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FORMER FIRE STATION, COLCHESTER ROAD, IPSWICH, SUFFOLK IP4 4SS

ARCHAEOLOGICAL TRIAL TRENCH EVALUATION

Authors: Gareth Barlow (Fig	eldwork & report)
NGR: TM 181 460	Report No: 4331
District: Ipswich	Site Code: IPS717
Approved: Claire Halpin MIfA	Project No: 5155
Signed:	Date: 17 June 2013

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Project details	
Project name	Former Fire Station, Colchester Road, Ipswich, Suffolk

In June 2013 Archaeological Solutions Ltd (AS) carried out an archaeological evaluation at the Former Fire Station, Colchester Road, Ipswich, Suffolk IP4 4SS (NGR TM 181 460). The evaluation was commissioned by Hopkins Homes Ltd and was undertaken in advance of the proposed construction of a residential development. The evaluation is required to comply with a planning requirement (Ipswich Borough Council) which requires a programme of archaeological work, based on advice from SCC AS-CT.

Trenches 6 and 7 contained numerous early Roman (mid 1st – mid 2nd century) features comprising a very large sunken feature (F1008) that appeared to have a metalled base (L1011), gullies, ditches and pits. While the majority of archaeological features (20) were found in Trenches 6 and 7, a sparse number were located in Trench 1 (Ditch (F1006), Trench 2 (?Roman buried soil L1062) and Trench 3 (Pits F1053 and F1053). The remainder of the site contained features of post-medieval/modern date only, many of which were associated with the fire station complex.

Sparse quantities of residual struck flint and burnt flint were found in Trenches 2 (F1008 and F2053), 6 (F1103, F1108 and F1110) and 7 (F1068, F1074, F1081 and F1083). The small number of flints have a diverse date range: a long blade of Palaeolithic or Mesolithic date. Mesolithic blade production on or close to the site is attested to by a core recovered as unstratified material and micro-blades contained in Ditch F1068 and Gully F1108. The remaining debitage is of later Neolithic to early Bronze Age date.

Project dates (fieldwork)	June 2013	3		
Previous work (Y/N/?)	N	Future work	?	
P. number	5155	Site code	IPS	3717
Type of project	Archaeolo	gical Evaluatio	n	
Site status				
Current land use	Former Fi	re Station		
Planned development	Residentia	al		
Main features (+dates)	Ditches, g	ullies, pits		
Significant finds (+dates)	Early Ron	nan pottery, res	idual prehisto	ric flint
Project location				
County/ District/ Parish	Suffolk			Ipswich
HER/ SMR for area	Suffolk His	storic Environm	ent Record	
Post code (if known)	IP4 4SS			
Area of site	1.2 ha			
NGR	TM 181 460			
Height AOD (min/max)	45m AOD			
Project creators				
Brief issued by	, ,		ounty Counci	il Archaeological Service
	Conserva			
Project supervisor/s (PO)	Gareth Ba			
Funded by	Hopkins F	lomes Limited		
Full title				oad, Ipswich, Suffolk.
		gical Evaluatio	on	
Authors	Gareth Ba	nrlow		
Report no.	4331			
Date (of report)	June 2013			

FORMER FIRE STATION, COLCHESTER ROAD, IPSWICH, SUFFOLK IP4 4SS

ARCHAEOLOGICAL EVALUATION

SUMMARY

In June 2013 Archaeological Solutions Ltd (AS) carried out an archaeological evaluation at the Former Fire Station, Colchester Road, Ipswich, Suffolk IP4 4SS (NGR TM 181 460). The evaluation was commissioned by Hopkins Homes Ltd and was undertaken in advance of the proposed construction of a residential development. The evaluation is required to comply with a planning requirement (Ipswich Borough Council) which requires a programme of archaeological work, based on advice from SCC AS-CT

The site lies in an area of archaeological potential fronting Colchester Road to the south, within the hinterland of the Anglo-Saxon and medieval town area at Ipswich, which lies to the south west. The site extends to some 1.2ha and is a former fire station. It lies at c.45m AOD.

Trenches 6 and 7 contained numerous early Roman (mid 1st – mid 2nd century) features comprising a very large sunken feature (F1008) that appeared to have a metalled base (L1011), gullies, ditches and pits. While the majority of archaeological features (20) were found in Trenches 6 and 7, a sparse number were located in Trench 1 (Ditch (F1006), Trench 2 (?Roman buried soil L1062) and Trench 3 (Pits F1053 and F1053). The remainder of the site contained features of post-medieval/modern date only, many of which were associated with the fire station complex.

Sparse quantities of residual struck flint and burnt flint were found in Trenches 2 (F1008 and F2053), 6 (F1103, F1108 and F1110) and 7 (F1068, F1074, F1081 and F1083). The small number of flints have a diverse date range: a long blade of Palaeolithic or Mesolithic date. Mesolithic blade production on or close to the site is attested to by a core recovered as un-stratified material and micro-blades contained in Ditch F1068 and Gully F1108. The remaining debitage is of later Neolithic to early Bronze Age date.

1 INTRODUCTION

1.1 In June 2013 Archaeological Solutions Ltd (AS) carried out an archaeological evaluation at the Former Fire Station, Colchester Road, Ipswich, Suffolk IP4 4SS (NGR TM 181 460; Figs.1 - 2). The evaluation was commissioned by Hopkins Homes Ltd and was

undertaken in advance of the proposed construction of a residential development. The evaluation is required to comply with a planning requirement (Ipswich Borough Council) which requires a programme of archaeological work, based on advice from SCC AS-CT

- 1.2 The project was carried out in accordance with a brief issued by Suffolk County Council Archaeological Service Conservation Team (SCC AS-CT) (Jess Tipper, 18th November 2011), and a specification compiled by AS (dated 8th January 2013) and approved by SCC AS-CT. It followed the procedures outlined in the Institute of Field Archaeologists' Code of Conduct, Standard and Guidance for Archaeological Field Evaluation (revised 2008). It also adhered to the relevant sections of Standards for Field Archaeology in the East of England (Gurney 2003).
- 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, 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 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 The site lies in an area of archaeological potential fronting Colchester Road to the south, within the hinterland of the Anglo-Saxon and medieval town area at Ipswich, which lies to the south west. The site extends to some 1.2ha and was a former fire station which has been demolished.

3 TOPOGRAPHY, GEOLOGY AND SOILS

3.1 The former fire station site is situated in on the outskirts of urban lpswich, $c.2 \, \text{km}$ to the north-west of the town centre. The site is situated at $c.45 \, \text{m}$ AOD on the shallow northern slope of the valley of the River Orwell, which passes $c.2.2 \, \text{km}$ to the south-west. Situated above the gravels of the flood plain, the underlying geology of the site is comprised of impermeable Boulder Clay and Till.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 4.1 Several Neolithic flint axes have been recorded on the northern river valley site, in the close vicinity to the east and south of the site (HER IPS077-MSF4860, IPS116-MSF4906 & IPS127-MSF4919), while a scatter of flint cores, tools and debitage on Tuddenham Road c.800m to the west (HER IPS238-MSF11898) may represent more substantive prehistoric occupation. An early Bronze Age triangular flint point was also recorded close to the north of the site on Colchester Road (HER IPSMisc-MSF1448).
- 4.2 The focal point of Roman settlement in the vicinity of the site appears to have been an enclosure, probably a farmstead c.800 m to

the west of the site on Tuddenham Road (HER IPS240-MSF14634), which had a cemetery/burial ground adjacent to the south-west (HER IPS046-MSF4778). However, 1st century AD pottery associated with an ash layer, ox and sheep bones recorded *c*.400m to the west (HER IPS047-MSF4918) has suggested that the extent of the Roman occupation close to the site has yet to be fully defined.

- 4.3 As in the Roman period, current evidence for medieval activity is focused *c*.800m to the west on Tuddenham Road (HER IPS237-MSF11897, IPS238-MSF11899 & IPS240-MSF14635), where it is suggested some sort of fair or informal market may have been held between the late 12th and 14th centuries. This theory is based on the presence of numerous coins, including Flemish types, but the oresence of Thetford-type ware pottery indicated activity had begun by the late Saxon period. A single Thetford-type ware sherd has also been recorded *c*.200m to the north-east of the site (HER IPS126-MSF4918).
- 4.4 The medieval activity appears to have continued into the post-medieval period, as evidenced by numerous coins and tokens (HER IPS240-MSF17706), with the area remaining relatively undeveloped into the late 18th century when the Red House mansion (HER IPS459-MSF21889) was built *c*.600m to the west and enclosed in substantial parkland with an associated farm. In the late 18th century, Everton School and Westerfield House were also constructed c.1km to the north (HER 275485). In 1935 the Temple of Remembrance was added to Ipswich Cemetery to the west (HER 493057 & IPS409-MSF19665)), and in 1938-9 the extensive almshouse development at Cranfield Court was added adjacent to the west of this (HER 479420, 479416-8).

5 METHODOLOGY

- 5.1 Eleven trenches (c.333 linear metres) representing a 5% sample of the c.0.38ha, were excavated using a mechanical excavator fitted with a toothless ditching bucket. The trench locations were approved by Suffolk County Council, Archaeological Service Conservation Team. The individual trenches were linear in plan and were 30m in length. They were all 1.8m in width and followed a grid pattern (Fig. 2).
- 5.2 Undifferentiated overburden was removed under close archaeological supervision using a 360° tracked mechanical excavator fitted with a 1.80m 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. Excavated spoil was checked for finds and the trenches were scanned by metal detector.

6 DESCRIPTION OF RESULTS

Individual trench descriptions are presented below.

Trench 1 (Figs. 2-3)

Sample section	: 1A		
Southwest end, southwest facing			
0.00m = 45.67r	n AOD	-	
0.00 - 0.36m	L1001	Topsoil. Firm, mid brownish grey, silty clay with	
		occasional small and medium angular flints	
0.36 – 0.41m	L1002	Subsoil. Firm, mid brownish yellow silty clay with	
		occasional small and medium angular flints	
0.41m+	L1000	Natural deposits. Mixed patches of firm, pale/mid yellow orange clay with occasional small angular flints and rounded chalk; firm, pale/mid brownish orange clay silt with occasional small and medium angular flints and very occasional large angular flints; firm mid brownish orange sandy silt with occasional small and medium angular flints.	

Sample section	: 1B	
Northeast end,	southwes	st facing
0.00m = 46.04n	n AOD	-
0.00 - 0.09m	L1003	Modern yard surface. Friable, very dark grey sandy
		silt with frequent small sub-angular flints.
0.09 – 0.20m	L1004	Modern made ground. Friable, pale greyish yellow,
		mottled with pale brownish yellow, sandy silt, with
		frequent modern CBM rubble.
0.20 - 0.31m	L1005	Modern made ground. Firm, mid brownish grey
		silty clay.
0.31 – 0.46m	L1002	Subsoil. As above.
0.46m+	L1000	Natural deposits. As above.

Description: Trench 1 contained a very shallow, early Roman ditch (F1006) which ran along the full length of the trench.

Ditch F1006 was linear (30.00+ x 0.53 x 0.06m), orientated northwest/southeast. It had very shallow sides and a shallow concave base. Its fill, L1007, was a firm, pale brownish grey silty clay with sparse small angular flints. It contained Roman (mid $1^{st} - 2^{nd}$ century) pottery (22g).

Trench 2 (Figs. 2 - 3)

Sample section	: 2A		
Southwest end,	Southwest end, southeast facing		
0.00m = 47.49r	n AOD		
0.00 – 0.07m	L1057	Modern yard surface. Black Tarmac.	
0.07 – 0.16m	L1058	Modern levelling layer. Friable, mid red brown	
		coarse sand with occasional small angular flints.	
0.16 – 0.30m	L1059	Modern hardcore layer. Friable, pale yellow brown	
		coarse sand, with frequent modern CBM rubble	
		and moderate small and medium angular and	
		rounded flints.	
0.30 – 0.56m	L1060	Modern made ground. Very firm, dark blue grey	
		clay silt, with occasional small angular and rounded	
		flints, chalk, charcoal and rust flecks.	
0.56m+	L1000	Natural deposits. As Trench 1.	

Sample section Northeast end, 0.00m = 47.67r	southeas	at facing
0.00 – 0.15m	L1055	Topsoil. Firm, mid grey brown sandy silt with occasional small angular flints.
0.15 – 0.35m	L1056	Subsoil. Very firm, mid yellow brown clay silt, with occasional small and medium angular flints and chalk flecks.
0.35m+	L1000	Natural deposits. As Trench 1.

Description: Trench 2 contained a possible early Roman buried soil (L1062) and two modern quarry pits (F1061 & F1094).

