ARCHAEOLOGICAL SOLUTIONS LTD

LOWER DOWNS SLADE, HAVERHILL, SUFFOLK

ARCHAEOLOGICAL TRIAL TRENCH EVALUATION

Authors: Thomas Mu	Thomas Muir (Fieldwork & Report)				
Andrew Pea	achey (Background Research)				
Illustrations: Thomas Lig	ht				
NGR: TL 6704 4564	Report No: 4752				
District: St Edmundsbury	Site Code: HVH089				
Approved: Claire Halpin	Project No: P5557				
MIfA	Date: 22 December 2014				
Signed:					

This report is confidential to the client. Archaeological Solutions Ltd accepts no responsibility or liability to any third party to whom this report, or any part of it, is made known. Any such party relies upon this report entirely at their own risk. No part of this report may be reproduced by any means without permission.

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

Desk-based assessments and environmental impact assessments
Historic building recording and appraisals
Trial trench evaluations
Geophysical surveys
Archaeological monitoring and recording
Archaeological excavations
Post excavation analysis
Promotion and outreach
Specialist analysis

ARCHAEOLOGICAL SOLUTIONS LTD

Unit 6, Brunel Business Court, Eastern Way, Bury St Edmunds IP32 7AJ Tel 01284 765210

PI House, r/o 23 Clifton Road, Shefford SG17 5AF Tel 01462 850483

e-mail info@ascontracts.co.uk www.archaeologicalsolutions.co.uk





twitter.com/ArchaeologicalS



www.facebook.com/ArchaeologicalSolutions













CONTENTS

OASIS SUMMARY SHEET

SUMMARY

- 1 INTRODUCTION
- 2 DESCRIPTION OF THE SITE
- 3 TOPOGRAPHY, GEOLOGY AND SOILS
- 4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND
- 5 METHOD OF WORK
- 6 DESCRIPTION OF RESULTS
- 7 CONFIDENCE RATING
- 8 DEPOSIT MODEL
- 9 DISCUSSION
- 10 DEPOSITION OF THE ARCHIVE

ACKNOWLEDGEMENTS

BIBLIOGRAPHY

APPENDIX

1 SPECIFICATION

OASIS SUMMARY SHEET

Project details								
Project name	Lower	Downs	Slade,	Haverhill,	Suffolk:	An	Archaeological	Trial-
	Trench	Evaluat	ion					

In December 2014 Archaeological Solutions Ltd (AS) carried out an archaeological evaluation of Lower Downs Slade, Haverhill, Suffolk (NGR TL 6704 4564). The evaluation was commissioned by Oxbury Chartered Surveyors on behalf of Havebury Housing Partnership as part of a draft planning condition on approval for the proposed erection of flats, garages, parking and vehicle access (Planning Approval Ref. DC/14/1457/FUL), based on advice from Suffolk County Council Archaeological Service Conservation Team.

The evaluation revealed a modern pit in Trench 1

Project dates (fieldwork)	Novembe	er 2014					
Previous work (Y/N/?)	N Future work TBC						
P. number	<i>P5557</i> Site c		ode	HVH (089		
Oasis No.	archaeol	7-197275		<u> </u>			
Type of project	An archa	eological	evaluation				
Site status	n/a						
Current land use	Car Park	and Gard	len				
Planned development	Resident	ial					
Main features (+dates)	None						
Significant finds(+dates)	None	None					
Project location							
County/ District/ Parish	Suffolk St Edmundsbury Haverhill				Haverhill		
HER/ SMR for area	Suffolk						
Post code (if known)	-						
Area of site	406m ²						
NGR	TL 6704 4564						
Height AOD (max/ min)	c. 67m						
Project creators							
Brief issued by	Suffolk County Council Archaeological Service Conservation Team						
	(SCC AS-CT)						
Project Supervisor	Thomas Muir						
Funded by	Havebury Housing Partnership						
Full title	Lower Downs Slade, Haverhill, Suffolk: An Archaeological Trial-						
	Trench Evaluation						
Authors	Muir, T. & Peachey, A.						
Report no.	4752						
Date (of report)	November 2014						

LOWER DOWNS SLADE, HAVERHILL, SUFFOLK

ARCHAEOLOGICAL TRIAL-TRENCH EVALUATION

SUMMARY

In December 2014 Archaeological Solutions Ltd (AS) carried out an archaeological evaluation of Lower Downs Slade, Haverhill, Suffolk (NGR TL 6704 4564). The evaluation was commissioned as part of a draft planning condition on approval for the proposed erection of flats, garages, parking and vehicle access (Planning Approval Ref. DC/14/1457/FUL), based on advice from Suffolk County Council Archaeological Service Conservation Team.

The site within an area of archaeological importance, recorded on the Suffolk County Historic Environment Record, with a potential for medieval and post-medieval remains associated with its location in the historic settlement core of Haverhill (recorded on the HER as HVH 067). The site lies to the rear of the historic Queens Street, with a potential for evidence of structures and 'back-yard' deposits such as property boundaries, industrial features, refuse pits and other occupation evidence. Historic maps suggest that the site has not been subject to extensive development in the last 100 years, which may increase the potential for survival/preservation of medieval and potentially earlier deposits. The site lies close to the floodplain of a small watercourse, also suggesting the area may have been attractive to early occupation. Medieval features were recorded during investigations to the south (HER HVH 050).

In the event the evaluation revealed a modern pit in Trench 1.

