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**100 SOUTHGATE STREET, BURY ST EDMUNDS,
SUFFOLK IP33 2AQ**

**AN ARCHAEOLOGICAL EVALUATION
AND MONITORING AND RECORDING**

Authors: Antony Mustchin (Fieldwork & report) Kathren Henry (Fieldwork & Report)	
NGR: TM 170 441	Report No: 5410
District: St Edmundsbury	Site Code: BSE520
Approved:	Project No: 6977
Claire Halpin MCIfA	Date: 22 March 2018 Revised 22 May 2018

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OASIS SUMMARY SHEET

Project details			
Project name		100 Southgate Street, Bury St Edmunds, Suffolk IP33 2AQ	
<p>In August 2017 and November 2017 Archaeological Solutions (AS) carried out an archaeological evaluation and monitoring and recording of land at 100 Southgate Street, Bury St Edmunds, Suffolk IP33 2AQ (NGR TM 170 441; Figs. 1 & 2). The evaluation and monitoring was required by Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT), as advisors to the Local Planning Authority, to provide for the requirements of a planning condition attached to planning approval (St Edmundsbury Borough Council Planning Approval DC/16/0798/FUL). It is proposed to erect to construct a new housing development of 10 dwellings and undertake external alterations to convert existing offices to residential use.</p> <p>The site is an area of archaeological potential, being located within the historic core area of Bury St Edmunds as defined by the HER (BSE 072) and also within the Area of Archaeological Importance designated on the Local Plan. The line of Southgate Street is thought to have been one of the earlier streets of the Saxon and medieval towns, and thus the site has a potential for complex archaeological remains of the early and later town. The street does have surviving historic buildings elsewhere along its course and medieval tenements and gardens are recorded along the street in 15th century Abbey documents.</p> <p>There was a high density of features in each trench and open area; the greatest number of features was within the open areas (Trenches 3 and 4). The most common features were pits (14), and thereafter ditches (2), tree hollows (2) and a post hole (1).</p> <p>The most significant artefactual material was contained in four medieval rubbish pits, comprising a high concentration in Pit F2011 (mid 13th-early 14th century), and lesser quantities in Pits F1016, F1026 and F2026 (late 12th-14th/15th century). The pottery is dominated by Bury St. Edmunds coarse wares, including sooted cooking pots and jugs, supplemented by jugs in wares from Hollesley, Hedingham and Grimston. High quantities of oyster shell were present as were a large quantity of sheep/goat metapodials that may have resulted for a specific form of carcass processing, and modest carbonised remains from fully processed cereals likely accumulated in domestic waste. 15th century Abbey documents record tenements along Southgate Street, and these features suggest the presence of back yard and garden areas behind dwellings on the street frontage. Post-medieval features on the site appear to contain scattered debris, in particular concentrations of red brick and peg tile that likely represent levelling material deposited from a nearby farm or the core of the town.</p>			
Project dates (fieldwork)		August 2017 & November 2017	
Previous work (Y/N/?)		N	Future work (Y/N/?) TBC
P. number		6977	Site code BSE520
Type of project		An Archaeological Evaluation	
Site status		-	
Current land use		Vacant offices and car parks	
Planned development		Residential	
Main features (+dates)		Pits, ditches	
Significant finds (+dates)		A struck flint, small medieval (late 12 th – 14 th C) assemblages	
Project location			
County/ District/ Parish		Suffolk	St Edmundsbury Bury St Edmunds
HER/ SMR for area		Suffolk HER	
Post code (if known)		-	
Area of site		1ha.	
NGR		TM 170 441	
Height AOD (min/max)		c.36m	
Project creators			
Brief issued by		Suffolk County Council	
Project supervisor/s (PO)		Archaeological Solutions Ltd	
Funded by		M & D Developments	
Full title		100 Southgate Street, Bury St Edmunds, Suffolk IP33 2AQ. An Archaeological Evaluation and Monitoring and Recording	
Authors		Henry, K.	
Report no.		5410	
Date (of report)		February 2018	

100 SOUTHGATE STREET, BURY ST EDMUNDS, SUFFOLK IP33 2AQ

AN ARCHAEOLOGICAL EVALUATION AND MONITORING AND RECORDING

SUMMARY

In August 2017 and November 2017 Archaeological Solutions (AS) carried out an archaeological evaluation and monitoring and recording of land at 100 Southgate Street, Bury St Edmunds, Suffolk IP33 2AQ (NGR TM 170 441; Figs. 1 & 2). The evaluation and monitoring was required by Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT), as advisors to the Local Planning Authority, to provide for the requirements of a planning condition attached to planning approval (St Edmundsbury Borough Council Planning Approval DC/16/0798/FUL). It is proposed to erect to construct a new housing development of 10 dwellings and undertake external alterations to convert existing offices to residential use.

The site is an area of archaeological potential, being located within the historic core area of Bury St Edmunds as defined by the HER (BSE 072) and also within the Area of Archaeological Importance designated on the Local Plan. The line of Southgate Street is thought to have been one of the earlier streets of the Saxon and medieval towns, and thus the site has a potential for complex archaeological remains of the early and later town. The street does have surviving historic buildings elsewhere along its course and medieval tenements and gardens are recorded along the street in 15th century Abbey documents.

There was a high density of features in each trench and open area; the greatest number of features was within the open areas (Trenches 3 and 4). The most common features were pits (14), and thereafter ditches (2), tree hollows (2) and a post hole (1).

The most significant artefactual material was contained in four medieval rubbish pits, comprising a high concentration in Pit F2011 (mid 13th-early 14th century), and lesser quantities in Pits F1016, F1026 and F2026 (late 12th-14th/15th century). The pottery is dominated by Bury St. Edmunds coarse wares, including sooted cooking pots and jugs, supplemented by jugs in wares from Hollesley, Hedingham and Grimston. High quantities of oyster shell were present as were a large quantity of sheep/goat metapodials that may have resulted for a specific form of carcass processing, and modest carbonised remains from fully processed cereals likely accumulated in domestic waste. 15th century Abbey documents record tenements along Southgate Street, and these features suggest the presence of back yard and garden areas behind dwellings on the street frontage. Post-medieval features on the site appear to contain scattered debris, in particular concentrations of red brick and peg tile that likely represent levelling material deposited from a nearby farm or the core of the town.

1 INTRODUCTION

1.1 In August 2017 and November 2017 Archaeological Solutions (AS) carried out an archaeological evaluation and subsequent monitoring and recording on land at 100 Southgate Street, Bury St Edmunds, Suffolk IP33 2AQ (NGR TM 170 441; Figs. 1 & 2). The evaluation and monitoring were required by Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT), as advisors to the Local Planning Authority, to provide for the requirements of a planning condition attached to planning approval (St Edmundsbury Borough Council Planning Approval DC/16/0798/FUL). It is proposed to erect to construct a new housing development of 10 dwellings and undertake external alterations to convert existing offices to residential use.

1.2 The evaluation and monitoring were undertaken in accordance with a brief issued by Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT) (Abby Antrobus, dated 8th March 2017), and a written scheme of investigation (specification) prepared by AS (dated 14/03/2017) and approved by SCC AS-CT. The project conformed to the Chartered Institute for Archaeologists (CIfA) *Standard and Guidance for Archaeological Field Evaluation* (2014), *Standard and Guidance for Archaeological Watching Brief* (2014), and the document *Standards for Field Archaeology in the East of England* (Gurney 2003).

1.3 The evaluation and monitoring aimed to determine the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development.

Planning policy context

1.4 The National Planning Policy Framework (NPPF 2012) states that those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest are heritage assets. The NPPF aims to deliver sustainable development by ensuring that policies and decisions that concern the historic environment recognise that heritage assets are a non-renewable resource, take account of the wider social, cultural, economic and environmental benefits of heritage conservation, and recognise that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. The NPPF requires applications to describe the significance of any heritage asset, including its setting that may be affected in proportion to the asset's importance and the potential impact of the proposal.

1.5 The NPPF aims to conserve England's heritage assets in a manner appropriate to their significance, with substantial harm to designated heritage assets (i.e. listed buildings, scheduled monuments) only permitted in exceptional circumstances when the public benefit of a proposal outweighs the conservation of the asset. The effect of proposals on non-designated heritage assets must be balanced against the scale of loss and significance of the asset, but non-designated heritage assets of demonstrably equivalent significance may be considered subject to the same policies as those that are designated. The NPPF states that opportunities to capture evidence from the historic environment, to record and

advance the understanding of heritage assets and to make this publicly available is a requirement of development management. This opportunity should be taken in a manner proportionate to the significance of a heritage asset and to impact of the proposal, particularly where a heritage asset is to be lost.

2 DESCRIPTION OF THE SITE

2.1 It is proposed to erect 10 new dwellings and convert the extensive existing offices to residential use on land at 100 Southgate Street, Bury St Edmunds. The site lies towards the southern end of Southgate Street on its western side and comprises former government offices and existing car parks. The overall site extends to some 1ha.

3 TOPOGRAPHY, GEOLOGY AND SOILS

3.1 The site lies at c.36m AOD on a slight promontory on the western edge of the floodplain of the River Lark, which passes c.400m to the west. The River Linnet, a tributary of the Lark, passes c.150m to the north, with the convergence of the rivers situated c.200m to the north-east. The river valleys rise gently to the south-west towards the Hospital and Hardwick Heath; while to the west are Holywater Meadows including a series of small water courses that feed into the River Linnet.

3.2 The underlying geology is of the Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation and Culver Chalk Formation. The overlying soil type is the loamy and clayey floodplain soil with naturally high groundwater typical of river valleys given the sites proximity to the River Lark.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Prehistory

4.1 The location of the site on promontory above the rivers Lark and Linnet, its proximity to the courses of the rivers and potential fording points makes places it in a landscape conducive for evidence of prehistoric activity. This evidence has included artefacts recorded in Grindle Pit in 1863-7, c.100m to the south of the site, during which a significant assemblage of Palaeolithic flint work was recovered, including a hand axe and Levalloisian flakes, as well as animal bone (HER BSE065). No other Prehistoric or Roman remains have been recorded in the vicinity, though an undated inhumation burial also recovered from Grindle Pit could belong to these periods, or be medieval (HER BSE065).

Medieval

4.2 The line of Southgate Street is thought to have been one of the earlier streets of the Saxon and medieval towns, leading south from the former monastery at the core of town, which was situated c.500m to the north. The site was situated within the town bank, whose route passed c.200m to the south (HER BSE141 & BSE257);

while investigations in 'Great Sexton's meadow' close to the west revealed an older course of the River Linnet, and that it may have been straightened (HER BSE165), probably as part of the managed agricultural landscape and water meadows around the medieval town (HER BSE503). Nonetheless, Southgate Lane and adjacent medieval roads have the potential to preserve evidence for medieval tenements and gardens as recorded along the street in 15th century Abbey documents. Excavations c.150m to the north on Maynewater Lane recorded medieval pits, pottery, animal bone and oyster shell close to the River Linnet (HER BSE428 & BSE159); while a medieval farmstead belonging to the Almoner of the Abbey is identified in documentary sources c.200m to the south-west (HER BSE495).

Post-medieval

4.3 The presence of a farmstead at Almoner's Barns c.200m to the south-west may attest to a continuation of the medieval townscape into the 18th century, with the farmstead recorded on Thomas Warren's 1747 map (HER BSE495), barns surviving as extant structures (HER BSE162) and an associated 19th century ditch recorded during evaluation trenching (HER BSE496). The 1st edition Ordnance Survey town plan (1885) depicts the site as undeveloped, although houses has been built on the street frontage extending to the north and south, and an oast house was also located close to the north, part of Southgate Brewery but has now been converted into apartments (HER BSE264). The site appears to have remained un-developed until offices were built at some point between 1952 and 1958, based on Ordnance Survey mapping. Thus the site has the potential for the preservation of earlier remains under deeper soils of later date, though the construction of the large government buildings may have truncated earlier remains within their footprint. LiDAR data in the HER suggests elements of cut and fill on the site related to the construction of the standing buildings on the site, with areas of fill in particular down towards the valley of the River Linnet. An initial site visit confirmed the presence of a 3m retaining wall along the northern side boundary, with land dropping to the north. The street frontage where new build units are proposed also appeared to be deeply built up.

5 METHODOLOGY

Trial Trenching

5.1 Two trial trenches (Trenches 1 and 2), and a larger open area (Trench 3) (Figs. 2 – 4) were excavated with a 360 tracked excavator under close archaeological supervision. These corresponded with the new build elements proposed for the scheme.

5.2 The overburden was mechanically excavated under close archaeological supervision. Exposed surfaces were cleaned by hand and examined for archaeological features. Deposits were recorded using *pro forma* recording sheets, drawn to scale, and photographed as appropriate. Excavated spoil was searched for finds and the trenches were scanned by a metal detector.

Monitoring and Recording

5.3 Following the trial trenching SCC AS-CT required further archaeological monitoring and recording to take place on the areas of deeper excavation required for the development. The monitoring and recording aimed to ensure the archaeological excavation and monitoring of all aspects of the development programme likely to affect buried archaeological remains; secure the adequate recording of any archaeological remains revealed by the development programme; secure the full analysis and interpretation of the site archive and the appropriate publication of the project results, if required; and secure the analysis, long-term conservation and storage of the project archive

6 DESCRIPTION OF RESULTS

Archaeological Evaluation

Trench 1 (Figs. 2 - 5)

<i>Sample section 1A</i> <i>0.00 = 37.13m AOD</i>		
0.00 – 0.15m	L1000	Made Ground. Crushed hardcore
0.15 – 0.68m	L1001	Made Ground. Friable, very dark grey brown silty clay. It contained post-medieval (17 th – 18 th C pottery) (3; 175g), CBM (549g) and animal bone (2g)
0.68m +	L1002	Natural. Friable, orange, sandy gravel

<i>Sample section 1B</i> <i>0.00 = 37.04m AOD</i>		
0.00 – 0.18m	L1000	Made Ground. As Above
0.18 – 0.73m	L1001	Made Ground. As Above
0.73m+	L1002	Natural. As Above

Description: Trench 1 contained undated Ditches F1003 and F1005.

Ditch F1003 was linear in plan (5.00+ x 0.80 x 0.61m). It had irregular moderately sloping sides and its base was unseen. Its fill, L1004, was a firm, mid yellowish grey silty sand with frequent small angular and sub-angular flint. It contained animal bone (27g) and oyster shell (1; 11g)

Ditch F1005 was linear in plan (5.00+ x 0.72 x 0.25m). It had steep - moderately sloping sides and a concave base. Its fill, L1006, was a firm, dark yellowish grey sand and gravel. It contained no finds.

Trench 2 (Figs. 2 - 5)

<i>Sample section 2A</i> 0.00 = 36.94m AOD		
0.00 – 0.12m	L1000	Made Ground. As Above Tr. 1.
0.12 – 0.62m	L1001	Made Ground. As Above Tr. 1.
0.62m+	L1002	Natural. As Above Tr. 1.

<i>Sample section 2B</i> 0.00 = 36.88m AOD		
0.00 – 0.20m	L1000	Made Ground. As Above Tr. 1.
0.20 – 0.68m	L1001	Made Ground. As Above Tr. 1.
0.68m+	L1002	Natural. As Above Tr. 1.

Description: Trench 2 contained Pits F1007 and F1009. The latter was undated and Pit F1007 contained CBM. Two modern services traversed the trench.

Pit F1007 was subcircular in plan (2.50+ x 1.11 x 0.35m). It had moderately sloping sides and a concave base. Its fill, L1008, was a friable, mid brown silty sand. It contained CBM (6g) and animal bone (55g).

Pit F1009 was subcircular in plan (0.91+ x 0.82 x 0.49m). It had moderately sloping sides and a narrow base. Its fill, L1010, was a friable, mid reddish brown silty sand. It contained no finds.

Open Area, Trench 3 (Figs. 2 – 4 & 6 - 7)

<i>Sample section 3A</i> 0.00 = 37.72m AOD		
0.00 – 0.10m	-	Tarmac
0.10 – 0.31m	-	Concrete
0.31 – 0.51m	L1011	Levelling Layer. Grey brown sandy silt, slightly clayey
0.51 – 0.70m	L1012	Made Ground. Friable, pale yellow sandy gravel
0.70 – 1.34m	L1013	Made Ground. = L1001. Dark grey sandy silty, slightly clayey. It contained 18 th – early 20 th century pottery (7; 109g) and CBM (4126g)
1.34m	L1002	Natural. As Above Tr. 1

<i>Sample section 3B</i> 0.00 = 36.65m AOD		
0.00 – 0.41m	L1013	Made Ground. = L1001. As above.
0.41m+	L1002	Natural. As Above Tr. 1.

<i>Sample section 3C</i> <i>0.00 = 37.46m AOD</i>		
0.00 – 0.12m	-	Concrete
0.12 – 0.28m	L1013	Made Ground. = L1001. As above.
0.28m+	L1002	Natural. As Above Tr. 1.

Description: Trench 3 contained Post Hole F1024, Pits F1016, F1026, F1031 and F1033, and Tree Hollows F1018 and F1020. Modern services and brick manholes were also present. Pit F1016 and F1026 contained medieval (late 12th – 14th century) pottery. The remaining features contained late post-medieval and modern finds.

Pit F1016 was subcircular in plan (1.31+ x 1.11 x 0.49m). It had moderately sloping sides and a narrow slightly irregular base. Its fill, L1017, was a friable, mid brown silty sand. It contained medieval (late 12th – 14th century) pottery (3; 43g) animal bone (<1g), oyster shell (2; 3g) and struck flint (1; 1g).

Tree Hollow F1018 was irregular in plan (1.10 x 0.82 x 0.05m). It had shallow sides and a flattish base. Its fill, L1019, was a friable, mid greyish brown silty sand. It contained no finds.

Tree Hollow F1020 was elongated in plan (1.01 x 0.69 x 0.07m). It had an irregular profile. Its fill, L1021, was a friable, mid brown silty sand. It contained no finds.

Post Hole F1024 was circular in plan (0.32 x 0.17m). It had steep sides and a concave base. Its fill, L1025, was a friable, mid grey brown silty sand with frequent chalk. It contained no finds.

