

The Bridge School,
Sprites Lane,
Ipswich,
Suffolk.
BSD 018

Archaeological Evaluation Report

SCCAS Report No. 2013/139

Client: Concertus Design & Property Consultants Ltd.

Author: Linzi Everett

December 2013

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Sprites Lane,
Belstead,
Suffolk.
BSD 018

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SCCAS Report No. 2013/139

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HER Information

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Date: December 2013

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Summary

An area of 1.1 hectares was evaluated by trial trenching as a condition of planning permission to develop the site. Ten trenches were excavated, with archaeological features identified in seven of these. Several boundary ditches of likely Iron Age or Roman date were observed which point towards one or more enclosures or field systems. Environmental sampling of two probable Iron Age ditches revealed the presence of ferrous spheroids in the fill, suggesting smithing in the vicinity of the site and that these features were almost certainly contemporary.

Evidence of Roman occupation was present in the south east corner of the site where four post holes were excavated and a layer rich in Roman pottery and building material was recorded in Trench 8, whilst in Trench 10, a large pit contained fired clay derived from a daub structure, and Roman pottery.

1. Introduction

A trial trench evaluation was carried out at The Bridge School, Belstead (BSD 018; TM 1306 4241). The proposed development area (hereafter referred to as 'the site') consisted of an area of c.1.1 hectares.

The evaluation was carried out prior to submission of a planning application for development, according to a Brief issued by Matthew Brudenell, which outlined the manner of the fieldwork, and a Written Scheme of Investigation (WSI) detailing the archaeological methodology (Brooks, 2013).

The trial trenching was conducted by the Field Team of the Suffolk County Council Archaeological Service (SCCAS) between the 29th October and 1st November 2013.

The site has been recorded with the County Historic Environment Record (HER) code BSD 018.

2. Geology and topography

The site is located on glacial chalky clay deposits on the northern valley side of Belstead Brook, a tributary of the River Orwell, at a height of approximately 36m OD. It is bounded by Sprites Lane on the east and housing to the south, west and north. The underlying glaciofluvial drift geology of the site comprises deep loam and sandy soils, locally flinty and in places over gravel.

3. Archaeology and historical background

The site's potential was based on its location on a south facing slope overlooking the valley of Belstead Brook, a topographically favourable location for early settlement. It also lies close to a Bronze Age cremation cemetery (SPT 035), a spread of Roman and Anglo Saxon material (WSH 012) and a scatter of Roman pottery (WSH 003).

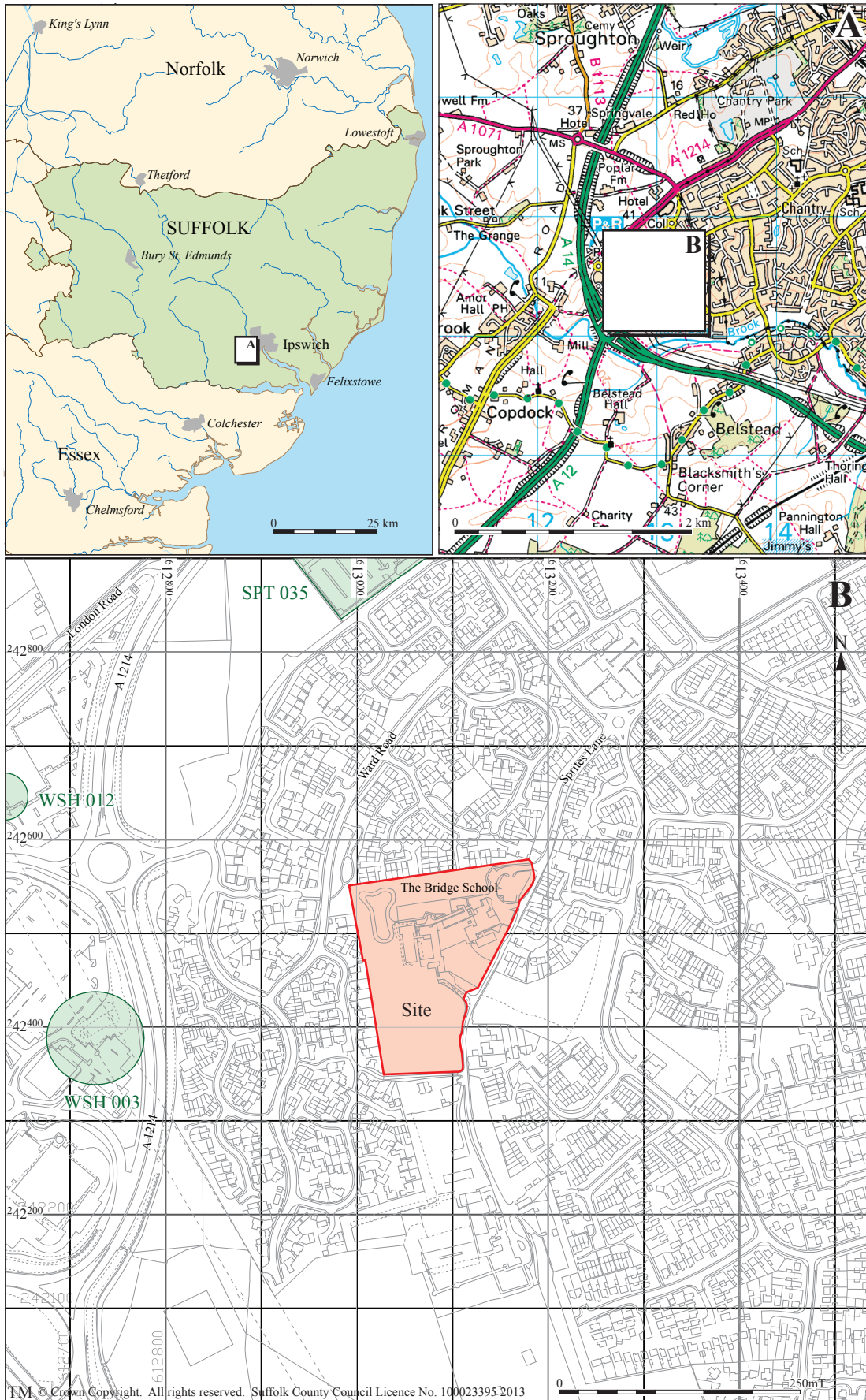


Figure 1. Location map, showing the development area (red) and selected HER entries (green)

4. Methodology

Trenching was conducted using a tracked digger equipped with a 1.5m wide toothless ditching bucket, focusing some of the trenches on anomalies identified during a geophysical survey undertaken by Britannia Archaeology Ltd (Report no. R1039). All machining was observed by an archaeologist standing adjacent to or within the trench. Topsoil was removed by machine to reveal undisturbed natural subsoil and/or archaeological deposits.

The base of each trench was examined for features or finds of archaeological interest. The upcast soil was examined for any archaeological finds. Records were made of the position and length of trenches and the depths of deposit encountered.

The site has been given the Suffolk HER code BSD 018. All elements of the site archive are identified with this code. An OASIS record (for the Archaeological Data Service) has been initiated and the reference code suffolkc1-160931 has been used for this project.

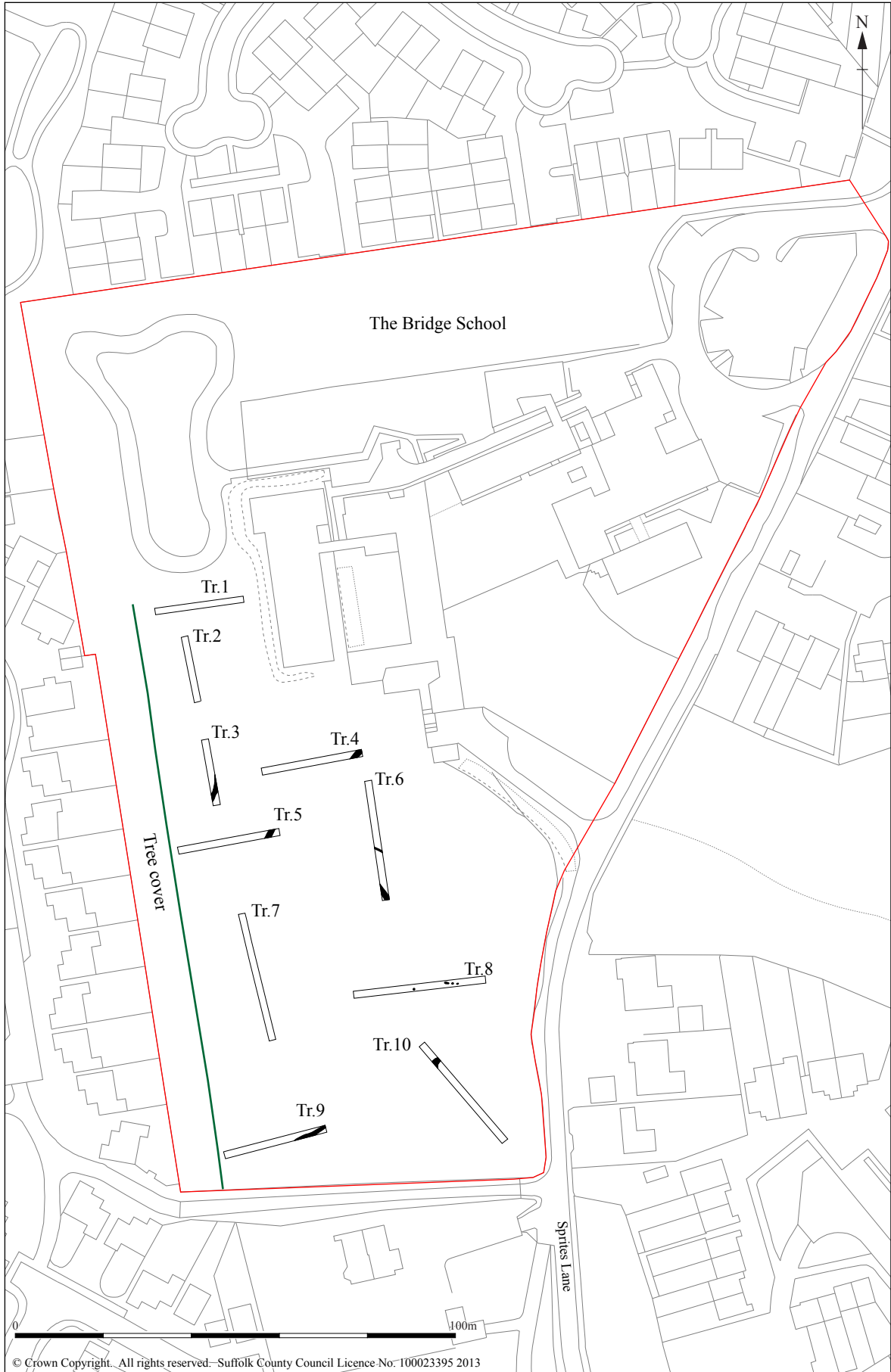


Figure 2. Plan showing location of evaluation trenches and recorded features (black)

5. Results

Ten trenches were excavated across the site (Fig. 2) In each case, between 0.35m - 0.45m of dark brown loamy silty sand topsoil was present. A possible colluvial subsoil layer (0004) was recorded in six of the trenches, which measured up to 0.15m thick in trenches 3, 5, 6 and 7 and up to 0.3m thick in trenches 8, 9 and 10.

A total area of 375 square metres was excavated. A belt of trees lining the western boundary of the site meant that trenches 1, 5 and 9 were cut short, and two large tree stumps prevented excavation of Trench 4 any further to the east. Trench dimensions are recorded in the table below:

Trench	Length	Area	Height	Depth to natural	Depth to top of archaeology	Features
1	20m	32m ²	39.02m W 38.69m E	0.75m	-	-
2	15m	24m ²	38.29m N 38.36m S	0.7m	-	-
3	15.4m	24.6m ²	38.67m N 38.35m S	0.7m	0.5m	0004; 0016
4	23m	36.8m ²	37.73m W 37.21m E	0.5m	0.5m	0018
5	23m	36.8m ²	37.55m W 37.55m E	0.75m	0.5m	0004; 0024
6	27.5m	42.4m ²	37.37m N 37.27m S	0.6m	0.38m	0004; 0020; 0022
7	29.5m	47.2m ²	37.38m N 37.56m S	0.9m	0.75m	0004
8	29m	46.4m ²	37.02m W 36.78m E	0.9m	0.55m	0004; 0012; 0015; 0028; 0030; 0032
9	23.6m	37.8m ²	36.60m W 37.22m E	1m	0.75m	0004; 0026
10	29.3m	46.9m ²	36.76m N 35.84m S	1m	0.6m	0004; 0005

Table 1. Trench dimensions

Trench 3 (Fig 3)

0016 was a slightly curvilinear ditch, aligned approximately NE-SW, in the southern end of the trench. It was shallow, with a gradual slope on the south side and steeper northern side, similar in profile to ditch 0020 in Trench 6. Several sherds of Iron Age pottery were recovered from its silty sand fill. The relationship between 0016 and subsoil layer 0004, which was a soft pale brown sandy silt present in the southern seven metres of the trench and measuring up to 0.15m thick, was uncertain.