1 INTRODUCTION

- 1.1 In November 2014 Archaeological Solutions Ltd (AS) carried out an archaeological evaluation at Lower Downs Slade, Haverhill, Suffolk (NGR TL 6704 4564; Figs.1 2). The evaluation was commissioned by Oxbury Chartered Surveyors on behalf of Havebury Housing Partnership as part of a draft planning condition attached to planning approval for the proposed erection of 8No flats, garages, parking and vehicle access (St Edmundsbury Planning Approval Ref. DC/14/1457/FUL), based on advice from Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT).
- 1.2 The evaluation was conducted in accordance with a brief issued by Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT) (dated 12th November 2014). It was also carried out according to a written scheme of investigation prepared by Archaeological Solutions (dated 02/12/2014), approved by SCC AS-CT. The project adhered to appropriate sections of Gurney (2003)

'Standards for Field Archaeology in the East of England', East Anglian Archaeology Occasional Paper 14, and the Institute for Archaeologists' Code of Conduct and Standard and Guidance for Archaeological Field Evaluation (2008).

- 1.3 The principal objectives of the evaluation were:
 - ➤ 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.

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 and 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 Haverhill is a small town in south-west Suffolk, located 15km west of Sudbury, 20km east of Cambridge, and 3km west of the River Stour. The site is in the centre of the town, and comprises a small irregular plot approximately 406m² on the eastern side of Lower Downs Slade, a cul-de-sac off Queens Street forming a residential area between the council offices, library and police station. The site is currently occupied by a car park and gardens.

3 TOPOGRAPHY, GEOLOGY AND SOILS

3.1 The site is located at *c*.67m AOD in a rolling landscape cut by small watercourses. The Stour Brook passes 100m to the north-east, with an eastern course that joins the River Stour 2km east of Haverhill. The local soils are largely unsurveyed due the urban nature of Haverhill, but the nearest adjacent soils are of the Ludford Association, comprising deep, well drained loamy soils with occasional flint over gravel formations (SSEW 1983a; 1983b). The underlying solid geology comprises Cretaceous Upper chalk (BGS 1991).

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 4.1 The shallow slopes overlooking the Stour Brook appear to have been conducive to earlier Prehistoric activity with a Palaeolithic Acheulian or Mousterian flint axe recovered *c*.400m to the north-east (HER HVH014), an earlier Neolithic polished flint axe recovered *c*.500m to the south on Duddery Hill (HER MSF22170), and residual prehistoric material including an earlier Neolithic leaf-shaped arrowhead and pottery recorded in the churchyard of St. Botolph's to the west (HER HVH005)
- 4.2 In the Roman Period, the Viatores identified the route of a road 'Margary's 24' that ran close to the Stour Brook (HER WTH007), linking Cambridge and Colchester. The postulated route of this road may lay approximately under the route of Queen Street, Market Hill and High Street, very close to the north-east of the site, but no evidence for the road has been recorded to date in Haverhill. Evidence for Roman occupation has been recorded *c*.450m to the west in the from of a cremation burial with grave goods on Castle Lane (HER HVH011), with further residual Roman pottery and a spindle whorl in the churchyard of St. Botolph's (HER HVH005), close to that cremation.
- 4.3 Anglo-Saxon settlement of Haverhill is likely to have comprised a village developed around the cross roads between Crowland Road and Camps Road to the west. A high number of late Saxon graves, including 'pillow stones' and pottery have been excavated from St. Botolph's Churchyard (HVH 005), and indicate the origins of the church during this period. Potentially from this Saxon foundation, the medieval town of Haverhill (HER HVE067) developed, with the Domesday Book listing Haverhill as a settlement of 54 households, with an established market. In the 13th century the town's market was relocated to what is now Market Hill, and the core of the town developed on the western side of the Stour Brook, in a cruciform

arrangement along Queen Street, High Street, Swan Lane and Camps Road. At the centre of this arrangement was the church of St. Mary (HER HVH016), situated c.100m to the south of the site and with origins dating back at least to the 13th century. Archaeological remains associated with the medieval town are relatively poorly-defined, although a 15th century hall house, now the Queen's Head (HER HVH049) is situated immediately to the south of Lower Downs Slade, and 12th -14th century pots have been identified beneath walls to the rear of the building. Further pits and layers of subsoil or dump-deposits on Queen Street and High Street (HER HVH053 & HVH066) also appear associated with the medieval town; while undated pits and ditches adjacent to the south and south-west of Lower Downs Slade (HER HVH050 & HVH052) may form an extension of this evidence.

4.4 Throughout the middle ages, Haverhill had flourished as a focal point for trade, particularly in the wool industry, but the collapse of the wool trade brought a decline to the town until the beginning of the industrial revolution which saw the town function as an active agricultural and industrial centre. The agricultural landscape is represented by tower and post mills (HER HVH018 & HVH033) on early to mid 19th century maps, *c*.500m south and north-east of the site on the outskirts of the post-medieval town; while industry included a brewery and Chauntry Mills textile works *c*.150m south-west and south of the site respectively (HER HVH055 & HVH082). Furthermore, the monitoring of footing trenches *c*.150m to the west revealed an east-west aligned ditch that may be associated with tenements or plots of the post-medieval town close to the site (HER HVH051).

5 METHODOLOGY

- 5.1 Two trenches, each 10m in length, were excavated using a mechanical excavator fitted with a toothless ditching bucket (Fig. 2).
- 5.2 Undifferentiated overburden was removed under close archaeological supervision using a 180° back acting mechanical excavator fitted with a 1.60m wide toothless ditching bucket. Thereafter, all further investigation was undertaken by hand. Exposed surfaces were cleaned as appropriate and examined for archaeological features and finds. Deposits were recorded using *pro forma* recording sheets, drawn to scale and photographed.