Quarry Pit F1094 was sub-oval (275+ x 1.00+ x 0.39m). Its north-eastern side was steep and it had a flattish base. Its fill, L1095, comprised mixed lenses of firm, mid greenish orange silty clay with occasional small and medium angular and sub-angular flints, very firm, very pale brownish yellow chalky clay with frequent small sub-angular chalk and occasional small sub-angular flint, and firm, mid yellow brown sandy silt with occasional small and medium angular and sub-angular flints. It contained no finds.

Quarry Pit F1061 was subcircular (5.00 x 1.80+ x 1.81m+) located at the centre of the trench. It had steep sides and was excavated to a depth of 0.70m and then augered further to a depth on 1.80m. The base had still not been reached. The lowest fill reached (L1067) was a firm, mid brownish grey silty clay with occasional small rounded chalk. It contained post-medieval pottery (16g) and CBM (406g). Above L1067, L1066 was a very firm, pale greyish brown silty clay with occasional small angular and sub-angular flints and small rounded chalk. It contained post-medieval pottery (12g), animal bone (8g), CBM (1404g), coal (17g), glass (1g) and slate (20g). Above L1066, L1065 was a very firm, pale yellow brown, with mid grey brown patches, silty clay with occasional small and medium angular and sub-angular flints

and small rounded and sub-rounded chalk. It contained residual Roman (mid $1^{st} - 2^{nd}$ century) pottery (18g), animal bone (22g), CBM (1267g), coal (1g) and slag (10g). Above L1065, L1064 was a friable, mid grey brown silty clay with occasional small and medium angular and sub-angular flints. It contained 19^{th} century pot (47g), animal bone (9g), CBM (54g), and glass (2g). Uppermost L1063 was a friable, dark grey brown silty clay with occasional small and medium angular and sub-angular flints. It contained post-medieval pottery (15g), coal (1g) and glass (25g).

L1062 (1.31+ x 1.00+ x 0.25m) was a buried soil in a slight depression at the north-eastern end of the trench extending beyond the baulk. It consisted of a very firm, mid orange brown silty clay with occasional small angular flints and charcoal flecks. It contained Roman (mid 1^{st} – 2^{nd} century) pottery (33g).

Trench 3 (Figs. 2 & 3)

Sample section Northwest end, 0.00m = 46.13n	southwes	st facing
0.00 – 0.25m	L1001	Topsoil. As Trench 1.
0.25 – 0.43m	L1002	Subsoil. As Trench 1.
0.43m+	L1000	Natural deposits. As Trench 1.

Sample section: 3B			
Northwest end, southwest facing			
0.00m = 47.40n	n AOD		
0.00 - 0.25m	L1001	Topsoil. As Trench 1.	
0.25 – 0.43m	L1002	Subsoil. As Trench 1.	
0.43m+	L1000	Natural deposits. As Trench 1.	

Description: Trench 3 contained two pits (F1051 & F1053) and a modern ditch. Pit F1053 contained Roman CBM and Pit F1051 was undated but possibly broadly contemporary.

Pit F1051 was sub-circular (0.82 x 0.80 x 0.15m). It had steep sides and a flattish base. Its fill (L1052) was a firm, mid brownish grey sandy clay with occasional small angular flints. Although it contained no finds its similarity to Pit F1053, adjacent, suggests it may be broadly contemporary.

Pit F1053 was sub-circular (0.83 x 0.80 x 0.24m). It had steep sides and a flattish base. Its fill (L1054) was a firm, mid brownish grey sandy clay with occasional small angular flints and charcoal flecks. It contained Roman CBM (14g) and struck flint (24g).

Trench 4 (Figs. 2 & 4)

Sample section: 4A Southwest end, southeast facing		
0.00m = 46.85r	n AOD	
0.00 – 0.20m	L1049	Made ground. Friable, mid orange brown silty sand
		with frequent concrete rubble.
0.20 – 0.30m	L1050	Subsoil. Firm, mid yellow brown silty clay with occasional medium and large angular flints.
0.30m+	L1000	Natural deposits. As Trench 1.

Sample section: 4B			
Northeast end, southeast facing			
0.00m = 46.94m	n AOD		
0.00 – 0.22m	L1049	Made ground. As above.	
0.22 – 0.28m	L1050	Subsoil. As above.	
0.28m+	L1000	Natural deposits. As Trench 1.	

Description: Trench 4 contained only modern features associated with the recently demolished Fire Station complex. No archaeological features or finds were present.

Trench 5 (Figs. 2 & 4)

Sample section	Sample section: 5A			
Southeast end,	Southeast end, northeast facing			
0.00m = 46.41n	0.00m = 46.41m AOD			
0.00 - 0.42m	L1046	Made ground. Friable, mid orange brown silty sand		
		with frequent concrete rubble.		
0.42 – 0.58m	L1047	Made ground. Compact, dark brownish grey silty		
		clay.		
0.58 - 0.65m	L1048	Subsoil. Compact, mid yellow brown silty clay.		
0.65m+	L1000	Natural deposits. As Trench 1.		

Sample section	Sample section: 5B			
Northwest end	Northwest end, northeast facing			
0.00m = 46.72m AOD				
0.00 – 0.24m	L1046	Made ground. As above.		
0.24 – 0.42m	L1047	Made ground. As above.		
0.42 – 0.54m	L1048	Subsoil. Compact, mid yellow brown silty clay.		
0.54m+	L1000	Natural deposits. As Trench 1.		

Description: Trench 5 contained only modern features associated with the recently demolished Fire Station complex. No archaeological features or finds were present.

Trench 6 (Figs. 2 & 5)

Sample section	Sample section: 6A		
Southwest end, northwest facing			
0.00m = 46.53r	n AOD		
0.00 - 0.20m	L1097	Concrete yard surface.	
0.20 – 0.40m	L1098	Modern made ground. Friable, mid orange brown coarse sand with frequent crushed concrete and CBM fragments, moderate small and medium rounded and sub-angular flints, and occasional rounded flint nodules.	
0.40 – 0.47m	L1100	Modern made ground. Firm, mid grey brown clay silt with frequent small and medium rounded and sub-angular flints.	
0.47 – 0.67m	L1101	Modern made ground. Very firm, dark grey brown sandy silt with occasional small and medium angular and sub-angular flints.	

Sample section: 6B			
	Northwest end, southwest facing		
0.00m = 46.61r	n AOD		
0.00 – 0.21m	L1097	Concrete yard surface.	
0.21 – 0.39m	L1098	Modern made ground. As above.	
0.39 - 0.49m	L1101	Modern made ground. As above.	
0.49 – 0.55m	L1102	?Buried soil. Firm, mottled mid brownish orange (c.	
		40%), mid orange grey (c.40%), and very pale	
		brownish orange (c.20%) sandy silt with moderate	
		black mineral flecks, and occasional small and	
		medium angular flints. It contained Roman (mid 1 st	
		- 2 nd century) pottery (2g)	

Description: Trench 6 contained a large early Roman sunken feature, F1008, which extended south eastwards 11m into Trench 7 and north westwards beyond the end of the trench. It had a metalled base surface (L1107=L1011). Two Roman ditches (F1072 and F1114), three Roman gullies (F1103, F1105 and F1108), three Roman pits (F1110, F1112 and F1116), a possible Roman buried soil (L1118), and a modern manhole with six service trenches leading into it, were recorded.

F1008 (20.00+ x 5.00+ x 0.10m) was a very large sunken feature that continued from Trench 7 and extended beyond the north-western end of the trench. It was much shallower in this trench than in Trench 7. It's south-western side was lost due to modern disturbance. A metalled surface (L1107) was evident at the north-western end consisting of a layer of small and medium angular and sub-rounded flints in a matrix of firm, mid orange brown sandy silt. Roman (mid $1^{st} - 2^{nd}$ century) pottery (24g) was recovered from this layer. Above L1107 was L1078, a compact, mid brownish orange sandy clay with moderate medium sub-angular flints and occasional large sub-rounded flints. It

contained Roman (mid 1st – mid 2nd century) pottery (822g), CBM (8g), animal bone (9g) and struck flint (25g).

Ditch F1072 was linear (5.00+ x 0.56 x 0.29m), orientated northwest/southeast, continuing from Trench 7 and located at the south-eastern end of the trench below F1008. It had steep sides and a flattish base. Its fill, L1073, was a very firm, dark orange grey silty clay with occasional small and medium angular and sub-angular flints. Within Trench 7 it contained Roman (late 1^{st} – early 2^{nd} century) pottery.

Gully F1103 was linear (1.50+ x 0.34 x 0.21m), orientated northeast/southwest. It had steep sides and a flat base. It cut F1008. Its fill, L1004, was a very firm, mid orange grey sandy silt with occasional small angular flints. It contained Roman (mid – late 1st century) pottery (4g), and struck flint (28g).

Gully F1105 was linear (2.00+ x 0.38 x 0.29m), orientated northeast/southwest. It had steep sides and a flat base. Its fill, L1106, was a very firm, mid brownish grey sandy silt with occasional large sub-angular flints. It contained Roman (mid – late 1st century) pottery (49q).

Gully F1108 was linear (8.00+ x 0.68 x 0.26m), orientated northwest/southeast. It cut the Roman sunken feature (F1008) and metalled surface (L1107). It had steep sides and a flat base. Its fill, L1009, was a firm, mid orange grey sandy clay-silt with occasional small and medium angular and sub-angular flints. It contained Roman (mid 1^{st} – mid 2^{nd} century) pottery (10g) and struck flint (1g).

Pit F1110 was circular $(0.70+ x\ 0.60+ x\ 0.35m)$ and cut Gully F1108 and Sunken Feature F1008. In turn, it was cut by Ditch F1114. It had moderately steep sides and a concave base. Its fill, L1111, was a firm, mid orange brown sandy silt with occasional small and medium angular and sub-angular flints. It contained Roman (mid 1^{st} – mid 2^{nd} century) pottery (218g) and struck flint (17g)

Pit F1112 was sub-circular (0.47 x 0.25+ x 0.23m). It cut Sunken Feature F1008 and was cut by Ditch F1114. It had steep sides and a concave base. Its fill, L1113, was a firm, mid orange grey very silty sand with moderate charcoal flecks and occasional small and medium angular and sub-angular flints. It contained Roman (mid $1^{st} - 2^{nd}$ century) pottery (14g).

?Ditch F1114 was ?linear (0.68+ x 0.48+ x 0.37m), orientated north/south. It cut Sunken Feature F1008 and Pits F1110 and F1112. Its north-western side steep and the base concave. Its fill (L1115) comprised mixed lenses of firm, mid brownish grey sandy silt (c.60%) and firm, mid brownish orange clay silt, with occasional small and medium angular and sub-angular flints and charcoal flecks. It

contained Roman (mid 1st – mid 2nd century) pottery (19g) and animal bone (20g).

Pit F1116 was sub-circular (0.61 x 0.40 x 0.13m). It had moderately steep sides and a flattish base. Its fill, L1117, was a firm, mid grey brown silty clay with occasional small sub-angular flints. It contained partially articulated animal bones (1366g).

L1118 was a buried soil or levelling layer, 0.17m thick, at the southwestern end of the trench. Its base was very uneven. It comprised a compact, mid greenish grey silty clay with occasional small subrounded and sub-angular flints. It contained Roman (mid – late 1st century) pottery (33g), CBM (39g) and glass (1g).

Trench 7 (Figs. 2 & 6)

Sample section	: 7A		
Southeast end,	Southeast end, northeast facing		
0.00m = 46.23r	n AOD		
0.00 - 0.20m	L1097	Concrete yard surface. As Trench 6.	
0.20 - 0.35m	L1098	Modern made ground. As Trench 6.	
0.35 – 0.65m	L1099	Modern made ground. Firm, mid orange brown sandy clay with moderate CBM fragments, and occasional small and medium angular and subangular flints.	
0.65m+	L1000	Natural deposits. As Trench 1.	

	Sample section; 7B		
Northwest end.	Northwest end. Northeast facing		
0.00m = 46.46m AOD			
0.00 – 0.21m	L1097	Concrete yard surface. As Trench 6.	
0.21 – 0.37m	L1098	Modern made ground. As Trench 6.	
0.37 – 0.78m	L1099	Modern made ground. As above.	
0.78m+	L1000	Natural deposits. As Trench 1.	

Description: Trench 7 contained a large early Roman sunken feature F1008, extending through and beyond Trench 6, with a metalled base surface (L1011). Four early Roman gullies (F1074, F1081, F1083 and F1085) and two early Roman ditches (F1072 and F1076). A post-medieval ditch (F1068), an undated possible hearth (F1088), an undated pit (F1079) and three modern service trenches, were all recorded.