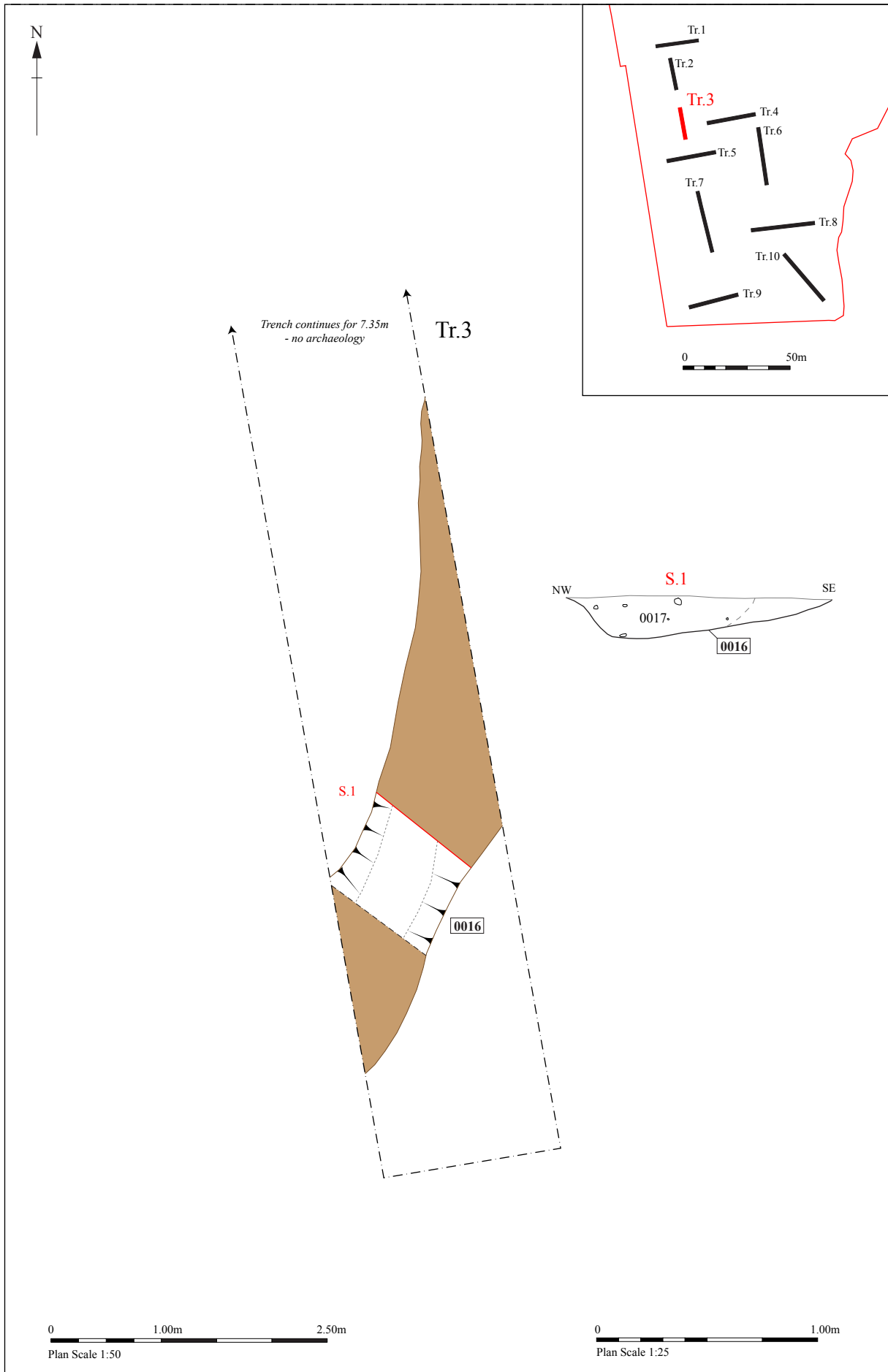


Figure 3. Trench 3 plan and sections

Trench 4 (Fig 4)

0018 was a SW-NE aligned ditch in the eastern end of the trench. It was shallow with a generally flattish base and could be the same feature as 0024 in Trench 5. A single sherd of Roman greyware was recovered from its fill, 0019.

Trench 5 (Fig 5)

Ditch 0024 was aligned approximately NE-SW and located in the eastern end of the trench. It was shallow, with rounded sides and a slightly concave base and of similar orientation and dimensions to 0018 in Trench 4. Three struck flints were recovered from its silty sand fill. The relationship between 0024 and subsoil layer 0004 was uncertain.

Trench 6 (Fig 6)

0022 was a narrow NW-SE aligned gully, shallow with an open v-shaped profile. No finds were recovered from its mid orangey brown silty sand fill. It cut subsoil layer 0004.

Ditch 0020 was aligned NW-SE through the southern end of the trench. It was fairly shallow, with a gradual slope on the south side but a steeper northern side, a strikingly similar profile to ditch 0016 in Trench 3. A single flint flake and small sherd of Iron Age pottery was found in the environmental sample taken from this ditch. The relationship between ditch 0020 and subsoil 0004 was uncertain.



