
ARCHAEOLOGICAL SOLUTIONS LTD

**82 – 84 WALTON STREET, AYLESBURY,
BUCKINGHAMSHIRE**

RESEARCH ARCHIVE REPORT

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NGR: SP 8225 1325	Report No: 3247
Borough: Aylesbury Vale	Site Code: AS970
Approved: Claire Halpin MIFA	Project No. 2101
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OASIS SUMMARY SHEET

Project details			
Project name	<i>82 – 84 Walton Street, Aylesbury, Buckinghamshire</i>		
<i>In October and November 2005, May and June 2006 and September 2008, Archaeological Solutions Ltd (AS) carried out a programme of archaeological investigations at 82 - 84 Walton Street, Aylesbury, Buckinghamshire (centred on NGR SP 8225 1325; Figs. 1 & 2). The investigations identified four phases of land use spanning the late Bronze Age through early modern periods, but the main periods of activity were Phases 2 and 3; from the middle Saxon to medieval periods (c. AD 550 to 1300).</i>			
<i>Phase 1 activity dated to the late Bronze Age/ early Iron Age (c. 1300 to 400BC) and comprised a single pit situated in the northern corner of the site. Three further pits contained late Bronze Age/ early Iron Age pottery, but in all instances this is thought to have been residual. Phase 2 activity dated to the middle Saxon period (c. AD 550 to 850) and is represented by a group of large quarry pits thought to have been related to chalk extraction. These large pits were situated in the central part of the site and were cut by an extensive boundary system thought to have been constructed in the late Saxon/ medieval period (Phase 3 – c. AD 850 – 1300). This rectilinear boundary system represents the formal organisation of the land around Walton Street. It is thought that the boundaries were constructed for the containment of livestock as documentary sources reveal that both manorial and peasant owned sheep were grazed in the area during the medieval period. Phase 4 activity dated to the early modern period (AD 1800 to 1900) and comprised a small number of ditches and pits relating to the development of Walton Street as a modern urban settlement.</i>			
Project dates (fieldwork)	<i>October and November 2005, May and June 2006 and September 2008</i>		
Previous work (Y/N/?)	<i>Y</i>	Future work (Y/N/?)	<i>N</i>
P. number	<i>2101</i>	Site code	<i>AS940</i>
Type of project	<i>Trial trench evaluation, followed by an open area excavation</i>		
Site status			
Current land use	<i>Long stay car park, demolished offices and servicemen's club</i>		
Planned development	<i>Residential, multi-storey car park and new servicemen's club</i>		
Main features (+dates)	<i>Iron Age pits, middle Saxon quarry pits and a late Saxon/ medieval boundary system and early modern pits and ditches</i>		
Significant finds (+dates)	<i>A fragmented Anglo-Saxon comb and glass bead</i>		
Project location			
County/ District/ Parish	<i>Buckinghamshire</i>	<i>Aylesbury</i>	<i>Walton</i>
HER/ SMR for area	<i>Buckinghamshire</i>		
Post code (if known)			
Area of site	<i>1.68ha</i>		
NGR	<i>SP 8225 1325</i>		
Height AOD (max/ min)	<i>75.56m AOD</i>		
Project creators			
Brief issued by	<i>Buckinghamshire County Council</i>		
Project supervisor/s (PO)	<i>Josh Williams, Claire Hallybone, Zbigniew Pozorski</i>		
Funded by	<i>Crest Nicholson Ltd</i>		
Full title	<i>82 - 84 Walton Street, Aylesbury, Buckinghamshire. Research Archive Report</i>		
Authors	<i>Pip Stone</i>		
Report no.	<i>3247</i>		
Date (of report)	<i>February 2009</i>		

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82-84 WALTON STREET, AYLESBURY, BUCKINGHAMSHIRE: RESEARCH ARCHIVE REPORT