Ditch F1072 was linear (5.00+ x 0.64 x 0.36m), orientated northwest/southeast, located below F1008/L1011. It had steep sides and a flattish base. Its fill, L1073, was a very firm, dark orange grey silty clay with moderate charcoal flecks and occasional small and medium angular and sub-angular flints. It contained Roman (mid 1^{st} –

mid 2nd century) pottery (699g), animal bone (21g), cremated bone (1g) and pumice (1004g).

Ditch F1068 was linear (3.48+ x 1.68 x 0.45m), orientated northeast/southwest, and also cut F1008. It had moderately sloping sides and a flattish base. Its principal fill, L1069, was a compact dark bluish grey silty clay with sparse small angular flints and dark orange iron oxide flecks. It contained 19^{th} century pot (459g), animal bone (310g), CBM (98g), residual struck flint (1g), and burnt flint (27g). The upper fill, L1070, was a compact, mid grey brown silty clay with occasional small angular flints and dark orange iron oxide flecks. It contained residual Roman (mid $1^{st} - 2^{nd}$ century) pottery (4g) and CBM (146g).

Ditch F1076 was linear (1.90+ x 1.82 x 0.12m) orientated northeast-southwest and cut F1008. It had moderately sloping sides and a flattish base. Its fill, L1077, was a compact, dark grey silty clay with occasional small angular flints. It contained Roman (mid 1^{st} – mid 2^{nd} century) pottery (48g).

F1008 (20.00+ x 5.00+ x 0.36m) was a very large sunken feature located in the north-western half of the trench and extended to the northwest through and beyond Trench 6. Its south-eastern side was moderately sloping and the base was flat but rising gently towards the northwest. On the base was what appeared to be a metalled surface (L1011) consisting of a layer of small and medium angular and subrounded flints in a matrix of compact, pale brownish orange silty claysand. Roman (mid – late 1st century) pottery (1112g) was recovered from this layer. Above L1011, on the south eastern side was (L1009) a compact, pale orange brown silty clay with occasional small subangular and sub-rounded flints. It contained Roman (late 1st – mid 2nd century) pottery (1222g). Above L1011 to the northeast of L1009 was (L1010) a compact, dark orange grey silty clay with moderate charcoal and red iron oxide flecks. It contained Roman (mid 1st - early 2nd century) pottery (121g) and struck flint (60g). This fill did not appear to continue beyond Trench 7 into Trench 6. The uppermost fill, L1078, was a compact, mid brownish orange sandy clay with moderate medium sub-angular flints and occasional large sub-rounded flints. It contained Roman (mid 1st - mid 2nd century) pottery (458g), animal bone (6g) and burnt flint (8g). This fill extended the full length of F1008, as exposed.

F1081, F1083, and F1085, orientated northwest/southeast in the south-eastern half of the trench, represent a twice re-cut gully, however, the identical fills meant that the relationships between them were not discernable. F1081 (3.30+ x 0.43 x 0.23m), on the northeastern side, had vertical sides and a flat base. Its fill, L1082, was a firm, mid orange brown, mottled with dark brownish orange, silt sand with occasional small and medium angular flints. It contained Roman (mid 1^{st} – mid 2^{nd} century) pottery (41g), struck flint (30g), burnt flint

(28g) and coal (1g). F1083 (3.30+ x 0.35 x 0.12m) was the centre gully of the three and had shallow sides and a concave base. Its fill, L1084, was a firm, mid orange brown, mottled with dark brownish orange, silt sand with occasional small and medium angular flints. It contained Roman (mid $1^{st} - 2^{nd}$ century) pottery (5g) and struck flint (3g). F1085 (3.30+ x 0.56 x 0.18m) was the south-western gully of the three and had moderately sloping sides and a concave base. Its fill, L1086, was a firm, mid orange brown, mottled with dark brownish orange, silt sand with occasional small and medium angular flints. It contained Roman (mid $1^{st} - 2^{nd}$ century) pottery (229g) and CBM (4g).

Pit F1079 was circular (0.47 x 0.47 x 0.19m). It had steep sides and a concave base. Its fill, L1080, was a friable, dark grey brown silty clay with sparse small angular flints. It contained no finds.

Hearth F1088 was sub rectangular (1.10 x 0.79 x 0.22m). It had shallow sides and a flattish base. At the base of the pit, L1090 was a layer of hard, dark reddish brown silty clay with occasional small angular and sub angular flints. It contained no finds and is probably the upper surface of the natural partially fired by *in situ* burning, suggesting the feature was a hearth. Above L1090 was L1089, a friable, very dark grey brown silty clay with very frequent small charcoal fragments and flecks, and occasional small angular and sub-angular flints. It contained no finds. The upper fill, L1091, only present in the northeastern half of the feature, was a friable, dark grey brown silty clay with moderate charcoal flecks and occasional small angular and sub-angular flints. It contained no finds.

Gully F1074 was curvilinear (2.00+ x 0.75 x 0.31m), located in the south eastern half of the trench. It had steep sides and a flattish base. Its fill, L1075, was a firm, pale/mid orange brown clay silt with occasional small and medium angular and sub-angular flints. It contained Roman (mid 1^{st} – mid 2^{nd} century) pottery (23g), CBM (1g) and residual struck flint (6g).

Trench 8 (Figs. 2-3)

Sample section: 8A.1			
Southwest end,	Southwest end, northwest facing		
0.00m = 46.09n	n AOD		
0.00 – 0.10m	L1032	Yard Surface. Black Tarmac.	
0.10 - 0.12m	L1033	Modern made ground. Friable, pale yellow brown	
		silty sand.	
0.12 – 0.30m	L1034	Modern made ground. Compact, pale grey	
		concrete crush.	
0.30 - 0.39m	L1045	Buried soil. Firm, dark grey brown silty clay with	
		occasional small and medium angular and sub-	
		angular flints.	
0.39m+	L1000	Natural deposits. As Trench 1.	

Sample section: 8A.2 Southwest end, northwest facing 0.00m = 46.43m AOD		
0.00 - 0.10m	L1032	Yard Surface. Black Tarmac.
0.10 – 0.14m	L1033	Modern made ground. As above
0.14 - 0.46m	L1034	Modern made ground. As above.
0.46 - 0.72m	L1035	Concrete layer.
0.72 – 0.79m	L1036	Modern made ground. Friable, dark reddish brown
		sandy clay with frequent modern brick rubble.
0.79m+	L1000	Natural deposits. As Trench 1.

Sample section	Sample section: 8B		
Northwest end, northeast facing			
0.00m = 46.55n	n AOD		
0.00 – 0.22m	L1038	Topsoil. Friable, mid brownish grey silty sand with occasional medium and large rounded and subrounded flints.	
0.22 – 0.27m	L1039	Modern made ground. Friable, mid brownish yellow silty sand with occasional concrete rubble.	
0.27 – 0.34m	L1040	Made ground. Compact, mid brownish yellow silty clay.	
0.28 – 0.70m	L1041	Made ground. Friable mid brownish grey sandy silt with frequent small sub-angular flints and occasional large sub-rounded flints.	
0.34 – 0.70m	L1042	Made ground. Friable, pale yellow brown silty sand with moderate small and medium angular and subrounded flints.	
0.70 – 0.88m	L1043	Made ground. Compact, mid brownish grey silty clay, with moderate modern CBM fragments and occasional small sub-angular flints.	
0.88 – 1.01m	L1044	Made ground. Compact, pale yellow silty clay with occasional modern CBM fragments and charcoal flecks.	
1.01m+	L1000	Natural deposits. As Trench 1.	

Description: Trench 8 contained only modern features associated with the recently demolished Fire Station complex. No archaeological features or finds were present.

Trench 9 (Figs. 2 & 7)

Sample section: 9A Northwest end, southwest facing 0.00m = 46.32m AOD		
0.00 – 0.26m	L1030	Made ground. Firm, pale brownish grey sandy clay and cement, with frequent small and medium angular and sub-angular flints.
0.26 – 0.40m	L1031	Buried subsoil. Compact, mid greyish yellow silty clay with occasional medium sub-angular flints.
0.40m+	L1000	Natural deposits. As Trench 1.

Sample section: 9B			
Southeast end, southwest facing			
0.00m = 46.19m AOD			
0.00 – 0.12m	L1030	Made ground. As above.	
0.12 – 0.35m	L1031	Buried subsoil. As above.	
0.35m+	L1000	Natural deposits. As Trench 1.	

Description: Trench 9 contained three undated, but probably modern, gullies (F1012, F1014 and F1016). No other archaeological features or finds were present.

F1012 (? = F1018 Tr11) was a gully (2.00+ x 0.40 x 0.22m) orientated east/west. It had steep sides and a flat base. Its fill (L1013) was a compact, mid yellow brown silty clay with occasional small and medium sub-angular flints. It contained no finds.

Gully F1014 was linear (1.50+ x 0.25 x 0.08m) running east-west, located in the north western end of the trench. Its fill (L1015) was a compact, mid yellow brown silty clay with occasional small and medium sub-angular flints. It contained no finds.

F1016 was the rounded terminus of a gully (0.70+ x 0.27 x 0.05m) running east-west and located adjacent to gully F1014. It had gently sloping sides and a concave base. Its fill (L1017) was a compact, mid yellow brown silty clay with occasional small and medium sub-angular flints. It contained no finds.

Trench 10 (Figs. 2-3)

Sample section	: 10A	
Southwest end, northwest facing		
0.00m = 47.12r	n AOD	
0.00 – 0.07m	L1020	Block paved yard surface. Pale grey bricks (0.19 x 0.10 x 0.07m)
0.07 – 0.17m	L1021	Modern made ground. Friable, pale yellowish grey silty sand.
0.17 – 0.20m	L1022	Modern made ground. Friable, pale blueish grey concrete crush.
0.20 – 0.23m	L1023	Modern made ground. Friable, very pale yellow grey concrete crush.
0.23 – 0.34m	L1024	Modern made ground. Pale orange brown silty sand with moderate concrete rubble.
0.34 – 0.42m	L1025	Modern made ground. Friable, very pale blueish grey concrete crush.
0.42 – 0.60m	L1026	Modern made ground. Friable, pale grey brown silty sand with moderate modern CBM rubble.
0.60 – 0.72m	L1027	Modern made ground. Firm, dark brownish grey silty clay with occasional small angular flints and charcoal flecks.
0.72 – 0.89m	L1028	Buried soil. Firm, dark grey brown silty clay with occasional small and medium angular flints.
0.89m+	L1000	Natural deposits. As Trench 1.

Sample section Northeast end, 0.00m = 46.76n	northwes	t facing
0.00 - 0.03m	L1029	Modern made ground. Friable, very pale yellow
		grey concrete crush.
0.03 – 0.21m	L1026	Modern made ground. As above.
0.21 – 0.27m	L1027	Modern made ground. As above.
0.27 – 0.37m	L1028	Buried soil. As above.
0.37m+	L1000	Natural deposits. As Trench 1.

Description: Trench 10 contained only modern features associated with the recently demolished Fire Station complex. No archaeological features or finds were present.

Trench 11 (Figs. 2 – 3)

Sample section	: 11A	
Northwest end	, southwe	est facing
0.00m = 46.26r	n AOD	
0.00 - 0.20m	L1030	Made ground. As Trench 9.
0.20 - 0.46m	L1031	Buried subsoil. As Trench 9.
0.46m+	L1000	Natural deposits. As Trench 1.

Sample section	: 11B	
Southeast end,	northeas	t facing
0.00m = 46.12r	n AOD	
0.00 – 0.11m	L1030	Made ground. As Trench 9.
0.11 – 0.36m	L1031	Buried subsoil. As Trench 9.
0.36m+	L1000	Natural deposits. As Trench 1.

Description: Trench 11 contained a single modern gully (F1018) running on the same alignment as those in Trench 9.

Gully F1018 (? = F1012 Tr9) was linear (2.00 + x 0.51 x 0.20m) running east-west, located in the north western half of the trench. It had steep sides and a concave base. Its fill (L1019) was a compact, mid brownish grey silty clay with occasional small and medium angular and sub-angular flints. It contained an iron fragment (25g) and clay pipe stem fragments (5g).

7 CONFIDENCE RATING

7.1 It is not felt that any factors restricted the identification of archaeological features or finds.

8 DEPOSIT MODEL

- 8.1 Modern made ground was uppermost in many of the trenches (c.0.20 1.00 m thick).
- 8.2 Topsoil L1001 was a firm, mid brownish grey, silty clay with occasional small and medium angular flints (c.0.30m thick). L1001 overlay Subsoil L1002, a firm, mid brownish yellow silty clay with occasional small and medium angular flints (c.0.10m thick).
- 8.3 Below L1002, the natural (L1001) comprised mixed patches of firm, pale/mid yellow orange clay with occasional small angular flints and rounded chalk; firm, pale/mid brownish orange clay silt with occasional small and medium angular flints and very occasional large angular flints; firm mid brownish orange sandy silt with occasional small and medium angular flints (c.30-65m below the present day ground surface).