Plate 1. Trench 6 soil profile and N-S section through gully 0022

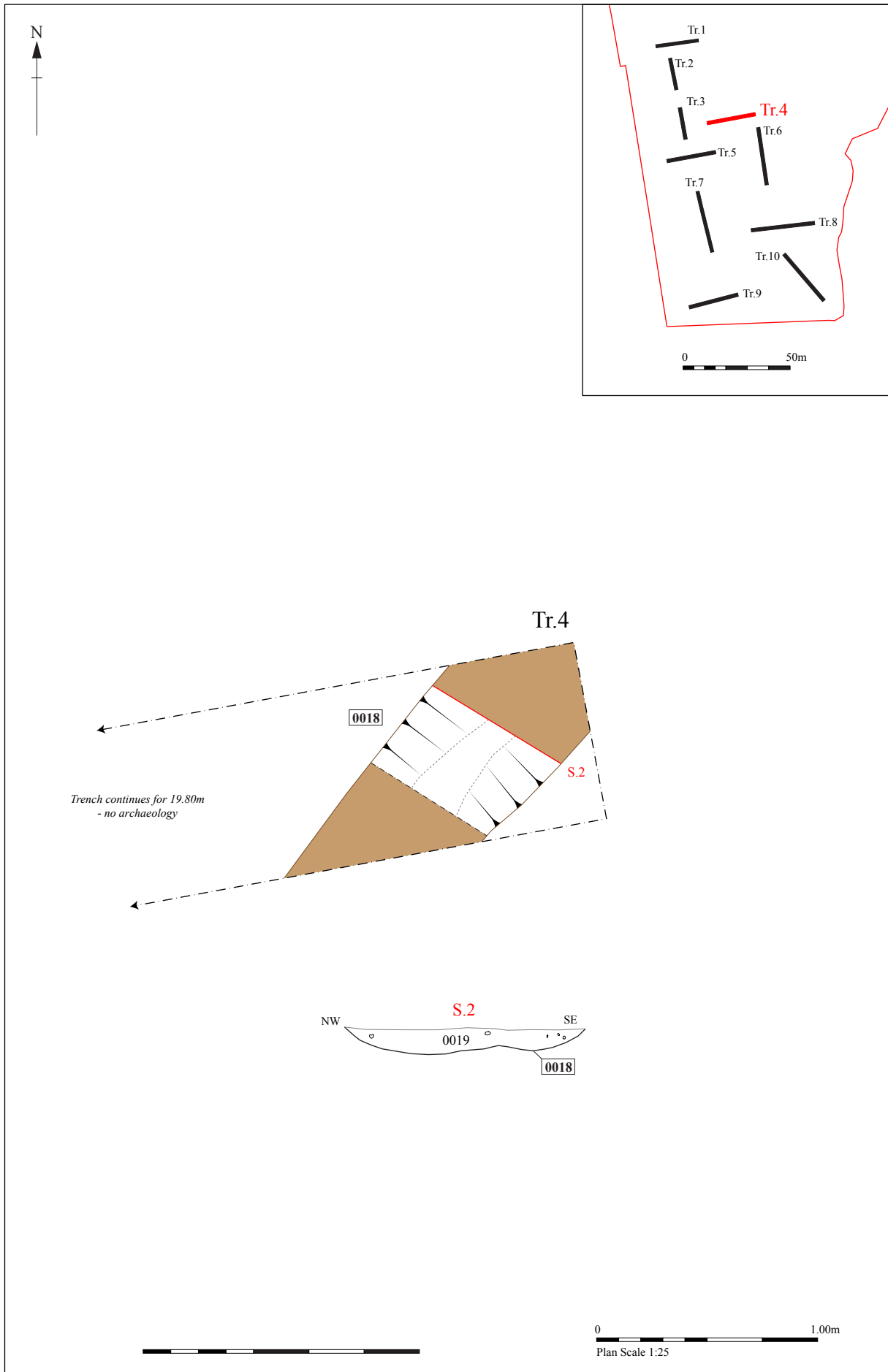


Figure 4. Trench 4 plan and section

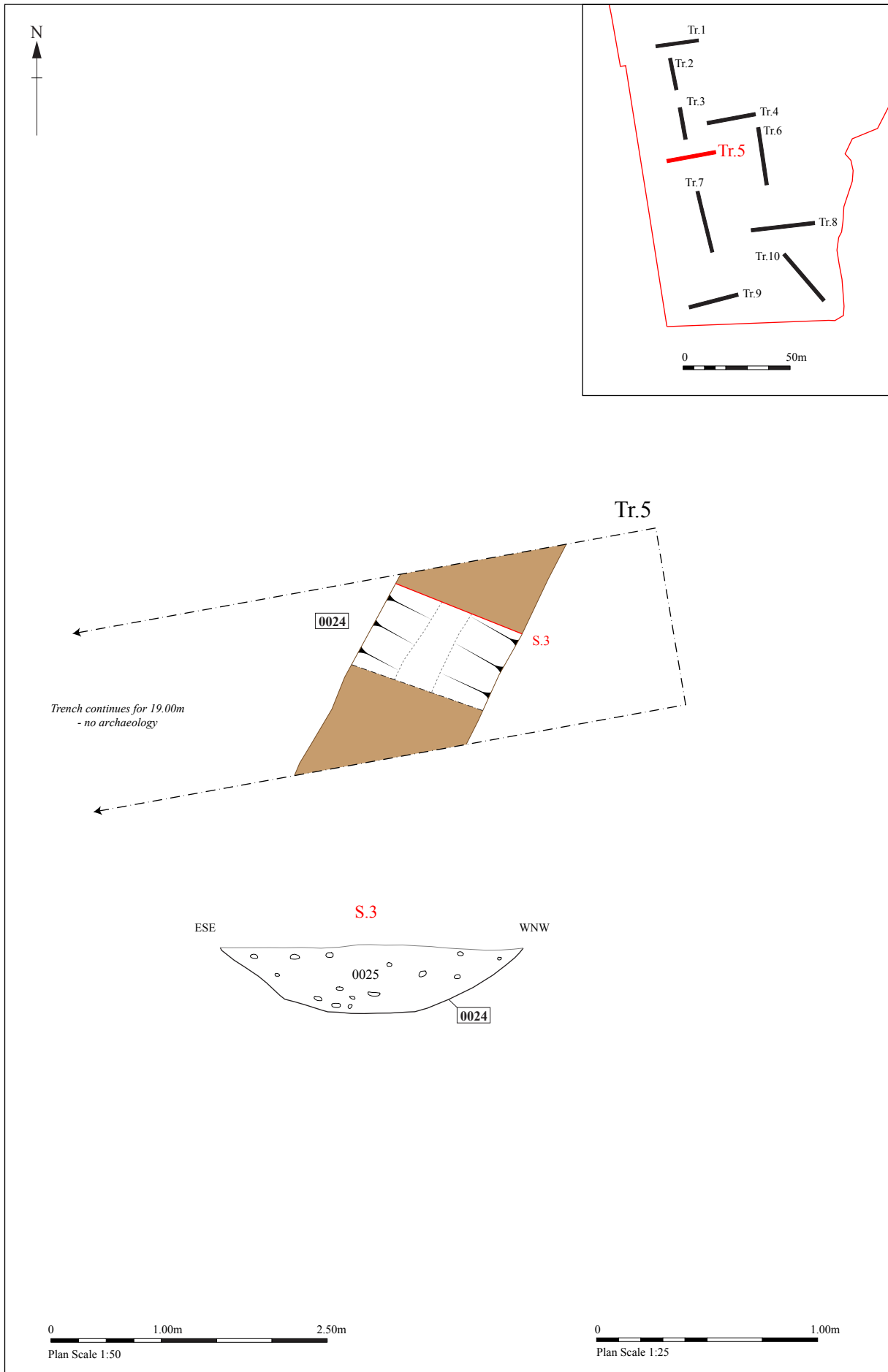


Figure 5. Trench 5 plan and section

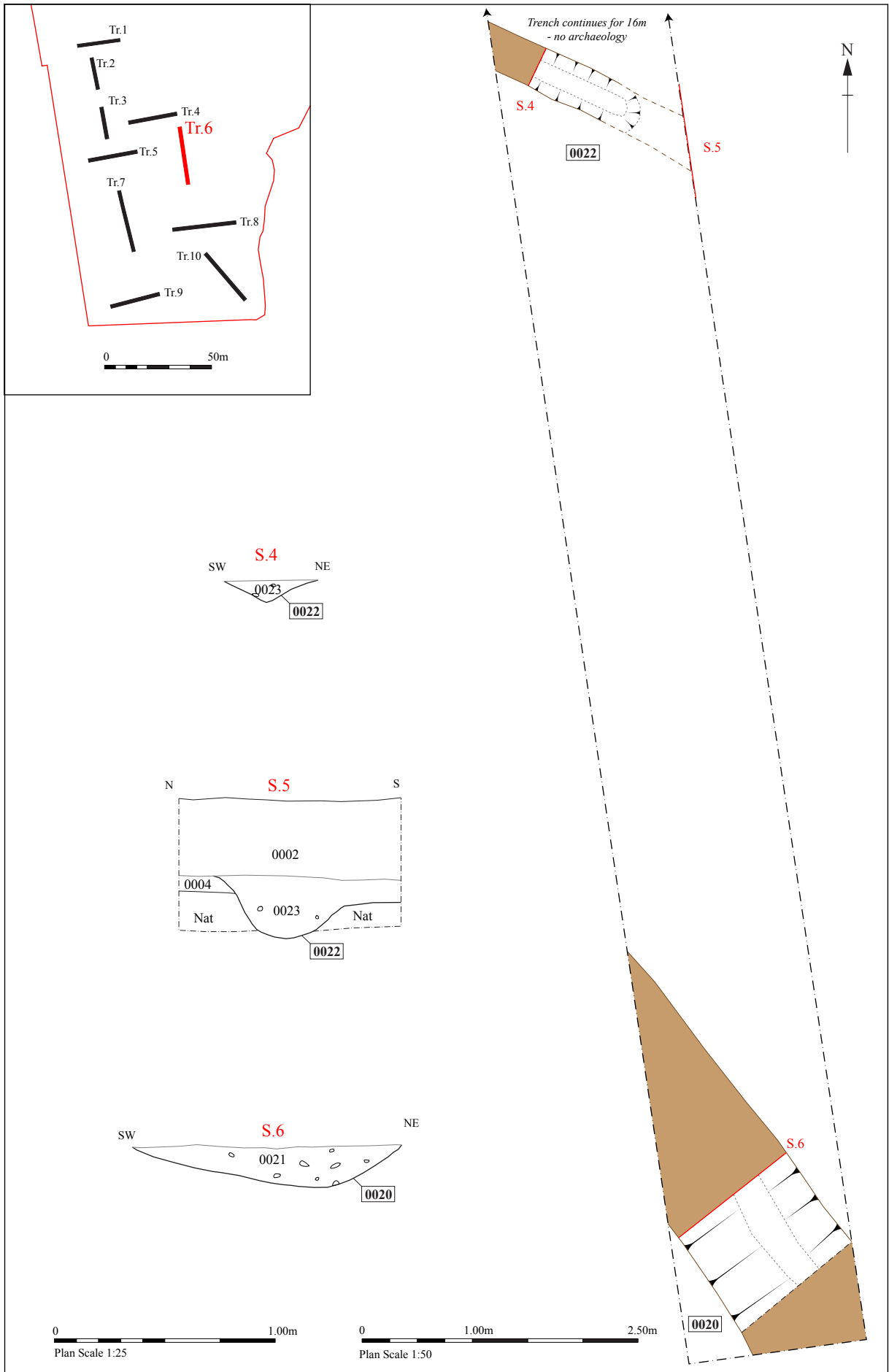


Figure 6. Trench 6, Plan and sections

Trench 8 (Fig 7)

0012 was a small, circular post hole with steep sides breaking gradually to a generally flattish base. Three small sherds of pottery were recovered from the environmental sample taken from this feature, two of which were Roman greyware and the third, an abraded fragment of a prehistoric sand tempered ware which was too small to be closely datable, and was probably residual within the feature. A small struck flint core or flake was also recovered.

During machining of the trench, a number of finds were observed and collected from the spoil and allocated the context number 0015. They were only present in a discrete area near post hole 0012, but no cut features or differences in subsoil were visible in plan during machining. The finds were predominantly Roman but included one small medieval sherd which may be intrusive, since the finds were collected from spoil rather than a secure, stratified context. The finds may come from subsoil 0034 in this particular area or from a feature that was not definable within the subsoil and did not cut into the natural subsoil.

The trench section was drawn and photographed at this approximate point where finds assemblage 0015 came from in order to record the subsoil layers as well as four possible features visible in the profile (Plate 2). Whilst it looked like four post holes may have been present immediately south of post hole 0012, the features visible in the exposed section could have been created by differential drying between layer 0035 and subsoil 0004. A small fragment of Roman pottery was removed from layer 0035.

A row of three closely spaced post holes were recorded in the east end of the trench, 0028, 0030 and 0032. Two were small and approximately circular whilst 0030 was oval in plan, and could represent a double post hole or two intercutting circular features, although no differences in the fill of 0030 were visible which might suggest two features. Each post hole was filled by similar mid-pale brown silty sand from which a small quantity of Roman pottery and CBM was recovered.

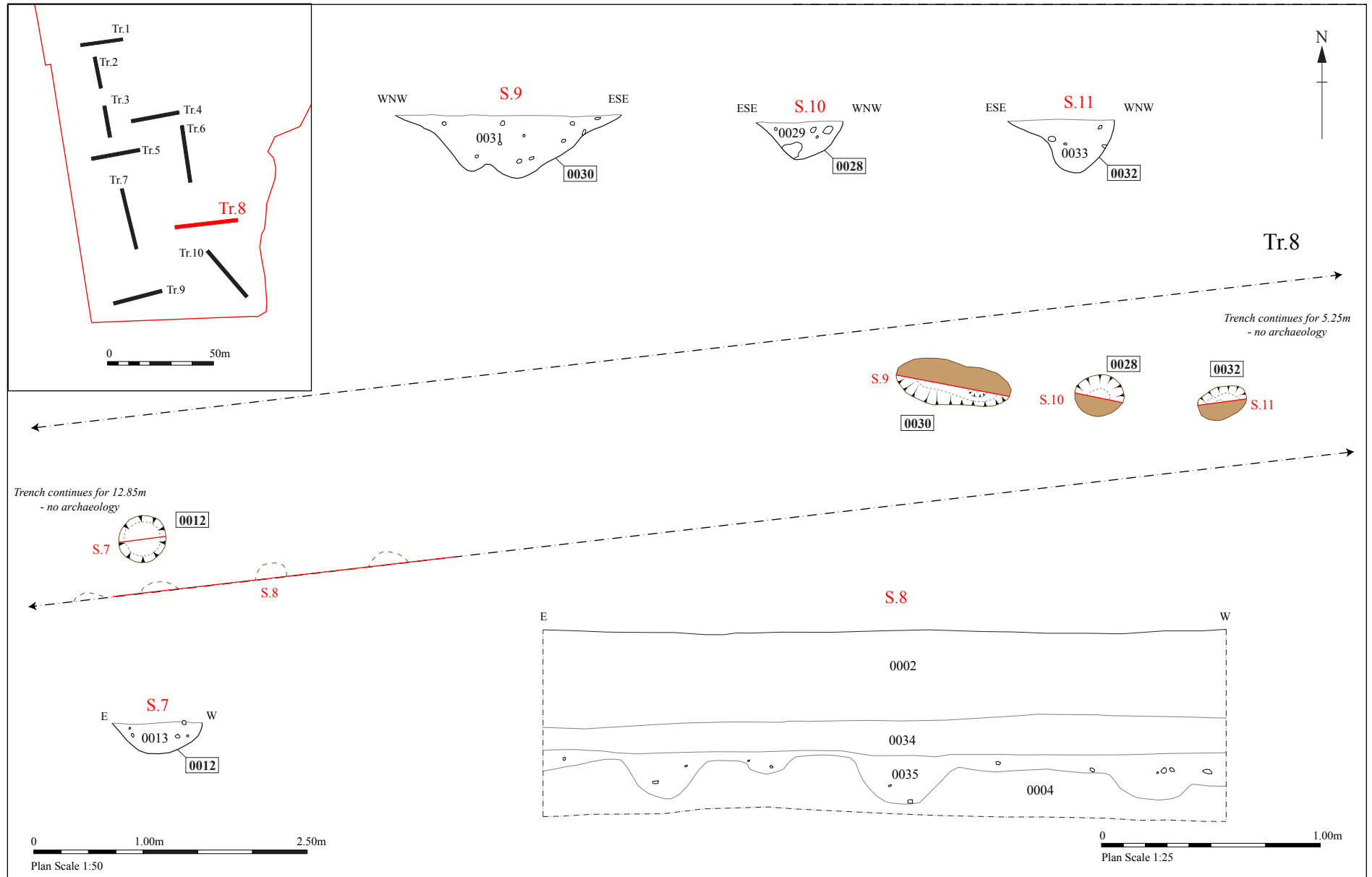


Figure 7. Trench 8 plan and sections



Plate 2. Trench 8, possible post holes visible in section. Looking south, post hole 0012 fully excavated in the foreground

Trench 9 (Fig 8)

0026 was a shallow NE-SW aligned ditch in the eastern end of the trench. It was filled by 0027, a mid grey brown silty sand, gradually paler towards the base, from which four small sherds of flint tempered pot were recovered, probably dating to the Iron Age. The relationship between ditch 0026 and subsoil 0004 was uncertain

A pit filled with modern building rubble was noted in the western end of the trench, but not recorded in detail.

The trench measured up to 1m deep and its profile suggested a former topsoil layer had been sealed by imported topsoil during landscaping works to level the playing field. This had been suggested by the geophysical survey at the northern and southern extremes of the site and the upper layers of trenches 1, 9 and 10 seem to support this (Plates 3 and 4).



Plate 3. View of Trench 9, showing its soil profile

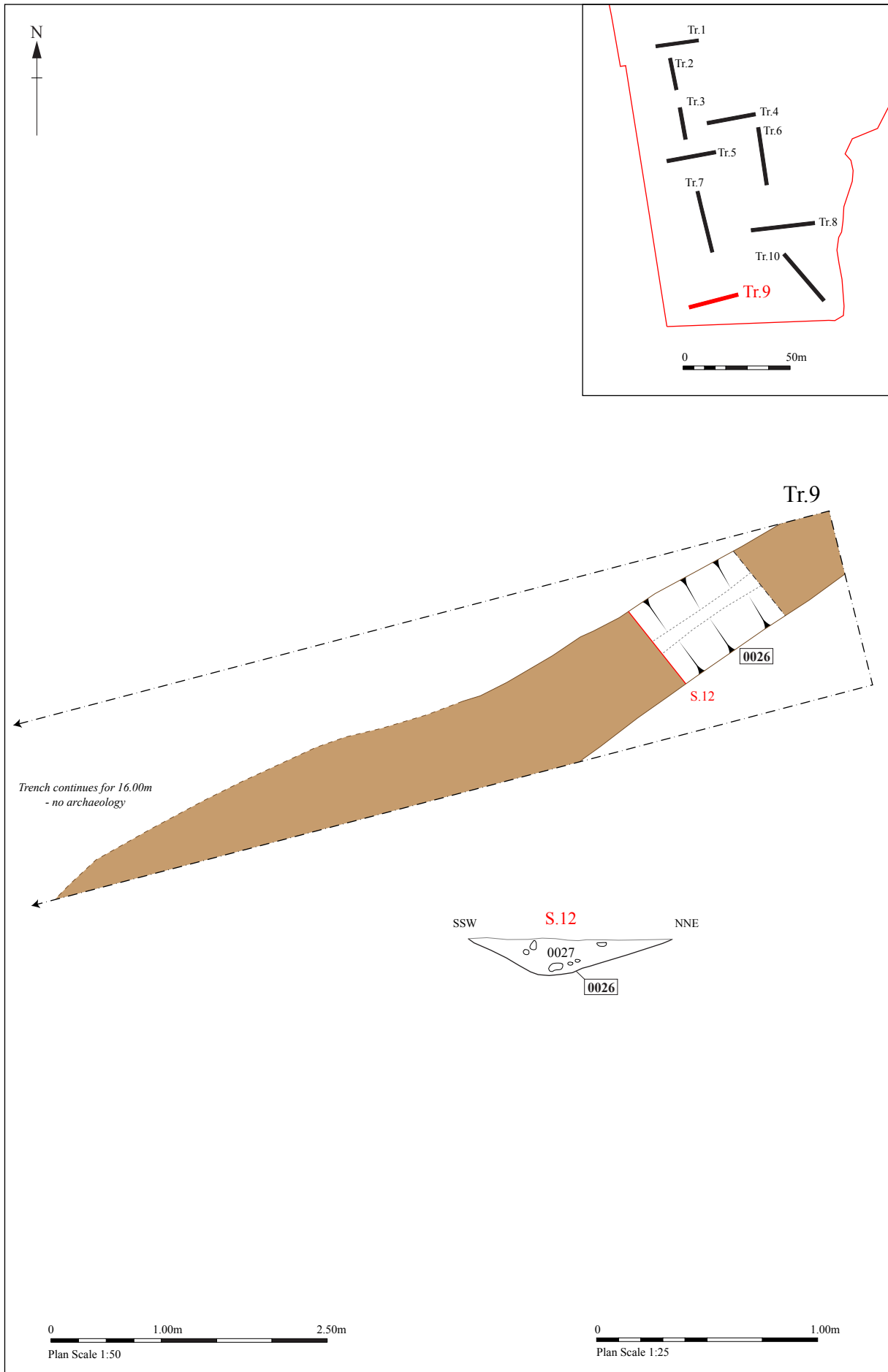


Figure 8. Trench 9 plan and section



Plate 4. Trench 10, pit 0005, looking south west

Trench 10 (Fig 9)

0005 (Plate 4) was a large probable pit in the north end of the trench, of uncertain shape in plan and likely related to an anomaly identified by geophysical survey. It cut subsoil layer 0004, was sealed by subsoil 0003 and was filled by various different layers including mid grey brown loose silty sand with heat altered clay/daub lumps and rounded cobbles (0009), a thin, compact layer of daub/oven dome material (0011) and charcoal rich silty sand (0006), from which Roman pottery was recovered.