1 INTRODUCTION

This report comprises the research archive for archaeological investigations undertaken at 82 - 84 Walton Street, Aylesbury, Buckinghamshire (centred on NGR SP 8225 1325; Figs. 1, 2 and 3). The investigations were carried out by Archaeological Solutions Ltd (formerly the Hertfordshire Archaeological Trust). A trial trench evaluation was undertaken in October and November 2005, and was followed by open area excavations between May and June 2006 and in September 2008. The work was commissioned by Crest Nicholson Ltd and was undertaken prior to residential development, and in response to a brief issued by Buckinghamshire County Archaeology Service (BCAS, dated 03/04/2006) (Planning Ref: 3/0/2271). The following report has been compiled in accordance with EH MAP 2, Section 7 and Appendix 6. It follows the Interim Site Narratives (Pozorski 2008 and Hallybone and Newton 2006), Evaluation Report (Doyle and Williams 2005) and the Post-Excavation Assessment and Updated Project Design (Newton 2006).

The purpose of this Research Archive Report is to describe, analyse and interpret the significant archaeological remains found during the investigations; full details of all features and contexts (including, for example, modern and undated features) can be found in the Evaluation Report and Interim Site Narratives. The following report is supported by catalogues and databases compiled during post-excavation analysis (on the accompanying CD), plans and section drawings (Figs. 1 – 17) and illustrations drawn during post-excavation and finds analysis (Figs. 18 - 21).

2 SITE NARRATIVE

2.1 Overview

In October and November 2005, May and June 2006 and September 2008, Archaeological Solutions Ltd (AS) carried out a programme of archaeological investigations at 82 - 84 Walton Street, Aylesbury, Buckinghamshire (centred on NGR SP 8225 1325; Figs. 1, 2 and 3). The investigations were commissioned by Crest Nicholson Ltd and was undertaken prior to residential development, and in response to a brief issued by Buckinghamshire County Archaeology Service (BCAS, dated 03/04/2006) (Planning Ref: 3/0/2271).

The site lies at an elevation of *c.* 80m OD. It slopes down to the north-west, into the shallow valley of the California Brook, and rises slightly towards Walton Street. The historic core of Aylesbury is situated on an outcrop of soft Portland limestone; the geology of the surrounding area is largely Jurassic Kimmeridge Clay. 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 of which are suitable for growing winter cereals with some dairying (SSEW 1983). To the south-east is a band of clay upland, beyond

which is the clay-with-flints of the Chiltern Hills (SSEW 1983).

2.2 Historical and archaeological background

2.2.1 Neolithic (c. 4300 - 2100 BC) and Bronze Age (c. 2100 - 750BC)

There is little evidence to suggest that there was any significant activity around Aylesbury during the early prehistoric period. The Lower Icknield Way, thought to have been an important line of communication in prehistoric times, passes c. 15km east of Aylesbury. Evidence of Neolithic activity is present but not extensive in the area directly surrounding the site; finds include a flint side scraper, two stone axes and a few sherds of pottery. The mid to late Bronze Age is better-attested: four or five possible middle Bronze Age to early Iron Age post-built roundhouses, with associated pits, pottery and struck flint, have been identified at Orchard Road, c. 110m east of the present site (Fig. 3; CAS¹ 6724; Ford and Howell 2004, 62-4, 84-7). Middle to late Bronze Age funerary remains, including a small cremation cemetery, pits, postholes, hearths and a boundary gully, were found during excavations at Walton Lodge Lane, c. 150m south-east of the site, in 1993 (CAS 6107; Bonner 1994).

2.2.2 Iron Age (c. 750 BC - AD 43)

In the late pre-Roman Iron Age, the area around the Vale of Aylesbury was occupied by the Catuvellauni tribe and is thought to have formed part of a territory covering much of Hertfordshire and Essex (BCC 2000, 6; Holgate 1995). An Iron Age hillfort was located on the rounded outcrop of Portland limestone which underlies the historic core of Aylesbury. It utilised the hill's natural topographical defences and augmented them with the construction of a ditch around the crest (Hanley and Hunt 1993). There is substantial Iron Age evidence from the hilltop, including human and animal remains and pottery. However, the main area of prehistoric activity lay to the south, east and west of the defended area. The ditches of the Iron Age hillfort were eventually filled in, but were re-cut in the Anglo-Saxon period to form the *burh* of Aylesbury (Farley 1986, 189). A possible late Iron Age to Romano-British farmstead and agricultural settlement has been excavated c. 250m east of the site (CAS 6377).