6 RESULTS

Individual trench descriptions are presented below:

Trench 1 (Figs. 2 & 8)

Sample section: 1A				
0.00 = 67.58m A	AOD			
0.00 - 0.10m	L1005	Tarmac		

0.10 - 0.22m	L1006	Levelling material. Dark yellowish brown, firm, clayey sand
0.22 - 0.35m	L1007	Levelling material. Dark greyish black, firm, sandy clay
0.35 – 0.46m	L1008	Levelling material. Light yellowish grey, firm, sandy clay
0.46 - 0.91m	L1001	Subsoil. Dark grey, firm, sandy silt
0.91 – 1.15m	L1003	Subsoil. Light greyish brown, friable, clayey sand
1.15m+	L1004	Natural. Mid yellowish brown, sandy clay with chalk

Sample section.	: 1B					
0.00 = 67.61 m A	0.00 = 67.61m AOD					
0.00 - 0.10m	L1005	Tarmac. As above				
0.10 - 0.23m	L1006	Levelling material. As above				
0.23 - 0.39m	L1007	Levelling material. As above				
0.39 – 0.44m	L1014	Levelling. Mid yellowish grey, clayey sand. As above				
0.44 - 0.49m	L1008	Levelling material. As above				
0.496 - 0.98m	L1001	Subsoil. As above				
0.98 1.30m	L1003	Subsoil. As above				
1.30m+	L1004	Natural. As above				

Description: Trench 1 contained a modern pit, F1015.

Pit F1015 cut Subsoil L1001. It contained four fills (L1010, 1011, 1012 and L1013) with modern CBM and glass.

Trench 2 (Figs. 2 & 8)

Sample section	2A	
0.00 = 65.91m		
0.00 - 0.32m	L1000	Topsoil. Dark brown sandy silt
0.32 – 0.68m	L1001	Subsoil. As above Tr.1.
0.68 - 96m	L1002	Subsoil. Mid yellowish brown clayey sand
0.96 – 1.20m	L1003	Subsoil. As above Tr. 1
1.20m+	L1004	Natural. As above Tr.1.

Sample section 2B						
0.00 = 66.24m A	0.00 = 66.24m AOD					
0.00 - 0.32m	L1000	Topsoil. Dark brown sandy silt				
0.32 - 0.68m	L1001	Subsoil. As above Tr.1.				
0.68 - 96m	L1002	Subsoil. Mid yellowish brown clayey sand				
0.96 – 1.20m	L1003	Subsoil. As above Tr. 1				
1.20m+	L1004	Natural. As above Tr.1.				

Description: No archaeological features or finds were present.

7 CONFIDENCE RATING

7.1 It is not felt that any factors inhibited the recognition of archaeological features or finds present.

8 DEPOSIT MODEL

- 8.1 Where the stratigraphy was intact (Trench 2) Topsoil L1000 was uppermost and it comprised a dark brown sandy silt (c.30mm thick). L1000 overlay a series of subsoil deposits L1001, L1002 and L1003 (c.0.85m thick). Subsoil L1003 overlay the natural, L1004, a mid yellowish brown, sandy clay with chalk (1.15m+ below the current ground surface).
- 8.2 In Trench 1 the stratigraphy was truncated and tarmac (L1005) and a series of levelling layers (L1006, L1007, L1008 and L1014) were present.

9 DISCUSSION

- 9.1 The site within an area of archaeological importance, recorded on the Suffolk County Historic Environment Record, with a potential for medieval and post-medieval remains associated with its location in the historic settlement core of Haverhill (recorded on the HER as HVH 067). The site lies to the rear of the historic Queens Street, with a potential for evidence of structures and 'back-yard' deposits such as property boundaries, industrial features, refuse pits and other occupation evidence. Historic maps suggest that the site has not been subject to extensive development in the last 100 years, which may increase the potential for survival/preservation of medieval and potentially earlier deposits. The site lies close to the floodplain of a small watercourse, also suggesting the area may have been attractive to early occupation. Medieval features were recorded during investigations to the south (HER HVH 050).
- 9.2 In the event the evaluation revealed a modern pit in Trench 1. Though some truncation had occurred subsoil deposits were recorded and archaeological remains, if present, would have been revealed. Previous development of the site has not been intensive (Figs. 3-7).

10 DEPOSITION OF THE ARCHIVE

10.1 Archive records, with an inventory, will be deposited with the finds from the site, at Suffolk County Store. 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.

ACKNOWLEDGEMENTS

Archaeological Solutions Ltd (AS) would like to thank Mr Joe Bootman of Oxbury Chartered Surveyors for commissioning the evaluation on behalf of the client Havebury Housing Partnership, and the client for funding the work.

Thanks also go to the staff of the Suffolk Historic Environment Record for the provision of data.

AS is also pleased to acknowledge the advice and input of Dr Abby Antrobus (Suffolk County Council Archaeological Service Conservation Team).

BIBLIOGRAPHY

British Geological Survey (BGS), 1991 East Anglia Sheet 52°N-00° 1:250,000 Series Quaternary Geology (Southampton, Ordnance Survey)

Gurney, D., 2003

Standards for Field Archaeology in the East of England, East Anglian Archaeology Occasional Paper No. 14

Institute for Archaeologists (IfA), 2008
Standard and Guidance for Archaeological Evaluation (Reading, IfA)

Soil Survey of England and Wales (SSEW), 1983

Soils of South East England (sheet 4) (Harpenden, Rothamsted Experimental Station/ Lawes Agricultural Trust)

Soil Survey of England and Wales (SSEW), 1983

Legend for the 1:250,000 Soil Map of England and Wales (Harpenden, Rothamsted Experimental Station/ Lawes Agricultural Trust)

APPENDIX 3 SPECIFICATION

LOWER DOWNS SLADE, HAVERHILL, SUFFOLK

REVISED WRITTEN SCHEME OF INVESTIGATION FOR AN ARCHAEOLOGICAL EVALUATION

2nd December 2014

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

> Desk-based assessments and environmental impact assessments Historic building recording and appraisals Trial trench evaluations Geophysical surveys Archaeological monitoring and recording Archaeological excavations Post excavation analysis Promotion and outreach Specialist analysis

