

**WATERSIDE REDEVELOPMENT,
EXCHANGE STREET, AYLESBURY,
BUCKINGHAMSHIRE**

AN ARCHAEOLOGICAL EVALUATION

ARCHAEOLOGICAL SOLUTIONS LTD

**WATERSIDE REDEVELOPMENT,
EXCHANGE STREET, AYLESBURY,
BUCKINGHAMSHIRE**

AN ARCHAEOLOGICAL EVALUATION

Authors: Zbigniew Pozorski MA (Fieldwork & Report) Hannah Tweedie MPhil (Editor)	
NGR: SP 8221 1364	Report No. 3404
District: Aylesbury Vale	Site Code: AS 1245
Approved: Claire Halpin MIFA	Project No. 3648
Signed:	Date: October 2009

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

CONTENTS

OASIS SUMMARY SHEET

SUMMARY

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

ACKNOWLEDGEMENTS

BIBLIOGRAPHY

APPENDICES

- 1 SITES & MONUMENTS RECORD**
- 2 SPECIALISTS REPORTS**

OASIS SUMMARY SHEET

Project details			
Project name	<i>Waterside Redevelopment, Exchange Street, Aylesbury, Buckinghamshire</i>		
<p><i>In October 2009 Archaeological Solutions (AS) conducted an archaeological evaluation at the Waterside Redevelopment site, Exchange Street, Aylesbury, Buckinghamshire (NGR SP 8221 1364). The evaluation was commissioned by Cheetham Hill Construction in compliance with a pre-planning application requirement in advance of a proposal to drill boreholes across the site.</i></p> <p><i>The site is of particular importance for the Saxon and medieval periods, and also for study of the Roman-Saxon transition. It lies between the historic cores of Walton and Aylesbury, on low-lying land that has the potential to seal and therefore preserve any archaeological deposits beneath alluvium. Waterlogged remains may be encountered.</i></p> <p><i>The evaluation revealed modern walls probably associated with the development on the site before it was converted into a car park. Several alluvial deposits above riverine gravels were also identified, and sampled. The monoliths were examined by Dr Rob Scaife and suggest an open environment with no local woodland.</i></p>			
Project dates (fieldwork)	<i>20th – 22nd October 2009</i>		
Previous work (Y/N/?)	<i>N</i>	Future work (Y/N/?)	
P. number	<i>3648</i>	Site code	<i>AS 1245</i>
Type of project	<i>An Archaeological Evaluation</i>		
Site status	<i>-</i>		
Current land use	<i>Car park</i>		
Planned development	<i>Borehole field for geothermal heating system</i>		
Main features (+dates)	<i>Two modern walls. Alluvial deposits</i>		
Significant finds (+dates)	<i>-</i>		
Project location			
County/ District/ Parish	<i>Buckinghamshire</i>	<i>Aylesbury Vale</i>	<i>Aylesbury</i>
HER/ SMR for area	<i>Buckinghamshire HER</i>		
Post code (if known)			
Area of site	<i>c. 900 m²</i>		
NGR	<i>SP 8221 1364</i>		
Height AOD (max/ min)	<i>c. 78m AOD</i>		
Project creators			
Brief issued by	<i>Buckinghamshire County Archaeological Service</i>		
Project supervisor/s (PO)	<i>Zbigniew Pozorski</i>		
Funded by	<i>Cheetham Hill Construction</i>		
Full title	<i>Waterside Redevelopment, Exchange Street, Aylesbury, Buckinghamshire. An Archaeological Evaluation</i>		
Authors	<i>Pozorski, Z.</i>		
Report no.	<i>3404</i>		
Date (of report)	<i>October 2009 (Version 2)</i>		

WATERSIDE REDEVELOPMENT, EXCHANGE STREET, AYLESBURY, BUCKINGHAMSHIRE

AN ARCHAEOLOGICAL EVALUATION

SUMMARY

In October 2009 Archaeological Solutions (AS) conducted an archaeological evaluation at the Waterside Redevelopment site, Exchange Street, Aylesbury, Buckinghamshire (NGR SP 8221 1364). The evaluation was commissioned by Cheetham Hill Construction in compliance with a pre-planning application requirement in advance of a proposal to drill boreholes across the site.

The site was regarded as of particular importance for the Saxon and medieval periods, and also for study of the Roman-Saxon transition. It lies between the historic cores of Walton and Aylesbury, on low-lying land that has the potential to seal and therefore preserve any archaeological deposits beneath alluvium. Waterlogged remains may be encountered.

The evaluation revealed modern walls probably associated with the development on the site before it was converted into a car park. Several alluvial deposits above riverine gravels were also identified, and sampled. The monoliths were examined by Dr Rob Scaife and suggest an open environment with no local woodland.

1 INTRODUCTION

1.1 In October 2009 Archaeological Solutions (AS) conducted an archaeological evaluation at the Waterside Redevelopment site, Exchange Street, Aylesbury, Buckinghamshire (NGR SP 8221 1364; Figs. 1 & 2). The evaluation was commissioned by Cheetham Hill Construction in compliance with a pre-planning application requirement in advance of a proposal to drill boreholes across the site.

1.2 The archaeological evaluation was undertaken in accordance with a brief prepared by Buckinghamshire County Archaeological Service (BCAS; dated 08/09/2009), and a specification (Written Scheme of Investigation) prepared by AS (dated 23/09/2009) and approved by BCAS. The project conformed to the Institute of Field Archaeologists (IFA) *Code of Conduct and Standard and Guidance for Field Evaluations* (revised 2001).

1.3 The evaluation aimed to gather sufficient information to generate a reliable predictive model of, extent, character, date, state of preservation and depth of burial of important archaeological remains, if present. It was also important to establish a date and potential of environmental deposits for informing understanding of past environments and land use.

Planning policy context

1.4 The relevant planning policy which applies to the effect of development with regard to cultural heritage is Planning Policy Guidance Note 16 'Archaeology and Planning' (PPG16) (Department of the Environment).

1.5 PPG16 (1990) is the national Planning Policy Guidance Note which applies to archaeology. It states that there should always be a presumption in favour of preserving nationally important archaeological remains *in situ*. However, when there is no overriding case for preservation, developers are required to fund opportunities for the recording and, where necessary, the excavation of the site. This condition is widely applied by local authorities.

2 DESCRIPTION OF THE SITE

2.1 The proposed development site fronts Exchange Street, being situated in half-way between the roundabouts forming a junction with Walton Street to the south-west and a junction with High Street to the north-east. The site lies at a height of c. 78m AOD. Land to the north rises gently away from the site but the area as a whole remains relatively flat. The Bear Brook lies immediately to the east/south-east of the site.

2.2 The proposed development area was until recently occupied by the car park. To the immediate south of the site a new Waterside Theatre building is located, still being under construction at the time of the evaluation. The site also lies c. 100m to the west of the Aylesbury branch of the Grand Union Canal (opened as part of the Grand Junction Canal in 1815) and canal basin.

3 TOPOGRAPHY, GEOLOGY AND SOILS

3.1 The historic core of Aylesbury is situated on an outcrop of soft Portland limestone. The solid geology of the area comprises Jurassic Kimmeridge Clay formations. Although the soils of the urban area are not mapped, the local drift geology comprises soils of the Denchworth association, derived from the underlying clay, with Grove association chalky drift soils to the south, both suitable for growing winter cereals with some dairying (Soil Survey of England and Wales (SSEW) 1983). To the south-east is a band of clay upland followed by the clay-with-flint of the Chilterns (SSEW 1983). These soils have given rise to distinct environmental zones, land use and settlement patterns (Holgate (ed.) 1995 *passim*).

3.2 The small watercourses of the Bear Brook give rise to localised alluvium and river gravel deposits. The Bear Brook is a tributary of the river Thames to the northeast, which itself drains into the Thames. The course of the Bear Brook forms part of the south-eastern boundary of the assessment site. The Bear Brook is generally slow-flowing, subject to flooding and appears to

have migrated westward. River terrace deposits have been recorded along the Bear Brook in Aylesbury (Sumbler 1991, 15).

3.3 The site lies at a height of c. 78m AOD on the north-west bank of the shallow valley of the Bear Brook. Land to both the north and south rises gently away from the site but the area as a whole remains relatively flat.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Prehistoric

4.1 There is so far little evidence to suggest that there was significant activity around Aylesbury during the early prehistoric period. The Lower Icknield Way, runs c. 15km east of Aylesbury. Historically the Icknield Way has been understood as a primary line of communication in prehistoric times, but this assumption has more recently been drawn into question (Harrison 2004). Evidence of prehistoric activity is present in the immediate area but is not extensive. Most finds were recovered from higher land in the area of the later Iron Age hillfort east of the town.

4.2 Neolithic finds include a flint side scraper from the town centre and examples of pottery and two stone axes from the Walton area, to the southeast of the site (Farley 1976). Residual flint tools and flakes recovered during the Police Houses excavation on Walton Street in 1987 (SMR-CAS 0555500000) provide the only evidence of early prehistoric activity within the immediate vicinity of the site.

4.3 Extensive development along Walton Road and Walton Street in the 1980s and 1990s led to a series of salvage excavations in the area. These revealed extensive evidence of a dispersed middle Bronze Age to early Iron Age roundhouse settlement and Saxon remains. Early Bronze Age pottery was found at the Teachers' Centre Site on Walton Road, together with a larger quantity of late Iron Age pottery and 'Belgic' brick (Hawkins 1989; Dalwood & Hawkins unpublished). Middle to late Bronze Age remains include a small cremation cemetery, pits, postholes hearths and a boundary gully found during excavations at Walton Lodge Lane (Bonner 1994), and a late Bronze Age to early Iron Age roundhouse settlement at the Orchard site (Ford & Howell 2004).