2.2.3 Roman (c. AD 43 - 410)

Aylesbury lies on the line of Akeman Street (presently the A41; CAS 10500), the Roman road that branched from Watling Street south of Verulamium (St Albans) and ran north-west, linking London to Chester (Margary 1973). Excavations c. 180m east of the present site, at the Walton Road Stores, found a 1st-century timber building, an oven-like structure, coaxial boundary features, twelve 1st-century AD inhumations and quantities of early Romano-British pottery, as well as residual Iron Age sherds and some medieval pottery (BCC 2000: CAS 6145 & CAS 6733). This suggests peripheral roadside settlement in the area, perhaps an early Roman cemetery and field systems, followed by light industry and craft areas developing on the peripheries of the settlement. It is possible that the orientation of the later Saxon streets and property

¹ County Archaeological Service Sites and Monuments Record reference number (see Appendix 1 for full list).

boundaries of Walton originated at this time (Ford & Howell 2004, fig. 3.16). A watching brief carried out at Aylesbury High School, *c.* 230m south-east of the site, in 2000 (Babtie 2001: CAS 6377) found Roman pits including a possible clay extraction pit, a possible building foundation and a limestone floor or yard surface. Quantities of Iron Age and Roman pottery were recovered, with most of the Roman pottery dating to the 2nd century AD.

2.2.4 *Anglo-Saxon (AD 410 - 1066)*

Early Anglo-Saxon Walton appears to have been an extensive dispersed settlement, with large unoccupied spaces between buildings (Dalwood *et al.* 1989). There is substantial excavated evidence of Anglo-Saxon settlement, with structures (predominately sunken-floored buildings) recorded and excavated to the immediate north, south and east of the current site. Excavations to date suggest that the core of the 5th-century settlement was located south-west of the present junction of Walton Street and Walton Road, *c.* 75m south of the site (CAS 2163), with more dispersed settlement adjacent to Walton Road *c.* 200m east of the site (CAS 6145). Middle Saxon structures (post-built rectangular halls rather than sunken-floored buildings) have been found both on the western side of Walton Street (CAS 2163) and across the street at the Orchard Site (Ford and Howell 2004: CAS 6108). Evidence of late Saxon tenement and plot boundaries is relatively frequent in the area; boundaries of this kind were found within the present site during the Police Houses excavation in the 1980s (Dalwood and Hawkins 1987; CAS 5555). The church of All Saints in nearby Aylesbury is thought to have had its origins in the 7th century as the Saxon minster church (Department of the Environment 1987).

2.2.5 *Norman and medieval (AD 1066 - 1500)*

Aylesbury is recorded in Domesday Book (Morris 1978). It was a regional administrative centre with its own court and was a household manor of the king. There is also evidence to suggest that the town had a motte-and-bailey type castle, although this is thought to have been short-lived (Hanley and Hunt 1993). From at least the 11th century, a formal layout of properties was established along both sides of Walton Street (Dalwood and Hawkins 1987). Tenth-century tenement boundary gullies were noted within the present site during the Police Houses excavation (*ibid*: CAS 5555). The excavations also identified a substantial medieval ditched boundary, interpreted as a continuation of the manorial enclosure, rubbish pits and quantities of pottery (*ibid*). A further possible stretch of the manorial earthwork was noted at Walton Court Farm, *c.* 25m south of the site (Farley 1976: CAS 0093) and 13th-century plot boundaries were found at the Walton Road Vicarage, *c.* 75m south of the site (*ibid*: CAS 2163). A linear mound (marked on historic maps as 'Intrenchment' – Figs. 2 and 4) runs through the development area. It has been dated to the 13th century and possibly represents a pillow mound or a rabbit warren boundary bank (Farley 1976).