A small number of finds were collected from the spoil from around pit 0005 (0008) included a fragment of lava quern and a sherd of Samian pottery.

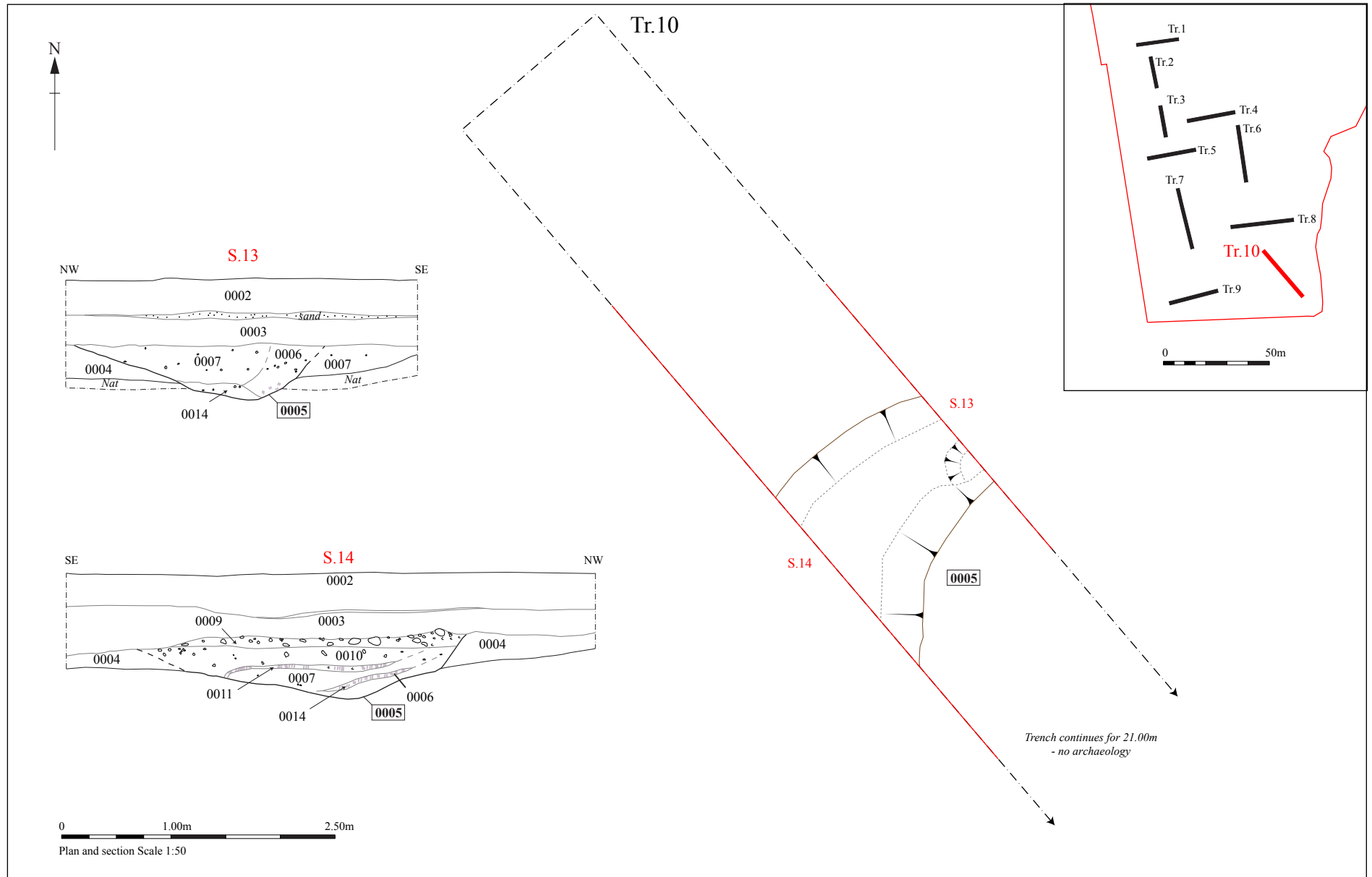


Figure 9. Trench 10 plan and sections

6. Finds and environmental evidence

By Cathy Tester

Introduction

Finds were collected from fifteen contexts in seven evaluation trenches. The quantities by context and Trench number are shown in Table 2 below.

Context	Trench No	Pottery		CBM		Flint		Miscellaneous	Pot Dates
		No	Wt/g	No	Wt/g	No	Wt/g		
0004								Fired clay: 4-12g	
0006	10	2	5						Rom
0008	10	1	12					Lava quern: 1-483g	Rom ,LIA-ERom
0011	10							Fired clay: 40-217g	
0013	8	3	3	1	10	1	10		Rom, Preh
0014	10					1	7		
0015	8	10	221	14	1482			Stone: 1-3672g	LSax/med,Rom
0017	3	41	46			3	8	Bt flint:17-31g	IA, Preh
0019	4	1	5						Rom
0021	6	1	3			2	7	Bt flint: 1-1g	L. IA
0025	5					3	1		
0027	9	4	5					Bt flint: 1-1g	IA
0031	8	1	4	1	7				Rom
0033	8	1	3						Rom
0035	8	1	5						Rom
Total		66	312	16	1499	10	33		

Table 2. Finds quantities

Pottery

Introduction and methodology

In total, sixty-six sherds of pottery weighing 312g were collected from eleven contexts in nine excavated features, four ditches, three postholes, a pit and a layer in Trenches 3, 4, 5, 6, 8 and 10. Also included are two 'spoilheap collections' from the machining of Trenches 8 and 10. The assemblage includes prehistoric, Roman and Late Saxon or medieval pieces and the quantities by broad ceramic period are shown in Table 3.

Ceramic period	No	Wt/g
Prehistoric	45	50
Roman	20	258
Post-Roman	1	4
Total	66	312

Table 3. Pottery quantities by period

All of the pottery was quantified by count and weight and estimated vessel equivalent (Eve). Details of fabric form and form element were recorded. Hand-made prehistoric

wares were divided into broad fabric groups based on their main visible inclusions (HMF for flint, HMS for sand-tempered). Roman and post-Roman fabric codes were assigned from the Suffolk Fabric Series which is available in archive. A x10 binocular microscope was used to identify the fabrics. SCCAS pottery recording forms were used and the resulting data has been input by context onto an Access database table which is shown in the Appendix III.

Prehistoric Pottery

Forty-five sherds (50g) of prehistoric pottery which include some very small scraps from environmental sample processing include flint and sand-tempered pieces recovered from four contexts from three ditches and a posthole in Trenches 3, 6, 8 and 9. The sherds are small and undiagnostic and not closely datable. However, the flint-tempered pieces may be of earlier Iron Age date, although the addition of flint as a tempering agent in pottery continued in East Anglia well into the later Iron Age. The presence of sandy fabrics suggests a later Iron Age date, from about the 3rd to 1st centuries BC (S. Percival, pers. comm.)

Roman Pottery

Twenty sherds of Roman pottery (258g) which include material ranging in date from the 1st to 3rd or 4th centuries was recovered from eight contexts in Trenches 3, 4, 8 and 10. Most of the Roman pottery (14 sherds, 231g) was recovered from Trench 8 and from the spoilheap created during the machining of Trench 8. In addition, there were two sherds from Trench 3, one from Trench 4 and three from Trench 10. The assemblage consists of local, regional and imported finewares and coarsewares and the fabrics are summarised in Table 4.

Fabric name	Fabric	No	Wt	Eve
Black surfaced wares	BSW	2	20	
Colchester buffware mortaria	COLBM	1	52	
Belgic grog-tempered wares	GROG	3	9	
Miscellaneous sandy grey wares	GX	12	134	0..30
Miscellaneous oxidised wares red	RX	1	31	
Central Gaulish samian (Les Martres)	SAMV	1	12	0.10
Total		20	258	0.40

Table 4. Roman pottery fabric quantities

The only imported ware is Central Gaulish samian, a Dragendorff type 15/17 platter or dish from Les-Martres-de-Veyre (SAMV) which is of Trajanic date (c. 100-120 AD). It was recovered from the Trench 10 spoil heap (0008) and most likely came from pit 0005 which contained other sherds of Roman pottery.

A single fragment of Colchester buffware mortaria (COLBM), an abraded bodysherd with flint and quartz grits was identified in the Trench 8 spoilheap collection (0015) and dates from the mid or late 2nd century.

The rest of the Roman pottery consists of local and regional coarsewares. The earliest are probably the two sherds of 'Belgic' grog-tempered ware (GROG) found in ditch 0016 in Trench 3 (0017) and pit 0005 in Trench 10 (0006). The sherds are undiagnostic and abraded but as they are wheel-made, probably belong to the 1st half of the 1st century AD. Two sherds of Black-surfaced ware (BSW) include a dish base of 2nd to 4th century date and an uncertain jar base, both from Trench 8 (0015). Twelve sherds of Miscellaneous sandy greywares (GX) were identified. The most diagnostic are from a round-bodied jar type 4.6 with incised lines around the base of the neck and a bead rim 160mm in diameter. The vessel can be dated from the mid 2nd to 4th century. The rest of the GX sherds are non-diagnostic bodysherds. A single sherd of miscellaneous red coarseware (RX) was also identified.

Post-Roman pottery

A single sherd of Late Saxon or medieval Pingsdorf type ware was recovered from amongst the pottery recovered from the spoilheap during the machining of Trench 8 (0015). This ware was made from the 10th to 13th centuries and could have been imported from the Rhineland or perhaps northern France.

NB: Pingsdorf ware was identified by R. Goffin

Ceramic building materials (CBM) and fired clay

CBM

Sixteen fragments (1499g) of CBM of Roman or probable Roman date were collected from three Trench 8 contexts (0015, 0013 and 0031). All but two small fragments were recovered from the Trench 8 spoilheap collection (0015) presumed to come from features in the trench.

Each fragment of CBM was recorded by fabric and type, thickness and weight were recorded and other descriptive comments about abrasion, burning or other features were made. General fabric codes were assigned from the Suffolk CBM fabric types which are based on the coarseness of the matrix, prefixed with 'f' for fine, 'm' for medium and 'c' for coarse, and by the main inclusions. The catalogue descriptions by context are shown in Table 5 below.

Context	form	fabric	Thickness	No	Wt	Notes	Date
0013	RBT	msfe		1	10	V. worn	Rom
0015	RBT	fsfe	34	1	62	No edges. Wall/floor brick	Rom
	RBT	fsfe	35	1	227	Grey core. Wall/floor brick	Rom
	RBT	msfe	36	1	337	1 edge. Wall/floor brick	Rom
	RBT	msf	32	1	134	Corner. Wall/floor brick	Rom
	BOX	msf	22	1	109	Abraded, grooves	Rom
	TEG	msf	22	1	137	Flange broken off	Rom
	TEG	mscp	24	1	80	clay pellets and silty streaks. Orange	Rom
	RBT	mscp		1	25	Orange. No full thickness	Rom
	RBT	mscp	21	1	111	Burnt	Rom
	RBT	cs	19	1	57	One edge. Orange-red.	Rom
	RBT	msf	20	1	127	Orange	Rom
	RBT	msfe		1	39	Orange. No full thickness	Rom
	RBT	msf		2	37	large flint	Rom
0031	RBT	fsfe		1	7	Corner	Rom

Table 5. CBM catalogue by context

All are made in sandy fabrics with clay pellets (mscp), ferrous (fsfe and msfe) or flinty (msf) inclusions. Two *tegulae* (TEG) fragments and a box flue tile (BOX) fragment are present. Four wall or floor bricks (RBT) with thicknesses ranging from 32mm to 36mm were also identified. The other fragments were non-diagnostic (RBT), but those with thicknesses of 20mm and 22mm are most likely to come from roofing tiles.

Fired clay

Forty-four fragments of fired clay weighing 229g were collected from two Trench 10 contexts, forty pieces from 0008 and four from layer 0004. All are made of the same chalky fabric (msc) and all appear to be part of one same larger expanse. With one flat face, they are most likely the remains of daub although no diagnostic features such as wattle impressions are present. The thickest surviving piece is 27mm.

Lava quern

A fragment (483g) of lava stone was recovered from Trench 10 pit 0005 (0008). The lava is medium grey and vesicular, almost certainly of Rhenish origin and is assumed to come from a small hand-operated domestic rotary quern. The non-grinding surface is pecked but also has been quite battered and flaked. The grinding surface is pecked and smooth. There are no edges present but the maximum thickness between the two faces is 33mm. Rhenish lava stone was imported to this country throughout the Roman period, and again from the Middle Saxon period onwards. This piece is not particularly diagnostic but is more likely to be Roman than later.

Struck flint

Ten fragments of struck or shattered flint were collected from five contexts in five features, three ditches, a pit and a posthole. The flint was found with small amounts of probable Iron Age pottery, Roman pottery and also with no associated material (0014). The flint is medium to dark grey in colour and cortex when present is creamy off-white. All of it is unpatinated. The flint was recorded by type and is listed by Trench and context in Table 6 below.

