

# Cotswold Archaeology

# Suffolk Business Park Treatt Site Bury St Edmunds Suffolk

Archaeological Evaluation



for Jaynic Suffolk Park Ltd

CA Project: 660861 CA Report: 17222 HER Code: RGH094 Event No: ESF25464 OASIS No: cotswold2-278600

April 2017



Andover Cirencester Exeter Milton Keynes

Suffolk Business Park Treatt Site Bury St Edmunds Suffolk

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#### SUMMARY

Project Name:	Suffolk Business Park, Treatt Site
Location:	Bury St Edmunds, Suffolk
NGR:	TL 8867 6388
Туре:	Evaluation
Date:	10-13 April 2017
Planning Reference:	DC/16/2825
Location of Archive:	To be deposited with Suffolk County Council Archaeology Service
Site Code:	RGH094

An archaeological evaluation was undertaken by Cotswold Archaeology in April 2017 at Suffolk Business Park, at the Treatt Site. Twenty trenches were excavated.

Four undated pits, two with *in situ* burning, one with a burning deposit, and one that was heavily truncated and recorded only in section, were exposed during this second phase of archaeological evaluation on the site. The characteristics of the features suggest a potential, broadly contemporary relationship with similar early medieval hearths identified as similar pits in the earlier phase of evaluation. In addition, modern disturbances and deposits of ferrous metal objects, associated with the later use of the site as a United States Army Air Force airfield during the Second World War, were recorded across the site.

#### 1. INTRODUCTION

- 1.1 In April 2017 Cotswold Archaeology (CA) carried out an archaeological evaluation and metal detecting survey for Jaynic Suffolk Park Ltd at the Treatt Site, Suffolk Business Park, Bury St Edmunds, Suffolk (centred on NGR: TL 8867 6388; Figure 1). The evaluation was undertaken to provide further information to inform the decision-making process and determine the resultant planning application (DC/16/2825). The evaluation followed an earlier geophysical survey (Magnitude Surveys 2016) and the first phase evaluation undertaken by CA in November 2016 (CA 2016). This element of the archaeological investigation comprises one part of the required programme on work for the Suffolk Business Park development. A second phase of evaluation will also be undertaken for the remainder of the wider site and will be followed by appropriate mitigation as required.
- 1.2 The evaluation was carried out in accordance with a Brief for archaeological evaluation, provided by Rachael Abraham, the Senior Archaeological Officer at Suffolk County Council (SCCAS), dated 5 January 2017 (Abraham 2017), the archaeological advisors to the Local Planning Authority (LPA), and with a subsequent detailed *Written Scheme of Investigation* (WSI) produced by CA (2017) and approved by Rachael Abraham. The fieldwork also followed *Standard and guidance: Archaeological field evaluation* (CIfA 2014), the Suffolk County Council Requirements for archaeological evaluation 2012 Ver. 1.3 (Suffolk County Council Archaeology Service 2012), *Standards for Field Archaeology in the East of England* (EEA 2003), the Management of Archaeological Projects 2 (English Heritage 1991), the Management of Research Projects in the Historic Environment (MORPHE): Project Manager's Guide (HE 2015) and any other relevant standards or guidance. It was monitored by Rachael Abraham, including a site visit on 12 April 2017.

#### The site

1.3 The proposed development area is c. 4.05ha. It comprises part of the western portion of a large arable field, formerly part of the RAF Rougham Airbase, home of the USAAF 322nd and 94th Bomb Groups in the Second World War. The site is bounded to the north by a new road alignment (currently under construction), to the east and west by industrial estates (forming part of the current Suffolk Business Park) and to the south by the A14 dual carriageway and agricultural land. The site

lies at approximately 62m AOD, and is largely flat, sloping away slightly at the east extent of site.

1.4 The underlying bedrock geology of the site was mapped as the Lewes Nodular Chalk Formation, Seaford Chalk Formation and Newhaven Chalk Formation of the period (BSG 2016). Previous archaeological investigations Cretaceous (SACIC2015/2016) in the immediate vicinity of the site indicate that the geology occurs at a depth of between 0.5 – 0.7m below ground level (BGL). In addition, in some of the trenches the solid geology was overlain by a superficial deposit of Cover Sand, a deposit formed up to 3 million years ago during the Quaternary Period, (BSG 2016). The overlying soils consisted of mid orange brown friable silty clays, containing frequent frost shattered flint and gravel. The evaluation undertaken by CA in 2016 recorded also that the geological substrate was overlain by deposits of wind-blown cover sand. It also noted that subsoil, where present, consisted of light red brown clay sand, deposited between 0.15 and 0.5m thick. This was sealed by topsoil consisting of mid orange brown silty sand 0.2 - 0.3 m thick.

## 2. ARCHAEOLOGICAL BACKGROUND

2.1 The following is a summary of information provided in the recently undertaken deskbased assessment, (CA 2016a) which was prepared to inform the development proposals. Included also is a summary of the results of the earlier phase of evaluation undertaken by CA in November 2016 (CA 2016b).

## Prehistoric period (to AD 43)

2.2 The site occupies the crest of a south-facing slope (at *c*. 60m aOD), which overlooks land that gradually descends towards the valley of the River Lark to the south and south-west. This topographic context was typically favoured by prehistoric settlers, providing free draining soils which are easily cultivated. However, throughout East Anglia, evidence for early prehistoric occupation in the region is limited (Medlycott 2011). Mesolithic worked flints recovered from plough soil have been found *c*. 320m south of the site, which were concentrated on similar south-facing slopes. In addition, one assemblage also contained worked lithics from the Bronze Age and Iron Age. The presence of the large collections of flints from just below the crest of a south-facing slope supports the suggestion that such locations were favoured by early settlement and agricultural exploitation. Given the proximity of the site to these

recovered assemblages, isolated finds elsewhere to the south and the site's prevailing topography, there is some potential for the presence of flint artefacts within the site.

- 2.3 An evaluation undertaken by CA (CA 2016b) revealed flint assemblages dated to the prehistoric period including retouched flint tools as well as small pits which are similar to the morphology of smaller pits at Grimes Graves. This could hint at flint mining activity in the wider site area.
- 2.4 Elsewhere, *c*. 180m west of the site an evaluation identified Neolithic settlement activity, from which 53 sherds of flint-gritted pottery were recovered, as well as parts of an early Neolithic carinated bowl. Sealed by this postulated occupation layer, several post holes and pits were also recorded. In addition, a series of undated pits, ditches and gullies have been identified to the west of the site, as well as further remains to the north, which are considered likely to relate to other areas of earlier prehistoric activity.
- 2.5 An evaluation to the north of the site identified a 'sparse archaeological horizon' comprising the dispersed remains of 16 pits or post holes, eight ditches, and an assemblage of middle Iron Age pottery (SACIC 2015). These remains appear primarily to relate to Iron Age agricultural activity, rather than evidence of settlement. There is potential therefore that evidence of Iron Age activity may continue into the north-eastern part of the site although the recorded remains to the north were heavily truncated by perimeter tracks and runways associated with RAF Rougham. The recently undertaken geophysical survey of the site whilst successfully identifying extensive buried remains associated with the former airbase did not identify any significant anomalies which may be associated with earlier archaeological remains (Magnitude Surveys 2016).
- 2.6 Within the wider landscape, archaeological investigation has identified further evidence of Iron Age activity, including pottery, animal bone and pits and ditches. These include a concentration of over 30 pits, postholes and one hollow recorded *c*. 500m north-west of the Site (CA 2016a). Eight of these post holes contained animal bone, late Iron Age pottery, fired clay and in one example, the remnants of a loom weight. Further to this, excavation on land to the east of Moreton Hall revealed evidence of Early and Middle Iron Age activity indicative of a small farmstead. This too revealed evidence of domestic activity including textile working in the form of

loomweight fragments (CA 2016a). The settlement is represented by the remains of four, possible granary structures, a number of pits, enclosure ditches and fire-pits.

## Middle Iron Age

2.7 The earlier phase of evaluation revealed the possible continuation of a north/south orientated Iron Age boundary ditch identified during previous phases of excavation to the north of the current development area (CA 2016b; SACIC 2016).

## Roman period (AD 43 to 410)

- 2.8 In contrast to the widespread evidence of Iron Age (and earlier) activity in the wider landscape, evidence for Roman period activity is relatively limited, and appears to have been focused *c*. 4km to the south-east of the site on the lower ground of the Lark Valley. Remains include the Eastlow Hill Tumulus and the remains of a Roman period building to the south-west of Lake Farm.
- 2.9 Elsewhere, two shallow pits of Roman date have been recorded *c*. 400m to the north of the site and Roman period pottery has been recovered *c*. 900m north of the site. Additionally, Roman period artefacts have also been recorded through the Portable Antiquities Scheme to the north-west of the site.

## Early medieval and medieval periods (AD 410 – 1539)

- 2.10 The Site is likely to have comprised part of the agricultural hinterland of nearby settlements throughout the early medieval period. Settlements surrounding the site recorded in the Domesday Survey include Rougham, Rushbrooke and Thurston. These all appear to be large settlements whose lord or overlord in 1066 (and later in 1086) was the Abbey of St Edmunds.
- 2.11 The earlier phase of evaluation recorded dispersed early medieval activity within the Suffolk Business Park Site, consisting of three areas of *in-situ* burning dated from radiocarbon samples to 714-994 cal AD (CA 2016b). The results have been interpreted as the remains of limited early medieval domestic activity, potentially associated with an early monastic community in the area which would develop into Bury St Edmunds.
- 2.12 During the medieval period, a number of settlement foci emerged within the wider landscape, including establishments associated with monks of the Benedictine order

who settled in Bury St Edmunds in AD 1020. Between 1100 and 1300 the Abbey grew in strength, although long-standing issues between the town of Bury St Edmunds and the Abbey led to a revolt in 1327, during which the manor houses owned by the Abbots were burnt down. Investigations at Eldo House Farm identified features relating to a possible monastic grange, *c*. 580m west of the site. The remains included two walls formed of bonded flint, which possibly related to a structure associated with the grange. A further possible medieval settlement focus has also been recorded at Catsale Green, *c*. 890m to the north of the site. Archaeological investigations in these areas have recorded ditches and gullies, potentially associated with the boundary of the settlement and of associated fields, as well as the remains of a kiln.

2.13 It is likely that during the medieval period, the site comprised agricultural land belonging to the Manor of *Eldhawe* (as part of the Eldo Estate).

#### Post-medieval and modern periods (1539 to present)

- 2.14 The site and its surrounding environs remained predominantly agricultural during the post-medieval period. The results of previous investigations in the wider area confirm this, indicating the removal of a number of hedgerows to enlarge fields. Mapping indicates a dispersed settlement pattern within the wider area, focused for example, on Eldo House Farm and Catsale, with the surrounding land, including the site, forming part of their agricultural hinterland.
- 2.15 At the turn of the 19th century the site remained in agricultural use, presumably still forming part of the Eldo Estate. Toward the end of the 19th century there is cartographic evidence of the remains of small-scale extractive pits within the site and surrounding area, although this remains set within the prevailing agricultural landscape until the development of Rougham Airbase during Second World War.
- 2.16 RAF Rougham was constructed to standard plans used for numerous other airfields and had three runways, 50 dispersal points and a connecting perimeter track. The key principle of the design was to disperse aircraft quickly to minimise against concentrated bomb attacks. The technical buildings associated with the functioning of the airbase were located to the east of the runways (well beyond the site), whilst the domestic buildings used by the personnel on the airbase were located southeast of the airfield in the village of Blackthorpe. Previous archaeological evaluation immediately north of the site recorded the buried remains of the runway, including

two large drainage channels, filled with clinker, spaced approximately 50m apart extending towards the site on the alignment of the western runway. The evaluation noted a severe degree of truncation in the areas of the former runways cutting into the natural substrate. A number of these trenches recorded layers of coarse sand and clays that contained modern brick, glass and concrete, and was presumably deposited in part to form the sub-base for the runways.

2.17 Furthermore, the remains of ten possible 'fog-lifter' pits were recorded during the evaluation north of the Site. These pits are generally associated with airfields from the Second World War and were small, shallow pits that were filled with petrol and burnt in an attempt to clear thick fog and allow aircraft to land safely. It is likely remains of the former airfield will survive within the site and that these will also have impacted the survival of potential earlier buried archaeological remains. There is a potential also that some of these features may actually be of early medieval origin, as evidenced with a number of radiocarbon dates, both at Rougham airfield and at other airfield sites across the county (CA 2016b).