Iron Age

4.4 An Iron Age hillfort was located on the rounded outcrop of soft Portland limestone, using the hill's natural topographical defences and augmenting them by the construction of a ditch around the crest (Hanley & Hunt 1993; Pearson 2000, 5). Prior to the advent of modern drainage schemes, the hill was probably surrounded by marshes, bogs and streams.

4.5 The substantial defensive ditch has been investigated at three locations within the town. The ditches of the Iron Age hillfort were eventually filled in,

but were re-cut in the Saxon period forming what became the supposed *burh* of Aylesbury (*Current Archaeology* 1986, 189). There is substantial Iron Age evidence from the hilltop, including human and animal remains, and pottery. The main area of prehistoric settlement continued to be outside the defended area, at Walton. Residual pottery has been recovered from a number of multi-period sites in the area such as the Police Houses site on Walton Street (SMR-CAS 0555500000). Middle Iron Age pits and boundaries have been recorded at Aylesbury High School.

Roman

4.6 Aylesbury lies on the line of Akeman Street (presently the A41; SMR-CAS 0105003000), the Roman road that branched from Watling Street south of *Verulamium* (St Albans) and ran north-west, linking London with Chester (Margary 1973). The road may have run through the modern centre of Aylesbury, along the line of the present High Street to the north of the site. Excavations of the road in Oxfordshire suggest that it was built soon after the Roman conquest, c. AD 47 (Hands 1993).

4.7 Excavations at Walton Road Stores have found evidence of coaxial field systems, structures and a small roadside inhumation cemetery. This indicates the antiquity of the street – the orientation of the later Saxon streets and property boundaries of Walton may have originated as early as the 1st century AD (Ford & Howell 2004, fig. 3.16). A watching brief at Aylesbury High School found part of a late Iron Age to early Romano-British farm (Babtie 2001). Residual Romano-British pottery has been recovered from several multi-period sites in the area, most notably in close proximity to the assessment site at the Police Houses site on Walton Street (SMR-CAS 0555500000).

4.8 Sparse and relatively incoherent Roman remains were discovered at rescue excavations conducted during the redevelopment of the town centre in the late 1970s and early 1980s. Excavations at 13-19 Buckingham Street in 1979 found two Roman ditches and later features that may have been part of a settlement fronting Akeman Street (Pevsner & Williamson 1994, 149). Another Romano-British ditch was noted beneath Victorian burials in the vault of the Hale Leys Chapel in the High Street in 1980. Closer to the assessment site, a watching brief during the Bull's Head development in 1980-81 noted a late Iron Age/Romano-British ditch and pit and recovered pottery of the same periods (SMR-CAS 0487200000, 0487201000).

4.9 In September 1925 eight to ten human skeletons were found behind Lucas' shop, number 10 Walton Street, Aylesbury, which lay c. 200m north west of the assessment site. Small fragments of pottery of Romano-British to 17th century date were found with the skeletons. In 1936, further burials were found in the garden of Lucas' shop. All the individuals represented were thought to be adult males and they lay with their feet orientated to the east. A pick of unusual form, probably of later Roman date, fashioned from red deer antler was found with the burials (SMR-CAS 0182500000, 0182500001, 0182500002, 0182501000).

Anglo-Saxon

4.10 Between the 6th and 10th century, the settlement has been recorded under the spellings of *Aegelesbyrig* or *Aegelesburh*, and as *Eilesberia* in the 11th century (VCH 1969, 1). Place-name evidence is disputed, suggesting that Aylesbury either derives from *Ægel's fortified place* (burh) and was therefore a defended Saxon settlement (Hanley & Hunt 1993) or *Eccles-burh*, a fortified church (Mawer & Stenton 1925). The church of St Mary, c. 800m northwest of the site and lying west of the modern town centre, replaced a Saxon Minster church which had been founded on the site of earlier place of pagan worship (English Heritage 2009, Durham 1978).

4.11 The Walton Road excavations between the 1970s and 1990s revealed extensive early Anglo-Saxon, middle Saxon and late Saxon remains, in addition to evidence for prehistoric settlement. These excavations indicate numerous early to middle Saxon Sunken Featured Buildings (SFBs), middle Saxon timber halls, ditched boundaries and fence-lines. Early Anglo-Saxon Walton appears to have been an extensive, dispersed settlement, with large unoccupied spaces between buildings (Dalwood & Dillon. 1989). In the middle Saxon period, this settlement may have expanded towards Aylesbury or been subject to some form of the 'Middle Saxon Shift' (Hamerow 1991).

4.12 A possible early to middle Anglo-Saxon mixed rite cemetery has been identified through chance finds found at Aylesbury Cemetery to the north of the putative core of early settlement. Excavations in George Street in 1981 also revealed 18 Saxon inhumation burials and large quantities of Saxon pottery (Allen & Dalwood 1983). Inhumations have also been recorded in Church Street, and this has led to the suggestion that the Saxon settlement of Aylesbury included an extensive churchyard which extended as far south as Temple Square and George Street (Farley 1979, 119).

4.13 Excavation in 1987 that took place at the Police House site (SMR-CAS 0555500000), to the south of the assessment site, located late Saxon features, mostly gullies, relating to the layout of 10th century tenements. Anglo-Saxon settlement activity in close proximity to the assessment site has also been recorded at the Orchard site, excavated in 1994-1995, where 6th to 8th century features comprising 8 post-built halls, 1 grubenhaus (SFB) and 1 foundation trench building were located (SMR-CAS 0610800000).

Medieval

4.14 *Eilesberia* is referred to in the Domesday Book of 1086. It was a regional administrative centre with its own court and was a household manor of the King. It was a substantial manor of 16 hides, with two mills. The church in Aylesbury, St Mary's, was held by the Bishop of Lincoln (Morris 1978). The hamlet of Walton is not separately named in Domesday. There is also documentary evidence to suggest that Aylesbury had a Norman castle, probably a minor, short-lived motte-and-bailey type and probably built either in the years after the Conquest or during the civil unrest of the early 12th

century, probably in the Castle Fee area to the west (Hanley & Hunt 1993, 2). No archaeological evidence for the castle has thus far been recorded.

4.15 From at least the 11th century, the formal layout of various properties was established along both sides of Walton Street (SMR-CAS 0555500000). A possible fragment of the manorial earthwork was excavated at Walton Court Farm, the site of the Manorial Courts. The core of medieval Aylesbury was probably located southeast of St Mary's Church, the highest point in the town, around Kingsbury and west of Market Square. There were two hospitals and a Franciscan Friary founded in the 1380s, which stood on Rickford's Hill (Pevsner & Williamson 1994, 149).

4.16 The Aylesbury market is first mentioned in the 13th century, but may be earlier, possibly dating back to the late Saxon period (SMR-CAS 0035400000). The original, possibly Saxon, marketplace was probably located in the triangular space at Kingsbury. This was probably also the site of the late Saxon royal palace (Watkin 1981, 41) – Aylesbury was a Royal demesne until 1204. It lay on sloping ground, extending south-east out of the town and along both sides of the western end of Walton Street, which was the principal thoroughfare; the northern end of the market was gradually encroached upon by buildings and lanes, now forming the north-western side of Market Square. Other than a series of encroachments by various properties, the structure of the market place was to remain much the same until the 20th century (Hanley & Hunt 1993).

4.17 Pottery sherds, animal bone and a leather shoe sole have been found at Walton Street during the construction of a new channel for the California Brook to the west (SMR-CAS 0562900000, 0562900001, 0562900002, 0562900003), part of the Aylesbury Past project. An evaluation conducted by HAT (now AS) at St. Mary's School, Aylesbury, in 2001 revealed features of 12th to 15th century date, the nature and density of which implied peripheral occupation (Boyer 2001). Timber framed buildings of 15th to 18th century date stood in Bourbon Street, Silver Street and the Market Square until they were demolished in late 1964 (SMR-CAS 0028000000). Pottery dating to the 13th and 18th centuries was recovered from Silver Street (SMR-CAS 0028001000). A goat of Edward IV (r. 1461-1483) and one of Henry VII (r. 1485-1509) were found in the garden of 32 Walton Street in 1920.

Post-medieval

4.18 During the Civil War, Aylesbury was a Parliamentary garrison. It is thought that the Battle of Aylesbury occurred at Holman's Bridge to the north of the town in 1642 (Griffin 1998; Zeepvat 1994), however documentary and archaeological sources offer conflicting evidence relating to this previously accepted fact. Traces of Aylesbury's defensive ditches have been excavated near St Mary's parish church.

4.19 Aylesbury's post-medieval economy was based largely on local agriculture, but lace-making became an important cottage industry in the 18th century. At this time, the town was clustered between St Mary's Church and

Market Square, with the pastures, duck ponds and hamlet of Walton to the southeast (Watkin 1981, 39).

4.20 The centrepiece of the marketplace is the Palladian County Hall (SMR-CAS 0099600000; architect Thomas Harris, built 1723-1740). The marketplace is also the location of the White Hart Inn (SMR-CAS 0181000000), this was a 17th century inn that stood on the site later occupied by the Corn Exchange. It was rebuilt in 1814 and was demolished in 1864 to make way for the Corn Exchange. Another 17th century inn, the White Swan, at 3 Walton Street, (SMR-CAS 1209000000) is still standing and is a grade II listed building. Leading from the marketplace is the post-medieval road to London, the construction of which was paid for Sir John Baldwin (SMR-CAS 0044800000). This road is probably the present Wendover Road although it is possible that the London Road went via Walton Street, Walton Road and the present A41.