Pit F1026 was subcircular in plan (1.21 x 0.98 x 0.55m). It had steep sides and a concave base. It contained four fills tabulated below:

Context	Fill	Finds
L1030 Upper	Friable, light grey brown chalky silt	-
L1029	Firm, white / grey chalk	Medieval (late 12 th – 14 th C) pottery (3; 228g); CBM (13g); animal bone (3)
L1028	Fine orange sand	-
L1027 Basal	Fine grey brown silt	-

Pit F1031 was rectangular in plan (0.99 x 0.52 x 0.30m). It had steep sides and a flattish base. Its fill, L1032, was a friable, mid grey brown silty sand with chalk. It contained 18th – 19th century pottery (8; 121g), CBM (601g), animal bone (40g), struck flint (1; 41g), burnt bone (1; 1g) and glass (2; 40g). F1031 was cut by Pit F1033.

F1033 was a large rectangular clay-lined pit (3.00 x 1.00+ x 0.32) much truncated by a modern water pipe (F1036). It was clay-lined, L1034, comprising a yellow clay which contained CBM (50g). Pit F1033 cut Pit F1031.

Drain Pipe Ditch F1035 contained a modern water pipe F1036

Archaeological Monitoring and Recording

Open Area, Trench 4 (Figs. 2 – 4 & 8)

<i>Sample section 4A</i> <i>0.00 = 38.42m AOD</i>		
0.00 – 0.05m	L2017	Existing Surface
0.05 – 0.30m	L2016	Made Ground
0.30 – 0.39m	L2015	Made Ground
0.39 – 0.79m	L2014	Made Ground
0.79 – 0.81+m	L2000	Natural

<i>Sample section 4B</i> <i>0.00 = 38.45m AOD</i>		
0.00 – 0.10m	L2017	Existing Surface
0.10 – 0.41m	L2016	Made Ground
0.41 – 0.99m	L2025	Sand Layer
0.99 – 1.10+m	L2000	Natural

<i>Sample section 4C</i> <i>0.00 = 37.49m AOD</i>		
0.00 – 0.12m	L2035	Topsoil
0.12 – 0.38m	L2034	Subsoil
0.38 – 0.49m	L2033	Rubble Layer
0.49 – 0.52m	L2032	Made Ground
0.52 – 0.61m	L2031	Rubble Layer
0.61 – 0.63m	L2036	Made Ground
0.63 – 0.70+m	L2000	Natural

Description: Trench 4 contained eight pits and a layer of bricks.

The description of the pits are tabulated below:

Context	Profile/Plan (dimensions)	Fill	Relationships	Finds
F2001	Sub-circular in plan (1.56 x 1.28+ x 0.54m), with steep sloping sides and a flattish base.	L2005: Upper fill. Firm, dark yellow brown clay sand with moderate small charcoal flecks, occasional CBM flecks, and occasional small sub-angular stone (1.56 x 1.28m+ x 0.28m).	Cut by pit F2002	Medieval (13 th – 14 th C) pottery (470g), CBM (78g), animal bone (18g), oyster shell (37g), Fe Fragments (8g).
		L2006: Basal fill. Compact, dark grey brown clay sand with moderate small charcoal flecks and small angular flint (1.56 x 1.28+ x 0.26m).		Mid 15 th – 17 th C pottery (118g), CBM (222g), animal bone (276g), oyster shell (9g), Fe Fragments (7g).
F2002	Sub-circular in plan (1.30 x 1.30+ x 0.42m), with steep sides and a flattish base.	L2007: Firm, mid yellow brown clay sand with frequent small CBM flecks and occasional small charcoal flecks.	Cut pits F2001 and F2003	Mid 15 th – mid 17 th C pottery (193g), CBM (13000g), animal bone (1584g), oyster shell (746g), Fe Fragments (132g).
F2003	Sub-circular in plan (1.05 x 0.80+ x 0.78m), with steep sides and a truncated base.	L2008: Firm, dark yellow brown clay sand with frequent small CBM and charcoal flecks.	Cut by pits F2002 and F2004	Mid 15 th – mid 17 th C pottery (392g), CBM (15000g), animal bone (2243g), oyster shell (1248g), Fe Fragments (284g), SF2: CU alloy ring (1g)
F2004	Sub-oval in plan (2.21 x 1.40 x 0.82m), with steep sides and a flattish base.	L2009: Compact, mid grey brown sandy clay with frequent small shell and CBM flecks, and moderate small charcoal flecks.	Cut pit F2003	Mid 15 th – mid 17 th C pottery (835g), CBM (14500g), animal bone (2082g), oyster shell (2772g), Fe Fragments (162g), Burnt bone (1g), Burnt flint (26g), struck flint (1g), glass (10g).
F2011	Sub-oval in plan (1.51 x 1.74 x 0.79m), with steep sloping sides and a concave base.	L2012 (upper): Friable, light brown grey silty sand with occasional small, medium and large sub-angular flint.	-	Medieval (13 th – mid 14 th C) pottery (2436g), CBM (60g), animal bone (317g), oyster shell (2158g)
		L2029: Friable, mid brown grey silty sand		-
		L2030 (basal): Friable, pale yellow green silty sand with clay		-
F2020	Sub-circular (1.65 x 0.76 x 0.39m), with steep sides and a	L2021: Firm, mid grey brown chalky clay with occasional small and medium sub-angular and sub-rounded flints.	-	16 th – 17 th /18 th C pottery (219g), CBM (857g), animal bone (288g), oyster shell (179g)

	flattish base.			
F2023	Irregular gently sloping to steep sides, concave base (0.90 x 0.61 x 0.16m)	L2024: Firm, mid grey brown chalky clay with occasional small and medium sub-angular and sub-rounded flints.	-	Animal bone (6g)
F2026	Sub-oval moderately sloping to steep sides, flattish base (1.27 x 1.10 x 0.52m)	L2027: Firm, mid grey brown chalky clay with occasional small and medium sub-angular and sub-rounded flints.	-	Medieval (13 th – 15 th C) pottery (28g)

7 CONFIDENCE RATING

7.1 Despite the presence of post-medieval and modern features it is not felt that any factors significantly inhibited the recognition of archaeological features or finds.

8 DEPOSIT MODEL

8.1 In each trench Tarmac and concrete overlay Made Ground deposits. The latter occurred to a depth of 0.28 - 1.34m deep, and contained post-medieval and modern finds.

8.2 The natural sand and gravel, L1002 (= L2000), was exposed in each trench and was 0.28 – 1.34m below the present day ground surface.

9 DISCUSSION

9.1 The recorded features are tabulated:-

Trench	Context	Description	Date
1	F1003	Ditch	-
	F1005	Ditch	-
2	F1007	Pit	Post medieval CBM
	F1009	Pit	-
3	F1016	Pit	Medieval (late 12 th – 14 th C)
	F1018	Tree Hollow	-
	F1020	Tree Hollow	-
	F1024	Post Hole	18 th – 19 th century
	F1026	Pit	Medieval (late 12 th – 14 th C)
	F1031	Pit	18 th – 19 th century
	F1033	Pit	-
4	F2001	Pit	Mid 15 th – mid 17 th C with residual 13 th – 14 th C
	F2002	Pit	Mid 15 th – mid 17 th C
	F2003	Pit	Mid 15 th – mid 17 th C
	F2004	Pit	Mid 15 th – mid 17 th C
	F2011	Pit	13 th – mid 14 th C
	F2020	Pit	16 th – 17 th /18 th C
	F2023	Pit	-
	F2026	Pit	13 th – 15 th C
	F2033	Rubble Layer	-

9.2 There was a high density of features in each trench and open area; the greatest number of features were within the more expansive open areas (Trenches 3 and 4). The most common features were pits (14), and thereafter ditches (2), tree hollows (2) and a post hole (1).

9.3 The earliest find was a flint scraper manufactured on a blade, likely of late Mesolithic to early Neolithic origin, but contained as residual material incorporated in a late post-medieval Pit F1031 (Flint Report below).

9.4 Ditches F1003 and F1005 (Trench 1), Pits F1009 (Trench 2), F1033 (Trench 3) and F2023 (Trench 4) were undated.

9.5 Pit F2011 contained a high quantity of medieval pottery, predominantly Bury St. Edmunds coarse wares, but also including fragments of jugs from industries at Hollesley, Hedingham and Grimston that define a date in the mid 13th to early 14th centuries. This deposit included a high quantity of oyster shell and a large quantity of sheep/goat metapodials that may have resulted for a specific form of carcass processing. It also included, with Pit F1026, a modest quantity of carbonised remains, in particular barley, wheat and rye that are indicative of fully processed cereal grains and are consistent with accumulation as part of general domestic refuse disposal. Pits F1016 and F1026 contained low quantities of medieval pottery (late 12th – 14th C), as did Pit F2026 (13th-15th C); with the pottery in all three deposits limited to coarse ware cooking pots (with sooted external surfaces) and jugs with patches of clear glaze, manufactured in or around Bury St. Edmunds. Pit F1026 also contained an isolated fragment of post-medieval peg tile which may be intrusive. Residual medieval pottery was also contained in Pit F1031 (Trench 3) and Pit F2001 (Trench 4). Southgate Street was an established route and thoroughfare in the medieval period, with the site situated within the town bank. The bulk of the land in the vicinity appears to have been a managed agricultural landscape and water meadows to the south of the town's nucleus; however 15th century Abbey documents record tenements and gardens along the medieval street. The artefactual assemblage from the medieval pits lends further support to the Abbey records, appearing to result from the disposal of domestic rubbish, and possibly the waste of limited domestic/cottage industry (based on the selective bone elements present), deposited into deliberate rubbish pits in the back yard and garden areas behind dwellings on the street frontage.

9.6 Pits F2001, F2002, F2003 and F2004 contained mid 15th – mid 17th century pottery, and Pit F2020 contained 16th – 17th / 18th century pottery. Associated finds comprise significant quantities of late post-medieval red brick and peg tile (possibly packing or levelling material), animal bone, Fe fragments (notably iron nails), oyster shell and glass. A copper alloy ring and a worked stone fragment were also found. These artefacts appear less focussed than those in the medieval pits, and likely reflect the dispersal and scattering of detritus, possibly as part of levelling material, from the nearby farmstead or after collection from the town.

9.7 The remaining dated features, Post Hole F1023 and Pit F1031 contained 18th – 19th century pottery and CBM.

10 DEPOSITION OF THE ARCHIVE

10.1 The archive records and finds from the site will be deposited at Suffolk County Archaeological Store. The archive will be quantified, ordered, indexed, cross-referenced and checked for internal consistency.

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APPENDIX 1 CONCORDANCE OF FINDS

Feature	Context	Segment	Trench	Description	Spot Date (Pot Only)	Pot Qty	Pottery (g)	CBM (g)	A.Bone (g)	Other Material	Other Qty	Other (g)
	1001		1	Made Ground	17th-18th	3	175	549	2			
1003	1004		1	Fill of Ditch					27	Oyster Shell	1	11
1007	1008		2	Fill of Pit				6	55			
	1013		3	Layer	18th-early 20th	7	109	4126	42	Glass Clay Pipe Oyster Shell	7 2 3	90 18 25
1016	1017		3	Fill of Pit	Late 12th-14th	3	43		<1	Oyster Shell	2	3
1024	1025		3	Fill of Post Hole	18th-19th	1	25	53				
1023	1037		3	Fill of Feature		2	25			Glass	1	153
1026	1029		3	Fill of Pit	Late 12th-14th	3	228	13	3			
1031	1032		3	Fill of Pit	18th-19th	8	121	601	40	S.Flint B.Bone Glass	1 1 2	41 1 40
1033	1034		3	Fill of Pit				50				
	1038		3	Layer		1	<1	<1		Glass	5	46
	1039		3	Layer		5	44	26		Glass	2	34
	1040		3	Layer	Late 18th-early 20th	3	18	10		Glass Fe.Object	1 1	12 19
2001	2005			Upper Fill of Pit	13th-14th C	3	470	78	18	O.Shell Fe Frags	2	37 8
2001	2006			Basal Fill of Pit	Mid 15th-Mid 17th C	6	118	222	276	O.Shell Fe Frag	1	9 7
2002	2007			Fill of Pit	Mid 15th-Mid 17th C	5	193	13000	1584	O.Shell Fe Frags	8	746 132
2003	2008			Fill of Pit	Mid 15th-Mid 17th C	14	392	15000	2243	SF2. Cu Alloy Ring Fe Frags	1 11	1 284

2004	2009			Fill of Pit	Mid 15th-Mid 17th C	42	835	14500	2082	O.Shell SF1.Worked Stone	1	1248 1210
										Fe Frags	9	162
										O.Shell		2772
										B.Bone		1
										S.Flint	1	1
										B.Flint		26
										Glass		10
2011	2012			Fill of Pit	13th-Mid 14th C	94	2436	60	317	O.Shell		2158
2020	2021			Fill of Pit	16th-17th/18th C	11	219	857	288	O.Shell		179
										Bone Knife Handle	1	11
2023	2024			Fill of Pit					6			
2026	2027			Fill of Pit	13th-15th C	2	28					
	2033			Layer of Brick				2856	128			

APPENDIX 2 SPECIALIST REPORTS

The Struck Flint

Andrew Peachey

The archaeological investigations recovered two pieces (42g) of struck flint in a slightly to moderately patinated condition, as residual material contained in post-medieval pits.

A flint scraper (41g) was contained in late post-medieval Pit F1031, and was manufactured in good quality dark grey flint, now very slightly patinated due to weathering. The scraper was manufactured on a large blade with neat, single-direction parallel dorsal scars, and an abraded (prepared) striking platform. Fine abrupt retouch has been applied to the length of one lateral edge to form a side scraper, the leading edge of which has subsequently become slightly chipped through wear. Pit F2004 (L2009) contained the tapering, snapped distal end of a blade with parallel dorsal scars and traces of wear on both lateral edges. This type of technology is particularly characteristic of late Mesolithic to early Neolithic technology in the region, and a scatter of early Neolithic flint artifacts have been recorded in the centre of Bury St. Edmunds including in the Cathedral Yard (Historic Environment Record BSE052), as well as several flaked or polished axes whose location remains imprecise (HER BSE Misc). However conclusions remain limited due to the residual context and isolated nature of the artifacts.

The Pottery Report

Peter Thompson

The combined pottery assemblages from the archaeological investigations produced 224 sherds weighing 4.884kg recovered from 7 pits, one post-hole, 4 layers and the subsoil/unstratified (Tables 1a and 1b). In total 126 sherds (2.749kg) were medieval, mainly comprising local Bury coarewares, with the majority, (91 sherds) coming from Pit F2011. In addition Pits F2001, F2002 and F2003 contained a total of 53 sherds (plus a further 15 medieval sherds), which were of a very late medieval to early post-medieval date. The remaining pottery sherds were all of later post-medieval to modern date.

Methodology

The sherds were examined under x35 binocular microscope and recorded according to the Medieval Pottery Research Group Guidelines (Slowikowski et al 2001). Fabric codes are those used for the Suffolk County Council pottery type series.

The Pottery

The feature of most interest was Pit F2011 (L2012) which contained 91 medieval sherds (1,827kg) in good condition. The bulk of these were Bury medieval coarse wares in sandy fabrics, usually dark grey but sometimes with oxidised margins. The forms were mostly cooking pots indicated by rims and charcoal residue on some body sherds. Two 'developed' bowl rims with impressed decoration above the shoulder were also present. The glazed ware component comprised 5 sherds of Grimston ware and two of Hedingham ware, including a body sherd from a strip jug

(Walker 2012, 43). This pottery assemblage is therefore dated between the 13th and early 14th centuries.