## 3. AIMS AND OBJECTIVES

- 3.1 The objectives of the evaluation and metal detecting survey were to provide information about the archaeological resource within the site, including its presence/absence, character, extent, date, integrity, state of preservation and quality. In accordance with the *Standard and Guidance for Archaeological Field Evaluation* (CIfA 2014), the evaluation was designed to be minimally intrusive and minimally destructive to archaeological remains. The results detailed below will enable SEBC to identify and assess the particular significance of any heritage asset, consider the impact of the proposed development upon it, and to avoid or minimise conflict between the heritage asset's conservation and any aspect of the development proposal, in line with the *National Planning Policy Framework* (DCLG 2012).
- 3.2 The results are considered with reference to *Research and Archaeology revisited: A Framework for the East of England* (Medlycott 2011).

## 4. METHODOLOGY

#### Metal detecting survey

- 4.1 Metal detecting during fieldwork was undertaken on the existing ground surface along the alignment of each trench prior to excavation by a trained member of staff, on all arising spoil during overburden stripping and prior to, and during, the excavation of exposed archaeological features.
- 4.2 Metal detecting targeted ferrous and non-ferrous metals, though due to the large number of ferrous metal signals across the former airbase, this resulted in on-site discard (with the consent of SCCAS) of all detected metal objects.
- 4.3 This element of the programme was undertaken by Michael Joyce and Sam Wilson, both experienced project leaders with professional experience of metal detecting on a number of archaeological sites.

## Evaluation methodology

- 4.4 The fieldwork comprised the excavation of 20 trenches (30m x 1.8m), in the locations shown on the attached plan (Figure 2). This equated with a 2% sample of the site, in accordance with the approved WSI. Trenches were set out on OS National Grid (NGR) co-ordinates using Leica GPS and surveyed in accordance with CA Technical Manual 4: *Survey Manual*.
- 4.2 All trenches were excavated by mechanical excavator equipped with a toothless grading bucket. All machine excavation was undertaken under constant archaeological supervision to the top of the natural substrate. Where archaeological deposits were encountered they were excavated by hand in accordance with CA Technical Manual 1: *Fieldwork Recording Manual* and in addition were metal detected both before and after excavation.
- 4.3 Deposits were assessed for their palaeoenvironmental potential in accordance with CA Technical Manual 2: *The Taking and Processing of Environmental and Other Samples from Archaeological Sites* and were sampled and processed. All artefacts recovered were processed in accordance with Technical Manual 3: *Treatment of Finds Immediately after Excavation*.

4.4 The archive and artefacts from the evaluation are currently held by CA at their offices in Kemble. Subject to the agreement of the legal landowner the artefacts will be deposited with Suffolk County Council Archaeological Service, along with the site archive, under HER Code **RGH094**. A summary of information from this project, set out within Appendix E, will be entered onto the OASIS online database of archaeological projects in Britain.

## 5. RESULTS (FIGS 2-6)

- 5.1 This section provides an overview of the evaluation results; detailed summaries of the recorded contexts, finds and environmental samples (palaeoenvironmental evidence) are to be found in Appendices A, B and C respectively. The evaluation comprised the excavation of 20 trenches (600 linear metres in total), in the locations shown in Figure 2.
- 5.2 Trenches 1, 3-6, 8-13, 15 and 17-20 contained no archaeological features. In trenches 1, 3, 4, 8, 9 and 12, as well as each of those containing archaeological features, 2, 7, 14 and 16 the geological substrate was overlain by a light brown grey sand and silt mixed subsoil, which in turn was sealed by a mid grey brown sand silt topsoil. The remaining trenches comprised the geological substrate overlain by topsoil alone, with no evidence of an intervening subsoil layer.

## Trench 2 (Figs 2 & 3)

5.3 The geological substrate 202 was encountered at a depth of 0.62m below present ground level (bpgl). Trench 2 revealed the profile of a heavily truncated pit 204, cutting the substrate to only 0.06m depth, which contained a single, charcoal-rich fill 203 (figure 3, section AA). Unlike the archaeological features recorded elsewhere (see below), pit 204 was heavily truncated by plough activity associated with the formation of subsoil layer 201, which sealed it. The nature of charcoal fragments in the immediate 100mm above the cut of the pit, recorded in the trench section (and its absence throughout the rest of the subsoil covering the trench), attests to its evident removal within the trench itself, as do plough scars visible in the geological substrate.

## Trench 7 (Figs 2 & 4)

5.4 The geological substrate 702 was encountered at a depth of 0.52m bpgl. Trench 7 contained a single pit 703, partially exposed in the south-west facing section of its north-western end (figure 4, section BB). The pit, measuring at least 0.5m in length, 0.73m wide and 0.23m deep, contained a charcoal-rich deposit 704, which was sealed by silt sand fill 705. The pit itself was evidently truncated as a result of plough activity. The base of plough furrow 707 cut the south-east side of pit 703, its fill 706 overlain by subsoil layer 701 and in turn by topsoil 700.

## Trench 14 (Figs 2 & 5)

5.5 The geological substrate 1402 was encountered at a depth of 1.00m bpgl. Trench 14 contained a single pit 1405 in the north-east facing section of its southern end (figure 5, section CC). The pit measuring 0.95m in length, 0.66m wide and 0.25m deep contained a large quantity of charcoal fragments within its primary fill 1404, and there was evidence of scorching to the base of the pit itself, suggesting that the burning activity may have occurred *in situ*, unlike the evidence of pit 703 in trench 7. Fill 1403 sealed primary burnt deposit 1404. It contained fewer charcoal fragments, and was principally a clay sand deposit. This was sealed by thick subsoil layer 1401, over which lay topsoil 1400.

## Trench 16 (Figs 2 & 6)

5.6 The geological substrate 1602 was encountered at a depth of 0.50m bpgl. Trench 16 contained a single pit 1605, which lay partially within its northern section and measured 1.14m in length, 0.6m wide and 0.31m deep. It was similar in morphology and composition to that identified in trench 14 (figure 6, section DD). Pit 1605 contained a primary fill of charcoal-rich clay sand 1604, again indicative of *in situ* burning. This was sealed by clay sand fill 1603, overlain by subsoil 1601 and, in turn by topsoil 1600.

## 6. THE FINDS

6.1 Artefactual material from the evaluation was hand-recovered from five topsoil deposits. The recovered material dates to the prehistoric and post-medieval periods. Quantities of the artefact types are given in Appendix B.

#### Lithics

6.2 A total of 22 worked flints (237g) was recovered as residual finds from five topsoil deposits. The majority had undergone a moderate degree of edge damage, although the three from deposit 1600 were in a fresher condition than most. These may have been moved only a small distance from where they were initially deposited. This small assemblage comprises 19 flakes, two flakes displaying small areas of retouch and one spurred piece. Flakes do not usually lend themselves to close dating. However, four of the flakes from topsoil deposits 1600 and 1800 display evidence of preparation of the striking platform which is suggestive of flintworking technology in use during the Mesolithic or Early Neolithic periods. The spurred piece, which was made using a thermal blank, is not a chronologically diagnostic type.

#### Ceramic building material

6.3 Topsoil deposit 1800 produced a fragment of flat roof tile (21g) of post-medieval date, in a moderately abraded condition.

#### 7. THE BIOLOGICAL EVIDENCE

7.1 Three environmental samples (55 litres) were retrieved and processed with the intention of recovering evidence of industrial or domestic activity and material for radiocarbon dating. The samples were processed by standard flotation procedures (CA Technical Manual No. 2: *The Taking and Processing of Environmental and Other Samples from Archaeological Sites*).

#### Undated

- 7.2 Fill 1404 within hearth 1405 (sample 2), fill 1604 within hearth 1605 (sample 3) and fill 704 within pit 703 (sample 5) contained no plant macrofossils but did contain large quantities of well-preserved charcoal identified as oak (*Quercus*). A mixture of heartwood and sapwood from small branches was identified suggesting the use of trunkwood and small branches.
- 7.3 The function of the hearths and pit is difficult to interpret due to the absence of plant remains or associated artefacts. It is likely the hearths functioned as small fires, most likely as a heat source. The charcoal within pit 703 was slightly less well

preserved suggesting the firing debris from a hearth had been removed and dumped within the pit.

## 8. DISCUSSION

- 8.1 The results of the evaluation correlated well with the preceding geophysical survey, and the previous archaeological evaluation, which suggested that the development area has been subjected to hard landscaping and associated activity during the construction and use of RAF Rougham, coupled with more recent agricultural activity and especially associated ploughing. Archaeological features found during this phase of evaluation remain of uncertain date; however, the palaeoenvironmental samples discussed in Section 7 contained predominantly charcoal deposits of oak (*Quercus*), found also within the early medieval (Saxon) pits previously excavated (CA 2016b). This does not, however, rule out the potential that these features have either an earlier or more recent origin.
- 8.2 The recovery of 22 pieces of worked flint from the topsoil of the trenches further supports the evidence for transient human activity and possibly flint sourcing or extraction during the Neolithic, as well as activity on the periphery of the Middle Iron age settlement immediately to the north of the site (SACIC 2015, 2016).

## Post-medieval/modern

8.3 A single, fragmented flat roof tile (21g) of post-medieval date, in a moderately abraded condition, was recovered from the topsoil in the location to Trench 18, possibly attributable to building activity associated with the Eldo Estate, or with more recent activity.

## 9. CA PROJECT TEAM

Fieldwork was undertaken by Michael Joyce, assisted by variously by Susanna Tarvainen, Holly Young, Christina McClean, Sam Wilson, Andy Donald, Ed Grenier, Jay Wood and Daniel Keane. The report was written by Michael Joyce. The finds and biological evidence reports were written by Jacky Sommerville and Sarah Cobain respectively. The illustrations were prepared by Lucy Martin. The archive has been compiled and prepared for deposition by Hazel O'Neill. The project was managed for CA by Mark Hewson.

#### 10. **REFERENCES**

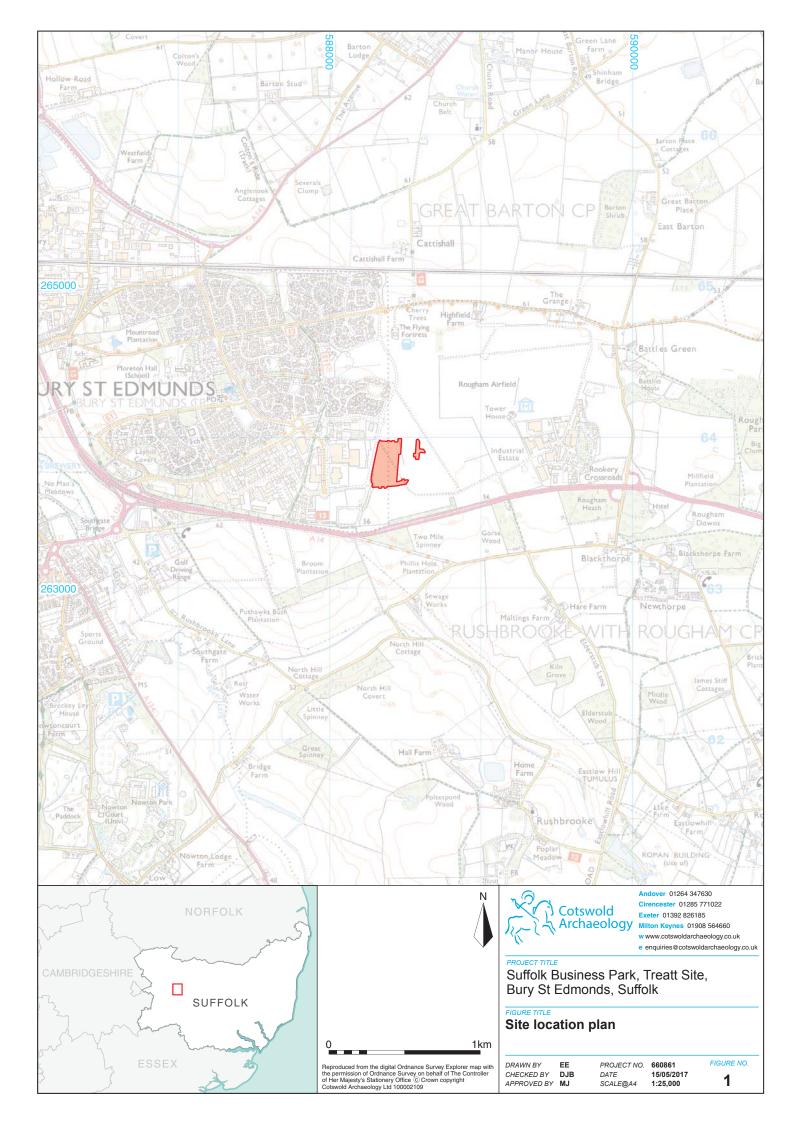
- Abraham, R. 2017 Brief for a Trenched Archaeological Evaluation at Western Part of the Suffolk Business Park Extension, Rougham.
- BGS (British Geological Survey) 2017 *Geology of Britain Viewer* <u>http://maps.bgs.ac.uk/geology viewer\_google/googleviewer.html</u> Accessed 18 April 2017.
- CA (Cotswold Archaeology) 2017 Suffolk Business Park, Treatt Site, Bury St Edmunds, Suffolk, Written Scheme of Investigation for an Archaeological Evaluation.
- CA (Cotswold Archaeology) 2016a Suffolk Business Park Extension, Bury St Edmunds, Suffolk: Heritage Desk-Based Assessment. CA Report 16448.
- CA (Cotswold Archaeology) 2016b Suffolk Park Bury, St Edmunds, Suffolk, Archaeological Evaluation. CA Report 16615.
- DCLG (Department of Communities and Local Government) 2012 National Planning Policy Framework.
- EEA (East Anglian Archaeology) 2003 *Standards for Field Archaeology in the East of England* East Anglian Archaeology. Occasional Papers **14**.