Previous archaeological investigations

4.21 A large amount of archaeological work was conducted in the Walton Street/Walton Road area to the east of the Waterside development site during the course of the Aylesbury Past project of the 1970s and 1980s. Excavations at Walton Road Stores, for instance, revealed evidence of coaxial field systems, structures and a small roadside inhumation cemetery (SMR 6733; Ford & Howell 2004). A watching brief at Aylesbury High School also found part of a late Iron Age - early Romano-British farm (SMR 6377; Babbie 2001), whilst a possible fragment of the manorial earthwork was excavated at Walton Court Farm (SMR 0093). Numerous buildings in the centre of Aylesbury were demolished during the redevelopment of the town centre in the 1960s and 1980s. These included ranges of 15th - 18th century timber framed buildings on Bourbon Street, Silver Street and Market Square (SMR 0280).

4.22 Several small archaeological interventions have investigated the course of the California Brook and local hydraulics. A watching brief at Walton Street was conducted during the construction of a new channel for the California Brook in 1987, and noted a sequence of possibly stream-laid deposits, which contained medieval pottery sherds, animal bone and a leather shoe sole (SMR 5629). An evaluation on the corner of Old Brewery Close and Walton Street, however, found that the area had been heavily disturbed by 19th - 20th century activity. Little evidence for medieval activity and no evidence of the alluvial and peat layers were found adjacent to the California Brook in 1996 (Anthony 2003). An archaeological watching brief at Walton Brewery near California Brook, close to the canal basin indicated the potential for palaeo-environmental deposits to have survived in the vicinity of the brook (SMR 6246; Roseff 1996).

6.3 An archaeological evaluation of land at 82 - 84 Walton Street, which comprised the Long Stay Car Park and Servicemen's Club c. 200m south of the Waterside development site was carried out by AS in 2005 (Doyle & Williams 2005). The evaluation revealed archaeology consistent with the very high potential for the discovery of late Saxon and medieval remains suggested

by the earlier desk based assessment (O'Brien 2005). The subsequent archaeological excavation at 82 - 84 Walton Street (Newton & Hallybone 2006) revealed three large intercutting pits, as well as sparse pits, dated to the 5th - 10th century AD. Late Saxon and medieval remains comprised a series of coaxial boundary features, and a cluster of intercutting pits, suggesting continuity in boundary alignments from medieval times to the modern day. A possible flood defence feature, dated to the early modern/modern period, was also detected.

5 METHODOLOGY

5.1 Three trenches were excavated using a mechanical 360° tracked excavator fitted with a toothless ditching bucket (Fig. 2). The trenches locations were approved by BCAS. The trenches were between 16.50m and 19.00 m in length.

6.2 Tarmac and undifferentiated overburden were mechanically excavated under close archaeological supervision. Exposed surfaces were cleaned by hand and examined for archaeological features. Deposits were recorded using *pro forma* recording sheets, drawn to scale, and photographed as appropriate. Excavated spoil was searched for finds and the trenches were scanned by a metal detector. Appropriate environment samples have been taken from all alluvium deposits.

6 DESCRIPTION OF RESULTS

Trench 1 (Fig. 2, DP 3-6)

<i>Sample section 4 (DP 4): NW end, SW facing</i>		
<i>0.00 = 77.89m AOD</i>		
0.00 – 0.05m	L1000	Tarmac surface of the former car park.
0.05 – 0.12m	L1001	Base layer for tarmac. Creamy white, compact, gravel.
0.12 – 0.28m	L1011	Levelling/base layer. Yellow / creamy white gravel.
0.28 – 0.34m	L1012	Black, loose, sandy silt with ash.
0.34 – 0.58m	L1013	Mid grey, friable, silty clay with CBM.
0.58 – 0.73m	L1014	Yellow / white, compact, sandy chalk with CBM.
0.73 – 0.80m	L1015	Black, clayey silt with charcoal.
0.80 – 1.00m	L1004	Dark blackish grey, compact, clayey silt with CBM.
1.00 – 1.20m	L1023	Brownish mid grey, moderately compact, clayey silt.
1.20 – 2.00m	L1005	Alluvium. Light to mid brown, compact, clayey silt.
2.00m+	L1006	Alluvium. Greyish and brownish green, compact clay.

<i>Sample section 5 (DP 5): SE end, SW facing</i>		
<i>0.00 = 77.94m AOD</i>		
0.00 – 0.05m	L1000	Tarmac. As above.

0.05 – 0.15m	L1001	Gravel. As above.
0.15 – 0.25m	L1026	Old surface. Red and grey tarmac.
0.25 – 0.38m	L1011	Gravel. As above.
0.38 – 0.45m	L1012	Black, loose, sandy silt with ash. As above.
0.45 – 0.78m	L1013	Mid grey, friable, silty clay with CBM. As above.
0.35 – 1.35m	L1024	Mid grey, friable, sandy silt.
1.35 – 1.48m	L1015	Black, clayey silt with charcoal. As above.
1.48m+	L1016	Alluvium. Black / green dark grey, compact, clay.

Additional description of deposits: Alluvial deposit L1005 was present in western part of the trench. It was comparable to L1016, also revealed in Trench 2. The deposits above alluvial layers L1005 and L1006 likely represented modern horizons. L1000, L1001, L1011 and L1026 all related to the car park. No finds were present. The water table was present at c.1.90m.

Description of results: Trench 1 contained modern Wall M1022.

Wall M1022 was aligned NE/SW (DP 3). It was constructed of light to mid red and yellow bricks (0.22 x 0.10 x 0.07m). It was located c. 0.40m below the present day ground surface, and measured 1.60+ x 1.00 x 0.23m. The bricks were bonded with cement mortar. More details were not revealed as the wall was located next to live services. The wall was modern and was likely part of the same building complex as Wall M1007 Trench 3.

Trench 2 (Fig. 2, DP 7-10)

<i>Sample section 6 (DP 8): NE end, SE facing</i>		
<i>0.00 = 78.12m AOD</i>		
0.00 – 0.05m	L1000	Tarmac. As above Tr.1.
0.05 – 0.12m	L1001	Gravel. As above Tr.1.
0.12 – 0.25m	L1011	Gravel. As above Tr.1.
0.25 – 0.78m	L1018	Mixed mid grey, loose, sandy silt with CBM rubble.
0.78 – 0.89m	L1019	Light grey, compact, chalk with CBM.
0.89 – 1.38m	L1012	Black, loose, sandy silt with ash. As above Tr.1.
1.38 – 1.48m	L1021	Black, clayey silt with rubbish incl. leather fragments.
1.48 – 1.60m	L1016	Alluvium. Black / green dark grey, compact, clay.
1.60m+	L1017	Alluvium. Bluish light grey, moderately compact, clay.

<i>Sample section 7 (DP 9): SW end, SE facing</i>		
<i>0.00 = 78.00m AOD</i>		
0.00 – 0.05m	L1000	Tarmac. As above Tr.1.
0.05 – 0.11m	L1001	Gravel. As above Tr.1.
0.11 – 0.32m	L1011	Gravel. As above Tr.1.
0.32 – 0.70m	L1025	Light orange yellow, compact, sandy clay with CBM.
0.70 – 1.20m	L1012	Black, loose, sandy silt with ash. As above Tr.1.

1.20 – 1.26m	L1021	Black, clayey silt with rubbish incl. leather fragments. As above.
1.26 – 1.75m	L1016	Alluvium. Black / green dark grey, compact, clay. As above.
1.75 – 2.80m	L1017	Alluvium. Bluish light grey, moderately compact, clay. As above.
2.80m+	L1020	Natural. Mid grey riverine, loose gravel.

Additional description of deposits: The alluvial deposits were sealed by L1021, a dump layer of mostly leather leftovers, including complete footwear. The deposit is 19th - early 20th century. The water table was present at c. 1.90m below the present ground level. L1016 was comparable to L1005.

Description of results: Trench 2 contained no archaeological features or finds.

Trench 3 (Fig. 2, DP 11-17)

<i>Sample section 8 (DP 15): NE end, SE facing</i>		
<i>0.00 = 78.22m AOD</i>		
0.00 – 0.05m	L1000	Tarmac. As above, Tr.1.
0.05 – 0.12m	L1001	Gravel. As above, Tr.1.
0.12 – 0.40m	L1002	Mid grey, loose, silty sand with CBM rubble.
0.40 – 0.59m	L1003	Greenish grey, compact, silty clay.
0.59 – 0.92m	L1004	Dark blackish grey, compact, clayey silt with CBM. As above, Tr.1.
0.92 – 1.25m	L1005	Alluvium. Light to mid brown, soft clayey silt. As above, Tr.1.
1.25m+	L1006	Alluvium. Greyish and brownish green, compact clay. As above, Tr.1.

<i>Sample section 9 (DP 16): SW end, SE facing</i>		
<i>0.00 = 78.05m AOD</i>		
0.00 – 0.05m	L1000	Tarmac. As above, Tr. 1.
0.05 – 0.12m	L1001	Gravel. As above, Tr.1.
0.12 – 0.43m	L1002	Mid grey, loose, silty sand with CBM rubble. As above.
0.43 – 0.60m	L1003	Greenish grey, compact silty clay. As above.
0.60 – 1.00m	L1004	Dark blackish grey, compact clayey silt with CBM. As above.
1.00 – 2.20m	L1005	Alluvium. Light to mid brown, soft clayey silt. As above.
2.20m+	L1006	Alluvium. Grey / brown green, compact clay. As above.

Additional description of deposits: Two alluvial deposits were revealed, L1005 and L1006, and were recorded in Trench 1. The top of alluvium was recorded at the relatively high level, at c. 1m below existing.