Pits F1016 and F2026 contained medieval pottery only, both including jug bases with thin patchy clear glaze which is unusual on Bury wares. Pit F2001 (L2005) contained two conjoining sherds of a large Bury medieval coarse ware strap handle which, although apparently residual is in good condition. Pits F2001, F2002, F2003, and F2004, contained pottery of late medieval to early post-medieval date including imported Rhineland Raeren stoneware from Pits F2002, F2003 and F2004. Pit F2004 also contained 15 sherds all from the same jug or bottle in an unidentified very fine white fabric (LMIM), which may be a continental import. The latest pottery in the four pits listed above is glazed red earthenware, which appears to be relatively early and probably of 16th-17th centuries date

Tables Quantifying the Pottery from the Trial Trenching and Monitoring

Key:

MCW (3.20) Medieval coarse ware 12th-15th
 BSW (3.30) Bury sandy ware mid 12th-14th
 BSFW (3.31) Bury fine sandy ware mid 12th-14th
 BMCW (3.33) Bury medieval coarse ware mid 12th-14th
 HOLL (3.42) Hollesley coarse ware mid 12th-14th
 UPG (4.00) Unprovenanced Glazed medieval ware late 12th-15th
 HFW (4.23) Hedingham fine ware mid 12th-mid 14th
 HFW (4.23) Hedingham (coarse) fine ware mid 12th-mid 14th
 GRIM (4.10) Grimston ware late 12th-14th
 LMT (5.00) Late medieval transitional 15th-16th
 LMIM (7.74) Late medieval import 15th-16th/17th
 RAER (7.13) Raeren stoneware 15th-early 17th
 GRE (6.12) Glazed red earthenware 16th-18th
 TGW (6.30): Tin glazed earthenware 16th- 18th
 LGRE (8.50): Late glazed red earthenware 18th – early 20th
 LBW (8.52): Late black glazed earthenware 18th-early 20th
 ENGS (8.20): English Stoneware late 17th-early 20th
 SWSW (8.41): Staffordshire white salt glazed Stoneware 18th
 TPW (8.00): Transfer Printed Ware late 18th+
 RWE (8.03) refined white earthenwares late 18th-20th
 LGWE (8.53): Late coloured glazed white earthenwares mid 18th-early 20th
 YELL (8.13) Yellow Ware late 18th-19th

Feature	Context	Quantity	Date	Comment
Subsoil	1001	1x19g GRE	17 th -18 th	
Layer	1013	1x6g LGRE 1x6g TPW 3x7g RWE 1x30g ENGS 1x55g YELL	18 th -early 20 th	
Pit 1016	1017	3x43g BMCW	Late 12 th -14 th	BMCW: x3 vessels; x1 base sherd with patch of thin clear glaze; x2 cooking pot sherds with sooting on outer surface
Post Hole	1025	1x20g LBW	18 th -19 th	LBW: mug base

1023	1037	2x10g LBW	18 th -19 th	LBW: x2 glossy black glaze on inner surface
Pit 1026	1029	3x224g BMCW	Late 12 th -14 th	BMCW: all from one complete jug base with frilled decoration and occasional small patches of thin clear glaze.
Pit 1031	1032	2x29g BSW 1x13g BMCW 5x73g LGRE	18 th -19 th	GRE: x5 vessels represented
Layer	1038	1x2g TPW	late 18 th +	
Layer	1039	2x8g LGRE 1x9g ENGS 1x4g LGWE 1x20g RWE	late 18 th +	LGRE: x2 vessels ENGS: small strap handle
Layer	1040	1x5g LGRE 1x5g TPW 1x8g SWSW	Late 18 th +	SWSW: white Staffordshire type salt glaze
Unstratified		7x96g BMCW 1x9g RWE 6x301g LGRE 3x28g LBW 1x53g TGW	late 18 th +	BMCW: jug base with frilled/finger impressed deco where body meets base. Has a few small patches of thin clear glaze LGRE: 4 vessels including profile of a wide shallow bowl or dish LBW: 2 vessel TGW: spout in white glaze

Table 1a: Quantification of sherds by context from the trial trenching

Feature	Context	Quantity	Date	Comment
Pit 2001	2005	2x369g BMCW 1x4g MCW	13 th -14 th (residual)	BMCW :large strap handle
Pit 2001	2006	4x48g MCW 2x52g GRE	16 th – 17 th	
Pit 2002	2007	2x69g GRE 2x79g RAER 1x15g MCW	Mid 15 th – mid 17 th	RAER: frilled jug base
Pit 2003	2008	8x262g GRE 2x20g RAER 1x5g UPG 1x14g MCW	16 th – 17 th	GRE: unusual handled vessel, either a skillet or dripping tray RAER: frilled base
Pit 2004	2009	5x33g MCW 17x383g GRE 4x50g LMT/GRE 1x18g RAER 15x238g LMIM	16 th – 17 th	LMIM: all one fine white ware flagon, jug or bottle, very fine fabric. Late med/early post-med, Probably an import, or else from the Midlands

Pit 2011	2012	74x1474g BMCW 6x182g BMCW? 1x35g ?HOLL 5x100 BSW 5x36g GRIM	Mid 13 th - early 14 th	HOLL: horizontal finger deco HFW: x1 jug rim with patchy mottled green and clear glaze on outer surface, a coarser fine ware fabric in Fabric1 HFW: dark green glaze on outer surface over applied vertical strips from stamped strip jug. Fabric 3, fine but not the finest Hedingham fabric GRIM: MNV 3; x3 green glazed ?jug body sherds, x1 rounded base/body sherd with patchy greeny-brown in underside, x base sherd with greeny-brown glaze on the underside and a curving scar line where another vessel has has marked the base of the pot during firing in the kiln
Pit 2020	2021	2x7g MCW 9x177g GRE	16 th -17 th /18 th	
Pit 2026	2027	2x22g ?BMCW	13 th -15 th	

Table 1b: Quantification of pottery by context from the monitoring

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The Ceramic Building Materials

Andrew Peachey

The archaeological investigations recovered a total of 664 fragments (47760g) of highly fragmented post-medieval CBM, predominantly peg tile and red brick (Table 2) from a series of pits.

The fragments were recorded by fragment count and weight per context, with all data entered into a Microsoft Excel spreadsheet that will form part of the site archive.

CBM type	Date	Fragment Count	Weight (g)
Red Brick	Post-medieval (L17 th -18 th C)	82	13948
Peg tile	Post-medieval (17 th -19 th C)	569	30323
Silicate Brick	Modern (19-20 th C)	2	3027
Pantile		8	298
Sewer Pipe		2	158
Bathroom tile		1	6
<i>Total</i>		664	47760

Table 2: Quantification of CBM

Commentary

The most common CBM types were post-medieval peg tile and red brick, manufactured in highly-fired, red-orange, medium sand-tempered fabrics; however there is little indication that these represent *in situ* demolition deposits directly related to a structure, but rather backfilled rubble. The post-medieval peg tile typically has lengthways striations on its upper surface, with either narrow circular or diamond shaped peg holes punched through the tiles with an implement prior to firing. The base of the peg tile is lightly sanded, but due to the level of fragmentation, the only extant dimension was a thickness of 12-14mm. Peg tile of similar type had been common since the late 15th century; however the high-firing, regularity of the fabric and appearance indicate that these peg tiles are entirely of post-medieval date, likely in the 17th century or later (until they were superseded by pantiles in the 19th century). The red brick includes a single complete example in Layer L1013, with dimensions of 220x110x50mm, a smooth base and regular faces/arrises, characteristic of types manufactured in the late 17th to 18th centuries.

The bulk of the peg tile and red brick were contained in three large groups in Pits F2002, F2003 and F2004, which collectively account for 86% of the assemblage by fragment count (78% by weight). Smaller groups were also contained in Pit F2020 and Layer L1013, while isolated peg tile fragments in Pits F1007, F1026, F1031, F2001, F2011, Layers L1038, L1039 and L1040. It may be suggested that the highly-concentrated pit groups represent the deliberate back-filling, possibly with the aim of packing or stabilizing pits in the 17th to 19th centuries, utilizing rubble from former buildings in the local area or the town.

The remainder of the assemblage comprises a sparse scatter of Victorian to modern CBM, including silicate brick, pantile, sewer pipe and bathroom tile; probably re-deposited in Subsoil L1001, Posthole F1023, Layers L1013, L1039 and L2033 following the construction or demolition of former buildings on Southgate Street, or imported as part of soils for made ground.

MOUNDED STONE FRAGMENT

Tansy Collins

The stone fragment found within Pit 2004 comprises a section of moulded stone of possible medieval date. The piece is carved from oolitic limestone and measures 150mm x 90mm x 65mm. It forms a short section of arch with plain chamfers measuring 65mm wide and was formerly longer but has been broken at both ends so that it measures 150mm in length. Tooling marks are visible on the rear un-faced side demonstrating it was housed in masonry on that side so that only the curved, finished areas would be exposed. It is consistent in form of a section of a window or doorway arch, or perhaps a rib from a vaulted ceiling.

There is no means of identifying the early provenance of this piece and many medieval buildings were known in this area, if from an ecclesiastical context it may be of later 13th century date though this simple form continues through later centuries. Medieval tenements and gardens are recorded along the street in 15th

century abbey documents, and the South Gate stood at the bottom of the street. This was demolished in 1762 and just outside the gate was St Petronella's Hospital for female lepers, built in the late 13th century and demolished in the 19th century (<http://www.stedmundsburychronicle.co.uk/Chronicle/1700-1812.htm>).

THE SMALL FINDS AND OTHER METALWORK

Rebecca Sillwood

Introduction

Thirty-three objects and fragments were found. Almost all of the material is iron, with only one object of copper alloy and one of bone. All the finds were recovered exclusively from pits, with five separate pits in total producing metalwork or small finds. The dating for the site appears to be later medieval through to the post-medieval period, with no earlier material.

Iron

Nails

The iron assemblage included sixteen nails of various shapes and sizes, but all clearly of some antiquity, due to the level of corrosion on each.

Feature	Context	Qty	Wt (g)
2001	2006	1	6.5
2001	2005	2	7.7
2002	2007	6	71
2003	2008	3	37.5
2004	2009	4	51.2

Table 3. Contexts containing iron nails

The nails can be dated to between the 13th and mid-17th century by the associated pottery.

Knives

Three knives were recovered from this site; two are of a similar form but are different in length. The knives from L2007 and L2009 are both whittle tang, with horizontal backs with the cutting edge rising to meet the tip. One is likely complete (L2009), while the other (L2007) is missing the tip. The length of the complete example is 170mm, whilst the other measures around 117mm. Goodall (1993b, 126, fig. 92, no. 799) places this type of knife in the 16th – 17th century, and states that all knives were utilitarian objects, and could have been used for a variety of purposes, including eating, butchery, craft occupations, etc.

The third knife is likely to be a post-medieval folding knife and is from L2008. The iron blade is missing its tip, and the length of the blade is serrated and pitted with corrosion. The tang of the knife is a whittle tang type, bent at a 45° angle to the blade, and at the junction where they meet there is a large circular rivet, and possibly the remains of wood. A complete example, which shows how the mechanism would

have worked can be found on the Portable Antiquities Scheme database (McFarlane 2005), where it is dated to the 17th century onwards.

Fixtures and Fittings

Other ironwork recovered includes a socketed candlestick, which was recovered from L2008. This object is complete and has a circular socket on top of a straight tapering stem. Socketed candlesticks are said to be among the most common forms of lighting in the medieval and post-medieval period (Goodall, 1993a, 84); other forms include the pricket type or multiple sockets. The Bury example is one of the simplest forms. This type of object is long-lived with illustrated examples dating from both the medieval and post-medieval periods.

A possible hinge was recovered from L2008. The piece is badly misshapen and corroded, but consists of a flat strip curved over and around another piece to form a V-shape.

Tools

Two possible pins or needles were found, and one that could be a pin or a nail (L2007, L2008, L2009). All of the objects identified as pins are tentative, as they could also feasibly be comb teeth from carding combs, used in the processing of textile (Goodall, 1993c, 183, fig. 133). It is difficult to see the heads of the pins, because of corrosion, and this is what makes full identification difficult. If they are pins or needles, their length means they are more likely for craft or industrial purposes, rather than for use as dress accessories.

A possible awl was found in L2009. An awl is a leather working tool, used for making holes in the leather, and usually comprises a square or circular sectioned shaft with a swollen central portion (Goodall, 1993d, 190, fig. 141).

Other iron

The remaining ironwork is unidentifiable, or fragmentary. There is, however, a possible vessel leg, of decorative, delicate form, which has not been paralleled. The object curves broadly, and at its top it is flat in section, which then changes at the shoulder, where there is an expanded decorative cross-shaped section, into a narrower square sectioned foot. It is presumed this object would have been attached to a cauldron or trivet type vessel at the top.

Copper alloy

A single find of copper alloy was made on the site: a medieval finger ring, from Pit L2008 (SF2). The piece is stirrup shaped with a circular sectioned frame, and a pointed bezel containing a glass cabochon. The setting here is powdery and white, and the original colour cannot be discerned. The ring measures 21.6mm in external diameter, and 19.5 internally. This ring has a direct and exact parallel from London, illustrated by Egan (2013, 326, fig. 215, no. 1609). Egan (2013, 326) describes the stirrup shaped ring as a type which was popular in Britain for around 300 years, from the mid-12th century onwards.

Bone

A bone handle from a scale tang knife was found in Pit L2021. The piece consists of the two scales, missing the knife, attached by a large circular copper alloy rivet near the terminal end. The piece expands along the length and ends in a trefoil terminal, with incised lines demarcating each 'foil'. There are also three smaller rivet holes along the length of the handle. Scale tang knives were extant from the later medieval period onwards, however this piece is of post-medieval date. A parallel for the iron knife, rather than the scales, is illustrated in Egan (2005, 94, fig. 79, no. 406). This knife is almost exact in dimensions and shape to the scales found in Bury St. Edmunds, and this knife is dated to c.1550 - c.1600.

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THE SHELL

Julia E M Cussans

A sizable assemblage of marine shell was recovered from archaeological investigations. In addition to the marine shell a small quantity of garden snail shells were also present (Table 4). Shells derived from a series of pits, plus a ditch deposit and a layer, and spot dates largely relate to the later medieval and post-medieval periods. Shell preservation was rated as poor to good on a five point scale ranging from very poor through to excellent, with the majority of contexts being rated as ok or good. The majority of shells were abraded to some extent and fresh breakages were present in most contexts.

The assemblage was relatively large with the number of identified specimens (NISP) being over 900 and the total minimum number of individuals (MNI) being over 400.

Marine molluscs present, in order of abundance, were oysters (*Ostrea edulis*), cockles (*Cerastoderma edule*), mussels (*Mytilus edulis*) and whelks (*Buccinum undatum*). In addition to these marine taxa a few shells of garden snails (*Cornu aspersum*) were also present.

Oysters were by far the most abundant of the marine molluscs and account for 90% of the NISP. Overall lower and upper valves were fairly evenly represented. Valve pairing was not systematically attempted but some valve pairs were noted. A small number of oysters showed signs of human modification with opening notches being noted as well as a small number of shells having perforations that could not be accounted for through natural causes. Low levels of parasitic activity were noted in most of the contexts including worm burrows, sponge borings and barnacles. A large number of the shells were measurable and many were noted as being particularly small.

Cockles were present in three contexts Pit Fills L2007, L2008 and L2009. Left valves were better represented than right valves, possibly indicating some of the right valves were deposited elsewhere. No parasitic infestations or human modifications were noted. A number of the valves were complete enough to be measured.

As for cockles, mussels were also only present in L2007, L2008 and L2009 and here right valves were more numerous than left ones. No parasites were noted for the mussel shells but one valve was noted as having a deformed shell with a depression in the outer surface that protruded into the interior of the shell; the reason for this is unknown. Only a single measurable shell was present and this was thought to be a fairly large specimen.

Whelks were represented by a single shell and a fragment, these came from Pit Fills L2007 and L2008. No parasites or human modifications were noted. Garden snails also only derived from two contexts (L2007 and L2009), it is not known however if the occurrence of these in the assemblage is as a result of anthropogenic activity or if they became incorporated into the pit deposits through natural processes.

As for the animal bone assemblage (Cussans this volume) it appears that Pits F2002, F2003 and F2004 have very similar contents in terms of the mollusc species present, with cockles, mussels, whelks and garden snails only being found within this group of pits. Pit F2011 is also of interest as it contains a large quantity of oysters; however none of the other taxa are present. Once again it appears that Pits F2002, F2003 and F2004 represent a specific set of activities. Further more detailed investigation of the shell assemblage may elucidate as to the nature of some of these activities.

Feature	Context	Description	Spot Date	Pres.	Oyster					Mussel					Cockle					Whelk				Garden snail				Total		
					Lower	Upper	Frag	NISP	MNI	Left	Right	Frag	NISP	MNI	Left	Right	Frag	NISP	MNI	Apex	Frag	NISP	MNI	Apex	Frag	NISP	MNI	NISP	MNI	
1003	1004	Fill of Ditch		good	1			1	1				0	0				0	0				0	0	1	1				
	1013	Layer	18th-early 20th	good		3		3	3				0	0				0	0				0	0	3	3				
1016	1017	Fill of Pit	Late 12th-14th	poor	1		1	2	1				0	0				0	0				0	0	2	1				
2001	2005	Upper Fill of Pit	13th-14th C	ok	2	1	2	5	2				0	0				0	0				0	0	5	2				
2001	2006	Basal Fill of Pit	Mid 15th- Mid 17th C	ok	1		1	2	1				0	0				0	0				0	0	2	1				
2002	2007	Fill of Pit	Mid 15th- Mid 17th C	good	33	50	19	102	50		2	2	4	2	13	7	3	23	13	1		1	1	5	11	16	5	146	71	
2003	2008	Fill of Pit	Mid 15th- Mid 17th C	ok	78	56	10	144	78	1	2	3	6	2	2			2	2		1	1	1			0	0	153	83	
2004	2009	Fill of Pit	Mid 15th- Mid 17th C	good	165	170	40	375	170	4	5	6	15	5	5	5		10	5			0	0	2	1	3	2	403	182	
2011	2012	Fill of Pit	13th- Mid 14th C	ok	86	58	49	193	86				0	0				0	0				0	0			0	0	193	86
2020	2021	Fill of Pit	16th- 17th/18th C	ok	6	16	3	25	16				0	0				0	0				0	0	1		1	1	26	17
				Total	373	354	125	846	373	5	9	11	25	9	20	12	3	35	20	1	1	2	1	8	12	20	8	934	411	

Table 4. Quantification of hand collected mollusc remains from Southgate Street.

THE ANIMAL BONE

Julia E M Cussans

A relatively large assemblage of animal bone was recovered from a combination of trial trench and watching brief interventions at 100 Southgate Street, Bury St Edmunds. Bones largely derived from a number of pit features, but also from ditch and layer features (Table 5). Spot dates largely related to the medieval and early post medieval periods. Bone preservation was rated as ok or good on a five point scale ranging from very poor through to excellent. Bone from the trial trench excavation was largely rated as having ok preservation whereas that from the watching brief, where the majority of the bone material derived from, was largely rated as good. Low levels of bone abrasion and fresh breakages were noted throughout the assemblage and bone gnawing was noted in slightly over half of the contexts containing bone. A small quantity of burnt bone was present including scorched, charred and calcined bone.

Over 600 bone fragments were recorded, only slightly over half of which could only be identified as large (cattle or horse sized) or medium (sheep or pig sized) mammal, with the remaining portion of the assemblage being identifiable to more specific taxa. Identified mammalian taxa in order of abundance were sheep/goat, cattle, pig, rabbit/hare, red deer, dog and cat. A significant number of bird and fish bones were also recovered. The bird bones were largely identified as chicken or chicken sized and the fish all appeared to belong to large gadid (cod family).

The sheep/goat material included a good mix of overall, including a horn core positively identified as sheep. Pit Fill L2012 (F2011) was noted as having a large quantity of sheep/goat metapodials and hence may have resulted for a specific form of carcass processing. Butchery marks were fairly common and included both chops and cuts. A significant quantity of ageable material was present including both mandibles and long bone epiphyses. The majority of mandibles present had the third molar (M3) in wear, indicating the presence of adult animals, but some younger individuals were also represented. A reasonable number of measurable elements were present which may prove useful for estimating animal stature and meat yield and possibly in indicating breed types present. A single pathological element was noted, this was a mandible with an over developed muscle attachment below the M3 and porous bone at the mesial end around the incisor sockets.