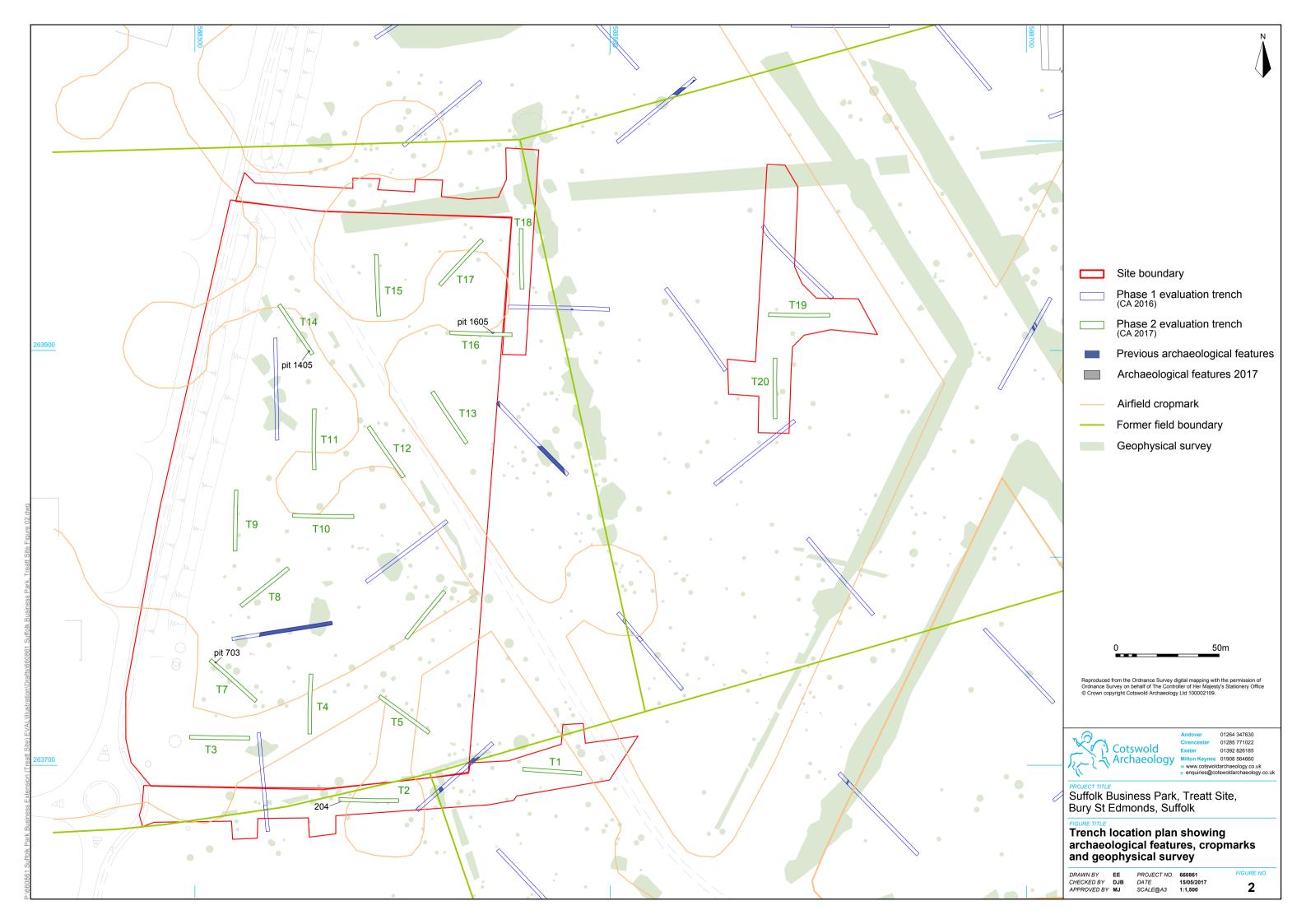
Magnitude Surveys, 2016 Geophysical Survey Report MSTL33 of Land at Moreton Hall, Bury St Edmunds, Suffolk.

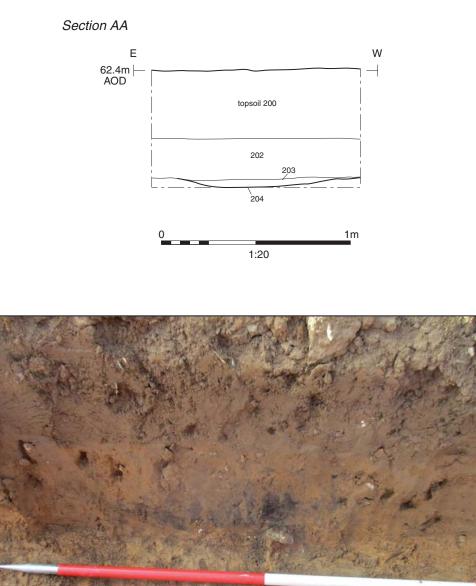
- Medlycott, M. (Ed.) East Anglian Archaeology. 2011, Research and Archaeology Revisited: a revised framework for the East of England. Occasional Papers 24.
- SACIC (Suffolk Archaeology) 2015 Bury St Edmunds Eastern Relief Road, Rougham, Suffolk: Archaeological Evaluation, SACIC Report No 2015/055. Suffolk Archaeology.
- SACIC (Suffolk Archaeology) 2016 Land East of Moreton Hall, Rushbrooke with Rougham, Suffolk: Archaeological Excavation, SACIC Report No 2015/078.

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- Suffolk County Council Archaeological Services (SCCAS) 2012 Requirements for a trenched archaeological evaluation, <u>https://www.suffolk.gov.uk/culture-heritage-and-leisure/suffolk-archaeological-service/archaeological-planning-and-countryside-advice/</u>, accessed September 2016.
- SCCAS 2014 Archaeological Archives in Suffolk: Guidelines for Preparation and Deposition, Unpublished Report.
- SCCAS 2016 Brief for a Trenched Archaeological Evaluation at Western Part of the Suffolk Business Park Extension, Rougham



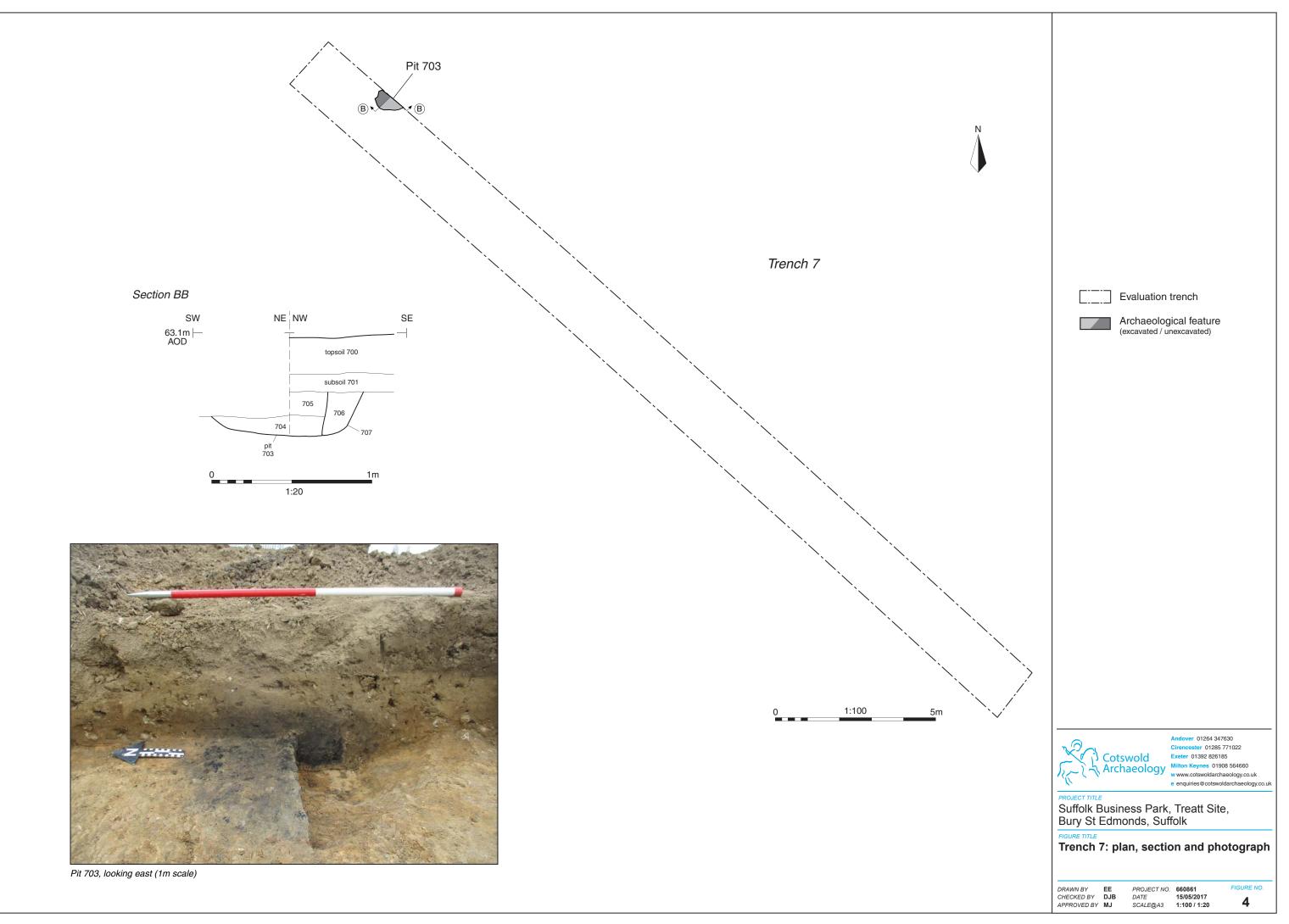


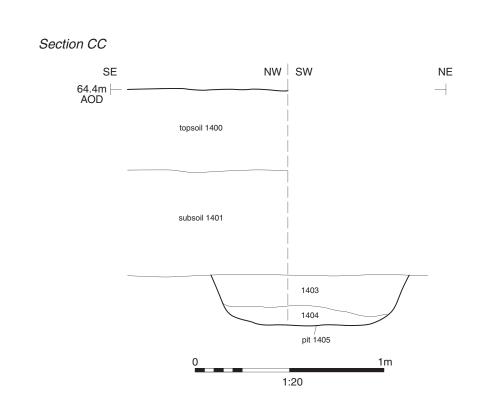




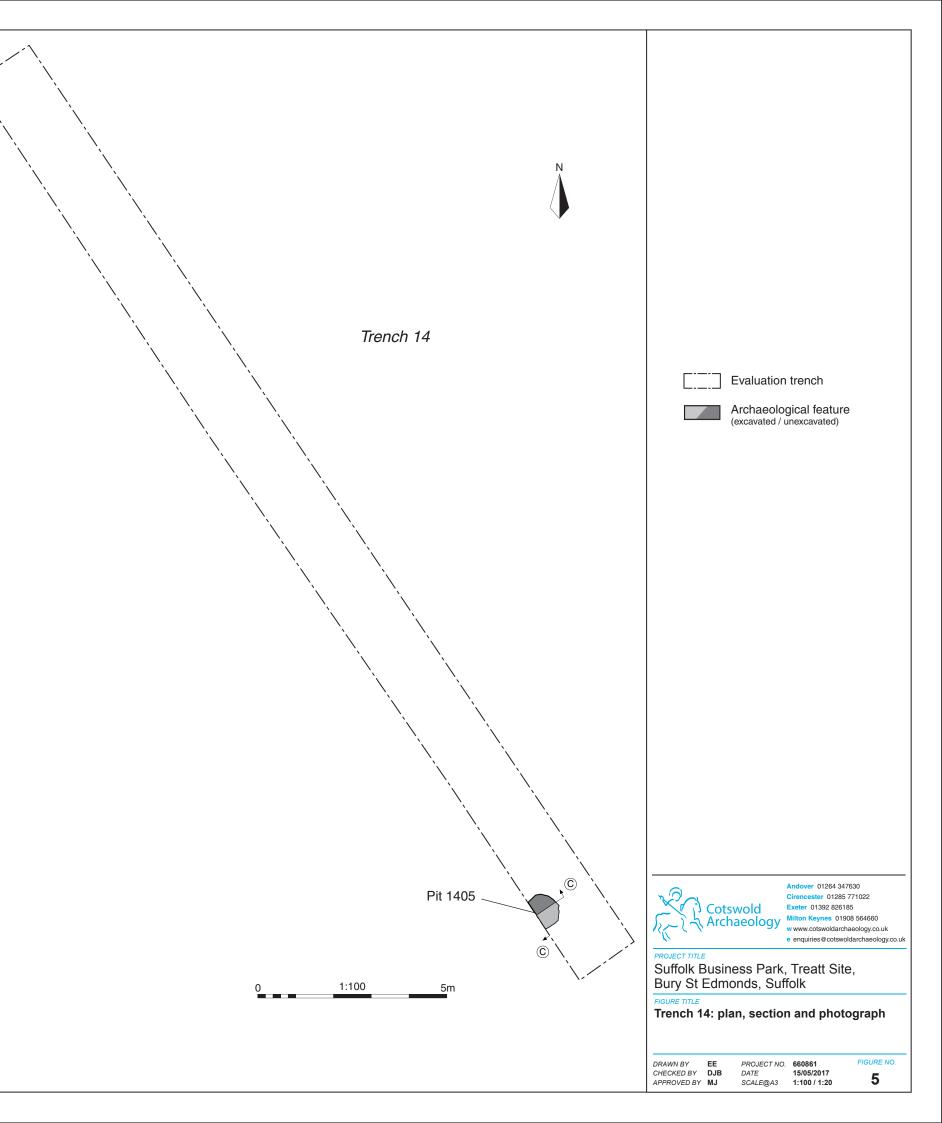
Archaeological feature 204, looking south (scale 1m)