Trench No	Context	Type	No	Notes	Date
3	0017	flake	1	Snapped flake with limited retouch on one edge	Later Preh
3	0017	spall	1	Spall	Later Preh
3	0017	flake	1	Small flake with hinge fracture	Later Preh
5	0025	spall	3	Three spalls	Later Preh
6	0021	flake	1	Snapped flake with limited retouch	Later Preh
6	0021	flake	1	Small irregular flake	Later Preh
8	0013	core	1	Small core/shatter piece w squat flakes removed	Later Preh
10	0014	flake	1	retouched flake with hinge fracture	Later Preh

Table 6. Flint descriptions

One core or shatter piece (0013), two unmodified flakes (0017, 0021), four spalls (0017 0025) and three retouched flakes (0014, 0017, 0021) were recorded. All of the flint is later prehistoric and is irregular in nature displaying characteristics of later assemblages such as squat, irregular flakes, hinge fractures and the use of surface raw material..

NB: The flint types were identified by Colin Pendleton.

Heat-altered flint

A small amount of heat-altered flint (19 fragments weighing 33g) was recovered amongst the non-floating sample processing residues from contexts 0017 (Trench 3, ditch 0016), 0021 (Trench 6, ditch 0020) and 0025 (Trench 5, ditch 0024). The material has most likely been heat-altered by proximity to high temperatures, accidentally rather than deliberately.

Stone

A large 'tabular' fragment of quartzite (L.165mm x W.120mm x Ht. 80mm. Wt 3672g) was recovered from the Trench 8 spoilheap (0015). It has a reddened surface that is not due to burning and is probably natural.

Plant macrofossils and other remains

By Anna West

Introduction and Methods

Five bulk environmental samples were taken from archaeological features during the evaluation. All of the samples were processed in order to assess the preservation of plant remains and their potential to provide useful data as part of the archaeological investigations. The samples were processed using a manual water flotation/washover method and the flots were collected in a 300 micron mesh sieve. The dried flots were then scanned using a binocular microscope at x16 magnification and any plant remains or artefacts present were recorded. Plant remains have been recorded with reference to New Flora of the British Isles, (Stace).

The non-floating residues were collected in a 1mm mesh and sorted when dry. All artefacts/ecofacts were retained.

Quantification

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

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

Items that cannot be easily quantified such as charcoal, magnetic residues and fragmented bone have been scored for abundance:

x = rare, xx = moderate, xxx = abundant.

Results

The preservation of the small number of cereal remains present was through charring. Some of the charred grains were fragmented and/or abraded making identification difficult to impossible, only single chaff element was present. Small quantities of wood charcoal were present in all the flots, but were highly comminuted and abraded.

A narrow suite of un-charred weeds seeds were identified. Modern contaminants in the form of fibrous rootlets were abundant in all of the flots and represent the majority of the material in many of them.

Discussion

Charred cereals were only present in two of the samples 0013 from post hole 0012 and 0027 from ditch 0026. They were too abraded to identify at this point beyond saying that they were wheat (*Triticum*) species. A single *Triticum* rachis fragment was present in fill 0021 from ditch 0020, but no cereal caryopses were present within this flot. The sparse quantities of charred cereal remains are more consistent with windblown or re-deposited material rather than purposely deposited waste.

Charred legumes, in the form of two pea (*Pisium* sp.) cotyledons, were present in fill 0017 from ditch 0016. As pulses do not need to be processed using heat in the same way as cereals, they are less likely to be exposed to chance preservation through charring and so are often under represented within archaeological deposits.

Charred seeds were very limited in number and remain unidentified at this stage due to their abraded condition they are however likely to represent common arable weeds that have been accidentally harvested along with the crop.

The majority of the seeds present were un-charred and consist of Goosefoots (*Chenopodium* sp.), Clovers (*Trifolium* sp.), Vetches (*Vicia* sp.), Elder (*Sambucus nigra*

L.), Campions (*Silene* sp.), Speedwells (*Veronica* sp.) and Docks/Knotweeds (*Polygonaceae* family). Many of these are un-abraded and are possibly intrusive within the archaeological features, representing the modern environment of the site.

Along with the botanical remains vitrified material and ferrous spheroids were also present in two of the samples 0017 from ditch 0016 and 0021 from ditch 0020. Ferrous spheroids/globules are formed during primary smithing as hot droplets of slag are expelled. The presence of ferrous spheroids suggests that metal working may have been taking place in the near vicinity.

As the site is located within a river valley, it is possible that some of the material identified within the sample flots has been moved from its primary location and re-deposited within the archaeological features, either within wind-blown or alluvial/colluvial deposits.

Conclusions and recommendations for further work

In general the samples were poor in terms of identifiable material. The small number of cereal grains recovered were charred and abraded but remained on the whole identifiable to an archaeobotanist. Most of the samples processed produced only small quantities of wood charcoal. If it is considered necessary it may be possible in the future to obtain radiocarbon dates from charred grains or small charcoal fragments for those deposits that remain undated, but as previously mentioned it can not be guaranteed that these dates will reflect accurately those of the contexts sampled.

Although the current assemblage is limited, it is suggested that if further interventions are planned on this site, where possible, 40 litre bulk samples should be taken from any sealed and dated archaeological contexts in order to provide data regarding the utilization of plant resources and the surrounding environment and to investigate the cereal and metalworking remains.

7. Discussion

Archaeological deposits were identified at differing depths over the site, with the top of the archaeology present at just 0.38m in Trench 6, 0.5m deep in trenches 4, 5 and 7, slightly deeper in Trenches 8 (0.55m) and 10 (0.6m) and 0.75m deep in Trench 9. The geophysical survey identified possible landscaping along the southern edge of the site which would explain the deeper deposits sealing the archaeology in this part of the development area. Evidence of landscaping was most clear in the soil profile of Trench 9 where a layer of buried topsoil was sealed by material presumably imported to level the playing field. Deposits including modern building rubble in Trench 1 and the southern end of Trench 10 are also likely to be associated with landscaping.

Eleven features were excavated in seven of the ten excavated trenches. Six linear features were recorded, in the form of shallow ditches or gullies. A possible relationship was identified between ditches, 0016 in Trench 3 and 0020 in Trench 6. These were aligned approximately at right angles to each other, had strikingly similar profiles and perhaps most significantly, both contained ferrous spheroids associated with metalworking, and Iron Age pottery, suggesting they could have been contemporary features. It is also possible that ditch 0018 in Trench 4 and ditch 0024 in Trench 5 represent the same feature, based on their similar alignment. Overall, the ditches provide good evidence of settlement boundaries and/or field systems.

Magnetometry had identified a large, irregular anomaly in the south east corner of the site which was confirmed in Trench 10. This consisted of a large pit (0005) filled by a series of distinct layers, the most significant of which was a thin but dense daub layer suggesting a single event clearance of a building or oven structure into a purpose made refuse pit or a reused feature such as a former extraction pit. Post holes recorded in the adjacent Trench 8 are evidence for post-built structures from which the fired clay might have originated. The evidence from these two trenches points at Roman occupation and the associated pottery assemblage includes local, regional and imported fineware materials that range in date from throughout the 1st to 3rd centuries. It is worth noting that subsoil layer 0004, present across much of the site, was cut by pit 0005, and sealed by layer 0035, and may represent a pre-Roman colluvium.

Finds were recovered from fifteen contexts in seven evaluation trenches. The earliest finds are within the struck flint assemblage that includes material of later prehistoric date, Neolithic, Bronze Age or Iron Age. A small amount of Iron Age pottery includes possible earlier and later Iron Age pieces.

The latest datable find is the single sherd of imported Pingsdorf type pottery which was made during the 10th to 13th centuries and imported from the Rhineland or Northern France. This was the only non-Roman find from context 0015, all of which were recovered from the trench spoil rather than a stratified context. It seems likely that the single sherd of medieval pot in an otherwise Roman assemblage represents contamination.

In addition to possible metalworking evidence, the environmental samples taken from five features produced a sparse and poorly-preserved assemblage of charred botanical remains which nevertheless demonstrate their presence within the archaeological horizons.

Trenching revealed good evidence for two main phases of activity on the site in the form of Iron Age ditches and Roman occupation. The positive results of the evaluation suggest that further work may be required in areas where the development design does not allow for *in situ* preservation of archaeological deposits.

8. Archive deposition

The archive is lodged with the SCCAS at its Ipswich office under the HER reference BSD 018. A summary of this project has also been entered onto OASIS, the online archaeological database, under the reference suffolkc1- 160931.

Photographs are catalogued under the code HTM 17-43.

Digital archive: R:\Environmental Protection\Conservation\Archaeology\Archive\
Belstead\BSD 018 The Bridge School, Sprites Lane

Bibliography

New Flora of the British Isles, 3rd Ed (*Stace C*).

Digital Seed Atlas of the Netherlands 2nd Ed. (*Cappers RTJ, Bekker RM, Jans JEA*.)

**BSD 018, The Bridge School, Sprites Lane,
Belstead, Suffolk (Phase 1)**

Archaeological Evaluation by Trial Trench

**Written Scheme of Investigation
&
Safety Statement and Risk Assessment**

**Prepared by Suffolk County Council Archaeological Service
October 2013**

Document Control

Title: The Bridge School Evaluation (Phase 1), Sprites Lane, Belstead

Date: 10/10/2013

Issued by: Suffolk County Council Archaeological Service Field Team

Author: Rob Brooks

Issued to: Matthew Brudenell (SCCAS Conservation Team)

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Appendices

1. SCC Health and Safety Policy
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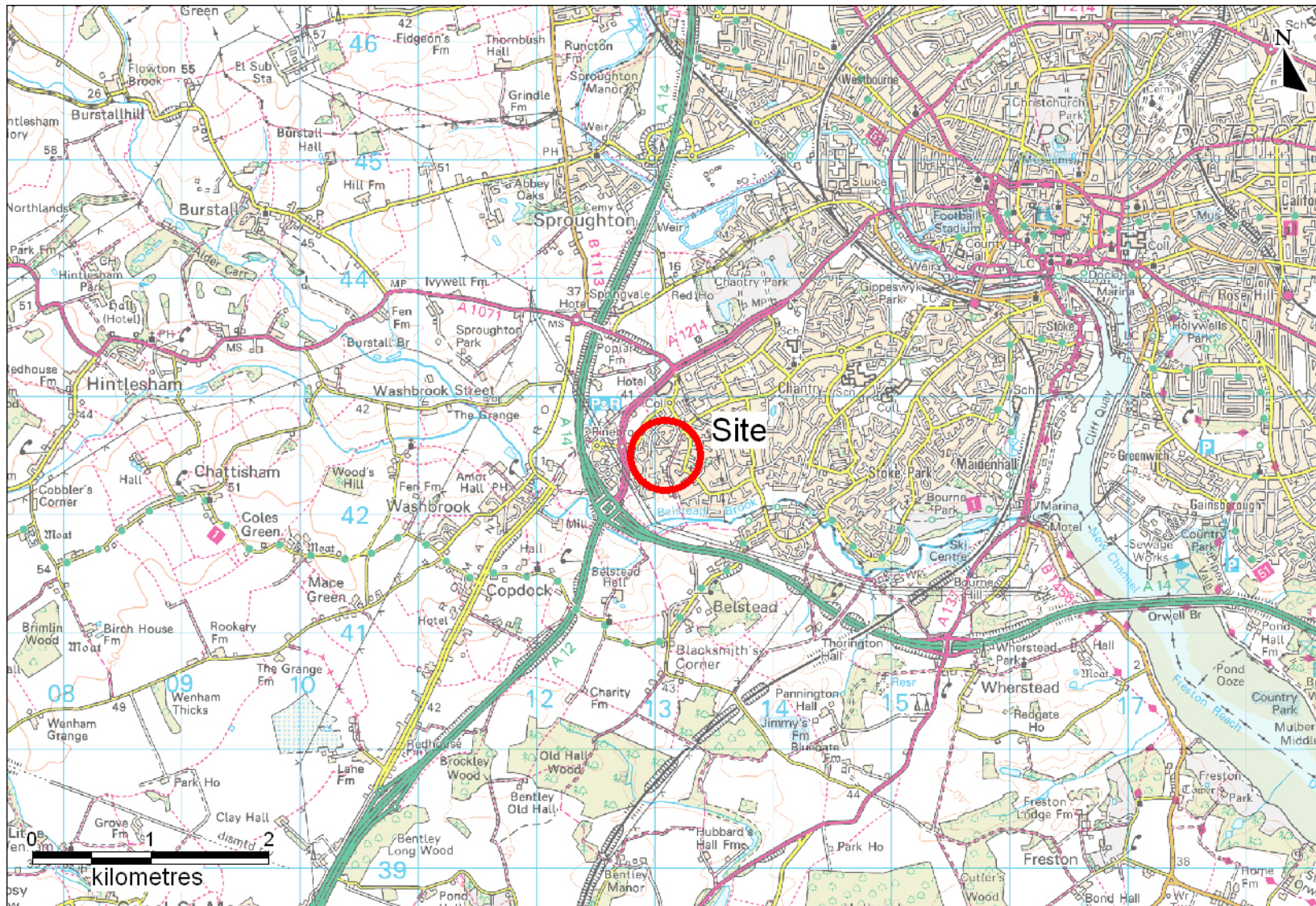
1. Background

- 1.1 The Field Team of the Suffolk County Council Archaeological Service (SCCAS) have been asked by Concertus Design & Property Consultants Ltd to prepare documentation for a programme of archaeological evaluation by trial trench at the above site (Fig 1). This Written Scheme of Investigation (WSI) covers the first stage of evaluation and construction only, which will take place in the south/south-western area of the proposed development area (PDA). Any further stages of archaeological evaluation and subsequent work that might be required in relation to the proposed development would be subject to new documentation.
- 1.2 The site is an irregularly shaped strip covering c.10,570sqm, located at NGR TM 130 424.
- 1.3 The work is to be undertaken as a condition during the application for planning permission. This is at the request of the local planning authority, following guidance set out in the National Planning Policy Framework.
- 1.4 The archaeological investigation will be conducted in accordance with a Brief produced by Matthew Brudenell of the SCCAS Conservation Team.
- 1.5 The site lies in an area of archaeological potential, to the south of the site of a Bronze Age cemetery (HER no. SPT 035) and overlooking the valley of Bedstead Brook, which is topographically favourable for early occupation (taken from Brudenell, M., 2013 – Brief for a Geophysical Survey and a Trenched Archaeological Evaluation). There are also records of a Saxon ditch and finds, Roman finds and Iron Age torcs within approximately 500m of the site. Prior to the evaluation the area for trenching detailed in this WSI a geophysical magnetometry survey was carried out by Britannia Archaeology Ltd. This identified two possible archaeological anomalies, as well as areas of modern disturbance including possible landscaping.
- 1.6 The proposed development includes the construction of a new school and associated landscaping.
- 1.7 The total area to be developed is shown on Fig 2, while the area to be evaluated in this phase of work is shown on Fig 3.
- 1.8 The total area directly affected by the proposed development, and therefore requiring trenching, is shown on Fig 2. Deposits in this area will be directly affected by the foundations and other groundworks associated with the construction of the building.
- 1.9 This WSI complies with the requirements of SCC's standard Requirements for a Trenched Archaeological Evaluation (2011 Ver 1.3), as well as the following national and regional guidance 'Standards and Guidance for Archaeological Excavation' (IFA, 1995, revised 2001) and 'Standards for Field Archaeology in the East of England (EAA Occasional Papers 14, 2003).

