sand, ash, brick fragments and redeposited clay. Machine excavated. Rake out pit fill.							0076	0078	No	No			

Context No	Feature No	Grid Sq.	Feature Type	Description	Length	Width	Depth	Small Finds	Cuts	Cut by	Over	Under	Finds	Sample	Group No	Phase	Spotdate
0078	0076		Pit Fill	Dark grey/black ashy silty-sand sand mix. Machine excavated. Rake out pit fill.							0077	0079	No	No			
0079	0076		Pit Fill	Mid brownish-grey clayey-sand, with abundant CBM fragments and burnt clay content. Machine excavated. Rake out pit fill.							0078, 0080		No	No			
0080	0076		Pit Fill	Dark grey sandy-clay with occasional brick fragments. Machine excavated. Rake out pit fill.								0079	No	No			
0081			Kiln Structure										No	No			

Appendix 3. OASIS form

OASIS ID: suffolkc1-133462

Project details

Project name	EUN 035 Wash Pits Field Evaluation, Euston
Short description of the project	An evaluation was carried out at Euston Estate, near Fakenham Magna in Suffolk, following a desk-based assessment and geophysical survey. A total of forty-five trenches were excavated, targeting an area for a proposed reservoir, on a site known as Wash Pits field. The works revealed that the site had been used in the mid-late 17th and early 18th centuries as a site for the quarrying of clay and subsequent firing of bricks, with various quarry pits and two kilns being recorded, with the eponymous Wash Pits forming part of the clay purification process. Two field drainage systems may have been associated with this phase of activity. The main finds from this period consisted of misfired brick and tile fragments. Several other post-medieval ditches and non-quarry pits, thought to be associated with the brick-making activity, were also recorded. Earlier features were found on the northern and southern edges of the site and consisted of Roman ditches, producing Roman pottery, as well as two undated ditches and an undated pit, which are assumed to either be later prehistoric or Roman. The features were all well preserved as the site had not been heavily ploughed, having been planted with trees.
Project dates	Start: 17-09-2012 End: 26-09-2012
Previous/future work	No / Yes
Any associated project reference codes	EUN 035 - HER event no.
Any associated project reference codes	EUN 035 - Sitecode
Any associated project reference codes	2012/151 - Contracting Unit No.
Type of project	Field evaluation
Current Land use	Grassland Heathland 2 - Undisturbed Grassland
Monument type	BRICK KILNS Post Medieval
Monument type	PITS Post Medieval
Monument type	DITCHES Post Medieval
Monument type	DITCHES Roman
Monument type	PITS Uncertain
Significant Finds	BRICKS Post Medieval
Significant Finds	TILES Post Medieval

Significant Finds	POT Roman
Significant Finds	LITHIC IMPLEMENTS Late Prehistoric
Significant Finds	FIRE CLAY Post Medieval
Methods & techniques	"Sample Trenches"
Development type	Service infrastructure (e.g. sewage works, reservoir, pumping station, etc.)
Prompt	Direction from Local Planning Authority - PPS
Position in the planning process	Pre-application

Project location

Country	England
Site location	SUFFOLK ST EDMUNDSBURY EUSTON EUN 035 Wash Pits Field Evaluation
Postcode	IP24
Study area	6.00 Hectares
Site coordinates	TL 922 771 52 0 52 21 27 N 000 49 22 E Point
Height OD / Depth	Min: 47.00m Max: 48.00m

Project creators

Name of Organisation	Suffolk County Council Archaeological Service
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Dr Abby Antrobus
Project director/manager	John Craven
Project supervisor	Rob Brooks
Type of sponsor/funding body	Land owner
Name of sponsor/funding body	Euston Estate

Project archives

Physical Archive recipient	Suffolk County Council Archaeological Service
Physical Archive ID	I/92/2
Physical Contents	"Ceramics", "Industrial", "Worked stone/lithics"
Digital Archive recipient	Suffolk County Council Archaeological Service
Digital Archive ID	EUN 035