2.2.6 *Post-medieval to modern (AD 1500 - present)*

The town was made a Parliamentary Borough in 1553/4 by Queen Mary (Elvey 1976). During the Civil War, it had a Parliamentary garrison. The Battle of Aylesbury occurred at Holman's Bridge, to the north of the town, in 1642 (Griffin 1998) and a

post-medieval Civil War battery is located to the north-west of the site. The Grand Junction Canal was extended to Aylesbury and a dock opened on Walton Street in 1814, and a railway opened in 1838 (Hanley and Hunt 1993). The increasing prosperity of local agriculture in the 1850s and 1860s resulted in the expansion of the market. A new cattle market was established at the rear of the existing marketplace in the mid 19th century, along with a new approach road (Exchange Street, which now links Walton Street and the High Street). Substantial development of the town did not occur until the arrival of large-scale industry in the later 19th century, with offices replacing industry in the later 20th century.

2.2.7 Previous archaeological investigations (Fig. 5)

Extensive development along Walton Road in the 1970s, 80s and 90s resulted in a series of rescue excavations (Table 1). Although not all of these sites have been published, they demonstrate substantial Bronze Age and Anglo-Saxon settlement in the area and have started to enable a detailed picture of the topography of the early Saxon settlement and later town to be compiled. Few excavations have taken place to the south-west of Walton Road; however, the Police Houses excavation in 1987 identified late Saxon and medieval remains within the site itself.

Year of excavation	Site name	Results	CAS	Reference
1973	Walton Court	Two SFBs, Saxon palisade trench, medieval manorial boundary and linear mound	0093	Farley 1976
1973	Walton Street Vicarage	Two SFBs; ditch adjacent to manor; 13 th -century rectangular plots;	2163	Farley 1976
1994	Walton Lodge Lane	Bronze Age cremations, pits, medieval pits	6107	Bonner 1994
1985-6	Walton Lodge	Bronze Age ?roundhouse, Saxon hall and SFBs	5499	Dalwood <i>et al.</i> 1989
1986	Walton Road Teachers' Centre	Medieval boundaries, pits, well	5500	Hawkins 1989
1987	Croft Road Teachers' Centre Area A	Roman field boundaries and possible Saxon buildings	5593	Dalwood & Hawkins Unpublished
1987	Croft Road Teachers' Centre Area B	Co-axial Roman field boundaries, Saxon hall and SFBs	5593	Dalwood & Hawkins Unpublished
1987	Police Houses	Late Saxon and medieval boundaries	5555	Dalwood & Hawkins 1987
1994	The Orchard	Bronze Age roundhouses and Saxon halls	6108	Ford & Howell 2004
1994	Walton Road Stores	Six SFBs and two halls; late Saxon boundaries	6145	BCMAS unpublished
2000	Aylesbury High School	Iron Age and Roman farm	6377	Babtie 2001 unpublished

Table 1: Significant archaeological interventions in the Walton Street/ Walton Road area

2.3 Phasing

Dateable material fell into the four chronological phases outlined below (Figs. 6 and 8):

CHRONOLOGICAL PHASE	DATE
Phase 1	Late Bronze Age to early Iron Age (c. 1300 – 400 BC)
Phase 2	Middle Saxon (c. AD 550 – 850)
Phase 3	Late Saxon to medieval (c. AD 850 – 1300)
Phase 4	Early modern (AD 1800 – 1900)
Unphased	-

Table 2: Chronological phasing

2.4 Phase 1: late Bronze Age to early Iron Age (c. 1300 – 400 BC) (Figs. 9 and 10)

There was only sparse evidence for prehistoric activity on the site. Four features contained pottery dating to the late Bronze Age or early Iron Age. Of these, only a single pit is assigned to Phase 1, with the pottery in the other three features being residual. Pit F3011 (0.88m x 0.52m x 0.28m)² was located in the northern corner of the site (Fig. 9, Grid Ref H15). It had vertical sides and a flat base and its fill (L3012) was a dark grey friable sandy silt with gravel. It contained a sherd (11g) of late Bronze Age/ early Iron Age pottery and a small quantity of animal bone. The latter is mostly too eroded and fragmentary to identify, but it includes a sheep/goat phalanx and an intrusive brown rat tibia.