Cattle were represented by a mix of elements. Butchery marks were common in some contexts and included both cuts and chops; of particular note were cut marks on calf skull fragments that may have been indicative of skinning. A reasonable quantity of ageable material was present and largely represented neonate animals, although a few older animals were also represented. One deposit (Pit Fill L2007, F2002) contained a total of six neonate mandibles, three left and three right, giving a minimum number of individuals (MNI) of three. A small quantity of measurable elements was present and no pathological material was noted.

Pigs were also represented by a good mix of elements with a number of butchery marks present including both chops and cuts. A good quantity of ageable material was present including a small number of mandibles and a significant quantity of long bone epiphyses; a proportion of the pig assemblage was made up of neonate bones.

Very few measurable elements were present and no pathological elements were noted.

Red deer was represented by a small number of limb bones, all deriving from one context (Pit Fill L2009, F2004). No butchery was noted but an ageable epiphysis was present.

Rabbit/hare was represented by a selection of elements and was present in a series of pit fills (Table 5). Some of the bones have been positively identified as hare; the others are likely to be identifiable on further examination. No butchery marks or pathologies were noted on any of the bones.

As noted above the bird bones are largely thought to belong to chicken and this may be confirmed on further examination, although the presence of other bird taxa cannot be ruled out. One tarso-metatarsus was noted as butchered. The fish bones included both head and vertebral elements and as noted above were thought most likely to belong to a large cod family fish or fishes. These bones were particularly large and present in a number of contexts (Table 5). A small quantity of fish remains were also noted in a brief scan of the bulk sample residues and further fish remains were present in the flots including some very small vertebrae (J. Summers pers. com.). No butchery was noted on any of the fish bones.

The large and medium mammal assemblages were largely made up of ribs, vertebrae and long bone shaft fragments. A number of the ribs, particularly for large mammal, were noted as having been butchered.

Three intercutting pits (F2002, F2003, F2004, highlighted in Table 5) were noted as of particular interest in terms of the animal bone assemblages they contain. The fills from these pits contained the vast majority of the animal bone assemblage presented here, containing a total of 510 bone fragments. The content of each of the pits was very similar in terms of taxa represented, although the proportions varied slightly from one pit to the next. The butchery and aging evidence for each of the pits appears similar, but detailed recording would be needed in order confirm this. The aging and butchery evidence also seems to indicate that individual taxa were being exploited to specific ends, for example the dominance of neonate cattle and mature sheep/goats.

Feature	Context	Trench	Description	Spot Date	Preservation	Cattle	Sheep/ Goat	Pig	Dog	Cat	Red Deer	Rabbit/ Hare	Large mammal	Medium mammal	Bird	Fish	Total	
1000	1001	1	Subsoil	17th-18th	ok									1				1
1003	1004	1	Fill of Ditch		ok		1							3				4
1007	1008	2	Fill of Pit		good		2									2		4
	1013	3	Layer	18th-early 20th	ok		4							2				6
1016	1017	3	Fill of Pit	Late 12th-14th	ok									1				1
1026	1029	3	Fill of Pit	Late 12th-14th	ok									2				2
1031	1032	3	Fill of Pit	18th-19th	ok	1	1						1	2				5
			Upper Fill of Pit	13th-14th C	ok								1					1
2001	2006	4	Basal Fill of Pit	Mid 15th- Mid 17th C	good	2	4						10		1			17
2002	2007	4	Fill of Pit	Mid 15th- Mid 17th C	good	37	18	8	1			8	22	44	3	4		145
2003	2008	4	Fill of Pit	Mid 15th- Mid 17th C	good	20	17	17				3	43	53	13	1		167
2004	2009	4	Fill of Pit	Mid 15th- Mid 17th C	good	13	19	14			4	17	40	80	7	4		198
2011	2012	4	Fill of Pit	13th-Mid 14th C	good	3	14	2	1	1		6	1	18	1			47
2020	2021	4	Fill of Pit	16th-17th/18th C	good	5	5	2					3	6	8	1		30
2026	2027	4	Fill of Pit	13th-15th C	good	1							1	1	1			4
2023	2024	4	Fill of Pit		ok		1							1				2
	U/S		unstratified		ok	1	6	2					4	5				18
					Total	83	92	45	2	1	4	34	126	219	34	12		652

Table 5. Quantification of animal bone from trial trench and watching brief interventions at Southgate Street

The Environmental Samples

Dr John Summers

Introduction

During excavations at 100 Southgate Street, Bury St. Edmunds, eight bulk samples of 10 litre volume were taken for environmental archaeological investigation. Sampled deposits included two spot dated to the 13th-15th century, five spot dated to the mid 15th to mid 17th century and one undated deposit.

This report presents the results from the investigation of the bulk sample light fractions. The aim of the investigation, although necessarily limited in scope, was to gain an understanding of the diet and economy of the site's inhabitants, considering the nature and source of the crop plants encountered. There is also the potential to examine changes in the plant based economy/diet between the two main periods of occupation represented.

Methods

Samples were processed at the Archaeological Solutions Ltd facilities in Bury St. Edmunds using standard flotation methods. The light fractions were washed onto a mesh of 500µm (microns), while the heavy fractions were sieved to 1mm. The dried light fractions were scanned under a low power stereomicroscope (x10-x30 magnification). Botanical and molluscan remains were identified and recorded using reference literature (Cappers *et al.* 2006; Jacomet 2006; Kerney and Cameron 1979; Kerney 1999) and a reference collection of modern seeds. Potential contaminants, such as modern roots, seeds and invertebrate fauna were also recorded in order to gain an insight into possible disturbance of the deposits.

Results

The data from the bulk sample light fractions are presented in Table 6. The following discussion of the results uses the spot dates derived from pottery to divide the samples.

13th-15th Century

Two samples were examined from deposits dated to the 13th-15th century. Both contained a reasonable quantity of carbonised material, having densities of 4.1 (L2012) and 5.4 (L2027) items per litre of sediment, which was dominated by carbonised cereal grains. Identified taxa were hulled barley (*Hordeum* sp.), free-threshing type wheat (*Triticum aestivum/ turgidum* type) and rye (*Secale cereale*). No chaff elements were present, nor were there any non-cereal crop taxa (e.g. pulses, flax etc). The samples did include a

small range of non-cereal taxa typical of arable weed communities, which included goosefoot (*Chenopodium* sp.), corncockle (*Agrostemma githago*), vetch/ wild pea (*Vicia/ Lathyrus* sp.) and wild grasses (Poaceae).

Cereal grains outnumbered non-cereal arable weeds by 7.6:1 which, combined with the absence of chaff remains, indicates the presence of clean, fully processed cereal grain. The small number of arable weed seeds are likely to have stayed with the grain following processing and most are large seeded types, which are difficult to separate. It is probable in the setting that the cereals were imported to the site in a fully processed site, most likely being purchased at nearby markets.

The density of material is consistent with a general accumulation of carbonised remains from mixed sources, probably as part of general domestic refuse disposal. Barley grains were more numerous than wheat in L2012 but there was no dominance in L2027. It is difficult to be certain of the relative importance of the cereal taxa, although rye appears to be only a minor contributor. It is possible that wheat and barley were used for different products, with wheat generally being the preferred grain for bread, although barley was also often employed for lower status loaves, as well as mixed grains (e.g. Stone 2006).

Mid 15th-mid 17th Century

The bulk of the material from the excavation came from a cluster of intercutting pits (F2001, F2002, F2003 and F2004) dating to the mid 15th to mid 17th century. The majority of these (F2002 - F2004) contained relatively sparse carbonised remains (1.5-1.7 items per litre), while the two fills from F2001 were richer (L2005 = 4.2 items per litre; L2006 = 6.3 items per litre). However, as noted above, the likelihood is that these densities represent a general accumulation of carbonised remains from mixed sources, probably as part of general domestic refuse disposal.

The range of taxa was slightly different to the assemblage from the 13th-15th century deposits. The cereal crops hulled barley (*Hordeum* sp.), free-threshing type wheat (*Triticum aestivum/ turgidum* type) and rye (*Secale cereale*) were all recovered, as in the earlier samples. In addition, oat (*Avena* sp.) was present in two of the samples. Oat was a commonly cultivated cereal for a range of uses from brewing to fodder, although wild oats are often encountered as weeds of cultivation. No diagnostic chaff elements were present to indicate whether the domestic or wild form was represented. Pea/ bean (Fabaceae) seeds were also present in four of the five samples. The specimens were not sufficiently preserved to allow identification to species but the usual taxa are pea (*Pisum sativum*) and horse bean (*Vicia fba* var. *minor*).

Non-cereal arable weed taxa were outnumbered by crop taxa and are mostly likely to represent large seeded plants that were retained in processed crops. These included corncockle (*Agrostemma githago*), dock (*Rumex* sp.), vetch/ wild pea (*Vicia/ Lathyrus* sp.), bedstraw (*Galium* sp.) and large seeded wild

grasses (Poaceae). Sedge (*Carex* sp.) can grow in wetter areas of cultivated land but could also have been introduced with gathered vegetation from marsh or heath habitats. Gathered sedges and rushes could have been used for floor coverings, amongst other uses.

Undated

The richest sample from the site was Sample 8 of Pit Fill L2024 (F2023), with a density of 45.4 items per litre of sediment. The bulk of this material was in the form of cereal grains, comprising hulled barley, including some asymmetric grains (*Hordeum vulgare* var. *vulgare*), free-threshing type wheat (*Triticum aestivum/ turgidum* type), oat (*Avena* sp.) and rye (*Secale cereale*). Also present were three pea/ bean seeds (Fabaceae), although it was not possible to identify them to species.

Barley was by far the dominant taxon, accounting for 82% of the identifiable cereal grains. Cereal grains outnumbered non-cereal arable weed taxa by 17:1 and the only evidence of cereal chaff was a single segment of rye rachis. Combined with the high density of material, it is apparent that this represents a deposit of clean grain, primarily composed of hulled barley. There was little evidence for malting (germinated grains displaying clear sprout or depression on dorsal surface), although some grains displayed distortion consistent with grain carbonised while germinating. This indicates that the material was carbonised as unmodified grain, perhaps accidentally during use (food preparation activities) or disposal of residues from cleaning grain stores or similar.

It is unfortunate that this deposit remains undated, as it was the richest to be sampled from the site. The presence of pulses and oat could align this deposit with the others from mid 15th to mid 17th century features but this is conjectural since these plants were also common cultivars in earlier periods.

Discussion

Although only a limited number of samples were available for investigation from this small excavation, the material recovered was of interest and value for gaining insights into later medieval and earlier post-medieval occupation within Bury St Edmunds, beyond the Abbey precinct. The material from both periods appears to represent the accumulation of general carbonised waste material from domestic food processing, preparation and consumption activities, as well as perhaps an accidental burning or cleaning event in L2024. The remains are likely to have been generated on a household scale and the nature of the assemblage, which was dominated by crop taxa, with no chaff and a small number of large seeded arable weeds, indicates grain and pulses imported in a fully processed state. Local markets, most likely within Bury St Edmunds itself, are the probable source for imported grain, which would have been grown in the surrounding farmland. Unfortunately there was insufficient information available from the non-cereal taxa to investigate crop

husbandry and growing conditions but the town is likely to have drawn products from a wide catchment.

It is important not to place too much confidence on the results of a small number of samples but preliminary indications are that free-threshing type wheat, barley and rye were consistently used at the site throughout its later medieval and earlier post-medieval occupation, but that pulses and oats were introduced in later periods.

Barley was prominent and frequently more abundant than wheat. Barley was generally a lower status, less expensive grain for consumption than wheat and was also the prime grain for brewing (Stone 2006). However, there was no clear evidence of malted barley in the assemblage, suggesting that it was more commonly used for more general consumption. Wheat and winter barley was a known medieval maslin crop but it is generally difficult to detect such products in carbonised assemblages, especially where mixing of multiple sources of material is expected (e.g. Moffett 2006).

Oats and pulses are common in pottages and could reflect a slight change in culinary practices in later periods. This is perhaps an issue to consider more broadly through combination with other datasets across Bury St Edmunds but is beyond the scope of the current project.

Medieval deposits from close to the Abbey, in the possible former Sacrists Yard at Shire Hall (Summers 2013), show a different pattern, with wheat, the higher status cereal for flour and bread, dominating the assemblages. This suggests a contrast between the relatively high status monastic diet and that of more 'middle class' inhabitants of the wider town.

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Site code	Sample number	Context	Feature	Description	Spot date	Volume (litres)	Cereals			Non-cereal taxa		Hazelnut shell	Charcoal		Molluscs		Contaminants					
							Cereal grains	Cereal chaff	Notes	Seeds	Notes		Charcoal > 2mm	Notes	Molluscs	Notes	Roots	Molluscs	Modern seeds	Insects	Earthworm capsules	Other remains
13th-15th Century																						
BSE520	1	2005	2001	Upper Fill of Pit	13th-14th C	10	XX	X	HB (4), Hord (7), FTW (3), Trit (3), Trit tail (1), Oat (1), Rye (2), NFI (21)	-	-	-	XX	Diffuse porous	XX	<i>Pupilla muscorum</i> , <i>Trichia hispida</i> group, <i>Vallonia</i> sp.	XXX	X	-	-	-	Small mammal bone (X), Coal (X), Clinker (X)
BSE520	5	2012	2011	Fill of Pit	13th-Mid 14th C	10	XX	-	HB (13), Hord (6), Hord tail (1), FTW (4), Trit (3), Trit tail (1), Rye (1), NFI (7)	X	-	-	XX	Diffuse porous	XX	<i>Pupilla muscorum</i> , <i>Trichia hispida</i> group	XX	X	-	-	-	Bone (X), Small mammal bone (X)
BSE520	7	2027	2026	Fill of Pit	13th-15th C	10	XX	-	HB (5), Hord (7), Hord tail (1), FTW (6), Trit (7), Rye (1), NFI (21)	X	-	-	XX	<i>Quercus</i> sp., Diffuse porous	XX	<i>Pupilla muscorum</i> , <i>Trichia hispida</i> group, <i>Vallonia</i> sp.	X	X	-	-	-	Small mammal bone (X)
Mid 15th to Mid 17th Century																						
BSE520	2	2006	2001	Basal Fill of Pit	Mid 15th-Mid 17th C	10	XX	X	HB (8), Hord (13), FTW (1), Trit (7), Rye (2), NFI (21), Embryo (1), Culm (1)	XX	-	-	X	-	X	<i>Pupilla muscorum</i>	XXX	X	-	-	-	Fish bone (X)

BSE520	3	2007	2002	Fill of Pit	Mid 15th- Mid 17th C	10	XX	-	HB (1), Hord (2), FTW (1), Trit (2), NFI (7)	X	Large Fabaceae (1), Medium Fabaceae (1)	-	XX	<i>Quercus</i> sp.	XX	Clausiliidae, <i>Oxychilus</i> sp., <i>Pupilla</i> <i>muscorum</i> , <i>Trichia</i> <i>hispidia</i> group, <i>Vallonia</i> sp., <i>Vitrea</i> sp.	XX	X	X	X	-	Bud (1), Small mammal dropping (1), Burnt bone (X), Small mammal bone (X), Fish bone (X), Fish scale (X), Amphibian bone (X)
BSE520	4	2008	2003	Fill of Pit	Mid 15th- Mid 17th C	10	XX	-	HB (1), FTW (2), Trit (1), Oat (1), Rye (1), NFI (8)	X	Large Fabaceae (2), <i>Galium</i> sp. (1)	-	XX	Ring porous, Diffuse porous incl. RW	XX	<i>Pupilla</i> <i>muscorum</i> , <i>Trichia</i> <i>hispidia</i> group, <i>Vallonia</i> sp.	XX	X	-	-	-	Bone (X), Fish bone (X), Amphibian bone (X), Clinker (X)
BSE520	6	2009	2004	Fill of Pit	Mid 15th- Mid 17th C	10	XX	-	HB (1), Hord (3), Trit (2), NFI (6)	X	Large Fabaceae (1), <i>Agrostemma</i> <i>githago</i> (1), <i>Carex</i> sp. (1), Large Poaceae (1)	-	XX	<i>Quercus</i> sp., Ring porous	XX	<i>Cochlicopa</i> sp., <i>Pupilla</i> <i>muscorum</i> , <i>Trichia</i> <i>hispidia</i> group, <i>Vallonia</i> sp.	XX	X	-	-	-	Small mammal bone (X), Bird bone (X), Fish bone (X)
Undated																						

BSE520	8	2024	2023	Fill of Pit	-	10	XXX	X	HTB (4), HB (113), HB germ (1), Hord (127), Hord tail (8), FTW (18), Trit (17), Trit tail (1), Oat (9), Rye (10), NFI (14), NFI tail (1), Embryo (3), Rye rachis (1)	XX	Large Fabaceae (3), <i>Chenopodium</i> sp. (2), Chenopodiaceae (1), <i>Agrostemma githago</i> (4), Caryophyllaceae (1), <i>Rumex</i> sp. (1), <i>Vicia/Lathyrus</i> sp. (2), Medium Fabaceae (1), <i>Sambucus nigra</i> (1), Asteraceae (1), <i>Eleocharis palustris</i> (1), Large Poaceae (9)	1	XX	<i>Quercus</i> sp.	XX	<i>Pupilla muscorum</i> , <i>Trichia hispida</i> group, <i>Vallonia</i> sp.	X	X	X	-	-	Heather leaves (X), Small mammal bone (X), Fish bone (X)
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Table 6: Results from the assessment of bulk sample light fractions from 100 Southgate Street, Bury St. Edmunds. Abbreviations: HTB = hulled twisted barley/ asymmetric grains (*Hordeum vulgare* var. *vulgare*) HB = hulled barley (*Hordeum* sp.); Hord = barley (*Hordeum* sp.); FTW = free-threshing type wheat (*Triticum aestivum/ turgidum*); Trit = wheat (*Triticum* sp.); Oat (*Avena* sp.); Rye (*Secale cereale*); NFI = not formally identified (indeterminate cereal grain).