9 DISCUSSION

Summary

9.1 The individual recorded features are tabulated:

Trench	Context	Description	Spot date
1	F1006	Ditch	Early Roman
2	F1061	Quarry pit	Post-medieval/Modern
	L1062	Buried soil	Early Roman
	F1094	Quarry pit	Modern
3	F1051	Pit	? Early Roman
	F1053	Pit	Roman
6	F1008	Sunken feature	Early Roman
	F1072	Ditch	Early Roman
	F1103	Gully	Early Roman
	F1105	Gully	Early Roman
	F1108	Gully	Early Roman
	F1110	Pit	Early Roman
	F1112	Pit	Early Roman
	F1114	Ditch	Early Roman
	F1116	Pit	Early Roman
	L1118	?Buried soil	Early Roman
7	F1008	Sunken feature	Early Roman
	F1072	Ditch	Early Roman
	F1068	Ditch	Post-medieval
	F1074	Gully	Early Roman
	F1076	Ditch	Early Roman
	F1079	Pit	Undated
	F1081	Gully	Early Roman
	F1083	Gully	Early Roman
	F1085	Gully	Early Roman
	F1088	?Hearth	Undated
9	F1012	Gully	Likely modern
	F1014	Gully	Likely modern
	F1016	Gully	Likely modern
11	F1018	Gully	Modern

- 9.2 Trenches 6 and 7 contained a very large sunken feature (F1008) that appeared to have a metalled base (L1011) comprising a layer of small and medium angular and sub-rounded flints in a matrix of compact, pale brownish orange silty clay-sand. This was dated to the Roman (mid 1st - mid 2nd century) period but its function was not Sunken Feature F1008 overlay Gullies F1072 and determined. F1003, also dated to the early Roman period. Pits F1110 and F1112 and Ditches/Gullies F1076, F1105, F1108, and F1114 were broadly contemporary; early Roman. At the south-east end of Trench 7 three intercutting gullies (F1081, F1083 and F1085), northwest/southeast were likely the result of twice re-cutting a gully.
- 9.3 While the majority of archaeological features (20) were found in Trenches 6 and 7, a sparse number were located in the area of the builder's yard. Trench 1 contained a very shallow Roman ditch (F1006), Trench 2 contained the remnant of a possible Roman buried soil (L1062) and Trench 3 contained two possible Roman pits (F1053 and F1053). The remainder of the site contained features of post-

medieval/modern date only, many of which were associated with the fire station complex.

- 9.4 The Roman finds includes two fragments of 18mm thick tile (146g), probably derived from tegula roof tile, contained in Ditch F1068 (CBM Report below). Charred plant macrofossils from F1008 L1010 (Tr.7) indicates that cereal processing activities are likely to have taken place nearby during the early Roman period (Environmental Report below).
- 9.5 The site was identified as being in an area of archaeological potential, within the hinterland of the Anglo-Saxon and medieval town of Ipswich; however, no features of these dates. The majority of archaeological features were early Roman, and a few undated. Sparse quantities of residual struck flint and burnt flint were found in Trenches 2 (F1008 and F2053), 6 (F1103, F1108 and F1110) and 7 (F1068, F1074, F1081 and F1083). The small number of flints have a diverse date range. The metalled surface, L1011 within F1008, contained a long blade of Palaeolithic or Mesolithic date (Struck Flint Report below). Mesolithic blade production on or close to the site is attested to by a core recovered as un-stratified material and micro-blades contained in Ditch F1068 and Gully F1108. The remaining debitage is of later Neolithic to early Bronze Age date. Although no prehistoric features were found the struck flint is suggestive of prehistoric activity in this area. There is no evidence of use of the site from the post Roman to medieval periods. One post-medieval feature Ditch F1068 was recorded.

Research Potential

The bulk of the archaeological remains recorded in the trial 9.6 trench evaluation comprise Roman pottery and artefacts associated with a sunken feature with a metalled base (F1008 Tr.7) and ditches, gullies and pits. The pottery assemblage has a homogenous character that indicates a date in the late 1st to early 2nd centuries AD. This chronology is consistent with the early Roman occupation of an enclosure located to the west on Tuddenham Road and interpreted as a farmstead. During the Roman period Suffolk was an area dominated by small towns and villas set in a rural landscape, but the area of the site is significantly removed from the nearest small towns at Hacheston to the north and Coddenham to the north-west (Plouviez 1988, 42-3). A Roman villa is known to have been located on Castle Hill c.2.5km to the west (Moir & Maynard 1933; Wessex Archaeology 2003) with occupation spanning at least the 1st to 4th centuries AD, and including an aisled building, bathhouse and cemetery. However rural settlement in the area has proved very hard to define and is probably underrepresented, in part due to the boulder clay geology not being conducive to the formation of crop marks, which have been an important tool in defining rural settlement across East Anglia (Taylor 2007, 49-50). The potential of archaeological remains associated with

Roman farmsteads and villages, especially those in close proximity to structural remains has been identified as a research priority with high value in informing on the character of the Roman rural landscape in East Anglia (Going 1997, 37-8; Medlycott 2011, 47).

10 DEPOSITION OF ARCHIVE

- 10.1 Archive records, with an inventory, will be deposited at the 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.
- 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).

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BIBLIOGRAPHY

Going, C. 1997 'Roman' in Glazebrook, J. Research and Archaeology: a Framework for the Eastern Counties 1, resource assessment. EAA Occ. Paper 3, 35-46

Medlycott, M. 2011 'Roman' in Medlycott, M. Research and Archaeology Revisited: a revised framework for the East of England. EAA Occ. Paper 24, 33-48

Moir, J.R. & Maynard, G., 1933, 'The Roman villa at Castle Hill, Whitton, Ipswich'. *Proceedings of the Suffolk Institute of Archaeology & History* XXI Part 3, 240-262

Plouviez, J. 1988 'The Roman Period' in Dymond, D. & Martin, E. (eds.) *An Historical Atlas of Suffolk*. Suffolk Institute of Archaeology & History, 42-43

Taylor, J. 2007 An Atlas of Roman Rural Settlement in England. CBA Res. Rep. 151

Wessex Archaeology 2003 Castle Hill, Ipswich, Suffolk: Archaeological Evaluation and an Assessment of the Results. Document Ref.52568.02

APPENDIX 1 CONCORDANCE OF FINDS

IPS717, Ipswich Fire Station, Colchester Rd. Concordance of finds by feature

								A.Bone	
Feature	Context	Segment	Trench	Trench Description	Spot Date	Pottery	CBM (g)	(g)	Other
1006	1007		_	Fill of Ditch	Mid 1st-2nd C AD	(3) 22g			
						(34)			
1008	1009		7	Fill of Sunken Metalled Surface	Late 1st-2nd C AD	501g			
					Late 1st-Mid 2nd C	(31)			
	1010			Fill of Sunken Metalled Surface	AD	721g			F. Clay - 4g
					Mid 1st-Early 2nd C	(15)			
		O			AD	121g			
						(29)			
	1011			Basal Fill of Sunken Metalled Surface	Mid 1st-Mid 2nd C AD	552g		4	
						(48)			
		В			Mid 1st-Mid 2nd C AD	196g			F. Clay - 80g
									Str. Flint (1) - 35g
						(89))
		O			Mid-Late 1st C AD	364g	8	6	Str. Flint (1) - 25g
	1078	O		Fourth Fill of Sunken Metalled Surface	Mid 1st-2nd C AD	ge (9)			
						(89)			
					Mid-Late 1st C AD	397g		9	
		Ш			Mid 1st-Mid 2nd C AD	(12) 52g			B. Flint - 8g
1018	1019		10	Fill of Ditch					Clay Pipe Stem (2) - 5g
									Fe. Frag (1) - 25g
1053	1054		2	Fill of Pit			14		Str. Flint (2) - 24g

1060			2	Made Ground	Post-Medieval	(1) 1g		Ö	Glass (1) - 2g
1062			2	Buried Soil Layer	Mid 1st-2nd C AD	(7) 33g			
1061	1063		2	Top Fill of Pit	Post-Medieval	(1) 15g		ਹ	Charcoal - 1g
								ŏ	Coal - 1g
								Ō	ass (3) - 25g
	1064			Fill of Pit	19th C	(15) 47g	54	<u>ල</u> ර	ass (2) - 2g
	1065			Fill of Pit	Mid 1st-2nd C AD	(1) 18g	1267		oal - 1g
								Š	Slag (3) - 10g
	1066			Fill of Pit	Post-Medieval	(5) 12g	1404	ၓ	Coal - 17g
								ত	Glass (1) - 1g
								ਲ - -	Slate - 20g
	1067			Fill of Pit	Post-Medieval	(10) 16g	406		
1068	7080		^	10 to 11 to 12 to	10th C	(109)	08	240	Flint 272
000	600		-) [[6]) D			B. r IIIIt = 27 g Str. Flint (1) - 1a
	1070			Top Fill of Ditch	Mid 1st-2nd C AD	(2) 4g	146		
1072	1073		7	Fill of Ditch					
					Late 1st-Early 2nd C				
		⋖			AD	(39) 94g		_	
					Late 1st-Mid 2nd C	(67)			
		В			AD	458g		20 Cr	Crem Bone - 1g
		O			Mid 1st-Mid 2nd C AD	(7) 147g			
		Ω						Pu	Pumice - 1004g
1074	1075		7	Upper Fill of Ditch	Mid 1st-Mid 2nd C AD	(4) 15g			
		В				(3) 8g	_	ਲੋ	Str. Flint (1) - 6g
	1096			Lower Fill of Ditch	Mid 1st-2nd C AD	(2) 4g			
1076	1077		7	Fill of Ditch	Mid 1st-Mid 2nd C AD	(11) 48g			
1081	1082		7	Fill of Gully	Mid 1st-Mid 2nd C AD	(9) 41g		B.	B. Flint - 28g

									Coal - 1g Str. Flint (5) - 30g
1083	1084		7	Fill of Gully	Mid 1st-2nd C AD	(4) 5g			Str. Flint (1) - 3g
1085	1086		7	Basal Fill of Gully	Mid 1st-2nd C AD	(2) 2g	4		
	1087			Upper Fill of Gully	1st C AD	(41) 227g			
1100			9	Made Ground			2293		
1102			9	Buried Soil Layer	Mid 1st-2nd C AD	(1) 2g			
1103	1104	А	9	Fill of Ditch	Mid-Late 1st C AD	(1) 4g			Str. Flint (1) - 28g
1105	1106	Α	9	Fill of Ditch	Mid-Late 1st C AD	(14) 49g			
1107			9	Metalled Surface	Mid 1st-2nd C AD	(5) 24g			
1108	1109		9	Fill of Gully	Mid 1st-Mid 2nd C AD	(6) 10g			Str. Flint (1) - 1g
						(23)			
1110	1111		9	Fill of Pit	Mid 1st-Mid 2nd C AD	218g			Str. Flint (1) - 17g
1112	1113		9	Fill of Pit	Mid 1st-2nd C AD	(4) 14g			
1114	1115		9	Fill of Pit	Mid 1st-Mid 2nd C AD	(7) 19g		20	
1116	1117		9	Fill of Pit				1366	
1118		Α	9	Layer		(7) 11g	22		
		В			Mid-Late 1st C AD	(2) 22g	17		Glass (1) - 1g
	S/N								Str. Flint (1) - 9g

APPENDIX 2 SPECIALIST REPORTS

The Struck Flint

Andrew Peachey MIfA

The trial trench evaluation recovered a total of 17 pieces (179g) of struck flint, including a single long blade of possible late Palaeolithic to Mesolithic origin, a core and blades typical of the Mesolithic, and debitage flakes potentially produced in the later Neolithic to early Bronze Age (Table 1).

Struck flint type	F	W
Core	1	9
Blade	3	37
Debitage	13	133
Total	17	179

Table 1: Quantification of struck flint implements and debitage by frequency (F) and weight (W, in grams)

Methodology & Terminology

The flint was quantified by fragment count and weight (g), with all data entered into a Microsoft Excel spreadsheet that will be deposited as part of the archive. Flake type (see 'Dorsal cortex,' below) or implement type, patination, colour and condition were also recorded as part of this data set, along with free-text comments.