Of the residual material, the earliest pottery was recovered from Phase 2 Pit F2150 and comprised two early Bronze Age sherds of a beaker-type vessel. Single sherds of late Bronze Age/ early Iron Age pottery were also found in the fills of Pit F2145 (7g) and Gully F3015 (9g). These are all thought to be residual; nevertheless, there is clearly evidence for low-level late Bronze Age/ early Iron Age activity on the site. Sixteen flint-tempered sherds found across the site can only be broadly dated from the late Bronze Age to late Iron Age, although similar coarse-gritted fabrics with mainly flint inclusions excavated from other sites in Aylesbury have been assigned a middle Iron Age date (Rayner 1996, 37).

Evidence of middle Bronze Age to early Iron Age settlement, in the form of pits, four or five possible post-built roundhouses, and pottery/ struck flint, has been excavated at the Orchard Site, to the east of the present excavation (Ford and Howell 2004, 62-4, 84-7). It is possible that the sparse evidence for late Bronze Age to early Iron Age activity found at 82 - 84 Walton Street represents activity on the periphery of this settlement. The number and range of features is too small to make any assessment of the character of the activity.

² In all feature descriptions, dimensions are given in the order: length x width x depth

2.5 Phase 2: middle Saxon activity (c. AD 550 – 850) (Figs. 6, 7, 8, 9 and 10)

Middle Saxon activity was attested by 12 features; three were identified during the trial trench evaluation, seven during the first phase of excavation and two during the second phase of excavation. The dating of this phase of activity is based primarily on the pottery found in association with the features, and on stratigraphy where stratigraphic relationships were present. The overall character of the pottery assemblage is consistent with a late 6th to 8th-century date; with a fairly high proportion of organic-tempered fabrics, a near-absence of early Saxon stamp-decorated pottery, and the presence of a single wheel-finished Ipswich Ware sherd.

2.5.1 Phase 2 pits in the south of the site

Pit F2146 (Fig. 9, Grid Ref: M3-M4) was situated in the central southern part of the site. It was a large, elongated pit (9.9m x 5.10m (max.) x 0.60m) with moderately-sloping sides and a flat base. Pit F2146 had five fills, which together contained 137 fragments (nearly 1.3kg) of animal bone and 18 sherds of middle Saxon pottery. The majority of the animal bone was found in the upper fills of the pit and is primarily sheep/ goat, with a partial cat skeleton also present. The pottery is mainly in quartz and organic –tempered fabrics, but also includes a single body sherd of sandy Ipswich Ware. Fragments of an antler comb (SF4; Fig. 19) and a residual Romano-British tegula roof tile were also present in Fill L2148. To the north-east, the pit was cut by another elongated Phase 2 Pit F2145 (Fig. 9, Grid Ref: M4-N2). The latter was shallow, with steep sides and a flat base (11.3m x 2.50m (max.) x 0.30m). It contained a single sherd (7g) of residual prehistoric pottery and animal bone (19g). Pit F2145 also cut Pit F2067 (=F1166) (Fig. 9, Grid Ref: M6-N4). The latter had a steep, bowl-shaped profile and was a large (8.50m+ x 4.00m x 0.80m), irregular feature, which extended northwards into the area truncated by modern council buildings. Two small possible postholes (F2072 and F2073) were cut into the base of Pit F2067. Posthole F2073 contained a small amount of middle Saxon pottery. Pit F2067 contained residual struck flint, three sherds (42g) of undiagnostic but broadly middle Saxon (late 5th to 9th-century) pottery, and 592 fragments (just under 2kg) of animal bone. A large proportion of the latter was found in the upper fill of the pit, and mainly consists of cattle with some sheep/ goat and pig. Also recovered from Pit F2067 was a sherd of Roman fine wheel-made grey sandy ware. This was one of just two sherds of Romano-British pottery found on site, and while no specific activities can be derived from its presence, it does imply that the area was occupied at some stage during the Romano-British period.