APPENDIX 3 SPECIFICATION

100 SOUTHGATE STREET, BURY ST EDMUNDS, SUFFOLK IP33 2AQ

**WRITTEN SCHEME OF INVESTIGATION FOR
ARCHAEOLOGICAL EVALUATION**

14th March 2017

Archaeological Solutions is an independent archaeological contractor providing the services which satisfy all archaeological requirements of planning applications, including:

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100 SOUTHGATE STREET, BURY ST EDMUNDS, SUFFOLK IP33 2AQ ARCHAEOLOGICAL TRIAL TRENCH EVALUATION

1 INTRODUCTION

1.1 This specification has been prepared in response to a brief issued by Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT) (Abby Antrobus, dated 8th March 2017). It provides for an archaeological trial trench evaluation to be carried out in advance of the proposed construction of a new housing development of 10 dwellings and external alterations to convert existing offices to residential on land at 100 Southgate Street, Bury St Edmunds, Suffolk IP33 2AQ (NGR TM 170 441), in order to provide further information for the initial requirement of a planning condition on St Edmundsbury Borough Council Planning Approval DC/16/0798/FUL, imposed on approval requiring a programme of archaeological work. The evaluation is required by the LPA, based on advice from SCC AS-CT.

1.2 It is understood that the programme of archaeological investigation should comprise an archaeological field evaluation, to comply with the planning requirement of the local planning authority (on advice from SCC AS-CT). This WSI for archaeological evaluation has been prepared for the approval of SCC AS-CT.

2 COMPLIANCE

2.1 If AS carried out the evaluation, AS would comply with SCC AS-CT's requirements.

3 SITE & DEVELOPMENT DESCRIPTION ARCHAEOLOGICAL BACKGROUND

3.1 It is proposed to erect 10 new dwellings and convert existing offices to residential on land at 100 Southgate Street, Bury St Edmunds. The site lies towards the southern end of Southgate Street on its western side and comprises former government offices and existing car parks. The site extends to some 1ha.

3.2 The Suffolk Historic Environment Record (HER) confirms that the site is an area of archaeological potential, located within the historic core area of Bury St Edmunds as defined by the HER (BSE 072) and also within the Area of Archaeological Importance designated on the Local Plan.

3.3 The line of Southgate Street is thought to have been one of the earlier streets of the Saxon and medieval towns, and thus has a potential for complex archaeological remains of the early and later town. The street does have surviving historic buildings elsewhere along its course and medieval

tenements and gardens are recorded along the street in 15th century Abbey documents.

3.4 The site also has a potential for earlier remains, given its position on a promontory of higher ground above the rivers Lark and Linnet, and proximity to the fording point of the Linnet at Southgate Bridge. Prehistoric and mid Saxon remains have been found on a similar topographic location on the other (north) side of the Linnet (BSE 127), and prehistoric remains have been found to the south in a gravel pit at Grindle Gardens in the later 19th century (BSE 065).

3.5 The site and immediate area is thought to have not been generally developed until at least the 19th century, with a consequent potential for the preservation of earlier remains under deeper soils of later date, though the construction of the large government buildings may have truncated earlier remains within their footprint. LiDAR data in the HER suggests elements of cut and fill on the site related to the construction of the standing buildings on the site, with areas of fill in particular down towards the valley of the River Linnet. A site visit confirms the presence of a 3m retaining wall along the northern side boundary, with land dropping to the north. The street frontage where new buildings are proposed also appears to be deeply built up.

3.6 The site thus has a potential for remains of Saxon and medieval activity associated with the early town, in particular for street frontage activity and 'back-yard' plots, and for earlier remains associated with the position on the higher ground above the two rivers.

3.7 The proposed works will cause significant ground disturbance that has the potential to damage any archaeological deposits that exist. The archaeological and historical background of the site will be discussed in the project report and the HER will be consulted.

4 BRIEF FOR THE ARCHAEOLOGICAL EVALUATION SPECIFICATION FOR TRIAL TRENCH EVALUATION GENERAL MANAGEMENT

4.1 The principal objectives for the evaluation include:

- To establish whether any archaeological deposit exists in the area, with particular regard to any which are of sufficient importance to merit preservation *in situ*
- To 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.
- To evaluate the likely impact of past land uses, and the possible presence of masking colluvial/alluvial deposits, along with the potential for the survival of environmental evidence

- To provide sufficient information to construct an archaeological conservation strategy dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of cost.

4.2 *Research Design*

4.2.1 The regional research frameworks are set out in Glazebrook (1997 and Brown & Glazebrook (2000) and updated by Medlycott and Brown (2008) and Medlycott (2011). The key issues for the Neolithic and Bronze Age (as set out by Brown & Murphy in Brown & Glazebrook 2000, 9-13) centre on the theme of the development of farming and the attendant development and integration of monuments, fields and settlements. Medlycott & Brown (2008) and Medlycott (2011, 13) suggest that future research on the Neolithic should include synthetic and regional studies for the region; an examination of the Mesolithic/Neolithic transition through radiocarbon dates; the establishment of a chronology for Neolithic ring-ditches; improved understanding of the chronological development of pottery; the excavation and study of cropmark complexes; greater understanding of burial practices; a study of the inter-relationships of settlements; greater use of scientific methods of dating and modelling of the environmental conditions during this period; targeted programmes of sedimentological, palynological and macrofossil analyses of sediment sequences in valley bottoms, lakes or the intertidal zone; and the human impact on the natural landscape during this period. The nature of Neolithic burial in the region and the pattern of burial practice, including the relationship between settlement sites and burial, require further research. Settlement sites themselves also form part of an important research subject as there is a requirement to identify if a consensus exists on the subject of non-permanent settlement in the Neolithic (Medlycott 2011, 13). Further work on understanding the effects of plough damage on Neolithic sites is considered to be an important research subject for the region (Medlycott 2011, 13).

4.2.2 Inter-relationships between settlements and greater understanding of patterns of burial practice are important areas of research for the Bronze Age (Medlycott & Brown 2008). Medlycott (2011, 21) identifies artefact studies as of particular importance for the study of the Bronze Age in the region; the typological identification of later Bronze Age pottery linked to close radiocarbon dating, the further study of Bronze Age flintworking and the significance of hoarding and other depositional practices are all identified as being key research subjects. Artefact studies can contribute to the refinement of chronologies for the period and to an assessment of the reasons behind the marked divide in research results between the northern and southern parts of the region, which are identified by Medlycott (2011, 21) as important research areas. Like the Neolithic, sedimentological, palynological and macrofossil analyses of sediment sequences are considered to be important areas of research as are the effects of colluviation and the possibility that colluvial deposits mask some significant sites (Medlycott 2011, 21).

4.2.3 Research topics for the Iron Age set out by Bryant (in Brown & Glazebrook 2000, 14-18) include further research into chronologies, precise dating and ceramic assemblages, further research into the development of the agrarian economy (particularly with regard to field systems), research into settlement chronology and dynamics, research into processes of economic and social change during the late Iron Age and Romano-British transition (particularly with regard to the development of Aylesford/Swarling and Roman culture, and also regional differences and tribal polities in the late Iron Age and further research into *oppida* and ritual sites), further analysis of development of social organisation and settlement form/function in the early and middle Iron Age, further research into artefact production and distribution and the Bronze Age/Iron Age transition. Medlycott & Brown (2008) and Medlycott (2011, 29-32) build on these themes, paying particular attention to chronological and spatial development and variation and adding subjects as the Bronze Age/Iron Age transition and manufacturing and industry.

4.2.4 Wade (in Brown & Glazebrook 2000, 23-26) identifies research topics for the rural landscape in the Saxon and medieval periods. These include examination of population during this period (distribution and density, as well as physical structure), settlement (characterisation of form and function, creation and testing of settlement diversity models), specialisation and surplus agricultural production, assessment of craft production, detailed study of changes in land use and the impact of colonists (such as Saxons, Danes and Normans) as well as the impact of the major institutions such as the Church.

4.2.5 Medlycott (2011, 57) states that the study of the Anglo-Saxon period still requires further cooperation between historians and archaeologists. Important research issues for this period comprise: the Roman/Anglo-Saxon transitional period; settlement distribution, which suffers from problems associated with the identification of Saxon settlement sites; population modelling and demographics, which has the potential to be advanced by modern scientific methods; differences within the region in terms of settlement type and economic practice and subjects related to this such as links with the continent, trading practices and cultural influences; rural landscapes and settlements, including detailed study of the changes and developments in such settlements over time and the influence of Saxon landscape organisation and settlements on these issues in the medieval period; towns and their relationships with their hinterland; infrastructure, including river management, the identification of ports and harbours and the role of existing infrastructure in shaping the Saxon period landscape; the economy, based on palaeoenvironmental studies; ritual and religion; the effect of the Danish occupation; and artefact studies (Medlycott 2011, 57-59).

4.2.6 The issues identified by Ayers (in Brown & Glazebrook, 2000) and Wade (in Brown & Glazebrook, 2000) remain valid research subjects (Medlycott 2011, 70) for the medieval period. The study of landscapes is dominated by issues such as water management and land reclamation for large parts of the region, the economic development of the landscape and the region's potential to reveal information regarding field systems, enclosures, roads and trackways. Linked to the study of the landscape are research

issues such as the built environment and infrastructure; the main communication routes through the region need to be identified and synthesis needs to be carried out regarding the significance, economic and social importance of historic buildings in the region (Medlycott 2011, 70-71). Also considered to be important research subjects for the medieval period are rural settlements, towns, industry and the production and processing of food and demographic studies (Medlycott 2011, 70-71).

4.2.7 As set out above, the principal research objectives will be to identify any further evidence of remains of Saxon and medieval activity associated with the early town, in particular for street frontage activity and 'back-yard' plots, and for earlier remains associated with the position on the higher ground above the two rivers.

References

Brown, N & Glazebrook, J (eds), 2000, *Research and Archaeology: A Framework for the Eastern Counties. 2. Research Agenda and Strategy*, East Anglian Archaeology Occasional Papers 8

Glazebrook, J (eds), 1997, *Research and Archaeology: A Framework for the Eastern Counties. 1. Resource Assessment*, East Anglian Archaeology Occasional Papers 3

Medlycott, M & Brown, N, 2008, *Revised East Anglian Archaeological Research Frameworks*, www.eaareports/algaoee

Medlycott, M. (ed.) 2011, *Research and Archaeology revisited: a revised framework for the East of England*, ALGAO East of England Region, East Anglian Archaeology Occasional Papers 24

5 SPECIFICATION TRENCHED EVALUATION

5.1 Details of Senior Project Staff

5.1.1 AS has developed a professional and well-qualified team who have undertaken numerous archaeological projects (both desk-based and field evaluations) on all types of developments, including commercial, residential, road schemes and golf courses. AS is a Registered Organisation of the ClfA.

5.1.2 Profiles of key project staff are provided (Appendix 3).

A Method Statement is presented
Trial Trench Evaluation Appendix 1

5.1.3 The evaluation will conform with the guidelines set down in the brief and the Chartered Institute for Archaeologists *Standard and Guidance for Archaeological Evaluations (revised 2014)* and *Standard and Guidelines for Historic Environment Desk-based Assessment (revised 2014)*. It will also adhere to the document *Standards for Field Archaeology in the East of England* (Gurney 2003) and the requirements of the SCC document *Requirements for a Trenched Evaluation* (updated March 2017).

5.1.4 SCC AS-CT require a programme of archaeological trial trenching/test-pitting to examine the footprints of the 10 new building plots on the Southgate Street frontage and northern site edge. A test pit of c.3m x 3m is proposed where the x3 new units are proposed on the street frontage, where overburden is expected to be deep. Two trenches of 10m x 1.8m are proposed along the northern edge of the site where the terrace of new dwellings is proposed, again in an area where overburden may be very deep, given that a retaining wall is present on the north boundary, with land dropping sharply to the north (stepping down some 3m, suggesting the car park has been heavily built up). A trench plan is appended. AS is happy to review the scale/location of the trenches following comment from the client and/or SCC AS-CT.

5.1.5 The environmental strategy will adhere to the guidelines issued by English Heritage (now Historic England) (*Environmental Archaeology; A guide to the theory and practice of methods, from sampling and recovery to post-excavation*, Centre for Archaeology Guidelines, rev 2011). An environmentalist will be invited to visit the site if remains of interest are found. Dr John Summers will be the Environmental Coordinator for the project. The specialist will make his/her results known to the regional science advisor who co-ordinates environmental archaeology in the region on behalf of Historic England.

5.1.6 Estimate of time and resources required for each phase, to complete the trial trenching, project archive and the production of an evaluation report.

Trial Excavation

Processing, Cataloguing and Conservation of Finds

Preparation of Report and Archive

c.10 Days

Staff on site: a Project Officer and Site Assistant/s (as necessary)

5.1.7 In advance of the field work AS will liaise with the Suffolk Archaeological Archive to fulfil their requirements for the long term deposition of the project archive. These will encompass: their collection policy, and their financial and technical requirements for long term storage. The resources include provision for the long term-deposition of the project archive.

5.1.8 Details of staff and specialist contractors are provided (Appendix 2). The project will be managed by Claire Halpin MCIFA /Jon Murray MCIFA.

5.1.9 AS is a member of FAME formerly the Standing Conference of Archaeological Unit Managers (SCAUM) and operates under the 'Health & Safety in Field Archaeology Manual'. A risk assessment and management strategy will be completed prior to the start of works on site.

5.1.10 AS is a member of the Council for British Archaeology and is insured under their policy for members.

6 SERVICES

6.1 The client is to advise AS of the position of any services which traverse the site.

7 SECURITY

7.1 Throughout all site works care will be taken to maintain all existing security arrangements, and to minimise disruption.

8 REINSTATEMENT

8.1 No provision has been made for reinstatement, excepting simple backfilling.

9 REPORT REQUIREMENTS

9.1 The report will include (as a minimum):

- a) the archaeological background
- b) a consideration of the aims and methods adopted in the course of the recording
- c) a detailed account of the nature, location, extent, date, significance and quality of any archaeological evidence recorded.
- d) Excavation methodology and detailed results including a suitable conclusion and discussion
- e) plans and sections of any recorded features and deposits
- f) discussion and interpretation of the evidence. An assessment of the projects significance in a regional and local context and appendices.
- g) All specialist reports or assessments
- h) A concise non-technical summary of the project results
- i) A HER summary sheet
- j) An OASIS summary sheet

9.2 Draft hard and digital PDF copies of the report will be submitted to SCC AS-CT for approval. If any revisions are required, final hard and digital PDF copies will be supplied to SCC AS-CT for deposition with the HER.

9.3 The project details will be submitted to the OASIS database, and the online summary form will be appended to the project report.

9.4 A summary report will be submitted suitable for inclusion in the annual roundups of *Proceedings of the Suffolk Institute of Archaeology and History*, dependent on the results of the project.

10 ARCHIVE

10.1 The requirements for archive storage will be agreed with the Suffolk Archaeological Archives.

10.2 The archive will be deposited within six months of the conclusion of the fieldwork. It will be prepared in accordance with the UK Institute for Conservation's *Conservation Guideline No.2* and according to the document *Deposition of Archaeological Archives in Suffolk* (SCC AS Conservation Team, 2010). A unique event number and monument number will be obtained from the County HER Officer.

10.3 The full archive of finds and records will be made secure at all stages of the project, both on and off site. Arrangements will be made at the earliest opportunity for the archive to be accessed into the collections of Suffolk Archaeological Archives; with the landowner's permission in the case of any finds. It is acknowledged that it is the responsibility of the field investigation organisation to make these arrangements with the landowner and Suffolk Archaeological Archives. The archive will be adequately catalogued, labelled and packaged for transfer and storage in accordance with the guidelines set out in the United Kingdom Institute for Conservation's *Conservation Guidelines No.2* and the other relevant reference documents.

10.4 Archive records, with inventory, are to be deposited, as well as any donated finds from the site, at the Suffolk Archaeological Archives and in accordance with their requirements. The archive will be quantified, ordered, indexed, cross-referenced and checked for internal consistency. In addition to the overall site summary, it will be necessary to produce a summary of the artefactual and ecofactual data. A unique event number for the report and monument number for any finds will be obtained from the HER.

11 MONITORING

11.1 It is understood that SCCAS-CT will monitor the project on behalf of the local planning authority.

11.2 **Notification** Archaeological Solutions will give SCCAS-CT notification prior to the commencement of the project on site

11.3 **Monitoring** SCCAS-CT will be responsible for monitoring progress and standards throughout the project, both on site and during the post-survey/report stages, to ensure compliance with the planning requirement, the approved WSI and any subsequent Brief and approved WSI for further fieldwork, analyses and publication.

11.4 Any variations to the WSI will be agreed in advance with SCCAS-CT prior to them being carried out.

APPENDIX 1 METHOD STATEMENT

Method Statement for the recording of archaeological remains

The archaeological evaluation will be conducted in accordance with the project brief, and the code of the Chartered Institute for Archaeologists.

1 Mechanical Excavation

1.1 A mechanical excavator fitted with a wide toothless bucket will be used to remove the topsoil/overburden. The machine will be powerful enough for a clean job of work and be able to mound spoil neatly, at a safe distance from the trench edges.

1.2 The mechanical stripping will be controlled, and the mechanical excavator will only operate under the full-time supervision of an experienced archaeologist.

2 Site Location Plan

2.1 On conclusion of the mechanical excavation, a 'site location plan', based on the current Ordnance Survey 1:1250 map and indicating site north, will be prepared. This will be supplemented by an 'area plan' at 1:200 (or 1:100) which will show the location of the area(s) investigated in relationship to the development area, OS grid and site grid.

3 Manual Cleaning & Base Planning of Archaeological Features

3.1 Exposed areas will be hand-cleaned to define archaeological features sufficient to produce a base plan.

4 Full Excavation

If deep, 'urban' type deposits are encountered, or significant deposits of made ground are encountered (which is very likely on this site) the upper levels of the test pits/trenches will be stepped as necessary, within layers of later post-medieval/modern date only, in order to ensure safe working practices. The trenches will be no less than 1.6m wide at base.

Excavation of Stratified Sequences

The trenches will be excavated according to phase, from the most recent to the earliest, and the phasing of features will be distinguished by their stratigraphic relationships, fills and finds.

Deep features e.g. quarry holes, may incorporate stratified deposits which will be excavated by hand-dug sections and recorded.