1.1 Research aims

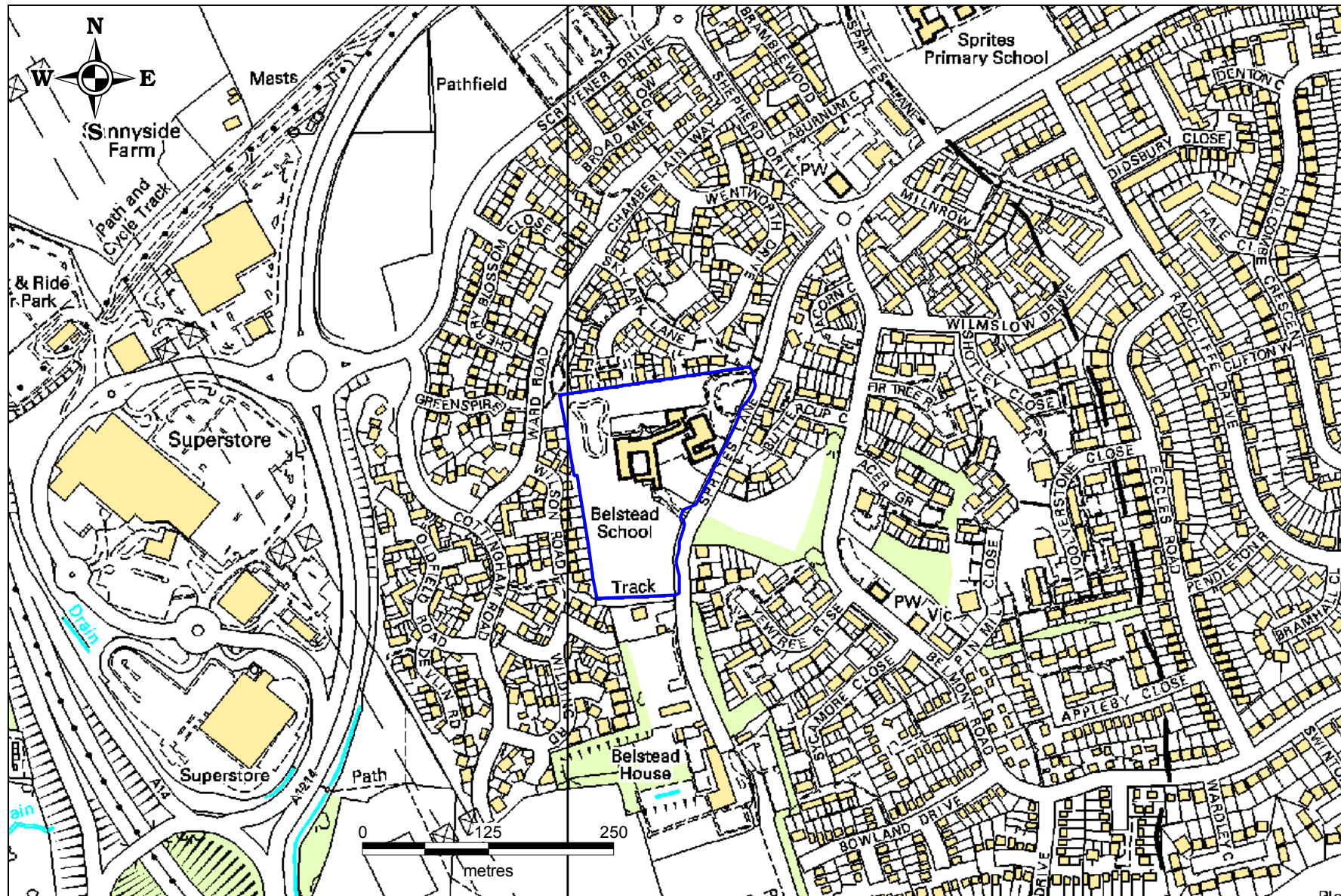
The research aims of this trial trench evaluations are as follows, as typically described by an LPA brief:

- RA1: Establish whether any archaeological deposit exists within the application area, with particular regard to any which are of sufficient importance to merit preservation in situ.*
- RA2: Identify the date, approximate form and purpose of any archaeological deposit within the application area, together with its likely extent, localised depth and quality of preservation.*
- RA3: Evaluate the likely impact of past land uses, and the possible presence of masking colluvial/alluvial deposits.*
- RA4: Establish the potential for the survival of environmental evidence.*
- RA5: Provide sufficient information to construct an archaeological conservation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of cost.*



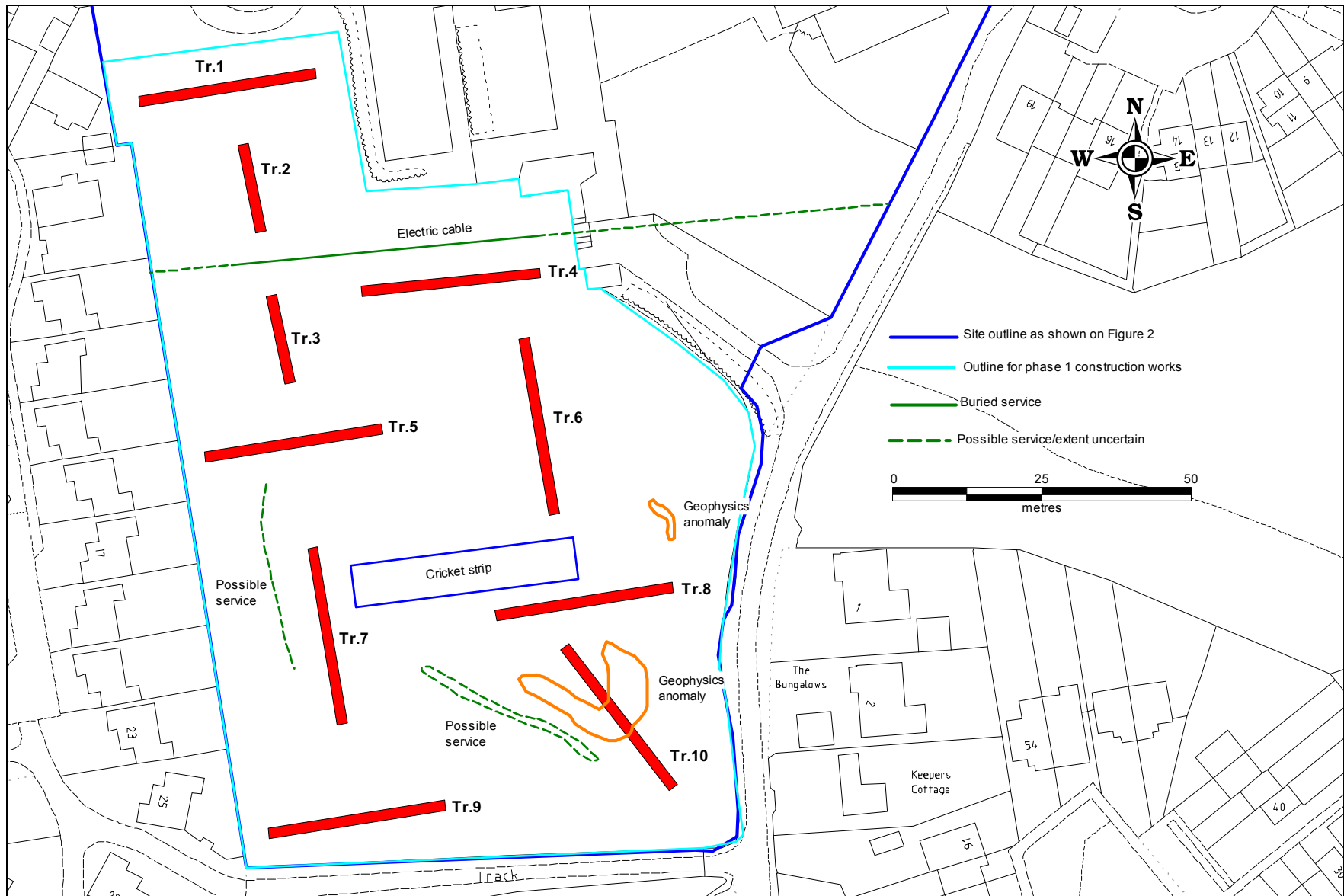
Crown Copyright. All Rights Reserved. Suffolk County Council Licence No. 100023395 2013

Figure 1. Site Location



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Figure 2. Site Location showing entire development area



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 Figure 3. Plan of trenches, geophysical results and obstacles to trenching

2 Project details

Site Name	The Bridge School Evaluation (Phase 1), Sprites Lane, Belstead
Site Location/Parish	Belstead
Grid Reference	TM 130 424
Access	Sprites Lane
Planning No	PL/0220/13
HER code	BSD 018
OASIS Ref	suffolkc1-160931
SCCAS Job Code	
Type:	Trial trench evaluation
Area	10,570sqm
Project start date	Monday 28th October, 2013
Fieldwork duration	2 days (estimated)
Number of personnel on site	Up to 3-4

Personnel and contact numbers

Contracts Manager	Rhodri Gardner	01473 581743
Project Officer (first point of on-site contact)	TBA	-
Finds Dept	Richenda Goffin	01284 352447
Sub-contractors	N/A	
Curatorial Officer	Matthew Brudenell	01284 741227
Consultant	Concertus Design & Property Consultants Ltd	
Developer	Concertus Design & Property Consultants Ltd	
Site landowner	Suffolk County Council	

Emergency contacts

Local Police	Ipswich Police Station, Civic Drive, Ipswich, IP1 2AW	101
Location of nearest A&E	Heath Road, Ipswich, Suffolk, IP4 5PD	01473 712 233
Qualified First Aiders	SCC Project Officer attending	

Hire details

Plant:	Holmes Plant (STC)	01473 890766
Toilet Hire	TBC	
Tool hire:	N/A	

Other Contacts

Suffolk Fleet Maintenance		01359 270777
Suffolk Press Office		01473 264395
SCC EMS (Jezz Meredith)		01473 583288
SCC H&S (Stuart Boulter)		01473 583290

3 Archaeological method statement

3.1 Evaluation by trial trench

- 3.1.1 The archaeological fieldwork will be carried out by members of the SCCAS field team led in the field by an experienced member of staff of Project Officer Grade. The excavation team will comprise up to 3 experienced excavators and surveyors from a pool of suitable staff at SCCAS.
- 3.1.2 Evaluation of the development area will employ ten trial trenches to sample the overall footprint of the first stage of construction within the proposed development area (PDA). These have been positioned in order to avoid services and possible services, as well as a cricket pitch, whilst targeting two geophysical anomalies.
- 3.1.3 The PDA area for phase 1 of the works is approximately 10,570sqm.
- 3.1.4 The trenches will be 30m long x 1.8m wide, excluding Trenches 2 and 3, which are both 15m long (Fig. 3).
- 3.1.5 Available service information suggests that one will be encountered, whilst the geophysical survey suggested that others are possibly present. If previously unknown services or similar restrictions are encountered during work on site then trench layout will be amended accordingly.
- 3.1.6 *General trial trench methodology*
- 3.1.7 All trenches will be cut using a tracked mechanical excavator equipped with a toothless ditching bucket, under the constant supervision of an archaeologist. All overburden (topsoil and subsoil) will be removed stratigraphically until either the first archaeological horizon or natural deposits are encountered. Spoil will be stored adjacent to each trench and topsoil, subsoil and concrete/overburden will be kept separate for sequential backfilling if requested by the client prior to excavation.
- 3.1.8 Archaeological deposits and features will be sampled by hand excavation and the trench bases and sections cleaned as necessary in order to satisfy the project aims and in compliance with the SCCAS Requirements for Archaeological Evaluation, 2011.
- 3.1.9 Trenches requiring access by staff for hand excavation and recording will not exceed a depth of 1.2m. Any trench in which this depth is not sufficient to meet the archaeological requirements of the Brief and Specification will be brought to the attention of the client or their agent and the Archaeological Advisor to the LPA so that further requirements can be discussed (and costed).
- 3.1.10 Deeper excavation can be undertaken provided suitable trench support is used or, where practicable, the trench sides are stepped or battered.
- 3.1.11 A site plan, which will show all trench locations, feature positions and levels AOD will be recorded using an RTK GPS or TST, depending on the specific requirements of the project. A minimum of two sections per trench will be recorded at 1:20. Feature sections and plans will be recorded at 1:20 and trench

and feature plans at 1:20 or 1:50 as appropriate. Normal Field Team conventions, compatible with the County HER, will be used during the site recording.