ARCHAEOLOGICAL SOLUTIONS LTD

Unit 6, Brunel Business Court, Eastern Way, **Bury St Edmunds IP32 7AJ** Tel 01284 765210

PI House, r/o 23 Clifton Road, Shefford SG17 5AF Tel 01462 850483

> e-mail info@ascontracts.co.uk www.archaeologicalsolutions.co.uk





twitter.com/ArchaeologicalS



www.facebook.com/ArchaeologicalSolutions

















LOWER DOWNS SLADE, HAVERHILL, SUFFOLK ARCHAEOLOGICAL DESK-BASED & 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) (dated 12th November 2013, and confirmed as still valid). It provides for an archaeological desk-based assessment & trial trench evaluation to be carried out as part of a draft planning condition on approval for the proposed erection of flats, garages, parking and vehicle access on land at Lower Downs Slade, Haverhill, Suffolk (NGR TL 760 456). The evaluation is required by St Edmundsbury Borough Council, based on advice from SCC AS-CT (Planning Approval Ref. DC/14/1457/FUL).
- 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).

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 construct a new housing development on land at Lower Downs Slade in the centre of Haverhill. The site comprises an area of rough ground and former surfaced car park at c.67m AOD extending to some 456m2 on the south eastern side of Lower Downs to the rear of the western side of the High Street.
- 3.2 The site within an area of archaeological importance, recorded on the Suffolk County Historic Environment Record, with a potential for medieval and post-medieval remains associated with its location in the historic settlement core of Haverhill (recorded on the HER as HVH 067). The site lies to the rear of the historic Queens Street, with a potential for evidence of structures and 'back-yard' deposits such as property boundaries, industrial features, refuse pits and other occupation evidence. Historic maps suggest that the site has not been subject to extensive development in the last 100 years, which may increase the potential for survival/preservation of medieval and potentially earlier deposits. The site lies close to the floodplain of a small watercourse, also suggesting the area may have been attractive to early occupation. Medieval features were recorded during investigations to the south (HER HVH 050).
- 3.3 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 desk-based assessment element of 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 research priorities for the region are set out in Glazebrook (1997) and Brown & Glazebrook (2000) and updated by Medlycott and Brown (2008) and Medlycott (2011).
- 4.2.2 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, Avers (in Brown & Glazebrook, 2000) discusses more 'urban' research topics in more detail. For demography, issues include assessment of population structures, density and mobility, urban sustainability, immigration and rural colonisation and housing/provisioning. For social organisation, issues include assessment of the impact of royal vills, major institutions and the Church on urban settlement, territorial boundaries in proto-urban and urban settlements, the effect of national political developments, ranking and status in settlements, spatial analysis, wealth distribution, specialism, acquisition of raw materials, building form and function, markets and commercial/corporate activity. Economic issues of the above also need to be considered, particularly with regard to industrial zoning. The impact of culture and religion could include issues such as identifying characteristics of

urban culture, its growth, complexity and values. The Church and its influence on the burgeoning towns must also be addressed. As Murphy notes in Brown and Glazebrook (2000, 31), urban environmental archaeology should be approached by analysis of environmental 'events', processes and study of relationships with producing sites in the rural hinterland.

- 4.2.3 Medlycott (2011, 57) states that he 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).
- 4.2.4 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).
- 4.2.5 The principal research issues for the site will be to identify and characterise any evidence of medieval/post-medieval occupation to the rear of the High Street (in particular any 'back-yard' evidence such as property boundaries, industrial features, refuse pits or structures).

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 DESK-BASED ASSESSMENT TRENCHED EVALUATION

5.1 Desk-based Assessment

- 5.1.1 As set out in the brief (Section 3), this will include:
- Consultation of the Suffolk Historic Environment Record.
- Cartographic and documentary research, to record historic landuse (and its impact), siting of old boundaries, and any early buildings on the site
- Assess the potential for any further documentary research that would contribute to archaeological investigation of the site
- A site visit to determine constraints to archaeological survival and fieldwork

5.1.2 Sources of Information to be Consulted

The desk-based assessment will entail consulting the sources listed in the IfA guidance documents and the brief.

5.1.3 Archaeological Databases

The archaeological databases represent the standard references to the known archaeology of an area. The primary source will be the Suffolk Historic Environment Record (HER).

5.1.4 Historical Documents

Documentary research will provide an overview of the history of the area and its immediate environs, suggesting the effects of land use and settlement patterns. The assessment will also consider the potential for detailed documentary research to contribute to any further archaeological investigation of the study area.

5.1.5 Cartographic & Pictorial Documents

Commonly a productive area of research. The examination will also be aware of the need to assess and map the archaeological impact of current and past land uses.

5.1.6 Site visit

A physical walkover of the site will be undertaken. It will have the following purposes:

To examine the areas of archaeological potential identified during the desk-based assessment, in particular, with a view to gauging the likely survival or condition of the archaeological remains; and

To consider the significance of above ground structures (e.g. industrial archaeology), historic buildings (to EH Level 1), historic landscape features, their settings and potential impacts for the proposed development

6 TRENCHED EVALUATION

6.1 Details of Senior Project Staff

- 6.1.1 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 IfA.
- 6.1.2 Profiles of key project staff are provided (Appendix 2).