The term 'cortex' refers to the natural weathered exterior surface of a piece of flint, and the term 'patination' to the colouration of a flaked surface exposed by human or natural agency. Dorsal cortex is categorised after Andrefsky (2005, 104 & 115) with 'primary flake' referring to those with cortex covering 100% of the dorsal face; 'secondary flake' with 50-99%; 'tertiary' with 1-49% and 'uncorticated' to those with no dorsal cortex. A 'blade' is defined as an elongated flake whose length is at least twice as great as it's breadth, often exhibiting parallel dorsal flake scars (a feature that can assist in the identification of broken blades that, by definition, have an indeterminate length/breadth ratio). Terms used to describe implement and core types follow the system adopted by Healy (1988, 48-9).

Commentary

Roman Sunken Metalled Surface F1008 (L1011) contained a single long blade (length: 75mm) manufactured from heavily mottled orange-brown raw flint, dulled by patination. Although un-modified, this type of implement is characteristic of blades produced in the Palaeolithic period, although it is possible such blades maintained currency through the Mesolithic also.

Mesolithic blade production on or close to the site is attested to by a core recovered as un-stratified material and micro-blades contained in Ditch F1068

(L1069) and Gully F1108 (L1109). The core comprises a bi-polar type, and weighing just 9g with maximum dimensions of 25mm, is certainly exhausted. Such a core corresponds closely with the micro-blades, which were very neatly and accurately struck, varying in length between 25-30mm. Both the core and blades were manufactured using high quality very dark grey raw flint that was probably carefully selected and exploited.

In contrast the remaining debitage typically occurs in slightly mottled dark grey-brown flint with an off-white chalky cortex. These flakes all exhibit a slightly irregular profile and vary from secondary, tertiary to un-corticated flakes. A secondary flake contained in Roman Sunken Metalled Surface F1008 (L1011 Seg.C) may represent a core trimming flake, while the remaining debitage flakes were contained in Pits F1053, F1110, Ditches F1074, F1103, Gullies F1081 and F1083. These debitage flakes exhibit the characteristics of the discarded bi-products of later Neolithic to early Bronze Age core reduction although they have limited diagnostic value.

Bibliography

Andrefsky, W. 2005 *Lithics: Macroscopic Approaches to Analysis (2nd edition)*. Cambridge University Press, Cambridge

Healy, F. 1988 The Anglo-Saxon Cemetery at Spong Hill, North Elmham, Part VI: Occupation during the Seventh to Second Millennium BC. East Anglian Archaeology No. 39.

The Roman Pottery

Andrew Peachey MIfA

The trial trench evaluation recovered a total of 686 sherds (4656g) of Roman pottery (Table 2), almost entirely recovered from features in Trenches 6 and 7. A further 33 sherds (221) of post-medieval pottery, probably of late 18th to 19th century date were also recovered during the evaluation. The assemblage is moderately well-preserved, being only slightly abraded but highly fragments and often with powdery surfaces, probably due to adverse (acidic) soil conditions.

The Roman pottery forms a homogenous group that can broadly be dated to the mid 1st to 2nd centuries AD, but based on sparsely distributed diagnostic sherds, probably has a chronology limited to the final quarter of the 1st century AD and first quarter of the 2nd century AD. The common fabric types comprise sandy grey ware (GRS1), Romanising grey wares (BSW1) and 'Belgic' grog-tempered wares (SOB GT), predominantly jars but also including dishes and beakers. These are supplemented by sparse regional coarse wares (WAT RE1, OXF1 and COL BB2), Colchester white ware including mortaria (COL WH (M)), and occasional continental imports comprising south Gaulish samian ware (LGF SA) and Baetican amphora (BAT AM2). The range of utilitarian, storage, processing and transport vessels present in the assemblage are indicative of domestic occupation of low to moderate status

on the site or in the immediate vicinity, although the extent of the assemblage is insufficient for further conclusions.

The pottery was quantified by sherd count and weight (g), with fabrics analysed at x20 magnification, and all data entered into a Microsoft Excel spreadsheet that forms part of the site archive. Samian ware forms reference Webster (1996). The pottery fabrics are described, below, and quantified (Table 2)

SOB GT BSW1	Southern British ('Belgic') grog-tempered ware (Tomber & Dore 1998, 214) Black-surfaced/Romanising sandy grey ware 1. Black surfaces over dark red margins and a mid red/grey core. Inclusions comprise common, poorly-sorted quartz (0.1-0.5mm), sparse fine mica, sparse grog (0.1-5mm) and occasional flint (<5mm). A hard fabric with an abrasive feel.
GRS1	Sandy grey ware 1. Mid grey surfaces fading to a paler grey core, sometimes with dark grey margins. Inclusions comprise common, well-sorted quartz (0.1-0.25mm), sparse fine mica, sparse black iron-rich grains (0.25-2mm) and occasional flint (<3mm). A hard fabric with an abrasive feel.
WAT RE1	Wattisfield/Waveney Valley reduced ware (Tomber & Dore 1998, 184). A mid to pale grey fabric, often with slightly contrasting margins and core. Inclusions comprise common, well-sorted quartz (generally <0.1mm), sparse dark grey to black iron rich grains/clay pellets (<0.5mm) and abundant mica, especially visible on the surface. The fabric has a slightly abrasive to powdery feel.
COL WH	Colchester white ware (Tomber & Dore 1998, 133)
COL WH1 COL BB2	Colchester white ware mortaria (Tomber & Dore 1998, 133) Colchester black-burnished ware 2 (Tomber & Dore 1998, 131)
OXF1	Oxidised fine ware 1. Pale red throughout, manufactured using a fine calcareous clay with occasional inclusions of fine mica and quartz (<0.1mm). A very hard fabric with a powdery finish. Similar fabrics are present at Colchester and Burgh (Martin 1988, 46: fabric XIVb).
LGF SA BAT AM2	La Graufesenque samian ware (Tomber & Dore 1998, 28) Baetican (Late) amphorae 2 (Tomber & Dore 1998, 85)

Fabric	Sherd Count	Weight (g)	R.EVE
SOB GT	191	1725	0.4
BSW1	97	356	0.35
GRS1	301	1344	1.25
WAT RE1	22	102	0.20
COL BB2	1	103	0.20
COL WH	55	210	0.00
COL WH (M)	12	422	0.25
LGF SA	2	6	0.10
OXF1	4	30	0.15
BAT AM2	1	358	0.00
Post Medieval	33	221	0.00
Total	719	4877	2.90

Table 2: Quantification of pottery

The bulk of the Roman pottery: 305 sherds (2869g) was contained in the four fills of Sunken Metalled Surface F1008 (L1009, L1010, L1011 & L1078), which collectively included sherds in every Roman fabric present except OXF1. The basal fill of this surface (L1011) appears to date to the mid-late 1st century AD, while the successive fills, do not appear to post date the early/mid 1st century AD, but such is the homogeneity of the group it is feasible the fills are contemporary. A large group of 113 sherds (661g), dated to the late 1st to early 2nd century AD was also contained in Ditch F1072 (L1073), while a large

contemporary re-deposited group was contained in post-medieval Ditch F1068 (L1069). The remaining Roman pottery was relatively sparse distributed in ditch, gully and pit features, but exhibited fabric and form types that were consistent with the significant groups.

The most common fabric in the assemblage: GRS1 appears principally comprised of jars with everted, slightly undercut bead rims (Arthur & Plouviez 2004: type 29), which are a common early Roman product in the region including at a kiln in Stowmarket. Examples of these jars were contained in Sunken Metalled Surface F1008 (L1011) and Ditch F1072 (L1073). addition to the jars, Ditch 1072 (L1073) also contained a bead rim dish (Arthur & Plouviez 2004: type 42A), and Ditch F1068 (L1069) a globular beaker (Arthur & Plouviez 2004: type 14A) that was not produced after the early/mid 1st century AD. The form types of other common coarse wares: BSW1 and SOB GT were also almost entirely limited to jars with everted bead rims of similar type, although two SOB GT examples in Sunken Metalled Surface F1008 (L1011) and Ditch 1072 (L1073) were of sufficiently large proportions to be considered storage jars. The only exception to this pattern was a BSW1 bowl with a sharp lower body carination (Arthur & Plouviez 2004: type 19A) contained in Ditch F1105 (L1106) that is unlikely to post-date the 1st century AD and is comparable to a COL WH vessel in the assemblage.

The main two sources of regional imports to the site are, expectedly, the Wattisfield/Waveney Valley region of north Suffolk (WAT RE) and Colchester (COL BB2, COL WH, COL WH (M)). Diagnostic forms in WAT RE are limited to a bag-shaped beaker in Ditch 1072 (L1073) and devolved Gallo-Belgic platter in Sunken Metalled Surface F1008 (L1011), both of which were probably produced between the late 1st and early 2nd centuries AD (Arthur & Plouviez 2004: types 15A & 32A respectively). The Colchester products, all contained in Sunken Metalled Surface F1008 appear more diverse as befitting the varied industries that served the urban centre, and included a COL BB2 bead rim dish with burnished lattice decoration; a COL WH necked bowl with sharp carination and unidentifiable flagon; and a heavily-worn COL WH (M) with long drooping flange and low internal bead (Symonds & Wade 1999: fig.4.4.56). Of these products only the COL WH bowl has a distinct period of production that ceased at the end of the 1st century AD, while the remaining products could have spanned the 2nd century AD.

The remaining imports in the assemblage are rare but include fragments of south Gaulish samian ware (LGF SA) Dr.18 shallow platters in Sunken Metalled Surface F1008 (L1011) and Ditch F1103 (L1104), a form and fabric type that was largely superseded in the late 1st/early 2nd centuries AD. Further more, OXF1 sherds contained in Ditch F1068 (L1069) are from a conical cup imitating samian ware form Dr.33 (i.e. Symonds & Wade 1999: fig.5.26.70), which is probably a continental import although no source has been identified. A single sherd of Baetican amphorae (BAT AM2) was contained in Sunken Metalled Surface F1008 (L1010) and is probably derived from a Dressel 20 type amphorae used to import olive oil from southern Spain.

The post-medieval pottery in the assemblage was almost entirely contained in Pit F1061 and Ditch F1068, and is almost entirely comprised of glazed red earthen ware with sparse sherds of willow-pattern, refined white earthen ware also present, indicating a date in the late 18th to 19th centuries.

Bibliography

Arthur, P. and Plouviez, J. 2004 'The pottery from the 1973 excavation' in Blagg, T., Plouviez, J. and Tester, A. *Excavations at a Large Romano British settlement at Hacheston 1973-1974*, East Anglian Archaeology 106, 160-186 Martin, E. 1988 'Other Pottery' in Martin, E. Burgh: The Iron Age and Roman Enclosure. East Anglian Archaeology 40, 34-63

Symonds, R. & Wade, S. (eds) 1999 Roman Pottery from Excavations in Colchester, 1971-86; Colchester Arch. Rep. 10

Thompson, I. 1982 *Grog-tempered 'Belgic' Pottery of South-eastern England*. BAR British Series 108 (i-iii)

Tomber, R. & Dore, J. 1998 *The National Roman Fabric Reference Collection*. Museum of London, London

Webster, P. 1996 Roman Samian Pottery in Britain; CBA Practical Handbook in Archaeology 13

The Ceramic Building Materials

Andrew Peachey

The trial trench evaluation recovered a total of 67 fragments (5734g) of CBM; the bulk of which comprised post-medieval brick and peg tile with sparse Roman fragments also present (Table 3).

CBM type	Fragment Count	Weight (g)
Roman tile	8	173
Post-medieval red brick	51	5181
Post-medieval peg tile	8	296
Total	67	5734

The Roman CBM includes two fragments of 18mm thick tile (146g), probably derived from tegula roof tile, contained in Ditch F1068 (L1070). The fragments were manufactured in a deep orange fabric tempered with common medium sand and occasional coarse flint. The remaining Roman CBM comprised small 'crumbs' in this fabric, contained in Sunken Metalled Surface F1008, Pit F1053, Ditch F1074 and Gully F1085.

The bulk of the post-medieval CBM is comprised of soft red bricks. A complete example contained in Made Ground L1100 has dimensions of 220x100x60mm, while the concentration of 38 fragments (2751g) contained in Pit F1061 (L1065, L1066 & L1067) appear to be of this type, with small fragments in Ditch F1068 and Layer L1118 comparable by fabric. This type of brick was a common component of buildings erected in the 18th and 19th centuries. Small fragments of post-medieval peg tile were also contained in Pit F1061 (L1064, L1066 & L1067) and appear contemporary with the soft red bricks.

The Environmental Samples

Dr John Summers

Introduction

Eleven bulk soil samples for environmental archaeological assessment were taken during trial excavations at the site of the former fire station, Colchester Road, Ipswich. The samples were mostly from features spot-dated to the 1st to 2nd centuries AD. This report presents the results from the assessment of the bulk sample light fractions and discusses the significance and potential of any remains identified.