- 3.1.12 The site will be recorded under HER site code BSD 018, acquired from the Suffolk HER Office and archaeological contexts will be recorded using standard SCCAS Context Recording sheets and associated database.
- 3.1.13 A digital photographic record will be made throughout the evaluation.
- 3.1.14 All pre-modern finds will be kept and no discard policy will be considered until all the finds have been processed and assessed.
- 3.1.15 All finds will be brought back to the SCCAS Bury St Edmunds office for processing, preliminary conservation and packing. Much of the archive and assessment preparation work will be done in house, but in some circumstances it may be necessary to send some categories of finds to specialists working in other parts of the country.
- 3.1.16 Bulk environmental soil samples (40 litres each) will be taken from suitable archaeological features and retained until an appropriate specialist has assessed their potential for palaeo-environmental remains. Decisions will be made on the need for further analysis following this assessment. If necessary advice will be sought from English Heritage's Regional Advisor in Archaeological Science on the need for specialist environmental sampling.
- 3.1.17 In the event of human remains being encountered on the site, guidelines from the Ministry of Justice will be followed. The evaluation will attempt to establish the extent, depth and date of burials whilst leaving remains *in situ*. During the evaluation any exposed human remains will be securely covered and hidden from the public view at all times when they are not attended by staff. At the conclusion of the work backfilling will be carried out in a manner sensitive to the preservation of such remains.
- 3.1.18 If circumstances dictate that the lifting of human remains is unavoidable then a Ministry of Justice Licence for their removal will be obtained prior to their removal from site.

3.3 Reporting, archive and OASIS record

- 3.3.1 A unique HER number has been acquired from the Suffolk HER – BSD 018. This will be clearly marked on all documentation relating to the project.
- 3.3.2 All artefactual material recovered will be held by the SCC Contracting Team until their analysis of the material is complete. Ownership of all such archaeological finds will then be given over to the relevant authority. There is a presumption that this will be SCCAS/CT, who will hold the material in suitable storage to facilitate future study and ensure its proper preservation.
- 3.3.3 In the event that artefacts of significant monetary value are discovered separate ownership arrangements may be negotiated, provided they are not subject to Treasure Act legislation.
- 3.3.4 The project archive shall be compiled in accordance with the guidelines issued by the SCCAS/CT (2010). The client is aware of the costs of archiving and provision has been made to cover these costs in our agreement with them. The archive will be deposited with the County Archaeology Store unless another suitable repository is agreed with SCCAS/CT.
- 3.3.5 Specialist finds staff will be used, who are experienced in local and regional types and periods for their field.
- 3.3.6 All site data will be entered on a computerised database compatible with the County HER. All site plans and sections will be copied to form a permanent archive on archivally stable material. Ordnance Datum levels will be on the section sheets. The photographic archive will be fully catalogued within the County HER photographic index.
- 3.3.7 All finds will be processed, marked and bagged/boxed to County HER requirements. Where appropriate finds will be marked with a site code and a context number.
- 3.3.8 Bulk finds will be fully quantified on a computerised database compatible with the County HER. Quantification will fully cover weights and numbers of finds by OP and context with a clear statement for specialists on the degree of apparent residuality observed.
- 3.3.9 Metal finds on site will be stored in accordance with ICON guidelines, initially recorded assessed for significance before dispatch to a conservation laboratory within 4 weeks of the end of the excavation. All pre-modern silver, copper alloy and ferrous metal artefacts will be x-rayed and coins will be x-rayed if necessary for identification. Sensitive finds will be conserved if necessary and deposited in bags/boxes suitable for long term storage to ICON standards. All coins will be identified to a standard acceptable to normal numismatic research.
- 3.3.10 The site archive will meet the standards set by 'The Guideline for the preparation of site archives and assessments of all finds other than fired clay vessels' of the Roman Finds Group and Finds Research Group AD700 - 1700 (1993).

- 3.3.11 The pottery will be recorded and archived to a standard consistent with the Draft Guidelines of the Medieval Pottery Research Group and Guidelines for the archiving of Roman Pottery, SGRP (ed. M.G. Darling, 1994) and to The Study of Later Prehistoric Pottery: General Policies and Guidelines for analysis and Publications, Occasional Papers No.1 and No. 2, 3rd Edition (Revised 2010, Prehistoric Ceramic Research Group).
- 3.3.12 Environmental samples will be processed and assessed to standards set by the Regional Environmental Archaeologist with a clear statement of potential for further analysis.
- 3.3.13 Animal and human bone will be quantified and assessed to a standard acceptable to national and regional English Heritage specialists.
- 3.3.14 An industrial waste assessment will cover all relevant material (i.e. fired clay finds as well as slag).
- 3.3.15 A report on the results of the evaluation will be completed c. 6 weeks after the completion of the fieldwork. A draft of the report will be submitted to SCCAS/CT for approval.
- 3.3.16 On receipt of approval of the report from SCCAS/CT hard and digital copies will be sent to the Suffolk HER.
- 3.3.17 The Suffolk HER is registered with the Online Access to Index of Archaeological Investigations (OASIS) project. The SCCAS Contracting Team will provide appropriate details relating to this project by completing the OASIS form at <http://ads.ahds.ac.uk/project/oasis>. The completed form (reference suffolkc1-160931) will be included as an appendix to the final report.

4 Risk assessment

4.1 General

4.1.1 The project will be carried out in accordance with the Suffolk County Council statement on Health and Safety at all times. Particular hazards to SCCAS staff and subcontractors identified with this project are as follows:

Outdoor working – hazards to staff from weather conditions and uneven ground.

Manual excavation – the main hazards are to staff from the use of tools, shallow holes and the resultant trip hazards, live services and ground contamination.

Mechanised excavation, site stripping etc. – the most significant hazard from this activity is working in close proximity with plant machinery.

4.1.2 Specific risk assessments for each are provided in Appendix 2.

4.1.3 All SCCAS staff are experienced in working under similar conditions and on similar sites to the present site and are aware of all SCCAS H&S policies. All staff will be issued with a copy of the project's risk assessment and will receive a safety induction from the Project Officer. All permanent SCCAS excavation staff are holders of CSCS cards.

4.1.4 It may be necessary for site visits by external specialists, SCCAS Conservation Team members and other SCC staff. All such staff and visitors will be issued with the appropriate PPE and will undergo the required inductions. PPE is not restricted to the list below – additional items will be provided if circumstances require it.

4.1.5 PPE required in this case includes:

- Hard Hat (to EN397)
- High Visibility Clothing (EN471 Class 2 or greater)
- Safety Footwear (EN345/EN ISO 20346 or greater – to include additional penetration-resistant midsole)

4.1.6 Other PPE that may be deployed as necessary includes:

- Gloves (to EN388)
- Eye Protection (safety glasses to at least EN 166 1F)

4.1.7 Site staff, official visitors and volunteers are all covered by Suffolk County Council insurance policies (available upon request).

4.1.8 A van will be available with fresh water and a first aid kit.

4.2 Environmental controls

- 4.2.1 Suffolk County Council is firmly dedicated to following an EMS policy. All our preferred providers and subcontractors have been issued with environmental guidelines.
- 4.2.2 On site the SCCAS Project Officer will police environmental concerns. In the event of spillage or contamination EMS reporting and procedures will be carried out in consultation with Jez Meredith (SCCAS EMS Officer). All rubbish will be bagged and removed either to areas designated by the client or returned to SCC property for disposal.

4.3 Plant and equipment details

- 4.3.1 A 360° tracked mechanical excavator equipped with a full suite of buckets will be required for the trial trenching. The sub-contracted plant machinery will be accompanied by a fully qualified operator who will hold an up-to-date Construction Plant Competence Scheme (CPCS) card (approved by the Construction Industry Training Board).
- 4.3.2 The plant machinery will be well serviced and be as quiet a model as is practicable. It will come equipped with appropriate spill kit and drip trays. It will only refuel in a single designated area, as defined by the SCCAS. If required all refuelling, will be carried out using electrically operated pumps and will only be done when drip trays are deployed.
- 4.3.3 Other plant details and appropriate certification can be supplied by the machine provider.

4.4 Hazardous substances

- 4.4.1 No hazardous substances are specifically required in order to undertake the archaeological works.

4.5 Services

- 4.5.1 A full services survey had not been provided at the time of writing this document. Appropriate measures will be taken to avoid previously unidentified services.

4.6 Lighting

- 4.6.1 No trenches are to be excavated indoors and no special requirements are necessary.

4.7 Access/Egress

- 4.7.1 All movements to and from site will respect any existing perimeter fencing/hoarding with all points of entry returned to their locked condition (if applicable), with the site kept secure via any existing means at all times.

Site induction sign off sheet

Name	Signature	Date

Appendix 1. Suffolk County Council Health and Safety Policy

Health & Safety Policy – HS04



Health & Safety Policy General Statement of Health and Safety Policy

Aim

Suffolk County Council aims to ensure that standards of health, safety and well-being for all our staff, service users and others who may be affected by what we do, are comparable with those of the best and most responsible organisations in the country.

We recognise that good health and safety management benefits our organisation and the community we serve.

- The County Council exists to provide quality services to the community of Suffolk. The delivery of these services relies on people throughout the organisation. The protection of our human resource is therefore essential to maintaining service delivery and contributing effectively to partnerships.

Objectives

To meet this aim, we will:

- Conduct all our activities safely and in compliance with legal requirements and good practice.
- Provide a safe and healthy working environment.
- Promote a positive culture towards health, safety and welfare issues. By the implementation of a Health and safety management system HSG65.
- Continuous Improvement will be measured and monitored across the organisation.

Working together

People, not regulations, are the key to safe and healthy workplaces. Everyone has a responsibility for health and safety.

- Achieving our aim and objectives requires everyone to play their part
- This depends on everyone having a common understanding of the identification, assessment and control of risks based on competence (i.e. knowledge, skill and behaviour). We will therefore ensure that all staff is appropriately trained to enable them to work safely
- We will have identified roles and responsibilities across the organisation on the implementation of the management system
- Managers and supervisors at all levels are directly responsible for ensuring that the council's health and safety policy is known and acted upon. This responsibility cannot be discharged by delegation
- Employees must take care of their own health and safety and that of others who may be affected by what they do, or fail to do, at work

Implementation

The Corporate Health and Safety Management Board will:

- Set the county council's strategy for effectively managing health and safety risks
- Promote high standards of health and safety throughout the organisation
- Monitor the implementation, operation and effectiveness of corporate health and safety management system and arrangements
- Receive from directorate's feedback on the progress against agreed plans for health and safety improvement.

All services will allocate sufficient time and resources to enable health and safety to be managed effectively, within operational parameters.

I am personally committed to making Suffolk County Council one of the safest and healthiest places to work, and I expect a similar level of commitment from all employees to help me achieve this goal.

Andrea Hill, Chief Executive, June 2010.

Appendix 2. Risk Assessments



Specific Risk Assessments for Archaeological Evaluation: BSD 018, The Bridge School (Phase 1), Sprites Lane, Belstead

- 1 Working with plant machinery
- 2 Physical work in an outdoor setting
- 3 Deep excavations
- 4 Use of hand tools
- 5 Damage to services

1-5 = Low risk

6-12 = Medium risk

20-25 = High risk

Risk Assessment 1 Working with plant machinery

Activity	Location	Hazard	Risks	Persons affected	Initial risk	Control measures	Residual risk	Name	Date	Rescue procedures
Direction and supervision of tracked 360 ^o excavator.	Various.	Staff in close proximity to excavation (operation of bucket & manoeuvre of boom).	Accidental contact with boom or bucket or unexpected movement of machine.	Principally SPO/PO, but at times may involve others.	10	Only PO to supervise machinery. No personnel to be within radius of boom. All staff to wear high visibility clothing, hard hats and safety footwear at all times.	5	R Brooks	10/10/13	Call emergency services. First Aid if required.

Severity	Likelihood				
	1	2	3	4	5
1	1	2	3	4	5
2	2	4	6	8	10
3	3	6	9	12	15
4	4	8	12	16	20
5	5	10	15	20	25

Initial Risk
Residual Risk

Likelihood	Severity	Risk (likelihood x severity)
1. Highly unlikely	1. Slight inconvenience	1-5 Low
2. May occur but very rarely	2. Minor injury requiring first aid	
3. Does occur but only rarely	3. Medical attention required	6-12 Medium
4. Occurs from time to time	4. Major injury leading to hospitalisation	
5. Likely to occur often	5. Fatality or serious injury leading to disablement	13-25 High

Risk Assessment 2 Physical work in an outdoor setting

Activity	Location	Hazard	Risks	Persons affected	Initial risk	Control measures	Residual risk	Name	Date	Rescue procedures
Hand excavations of archaeological features.	Various.	Extremes of heat, cold and wet weather. Trip hazards.	Hypothermia, heat stroke, sunburn. Minor injuries.	All field staff.	9	All staff provided with appropriate clothing for weather conditions. No staff to work alone in extreme conditions. Regular sweep for trip hazards.	2	R Brooks	10/10/13	First Aid if required. Call emergency services if necessary.