Pit F2165 cut Pit F2146, but was in turn cut by Pit F2145, Phase 3 Ditch F2076 and Phase 4 Pit F2166 (Figs. 9-10, Grid Ref: N3-M2). Its exact dimensions could not be established due to truncation from later features, but it was at least 3.92m wide by up to 2.20m deep. It had moderately-sloping straight sides, which broke to a steep, bowl-shaped base. Seven fills were identified in the pit. These appeared to represent a sequence of natural silting episodes (e.g. L2168, L2170 and L2172), interspersed with thin lenses (L2169, L2171) of slumped weathered material from the open north-east side of the pit. The silting layers (the second, fourth and sixth fills) contained 5th to 9th-century pottery, while the slumped lenses (the basal, third and fifth fills) were 'clean', containing no finds. Pit F2165 contrasted with the other pits in this 'cluster' of middle Saxon features, the rest of which tended to have one main fill of yellowy or

brownish-grey silty sand. The sequence of infilling suggests that Pit F2165 was open for some time rather than deliberately backfilled, an observation supported by the animal bone assemblage, particularly that from the lower fill (L2168), which includes a large number of frog/ toad bones. Taken together, the evidence suggests that the pit was open for some time, that it filled in gradually and naturally, and that it was at least sometimes waterlogged. It is possible that it was used as a watering hole for livestock, something which the relatively gradual slope of the upper portion of its sides would have facilitated.

Located *c.* 10m to the north of Pit F2067, on the opposite side of the council office buildings, were smaller Pits F2084 and F2086 (Fig. 9; Grid Ref. L8-M8). Pit F2084 was *c.* 1m in diameter and shallow, with gently-sloping sides and a flat base. It contained three sherds (21g) of late 5th to 9th-century pottery and was truncated by the council building in the centre of the site. It may have formed part of Pit F2067 though any such relationship was obscured. Located *c.* 1.5m to the north of Pit F2084 was Pit F2086. The latter was 1.34m across with steep sides and a flat base. It contained late 5th to 9th-century pottery (one sherd; 3g), animal bone (6g) and residual struck flint (7g). Located *c.* 7m to the south-west of Pit F2146 was Pit F2143. The latter (Fig. 9, Grid Ref: K3) had been heavily-truncated by a cluster of later pits immediately to the south (Phase 3, below). It was 1.00m deep, with vertical sides and a flat base. It contained four fills, the upper two of which contained late 5th to early 9th-century pottery (four sherds; 16g), animal bone (13g) and a glass bead fragment (SF5; 1g). The size of Pit F2143 was very similar to Pits F2084 and F2086; however, unlike Pit F2143, Pits F2084 and F2086 only contained one fill each. It seems likely that Pit F2143 was utilised in a different way to the other two small pits. It appeared to be very regular in plan, with 'clean' vertical sides and a flat base. The faunal evidence from its lower fill, which included numerous frog/ toad and small mammal bones, suggests that the pit was both wet and left open for a period of time. It may originally have had a specialised use, for example, as a tanning pit.

It seems likely that there was a functional difference between these small pits and the larger intercutting cluster of contemporary pits described above. The relatively large size and irregular shape of the larger pits (Pit F2146, Pit F2145 and Pit F2067) suggests that their primary purpose may have been small-scale extraction of clay for local use (discussed below). The character of the middle Saxon activity, comprising small-scale clay extraction and occasional rubbish dumping, seems in-keeping with a peripheral area on the outskirts of a middle Saxon settlement.