Methods

Samples were processed at the Archaeological Solutions Ltd facilities in Bury St. Edmunds using a Siraf style flotation tank. The light fractions were washed onto a mesh of 250µm (microns), while the heavy fractions were sieved to 500µm. The dried light fractions were scanned under a low power stereomicroscope (x10-x30 magnification). Botanical and molluscan remains were identified and recorded using a semi-quantitative scale (X = present; XX = common; XXX = abundant). Reference literature (Cappers *et al.* 2006; Jacomet 2006; Kerney and Cameron 1979; Kerney 1999) and a reference collection of modern seeds was consulted where necessary. 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.

A random sample of larger (>2mm) charcoal fragments from charcoal-rich deposits were fractured to produce a tranverse section. These were examined under a low-power microscope to gain an impression of species diversity.

Results

The assessment data from the bulk sample light fractions are presented in Table 4.

Plant macrofossils

Plant macrofossils in the form of cereal grains, chaff and the seeds of non-cereal taxa were present in four of the eleven samples. Grains of glume wheat (*Triticum dicoccum*/ *spelta*) were present in L1010A and L1077 and a single grain of free-threshing type wheat (*T. aestivum*/ *compactum* type) was present in L1062. Spelt wheat glume bases were recorded in both L1077 and L1010A, with glume bases dominating the material in the latter. Spelt wheat was the dominant cereal throughout Roman Britain (e.g. Campbell 2008; van der Veen 1992). Free-threshing wheat is also an occasional occurrence on Roman sites, perhaps representing a more minor crop (e.g. Campbell 2008).

A single flax (*Linum* sp.) seed was present in L1073B. Although it was fragmentary and could not be precisely identified, it could be of the cultivated species *L. usitatissimum*. Flax has been cultivated in southern Britain since at least the middle Bronze Age, if not earlier (Campbell and Straker 2003) and could have been grown as an oil of fibre crop.

Other non-cereal taxa are likely to represent arable weeds. These included dock (*Rumex* sp.), black bindweed (*Fallopia convolvulus*), medium legumes (Fabaceae indet.) and small grasses (Poaceae indet.). The concentration of these remains was low but the association with cereal chaff in L1010A indicates that they are present as crop processing debris in this instance.

Charcoal

The light fraction from L1089 (fill of hearth F1088) was composed almost entirely of charcoal. A number of large fragments (>2cm) were present and preservation was generally good. Of the fragments fractured, all were recognised as oak (*Quercus* sp.). Oak is a high quality fuel which is often preferentially selected for specific roles, such as industrial activities. At present this feature remains un-dated, making its role on the site difficult to interpret.

Terrestrial molluscs

Only a small number of snail shells were encountered in the bulk sample light fractions, indicating that preservation of such remains on the site was limited.

Contaminants

Modern contaminants, in the form of rootlets, seeds, burrowing molluscs (*Cecilioides acicula*) and earthworm egg capsules were present in the deposits. However, concentrations were low, which indicates that little biological disturbance is likely to have occurred.

Discussion

Although the number of plant macrofossils was generally low, they were quite common in the Roman deposits on the site. This implies that most features were only receiving small amounts of material as scattered or wind-blown debris.

However, the material from L1010A was richer and is more likely indicative of nearby activity. The predominance of glume bases in L1010A, most likely representing the waste from the final stages of glume wheat processing, implies that cereal processing was taking place within the vicinity of the

excavated features. Cereal processing waste was a commonly used fuel in kilns during the Romano-British period (e.g. Fryer 2004; Carruthers 2008, 34.9; Campbell 2008; van der Veen 1989) and, although there is the possibility that it may have been imported to sites for this particular role in some instances (e.g. van der Veen 1999, 217), it is most likely that it was used close to areas of production.

The rich deposit of charcoal in L1089, which appears to be predominantly composed of oak (*Quercus* sp.), may indicate that hearth F1088 had a potential industrial role, which required the use of a high quality fuel. No other evidence regarding the role of this feature is available at present and no dateable material was present to narrow down the period during which it was in use.

Conclusions and statement of potential

The sampled features from excavations at Colchester Road have demonstrated that charred plant macrofossils are preserved within the deposits. The material from L1010A indicates that cereal processing activities are likely to have taken place nearby during the early Roman period. This highlights the possibility that other deposits containing waste representative of arable production and processing may yet be identified through further excavation. It is therefore considered that further excavation and sampling of deposits at the site will produce a greater number of carbonised plant remains, enabling a more detailed analysis of the past economy and diet in the local area.

References

Campbell, G. 2008, 'Plant utilization in the countryside around Danebury: a Roman perspective', in Cunliffe, B. *The Danebury Environs Roman Programme: A Wessex Landscape During the Roman Era. Volume 1: Overview*, Oxford University School of Archaeology Monograph No. 70, Oxford, 53-100

Campbell, G. and Straker, V. 2003, 'Prehistoric crop husbandy and plant use in southern England: development and regionality', in Brown, K.A.R. (ed) Archaeological Sciences 1999: Proceedings of the Archaeological Sciences Conference, University of Bristol, 1999, BAR International Series 1111, Oxford, 14-30

Cappers, R.T.J., Bekker R.M. and Jans J.E.A. 2006, *Digital Seed Atlas of the Netherlands. Groningen Archaeological Studies Volume 4*, Barkhuis Publishing, Eelde

Carruthers, W.J. 2008, 'Charred, mineralized and waterlogged plant remains', in Framework Archaeology, *From Hunter-Gatherers to Huntsmen: A History of the Stansted Landscape*, Wessex Archaeology, Salisbury, Chapter 34 on CD

Fryer, V. 2004, 'Charred macrofossils and other remains', in Bales, E. *A Roman Maltings at Beck Row, Mildenhall, Suffolk*, East Anglian Archaeology Occasional Paper No. 20, Suffolk County Council, Bury St. Edmunds, 49-54

Jacomet, S. 2006, *Identification of Cereal Remains from Archaeological Sites* (2nd edn), Laboratory of Palinology and Palaeoecology, Basel University

Kerney, M.P. 1999, Atlas of the Land and Freshwater Molluscs of Britain and Ireland, Harley Books, Colchester

Kerney, M.P. and Cameron, R.A.D. 1979, A Field Guide to Land Snails of Britain and North-West Europe, Collins, London

van der Veen, M. 1989, 'Charred grain assemblages from Roman-period corn driers in Britain', *Archaeological Journal* 146, 302-319

van der Veen, M. 1992, *Crop Husbandry Regimes: An Archaeobotanical Study of Farming in Northern England 1000BC - AD500,* Sheffield Archaeological Monographs 3, J.R. Collis Publications, Sheffield

van der Veen, M. 1999, 'The Economic Value of Chaff and Straw in Arid and Temperate Zones', *Vegetation History and Archaeobotany* 8, 211-224

			I							l		
	Other remains	-			1	1		Indet. carb (X)	1	1	Bone frag (X)	Indet. carb (X)
Contaminants	Earthworm capsules	-	-	-	×	_	-		1	-		-
	Insects			-		×			1	,		-
	Modern seeds	×	×	×	×	×	×		×		×	1
	Molluscs	×	,		×	-		1	1			
	Roots	×	×	×	×	×		×	×	×	×	×
Molluscs	Notes	1	Cochlicopa sp.	1			1		1	1	Anisus sp.	-
	Molluscs		×	,		1			1	,	×	
Charcoal	Notes	-	1	ı	1	1	Quercus sp.		,	1	-	-
	Charcoal>2mm		,	,	×	×	×		×			
Non-cereal taxa	Notes	1		-	,	Fallopia convolvulus (X), Small Poaceae (X)	1		Rumex sp. (1), Medium Fabaceae (1), Linum sp. (1)		1	
No	Seeds	,	,	,		×			×	,		-
Cereals	Notes	-	FTW (1)	ı	E/S (1), NFI (2), E/S GB (1)	E/S (X), Spelt GB (X), E/S GB (XX)	1	-	NFI (1)			-
	Cereal chaff	,	,		×	×		1	1			-
	Cereal grains		×	-	×	×			×	,		1
% processed		%99	20%	100%	20%	20%	%99	100%	20%	100%	100%	100%
Volume (litres)		20	20	20	20	20	20	20	20	က	10	20
Spot date		mid 1st-2nd C	mid 1st-2nd C	mid 1st-mid 2nd C	mid 1st-mid 2nd C	late 1st-mid 2nd C	-	19th C	late 1st-mid 2nd C	late 1st-mid 2nd C	1	mid 1st-mid 2nd C
Feature type		Fill of Ditch	Buried Soil Layer	Fill of Ditch	Fill of Ditch	Layer	Fill of Hearth	Fill of Ditch	Fill of Ditch	Fill of Ditch	Fill of Pit	Fill of Ditch
Feature				1081	1076	1	1088	1068	1072B	1072B	1116	1114
Context			1062	1082	1077	1010A	1089	1069	1073B	1073B	1117	1115
Sample number		-	2	က	4	2	9	7	∞	6	10	7
Site code		IPS717	IPS717	IPS717	IPS717	IPS717	IPS717	IPS717	IPS717	IPS717	IPS717	IPS717

Table 4: Results from the assessment of bulk sample light fractions from Colchester Road, Ipswich. Abbreviations: FTW = freethreshing type wheat (*Triticum aestivum/ compactum*); spelt (*T. spelta*); E/S = emmer/ spelt wheat (*T. dicoccum/ spelta*); GB = glume base; NFI = not formerly identified (cereal indet.).

APPENDIX 3

FORMER FIRE STATION, COLCHESTER ROAD, IPSWICH, SUFFOLK IP4 4SS

WRITTEN SCHEME OF INVESTIGATION FOR AN ARCHAEOLOGICAL EVALUATION

8th January 2013

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

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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 ASCT, Jess Tipper, dated 18th November 2011). It provides for an archaeological evaluation in advance of proposals to construct a new residential development on land at the former Fire Station, Colchester Road, Ipswich, Suffolk IP4 4SS (NGR TM 181 460). The evaluation is required as part of a planning condition to be imposed on approval (by Ipswich Borough Council), 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 ASCT).

2 COMPLIANCE

2.1 The brief has been read and understood. If AS carried out the evaluation, AS would comply with SCC AS-CT's requirements.

3 SITE & DEVELOPMENT DESCRIPTION ARCHAEOLOGICAL BACKGROUND

- 3.1 The site lies in an area of archaeological potential fronting Colchester Road to the south, within the hinterland of the Anglo-Saxon and medieval town area at Ipswich, which lies to the south west. The site extends to some 1.2ha and is a former fire station. It lies at c.45m AOD.
- 3.2 It is proposed to construct a new residential development on the site.
- 3.3 The large site has a potential for archaeological remains, as highlighted on the Suffolk Historic Environment Record, but has not been the subject of any systematic investigation. The detailed archaeological background will be presented in the project report, with reference to the HER.

4 BRIEF FOR THE ARCHAEOLOGICAL EVALUATION SPECIFICATION FOR A TRENCHED EVALUATION GENERAL MANAGEMENT

- 4.1 The principal research objectives for the evaluation as a whole 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). 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 interrelationships 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 Medlycott (2011, 47) identifies regional variation and tribal distinctions as underlying themes for research in the Roman period. Research topics for the Roman period previously set out by Going & Plouviez (in Brown & Glazebrook 2000, 19-22) include analysis of early and late Roman military developments, further analysis of large and small towns, evidence of food consumption and production, further research into agricultural production, landscape research (in particular further evidence for potential woodland succession/regression and issues of relict landscapes, as well as further research into the road network and bridging points), further research into rural settlements and coastal issues. Medlycott (2011, 47-48) states that these research areas remain valid and presents updated consideration of them. To these themes Medlycott & Brown (2008) and Medlycott (2011, 47-48) add rural settlements and landscapes, the process of Romanisation in the region, the evidence for the Imperial Fen Estate, and the Roman/Saxon transition.
- 4.2.5 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. Ayers (in Brown & Glazebrook, 2000) discusses these 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.

- 4.2.6 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).
- 4.2.7 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).

4.2.8 The research subjects identified as important for the post-medieval and modern periods (see Medlycott 2011, 72-80) expand on those set out by Gilman et al (in Brown & Glazebrook, 2000) which focussed on the subjects of fortifications, parks and gardens and industrialisation and manufacture. Medlycott (2011) stresses the importance of the built and environment and the use of the Listed Buildings databases and thematic surveys in understanding this. The subject of industry and infrastructure, which is clearly of great importance for this period, remains a key research subject for the region with particular attention being paid to rural industries, the processing of food for urban markets and the development and character of the region's primary communication roots. Landscapes, and the effect of social changes, such as the Dissolution and the enclosure of greens and commons, on them are considered to be an area of research. The region's military sites and their impact on the development of eastern England, on its landscapes and on its appearance are also considered to be of importance. Towns, their development and their impact on the landscape, require further study. Issues such as economic and social influences of towns on their hinterlands and neighbours are identified as being of importance, as are the development of specific urban forms.