Excavation of Buildings

Building remains are likely to comprise stake holes, post holes and slots/gullies, masonry foundations and low masonry walls. Associated features may be present e.g. hearths.

The features comprising buildings will be excavated fully and in plan/phase, to a level sufficient for the requirements of an evaluation.

Full Excavation

Industrial remains and intrinsically interesting features e.g. hearths, burials will clearly merit full excavation, though will be excavated sufficient to characterise such deposits within the context of an evaluation. Discrete features associated with possible structures and/or settlement will be fully excavated, again sufficient to characterise them for the purposes of an evaluation. Otherwise discrete features (eg pits) will be half-sectioned.

Ditches

The ditches will be excavated in segments up to 2m long, and the segments will be placed to provide adequate coverage of the ditches, establish their relationships and obtain samples and finds.

Buried Soils

If buried soils are encountered, the surfaces will be cleaned and examined for features/finds, which will be investigated/recorded before any further excavation takes place.

5 Written Record

5.1 All archaeological deposits and artefacts encountered during the course of the excavation will be fully recorded on the appropriate context, finds and sample forms.

5.2 The site will be recorded using AS.'s excavation manual which is directly comparable to those used by other professional archaeological organisations, including English Heritage's own Central Archaeological Service.

6 Photographic Record

6.1 An adequate photographic record of the investigations will be made. It will include black and white prints and colour transparencies (on 35mm) illustrating in both detail and general context the principal features and finds discovered. Digital images will also be taken (Nikon Coolpix L29 16.1 megapixel cameras). It will also include 'working and promotional shots' to illustrate more generally the nature of the archaeological operations. The black and white negatives and contacts will be filed, and the colour transparencies will be mounted using appropriate cases. All photographs will be listed and indexed.

7 Drawn Record

7.1 A record of the full extent, in plan, of all archaeological deposits encountered will be drawn on A1 permatrace. The plans will be related to the site, or OS, grid and be drawn at a scale of 1:50 or 1:20, as appropriate. In addition where appropriate, e.g. recording an inhumation, additional plans at 1:10 will be produced. The sections of all archaeological contexts will be drawn at a scale of 1:10 or, where appropriate, 1:20. The OD height of all principal strata and features will be calculated and indicated on the appropriate plans and sections.

8 Recovery of Finds

GENERAL

The principal aim is to ensure that adequate provision is made for the recovery of finds from all archaeological deposits.

The Small Finds, e.g. complete pots or metalwork, from all excavations will be 3-dimensionally recorded.

A metal detector will be used to enhance finds recovery. The metal detector survey will be conducted on conclusion of the topsoil stripping, and thereafter during the course of the excavation. The spoil tips will also be surveyed.

Regular metal detector surveys of the excavation area and spoil tips will reduce the loss of finds to unscrupulous users of metal detectors (treasure hunters). All non-archaeological staff working on the site should be informed that the use of metal detectors is forbidden.

In the event of items considered as being defined as treasure being found, then the requirements of the Treasure Act 1996 (with subsequent amendments) will be followed. Any such finds encountered during the investigation will be reported immediately to the Suffolk Portable Antiquities Scheme Finds Liaison Officer who will in turn inform the Coroner within 14 days

WORKED FLINT

When flint knapping debris is encountered large-scale bulk samples will be taken for sieving.

POTTERY

It is important that the excavators are aware of the importance of pottery studies and therefore the recovery of good ceramic assemblages.

The pottery assemblages are likely to provide important evidence to be able to date the structural history and development of the site.

The most important assemblages will come from 'sealed' deposits which are representative of the nature of the occupation at various dates, and indicate a range of pottery types and forms available at different periods.

'Primary' deposits are those which contain sherds contemporary with the soil fill and in simple terms this often means large sherds with unabraded edges. The sherds have usually been deposited shortly after being broken and have remained undisturbed. Such sherds are more reliable in indicating a more precise date at which the feature was 'in use'. Conversely, 'secondary' deposits are those which often have small, heavily abraded sherds lacking obvious conjoins. The sherds are derived from earlier deposits.

HUMAN BONE

Any human remains present would not normally be excavated at the stage of an evaluation, but would be protected and preserved in situ, on advice from SCC AS-CT. Should human remains be discovered and be required to be removed, the coroner will be informed and a licence from the Ministry of Justice sought immediately; both the client and the monitoring officer will also

be informed. Any excavation of human remains at the stage of an evaluation would only be carried out following advice from SCC AS-CT. Excavators would be made aware, and comply with, provisions of Section 25 of the Burial Act of 1857 and pay due attention to the requirements of Health & Safety.

ANIMAL BONE

Animal bone is one of the principal indicators of diet. As with pottery the excavators will be alert to the distinction of primary and secondary deposits. It will also be important that the bone assemblages are derived from dateable contexts. All animal bone will be collected.

ENVIRONMENTAL SAMPLING

The sampling will adhere to the guidelines prepared by English Heritage (now Historic England), and the specialist will make his/her results known to the regional science advisor who co-ordinates environmental archaeology in the region on behalf of Historic England. The project will also accord with the guidelines of the English Heritage (now Historic England) document *Environmental Archaeology, a guide to the theory and practice of methods, from sampling and recovery to post-excavation*, Centre for Archaeology Guidelines 2011.

Provision will be made for the sampling of appropriate materials for specialist and/or scientific analysis (e.g. radiocarbon dating, environmental analysis). The location of samples will be 3-dimensionally recorded and they will also be shown on an appropriate plan. AS has its own environmental sampling equipment (including a pump and transformer) and, if practical, provision will be made to process the soil samples during the fieldwork stage of the project.

If waterlogged remains are found advice on sampling will be obtained on site from Dr Rob Scaife/Dr John Summers. Dr Rob Scaife/Dr Summers and AS will seek advice from the HE Regional Scientific Advisor if significant environmental remains are found.

The study of environmental archaeology seeks to understand the local and near-local environment of the site in relation to phases of human activity and as such is an important and integral part of any archaeological study.

Environmental remains, both faunal and botanical, along with pedological and sedimentological analyses may be used to understand the environment and the impact of human activity.

There may be a potential for the recovery of a range of environmental remains (ecofacts) from which data pertaining to past environments, land use and agricultural economy should be forthcoming.

Sampling strategies on evaluations aim to determine the potential of the site for both biological remains (plants, small vertebrates) and small sized artefacts which would otherwise not be collected by hand. The number/range of samples taken will represent the range of feature types encountered, but with an aim of at least three samples from each feature type.

For plant remains, the samples taken at evaluation stage would aim to characterise:

- The range of preservation types (charred, mineral-replaced, waterlogged) and their quality
- Any differences in remains from dated/undated features
- Variation between different feature types/areas

To realise the potential of the environmental material encountered, a range of specialists from different disciplines is likely to be required. The ultimate goal will be the production of an interdisciplinary environmental study which can be of value to an understanding of, and integrated with, the archaeology.

Organic remains may allow study of the contemporary landscape (occupation/industrial/agricultural impact and land use) and also changes after the abandonment of the site.

The nature of the environmental evidence

Aspects of sampling and analysis may be divided into four broad categories; faunal remains, botanical remains, soils/sediments and radiocarbon dating measurements.

a) Faunal remains: These comprise bones of macro and microfauna, birds, molluscs and insects.

a.i) Bones: The study of the animal bone remains, in particular domestic mammals, domestic birds and marine fish will enhance understanding of the development of the settlement in terms of the local economy and also its wider influence through trade. The study of the small animal bones will provide insight into the immediate habitat of any settlement.

The areas of study covered may include all of the domestic mammal and bird species, wild and harvested mammal, birds, marine and fresh water fish in addition to the small mammals, non-harvest birds, reptiles and amphibia.

Domestic mammalian stock, domestic birds and harvest fish

The domestic animal bone will provide insight into the different phases of development of any occupation and how the population dealt with the everyday aspect of managing and utilising all aspects of the animal resource.

Small animal bones

Archaeological excavation has a wide role in understanding humans' effect on the countryside, the modifications to which have in turn affected and continue to affect their own existence. Small animals provide information about changing habitats and thereby about human impact on the local environment.

a.ii) Molluscs: Freshwater and terrestrial molluscs may be present in ditch and pit contexts which are encountered. Sampling and examination of molluscan assemblages if found will provide information on the local site environment including environment of deposition.

a.iii) Insects: If suitable waterlogged contexts (pit, pond and ditch fills) are encountered (which can potentially be expected to be encountered on the project), sampling and assessment will be carried out in conjunction with the analysis of waterlogged plant remains (primarily seeds) and molluscs. Insect data may provide information on local site environment (cleanliness etc.) as well as proxies for climate and vegetation communities.

b) Botanical remains: Sampling for seeds, wood, pollen and seeds are the essential elements which will be considered. The former are most likely to be charred but possibly also waterlogged should any wells/ponds be encountered.

b.i) Pollen analysis: Sampling and analysis of the primary fills and any stabilisation horizons in ditch and pit contexts which may provide information on the immediate vegetation environment including aspects of agriculture, food and subsistence. These data will be integrated with seed analysis.

b.ii) Seeds: It is anticipated that evidence of cultivated crops, crop processing debris and associated weed floras will be present in ditches and pits. If waterlogged features/sediments are encountered (for example, wells/ponds) these will be sampled in relation to other environmental elements where appropriate (particularly pollen, molluscs and possibly insects).

c) Soils and Sediments: Characterisation of the range of sediments, soils and the archaeological deposits are regarded as crucial to and an integral part of all other aspects of environmental sampling. This is to afford primary information on the nature and possible origins of the material sampled. It is anticipated that a range of 'on-site' descriptions will be made and subsequent detailed description and analysis of the principal monolith and bulk samples obtained for other aspects of the environmental investigation. Where considered necessary, laboratory analyses such as loss on ignition and particle size may also be undertaken. A geoarchaeologist will be invited to visit the site as necessary to advise on sampling.

d) Radiocarbon dating: Archaeological/artifactual dating may be possible for most of the contexts examined, but radiocarbon dating should not be ruled out

Sampling strategies

Provision will be made by the environmental co-ordinator that suitable material for analysis will be obtained. Samples will be obtained which as far as possible will meet the requirements of the assessment and any subsequent analysis.

a) Soil and Sediments: Samples taken will be examined in detail in the laboratory. An overall assessment of potential will be carried out. Analysis of particle size and loss on ignition, if required would be undertaken as part of full analysis if assessment demonstrates that such studies would be of value.

b) Pollen Analysis: Contexts which require sampling may include stabilisation horizons and the primary fills of the pits and ditches, and possibly organic well/pond fills. It is anticipated that in some cases this will be carried out in conjunction with sampling for other environmental elements, such as plant macrofossils, where these are also felt to be of potential.

c) Plant Macrofossils: Principal contexts will be sampled directly from the excavation for seeds and associated plant remains. It is anticipated that primarily charred remains will be recovered, although provision for any waterlogged sequences will also be made (see below). Sampling for the former will, where possible (that is, avoiding contamination) comprise samples of an average of 40-60 litres which will be floated in the AS facilities for extraction of charred plant remains. Both the flot and residues will be kept for assessment of potential and stored for any subsequent detailed analysis. The residues will also be examined for artifactual remains and also for any faunal remains present (cf. molluscs). Where pit, ditch, well or pond sediments are found to contain waterlogged sediments, principal contexts will be sampled for seeds and insect remains. Standard 5 litre+ samples will be taken which may be sub-sampled in the laboratory for seed remains if the material is found to be especially rich. The full sample will provide sufficient material for insect assessment and analysis.

d) Bones: Predicting exactly how much of what will be yielded by the excavation is clearly very difficult prior to excavation and it is proposed that in order to efficiently target animal bone recovery there should be a system of direct feedback from the archaeozoologist to the site staff during the excavation, allowing fine tuning of the excavation strategy to concentrate on the recovery of animal bones from features which have the highest potential. This will also allow the faunal remains to materially add to the interpretation as the excavation proceeds. Liaison with other environmental specialists will need to take place in order to produce a complete interdisciplinary study during this phase of activity. In addition, this feedback will aid effective targeting of the post-excavation analysis.

e) Insects: If contexts having potential for insect preservation are found, samples will be taken in conjunction with waterlogged plant macrofossils. Samples of 5 litres will suffice for analysis and will be sampled adjacent to

waterlogged seed samples and pollen; or where insufficient context material is available provision will be made for exchange of material between specialists.

f) Molluscs: Terrestrial and freshwater molluscs. Samples will be taken from a column from suitable ditches. Pits may be sampled, based on the advice of the Environmental Consultant and / or Historic England Regional Advisor. Provision will also be made for molluscs obtained from other sampling aspects (seeds) to be examined and/or kept for future requirements.

g) Archiving: Environmental remains obtained should be stored in conditions appropriate for analysis in the short to medium term, that is giving the ability for full analysis at a later date without any degradation of samples being analysed. The results will be maintained as an archive at AS and supplied to the HE regional co-ordinator as requested.

Waterlogged Deposits/Remains

Should waterlogged deposits (such as wells/deep ditches) be encountered, provision has been made for controlled hand excavation and sampling. Dr Rob Scaife/Dr John Summers will visit to advise on sampling as required, and AS will take monolith samples as necessary for the recovery of palaeoenvironmental information and dating evidence.

Scientific/Absolute Dating

- Samples will be obtained for potential scientific/absolute dating as appropriate (eg Carbon-14).

Provision will be made for the sampling of appropriate materials for specialist and/or scientific analysis (e.g. radiocarbon dating, environmental analysis). The location of samples will be 3-dimensionally recorded and they will also be shown on an appropriate plan. AS has its own environmental sampling equipment (including a pump and transformer) and, if practical, provision will be made to process the soil samples during the fieldwork stage of the project.

If waterlogged remains are found they will be sampled by Dr Rob Scaife/Dr John Summers. Dr Rob Scaife and AS will seek advice from the HE Regional Scientific Advisor if significant environmental remains are found.

FINDS PROCESSING

The project director will have overall responsibility for the finds and will liaise with AS's own finds personnel and the relevant specialists. A person with particular responsibility for finds on site will be appointed for the excavation. The person will ensure that the finds are properly labelled and packaged on site for transportation to AS's field base. The finds processing

will take place in tandem with the excavations and will be under the supervision of AS's Finds Officer.

The finds processing will entail first aid conservation, cleaning (if appropriate), marking (if appropriate), categorising, bagging, labelling, boxing and basic cataloguing (the compilation of a Small Finds Catalogue and quantification of bulk finds) i.e. such that the finds are ready to be made available to the specialists. The Finds Officer, having been advised by the Project Officer and relevant specialists, will select material for conservation. AS's Finds Officer, in conjunction with the Project Officer, will arrange for the specialists to view the finds for the purpose of report writing.

APPENDIX 2

ARCHAEOLOGICAL SOLUTIONS LIMITED: PROFILES OF STAFF & SPECIALISTS

DIRECTOR

Claire Halpin BA MCIfA

Qualifications: Archaeology & History BA Hons (1974-77). Oxford University Dept for External Studies In-Service Course (1979-1980). Member of Institute of Archaeologists since 1985: IFA Council member (1989-1993)

Experience: Claire has 25 years' experience in field archaeology, working with the Oxford Archaeological Unit and English Heritage's Central Excavation Unit (now the Centre for Archaeology). She has directed several major excavations (e.g. Barrow Hills, Oxfordshire, and Irthlingborough Barrow Cemetery, Northants), and is the author of many excavation reports e.g. St Ebbe's, Oxford: *Oxoniensia* 49 (1984) and 54 (1989). Claire moved into the senior management of field archaeological projects with Hertfordshire Archaeological Trust (HAT) in 1990, and she was appointed Manager of HAT in 1996. From the mid 90s HAT has enlarged its staff complement and extended its range of skills. In July 2003 HAT was wound up and Archaeological Solutions was formed. The latter maintains the same staff complement and services as before. AS undertakes the full range of archaeological services nationwide.

DIRECTOR

Tom McDonald MCIfA

Qualifications: Member of the ClfA

Experience: Tom has twenty years' experience in field archaeology, working for the North-Eastern Archaeological Unit (1984-1985), Buckinghamshire County Museum (1985), English Heritage (Stanwick Roman villa (1985-87) and Irthlingborough barrow excavations, Northamptonshire (1987)), and the Museum of London on the Royal Mint excavations (1986-7)., and as a Senior Archaeologist with the latter (1987-Dec 1990). Tom joined HAT at the start of 1991, directing several major multi-period excavations, including excavations in advance of the A41 Kings Langley and Berkhamsted bypasses, the A414 Cole Green bypass, and a substantial residential development at Thorley, Bishop's Stortford. He is the author of many excavation reports, exhibitions etc. Tom is AS's Health and Safety Officer and is responsible for site management, IT and CAD. He specialises in prehistoric and urban archaeology, and is a Lithics Specialist.

OFFICE MANAGER

Rose Flowers

Experience: Rose has a very wide range of book-keeping skills developed over many years of employment with a range of companies, principally Rosier Distribution Ltd, Harlow (now part of Securicor) where she managed eight accounts staff. She has a good working knowledge of both accounting software and Microsoft Office.

OFFICE ADMINISTRATOR

Sarah Powell

Experience: Sarah is an experienced and efficient administrative assistant with more than ten years' experience of working in a variety of office environments. She is IT literate and proficient in the use of Microsoft Word, particularly Microsoft Excel. She

has completed NVQ 2 & 3 in Administration and Office Skills. She recently attended and completed a course in Microsoft Excel – Advanced Level.

OFFICE ADMINISTRATOR

Jennifer O'Toole

Experience: Jennifer's professional career has included a variety of roles such as Operations Director with The Logistics Network Ltd, Tutor/Trainer & Deputy Manager with Avanta TNG and Training and Assessment Consultant with PDM Training and Consultancy Ltd. Jennifer's career history emphasises her organisational and interpersonal skills, especially her ability to efficiently liaise with and manage individuals on various levels, and provide a range of supportive/ administrative services. Jennifer holds professional qualifications in a number of subjects including recruitment practice, customer service, workplace competence and health and safety. In her role with Archaeological Solutions Ltd, Jennifer has assisted in the delivery of the company's services on a variety of projects as well as co-ordinating recruitment and providing a range of complex administrative support.