2.5.2 Other Phase 2 features

Three further early to middle Saxon features were present on the site. Pit F1075 was located in Trial Trench 8 (Figs. 6 and 7), *c.* 80m north of Pits F2084 and F2086. It was fairly small and shallow (1.46m x 0.90m x 0.05m), with gently-sloping sides and a flat base. It contained two sherds (25g) of Saxon pottery, including a probable 7th-century stamp-decorated sherd (incised with a circular cross), and a small quantity of animal bone (15g). Pit F3009 (Fig. 9; Grid Ref. H15) was located *c.* 35m north-west of Pits F2084 and F2086. It was U-shaped in profile, measuring *c.* 0.55m in diameter by 0.33m deep, and had near vertical sides and a concave base. It contained two sherds (7g) of Saxon pottery and animal bone (22g). Just south of Pit F3009 was Gully F3013 (Fig. 9, Grid Ref. H14). It was 4.00m+ long x 1.08m wide x 0.35m deep,

with steep sides and a concave base. It was aligned north-east to south-west; it was truncated by Ditch F3017 to the south-west and extended beyond the site boundary to the north-east. It contained a single sherd of residual Samian ware, 27 fragments of animal bone, a large proportion of which are from cattle, and also a fragmentary dog skull. The presence of the residual Samian ware implies that Romano-British activity was occurring in the vicinity of the site, however it is impossible to speculate as to where this may have been or what it may have entailed. Gully F3015 was parallel to F3013 and was 5.00m+ long by 0.75m wide by 0.20m deep, with a U-shaped profile and a flat base. It contained late 5th to 9th-century pottery (seven sherds; 65g) and animal bone (601g). These narrow, shallow features were probably drainage gullies; certainly they were aligned with respect for the slight downward slope of this part of the site to the west. However, it is also possible that they represent beam slots or foundation trenches for a small post-in-trench building. Pit F3009 may have been associated.

The nature of the Phase 2 activity identified at 82 - 84 Walton Street suggests that the site was on the periphery of the early to middle Saxon settlement revealed by previous excavations in this part of Aylesbury. This previous archaeological work has identified what might be interpreted as the 'core' of early to middle Saxon activity, located approximately 150m east of the current site, on the opposite side of Walton Street. The portion of the settlement so far identified comprises 10 sunken-featured buildings and 11 post-built halls (Ford and Howell 2004, Dalwood *et al.* 1989, Bonner 1994). The lack of direct occupation evidence at the current site compared with sites situated on the east side of Walton Street ties in with the developing picture of the topography of the early Saxon settlement. The site was likely agricultural land/scrubland located on the fringes of the settlement, used for occasional clay extraction, periodic refuse disposal and perhaps, given the presence of a possible watering hole, grazing livestock. The resulting large pits were sometimes used for dumping domestic waste, although not in large enough quantities to indicate intensive activity in the immediate vicinity.

2.6 Phase 3: late Saxon to medieval (AD 850 – 1300) (Figs. 11, 12 and 13)

Phase 3, representing the late Saxon to medieval period, was the principal phase of activity on the site. This period saw the initial establishment, and then the long-term use and maintenance, of a system of substantial boundary ditches which divided the site into several separate rectilinear enclosures. Numerous other ditches, pits and gullies are also assigned to this phase. The ceramic evidence demonstrates that elements of the ditch system were first laid out in the late Saxon period. Probable pre-Norman Conquest assemblages, with diagnostic St Neots Ware sherds, were present, for example, in Ditches F3017 and F2097 (=F2046=F1179). However, the ditches appear to have been periodically re-cut, cleaned out, and maintained over a long period, perhaps continuing as late as the 13th/ early 14th century (e.g. Ditch F2006 (=F2002=F2196)). Land use on the site therefore appears to have remained much the same throughout the late Saxon and early medieval periods (for perhaps three to four hundred years).

2.6.1 *The Phase 3 rectilinear boundary ditches*

The rectilinear boundary system was formed by six parallel north-west to south-east aligned ditches:

F2006 (=F2002=F2196)
F2056 (=F2064=F1134=F1136)
F2097 (=F2046=F1179)
F2151
F2076
F2157

The boundary system also comprised two south-west to north-east aligned ditches: F2040 and F2044. All of these ditches were very similar in width and depth; all but F2056, which was an earlier cut of F2097, were between 1.00m and 2.50m in width and generally no deeper than 1.00m.