A Method Statement is presented
Trial Trench Evaluation Appendix 1

- 6.1.3 The evaluation will conform with the guidelines set down in the brief and the Institute for Archaeologists Standard and Guidance for Archaeological Evaluations (revised 2008) and Standard and Guidelines for Historic Environment Desk-based Assessment (revised 2012). 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 2011 Ver. 1.2.
- 6.1.4 SCC AS-CT require a programme of archaeological trial trenching to follow and be led by the results of the desk-based assessment element, and stipulate that linear trenching of 20m length by 1.8m width should be excavated to assess a sample of the site. Two trenches each up to 10m x 1.8m are proposed. An outline trench plan is appended. AS will obtain the historic mapping for the site and confirm and agree the trench locations within the proposed development area based on the need to target any historic features with SCC AS-CT prior to start. AS is happy to review the scale/location of the trenches following comment from the client and/or SCC AS-CT.
- 6.1.5 The environmental strategy will adhere to the guidelines issued by English Heritage (*Environmental Archaeology; A guide to the theory and practice of methods, from sampling and recovery to post-excavation,* Centre for Archaeology Guidelines,

- 2011). An environmentalist will be invited to visit the site if remains of interest are found. Dr Rob Scaife will be the Environmental Coordinator for the project. The specialist will make his/her results known to Zoe Outram who co-ordinates environmental archaeology in the region on behalf of English Heritage. It will be particularly important on this project to identify any palaeoenvironmental remains and to identify any waterlogged remains present on the site.
- 6.1.6 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)

- 6.1.7 In advance of the field work AS will liaise with the County HER 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.
- 6.1.8 Details of staff and specialist contractors are provided (Appendix 2). The project will be managed by Claire Halpin MIFA /Jon Murray MIFA.
- 6.1.9 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.
- 6.1.10 AS is a member of the Council for British Archaeology and is insured under their policy for members.

7 SERVICES

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

8 SECURITY

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

9 REINSTATEMENT

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

10 REPORT REQUIREMENTS

- 10.1 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 and OASIS form
- 10.2 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
- 10.3 The project details will be submitted to the OASIS database, and the online summary and OASIS form will be appended to the project report.
- 10.4 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.

11 ARCHIVE

- 11.1 The requirements for archive storage will be agreed with the County HER.
- 11.2 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 will be obtained from the County HER Officer.
- 11.3 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 HER; 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 HER. 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.

11.4 Archive records, with inventory, are to be deposited, as well as any donated finds from the site, at the county HER 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 accession number will be obtained from the HER.

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 Institute of Field 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

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.

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.

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. 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. Digital photos will also be taken and included in the report and archive (AS cameras are 14 or 16mp).

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.

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 ASCT. 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, and the specialist will make his/her results known to Zoe Outram who co-ordinates environmental archaeology in the region on behalf of English Heritage. The project will also accord with the recent guidelines of the English Heritage 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 Rob Scaife and AS will seek advice from the EH 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 English Heritage 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 EH regional coordinator 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 will visit to advise of 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 Rob Scaife and AS will seek advice from the EH Regional Scientific Advisor (Helen Chappell) 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 MIfA

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 MIfA

Qualifications: Member of the IfA

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.

SENIOR PROJECTS MANAGER Jon Murray BA MIfA

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

repared 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 Zbigniew Pozorski MA

Qualifications: University of Wroclaw, Poland, Archaeology (1995-2000, MA 2003)

Experience: Zbigniew has archaeological experience dating from 1995 when as a student he joined an academic group of excavators. He was involved in numerous archaeological projects throughout the Lower Silesia region in southwest Poland and a number of projects in old town of Wroclaw. During his university years he specialized in medieval urban archaeology. He had his own research project working on an early/high medieval stronghold in Pietrzykow. He was a member of a University team which located and Excavated an

unknown high medieval castle in Wierzbna, Poland. Zbigniew has worked for archaeological contractors in Poland on several projects as a supervisor where he gained experience in all types of evaluations and excavations in urban and rural areas. Recently he worked in Ireland where he completed two large long-term projects for Headland Archaeology Ltd. He joined AS in January 2008 as a Project Officer. Zbigniew is qualified in the Construction Skills Certification Scheme (CSCS) and is a qualified in First Aid at Work (St Johns Ambulance).

SUPERVISOR

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 Kamil Orzechowski BA, MA

Kamil Orzechowski joined AS in 2012, as an experienced field archaeologist after spending five years in various commercial archaeology units working on large-scale construction projects including railways and pipelines. Before becoming a field archaeologist, Kamil graduated from the Institute of Ethnology and Cultural Anthropology, Adam Mickiewicz University, Poznan, Poland. Kamil is qualified in the Construction Skills Certification Scheme (CSCS).

SUPERVISOR James Earley

Experience: James' site experience dates from 2002 – 2006 when he was a Project Assistant with Suffolk County Council Archaeological Services. From Suffolk he was an Archaeological Officer with Thames Valley Archaeological Services (2006 – 2013), and more recently the University of Leicester Archaeological Services. James has over 10 years field experience on both urban and rural sites. He has supervised staff, supervised topsoil and subsoil stripping for evaluations and excavations, and has surveyed sites using both GPS and Total Station.

SUPERVISOR Julie Walker BSc MA PIfA

Qualifications: Queens University Belfast: BSc Archaeology (2007-2010)

University of Southampton: MA Osteoarchaeology (2010-2011)

Experience: Julie is a member of the Institute for Archaeologists (PIfA grade) and the British Association for Biological Anthropology and Osteoarchaeology. Professionally, Julie has worked for organisations including Albion Archaeology (2014) and Oxford Archaeology

East (2014). Julie has a thorough knowledge and experience of archaeological fieldwork and post-excavation practice. Julie's personal research interests include congenital and developmental defects in the Romano-British and Anglo-Saxon periods and she has made several conference presentations on this subject.