Andover 01264 347630 Cirencester 01285 771022 Exeter 01392 826185 Milton Keynes 01908 564660 w www.cotswoldarchaeology.co.uk e enquiries@cotswoldarchaeology.co.uk
Suffolk Business Park, Treatt Site, Bury St Edmonds, Suffolk
Trench 2: section and photograph
DRAWN BY EE PROJECT NO. 660861 FIGURE NO. CHECKED BY DJB DATE 15/05/2017 APPROVED BY MJ SCALE@A4 1:20 3

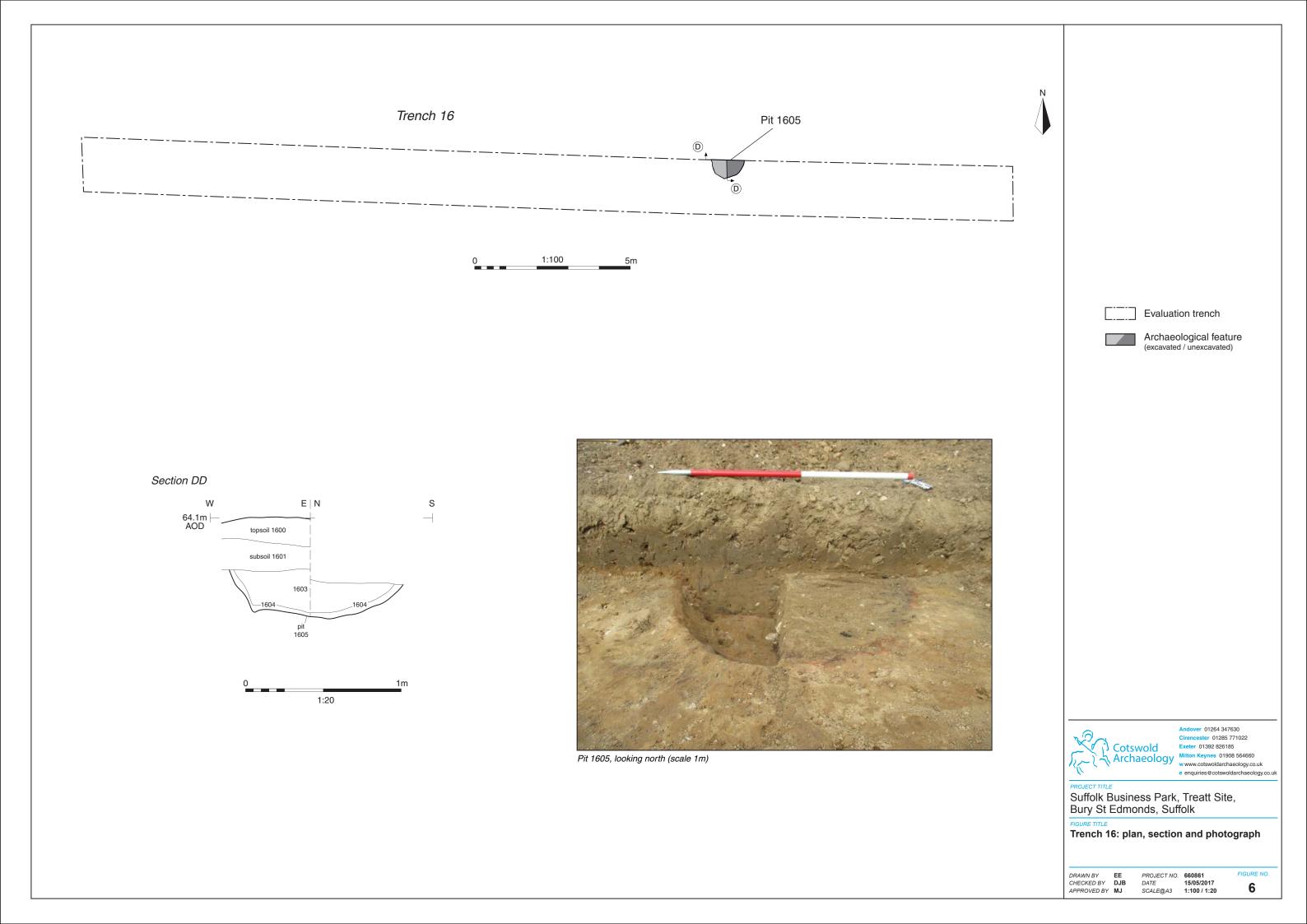








Pit 1405, looking south-west (1m scale)



#### APPENDIX A: CONTEXT DESCRIPTIONS

Trench No.	Context No.	Туре	Fill of	Context interpretation	Description	L (m)	W (m)	D (m)
1	100	Layer		Topsoil	Mid grey brown sand silt, occasional small stones	30	1.8	0.32
1	101	Layer		Subsoil	Light brown grey sand silt, friable	30	1.8	0.30
1	102	Layer		Natural Substrate	Mid brown orange sand clay, occasional stones	30	1.8	-
1	103	Cut		Field drain	Vertical sided Cut for field drain	1.98	0.34	-
1	104	Fill	103	Field drain fill	Infill for field drain in 103	1.98	0.34	-
2	200	Layer		Topsoil	Mid grey brown sand silt, occasional small stones	30	1.8	0.40
2	201	Layer		Subsoil	Light brown grey sand silt, friable	30	1.8	0.22
2	202	Layer		Natural Substrate	Mid brown orange sand clay, occasional stones	30	1.8	-
2	203	Fill	204	Fill of Pit	Dark grey black charcoal rich clay silt	0.9	-	0.06
2	204	Cut		Cut of Pit	Concave based pit, caught in section	0.9	-	0.06
3	300	Layer		Topsoil	Mid grey brown sand silt, occasional small stones	30	1.8	0.40
3	301	Layer		Subsoil	Light brown grey sand silt, friable	30	1.8	0.20
3	302	Layer		Natural Substrate	Mid brown orange sand clay, occasional stones	30	1.8	-
4	400	Layer		Topsoil	Mid grey brown sand silt, occasional small stones	30	1.8	0.48
4	401	Layer		Subsoil	Light brown grey sand silt, friable	30	1.8	0.10
4	402	Layer		Natural Substrate	Mid brown orange sand clay, occasional stones	30	1.8	-
5	500	Layer		Topsoil	Mid grey brown sand silt, occasional small stones	30	1.8	0.40
5	501	Layer		Natural Substrate	Mid brown orange sand clay, occasional stone	30	1.8	-
6	600	Layer		Topsoil	Mid grey brown sand silt, occasional small stones	30	1.8	0.34
6	601	Layer		Natural Substrate	Mid brown orange sand clay, occasional stones	30	1.8	-
7	700	Layer		Topsoil	Mid grey brown sand silt, occasional small stones	30	1.8	0.32
7	701	Layer		Subsoil	Light brown grey sand silt, friable	30	1.8	0.20
7	702	Layer		Natural Substrate	Mid brown orange sand clay, occasional stones	30	1.8	-
7	703	Cut		Cut of Pit	Flat based charcoal rich pit, half into baulk	>0.50	0.73	0.23
7	704	Fill	703	Fill of Pit	Charcoal rich fill, <i>in situ</i> burning, in pit 703	>0.50	0.21	0.13
7	705	Fill	703	Fill of Pit	Backfill of pit 703, covering <i>in situ</i> burning 704	0.23	0.15	0.15
7	706	Fill	707	Fill of Plough scar	Mid grey brown silt sand fill of 707	0.25	0.27	-
7	707	Cut		Plough scar	Truncating pit 703, charcoal rich pit	0.25	0.27	-
8	800	Layer		Topsoil	Mid grey brown sand silt, occasional small stones	30	1.8	0.36
8	801	Layer		Subsoil	Light brown grey sand silt, friable	30	1.8	0.16
8	802	Layer		Natural Substrate	Mid brown orange sand clay, occasional stones	30	1.8	-
9	900	Layer		Topsoil	Mid grey brown sand silt, occasional small stones	30	1.8	0.38
9	901	Layer		Subsoil	Light brown grey sand silt, friable	30	1.8	0.17
9	902	Layer		Natural Substrate	Mid brown orange sand clay, occasional stones	30	1.8	-
10	1000	Layer		Topsoil	Mid grey brown sand silt, occasional small stones	30	1.8	0.35
10	1001	Layer		Natural Substrate	Mid brown orange sand clay, occasional stones	30	1.8	-
11	1100	Layer		Topsoil	Mid grey brown sand silt, occasional small stones	30	1.8	0.44
11	1101	Layer		Natural Substrate	Mid brown orange sand clay, occasional stones	30	1.8	-

12	1200	Layer		Topsoil	Mid grey brown sand silt, occasional small stones	30	1.8	0.38
12	1201	Layer		Subsoil	Light brown grey sand silt, friable	30	1.8	0.21
12	1202	Layer		Natural Substrate	Mid brown orange sand clay, occasional stones	30	1.8	-
13	1300	Layer		Topsoil	Mid grey brown sand silt, occasional small stones	30	1.8	0.32
13	1301	Layer		Natural Substrate	Mid brown orange sand clay, occasional stones	30	1.8	-
14	1400	Layer		Topsoil	Mid grey brown sand silt, occasional small stones	30	1.8	0.44
14	1401	Layer		Subsoil	Light brown grey sand silt, friable	30	1.8	0.56
14	1402	Layer		Natural Substrate	Mid brown orange sand clay, occasional stones	30	1.8	-
14	1403	Fill	1405	Fill of Pit	Upper fill of 1405, mid grey brown clay sand	0.95	0.66	0.21
14	1404	Fill	1405	Fill of Pit	Lower fill of 1405, charcoal rich clay sand	0.72	0.65	0.09
14	1405	Cut		Cut of Pit	Pit with in situ burning 1404, covered by 1403	0.95	0.66	0.25
15	1500	Layer		Topsoil	Mid grey brown sand silt, occasional small stones	30	1.8	0.41
15	1501	Layer		Natural Substrate	Mid brown orange sand clay, occasional stones	30	1.8	-
16	1600	Layer		Topsoil	Mid grey brown sand silt, occasional small stones	30	1.8	0.43
16	1601	Layer		Subsoil	Light brown grey sand silt, friable	30	1.8	0.07
16	1602	Layer		Natural Substrate	Mid brown orange sand clay, occasional stones	30	1.8	-
16	1603	Fill	1605	Fill of Pit	Upper fill 1605, mid grey brown clay sand	1.14	>0.6	0.29
16	1604	Fill	1605	Fill of Pit	Lower fill 1605, charcoal rich clay sand	1.14	0.6	0.05
16	1605	Cut		Cut of Pit	Pit with in situ burning 1604, covered by 1603	1.14	0.6	0.31
17	1700	Layer		Topsoil	Mid grey brown sand silt, occasional small stones	30	1.8	0.43
17	1701	Layer		Natural Substrate	Mid brown orange sand clay, occasional stones	30	1.8	-
18	1800	Layer		Topsoil	Mid grey brown sand silt, occasional small stones	30	1.8	0.49
18	1801	Layer		Natural Substrate	Mid brown orange sand clay, occasional stones	30	1.8	-
19	1900	Layer		Topsoil	Mid grey brown sand silt, occasional small stones	30	1.8	0.45
19	1901	Layer		Natural Substrate	Mid brown orange sand clay, occasional stones	30	1.8	-
20	2000	Layer		Topsoil	Mid grey brown sand silt, occasional small stones	30	1.8	0.45
20	2001	Layer		Natural Substrate	Mid brown orange sand clay, occasional stones	30	1.8	-