Digital Contents	"Ceramics","Industrial","Worked stone/lithics","other"
Digital Media available	"Database","Geophysics","Images raster / digital photography","Spreadsheets","Survey","Text"
Paper Archive recipient	Suffolk County Council Archaeological Service
Paper Archive ID	EUN 035
Paper Contents	"Ceramics","Industrial","Worked stone/lithics","other"
Paper Media available	"Context sheet","Correspondence","Plan","Report","Section","Survey","Unpublished Text"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Wash Pits Field, Euston, EUN 035, Archaeological Evaluation Report
Author(s)/Editor(s)	Brooks, R.
Other bibliographic details	SCCAS Report No. 2012/151
Date	2012
Issuer or publisher	SCCAS
Place of issue or publication	Bury St Edmunds
Description	A4, comb-bound, white card covers, in colour, with 7 appendices. Also available as a pdf.
Entered by	Rob Brooks (rob.brooks@suffolk.gov.uk)
Entered on	31 October 2012

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Appendix 4. Quarry features

Trenches containing clay quarrying and brick making features

<p>Trench 3 Quarry pits/brick deposits Almost the entire length of the trench was taken up with approximately nine large cuts. These were not hand-excavated, although a 7.5m machine sondage was dug through the pits at the southern end to reveal the profile. The pits appeared to be sub-square, although some were more irregular, whilst the largest pits tended to be rounded. They ranged in size from 0.5m x >0.45m to 4.5m x >1.8m. Whilst the cuts were variable in plan, their profiles in section were very similar, with steep, slightly concave sides, curving to fairly flat bases. The pits were cut through either subsoil or the geological layers and were overlaid by topsoil. The fills consisted of grey and brown silty-sands, sometimes with clay content and most of the cuts contained only one fill. Some of the fills also contained burnt clay fragments and over fired brick fragments. A sample of unstratified bricks produced from the machining of the pit was dated as 17th to 18th century, which correlates with other brick fragments on site, as well as the brick sample from kiln 0036.</p>
<p>Trench 4 Quarry pit 0046 A large pit cut measuring >8.4m x >1.8m x 0.8m deep was excavated in the west end of Trench 4. Its shape in plan was not clear, but it had gently sloping sides, a flat base and was filled with 0047, 0048 and 0049; mixes of brown and grey-brown clayey-sandy-silts, which produced no finds. This was interpreted as a quarry pit due to its proximity to those in Trenches 3 and 6, and because it was similarly shallow. It also produced a distinct positive anomaly result during the magnetometer survey, suggesting the presence of redeposited brick within the rest of the feature.</p>
<p>Trench 6 Quarry pits/brick deposits This trench revealed another series of quarry pits with a sub-square shape in plan, as well as several slightly more irregular pits, including some with a somewhat elongated shape. Similar linear cuts were seen amongst other areas of quarrying and were excavated in Trenches 7, 30 and 36. The deposits ranged in size from 0.75m x >0.8m to 9m x >1.8m. A sondage was excavated through the largest deposit, revealing it to be a series of irregular cuts that were at most 0.5m deep and seem to have been dug to the top of the sand geology, having excavated the clay layer. The fills were a mixture of greyish-brown sandy-silts with occasional clay content. Some of them also contained brick fragments.</p>
<p>Trench 7 Quarry pits Trench 7 revealed a series of sub-square and very irregular linear quarry pit cuts. These varied in size from 0.65m x >1.45m to c.9.75m x >1.8m. The largest of these deposits was machine excavated to 1.15m below ground level, where its uneven base was revealed. Another linear deposit was excavated as a possible ditch, but its extremely irregular and shallow base was interpreted as being that of another quarry feature. Similarly cuts were found in trenches 30 and 36. Mid to dark brownish-grey sandy-silt fills were recorded infilling these cuts, and none of them contained brick fragments.</p>
<p>Trench 8 Quarry pits/brick deposit Two slightly irregular sub-square quarry pits containing brick rubble were recorded at the northern end of Trench 8, measuring >3.27m x >1.8m and >2.95m x >1.2m. These were centred on a discrete positive anomaly from the magnetometer survey and the brownish-grey silty-sand fills contained brick patches. At the southern end of the trench a less irregular sub-square pit was recorded with a similar fill, but no brick content. This measured >4.5m x >1.8m.</p>
<p>Trench 9 Quarry pit/brick deposit A sub-square corner to a cut was present in the west end of this trench, measuring >0.7m x >1.2m. This contained brownish-grey silty-sands and brick and burnt clay fragments, which were also present within the trench section, underlying the topsoil. A strong area of magnetic disturbance was recorded in this area of the site.</p>
<p>Trench 10 Quarry pit/brick deposit A single sub-square pit, measuring 2.65m x >1.6m was present in the western end of this trench. It contained brownish-grey silty-sand and brick and burnt clay fragments, which were also present in the trench profile. This feature centred on a discrete positive anomaly from the geophysical survey.</p>
<p>Trench 11 Quarry pit/brick deposit A discrete positive anomaly result from the geophysical survey marked a single pit, measuring >1.4m x >0.85m was present in the western end of this trench. It contained brownish-grey silty-sand and brick and burnt clay fragments, which were also present in the trench profile. It was cut by a field drain and a ditch/field drain.</p>
<p>Trench 12 Quarry pit/brick deposit A single sub-circular pit, measuring >1.05m x >0.55m was present in the eastern edge of this trench. It contained brownish-grey silty-sand and brick and burnt clay fragments, which were also present in the trench profile.</p>