4.2.9 The principal research issues for the site will be to identify and characterise the nature of the anomalies recorded by the geophysical survey and also to test 'blank' areas identified by the survey.

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 TRIAL TRENCH 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 IFA.
- 5.1.2 Profiles of key project staff are provided (Appendix 2).

A Method Statement is presented
Trial Trench Evaluation Appendix 1

- 5.2 The evaluation will conform with the guidelines set down in the brief, SCC AS-CT document Requirements for a Trenched Archaeological Evaluation 2011 Ver 1.3) and the Institute for Archaeologists Standard and Guidance for Archaeological Evaluations (revised 2008) and Standard and Guidance for Archaeological Desk-Based Assessments (revised 2008). It will also adhere to the document Standards for Field Archaeology in the East of England (Gurney 2003).
- 5.3 The SCC AS-CT brief requires a programme of archaeological trial trenching, and stipulates that a 5% sample of the c.1.2ha site should be subject to trenching. 11 trenches, each 30m x 1.8m are proposed, to allow for the c.333 linear metres of trenching required by the brief. A proposed trench plan is presented. AS is happy to review the scale/location of the trenches following comment from the client and/or SCC AS-CT.
- 5.4 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 Helen Chappell 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.
- 5.5 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.15 Days

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

5.6 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.

- 5.7 Details of staff and specialist contractors are provided (Appendix 2). The project will be managed by Claire Halpin MIFA /Jon Murray MIFA.
- 5.8 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.
- 5.9 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

10 ARCHIVE

- 10.1 The requirements for archive storage will be agreed with the County HER.
- 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, 2008). A unique event 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 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.
- 10.4 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.

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 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.

ENVIRONMENTAL SAMPLING

The sampling will adhere to the guidelines prepared by Drs Peter Murphy and Patricia Wiltshire, and the specialist will make his/her results known to Helen Chappell 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 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 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).

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 Field 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.

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 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**

PROJECTS MANAGER (FIELD & ARCHIVES)

Martin Brook BA

Qualifications: University of Leicester BA (Hons) Archaeology (2003 -2006) *Experience:* Martin worked on archaeological excavations throughout his university career in and around Leicester including two seasons excavating a medieval abbey kitchen at Abbey Park, Leicester with ULAS. He specialised in Iron Age funeral traditions and grave goods for his 3rd year dissertation advancing his skills in museum research, database use and academic correspondence. He joined AS in September 2006 as an excavator involved in projects such as Earsham Bronze Age Barrow and cremation site. From May 2007, Martin has moved across to the Post-Excavation team to become Assistant Archives Officer, and thereafter Martin has returned to fieldwork as a Supervisor before being promoted to project management in 2009

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.

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.

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 PIFA

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)

Antony has 11 years' experience in field archaeology, gained during Experience: 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 postexcavation 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 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

Lisa Smith BA

Qualifications: University of York, BA Archaeology (1998-2001)

Experience: Lisa has nine years archaeological experience undertaken mainly in the north of England previously working as a senior site assistant for Field Archaeology Specialists in York on both rural and urban sites as well as Castle Sinclair Girnigoe and Tarbat in Scotland. Prior to working for FAS Lisa was involved in various excavation projects for Oxford Archaeology North and Archaeological Services, University of Durham. Lisa joined AS as a supervisor in January 2008 and in November 2009 transferred to historic building recording and has since worked on a variety of buildings dating from the medieval period onwards, working closely with external consultant Dr Lee Prosser.

GRAPHICS OFFICER

Rosanna Price BSc

Qualifications: University of Kent, Medical Anthropology BSc (Hons) (2005 -

2008)

Experience: Rosanna's interests have always revolved around art and human history, and she has combined these throughout her work and education. During her degree she specialised in Osteoarchaeology and Palaeopathology, and personally instigated the University's photographic database of human remains. This experience gained her the post of Osteoarchaeologist at Kent Osteological Research and Analysis in early 2009, where she worked on a number of human bone collections including the Thanet Earth Skeletons. In January 2010 she joined AS as a Finds and Archives assistant, and by the summer had achieved a new role as graphics officer. In her current position Rosanna uses a range of computer programmes, such as AutoCAD, Adobe Illustrator and CorelDraw to produce digital figures and finds illustrations. These accompany a wide range of archaeological reports, from desk-based assessments and interim reports through to publication standard.

GRAPHICS OFFICER

Charlotte Davies BA

Qualifications: University of Exeter, Archaeology BA (Hons) (2004-2007)

Surrey Institute of Art & Design, BTEC Foundation Diploma in

Art & Design (2003-2004)

University of Cambridge, Archaeology (Heritage & Museum

Studies) MPhil (2010-2011).

Experience: Charlotte has always had a passionate interest in art and archaeology, and has combined these interests in her higher education. Charlotte worked on archaeological excavations in South Dakota, USA, before joining AS in 2007 as part of the graphics team. Charlotte's role within AS comprises the production of a wide range of high quality figures and illustrations for reports, from desk-based assessments and interim reports through to publication. Charlotte became a member of the Association of Archaeological Illustrators and Surveyors in 2009 (this subsequently became incorporated into the Institute for Archaeologists), and in 2010 undertook a masters degree in archaeology at the University of Cambridge.

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

GLASS

Mr A Peachey

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 J Curl
ENVIRONMENTAL CO- Dr R Scaife

ORDINATOR

POLLEN AND SEEDS: Dr R Scaife
CHARCOAL/WOOD Dr J Summers

SOIL MICROMORPHOLOGY
CARBON-14 DATING:

Dr R MacPhail, Dr C French
English Heritage Ancient
Monuments Laboratory (for

advice).

CONSERVATION University of Leicester

OASIS DATA COLLECTION FORM: England

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OASIS ID: archaeol7-156617

Project details

Project name Former Fire Station, Colchester Road, Ipswich, Suffolk

Short description of the project

In June 2013 Archaeological Solutions Ltd (AS) carried out an archaeological evaluation at the Former Fire Station, Colchester Road, Ipswich, Suffolk IP4 4SS (NGR TM 181 460). The evaluation was commissioned by Hopkins Homes Ltd and was undertaken in advance of the proposed construction of a residential development. The evaluation is required to comply with a planning requirement (Ipswich Borough Council) which requires a programme of archaeological work, based on advice from SCC AS-CT. Trenches 6 and 7 contained numerous early Roman (mid 1st - mid 2nd century) features comprising a very large sunken feature (F1008) that appeared to have a metalled base (L1011), gullies, ditches and pits. While the majority of archaeological features (20) were found in Trenches 6 and 7, a sparse number were located in Trench 1 (Ditch (F1006), Trench 2 (?Roman buried soil L1062) and Trench 3 (Pits F1053 and F1053). The remainder of the site contained features of post-medieval/modern date only, many of which were associated with the fire station complex. Sparse quantities of residual struck flipt and burnt flipt were found in

post-medieval/modern date only, many of which were associated with the fire station complex. Sparse quantities of residual struck flint and burnt flint were found in Trenches 2 (F1008 and F2053), 6 (F1103, F1108 and F1110) and 7 (F1068, F1074, F1081 and F1083). The small number of flints have a diverse date range: a long blade of Palaeolithic or Mesolithic date. Mesolithic blade production on or close to the site is attested to by a core recovered as un-stratified material and micro-blades contained in Ditch F1068 and Gully F1108. The remaining debitage is of later Neolithic to early

Bronze Age date.

Project dates Start: 01-06-2013 End: 30-06-2013

Previous/future work

No / Not known

Any associated project reference codes

P5155 - Contracting Unit No.

Any associated project reference codes

IPS717 - Sitecode

Type of project

Field evaluation

Site status None

Current Land use Other 3 - Built over

Monument type DITCHES, GULLYS AND PITS Roman

Significant Finds POTTERY Roman

Methods & techniques

"Sample Trenches", "Targeted Trenches"

Development type Rural residential

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Prompt Planning condition

Position in the planning process Pre-application

Project location

Country **England**

Site location SUFFOLK IPSWICH IPSWICH Former Fire Station, Colchester Road, Ipswich, Suffolk

IP4 4SS Postcode

Study area 1.20 Hectares

Site coordinates TM 181 460 52 1 52 04 07 N 001 10 57 E Point

Height OD / Depth Min: 45.00m Max: 45.00m

Project creators

Name of Archaeological Solutions Ltd

Organisation

Project brief Suffolk County Council Archaeological Service Conservation Team

Project design

originator

Jon Murray originator

Project

Jon Murray

director/manager

Project supervisor **Gareth Barlow**

Type of

sponsor/funding

body

Hopkins Homes

Project archives

Physical Archive

recipient

Suffolk County Archaeological Store

Physical Contents "Ceramics"

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

Grey literature (unpublished document/manuscript)

Publication type

Title Former Fire Station, Colchester Road, Ipswich, Suffolk

Author(s)/Editor(s) Barlow, G

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PHOTOGRAPHIC INDEX



Trench 1 post-excavation. Looking north.



F1108, F1110, F1112 and F1114, Trench 7. Looking north west.



Trench 6 post-excavation. Looking north.



Trench 2 post-excavation. Looking north.



4 Sample section 6A. Looking south east.



Trench 6 post-excavation. Looking west.



7 L1011 (F1010) in Trench 7. Looking north.



9 F1081, F1083 and F1085 in Trench 7. Looking north east.



11 Sample section 11A. Looking north east.



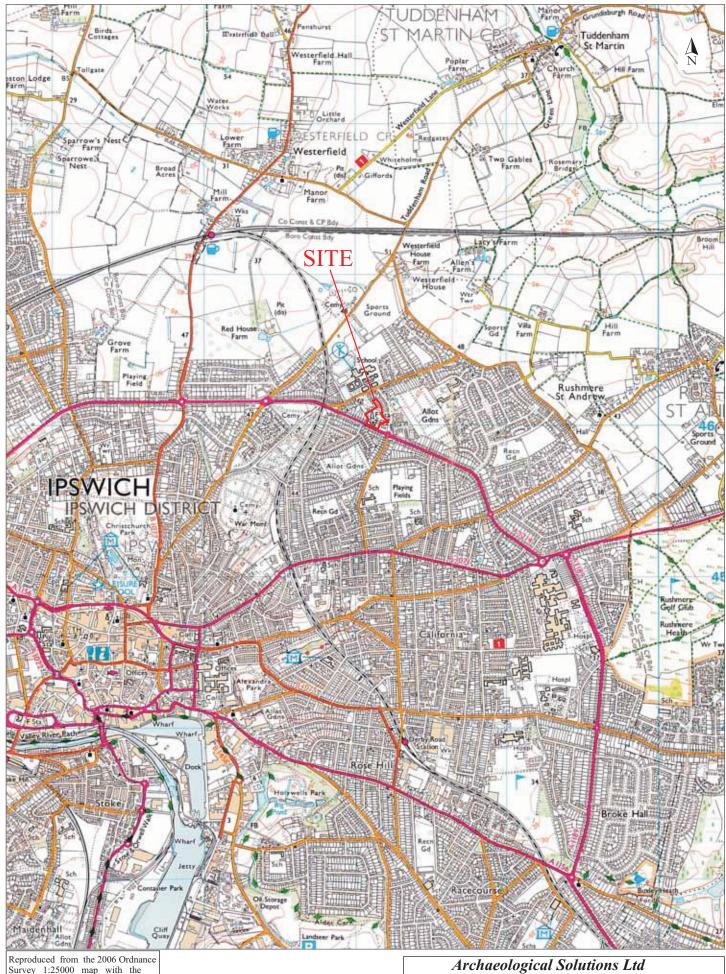
8 F1008, amphora rim *in situ*. Looking north.