SENIOR PROJECTS MANAGER

Jon Murray BA MCIFA

Qualifications: History with Landscape Archaeology BA Hons (1985-1988).

Experience: Jon has been employed by HAT (now AS) continually since 1989, attaining the position of Senior Projects Manager. Jon has conducted numerous archaeological investigations in a variety of situations, dealing with remains from all periods, throughout London and the South East, East Anglia, the South and Midlands. He is fluent in the execution of (and now project manages) desk-based assessments/EIAs, historic building surveys (for instance the recording of the Royal Gunpowder Mills at Waltham Abbey prior to its rebirth as a visitor facility), earthwork and landscape surveys, all types of evaluations/excavations (urban and rural) and environmental archaeological investigation (working closely with Dr Rob Scaife), preparing many hundreds of archaeological reports dating back to 1992. Jon has also prepared numerous publications; in particular the nationally-important Saxon site at Gamlingay, Cambridgeshire (*Anglo-Saxon Studies in Archaeology & History*). Other projects published include Dean's Yard, Westminster (*Medieval Archaeology*), Brackley (*Northamptonshire Archaeology*), and a medieval cemetery in Haverhill he excavated in 1997 (*Proceedings of the Suffolk Institute of Archaeology*). Jon is a member of the senior management team, principally preparing specifications/tenders, co-ordinating and managing the field teams. He also has extensive experience in preparing and supporting applications for Scheduled Monument Consent/Listed Building Consent

PROJECT OFFICER

Gareth Barlow MSc

Qualifications: University of Sheffield, MSc Environmental Archaeology & Palaeoeconomy (2002-2003)

King Alfred's College, Winchester, Archaeology BA (Hons) (1999-2002)

Experience: Gareth worked on a number of excavations in Cambridgeshire before pursuing his degree studies, and worked on many archaeological projects across the UK during his university days. Gareth joined AS in 2003 and has worked on numerous archaeological projects throughout the South East and East Anglia with AS. Gareth was promoted to Supervisor in the Summer 2007. Gareth is qualified in

the Construction Skills Certification Scheme (CSCS) and is a qualified in First Aid at Work (St Johns Ambulance).

PROJECT OFFICER
Vincent Monahan BA

Qualifications: University College Dublin: BA Archaeology (2007-2012)

Experience: Professionally, Vincent has worked for various archaeological groups and projects including the Stonehenge Riverside Project (Site Assistant/ Supervisor; 2008), University College Dublin Archaeological Society (Auditor; 2009-2010) and the Castanheiro do Vento Research Project (Site Assistant/ Supervisor; 2009-2010 (seasonal)). Vincent has gained good experience of archaeological fieldwork including excavation, various sampling techniques and on-site recording. He also gained experience of museum-grade curatorial practice during his undergraduate degree.

SUPERVISOR
Kerrie Bull BSc

Qualifications: University of Reading: BSc Archaeology (2008-2011)

Experience: During her undergraduate degree at the University of Reading Kerrie worked on the Lyminge Archaeological Project (2008), the Silchester 'Town Life' Project (2009) and the Ecology of Crusading Research Programme (2011). Through her academic and professional career, Kerrie has gained good experience of archaeological fieldwork and post-excavation techniques.

SUPERVISOR
Thomas Muir BA MSc

Qualifications: University of Edinburgh: BA Archaeology (2007-2011)

University of Edinburgh: MSc Mediterranean Archaeology (2011-2012)

Experience: Thomas is an affiliate member of the Chartered Institute for Archaeologists. Throughout his higher education, Thomas volunteered on research excavations at sites including Port Sec Sud, Bourges (France; 2008), the Hill of Barra (the Hillforts of Strathdon Project; 2010) and Prastio Mesorotsos, Cyprus (2010-2012). In 2013 Thomas returned to Prastio Mesorotsos – a research project run by the Cyprus American Archaeological Institute – in a supervisory capacity. Professionally, Thomas has worked for CFA Archaeology (2013) and thereafter AS Ltd. Through his academic and professional career, Thomas has gained a broad working knowledge of archaeological fieldwork and post-excavation techniques including environmental sampling, on-site recording and digital archiving.

SUPERVISOR
Mark Blagg-Newsome

Qualifications: University of Reading (2007-2010) BSc Archaeology

University of Reading (2010-2011) MA Res Archaeology

Experience: Mark has an excellent academic record in archaeology having received an award for best undergraduate dissertation (Department of Archaeology, University of Reading; 2010) and the prize for the best Roman archaeology dissertation (2014) from the Society for the Promotion of Roman Studies. Mark also chaired and presented in sessions at the 2014 Roman Archaeology Conference and is a contributor on forthcoming archaeozoological publications. Before becoming a supervisor with Archaeological Solutions Ltd, Mark held the position of Site Assistant and has worked on numerous commercial projects. He has also undertaken geophysical and GPS survey.

PROJECT OFFICER (DESK-BASED ASSESSMENTS)

Kate Higgs MA (Oxon)

Qualifications: University of Oxford, St Hilda's College Archaeology & Anthropology MA (Oxon) (2001-2004)

Experience: Kate has archaeological experience dating from 1999, having taken part in clearance, surveying and recording of stone circles in the Penwith area of Cornwall. During the same period, she also assisted in compiling a database of archaeological and anthropological artefacts from Papua New Guinea, which were held in Scottish museums. Kate has varied archaeological experience from her years at Oxford University, including participating in excavations at a Roman amphitheatre and an early church at Marcham/ Frilford in Oxfordshire, with the Bamburgh Castle Research Project in Northumberland, which also entailed the excavation of human remains at a Saxon cemetery, and also excavating, recording and drawing a Neolithic chambered tomb at Prissé, France. Kate has also worked in the environmental laboratory at the Museum of Natural History in Oxford, and as a finds processor for Oxford's Institute of Archaeology. Since joining AS in November 2004, Kate has researched and authored a variety of reports, concentrating on desk-based assessments in advance of archaeological work and historic building recording.

ASSISTANT PROJECTS MANAGER (POST-EXCAVATION)

Andrew Newton MPhil PCIFA

Qualifications: University of Bradford, MPhil (2002-04)

University of Bradford, BSc (Hons) Archaeology (1998-2002)

University of Bradford, Dip Professional Archaeological Studies (2002)

Experience: Andrew has carried out geophysical surveys for GeoQuest Associates on sites throughout the UK and has worked as a site assistant with BUFAU. During 2001 he worked as a researcher for the Yorkshire Dales Hunter-Gatherer Research Project, a University of Bradford and Michigan State University joint research programme, and has carried out voluntary work with the curatorial staff at Beamish Museum in County Durham. Andrew is a member of the Society of Antiquaries of Newcastle-upon-Tyne and a Practitioner Member of the Institute for Archaeologists. Since joining AS in early Summer 2005, as a Project Officer writing desk-based assessments, Andrew has gained considerable experience in post-excavation work. His principal role with AS is conducting post-excavation research and authoring site reports for publication. Significant post-excavation projects Andrew has been responsible for include the Ingham Quarry Extension, Fornham St. Genevieve, Suffolk – a site with large Iron Age pit clusters arranged around a possible wetland area; the late Bronze Age to early Iron Age enclosure and early Saxon cremation cemetery at the Chalet Site, Heybridge, Essex; and, Church Street, St Neots, Cambridgeshire, an excavation which identified the continuation of the Saxon settlement previously investigated by Peter Addyman in the 1960s. Andrew also writes and co-ordinates Environmental Impact Assessments and has worked on a variety of such projects across southern and eastern England. In addition to his research responsibilities Andrew undertakes outreach and publicity work and carries out some fieldwork.

PROJECT OFFICER (POST-EXCAVATION)

Antony Mustchin BSc MSc DipPAS

Qualifications: University of Bradford BSc (Hons) Bioarchaeology (1999-2003)
University of Bradford MSc Biological Archaeology (2004-2005)
University of Bradford Diploma in Professional Archaeological Studies (2003)

Experience: Antony has over 14 years' experience in field archaeology, gained during his higher education and in the professional sector. Commercially in the UK, Antony has worked for Archaeology South East (2003), York Archaeological Trust (2004) and Special Archaeological Services (2003). He has also undertaken a six-month professional placement as Assistant SMR Officer/ Development Control Officer with Kent County Council (2001-2002). Antony's academic interests have led to his gaining considerable research excavation experience across the North Atlantic region. He has worked for projects and organisations including the Old Scatness & Jarlshof Environs Project, Shetland (2000-2003), the Viking Unst Project, Shetland (2006-2007), the Heart of the Atlantic Project Føroys Fornminnisavn, Faroe Islands (2006-2008) and City University New York/ National Museum of Denmark/ Greenland National Museum and Archives, Greenland (2006 & 2010). Shortly before joining Archaeological Solutions in November 2011, Antony spent three years working for the Independent Commission for the Location of Victims Remains, assisting in the search for and forensic recovery of 'the remains of victims of paramilitary violence ("The Disappeared") who were murdered and buried in secret arising from the conflict in Northern Ireland'. Antony has a broad experience of fieldwork and post-excavation practice including specialist (archaeofauna), teaching, supervisory and directing-level posts.

POTTERY, LITHICS AND CBM RESEARCHER

Andrew Peachey BA MCIfA

Qualifications: University of Reading BA Hons, Archaeology and History (1998-2001)
Experience: Andrew joined AS (formerly HAT) in 2002 as a pottery researcher, and rapidly expanded into researching CBM and lithics. Andrew specialises in prehistoric and Roman pottery and has worked on numerous substantial assemblages, principally from across East Anglia but also from southern England. Recent projects have included a Neolithic site at Coxford, Norfolk, an early Bronze Age domestic site at Shropham, Norfolk, late Bronze Age material from Panshanger, Hertfordshire, middle Iron Age pit clusters at Ingham, Suffolk and an Iron Age and early Roman riverside site at Dernford, Cambridgeshire. Andrew has worked on important Roman kiln assemblages, including a Nar Valley ware production site at East Winch Norfolk, a face-pot producing kiln at Hadham, Hertfordshire and is currently researching early Roman Horningsea ware kilns at Waterbeach, Cambridgeshire. Andrew is an enthusiastic member of the Study Group for Roman Pottery, and also undertakes pottery and lithics analysis as an 'external' specialist for a range of archaeological units and local societies in the south of England.

POTTERY RESEARCHER

Peter Thompson MA

Qualifications: University of Bristol BA (Hons), Archaeology (1995-1998)
University of Bristol MA; Landscape Archaeology (1998-1999)

Experience: As a student, Peter participated in a number of projects, including the excavation of a Cistercian monastery cemetery in Gascony and surveying an Iron Age promontory hillfort in Somerset. Peter has two years excavation experience with the Bath Archaeological Trust and Bristol and Region Archaeological Services which

includes working on a medieval manor house and a post-medieval glass furnace site of national importance. Peter joined HAT (now AS) in 2002 to specialise in Iron Age, Saxon and medieval pottery research and has also produced desk-based assessments. Pottery reports include an early Iron pit assemblage and three complete Early Anglo-Saxon accessory vessels from a cemetery in Dartford, Kent.

PROJECT OFFICER (OSTEOARCHAEOLOGY)

Dr Julia Cussans

Qualifications: University of Bradford, PhD (2002-2010)
University of Bradford, BSc (Hons) Bioarchaeology (1997- 2001)
University of Bradford, Dip. Professional Archaeological Studies (2001)

Experience: Julia has over 14 years of archaeozoological experience. Whilst undertaking her part time PhD she also worked as a specialist on a variety of projects in northern Britain including Old Scatness (Shetland), Broxmouth Iron Age Hillfort and Binchester Roman Fort. Additionally Julia has extensive field experience and has held lead roles in excavations in Shetland and the Faroe Islands including, Old Scatness, a large multi-period settlement centred on an Iron Age Broch; the Viking Unst Project, an examination of Viking and Norse houses on Britain's most northerly isle; the Laggan Tormore Pipeline (Firths Voe), a Neolithic house site in Shetland; the Heart of the Atlantic Project, an examination of Viking settlement in the Faroes and Við Kirkjugarð, an early Viking site on Sanday, Faroe Islands. Early on in her career Julia also excavated at Sedgeford, Norfolk as part of SHARP and in Pompeii, Italy as part of the Anglo-American Project in Pompeii. Since joining AS in October 2011 Julia has worked on animal bone assemblages from Beck Row, a Roman agricultural site at Mildenhall, Suffolk and Sawtry, an Iron Age, fen edge site in Cambridgeshire. Julia is a full and active member of the International Council for Archaeozoology, the Professional Zooarchaeology Group and the Association for Environmental Archaeology.

ENVIRONMENTAL ARCHAEOLOGIST

Dr John Summers

Qualifications: 2006-2010: PhD "The Architecture of Food" (University of Bradford)
2005-2006: MSc Biological Archaeology (University of Bradford)
2001-2005: BSc Hons. Bioarchaeology (University of Bradford)

Experience: John is an archaeobotanist with a primary specialism in the analysis of carbonised plant macrofossils and charcoal. Prior to joining Archaeological Solutions, John worked primarily in Atlantic Scotland. His research interests involve using archaeobotanical data in combination with other archaeological and palaeoeconomic information to address cultural and economic research questions. John has made contributions to a number of large research projects in Atlantic Scotland, including the Old Scatness and Jarlshof Environs Project (University of Bradford), the Viking Unst Project (University of Bradford) and publication work for Bornais Mound 1 and Mound 2 (Cardiff University). He has also worked with plant remains from Thruxton Roman Villa, Hampshire, as part of the Danebury Roman Environs Project (Oxford University/ English Heritage). John's role at AS is to analyse and report on assemblages of plant macro-remains from environmental samples and provide support and advice regarding environmental sampling regimes and sample processing. John is a member of the Association for Environmental Archaeology.

SENIOR GRAPHICS OFFICER

Kathren Henry

Experience: Kathren has over twenty-five years' experience in archaeology, working as a planning supervisor on sites from prehistoric to late medieval date, including urban sites in London and rural sites in France/ Italy, working for the Greater Manchester Archaeological Unit, Passmore Edwards Museum, DGLA and Central Excavation Unit of English Heritage (at Stanwick and Irthlingborough, Northamptonshire). She has worked with AS (formerly HAT) since 1992, becoming Senior Graphics Officer. Kathren is AS's principal photographer, specializing in historic building survey, and she manages AS's photographic equipment and dark room. She is in charge of AS's Graphics Department, managing computerised artwork and report production. Kathren is also the principal historic building surveyor/illustrator, producing on-site and off-site plans, elevations and sections.

GRAPHICS OFFICER

Thomas Light

Qualifications: University of Kent (2009-2012) BA Classical and Archaeological Studies

University of Kent (2012-2013) MA Roman History and Archaeology

Experience: Since completing his higher education, Thomas has gained good practical experience in the archaeological and heritage sector, working in a voluntary capacity for Guilford Institute Library and Archive, and Surrey County Archaeological Unit. Before becoming a graphics officer, Thomas held the position of Site Assistant and has excavated on a variety of commercial projects. In his current capacity Thomas has produced extensive illustrative material, including figures and plates for nationally and internationally distributed journal publications.

HISTORIC BUILDING RECORDING

Tansy Collins BSc

Qualifications: University of Sheffield, Archaeological Sciences BSc (Hons) (1999-2002)

Experience: Tansy's archaeological experience has been gained on diverse sites throughout England, Ireland, Scotland and Wales. Tansy joined AS in 2004 where she developed skills in graphics, backed by her grasp of archaeological interpretation and on-site experience, to produce hand drawn illustrations of pottery, and digital illustrations using a variety of packages such as AutoCAD, Corel Draw and Adobe Illustrator. She joined the historic buildings team in 2005 in order to carry out both drawn and photographic surveys of historic buildings before combining these skills with authoring historic building reports in 2006. Since then Tansy has authored numerous such reports for a wide range of building types; from vernacular to domestic architecture, both timber-framed and brick built with date ranges varying from the medieval period to the 20th century. These projects include a number of regionally and nationally significant buildings, for example a previously unrecognised medieval aisled barn belonging to a small group of nationally important agricultural buildings, one of the earliest surviving domestic timber framed houses in Hertfordshire, and a Cambridgeshire house retaining formerly hidden 17th century decorative paint schemes. Larger projects include The King Edward VII Sanatorium in Sussex, RAF Bentley Priory in London as well as the Grade I Listed Balls Park mansion in Hertfordshire.

HISTORIC BUILDING RECORDING

Lauren Wilson

Qualifications: University of Chester (2010-2013) BA (Hons) Archaeology
University of York (2013-2014) MA Archaeology of Buildings

Experience: Throughout her higher education, Lauren has gained extensive practical archaeological experience, including small finds processing and cataloguing at Norton Priory, Runcorn and assisting in the excavation of a Roman villa as part of the *Santa Marta Project*, Tuscany. Lauren also participated in a training excavation at Grovesnor Park, Chester, centred on a Roman road and 16th century chapel. As part of her Masters dissertation, Lauren worked with the Historic Property Manager of Middleham Castle, North Yorkshire, gaining a good practical knowledge of public outreach and events planning. Since joining Archaeological Solutions Ltd, Lauren has contributed to complex historic buildings recording projects at Landens Farm, Horley (Surrey) and the Ostrich Inn, Colnbrook (Berkshire). She also conducts background research and contributes to archaeological report writing.

ARCHIVES ADMINISTRATOR

Claire Wootton

Experience: Throughout her professional career, Claire has gained extensive administrative experience. Her past roles include Administrative Officer with the Court Service (Royal Courts of Justice; 1988-1997) and Discovery Centre Administrator at St Edmundsbury Cathedral (2012-2015). Claire's Advanced Level qualifications include History, English and Law. Since joining Archaeological Solutions Ltd, Claire has gained a thorough experience of archives administration through a programme of work-based training on numerous projects.