SUPERVISOR Matthew Baker BA MA

Qualifications: Cardiff University: BA Archaeology (2008-2011)

Cardiff University: MA Archaeology (2012-2013)

Experience: Since concluding his higher education, Matthew has worked for a number of archaeological projects and organisations including GeoArch (Cardiff), the Damerham Archaeology Project and Cambridge University. He has a gained a varied experience of archaeological fieldwork and post-excavation practice including geophysical survey/interpretation and isotopic analysis.

SUPERVISOR 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.

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 Andrew Newton MPhil PIFA (POST-EXCAVATION)

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 11 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 is part-way through writing up a PhD on Viking Age demographics, a long-

term academic interest that has led to his gaining considerable research excavation experience across the North Atlantic. 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/ Føroya Fornminnissavn, 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 MIfA

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, Cambridgshire. 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) Julia Cussans PhD

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 c. 12 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 villa 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 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.

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 timberframed 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.

FINDS AND ARCHIVE ASSISTANT Adam Leigh

Experience: Adam joined AS in January 2012. In his time with the company he has helped process hundreds of finds from a variety of sites going on to concord them. Adam has

helped prepare a large number of sites for deposition with museums making sure that the finds are prepared in strict accordance with the guidelines and requirements laid out by the receiving museum.

ASSISTANT ARCHIVES OFFICER 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 Stratascan Ltd
AIR PHOTOGRAPHIC Air Photo Services

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 Ms J Cowgill
ANIMAL BONE Dr J Cussans
HUMAN BONE: Ms S Anderson
ENVIRONMENTAL CO-ORDINATOR Dr R Scaife
POLLEN AND SEEDS: Dr R Scaife
CHARCOAL/WOOD Dr J Summers

SOIL MICROMORPHOLOGY Dr R MacPhail, Dr C French

CARBON-14 DATING: English Heritage Ancient

Monuments Laboratory (for advice).

CONSERVATION University of Leicester

PHOTOGRAPHIC INDEX



General view of the site. Looking north-east.