<p>Trench 14 Quarry pit/brick deposit One sub-square pit in the western edge of the trench, measuring >2.65m x >0.7m and containing brownish-grey silty-sand and brick fragments.</p>
<p>Trench 15 Quarry pit/brick deposit At the eastern end of this trench, to the south-east of kiln 0036, was a quarry pit containing brick deposits and mid brownish-grey silty-sand. It measured >2.75m x >2.55m and had a curved edge.</p> <p>Kiln 0036, structure 0035 and rake-out deposits Kiln 0036 and associated brick structure 0035 were recorded within the extended area of this trench. A more detailed description is given in the main report. To the north-west of the kiln, burnt deposits of rake-out material from brick-firing were recorded.</p>
<p>Trench 16 Quarry pits/brick deposits At the northern end of this trench a large quarry pit containing brownish-grey sandy-silt, brick fragments and burnt clay was recorded. It measured 3.3m x >1.8m. A small area of a quarry pit with redeposited brick was also recorded emerging from the western edge of the trench as cut 0025. It appeared to have a slightly irregular sub-square shape and measured >1.55m x >0.4m and had brownish-grey silty-sand. A shallow linear cut, with an irregular base, was recorded as 0019 and ran on a north-east to south-west alignment.</p> <p>Post-medieval linear features Three linear features and a further small possible pit were recorded in this trench and are described in greater detail in the main report.</p>
<p>Trench 21 Quarry pits/brick deposits Three sub-square and linear quarry pits containing brick rubble were recorded in plan within this trench and all three contained brownish-grey sandy-silt. The largest of these cuts measured 3.95m x >1.8m, whilst the remaining two were >0.9m x 0.75m and >1.8m x >1.65m.</p> <p>Pits 0039, 0041 and 0045 Three pits containing material thought to be kiln waste and probably contemporary with the kilns. These are discussed in greater detail in the main report.</p>
<p>Trench 22 Quarry pits/brick deposits Six irregular and sub-square pits were present in this trench, measuring 1.7m x >1.5m up to >3.4m x >1.8m. Each contained brownish-grey silty-sandy fills with varying levels of burnt clay and over-fired brick fragments. The presence of a large area of magnetic disturbance around this trench may indicate the presence of another kiln.</p>
<p>Trench 24 Quarry pit/brick deposit One sub-circular pit containing brownish-grey silty-sand and brick fragments with burnt clay. The cut measured 2.4m x >1.25m. This end of the trench was identified as an area of magnetic disturbance in the magnetometer survey, and as such further brick deposits may be present nearby.</p>
<p>Trench 27 Quarry pit/brick deposit A single sub-square pit was partially recorded within the southern edge of this trench, measuring 0.6m x >0.25m and containing brownish-grey sandy-silt with brick fragments. It appeared to be partially disturbed by tree rooting and was located in an area of magnetic disturbance.</p>
<p>Trench 29 Rake-out pit 0076 A large rake-out pit, 0076, associated with kiln 0081 in Trench 35, was recorded in Trench 29, containing several fills. Several machine sondages were excavated through the, which is discussed in greater detail in the main report.</p>
<p>Trench 30 Quarry pits At least nine separate quarry pit cuts were present along the edge of this trench. Whilst some of these were sub-square, or linear, some were also extremely irregular. One of the linear cuts was excavated as a potential ditch and was recorded as 0074. This was shallow and had a very irregular base, indicating a similarity to those excavated in Trenches 7 and 36. None of these deposits produced brick fragments or burnt clay, but were consistently filled with greyish-brown silty-sand.</p>
<p>Trench 31 Quarry pit/brick deposit or possible rake-out pit At the eastern end of Trench 31 a large cut measuring >5.2m x >1.8m was recorded. Its western edge was irregular and it consisted of pale grey silty-sand, overlaid by a mixed deposit of greyish-yellow chalky-clay and grey chalky-sand, which had been heavily discoloured by burnt clay and over fired brick fragments. Whilst this may be another quarry pit, the density of the brick fragments and burnt clay in the uppermost fill is comparable to the material in the rake-out pits associated with the kilns. A similar feature was recorded at the west end of Trench 36.</p>
<p>Trench 34 Quarry pits/brick deposits Two sub-square pits were recorded in this trench. Both contained mid brownish-grey silty-sand and one contained</p>