#### APPENDIX B: THE FINDS

Context	Category	Description	Count	Weight (g)	Spot-date
100	Worked flint	Flake	1	48	-
200	Worked flint	Flake	4	32	-
1300	Worked flint	Flake	2	18	-
1600	Worked flint	Flake	3	10	-
1800	Post-medieval ceramic building material	Flat roof tile	1	21	-
	Worked flint	Flakes, retouched flakes, spurred piece	12	129	

#### APPENDIX C: THE PALAEOENVIRONMENTAL EVIDENCE

## Charcoal identifications

Context nu	mber		1404	1604	704
Feature nu	nber		1405	1605	703
Sample nur	nber (SS)		2	4	5
Flot volume	ə (ml)		2239	598	969
Sample vol	ume processed (I)		20	18	17
Soil remain	ing (l)		10	0	0
Period		UD	UD	UD	
Charcoal q	uantity >2mm		+++++	+++++	+++++
Charcoal p	reservation		Good	Good	Moderate
Family	Species	Common Name			
Fagaceae	Quercus petraea (Matt.) Liebl./ Quercus robur L.	Sessile Oak/ Pedunculate Oak s/w	3		
	Quercus petraea (Matt.) Liebl./ Quercus robur L.	Sessile Oak/ Pedunculate Oak h/w	3	3	7
	Quercus petraea (Matt.) Liebl./ Quercus robur L.	Sessile Oak/ Pedunculate Oak	4	7	
		Total	10	10	10

Key s/w = sapwood; h/w = heartwood + = 1-4 fragments; ++ = 4-20 items; +++ = 21-49 items; ++++ = 50-99 items; +++++ = 100-500 items; +++++ = >500 items

UD = undated

#### APPENDIX D: OASIS DATA COLLECTION FORM

## OASIS ID: cotswold2-278600

Project details	
Project name	Suffolk Business Park, Bury St Edmunds (Treatt Site)
Short description of the project	An archaeological evaluation was undertaken by Cotswold Archaeology in April 2017at Suffolk Business Park, at the Treatt Site. Twenty trenches were excavated. Four pits, two with in situ burning, one with burning deposit, and one that was heavily truncated and recorded in section, were exposed during the second phase of archaeological evaluation on the site. The characteristics of the features suggest a relation to the limited early medieval (Saxon) activity found within similar pits in the initial phase of evaluations. In addition, modern disturbances and deposits of ferrous metal objects, associated with the later use of the site as an American airfield during the Second World War, were found across the site.
Project dates	Start: 10-04-2017 End: 13-04-2017
Previous/future work	Yes / Not known
Any associated project reference codes	660861 - Contracting Unit No.
Any associated project reference codes	ESF25464 - HER event no.
Type of project	Field evaluation
Monument type	AIRFIELD Modern
Significant Finds	0 None
Methods & techniques	""Targeted Trenches""
Prompt	Planning condition
Project location	
Country	England
Site location	SUFFOLK ST EDMUNDSBURY BURY ST EDMUNDS Suffolk Business Park, Bury St Edmunds (Treatt Site)
Postcode	IP32 7YL
Study area	4 Hectares
Site coordinates	TL 88600 63800 52.239558917301 0.762553330035 52 14 22 N 000 45 45 E Point
Project creators	
Name of Organisation	Cotswold Archaeology
Project brief originator	Suffolk County Council Archaeological Services
Project design originator	Cotswold Archaeology

Project director/manager	Mark Hewson
Project supervisor	Michael Joyce
Project archives	
Physical Archive recipient	Suffolk County Council Archaeological Services
Physical Contents	"Worked stone/lithics","other"
Digital Archive recipient	Suffolk County Council Archaeological Services
Digital Contents	"none"
Digital Media available	"Images raster / digital photography","Text"
Paper Archive recipient	Suffolk County Council Archaeological Services
Paper Contents	"none"
Paper Media available	"Context sheet","Miscellaneous Material","Photograph","Report","Section"
Project bibliography 1	
Publication type	Grey literature (unpublished document/manuscript)
Title	Suffolk Business Park, Treatt Site, Bury St Edmunds, Suffolk: Archaeological Evaluation
Author(s)/Editor(s)	Joyce, M.
Other bibliographic details	17222
Date	2017
Issuer or publisher	Cotswold Archaeology
Place of issue or publication	Cotswold Archaeology, Milton Keynes
Entered by	Hazel O'Neill (hazel.o'neill@cotswoldarchaeology.co.uk)
Entered on	

## APPENDIX E: SUFFOLK PARK BUSINESS EXTENSION, BURY ST EDMUNDS: WRITTEN SCHEME OF INVESTIGATION FOR AN ARCHAEOLOGICAL EVALUATION





# Suffolk Business Park Treatt Site Bury St Edmunds Suffolk

Written Scheme of Investigation for an Archaeological Evaluation



for Jaynic Suffolk Park Ltd

CA Project: 660861 HER CODE: RGH 094 Event No: ESF25464

OASIS No: cotswold2-278600

March 2017



Andover Cirencester Exeter Milton Keynes

Suffolk Business Park Treatt Site Bury St Edmunds Suffolk

Written Scheme of Investigation for an Archaeological Evaluation

> CA Project: 660861 HER CODE: RGH 094 Event No: ESF25464

OASIS No: cotswold2-278600



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С	08/03/17	AW	MPH	FOR	FOR LPA APPROVAL	MPH		
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Figure 1 Trench location plan

## 1. INTRODUCTION

- 1.1 This document sets out details of a *Written Scheme of Investigation* (WSI) by Cotswold Archaeology (CA) for an archaeological evaluation and metal detecting survey of the Treatt Site (henceforth 'the site'), Suffolk Business Park, Bury St Edmunds, Suffolk (centred at NGR: TL 8867 6388) at the request of the client, Jaynic Suffolk Park Ltd, and in liaison with Rachael Abraham, Senior Archaeological Officer, Suffolk County Council Archaeological Service (SCCAS). This programme of work comprises a second phase of evaluation across one part of the wider site (the Treatt site) and follows an evaluation undertaken by CA in November 2016 (CA 2016) across the whole Suffolk Business Park Site (henceforth referred to as 'SBP site'). Further evaluation will be required across the rest of the phases of the wider site, plus archaeological mitigation works, as required. Any such further archaeological evaluation or mitigation works would require separately approved Written Schemes of Investigation).
- 1.2 A planning application has been made to St Edmundbury Borough Council for commercial development of the site (DC/16/2825). Rachael Abraham (SCCAS) has requested that further archaeological evaluation trenching be carried out in order to provide sufficient information to inform the decision-making process and determine the resultant planning application. This evaluation follows and is informed by the recently undertaken geophysical survey (Magnitude Surveys 2016) and evaluation undertaken by CA in November 2016 (CA 2016). It should be noted that this second phase of evaluation has been requested post-consent as a condition should planning permission (DC/16/2825) be granted.
- 1.3 This WSI has been guided in its composition by the Brief provided by the Senior Archaeological Officer at Suffolk County Council dated 5 January 2017 (Abraham 2017), Standard and guidance: Archaeological field evaluation (CIfA 2014), the Suffolk County Council Requirements for archaeological evaluation 2012 Ver 1.3 (Suffolk County Council Archaeology Service 2012), Standards for Field Archaeology in the East of England (EEA 2003), the Management of Archaeological Projects 2 (English Heritage 1991), the Management of Research Projects in the Historic Environment (MORPHE): Project Manager's Guide (HE 2015) and any other relevant standards or guidance contained within Appendix B.

## The site

- 1.4 The site is located on the eastern outskirts of Bury St Edmunds at approximately 62m above Ordnance Datum (aOD). It comprises part of the western portion of a large arable field, formerly part of the RAF Rougham Airbase. The site is bounded to the north by a new road alignment (currently under construction) and Rougham Airfield, to the east and west by industrial estates (forming part of the current Suffolk Business Park) and to the south by the A14 duel carriageway and agricultural land.
- 1.5 The solid geology of the site is mapped as the Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation of the Cretaceous period. (BSG 2016). Previous archaeological investigations (SCCAS 2014) in the immediate vicinity of the site indicate that the geology occurs at a depth of between 0.5 0.7m below ground level (BGL).
- 1.6 The solid geology is overlain by a superficial deposit of Cover Sand, a deposit formed up to 3 million years ago during the Quaternary Period, (BSG 2016). The overlying soils both within, and in the vicinity of the site, consist of freely draining slightly acid but base-rich soils (Soilscapes, August 2016).

## 2. ARCHAEOLOGICAL BACKGROUND

2.1 The following is a summary of information provided in the recently undertaken deskbased assessment, (Fletcher 2016) which was prepared to inform the development proposals, as well as more detailed results from the evaluation performed by CA in November 2016 (CA 2016).

## Prehistoric period (to AD 43)

2.2 The site occupies the crest of a south-facing slope (at *c*. 60m aOD), which overlooks land that gradually descends towards the valley of the River Lark to the south and south-west. This topographic context was typically favoured by prehistoric settlers, providing free draining soils which are easily cultivated. However, throughout East Anglia, evidence for early prehistoric occupation in the region is limited (Medlycott 2011). Mesolithic worked flints recovered from plough soil have been found *c*. 320m south of the site, which were concentrated on similar south-facing slopes. In addition, one assemblage also contained worked lithics from the Bronze Age and Iron Age. The presence of the large collections of flints from just below the crest of a

south-facing slope supports the suggestion that such locations were favoured by early settlement and agricultural exploitation. Given the proximity of the site to these recovered assemblages, isolated finds elsewhere to the south and the site's prevailing topography, there is some potential for the presence of flint artefacts within the site.

- 2.3 An evaluation conducted by CA (CA 2016) revealed flint assemblages dated to the prehistoric period including retouched flint tools as well as small pits which mirror the morphology of smaller pits at Grimes Graves suggesting flint mining had been attempted in the area.
- 2.4 Elsewhere, *c*. 180m west of the site an evaluation identified Neolithic settlement activity including 53 sherds of flint-gritted pottery as well as pieces of an early Neolithic carinated bowl. Sealed by this postulated occupation layer, several post holes and pits were also recorded. In addition, a series of undated pits, ditches and gullies have been identified to the west of the site, as well as further remains to the north, which are considered likely to relate to other areas of earlier prehistoric activity.
- 2.5 An evaluation to the north of the site identified a 'sparse archaeological horizon' comprising the dispersed remains of 16 pits or postholes, eight ditches, and an assemblage of middle Iron Age pottery. These remains appear primarily to relate to Iron Age agricultural activity, rather than evidence of settlement. There is potential therefore that evidence of Iron Age activity may continue into the north-eastern part of the site although the recorded remains to the north were heavily truncated by perimeter tracks and runways associated with RAF Rougham. The recently undertaken geophysical survey of the site whilst successfully identifying extensive buried remains associated with the former airbase did not identify any significant anomalies which may be associated with earlier archaeological remains (Magnitude Surveys 2016).
- 2.6 Within the wider landscape, archaeological investigation has identified further evidence of Iron Age activity, including pottery, animal bone and pits and ditches. These include a concentration of over 30 pits, postholes and one hollow recorded *c*. 500m north-west of the Site. Eight of these postholes contained animal bone, late Iron Age pottery, fired clay and in one example, the remnants of a loom weight. Further to this, excavation on land to the east of Moreton Hall revealed evidence of

Early and Middle Iron Age activity indicative of a small farmstead. This too revealed evidence of domestic activity including textile working in the form of loomweight fragments. The settlement is represented by the remains of four, possible granary structures, a number of pits, enclosure ditches and fire-pits.

## Middle Iron Age

2.7 The evaluation revealed the possible continuation of a north/south orientated Iron Age boundary ditch identified during previous phases of excavation to the north of the current development area (SACIC 2016).

## Roman period (AD 43 to 410)

- 2.8 In contrast to the widespread evidence of Iron Age (and earlier) activity in the wider landscape, evidence for Roman period activity is relatively limited, and appears to have been focused *c*. 4km to the south-east of the site on the lower ground of the Lark Valley. Remains include the Eastlow Hill Tumulus and the remains of a Roman period building to the south-west of Lake Farm.
- 2.9 Elsewhere, two shallow pits of Roman date have been recorded *c*. 400m to the north of the site and Roman period pottery has been recovered *c*. 900m north of the site. Additionally, Roman period artefacts have also been recorded through the Portable Antiquities Scheme to the north-west of the site.