Description of results: Trench 3 contained modern Wall M1007 and its foundation, M1008.

M1007 was a wall (DP 11-13) located along of the most of the length of the trench (Fig. 3). Its principal length was aligned NE/SW and measured 12.60+ 0.80 x 0.22m. It had two perpendicular extensions on its south-east side, and extended beyond the trench at its southern end. The wall was constructed of light to mid red and yellow bricks (0.22 x 0.10 x 0.07m) with a regular finish. Its coursing was most close to English garden-type. The bricks were bonded with cement mortar. Two lowest courses of bricks extended outwards from the wall (max 0.10m), and the wall was 20th century.

Foundation M1008 (12.60+ x 0.20+ x 0.40m) was constructed of a light to mid grey concrete, directly below M1007 which was bonded to this base.

7 CONFIDENCE RATING

7.1 It is not felt that any factors inhibited the recognition of archaeological features or finds. Wall M1007 and its foundation M1008, located in Trench 3, were demolished under archaeological supervision and the trench did not reveal any additional evidence.

8 DEPOSIT MODEL

8.1 The site was entirely covered by the tarmac surface of the car park. The stratigraphy of the site was characterised by a substantial overburden and several levelling and dump layers dating to the modern period. These layers were present at depths c. 1.00 – 1.50m below existing. A layer of 19th - 20th century leather off-cuts and rubbish (L1021) capped alluvial deposits in eastern part of the site (Trench 2).

8.2 Below the modern overburden a sequence of alluvial deposits were encountered. In northern (Trench 3) and western (Trench 1) parts of the site L1005 overlay L1006. L1005 was present at relatively high level (c. 1.00m below ground level) in NE end of Trench 3. A clay layer, L1016 comparable to L1005, was present in Trench 2 and eastern part of Trench 1.

8.3 The lower sequence of alluvial deposits was represented by L1006 (Trenches 1 & 3) and L1017 (Trench 2).

8.4 The natural fluvial gravels (L1020) were identified in the base of Trench 2, the nearest trench to the present course of the Bear Brook. L1020 was overlain by deep sequences of alluvium deposits sealed by modern made ground. The gravels were present at c. 2.80m below existing.

9 DISCUSSION

9.1 The site had a good potential for archaeological remains, in particular for Saxon and medieval remains. The latter have been recorded locally and relate to the settlements of Walton and Aylesbury. The site also had the potential for Roman remains associated with Roman to Saxon transition period

9.2 Despite the archaeological potential of the site, in the event only modern buildings remains were revealed (Trenches 1 and 3). Wall M1007 and Foundation M1008 (Trench 3) represented the remains of a modern building which fronted Exchange Street. Wall M1022 (Trench 1) may have been a part of the same development.

9.3 The evaluation revealed numerous alluvium deposits which were encountered during previous archaeological investigations in vicinity of the site (Williamson 2006). Some of those deposits may date to medieval and post-medieval periods, however, no finds were recovered during the programme. The column samples, examined by Dr Rob Scaife (see Appendix 2) have revealed the presence of pollens suggesting the nature of the local environment, with evidence for cereal cultivation and a lack of forestation in the vicinity.

10 DEPOSITION OF THE ARCHIVE

10.1 Archive records, with an inventory, will be deposited with any donated finds from the site at the Buckinghamshire County Museum. The archive will be quantified, ordered, indexed, cross-referenced and checked for internal consistency. In addition to the overall site summary, it will be necessary to produce a summary of the artefactual and ecofactual data.

ACKNOWLEDGEMENTS

Archaeological Solutions would like to thank Cheetham Hill Construction for funding the project.

AS gratefully acknowledge the input and advice of Ms Ruth Beckley of Buckinghamshire County Archaeological Service (BCAS).

BIBLIOGRAPHY

Allen, D & Dalwood, H. 1983. Iron Age occupation, a middle Saxon cemetery, and 12th to 19th century urban occupation: Excavations in George St, Aylesbury. In *Records of Buckinghamshire* 25: 1-61

Anthony, S., 2003, *Old Brewery Close and Walton Street, Aylesbury: An evaluation report*. Thames Valley Archaeological Services unpublished report

Babtie, 2001, *Aylesbury High School: draft archaeological watching brief report for site 1: new music centre, 2: replacement tennis courts and 3: classroom extension*. Babtie Group

Bonner, D., 1994, *An Interim Report on Archaeological Investigations on Land Adjacent to Walton Lodge Lane*. Buckinghamshire County Museums and Archaeological Service

Boyer, P., 2001, *St Mary's School, Aylesbury, Buckinghamshire: an archaeological evaluation*. HAT unpublished report 838

British Geological Survey (BGS), 1978 *Legend for the 1:625,000 Geological map of the United Kingdom (solid geology)*; London. Mansfield

Current Archaeology, 1986, *Aylesbury*. No 101 (August 1986)

Dalwood, H., Dillon, J., Evans, J. & Hawkins, A., 1989, Excavations at Walton, Aylesbury 1985-1986. *Records of Bucks* 31, 137-225

Doyle, K. & Williams, J. 2005 *82 - 84 Walton Street, Long Stay Car Park and the Servicemen's Club, Aylesbury, Buckinghamshire; an archaeological trial trench evaluation*. Archaeological Solutions unpublished report No. 1918

Durham, B. 1978. 'Traces of a late Saxon Church at St Mary's Church, Aylesbury'. *Records of Buckinghamshire*. 20:4 621-627

English Heritage. 2009. *Aylesbury Historic Town Assessment Report*. Draft Report June 2009. English Heritage, Buckinghamshire County Council & Aylesbury Vale District Council.

Farley, M. 1979. Burials in Aylesbury and the early history of the town. In *Records of Buckinghamshire*. 21: 116-122

Farley, M., 1976, *Saxon and Mediaeval Walton, Aylesbury: Excavations 1973-4*. In *Records of Bucks* 20 (2)

Ford, S. & Howell, I., 2004, *Saxon and Bronze Age settlement at the Orchard site, Walton Road, Walton, Aylesbury, 1994*. In Ford, S., Howell, I., & Taylor, K., *The Archaeology of the Aylesbury-Chalgrove Gas Pipeline, and the Orchard, Walton Road, Aylesbury*. Thames Valley Archaeological Services Monograph 5, 60-88

Griffin, S., 1998, *Aylesbury in the Civil War*. Stuart Press

Hamerow, H. F., 1991, *Settlement mobility and the 'Middle Saxon shift': rural settlement and settlement patterns in Anglo-Saxon England*. In *Anglo-Saxon England* 20, 1-17

Hands, A. R., 1993, *Excavation at the Romano-British Roadside Settlement of Wilcote, Oxfordshire: I, excavations 1990-92*. BAR British Series 232, Oxford

Hanley, H. & Hunt, J., 1993, *Aylesbury: a pictorial history*. Phillimore, Chichester

Hawkins, A., 1989, *Medieval and post-medieval occupation at Teacher's Centre, Walton Road*. In Dalwood et al. 1989, 191-225

Institute of Field Archaeologists (IFA) 1994 (revised 2001) *Standard and Guidance for Archaeological Desk-Based Assessments*. IFA, Reading

Institute of Field Archaeologists 1994 (revised 2001) *Standard and Guidance for Archaeological Field Evaluations*. IFA, Reading

Kelly's Directory, 1935, *Kelly's Directory of Buckinghamshire*. Chapel River Press, Andover, Hants

Margary, I., 1973, *Roman Roads in Britain*. 3rd edition. John Baker, London

Morris, J. (ed.), 1978, *Domesday Book 13 Buckinghamshire*. Phillimore, Chichester

Newton, A. & Hallybone, C. 2006 *82 - 84 Walton Street, Aylesbury, Bucks: an interim site narrative*. Archaeological Solutions unpublished report No. 2085

O'Brien, L. 2005. *82-84 Walton Street (including the Long-Stay Car Park and Servicemen's Club) Aylesbury, Bucks. An Archaeological Desk-Based Assessment*. Archaeological Solutions Unpublished Report No 1669

Pevsner, N. & Williamson, E., 1960, (2nd edition 1994) *The Buildings of England: Buckinghamshire*. Penguin, Harmondsworth

Roseff, R. 1996 *Walton Brewery, Aylesbury; a watching brief*. Bucks County Museum Archaeological Service (BCMAS), Aylesbury

Soil Survey of England and Wales (SSEW) 1983 *Legend for the 1:250,000 Soil Map of England and Wales*. SSEW, Harpenden

Watkin, 1981, *Buckinghamshire: a Shell guide*. Faber & Faber, London

Zeepvat, R. J., 1994, *The Battle of Aylesbury: fact or fiction?* Bound typescript in Buckinghamshire Records and Local Studies Service

Williamson, I., 2006, *Bucks herald & Wilkins Solicitors Site, Aylesbury, Buckinghamshire*. AS Report No. 2064

APPENDIX 1

SITES AND MONUMENTS RECORD

The following sites are those that lie within the assessment area (c. 1 km radius of the site). The table has been compiled from data held by the Buckinghamshire Sites and Monuments Record (SMR-CAS).