	Likelihood				
Severity	1	2	3	4	5
1	1	2	3	4	5
2	2	4	6	8	10
3	3	6	9	12	15
4	4	8	12	16	20
5	5	10	15	20	25

Initial Risk
Residual Risk

Likelihood	Severity	Risk (likelihood x severity)
1. Highly unlikely	1. Slight inconvenience	1-5 Low
2. May occur but very rarely	2. Minor injury requiring first aid	
3. Does occur but only rarely	3. Medical attention required	6-12 Medium
4. Occurs from time to time	4. Major injury leading to hospitalisation	
5. Likely to occur often	5. Fatality or serious injury leading to disablement	13-25 High

Risk Assessment 3 Deep excavations

Activity	Location	Hazard	Risks	Persons affected	Initial risk	Control measures	Residual risk	Name	Date	Rescue procedures
Excavation of trial trenches and archaeological features within.	Various.	Trench collapse, falls, and work in confined spaces.	Physical injury (minor to rare major examples), suffocation.	All field staff.	12	No excavation beyond safe depth in any circumstances (not necessary for evaluation stage of works). No excavation of trenches beyond depth of 1.2m (or shallower where there is risk of collapse in the judgement of the PO if deposits are unconsolidated).	2	R Brooks	10/10/13	Call emergency services. First Aid if required.

Severity	Likelihood				
	1	2	3	4	5
1	1	2	3	4	5
2	2	4	6	8	10
3	3	6	9	12	15
4	4	8	12	16	20
5	5	10	15	20	25

Initial Risk
Residual Risk

Likelihood	Severity	Risk (likelihood x severity)
1. Highly unlikely	1. Slight inconvenience	1-5 Low
2. May occur but very rarely	2. Minor injury requiring first aid	
3. Does occur but only rarely	3. Medical attention required	6-12 Medium
4. Occurs from time to time	4. Major injury leading to hospitalisation	
5. Likely to occur often	5. Fatality or serious injury leading to disablement	13-25 High

Risk Assessment 4 Use of hand tools

Activity	Location	Hazard	Risks	Persons affected	Initial risk	Control measures	Residual risk	Name	Date	Rescue procedures
Excavation of archaeological features using shovels, mattocks, forks, wheelbarrows and small tools	Various.	Splinters from poorly maintained equipment, trip hazards from unused equipment, accidental striking of personnel in close proximity, some heavy lifting.	Minor injuries.	All field staff.	8	Ensure all tools in serviceable condition. Careful policing of temporarily unused equipment (e.g. no discarded hand tools near trench edges). Ensure all tools carried appropriately.	4	R Brooks	10/10/13	First Aid if required.

	Likelihood				
Severity	1	2	3	4	5
1	1	2	3	4	5
2	2	4	6	8	10
3	3	6	9	12	15
4	4	8	12	16	20
5	5	10	15	20	25

Initial Risk

Residual Risk

Likelihood	Severity	Risk (likelihood x severity)
1. Highly unlikely	1. Slight inconvenience	1-5 Low
2. May occur but very rarely	2. Minor injury requiring first aid	
3. Does occur but only rarely	3. Medical attention required	6-12 Medium
4. Occurs from time to time	4. Major injury leading to hospitalisation	
5. Likely to occur often	5. Fatality or serious injury leading to disablement	13-25 High

Risk Assessment 5 Damage to services

Activity	Location	Hazard	Risks	Persons affected	Initial risk	Control measures	Residual risk	Name	Date	Rescue procedures
Machine cutting of trial trenches.	Various.	Accidental damage to cables or services (water, electrical etc.).	Electrocution, environmental damage/pollution, cost implications.	Machine operator and PO.	6	Client to provide survey of any known services. Carefully observed machine excavation under full supervision. Use of CAT scanner.	2	R Brooks	10/10/13	Call emergency services. First Aid if required. Any pollution to be reported to Environmental Manager immediately.

	Likelihood				
Severity	1	2	3	4	5
1	1	2	3	4	5
2	2	4	6	8	10
3	3	6	9	12	15
4	4	8	12	16	20
5	5	10	15	20	25

Initial Risk
Residual Risk

Likelihood	Severity	Risk (likelihood x severity)
1. Highly unlikely	1. Slight inconvenience	1-5 Low
2. May occur but very rarely	2. Minor injury requiring first aid	
3. Does occur but only rarely	3. Medical attention required	6-12 Medium
4. Occurs from time to time	4. Major injury leading to hospitalisation	
5. Likely to occur often	5. Fatality or serious injury leading to disablement	13-25 High

Appendix II

Context Number	Feature Type	Category	Feature Number	Description
0001	Unstratified	Other		Unstratified
0002	Topsoil	Layer	0002	Dark brown loamy silty sand topsoil present over the whole site, measuring 0.35m-0.45m thick. Likely to be at least in part associated with landscaping of the school playing field, and therefore may be imported or reused from the school building site
0003	Subsoil	Layer	0003	Layer of buried topsoil or imported soil associated with landscaping the school playing field present in trenches 9&10. Contains modern building rubble
0004	Subsoil	Layer	0004	Pale greyish brown silty sand subsoil present in varying depths within most of the trenches, sealing the natural subsoil. Cut by various features
0005	Pit	Cut	0005	Probable pit in north end of Tr 10, large, uncertain plan. Sealed by subsoil 0003. Appears to relate to an anomaly identified by geophysical survey
0006	Pit	Fill	0005	Dark, charcoal rich silty sand at base of pit 0005
0007	Pit	Fill	0005	Mid greyish brown sandy silt with occasional charcoal flecks
0008	Finds		0005	Spoil heap finds likely from fill of pit 0005
0009	Pit	Fill	0005	Mid grey brown loose silty sand with heat altered clay/daub lumps and rounded cobbles
0010	Pit	Fill	0005	Mid-pale greyish brown sandy silt, very similar to subsoil layer on southern side of the pit- no cut visible
0011	Pit	Fill	0005	Thin layer of compacted heat altered clay/daub lumps, likely demolition waste from a building or structure such as oven dome
0012	Posthole	Cut	0012	Small, circular post hole in Tr 8, with steep sides breaking gradually to a generally flattish base
0013	Posthole	Fill	0012	Mid-pale brown silty sand. 100% sampled
0014	Pit	Fill	0005	Basal fill of pit 0005. Pale yellowish brown fine sandy silt with occasional charcoal flecks
0015	Finds		0015	Finds from spoil of Tr 8. Discrete area around post hole 0012, likely to be from subsoil 0034, no cut features visible in plan during machining until seen cutting natural.
0016	Ditch	Cut	0016	Slightly curvilinear ditch in southern end of Tr 3, gradual slope on the south side, steeper northern side, shallow. Similar profile to 0020
0017	Ditch	Fill	0016	Mid greyish brown sandy silt, graduating to a paler brown on the southern edge- no clear horizon to imply distinct fills
0018	Ditch	Cut	0018	Shallow SW-NE ditch in the eastern end of Tr 4. Generally flattish base. Same as 0024 in Tr 5?
0019	Ditch	Fill	0018	Mid orangey brown silty sand
0020	Ditch	Cut	0020	NW-SE in southern end of Tr 6. Fairly shallow, gradual slope on the south side, steeper northern side- similar profile to 0016

Context Number	Feature Type	Category	Feature Number	Description
0021	Ditch	Fill	0020	Mid-pale brown compact sandy silt with occasional charcoal flecks. Relationship with subsoil uncertain.
0022	Gully	Cut	0022	Narrow NW-SE aligned gully, shallow with an open v-shaped profile
0023	Gully	Fill	0022	Mid orangey brown silty sand
0024	Ditch	Cut	0024	NE-SW aligned ditch in eastern end of Tr 5. 1.4m wide, 0.3m deep, rounded sides and a slightly concave base. May be same as 0018 in Tr 4
0025	Ditch	Fill	0024	Pale brown compact silty sand
0026	Ditch	Cut	0026	NE-SW aligned ditch in eastern end of Tr 9. Northern edge difficult to define
0027	Ditch	Fill	0026	Mid grey brown silty sand, gradually paler towards the base
0028	Posthole	Cut	0028	Small, circular post hole, fairly steep sides, open v-shaped profile
0029	Posthole	Fill	0028	Mid brown silty sand
0030	Posthole	Cut	0030	Oval post hole, steep sides, w-shaped profile. Possibly two intercutting post holes or evidence of repair/replacement, but no cut visible
0031	Posthole	Fill	0030	Mottled mid-pale brown silty sand, gradual change to darker, siltier fill in the two deeper extents. No difference in fill on either side of the feature to suggest two features
0032	Posthole	Cut	0032	Small post hole, generally circular but with a shallow scoop on the eastern side. Steep sides, breaking gradually to a rounded base. Generally u-shaped profile
0033	Posthole	Fill	0032	Mid greyish brown silty sand
0034	Subsoil	Layer	0034	Layer of subsoil in Tr 8. Dark greyish brown loamy silty sand. Possibly the origin of spoilheap finds 0015
0035	Feature	Layer	0035	Mid brown loamy silty sand with occasional charcoal flecks filling four possible post holes visible in the south section of Tr 8, south of post hole 0012 (could be differential water retention). Possibly the origin of spoilheap finds 0015

Appendix III

Context	Trench	Period	Fabric	Sherd	No	W/gt	Notes	Date
0006	10	Rom	GROG	b	1	4	Abraded	LIA-ERom
		Rom	GX	b	1	1		Rom
0008	10	Rom	SAMV	r	1	12	Dr 15/17 Trajanic (rim diam 180mm, 10%)	100-120
0013	8	Rom	GX	b	2	2	(from SS proc.)	Rom
		Preh	HMS	b	1	1	small and abraded (from SS proc)	Preh
0015	8	Sax-med	PING	b	1	4	Hard fired buff with red streaky inclusions Pingsdorf type ware	10th-13 th c
		Rom	GX	b	1	16	Soot interior, Coarse quartz sand	Rom
		Rom	COLBM	b	1	52	7. Mortarium. Abraded. flint & quartz grits	160-200
		Rom	BSW	ba	1	13	Oxy. margins	C2+
		Rom	BSW	ba	1	7	Abraded. Oxy. core	Rom
		Rom	GX	b	1	15		Rom
		Rom	GX	rb	3	83	Jar type 4.6Rim type 7, diam 160mm, 30%	MC2+
		Rom	RX	b	1	31	Soft and abraded. Buff/orange	Rom
0017	3	Rom	GROG	b	2	5	SV . Red surf w bead cord. HM-WF? LIA	LIA-ERom
		Preh	HMF	b	39	41	Small bodysherds (inc SS proc)	IA
0019	4	Rom	GX	b	1	5	Soft abraded (Wherstead fabric?)	Rom
0021	6	Preh	HMS	b	1	3	Fine med sand. (from SS proc.)	L.IA
0027	9	Preh	HMF	b	4	5	Probably IA (from SS proc.)	IA
0031	8	Rom	GX	b	1	4	(VRW type fabric)	Rom
0033	8	Rom	GX	b	1	5	Abraded	Rom
0035	8	Rom	GX	b	1	3	Abraded	Rom

OASIS ID: suffolkc1-160931

Project details

Project name	BSD 018 The Bridge School Evaluation, Sprites Lane, Belstead
Short description of the project	An area of 1.1 hectares was evaluated by trial trenching as a condition of planning permission to develop the site.
Project dates	Start: 28-10-2013 End: 06-12-2013
Previous/future work	Yes / Not known
Any associated project reference codes	PL/0220/13 - Planning Application No.
Any associated project reference codes	BSD 018 - HER event no.
Type of project	Field evaluation
Site status	None
Current Land use	Other 14 - Recreational usage
Monument type	DITCH Iron Age
Monument type	DITCH Uncertain
Monument type	PIT Roman
Monument type	POST HOLE Roman
Significant Finds	CERAMIC Roman
Significant Finds	CERAMIC Late Prehistoric
Significant Finds	CERAMIC Iron Age
Significant Finds	CERAMIC Medieval
Methods & techniques	""Sample Trenches""
Prompt	National Planning Policy Framework - NPPF
Position in the planning process	Pre-application

Project location

Country	England
Site location	SUFFOLK BABERGH BELSTEAD BSD 018 The Bridge School Evaluation, Sprites Lane
Postcode	IP8 3ND
Study area	17500.00 Square metres
Site coordinates	TM 130 424 52 1 52 02 18 N 001 06 21 E Point

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	Matthew Brundenell
Project director/manager	Rhodri Gardner
Project supervisor	Linzi Everett
Type of sponsor/funding body	Architect on behalf of client
Name of sponsor/funding body	Concertus Design & Property Consultants Ltd

Project archives

Physical Archive recipient	Suffolk County Council Archaeological Service
Physical Archive ID	BSD 018
Physical Contents	"Ceramics","other"
Digital Archive recipient	AHDS
Digital Archive ID	BSD 018
Digital Contents	"other"
Digital Media available	"Images raster / digital photography","Text"
Paper Archive recipient	Suffolk County Council Archaeological Service

Paper Archive ID	BSD 018
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