<p>burnt clay and brick fragments. These measured >3m x >1.3m and >1.9m x >0.75m and emerged from the northern edge of the trench.</p>
<p>Trench 35 Kiln 0081 Kiln 0081 was present in the northern end of the trench. It was only partially uncovered during this stage of works. A more detailed description is given in the main report.</p>
<p>Trench 36 Quarry pit/brick deposit or possible rake-out pit At the western end of this trench was a large cut very similar to that in Trench 31. It consisted of brownish-grey sandy-clayey material, with occasional brick fragments, overlaid by a clayey-sand that was heavily discoloured by burnt clay and over fired brick fragments.</p> <p>Quarry pits/brick deposits Three other quarry pits were recorded within the trench. All were sub-square, or irregularly shaped with straight edges and measured from 1.1m x >0.65m and up to >2.75m x >1.1m. All three contained brownish-grey silty-sandy fills and the largest pit contained brick fragments.</p>
<p>Trench 41 Quarry pits Two sub-square/irregular features were present in this trench. These measured 3.4m x >1.8m and >2m x >0.7m and were filled with brownish-grey sandy-silt.</p>
<p>Trench 42 Quarry pits In the north-east end of this trench two sub-square pit cuts were present. Both contained variable pale-mid greyish-brown slightly disturbed silty-sand and neither appeared to contain kiln waste. The largest cut measured >2.7m x >1.35m, with the other recorded at >1.6m x >1.5m.</p>
<p>Trench 43 Quarry pits/brick deposits In the centre of this trench a large round pit filled with greyish-brown silty-sand and dense deposits of brick fragments and burnt clay. The visible extent of the pit measured 5m x >1.8m and corresponds closely with a discrete positive anomaly from the geophysical survey. Four smaller sub-rectangular pits were also present in this trench and they measured 1.5m-2.6m long x 0.7m->2m wide. They were filled with identical material to that in the larger pit, although no kiln waste was present.</p>
<p>Trench 44 Quarry pits Four small sub-square quarry pits, containing brownish-grey silty-sand were present within Trench 44. These measured from 1.6m x 0.8m to >2.7m x >1m. None of these cuts produced kiln waste.</p>