SMR-CAS	NGR SP	Description
Early Neolithic to Romano-British		
0555500000	8221 1329	Police Houses, Walton Street excavation (1987). Residual flint tools and flakes. Excavation also recovered some Iron Age and Romano-British pottery.
<i>Iron Age</i>		
0180600000	8200 1350	Belgic coin. Uninscribed silver stater of Durotriges. Found 1849
0180601000	8200 1350	Belgic coin. Dobunnic triple-tailed horse stater with plain obverse
0180603000	8200 1350	Gallo-Belgic E 'Morini' gold stater. Found c. 1902
<i>Roman</i>		
0025000000	8200 1350	Small brass Roman coin. Possibly Valens. Dug up in a garden in Aylesbury
0025001000	8200 1350	Roman coin. Third brass of Constantine with a rare reverse. "Beati Tranquillatus" and altar inscribed "Volis XX. In exergue P. LON" Probably found near Aylesbury
0025002000	8200 1350	Roman coin, probably found near Aylesbury
0025003000	8200 1350	Bronze Roman Constantinus coin. Probably found in Aylesbury
0025004000	8200 1350	Roman coin. Third brass Victorinus
0029100001	8178 1396	Roman pottery, spindles etc. dug up in Granville Street near St. Mary's Church. Exhibited at Buckingham in 1855 with silver and copper coins for which there is no evidence linking them to Granville Street.
0105003000	8200 1400	Line of Roman Akeman Street. Running from NGR SP 7931 1507 to 6420 1990. Much of its course is followed by the modern A41
0181200000	8200 1350	A bucket more than half full of Roman coins was found on a farm near Aylesbury, about 1938. The coins were to be thrown away by the farmer but 36 of them were rescued. This collection included coins of Magnentius, Constantius II, Valentinian I and II, Valens, Gratian and the house of Valentinian. On this evidence they were probably buried c. 387AD or soon after.
0182500000 0182500001 0182500002 0182501000	8194 1362	8-10 Human skeletons found in September 1925 behind Lucas' Shop, No. 10 Walton Street. 20 small pottery fragments of Romano-British to 17 th C date found with skeletons. Further burials were found in 1936 in the garden of Lucas' shop. All were believed to be adult

SMR-CAS	NGR SP	Description
		males orientated with feet to the east. A pick of unusual form, probably of later Roman date, formed from Red Deer antler was found with the burials
0193100000	8229 1369	Roman coin found in Highbridge Walk, Aylesbury in c. 1932. Possibly a coin of Vespasian but later re-interpreted as a follis of the House of Constantine AD 330-335. The Obverse is marked "VRBS ROMA" whilst the reverse bears the Wolf and twins
0487200000 0487201000	8204 1375	Bulls Head Development site watching brief (1980-1). Recorded LIA/early Roman ditch and pit and pottery
<i>Anglo-Saxon</i>		
0555500000	8221 1329	Police Houses, Walton Street excavation (1987). Late Saxon tenement boundaries; medieval manorial enclosure ditch, backyard deposits
0610800000	8230 1335	Excavation at the Orchard Site, off Walton Road (1994-1995), revealed Middle Saxon settlement remains dating from the late 6 th to early 8 th centuries. 10 structures were identified comprising 8 post-built halls, 1 sunken floored building and 1 foundation trench building.
<i>Medieval</i>		
0025400000	8211 1346	Groat of Henry VII and groat of Edward IV found in the garden of 32 Walton Street in 1920
0028000000	8190 1369	Bourbon Street: Phoenix, Jones & Cocks Silver Street: Nos. 11, 12, 14, 16, 18 & 20 Market Square: Nos. 17, 19, 31, 33, 35, 37, 39, 45, 47, Cross Keys PH 15th to 18th century timber framed houses recorded during demolition in Aug-Dec 1964.
0028001000	8190 1369	13th and 18th century pottery recovered from Silver Street
0035400000	8195 1373	Market Square market place. Noted in early 16th century. Possibly late Saxon (M Farley/JT Smith correspondence, 1981)
0035400001	8195 1373	Market Square cockpit, upper floor of old market house
0035401000	8195 1373	Market Square market hall. Market house, erected c. 1530 and demolished c. 1808, when octagonal building was erected. This demolished and present clock tower erected in 1866 or 1876
0035402000	8195 1373	Market Square stocks, west of market house
0035403000	8195 1373	Market Square pillory, between clock tower and county hall
0562900000 0562900001 0562900002 0562900003	8215 1341	Medieval artefact scatter. Including medieval pottery sherds, animal bone and a leather shoe sole
<i>Post-medieval</i>		
0044800000	81950 13645	Sir John Baldwin was the greatest benefactor this town ever had, the Causey leading towards London being rais'd at his Cost. The road described is probably the present Wendover Road, though it is possible that the

SMR-CAS	NGR SP	Description
		London Road was via Walton Street, Walton Road and the present A41
0180800000	82180 13410	(Quoting Charter of Incorporation of the Town of Aylesbury, 1554) – “...the said Borough of Aylesbury...shall extend and stretch forth...in length from the bridge called Glasyers Bridge unto the bridge called Stannebridge, and in breadth from the bridge called Holman’s Bridge unto the bridge called Wallbridge.” Glassweir Bridge divided the town from Walton hamlet, and was generally called ‘Glazier’s Bridge’. It is adjoining the Walton Brewery and was one of the old Corporation boundaries, Walton hamlet not being included in the borough. Of late years this has been known as Walton Bridge, as distinct from the Bear-Brook Bridge
0181000000	8200 1368	White Hart Inn, 17th to 19th century. On site of corn exchange. Modern White Hart built 1814 and demolished 1864 to make way for Corn Exchange and buildings
1209000000	8198 1363	3 Walton Street. White Swan Inn late 17th century with 18th century refronting. Grade II listed building
<i>18th and 19th century</i>		
0035001000	8198 1365	Prison adjacent to County Hall. Late 13th/early 14th century jail is noted. New prison built at Berton Road, 1844.
0035406001	8197 1369	Two flanking Lion statues. Painted bronze, lead or cast iron on stone pedestals. Both couchant, 1 asleep, 1 awake with open mouth. Grade II listed structure
0099600000	8199 1367	County Hall, Market Square. New County Hall, built about 1727 and complete 1740, attributed to Vanburgh
0207000000	81998 13631	5-7 Walton Street. Two Victorian wells excavated during construction work in 1973. Well A stone lined, located at SP 82000 13631. Well B brick lined, located at SP 81996 13628
0207000001	81998 13631	19 th century black jug of Buckland type fabric and much Victorian debris brought up from wells
0295200000 0295201000	8690 1400	Aylesbury branch of Grand Junction (later Grand Union) Canal. Canal authorised 1794, after several disputes opened c. May 1815. Length: c. 6 miles. 16 locks fall 94 ft 8in to Aylesbury from Marsworth on main canal line
0411900000 0411901000 0411902000	8819 3200 running from 933 136 to 800 418	Grand Junction, later Grand Union, Canal
0470100000	8214 1343	Baptist Chapel. The Particular Baptists wanted a building of their own, separate from the Baker’s Lane Chapel and in 1828 building started of their Walton Street Chapel. Chapel built 1828, altered 1895, demolished 1966. Site later occupied by a garage
0470101000	8214 1343	Particular Baptist’s burial ground

SMR-CAS	NGR SP	Description
0672200000	822 135	Aylesbury canal basin. A mission hut at the end of the canal was set up by Rev. Pennefather (vicar of Walton Church from 1843-1853) to mission to the boatpeople. Photograph of the boatman's chapel c.1920. Exact location unknown
1202500000	8197 1365	The Bell Hotel. Early to mid 19 th C front probably concealing earlier structure. Grade II listed building.
1202600000	8198 1372	32 Market Square. Green Man Public House. Grade II listed building
1202700000	8199 1371	34 Market Square. House and shop. Grade II listed building
1202800000	8200 1370	36 Market Square. Inn and shop. Grade II listed building
1209100000	8205 1356	23a Walton Street. Early 19 th C House. Grade II listed building
<i>Modern</i>		
0035406000	8197 1369	1907 statue of Charles Compton, 3 rd Lord Chesham by J. Tweed. Bronze on Stone pedestal. Grade II listed
0672100000	8224 1358	Coal Fired Power Station - Aylesbury Urban District Council set up its own generating works in 1915. Originally designed for the purpose of street lighting, it made available a cheap source of power for industry. Generating hall, wharf-side building and some other ancillary buildings still standing in April 1999, other buildings demolished. Buildings disused and boarded up, site in use as temporary car park
0672101000	8224 1357	Former Electricity Depot, off Exchange Street. Tall brick generating house with four large arched windows (bricked and boarded up) visible along south-west and north-east sides and a small circular window high up in the north-western gable. Much of the rest of the building obscured by later extension, although the lower, hipped-roofed extension on the northwest may be original?
0672102000	8224 1353	Former Electricity Depot, off Exchange Street. Two-storey brick wharf-side building with large double access doors at front and rear and landing stage, presumably built in 1915 to unload coal from barges in the canal basin, for use in the electricity depot. Presumably the wharf-side building house a hoist or small crane and possibly offices?
<i>Undated</i>		
0624600000	8226 1348	Brewery Site, Walton. Charcoal found in layer overlain by peaty topsoil, underneath layers with charcoal were gravels of the original river bed of California Brook. No archaeological features were found. Presence of charcoal indicates deposits are post-glacial in date
Non-antiquity		
0261000000	8250 1300	Aylesbury

APPENDIX 2 SPECIALISTS REPORTS

Plant Remains

By Anita Radini

Introduction

Three soil samples produced flots which were investigated for the bio-archaeological evidence.

Processing methods

The processing of the sample was carried out by staff at Archaeological Solutions. The sample was sieved using a 1mm aperture mesh for the retention of the heavy residue with flotation onto a 0.5mm mesh. The resulting flots were packed in self-seal polythene bags and submitted for this assessment. The residues were kept at Archaeological Solutions and were not found to contain any artefacts.