## Early medieval and medieval periods (AD 410 – 1539)

- 2.10 The Site is likely to have comprised part of the agricultural hinterland of nearby settlements throughout the early medieval period. Settlements surrounding the site recorded in the Domesday Survey include Rougham, Rushbrooke and Thurston. These all appear to be large settlements whose lord or overlord in 1066 (and later in 1086) was the Abbey of St Edmunds.
- 2.11 The 2016 CA evaluation recorded dispersed early medieval activity within the Suffolk Business Park Site, consisting of three areas of *in-situ* burning dated from radiocarbon samples to 714-994 cal AD (CA 2016). The results have been interpreted as the remains of limited early medieval domestic activity, potentially associated with an early monastic community in the area which would develop into Bury St Edmunds.

- 2.12 During the medieval period, a number of settlement foci emerged within the wider landscape, including establishments associated with monks of the Benedictine order who settled in Bury St Edmunds in AD 1020. Between 1100 and 1300 the Abbey grew in strength, although long-standing issues between the town of Bury St Edmunds and the Abbey led to a revolt in 1327, during which the manor houses owned by the Abbots were burnt down. Investigations at Eldo House Farm identified features relating to a possible monastic grange, *c*. 580m west of the site. The remains included two walls formed of bonded flint, which possibly related to a structure associated with the grange. A further possible medieval settlement focus has also been recorded at Catsale Green, *c*. 890m to the north of the site. Archaeological investigations in these areas have recorded ditches and gullies, potentially associated with the boundary of the settlement and of associated fields, as well as the remains of a kiln.
- 2.13 It is likely that during the medieval period, the site comprised agricultural land belonging to the Manor of *Eldhawe* (as part of the Eldo Estate).

#### Post-medieval and modern periods (1539 to present)

- 2.14 The site and its surrounding environs remained predominantly agricultural during the post-medieval period. The results of previous investigations in the wider area confirm this, indicating the removal of a number of hedgerows to enlarge fields. Mapping indicates a dispersed settlement pattern within the wider area, focused for example, on Eldo House Farm and Catsale, with the surrounding land, including the site, forming part of their agricultural hinterland.
- 2.15 At the turn of the 19th century the site remained in agricultural use, presumably still forming part of the Eldo Estate. Toward the end of the 19th century there is cartographic evidence of the remains of small-scale extractive pits within the site and surrounding area, although this remains set within the prevailing agricultural landscape until the development of Rougham Airbase during World War II.
- 2.16 RAF Rougham was constructed to standard plans used for numerous other airfields and had three runways, 50 dispersal points and a connecting perimeter track. The key principle of the design was to disperse aircraft quickly to minimise against concentrated bomb attacks. The technical buildings associated with the functioning of the airbase were located to the east of the runways (well beyond the site), whilst the domestic buildings used by the personnel on the airbase were located south-

east of the airfield in the village of Blackthorpe. Previous archaeological evaluation immediately north of the site recorded the buried remains of the runway, including two large drainage channels, filled with clinker, spaced approximately 50m apart extending towards the site on the alignment of the western runway. The evaluation noted a severe degree of truncation in the areas of the former runways cutting into the natural substrate. A number of these trenches recorded layers of coarse sand and clays that contained modern brick, glass and concrete, and was presumably deposited in part to form the sub-base for the runways.

2.17 Furthermore, the remains of ten possible 'fog-lifter' pits were recorded during the evaluation north of the Site. These pits are generally associated with airfields from the Second World War and were small, shallow pits that were filled with petrol and burnt in an attempt to clear thick fog and allow aircraft to land safely. It is likely remains of the former airfield will survive within the site and that these will also have impacted the survival of potential earlier buried archaeological remains. There is a potential also that some of these features may actually be of early medieval origin, as evidenced with a number of radiocarbon dates, both at Rougham airfield and at other airfield sites across the county.

## 3. AIMS AND OBJECTIVES

3.1 The objectives of the evaluation and metal detecting survey are to provide additional information about the archaeological resource within the site, including its presence/absence, character, extent, date, integrity, state of preservation and quality. In accordance with Standard and guidance: Archaeological field evaluation (CIfA 2014), the evaluation has been designed to be minimally intrusive and minimally destructive to archaeological remains. In addition, this phase of work will seek to identify any potential remains which may be considered of national significance and on that basis may require preservation in situ. The information gathered will enable Suffolk County Council Archaeological Services to identify and assess the particular significance of any heritage asset, consider the impact of the proposed development upon it, and to avoid or minimise conflict between the heritage asset's conservation and any aspect of the development proposal, in line with the National Planning Policy Framework (DCLG 2012). This will serve to provide sufficient information to enable a mitigation strategy to be developed, should it be required.

3.2 The results will be considered with reference to *Research and Archaeology revisited: A Framework for the East of England* (Medlycott 2011).

### 4. METHODOLOGY

#### Metal detecting survey

- 4.1 Metal detecting during fieldwork will be undertaken on the existing ground surface along the alignment of each trench prior to excavation by a trained member of staff, on all arising spoil during overburden stripping and prior to / during the excavation of exposed archaeological features.
- 4.2 Metal detecting will target ferrous and non-ferrous metals, though due to the potential for a large number of ferrous metal signals across most agricultural land parcels and especially the former airbase, this may result in considerable on-site discard (with the consent of SCCAS). Metal-detected finds will be plotted by GPS.
- 4.3 Artefacts will be labelled with a unique ID number. They will be stored in breathable plastic bags or wrapped in acid-free tissue and placed in plastic cases, as appropriate. Artefacts of undoubted modern date will be collected and bagged together and a single ID number will be allocated.
- 4.4 This element of the programme will be undertaken by Matt Nichol, an Experienced Project Officer with professional experience of metal detecting on a number of archaeological sites, including recently at Crewkerne in Somerset and Keephatch in Berkshire.

## Evaluation methodology

4.4 The evaluation will comprise the excavation of up to 20 trenches, equating to a 2% sample of the c.6ha site, in the locations shown on the attached plans (Figures 1 and 2). Each of these will be 30m long and 1.8m wide. Trenches will be set out on OS National Grid (NGR) co-ordinates using Leica GPS, and scanned for live services by trained Cotswold Archaeology staff using CAT and Genny equipment in accordance with the Cotswold Archaeology *Safe System of Work for avoiding underground services*. The position of the trenches may be adjusted on site to account for services and other constraints, with the approval of the Senior

Archaeological Officer to the Suffolk County Council. The final 'as dug' trench plan will be recorded with GPS.

- 4.5 All trenches will be excavated by a mechanical excavator equipped with a toothless grading bucket. All machining will be conducted under archaeological supervision and will cease when the first archaeological horizon or natural substrate is revealed (whichever is encountered first). Topsoil and subsoil will be stored separately adjacent to each trench.
- 4.6 Following machining, all archaeological features revealed will be planned and recorded in accordance with Cotswold Archaeology Technical Manual 1: Fieldwork Recording Manual. Each context will be recorded on a pro-forma context sheet by written and measured description; principal deposits will be recorded by drawn plans (scale 1:20 or 1:50, or electronically using Leica GPS or Total Station (TST) as appropriate) and drawn sections (scale 1:10 or 1:20 as appropriate). Where detailed feature planning is undertaken using GPS/TST this will be carried out in accordance with Cotswold Archaeology Technical Manual 4: Survey Manual. Photographs (digital colour) will be taken as appropriate. All finds and samples will be bagged separately and related to the context record. All artefacts will be recovered and retained for processing and analysis in accordance with Cotswold Archaeology Technical Immediately after Excavation.
- 4.7 Sample excavation of archaeological deposits will be limited and minimally intrusive, sufficient to achieve the aims and objectives identified in Section 3 above. At this initial stage of evaluation all archaeological features will be sample excavated as per SCCAS requirements, unless discussed and agreed with SCCAS, in examples where evidence of archaeological features or remains may remain unevaluated until the subsequent mitigation stage of the programme. Where appropriate excavation will not compromise the integrity of the archaeological record, and will be undertaken in such a way as to allow for the subsequent protection of remains either for conservation or to allow more detailed investigations to be conducted under better conditions at a later date.
- 4.8 Artefacts from topsoil and subsoil and unstratified contexts whilst normally simply noted but not retained unless they are of intrinsic interest (e.g. worked flint or flint debitage, featured pottery sherds, and other potential 'registered artefacts'), will be retained at this stage of the programme and assessed by the appropriate specialists.

All artefacts will be collected from stratified excavated contexts except for large assemblages of post-medieval or modern material. Such material may be noted and not retained, or, if appropriate, a representative sample may be collected and retained.

- 4.9 Where human remains are encountered, these will not normally be excavated, but will be planned and recorded in detail. Where excavation of human remains is required, this will be conducted following the provisions of the Coroners Unit in the Ministry of Justice, including the obtaining of relevant licence documentation.
- 4.10 Due care will be taken to identify deposits which may have environmental potential, and where appropriate, a programme of environmental sampling will be initiated in line with English Heritage (Historic England) guidelines (English Heritage 2011). As a minimum 40 litre bulk samples will be recovered from appropriate archaeological features. Samples will be taken, processed and assessed for potential in accordance with *Cotswold Archaeology Technical Manual 2: The Taking and Processing of Environmental and Other Samples from Archaeological Sites.* If appropriate, specialist advice will be sought from Sarah Cobain, CA's environmental archaeology specialist or the Historic England Regional Archaeological Science Advisor (East of England).
- 4.11 Upon completion of this stage of the evaluation programme and with the approval of SCCAS all trenches will be backfilled as dug by mechanical excavator.
- 4.12 CA will comply fully with the provisions of the Treasure Act 1996 and the Code of Practice referred to therein. All treasure finds will be reported immediately to Suffolk's Finds Liaison Officer, who in turn will inform the Coroner within 14 days.

# 5. STAFF AND TIMETABLE

- 5.1 This project will be under the management of Mark Hewson, Project Manager, CA.
- 5.2 The staffing structure will be organised thus: the Project Manager will direct the overall conduct of the evaluation as required during the period of fieldwork. Day to day responsibility however will rest with the Project Leader who will be on-site throughout the project.

- 5.3 The field team will consist of a maximum of four staff (eg one Project Officer and three Archaeologists).
- 5.4 It is anticipated that fieldwork will commence on 18th April 2017, though this is yet to be confirmed, with the fieldwork element to be completed within 5 working days.Analysis of the results and subsequent reporting will take up to a further four weeks.
- 5.5 Specialists who will be invited to advise and report on specific aspects of the project as necessary are:

Ceramics	Ed McSloy (CA)
Metalwork	Ed McSloy (CA)
Flint	Ed McSloy (CA)
Animal Bone	Andy Clarke (CA)
Human Bone	Dr Sharon Clough (CA)
Environmental Remains	Sarah Cobain (CA)
Conservation	Wiltshire Conservation Service
Geoarchaeology	Dr Keith Wilkinson (ARCA)

5.6 Depending upon the nature of the deposits and artefacts encountered it may be necessary to consult other specialists not listed here. A full list of specialists currently used by Cotswold Archaeology is contained within Appendix A.

# 6. POST-EXCAVATION, ARCHIVING AND REPORTING

- 6.1 Following completion of fieldwork, all artefacts and environmental samples will be processed, assessed, conserved and packaged in accordance with CA Technical Manuals and *Archaeological archives in Suffolk: guidelines for preparation and deposition* (SCCAS 2014).
- 6.2 An illustrated report will be compiled on the results of the fieldwork and assessment of the artefacts, palaeoenvironmental samples etc. The report will include: a nontechnical summary; an introduction to the project; an archaeological and historical background; an objective text account of the archaeological results, supported by tabulated data that enables appropriate re-assessment of the results by other parties

without recourse to the project archive; a quantification and assessment of the finds and environmental materials; and an interpretative conclusion regarding the archaeological content of the site. The report will include appropriate illustrations of the site, its context and individual trenches, features and contexts where appropriate. The associated appendices will also include a completed OASIS form and a copy of the final approved WSI. A digital version of the report (either in .pdf or .doc format) will be issued to the client for approval prior to submission to SCCAS for its approval. Once finalised, copies of the report will be distributed to the client, SCCAS and Suffolk HER, under a HER number/event number issued by SCCAS.

- 6.3 Should no further work be required, an ordered, indexed, and internally consistent site archive will be prepared and, subject to the agreement of the legal landowner, the artefacts will be deposited with the Suffolk County Council Archaeology Service, in accordance with Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation (Archaeological Archives Forum 2007) and Suffolk County Council Archaeology Service, Archaeological Archives in Suffolk: Guidelines for Preparation and Deposition (2014).
- 6.4 As the limited scope of this work is likely to restrict its publication value, it is anticipated that a short publication note only will be produced, suitable for inclusion within *Proceedings of the Suffolk Institute of Archaeology and History*. A summary of information from the project will also be entered onto the OASIS online database of archaeological projects in Britain.