Appendix 6. CBM catalogue

Ctxt	Fabric	Form	No	Wgt/g	Height (mm)	Length	Width	Abr	Notes	Date
0004	MS	FRAG	1	1				Very	Oxidised	P-Med
0020	MSFE	FRAG	4	92				Abr	Oxidised (red) most look like LB fragments, most with sparse flint	P-Med
0020	MS	FRAG	4	78				Abr	Oxidised, most look like LB fragments, all with sparse flint	P-Med
0022	MSFE	RT	2	259	11-14			Abr	Oxidised with sparse flint	P-Med
0022	MSFE	LB	1	752	60		110	Abr	Oxidised with sparse flint. Poorly made contains big voids, a waster. No frog, similar to Drury LB3 or 6	17th-18th C
0024	MSFE	LB	2	1122	65			Abr	Oxidised (partially burnt) with sparse flint. No frog could be Drury LB3 or 6	17th-18th C
0029	MSFE	LB	2	939	60			Sli	Variably oxidised/partially burnt with sparse flint. Poorly made with large voids and inclusions, a waster. Drury LB3 or 6	17th-18th C
0029	MSFE	FRAG	12	472				Abr	Oxidised with sparse flint, most are LB fragments	P-Med
0029	MS	FRAG	3	107				Abr	Oxidised with sparse flint, most are LB fragments and more likely in the msfe fabric	P-Med
0029	MSFE	LB	2	551	65			Abr	Oxidised with sparse flint. Poorly made with creases and large voids as well as cracked. No frog. Drury LB3 or 6	17th-18th C

Ctxt	Fabric	Form	No	Wgt/g	Height (mm)	Length	Width	Abr	Notes	Date
0029	MSFE	LB	15	210				Abr	Dark grey with a very sandy texture with a loose feel to the surfaces. Some flat surfaces are present	P-Med
0036	MSFE	LB	1	2520	60	225	105	Sli	Whole brick, oxidised (bright orange) with sparse flint. No frog, a Drury LB3	17th-18th C
0040	MSFE	FRAG	3	256				Abr	Oxidised (one partially burnt) with sparse large flint, all look like LB fragments	P-Med
0044	MSFE	FRAG	2	207				Abr	Oxidised (one red) with sparse flint, all LB fragments	P-Med
0044	MSFE	LB	1	420	60			Abr	Oxidised with sparse flint. No frog, a Drury LB3 or 6	17th-18th C
0075	MSFE	LB	1	1062	60		105	Sli	Oxidised with sparse flint. No frog, a Drury LB3	17th-18th C
0075	MSFE	LB	1	1140	c 55		105	Sli	Oxidised (bright orange) with sparse flint. A Drury LB3 or 5	17th-18th C

Appendix 7. Flint catalogue

Ctxt	Type	No	Pat	Notes	Date disc
0001	Flake	1	Up	Dark grey and lozenge shaped. Use wear on one edge, with two negative flake scars. Possibly used as a scrapper	Later Preh
0008	Flake	1	Up	Small thin dark grey flake. No use wear or retouch present	Later Preh
0051	Flake	1	Up	Small, thin, dark grey and triangular shaped. Use wear on one edge	Later Preh
0061	Flake	1	Up	Small, thin, dark grey flake which is broken at the distil end. It has four negative flake scars	Later Preh
0070	Flake	1	Up	Thin, dark grey and sub-rectangular in shape. Thirty percent cortex and no retouch present. It has three negative flake scars	Later Preh

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