Table.1: Samples details

Sample	Size (l)	Feature	Trench	Flot (ml)	Plant remains
2	30	1005		5ml	charcoal flakes and small modern root fragments
3	30	1016	1,2	20ml	charcoal flakes and small modern root fragments
5	30	1017	1,2	20ml	charcoal flakes and small modern root fragments

Results and conclusion

All flots screened for this analysis came from alluvium contexts. The flots consisted mainly in sand with a degree of deteriorated organic matter. Small flakes of charcoal were the only plant remains found in the flots and they were in low quantity. Modern root fragments were also recovered from all flots, those fragments appeared very small in size. Due to a significant lack of archaeobotanical evidence the analysis of these flots is negative and no further work is required.

Environmental analysis.

The pollen and diatoms

By Dr. Rob Scaife

Introduction

Excavations at Waterside, Aylesbury revealed sequences of Holocene alluvial silt-clay deposited on Pleistocene gravels. Because of their deposition under fluvial conditions and present water-logged character, it was felt that sampling should be undertaken for recovery of environmental materials and thus, to obtain information on the local past local environments. The principal aims of the environmental strategy were as follows.

- * To obtain monolith profiles from the excavated sections which would provide the necessary environmental samples for a range of analyses.
- * To examine and describe the stratigraphy in detail, in the laboratory.
- * Sub-sampling for pollen analysis and thus reconstruction of the past vegetation and environment represented in the time-span of sediment deposition.
- * Sub-sampling for diatoms to examine the status of the fluvial habitat (trophic status, pollution etc.).
- * Recovery of any material which might allow radiocarbon dating and any other visible ecofacts.

Three monolith profiles were obtained from the excavation which have now been examined for stratigraphy, pollen and diatoms. Some pollen was recovered from more humic contexts but, however, preservation is poor with absolute numbers and evidence of differential preservation. Diatoms were absent. This report presents the results of this phase of the analysis.

Previous palaeo-environmental studies have been carried out at the nearby sites of the Buckinghamshire, Herald and Wilkins solicitors site (Scaife 2006a) and Wilton Street (Scaife 2006b) developments. The former is in close proximity to the current Water Side development and similarly lies on the floodplain alluvium of Bear Brook. The latter is at slightly higher elevation and only revealed a small fringe of alluvium resting on Jurassic bedrock and Devensian solifluction deposits. Pollen investigations were undertaken on sediments from both of these sites. Pollen was unfortunately very poorly preserved or absent with only occasional very robust pollen grains recovered. These comprised largely Lactucoideae (dandelion types), a clear indication of poor pollen preserving conditions and differential preservation in favour of the most robust types. This is, diagnostic of alluvial sediments which have always presented problems in terms of low pollen concentrations and, where pollen is present, (always sparsely) the taphonomy is complex (Burrin and Scaife 1984, 1988; Scaife and Burrin 1992). It is for this reason that such minerogenic,

alluvial sediments are not frequently analysed. However, useful information can be gained in some circumstances and in spite of the poor preservation found at the nearby sites, it was decided that sampling should be undertaken and further attempts made to obtain a pollen from the most recent Water Side site.

3.) Stratigraphy

The stratigraphy of the three columns examined is as follows. Colours given are from a standard Munsell colour chart.

3.a.) Trench 1 (top of profile at 1.05m below land surface)

0cm – 3cm	Grey sandy silt. 10YR 3/1
3cm – 21cm	Grey silt. 10YR 4/1
21cm – 38cm	Brown, mottled alluvial silt. 10YR 4/2
38cm – 85cm	Homogeneous brown alluvium. 10YR 5/8.
85cm – 88cm	Transition.
88cm – 100cm	Silty sand. Paler than above. 10YR 6/6.

3.b.) Trench 2 (top of profile at 0.90m below ground surface.

Contexts (1012) (1021) (1016) (1017).

0cm – 35cm	Humic sand/gritty silt with occasional pale mottling. Red tile fragment at 12cm.
35cm – 52cm	Humic horizon. Fibrous monocot remains. Possibly straw.
52cm – 77cm	Very dark, steel grey silt. Oxidising to pale brown. Also monocotyledonous remains. 10YR 4/1
77cm – 100cm	Buff, clay silt and sand.

3.c.) Trench 3 (top of profile at 1.10m below ground surface.

Contexts (1005) (1006)

0cm – 6cm	Black humic gritty silt with flints to 8cm. 10YR 3/1. Red brick
-----------	---

	fragment at 24cm.
6cm – 36cm	Clay silt with occasional small flints (10Yr 4/1). 10YR 4/1.
36cm – 62cm	Homogeneous brown loam. Red/brown 10YR 5/8.
62cm – 95cm	As above slightly darker.
95cm – 128cm	Homogeneous brown loam with sandy inclusions. Charcoal fragments at 90cm – 101cm.
128cm – 136cm	Fine sand with grey mottling.

3.) *Pollen analysis*

Pollen assessment analysis was carried out on all of the three monolith columns and spanning all of the different sedimentary types/facies. Pollen was obtained from a small number of the more humic sediments/samples.

3.a.) *Pollen method*

The three monolith profiles were described and sub-sampled for sub-fossil pollen and diatoms in the laboratory. Standard pollen extraction techniques were used (Moore and Webb 1978; Moore *et al.* 1992). However, because of previous experience of poor pollen preservation and absence in nearby sites, samples of 3-4ml were used rather than standard 1-2ml. Micromesh sieving at 10 μ was also used to aid removal of clay prior to hydrofluoric acid digestion.

Taxonomy, in general, follows that of Moore and Webb (1978) modified according to Bennett *et al.* (1994) for pollen types and Stace (1992) for plant descriptions. These procedures were carried out in the Palaeoecology Laboratory of the School of Geography, University of Southampton.

3.b.) *The pollen data.*

Of the 16 samples prepared and analysed from the three profiles, 7 produced pollen in countable numbers but with difficulty and one sample very marginally (column 2, 56cm). These samples equate largely with the more humic, horizons at the top of the profile/monolith 3 and in columns 2, from a very organic context which, as noted, may be a straw deposit (but may be an ephemeral grass/reed pool). Pollen was totally absent in the homogeneous, inorganic, alluvial sediments of the lower levels of the stratigraphical sequences. Pollen was very sparse in all samples including the straw horizon of monolith profile <2>.

Pollen data obtained are given in table 1 below. In all of the samples where pollen was recovered, the pollen spectra are dominated by herbs of which

Poaceae (grasses) and Lactucoideae are the most important taxa. The most productive samples proved to be the humic horizon of trench 2, 35-52cm. Here, cereal type pollen is important in the humic (straw ?). This is thought to be from cereals but, however, *Glyceria fluitans* has similarly large pollen grains and grows in wet habitats. Cereal type pollen was also found in important numbers at a specific level (4cm) in the upper gritty humic soil of trench 3. The humic horizon of trench 2 also contains Cyperaceae (sedges) adding to the view that this was either a phase of wet fen or more probably dumped straw/fodder/floor coverings perhaps domestic waste. No other possible cultigens were found.

The substantial numbers of Lactucoideae (dandelion types) are typical of poor pollen preserving conditions such as found here, where this taxon is differentially preserved due to its robust exine and longer residence time in oxidising sediments. Naturally this produces skewed pollen assemblages since less robust forms are differentially destroyed/absent. Lactucoideae may, however, be indicative of grassland/pasture. This would be in accord with the dominance of Poaceae in the pollen spectra. Because of the robustness of Lactucoideae pollen, and its long residence time in soils and sediments there is also the tendency for reworking of older pollen.

There are diminutive numbers of tree and shrub pollen with only sporadic occurrences of *Pinus* (pine), *Quercus* (oak), *Ulmus* (elm), *Carpinus* (hornbeam) and *Salix* (willow). The paucity of these suggests that the environment was open at least within the airborne and fluvial pollen catchments. *Pinus* is not regarded of significance because of its copious production of anemophilous pollen and propensity for over representation in sediments of fluvial derivation. *Salix* contrasts with this and was probably growing nearby along the fringes of the alluvial floodplain; although note the possibility of fluvial transport from growth further up the river catchment.

Spores of Pteridophytes are typical of fluvial sediments due to their robust form (Peck 1973) and over represented due to their reworking and deposition in periods of high discharge and overbank deposition. Here, these include monolete forms (*Dryopteris* type/typical ferns and *Polypodium*/polypody fern) and *Pteridium aquilinum* (bracken) and *Equisetum* (horsetail fern).

Column	1	1	2	2	2	2	3	3
Depth cm	2	16	34	40	48	56	4	24
Trees & Shrubs								
<i>Pinus</i>		6	1					2
<i>Quercus</i>			3		6			

<i>Ulmus</i>			1		1			1
<i>Carpinus</i>								1
<i>Alnus</i>				1				
<i>Salix</i>			2		1	1		
Herbs								
<i>Ranunculus</i> type				1				
Brassicaceae					1			
<i>Sinapis</i> type	1		1	1	5			
Chenopodiaceae					1			
Fabaceae	1							
<i>Trifolium</i> type			1					
<i>Viola</i>			1					
<i>Filipendula</i>				1	1			
<i>Rumex</i>				1				
Scrophulariaceae			1				3	
<i>Veronica</i> type				1				
<i>Plantago lanceolata</i>			1					
Lactucoideae	7	32	3	1	1	5		54
Poaceae	33	14	66	81	58	7	174	33
Cereal type	3		13	8	26		24	
Cyperaceae				1	3	9		
Unidentified/degraded	3	1		1	1	1		5
Spores								
<i>Dryopteris</i> type		1	1		3	2	24	2
<i>Pteridium aquilinum</i>	6	5		1		1	3	5
<i>Equisetum</i>					1			
<i>Polypodium</i>	1							
Miscellaneous								
Pre-Quaternary palynomorphs	1							

Table 1: Pollen data obtained from trenches 1-3

3.c.) Discussion

Although some pollen has been recovered, this is poorly preserved and sparse even in those levels where counts have been obtained. Those samples which produced the most satisfactory pollen assemblages are the upper humic old land surface at the top of monolith <3> and a possible deposit of grass or straw in monolith <2>. Both of these are dominated by grass pollen including that from cereals. The latter clearly suggests the growth and use of cereals. However, the derivation (taphonomy) of cereal pollen may, however, be more complex since it may derive from secondary sources rather than directly from cultivation. For example, it is possible that cereal pollen in the soil profile of monolith <3> may be from dumped human

and animal faecal debris whilst the cereal pollen in monolith <2> clearly comes from the possible straw deposit. The more minerogenic sediments were largely devoid of pollen and where present there is evidence of strong differential preservation in favour of robust pollen (esp. dandelion types). Detailed interpretation is, therefore, not possible and only broad inferences can be made.