## 7. HEALTH, SAFETY AND ENVIRONMENT

7.1 CA will conduct all works in accordance with the Health and Safety at Work Act 1974 and all subsequent Health and Safety legislation, CA Health and Safety and Environmental policies and the CA Safety, Health and Environmental Management System (SHE), as well as any Principal Contractor's policies or procedures. A site-specific Project Health and Safety Plan (form SHE 017) will be formulated prior to commencement of fieldwork.

## 8. INSURANCES

8.1 CA holds Public Liability Insurance to a limit of £10,000,000 and Professional Indemnity Insurance to a limit of £10,000,000.

## 9. MONITORING

9.1 Notification of the start of site works will be made to Rachael Abraham (SCCAS) so that there will be opportunities to visit the evaluation and check on the quality and progress of the work.

# 10. QUALITY ASSURANCE

- 10.1 CA is a Registered Organisation (RO) with the Chartered Institute for Archaeologists (RO Ref. No. 8). As a RO, CA endorses the *Code of Conduct* (CIfA 2014) and the *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology* (CIfA 2014). All CA Project Managers and Project Officers hold either full Member or Associate status within the CIfA.
- 10.2 CA operates an internal quality assurance system in the following manner. Projects are overseen by a Project Manager who is responsible for the quality of the project. The Project Manager reports to the Chief Executive who bears ultimate responsibility for the conduct of all CA operations. Matters of policy and corporate strategy are determined by the Board of Directors, and in cases of dispute recourse may be made to the Chairman of the Board.

# 11. PUBLIC ENGAGEMENT, PARTICIPATION AND BENEFIT

11.1 This project will not afford opportunities for public engagement or participation during the course of the fieldwork. However, the results will be made publicly available on the ADS and Cotswold Archaeology websites, as set out in Section 6 above, in due course.

# 12. STAFF TRAINING AND CPD

12.1 CA has a fully documented mandatory Performance Management system for all staff which reviews personal performance, identifies areas for improvement, sets targets

and ensures the provision of appropriate training within CA's adopted training policy. In addition, CA has developed an award-winning Career Development Programme for its staff, which ensures a consistent and high quality approach to the development of appropriate skills.

12.2 As part of the company's requirement for Continuing Professional Development, all members of staff are also required to maintain a Personal Development Plan and an associated log which is reviewed within the Performance Management system. All staff are subject to probationary periods on appointment, with monthly review; for site-based staff additional monthly Employee Performance Evaluations measure and record skills and identify training needs.

## 13. REFERENCES

- Abraham. R. 2017 Brief for a Trenched Archaeological Evaluation at Western Part of the Suffolk Business Park Extension, Rougham
- BGS (British Geological Survey) 2016 *Geology of Britain Viewer* <u>http://maps.bgs.ac.uk/geology viewer\_google/googleviewer.html</u> Accessed September 2016.
- CA (Cotswold Archaeology) 2016 Suffolk Park Bury, St Edmunds, Suffolk, Archaeological Evaluation. CA Report 16615.
- DCLG (Department of Communities and Local Government) 2012 National Planning Policy Framework.
- EEA (East Anglian Archaeology) 2003 *Standards for Field Archaeology in the East of England* East Anglian Archaeology. Occasional Papers **14**
- Fletcher, L. 2016 Suffolk Business Park Extension, Bury St Edmunds, Suffolk: Heritage Desk-Based Assessment. CA Report 16448.
- Magnitude Surveys, 2016 Geophysical Survey Report MSTL33 of Land at Moreton Hall, Bury St Edmunds, Suffolk.
- Medlycott, M. (Ed.) East Anglian Archaeology. 2011, Research and Archaeology Revisited: a revised framework for the East of England. Occasional Papers 24
- SACIC (Suffolk Archaeology) 2016 Land East of Moreton Hall, Rushbrooke with Rougham, Suffolk: Archaeological Excavation, SACIC Report No 2015/078.
- Suffolk County Council Archaeological Services (SCCAS) 2011 *Requirements for a trenched archaeological evaluation*, <u>https://www.suffolk.gov.uk/culture-heritage-and-leisure/suffolk-archaeological-service/archaeological-planning-and-countryside-advice/, accessed September 2016.</u>
- SCCAS 2014 Archaeological Archives in Suffolk: Guidelines for Preparation and Deposition, Unpublished Report.

### APPENDIX A: COTSWOLD ARCHAEOLOGY SPECIALISTS

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Neolithic/Bronze Age	Ed McSloy BA MCIFA (CA) Emily Edwards (freelance) Dr Elaine Morris BA PhD FSA MCIFA (University of Southampton)
Iron Age/Roman	Ed McSloy BA MCIFA (CA)
(Samian) (Amphorae stamps)	Kayt Marter Brown BA MSc MCIFA (freelance) Gwladys Montell MA PhD (freelance) Dr David Williams PhD FSA (freelance)
Anglo-Saxon	Paul Blinkhorn BTech (freelance) Dr Jane Timby BA PhD FSA MCIFA (freelance)
Medieval/post-medieval	Ed McSloy BA MCIFA (CA) Kayt Marter Brown BA MSc MCIFA (freelance) Stephanie Ratkai BA (freelance) Paul Blinkhorn BTech (freelance) John Allan BA MPhil FSA (freelance)
South West	Henrietta Quinnell BA FSA MCIFA (University of Exeter)
Clay tobacco pipe	Reg Jackson MLitt MCIFA (freelance) Marek Lewcun (freelance)
Ceramic Building Material	Ed McSloy MCIFA (CA) Dr Peter Warry PhD (freelance)
<b>Other Finds</b> Small Finds	Ed McSloy BA MCIFA (CA)
Metal Artefacts	Katie Marsden BSc (CA) Dr Jörn Schuster MA DPhil FSA MCIFA (freelance) Dr Hilary Cool BA PhD FSA (freelance)
Lithics	Ed McSloy BA MCIFA (CA)
(Palaeolithic)	Jacky Sommerville BSc MA PCIFA (CA) Dr Francis Wenban-Smith BA MA PhD (University of Southampton)
Worked Stone	Dr Ruth Shaffrey BA PhD MCIFA (freelance) Dr Kevin Hayward FSA BSc MSc PhD PCIFA (freelance)
Inscriptions	Dr Roger Tomlin MA DPhil, FSA (Oxford)
Glass	Ed McSloy MCIFA (CA) Dr Hilary Cool BA PhD FSA (freelance) Dr David Dungworth BA PhD (freelance; English Heritage)
Coins	Ed McSloy BA MCIFA (CA) Dr Peter Guest BA PhD FSA (Cardiff University) Dr Richard Reece BSc PhD FSA (freelance)
Leather	Quita Mould MA FSA (freelance)
Textiles	Penelope Walton Rogers FSA Dip Acc. (freelance)
Iron slag/metal technology	Dr Tim Young MA PhD (Cardiff University) Dr David Starley BSc PhD
Worked wood	Michael Bamforth BSc MCIFA (freelance)

<i>Biological Remains</i> Animal bone	Dr Philip Armitage MSc PhD MCIFA (freelance) Dr Matilda Holmes BSc MSc ACIFA (freelance)
Human Bone	Sharon Clough BA MSc MCIFA (CA)
Environmental sampling	Sarah Wyles BA PCIFA (CA) Sarah Cobain BSc MSc ACIFA (CA) Dr Keith Wilkinson BSc PhD MCIFA (ARCA)
Pollen	Dr Michael Grant BSc MSc PhD (University of Southampton) Dr Rob Batchelor BSc MSc PhD MCIFA (QUEST, University of Reading)
Diatoms	Dr Tom Hill BSc PhD CPLHE (Natural History Museum) Dr Nigel Cameron BSc MSc PhD (University College London)
Charred Plant Remains	Sarah Wyles BA PCIFA (CA) Sarah Cobain BSc MSc ACIFA (CA)
Wood/Charcoal	Sarah Cobain BSc MSc ACIFA(CA) Dana Challinor MA (freelance)
Insects	Enid Allison BSc D.Phil (Canterbury Archaeological Trust) Dr David Smith MA PhD (University of Birmingham)
Mollusca	Sarah Wyles BA PCIFA (CA) Dr Keith Wilkinson BSc PhD MCIFA (ARCA)
Ostracods and Foraminifera	Dr John Whittaker BSc PhD (freelance)
Fish bones	Dr Philip Armitage MSc PhD MCIFA (freelance)
Geoarchaeology	Dr Keith Wilkinson BSc PhD MCIFA (ARCA)
Soil micromorphology	Dr Richard Macphail BSc MSc PhD (University College London)
Scientific Dating Dendrochronology	Robert Howard BA (NTRDL Nottingham)
Radiocarbon dating	SUERC (East Kilbride, Scotland) Beta Analytic (Florida, USA)
Archaeomagnetic dating	Dr Cathy Batt BSc PhD (University of Bradford)
TL/OSL Dating	Dr Phil Toms BSc PhD (University of Gloucestershire)
Conservation	Karen Barker BSc (freelance) Pieta Greaves BSc MSc ACR (Drakon Heritage and Conservation)