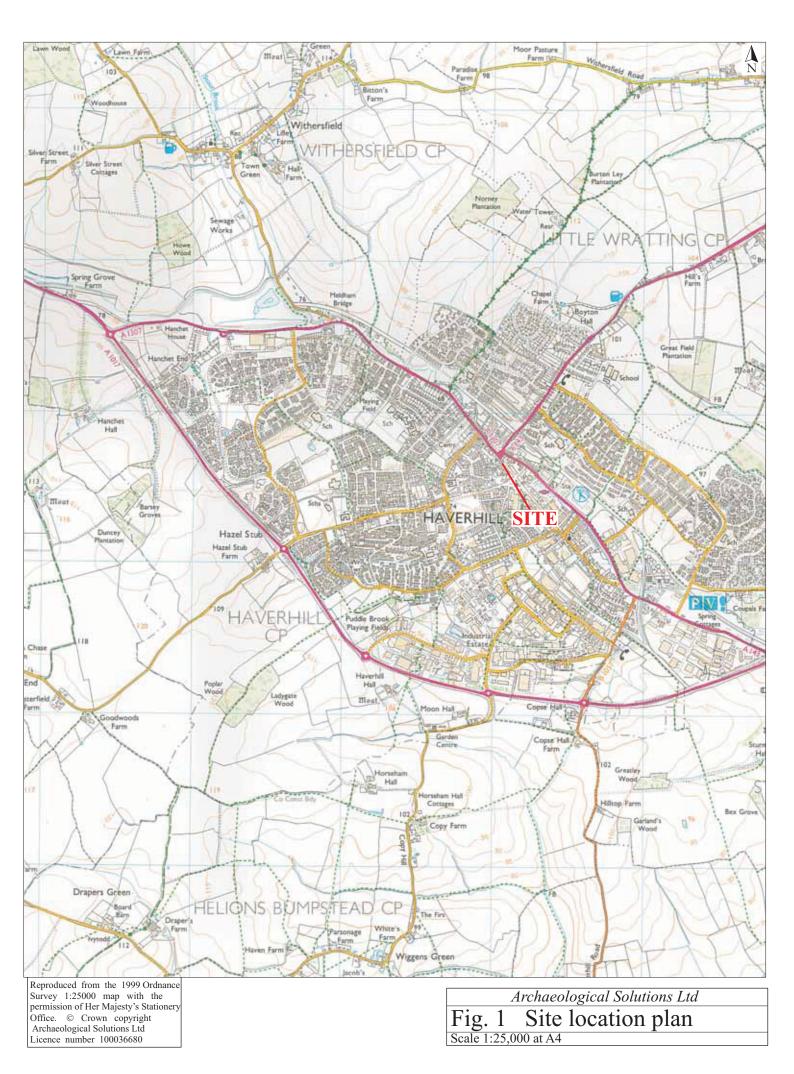


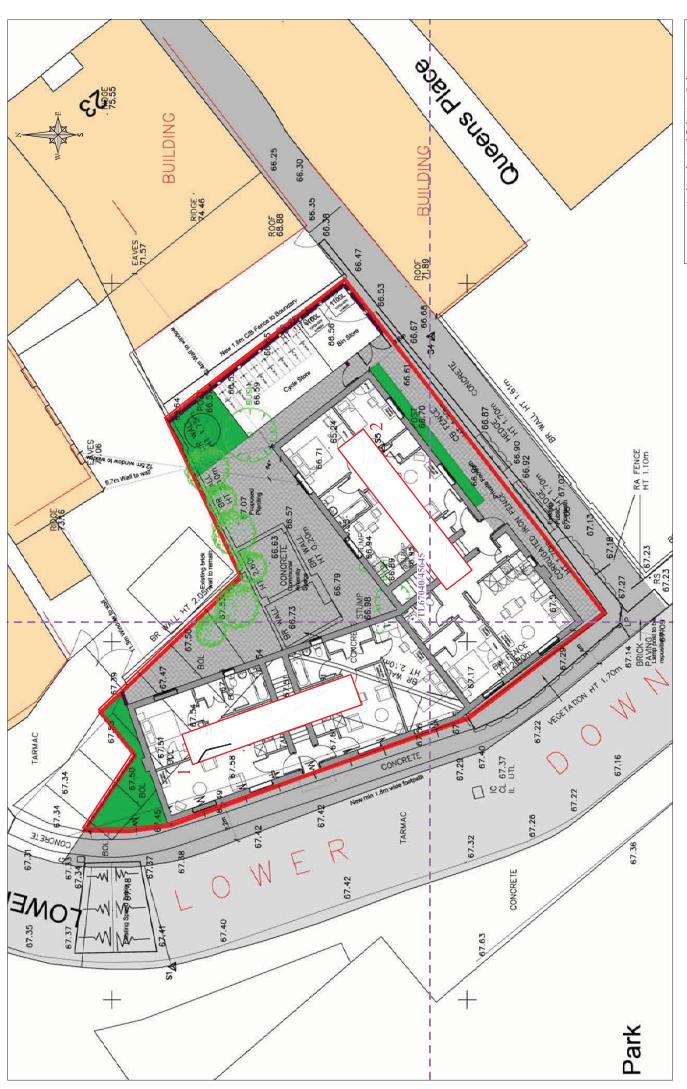
General view of the site. Looking north-west.





Trial trench 2. Looking north-east.

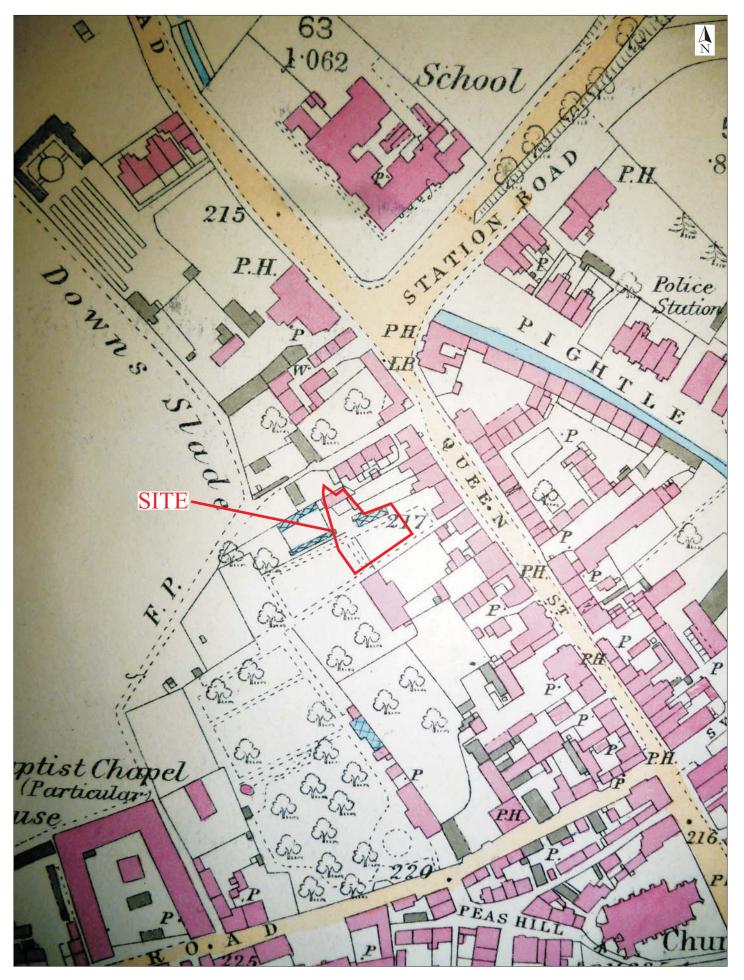




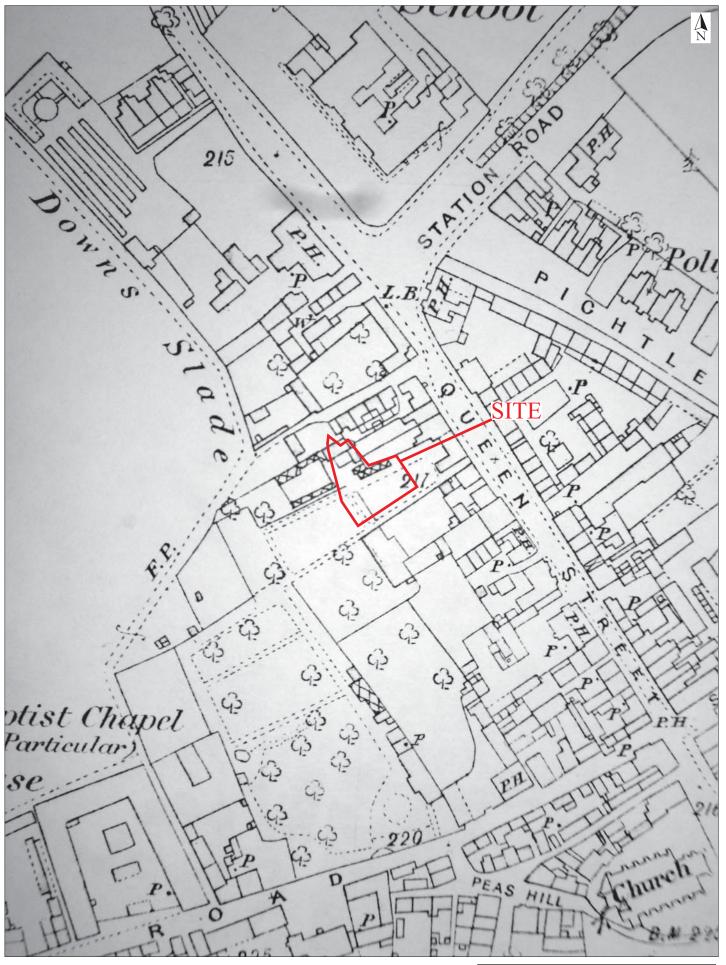
Archaeological Solutions Ltd
Fig. 2 Detailed site location plan
Scale 1:150 at A3