The pollen recovered from a small number of samples from the 3 monoliths clearly shows an open environment with no local woodland. The pollen, where present, appears to come largely from the floodplain communities or from possible dumped organic material. Large numbers of Lactucoideae (dandelion types) are indicative of grassland/pasture but, however, apart from being differentially preserved may also have derived from reworked soil and sediment.

At present there is no radiocarbon dating of the profile. From the pollen data presented it is highly probable that those horizons from which pollen has been recovered are of historic age and probably very recent. This is also indicated by the presence of red brick/tile fragments in the upper levels.

4.) *Diatoms*

Sub-samples for diatom analysis were taken from monolith <1> at 8cm, 16cm and 32cm; monolith <2> at 34cm, 48cm, 64c and 72cm; monolith <3> at 4cm, 32cm and 70cm.

Preparation: The extraction technique used Hydrogen Peroxide for digestion of humic/organic material. Samples were then air dried on microscope cover-slips and mounted on microscope slide using Naphrax mounting medium. Examination was carried out at high power x400 and x1000 using a biological microscope with phase contrast.

Results: All ten samples examined for diatoms were sterile. This was similarly the case in samples examined from the alluvial sediments at the nearby Buckinghamshire Herald & Wilkins Solicitors Site. Other siliceous material included small numbers/occasional plant opaline phytoliths. These comprised non-ornamented, straight rods, wavy and spiny rods from Poaceae which were probably grasses from the floodplain.

5.) *Summary and Conclusions*

The following principal points have been made in this study.

* Samples from the differing contexts of three monolith profiles have been assessed for pollen and diatom content with the aim of providing palaeoenvironmental data.

- * Pollen has been recovered from the more humic sediments. Diatoms were absent in all samples examined.
- * Pollen preservation is poor and numbers are very sparse.
- * Grasses including cereal type pollen is most important along with dandelion types. The latter shows extreme differential preservation. The former may be from secondary sources including dumped domestic material rather than directly from local cereal cultivation
- * The environment was open with no evidence of woodland local to the site.
- * The bulk of the sediments are typical floodplain, overbank alluvium, hence the poor pollen preservation.
- * The age of those more humic samples which contained pollen are probably of recent age.

Suggested future work: Pollen has been obtained from this site, contrasting with the two other sites also examined in the vicinity. However, pollen numbers are small and preservation is poor. The only sequence which might warrant additional analysis is the humic monocot. deposit of monolith <2>. However, it is unlikely that much useful additional data would be obtained from larger pollen counts. If, however this is considered necessary, a radiocarbon date must also be obtained and some examination of the plant macrofossil-content.

References

- Bennett, K.D., Whittington, G. and Edwards, K.J. 1994 'Recent plant nomenclatural changes and pollen morphology in the British Isles'. *Quaternary Newsletter* 73,1-6.
- Burrin, P.J. and Scaife, R.G. 1984 'Aspects of Holocene valley sedimentation and floodplain development in southern England'. *Proceedings of the Geologists' Association* 95, 81-96.
- Burrin, P.J. and Scaife, R.G. 1988 'Environmental thresholds, catastrophe theory and landscape sensitivity: their relevance to the impact of man on valley alluviation'. pp. 211-232 in Bintcliffe, J., Davidson, D.A. and Grant, E.G. *Conceptual Issues in Environmental Archaeology*. Edinburgh University Press.
- Harrison, S. 2004. 'The Icknield Way: some queries' *Archaeological Journal* 160, 1-22.
- Moore, P.D. and Webb, J.A. 1978 *An Illustrated Guide to Pollen Analysis*. London: Hodder and Stoughton.

Moore, P.D., Webb, J.A. and Collinson, M.E. 1991 *Pollen Analysis* Second edition. Oxford: Blackwell Scientific.

Peck, R. 1973 'Pollen budget studies in a small Yorkshire catchment'. pp. 43-60 in West, R.G. and Birks, H.J.B. (eds.) *Quaternary Plant Ecology*. Oxford: Blackwell.

Scaife, R.G. and Burrin, P.J. 1992 'Archaeological inferences from alluvial sediments: some findings from southern England'. pp. 75-91 in Needham, S. and Macklin, M. (eds.) *Alluvial Archaeology in Britain*. Oxbow Monograph 27.

Scaife, R.G. 2006a 'Aylesbury, Wilson Street (AS940); Environmental analysis'. Report to Archaeological Solutions.

Scaife, R.G. 2006b 'Bucks. Herald & Wilkins Solicitors Site, Aylesbury: The stratigraphy and pollen analysis'. Report to Archaeological Solutions.

Scaife, R.G. 2009 'Aylesbury Water Side (AS 1245): Sampling for Environmental Archaeology'. Report to Archaeological Solutions.

Stace, C. 1991 *New Flora of the British Isles*. Cambridge: Cambridge University Press

PHOTOGRAPHIC INDEX



DP 1. Waterside redevelopment site, Exchange Street, Aylesbury, Bucks. View S.



DP 2. The site. View N.



DP 3. Trench 1. View SE.



DP 4. Trench 1, NW end. View NE.



DP 5. Trench 1, SE end. Sample section. View NE.



DP 6. Trench 1, NW end. Sample 6. View NNE.



DP 7. Trench 2. View NE.



DP 8. Trench 2, NE end. Sample section. View SE.



DP 9. Trench 2, SW end. Sample section. View SE.



DP 10. Trench 2, SW end. Sample 4. View SE.



DP 11. Trench 3. View NE.



DP 12. Trench 3. View SW.



DP 13. Trench 3, Wall M1007. View S.



DP 14. Trench 3. View SW after demolition of M1007.



DP 15. Trench 3, NE end. Sample section. View NW.



DP 16. Trench 3, SW end. Sample section. View NW.

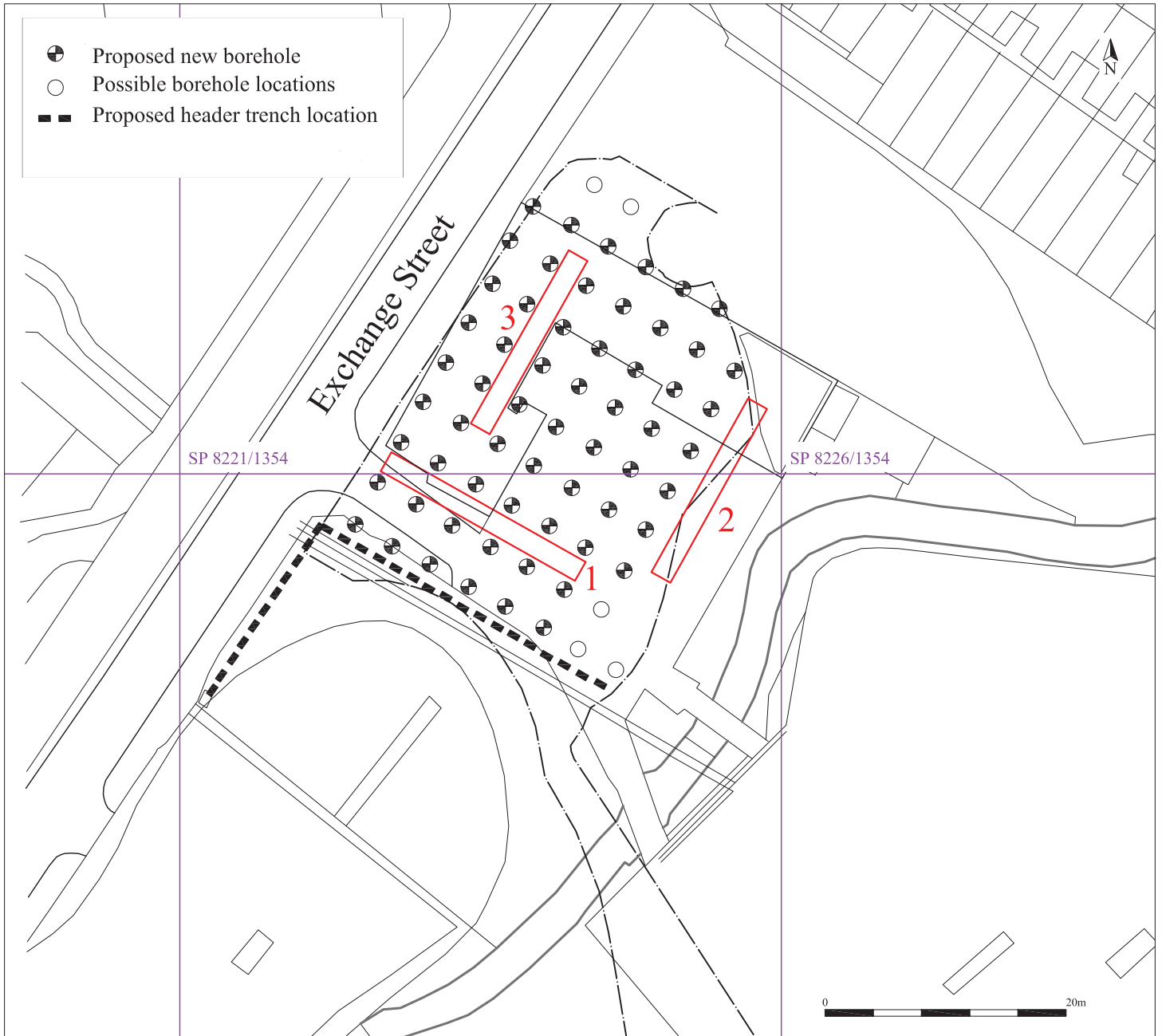


DP 17. Trench 3, SW end. Sample 1. View NW.