10
Trench 7 post-excavation. Looking east.

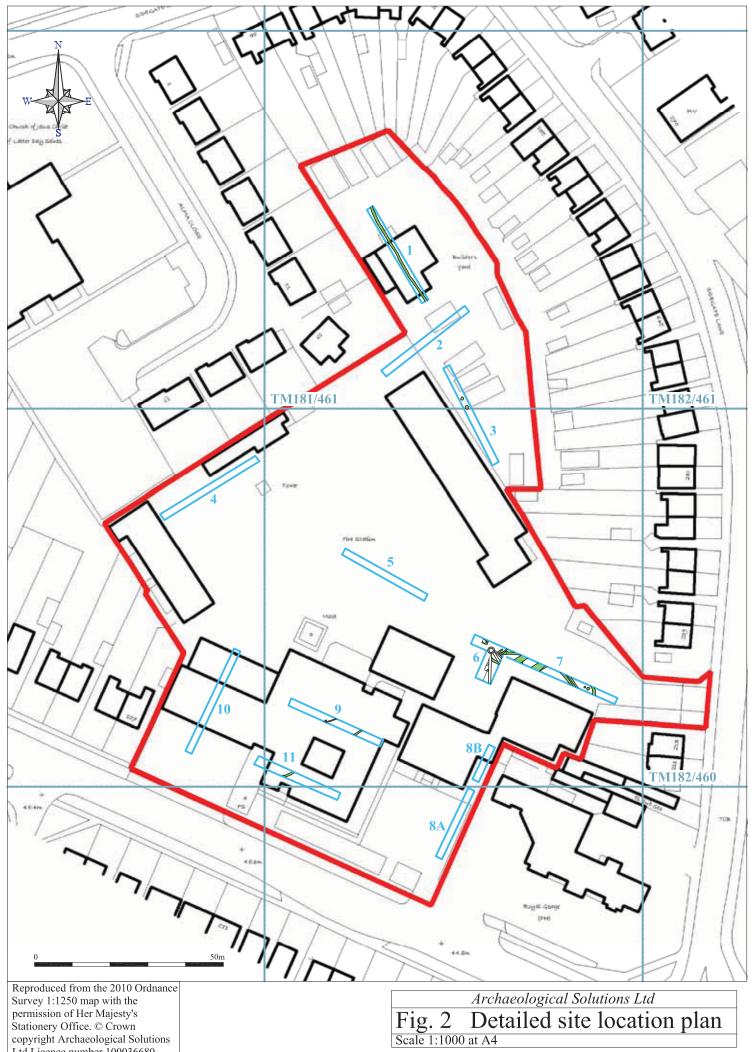


12 Trench 11 post-excavation. Looking east.

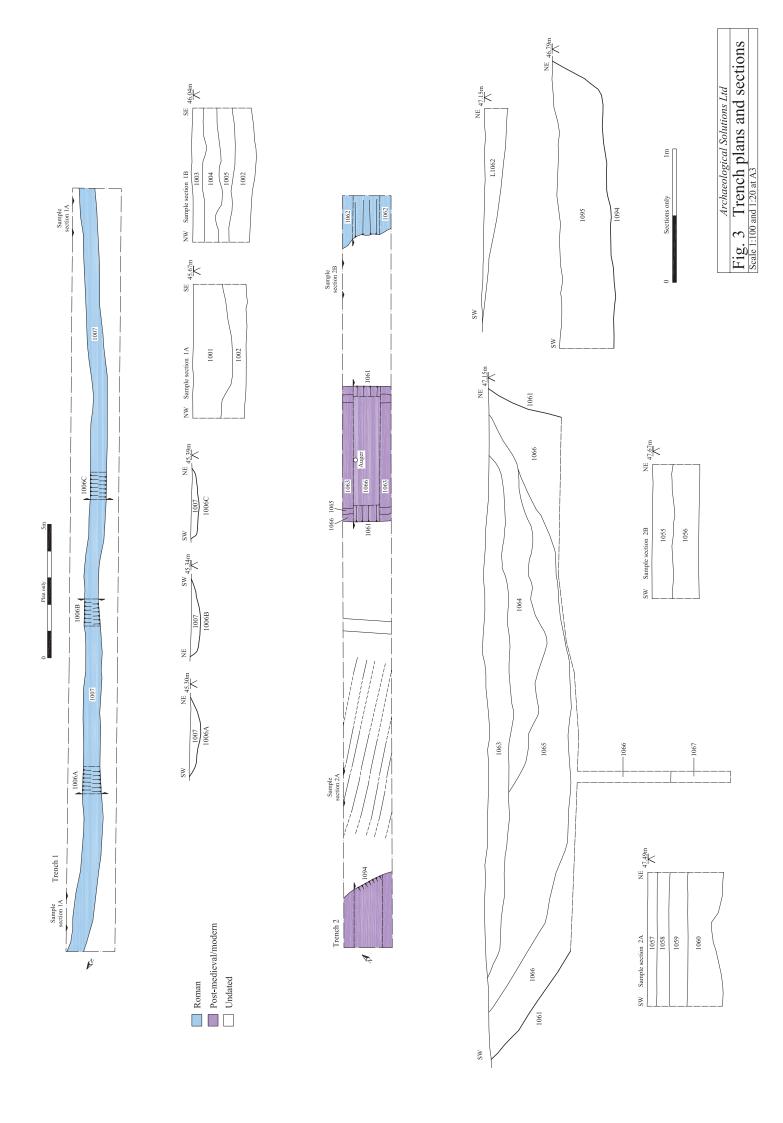


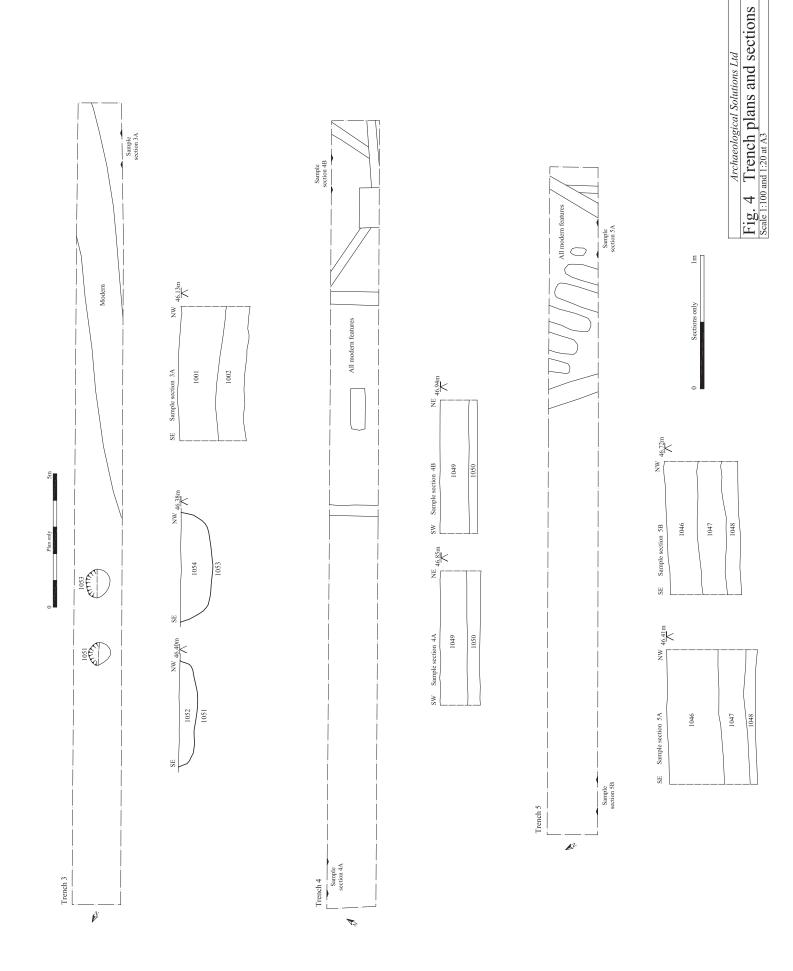
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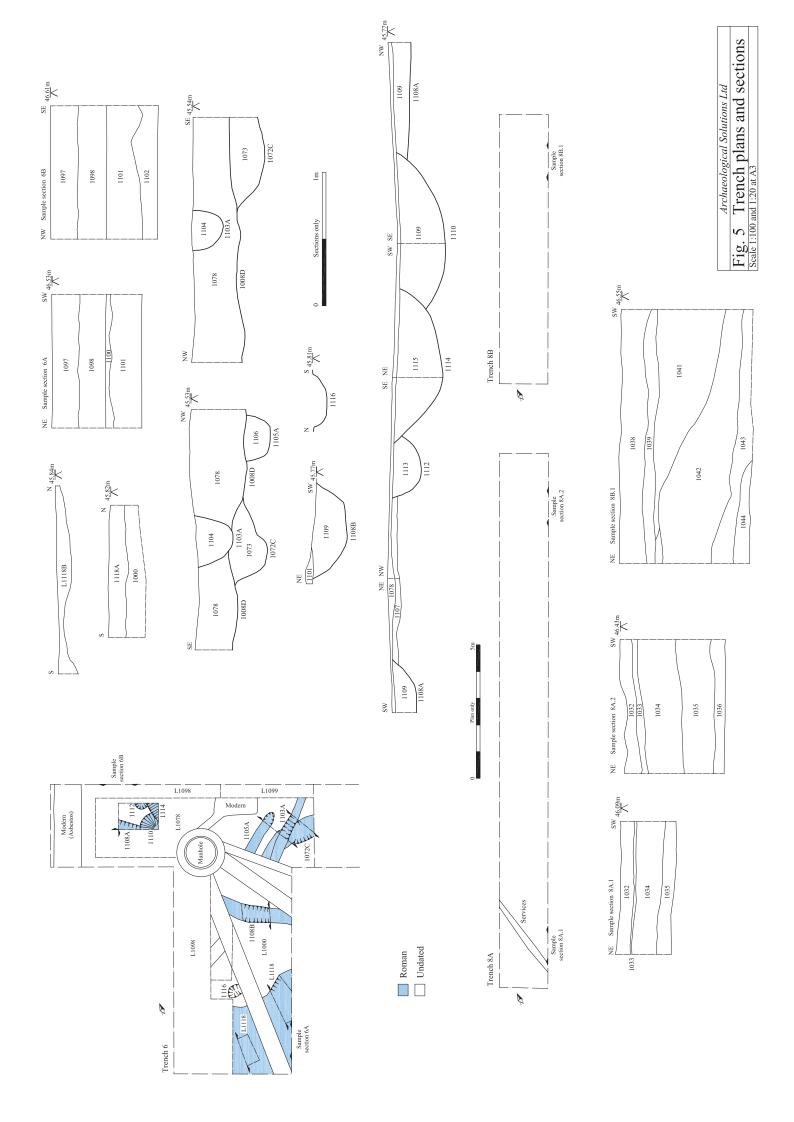
Fig. 1 Site location plan
Scale 1:25,000 at A4

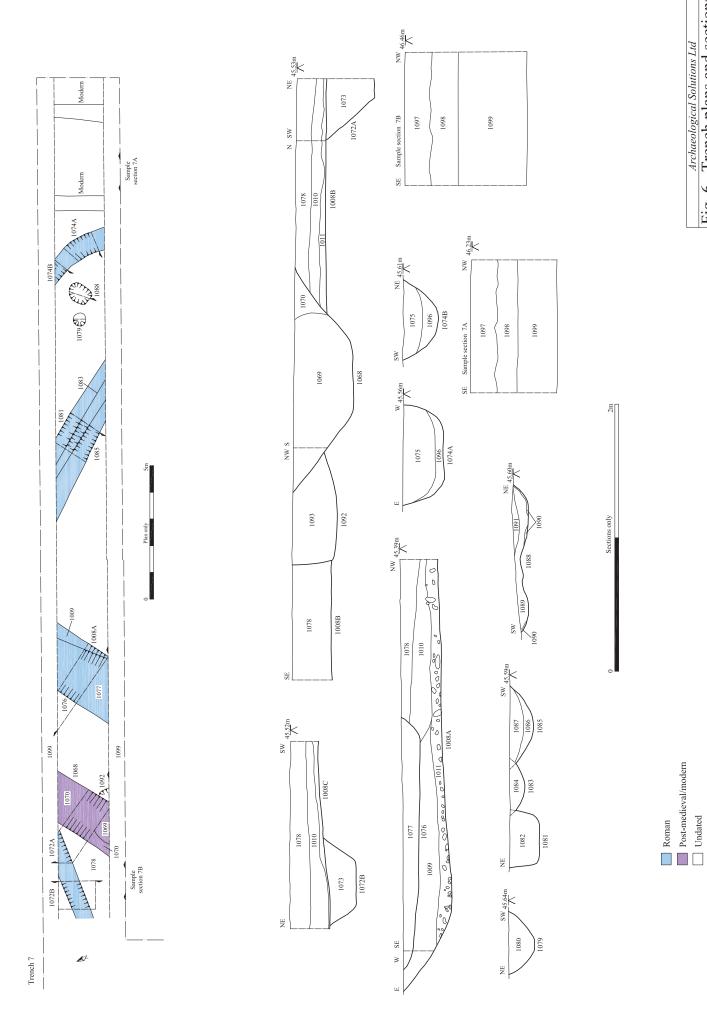


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Trench 9

Archaeological Solutions Ltd
Fig. 7 Trench plans and sections
Scale 1:100 and 1:20 at A3