#### APPENDIX B: ARCHAEOLOGICAL STANDARDS AND GUIDELINES

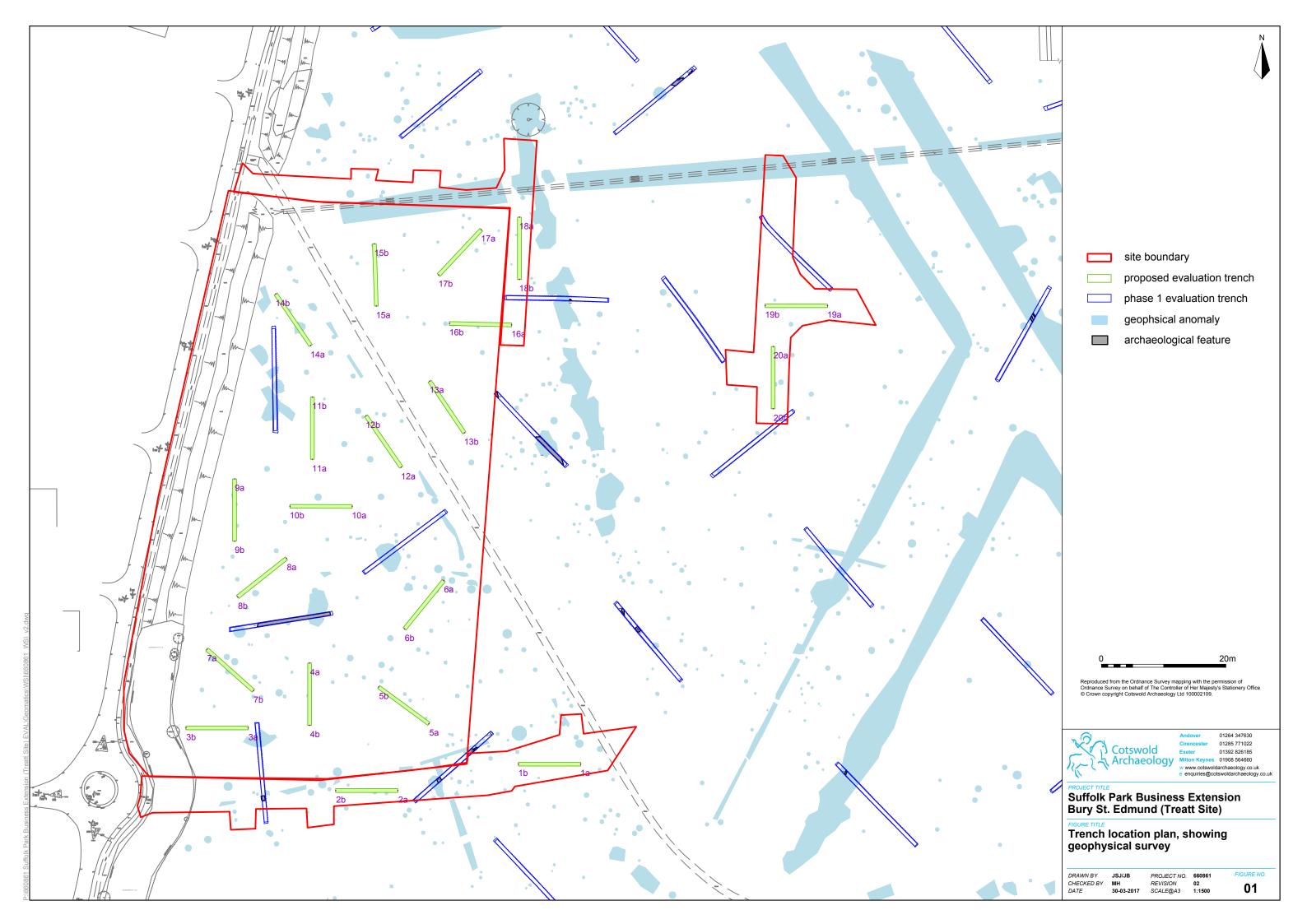
- AAF 2007 Archaeological Archives. A guide to best practice in creation, compilation, transfer and curation. Archaeological Archives Forum
- AAI&S 1988 The Illustration of Lithic Artifacts: A guide to drawing stone tools for specialist reports. Association of Archaeological Illustrators and Surveyors Paper **9**
- AAI&S 1994 The Illustration of Wooden Artifacts: An Introduction and Guide to the Depiction of Wooden Objects. Association of Archaeological Illustrators and Surveyors Paper **11**
- AAI&S 1997. Aspects of Illustration: Prehistoric pottery. Association of Archaeological Illustrators and Surveyors Paper **13**
- AAI&S nd *Introduction to Drawing Archaeological Pottery*. Association of Archaeological Illustrators and Surveyors, Graphic Archaeology Occasional Papers **1**
- ACBMG 2004 Draft Minimum Standards for the Recovery, Analysis and Publication of Ceramic Building Material. (third edition) Archaeological Ceramic Building Materials Group
- AEA 1995 Environmental Archaeology and Archaeological Evaluations. Recommendations concerning the environmental archaeology component of archaeological evaluations in England. Working Papers of the Association for Environmental Archaeology No. **2**
- BABAO and IFA, 2004 *Guidelines to the Standards for Recording Human Remains.* British Association for Biological Anthropology and Osteoarchaeology and Institute of Field Archaeologists. Institute of Field Archaeologists Technical Paper 7 (Reading)
- Barber, B., Carver, J., Hinton, P. and Nixon, T. 2008 Archaeology and development. A good practice guide to managing risk and maximising benefit. Construction Industry Research and Information Association Report C672
- Bayley, J. (ed) 1998 Science in Archaeology. An agenda for the future. English Heritage (London)
- Bewley, R., Donoghue, D., Gaffney, V., Van Leusen, M., Wise, M., 1998 Archiving Aerial Photography and Remote Sensing Data: A guide to good practice. Archaeology Data Service
- Blake, H. and P. Davey (eds) 1983 Guidelines for the processing and publication of Medieval pottery from excavations, report by a working party of the Medieval Pottery Research Group and the Department of the Environment. Directorate of Ancient Monuments and Historic Buildings Occasional Paper 5, 23-34, DoE, London
- Brickley, M. and McKinley, J.I., 2004 *Guidelines to the Standards for Recording Human Remains*. IFA Paper No 7,Institute of Field Archaeologists (Reading)
- Brickstock, R.J. 2004 The Production, Analysis and Standardisation of Romano-British Coin Reports. English Heritage (Swindon)
- Brown, A. and Perrin, K. 2000 A Model for the Description of Archaeological Archives. English Heritage Centre for Archaeology/ Institute of Field Archaeologists (Reading)
- Brown, D.H. 2007 Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation. IFA Archaeological Archives Forum (Reading)
- Buikstra, J.E. and Ubelaker D.H. (eds) 1994 Standards for Data Collection from Human Skeletal Remains. (Fayetteville, Arkansas)
- ClfA, 2014, Code of Approved Practice for the Regulation of Contractual Arrangements in Field
- Archaeology. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for Archaeological Desk-based Assessment. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for Archaeological Watching Brief. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for Archaeological Excavation. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for Archaeological Investigation and Recording of Standing Buildings or Structures. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for the Creation, Compilation, Transfer and Deposition of
- Archaeological Archives. Chartered Institute for Archaeologists (Reading)
- CIFA, 2014, Standard and Guidance for Archaeological Field Evaluation. Chartered Institute for Archaeologists (Reading)
- Clark, J., Darlington, J. and Fairclough, G. 2004 Using Historic Landscape Characterisation. English Heritage (London)
- Coles, J.M., 1990 Waterlogged Wood: guidelines on the recording, sampling, conservation and curation of structural wood. English Heritage (London)
- Cowton, J., 1997 Spectrum. The UK Museums Documentation Standard. Second edition. Museums Documentation Association
- Cox, M., 2002 Crypt Archaeology: an approach. Institute of Field Archaeologists Technical Paper 3 (Reading)
- Darvill, T. and Atkins, M., 1991 Regulating Archaeological Works by Contract. IFA Technical Paper No 8, Institute of Field Archaeologists (Reading)

- Davey P.J. 1981 *Guidelines for the processing and publication of clay pipes from excavations.* Medieval and Later Pottery in Wales, IV, 65-87
- Eiteljorg, H., Fernie, K., Huggett, J. and Robinson, D. 2002 CAD: A guide to good practice. Archaeology Data Service (York)
- EA 2005 Guidance on Assessing the Risk Posed by Land Contamination and its Remediation on Archaeological Resource Management. English Heritage/ Environment Agency Science Report P5-077/SR (Bristol)
- EH 1995 A Strategy for the Care and Investigation of Finds. English Heritage Ancient Monuments Laboratory (London)
- EH 1998 *Identifying and Protecting Palaeolithic Remains*. Archaeological guidance for planning authorities and developers. English Heritage (London)
- EH 1999 Guidelines for the Conservation of Textiles. English Heritage (London)
- EH 2000, Managing Lithic Scatters. Archaeological guidance for planning authorities and developers. English Heritage (London)
- EH 2002 With Alidade and Tape: graphical and plane table survey of archaeological earthworks. English Heritage (Swindon)
- EH 2003a Where on Earth Are We? The Global Positioning System (GPS) in archaeological field survey. English Heritage (London)
- EH 2003b Twentieth-Century Military Sites. Current approaches to their recording and conservation English Heritage (Swindon)
- EH 2004a Dendrochronology. Guidelines on producing and interpreting dendrochronological dates. English Heritage (Swindon)
- EH 2004b Human Bones from Archaeological Sites: Guidelines for producing assessment documents and analytical report. English Heritage Centre for Archaeology Guidelines
- EH 2006a Guidelines on the X-radiography of Archaeological Metalwork. English Heritage (Swindon)
- EH 2006b Archaeomagnetic Dating. English Heritage (Swindon)
- EH 2006c Science for Historic Industries: Guidelines for the investigation of 17th- to 19th-century
  - industries. English Heritage (Swindon)
- EH 2007a Understanding the Archaeology of Landscapes. A guide to good recording practice. English Heritage (Swindon)
- EH 2007b Geoarchaeology. Using earth sciences to understand the archaeological record. (London)
- EH 2008a Luminescence Dating. Guidelines on using luminescence dating in archaeology. English Heritage (Swindon)
- EH 2008b Geophysical Survey in Archaeological Field Evaluation. English Heritage Research and Professional Services Guidelines No 1 (second edition). English Heritage (Swindon)
- EH 2008c Research and Conservation Framework for the British Palaeolithic. English Heritage/Prehistoric Society (Swindon)
- EH 2008d Investigative Conservation. Guidelines on how the detailed examination of artefacts from archaeological sites can shed light on their manufacture and use. English Heritage (Swindon)
- EH 2010 Waterlogged Wood: Guidelines on the recording, sampling, conservation and curation of archaeological wood. English Heritage (London)
- EH 2011 Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation. English Heritage Centre for Archaeology Guidelines (London)
- EH 2012, Guidelines for the Care of Waterlogged Organic Artefacts: guidelines on their recovery, analysis and conservation.
- EH 2014 Our Portable Past: a statement of English Heritage policy and good practice for portable antiquities/surface collected material in the context of field archaeology and survey programmes (including the use of metal detectors). English Heritage (Swindon)
- EH and Church of England, 2005, *Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England*. English Heritage (London)
- Ferguson, L. and Murray, D., 1997, Archaeological Documentary Archives. IFA Paper 1, Institute of Field Archaeologists (Reading)
- Gaffney, C. and Gater, J., with Ovenden, S., 2002, *The Use of Geophysical Techniques in Archaeological Evaluations*. IFA Technical Paper 9, Institute of Field Archaeologists (Reading)
- Gillings, M. and Wise, A., 1999, GIS: A guide to good practice. Archaeology Data Service (York)
- Gurney, D.A., 1985, *Phosphate Analysis of Soils: A Guide for the Field Archaeologist*. IFA Technical Paper 3, Institute of Field Archaeologists (Reading)
- HE 2015a Archaeometallurgy: Guidelines for Best Practice. Historic England (Swindon)
- HE 2015b (revised 2008), Metric Survey Specifications for Cultural Heritage. Historic England (Swindon)
- HE 2015c Management of Research Projects in the Historic Environment. The MoRPHE Project Managers' Guide. Historic England (Swindon)

Handley, M., 1999, *Microfilming Archaeological Archives*. IFA Technical Paper 2, Institute of Field Archaeologists (Reading)

- Mays, S., 1991, Recommendations for Processing Human Bone from Archaeological Sites. Ancient Monuments Lab Report 124/91 (London)
- Mays, S., Brickley, M. and Dodwell, N., 2002, *Human Bones from Archaeological Sites. Guidelines for Producing Assessment Documents and Analytical Reports.* Centre for Archaeology Guidelines, English Heritage (Portsmouth)

- McKinley, J.I. and Roberts, C., 1993, *Excavation and Post-excavation Treatment of Cremated and Inhumed Human Remains*. Institute of Field Archaeologists Technical Paper No. 13 (Reading)
- MGC, 1992, Standards in the Museum Care of Archaeological Collections. Museums and Galleries Commission
- Murphy, P.L. and Wiltshire, P.E.J. 1994, A Guide to Sampling Archaeological Deposits for Environmental Analysis. English Heritage (London)
- MPRG 2000, A Guide to the Classification of Medieval Ceramics. Medieval Pottery Research Group Occasional Papers No. 1.
- MPRG 2001, *Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics.* Medieval Pottery Research Group
- Owen, J., 1995, Towards an Accessible Archaeological Archive. The Transfer of archaeological archives to museums: guidelines for use in England, Northern Ireland, Scotland and Wales. Society of Museum Archaeologists
- PCRG 1997, *The Study of Later Prehistoric Pottery: General polices and guidelines for analysis and publication.* Prehistoric Ceramics Research Group Occasional Paper 12
- Philo, C. and Swann, A., 1992, *Preparation of Artwork for Publication*. Institute of Field Archaeologists Technical Paper No. 10 (Reading)
- RCHME 1999, Recording Archaeological Field Monuments: A descriptive specification. RCHME (Swindon)
- RCHME 2007, *MIDAS: A manual and data standard for monuments inventories*. RCHME (Swindon)
- Schofield, A J, (ed) 1998, Interpreting Artefact Scatters. Oxbow Monograph 4 (Oxford)
- Richards, J. and Robinson, D. (eds), 2001, *Digital Archives From Excavation and Fieldwork: A guide to good* practice. Archaeology Data Service
- Robinson, W., 1998, First Aid for Underwater Finds. Archetype Books (London)
- RFG and FRG, 1993, *Guidelines for the Preparation of Site and Assessments for all Finds other than Fired Clay Vessels*. Roman Finds Group And Finds Research Group
- Schmidt, A., 2001, Geophysical Data in Archaeology: A guide to good practice. Archaeology Data Service
- SGRP, 1994, Guidelines for the Archiving of Roman Pottery. Study Group for Roman Pottery
- SMA, 1993, Guidelines on the Selection, Retention and Dispersal of Archaeological Collections. Society of Museum Archaeologists
- UKIC, 1983, Packaging and Storage of Freshly Excavated Artefacts from Archaeological Sites. (United Kingdom Institute for Conservation, Conservation Guidelines No 2)
- UKIC, 1984, Environmental Standards for Permanent Storage of Excavated material from Archaeological Sites. (United Kingdom Institute for Conservation, Conservation Guidelines No 3)
- UKIC, 1990, Guidance for Conservation Practice. United Kingdom Institute for Conservation
- UKIC, 1990, *Guidelines for the Preparation of Excavation Archives for Long-term Storage*. United Kingdom Institute for Conservation Archaeology Section
- UKIC, 2001, Excavated Artefacts and Conservation. (United Kingdom Institute for Conservation,
- Conservation Guidelines No 1, revised)
- Watkinson, D.E., and Neal, V., 1998, *First Aid for Finds*. (3rd edition) RESCUE/United Kingdom Institute for Conservation, Archaeology Section and Museum of London
- Willis, S., 1997, (ed) Research Frameworks for the Study of Roman Pottery. Study Group for Roman Pottery
- World Archaeology Congress 1989, The Vermillion Accord Human Remains. Motion Approved at the First Inter-Congress on the Disposal of the Dead (Vermillion)
- Young C., 1980, Guidelines for the Processing and Publication of Roman Pottery. Department of the Environment





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