Reproduced from the 1999 Ordnance Survey 1:25000 map with the permission of Her Majesty's Stationery Office. Crown copyright Archaeological Solutions Ltd Licence number 100036680

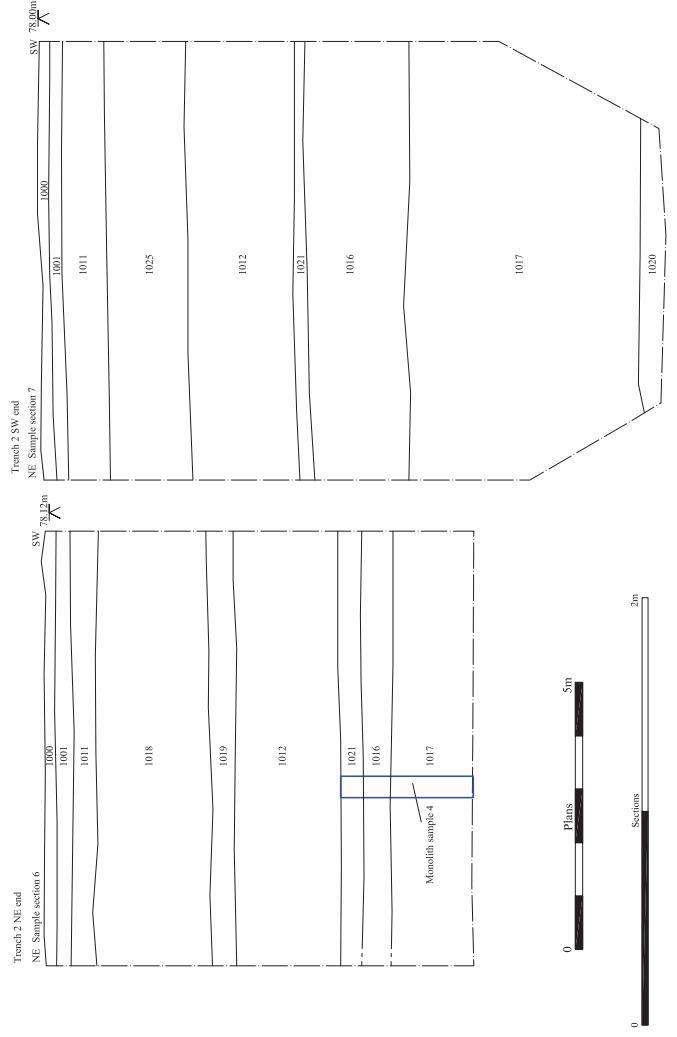
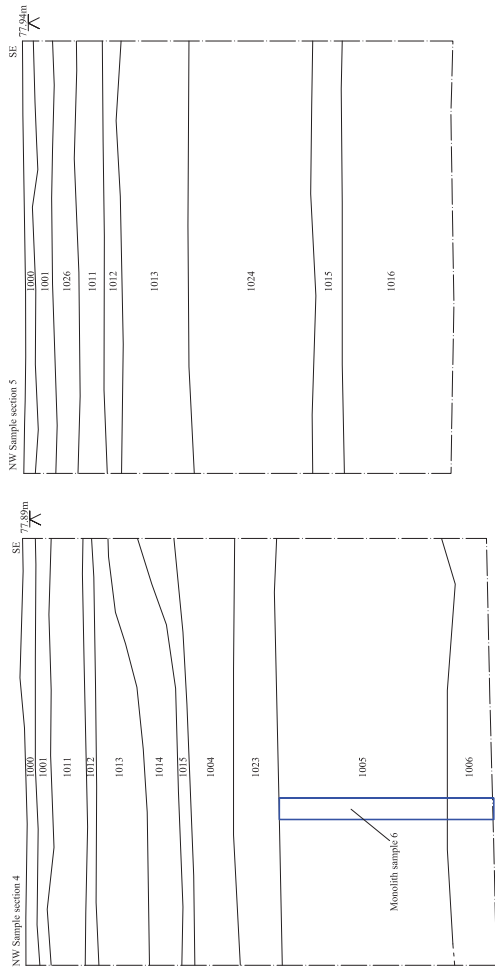
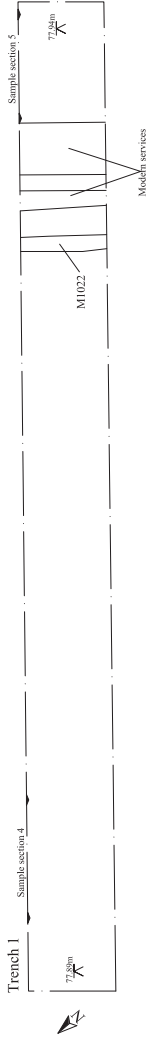
Archaeological Solutions Ltd
Fig. 1 Site location plan
 Scale 1:25,000 at A4



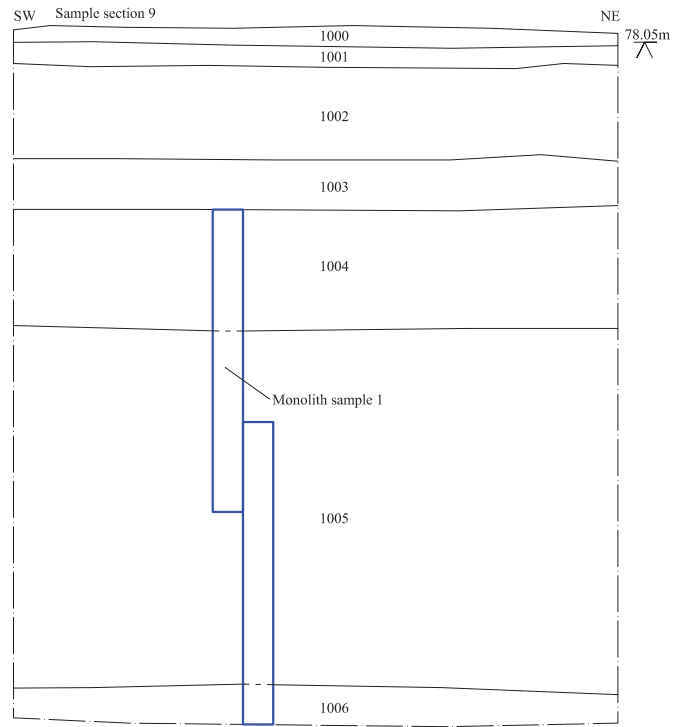
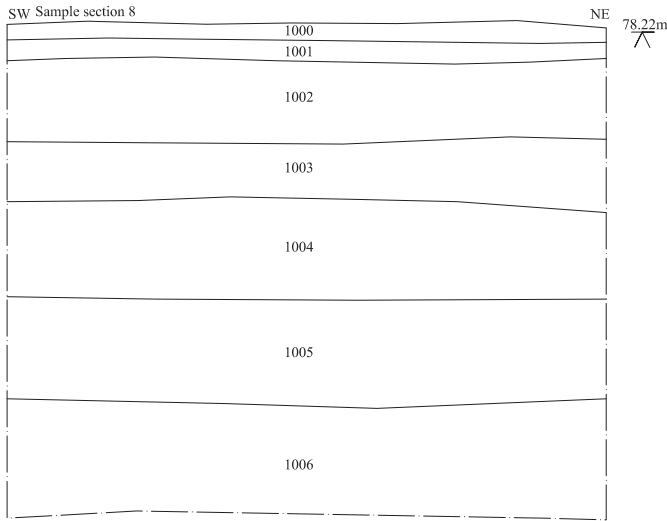
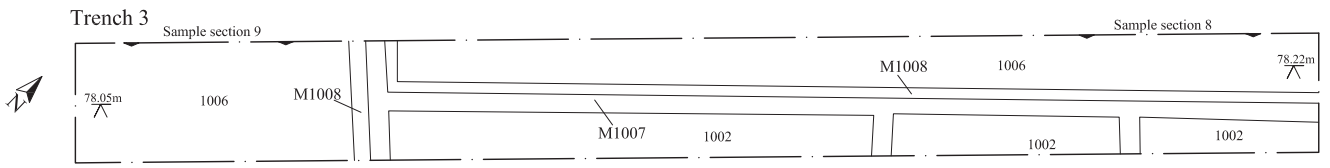
Archaeological Solutions Ltd

Fig. 2 Trench location plan

Scale 1:500 at A4



Archaeological Solutions Ltd
Fig. 3 Trench plans and sections
 Scale plans at 1:100 and sections at 1:25 at A3



0 Plans 5m

0 Sections 2m

Archaeological Solutions Ltd

Fig. 4 Trench plans and sections

Scale plans at 1:100 and sections at 1:25 at A4