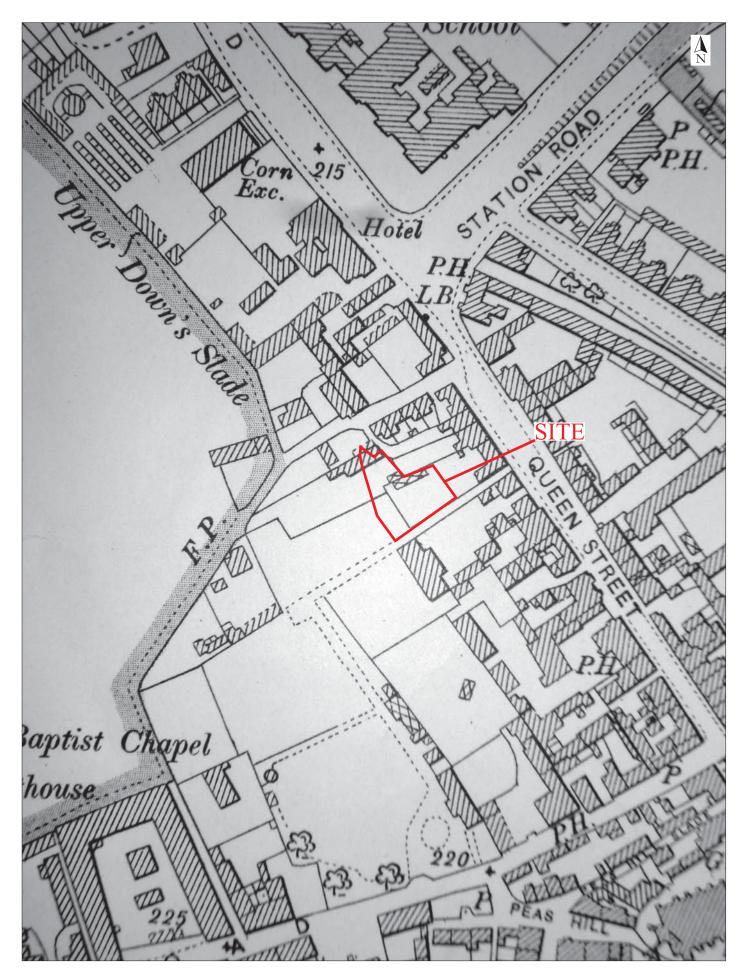
Fig. 3 1841 Tithe map
Not to scale



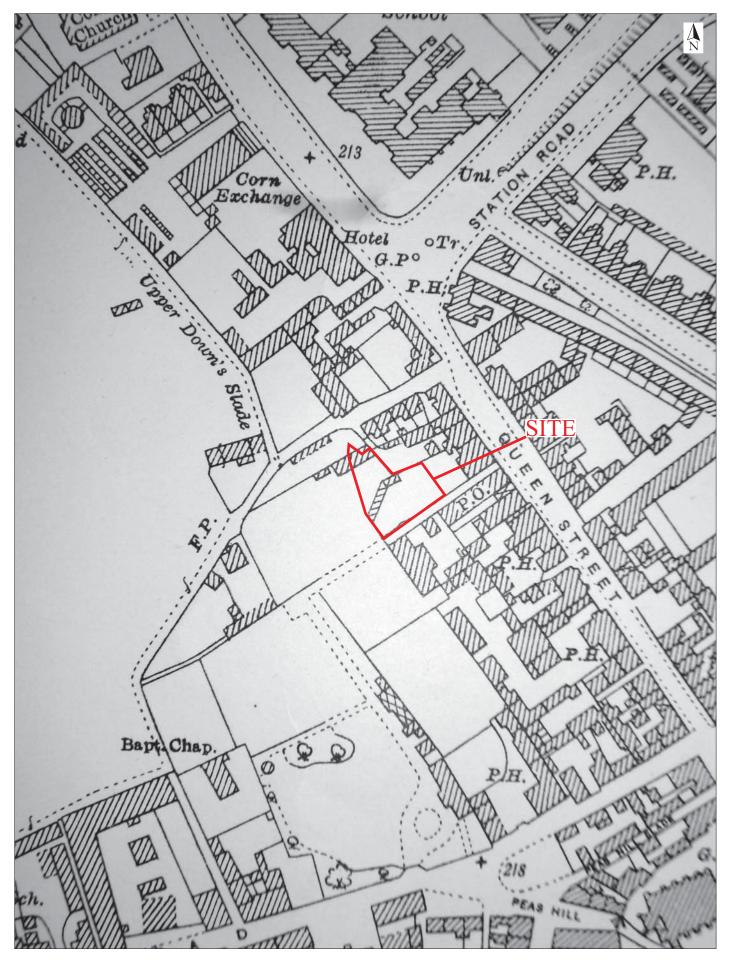
Archaeological Solutions Ltd
Fig. 4 OS map, 1886
Not to scale



Archaeological Solutions Ltd Fig. 5 OS map, 1895 Not to scale



Archaeological Solutions Ltd
Fig. 6 OS map, 1902
Not to scale



Archaeological Solutions Ltd
Fig. 7 OS map, 1924
Not to scale