ARCHIVES ADMINISTRATOR

Karen Cleary

Experience: Karen started her administrative career as Youth Training Administrator for a training company (TSMA Ltd) in 1993, where she provided administrative support for NVQ Assessors' of trainees and apprentices on the youth training scheme and in work placements they'd helped set up. Amongst her administrative duties she was principally in charge of preparing the Training Credits Claims and sending off for government funding. She gained NVQ's Level's 2 and 3 in Administration whilst working in this role. Karen started out with AS as Office Assistant in February 2009 and within a few months was promoted to Archives Assistant. Principally her role involves the preparation of Archaeological archives for long term deposition with museums. She has developed a good understanding of the preparation process and follows each individual museum's guidelines closely. She has a good working knowledge of Microsoft Office and is competent with *FileZilla*-Digital File Transfer software and *Fastsum*-Checksum Creation software.

ARCHAEOLOGICAL SOLUTIONS: PRINCIPAL SPECIALISTS

GEOPHYSICAL SURVEYS	David Bescoby Dr John Summers Air Photo Services
AIR PHOTOGRAPHIC ASSESSMENTS	
PHOTOGRAPHIC SURVEYS	Ms K Henry
PREHISTORIC POTTERY	Mr A Peachey
ROMAN POTTERY	Mr A Peachey
SAXON & MEDIEVAL POTTERY	Mr P Thompson
POST-MEDIEVAL POTTERY	Mr P Thompson
FLINT	Mr A Peachey
GLASS	H Cool
COINS	British Museum, Dept of Coins & Medals
METALWORK & LEATHER	Ms Q Mould, Ms N Crummy
SLAG	Mr A Newton
ANIMAL BONE	Dr J Cussans
HUMAN BONE:	Ms S Anderson
ENVIRONMENTAL CO-ORDINATOR	Dr J Summers
POLLEN AND SEEDS:	Dr R Scaife
CHARCOAL/WOOD	Dr J Summers
SOIL MICROMORPHOLOGY	Dr R MacPhail, Dr C French
CARBON-14 DATING:	Historic England Ancient Monuments Laboratory (for advice).
CONSERVATION	University of Leicester

OASIS DATA COLLECTION FORM: England

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OASIS ID: archaeol7-317492

Project details

Project name	100 Southgate Street, Bury St Edmunds, Suffolk IP33 2AQ
Short description of the project	In August 2017 and November 2017 Archaeological Solutions (AS) carried out an archaeological evaluation and monitoring and recording of land at 100 Southgate Street, Bury St Edmunds, Suffolk IP33 2AQ. There was a high density of features in each trench and open area; the greatest number of features was within the open areas (Trenches 3 and 4). The most common features were pits (14), and thereafter ditches (2), tree hollows (2) and a post hole (1). The most significant artefactual material was contained in four medieval rubbish pits, comprising a high concentration in Pit F2011 (mid 13th-early 14th century), and lesser quantities in Pits F1016, F1026 and F2026 (late 12th-14th/15th century). The pottery is dominated by Bury St. Edmunds coarse wares, including sooted cooking pots and jugs, supplemented by jugs in wares from Hollesley, Hedingham and Grimston. High quantities of oyster shell were present as were a large quantity of sheep/goat metapodials that may have resulted for a specific form of carcass processing, and modest carbonised remains from fully processed cereals likely accumulated in domestic waste. 15th century Abbey documents record tenements along Southgate Street, and these features suggest the presence of back yard and garden areas behind dwellings on the street frontage. Post-medieval features on the site appear to contain scattered debris, in particular concentrations of red brick and peg tile that likely represent levelling material deposited from a nearby farm or the core of the town.
Project dates	Start: 01-08-2017 End: 01-11-2017
Previous/future work	No / Not known
Any associated project reference codes	P6977 - Contracting Unit No.
Any associated project reference codes	BSE520 - Sitecode
Type of project	Field evaluation
Site status	None
Current Land use	Other 3 - Built over
Monument type	PITS Post Medieval
Monument type	POST HOLE Post Medieval
Monument type	PITS Medieval
Significant Finds	POTTERY Medieval
Significant Finds	STRUCK FLINT Post Medieval

Methods & techniques	"Sample Trenches","Targeted Trenches"
Development type	Rural residential
Prompt	Planning condition
Position in the planning process	Pre-application

Project location

Country	England
Site location	SUFFOLK ST EDMUNDSBURY BURY ST EDMUNDS 100 Southgate Street, Bury St Edmunds, Suffolk IP33 2AQ
Postcode	IP33 2AQ
Study area	1 Hectares
Site coordinates	TM 170 441 52.052186642286 1.165324437586 52 03 07 N 001 09 55 E Point
Height OD / Depth	Min: 36m Max: 36m

Project creators

Name of Organisation	Archaeological Solutions Ltd
Project brief originator	Suffolk County Council Archaeological Service Conservation Team
Project design originator	Jon Murray
Project director/manager	Jon Murray
Project supervisor	Archaeological Solutions Ltd

Project archives

Physical Archive recipient	Suffolk County Archaeological Store
Physical Contents	"Ceramics","Worked stone/lithics"
Digital Archive recipient	Suffolk County Archaeological Store
Digital Contents	"Survey"
Digital Media available	"Images raster / digital photography","Survey","Text"
Paper Archive recipient	Suffolk County Archaeological Store
Paper Contents	"Survey"
Paper Media available	"Drawing","Photograph","Plan","Report","Survey "

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	100 Southgate Street, Bury St Edmunds, Suffolk IP33 2AQ

Author(s)/Editor(s) Henry, K
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OASIS:

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PHOTOGRAPHIC INDEX



1
View of site looking south-west with Trench 2 in the foreground



2
Trench 1 looking south-west



3
Ditch 1003 in Trench 1 looking south-west



4
Ditch 1005A in Trench 1 looking south-west



5
Ditch 1005B in Trench 1 looking north-east



6
Sample section 1B in Trench 1 looking north-west



7
Trench 2 looking south-west



8
Pit 1007 in Trench 2 looking south



9
Pit 1009 in Trench 2 looking south-west



10
General view of Trench 3 looking north-east



11
Pit 1016 in Trench 3 looking west



12
Pit 1016 in Trench 3 fully excavated



13
F1018 (tree hollow) in Trench 3 looking south-west



14
F1020 (tree hollow) in Trench 3 looking west



15
Post-hole 1024 in Trench 3 looking north-east



16
Pit 1026 in Trench 3 looking west



17
Clay lined Pit 1033 in Trench 3 looking north-east



18
Base of clay lined pit in Trench 3 looking north-east



19
Section 3A looking south-west



20
Section 3B (south-west end)



21
Section 3B (middle section)



22
Section 3B (north-east end)



23
View of Trench 4 looking north-west



24
Truncation by modern building rubble in NE corner of Trench 4



25
Pre-excavation shot of Pits 2002-2004 in Trench 4



26
Post-excavation shot of Pits 2002-2004 in Trench 4



27
Pit 2011 in Trench 4



28
Pit 2020 in Trench 4



29
Pit 2023 in Trench 4



30
Pit 2026 in Trench 4



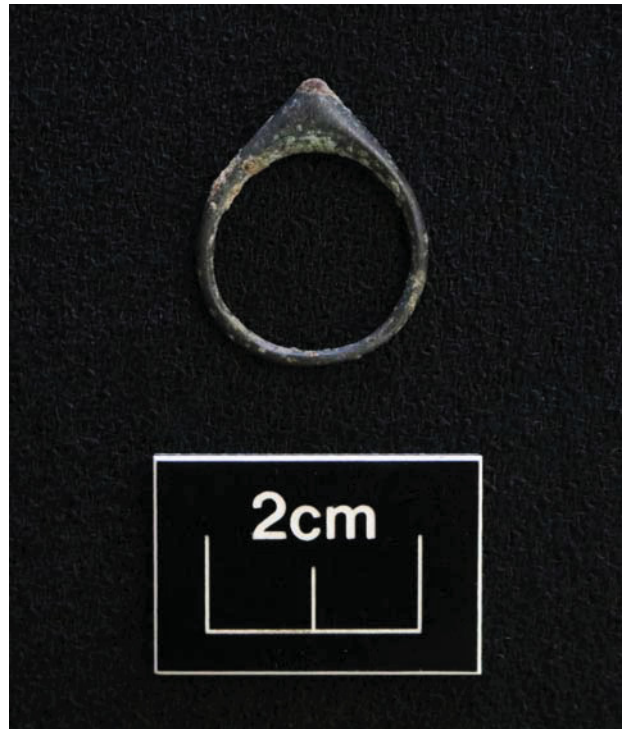
319
Sample section 4A



32
Sample section 4B



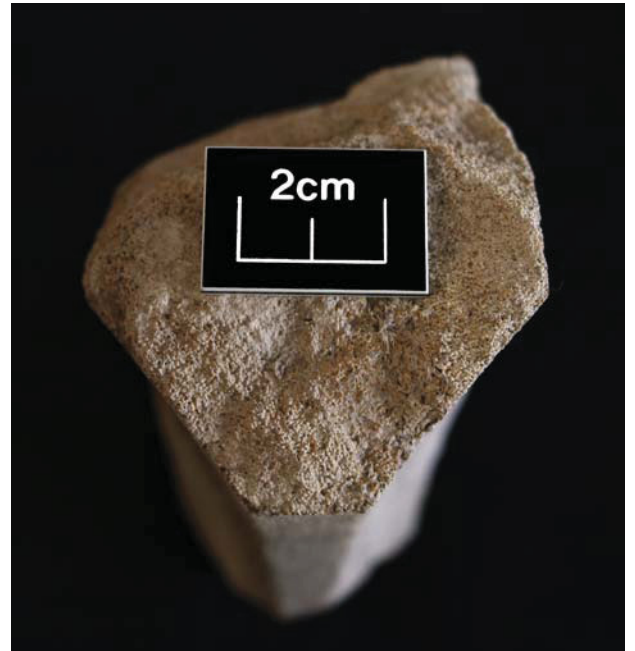
33
Sample section 4C



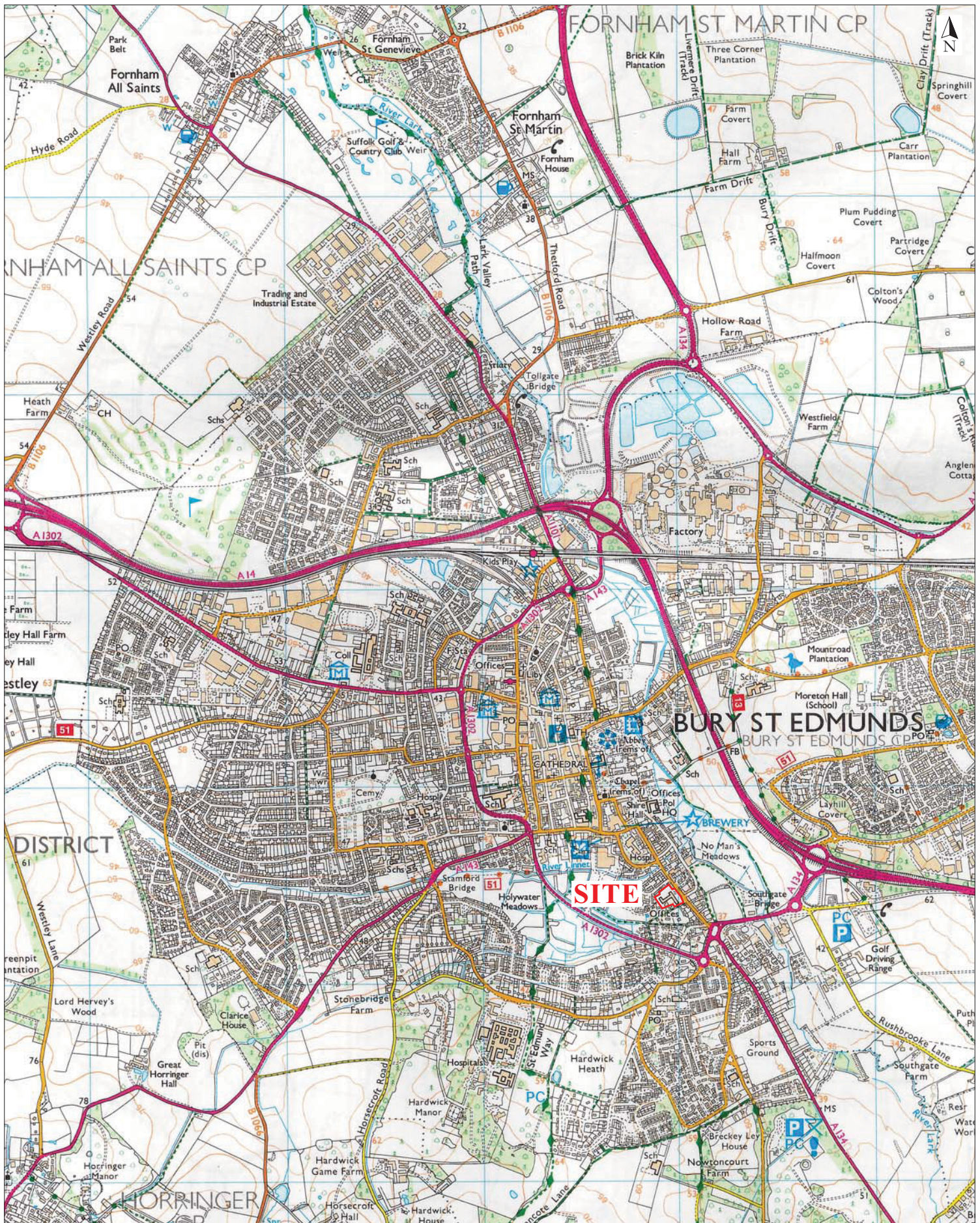
34
A copper alloy stirrup ring, which would have held a glass cabochon. This type of ring was popular in the medieval period, spanning the mid 12th to mid 15th centuries



35
Moulded stone found within Pit 2004 showing
chamfering and curve of arch

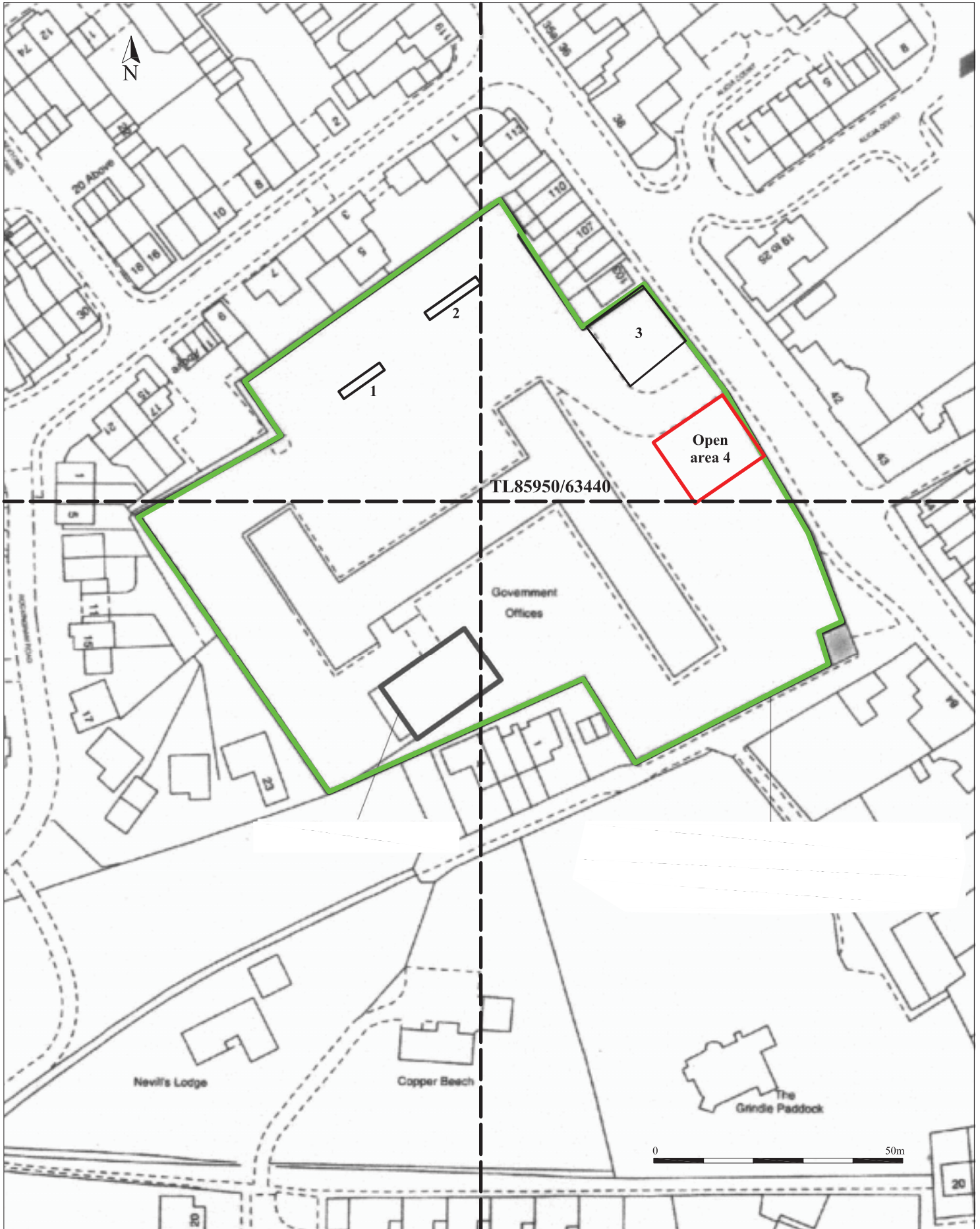


36
Moulded stone found within Pit 2004 showing
profile



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Archaeological Solutions Ltd
Fig. 1 Site location plan
 Scale 1:25,000 at A4
 100 Southgate St, Bury St Edmunds, Suffolk (P6977)



- Trenches 1-3 excavated August 2017
- Monitoring & recording November 2017

Archaeological Solutions Ltd

Fig. 2 Detailed site location plan

Scale 1:1000 at A4
100 Southgate Street, Bury St Edmunds, Suffolk (P6977)



- Trenches 1-3 excavated August 2017
- Monitoring & recording November 20

0 25m

<i>Archaeological Solutions Ltd</i>
Fig. 3 Trench location plan
Scale 1:500 at A4
100 Southgate Street, Bury St Edmunds, Suffolk (P6977)