The northernmost of the north-west to south-east aligned ditches was Ditch F2006 (Fig. 11, Grid Ref: Q16-V11). It measured 35m in length and was up to 2.60m wide by over 1.00m deep, with V-shaped sides and a slightly rounded base. It contained two sherds (13g) of residual late 5th to 9th-century pottery and a large assemblage of 12th to 13th-century pottery (418 sherds; 2.4kg+). The latter includes South Hertfordshire Grey Wares, Brill and Oxfordshire/ Brill-type sherds, including some diagnostic jar and cooking pot rims. Animal bone (167 fragments; 646g) and a small quantity of ceramic building materials (10g) were also present. The animal bone, consisting predominantly of sheep/ goat with smaller quantities of cattle and pig, was mainly present in the upper fills of the ditch, suggesting that the feature was cleaned-out/ kept open, only being subject to the dumping of rubbish towards the end of its period of use. The ditch was traced in three locations across the northern edge of the site; in places it lay outside the excavated areas or had been truncated by the former council offices. There was no evidence of any contemporary ditches running southwards at right angles to Ditch F2006, which would have directly associated it with Ditches F2097 and/ or F2056. However, a large proportion of the area between the two sets of ditches had been severely truncated by the former council offices, possibly obscuring any such relationship. Based on its identical alignment, dimensions and similar profile to the 9th to 13th-century ditches to the south, Ditch F2006 almost certainly formed part of the same boundary system. The basal and secondary fills identified in Segment A of the ditch (specifically Ditch F2006) contained limestone rubble, a characteristic also noted in relation to several of the other Phase 3 ditches (below). Aside from these two lower fills in Segment A, the ditch contained numerous chalky, clayey silt layers of varying composition. This varied sequence of infilling supports the suggestion that the ditch was left open for a considerable period of time and largely filled in through natural silting/ weathering.

Ditch F2097 was orientated north-west to south-east and traversed the centre of the main excavation area, 33m to the south of Ditch F2006 (Fig. 11, Grid Ref: J12-R4). It was traced for 41m, and extended beyond both the north-western and south-eastern boundaries of the site; it was almost certainly a continuation of a ditch excavated to the south-east of the current site in 1974 (Fig. 2). The profile of the ditch varied along its length, but it generally had steep convex sides and a rounded base. It was

consistently *c.*2.20m across and between 0.66m and 1.10m deep. The ditch contained 21 different fills along its length; up to five successive fill layers were present in the individual segments dug through the ditch (Fig.12). One sherd of residual Iron Age pottery (2g), 38 sherds of residual middle Saxon pottery (367g), and a relatively large assemblage of Saxo-Norman pottery were recovered. The ditch also contained CBM (316g), tap slag (311g), shell (71g) and animal bone (780 fragments; 2.4kg). The animal bone assemblage is the largest from any of the Phase 3 ditches and predominantly comprises cattle and sheep/ goat bones. A partial adult dog ABG (Associated Bone Group) was present in the lower fill (L2178) of one segment. The presence of frog/ toad and small mammal bones throughout the different fills suggests that the infilling of the ditch was a gradual process, with the feature remaining open for some time. Along the south-eastern length of the ditch (Ditch F2097), the second fill of the feature consistently included fairly large quantities of degraded limestone rubble, possibly representing a weathered and slumped bank. The layering of fills along the majority of the ditch's length also suggests that it was left open for a significant period of time, during which time it filled in naturally. The majority of the fills consisted of greyish-brown sandy silt. Ditch F2097 re-cut Ditch F2056 which ran on an identical north-west to south-east alignment for 40m+. It had gentle to moderately-sloping sides and a flat base (2.00m+ wide x 0.76m deep). It contained 56 mixed sherds of mid 9th to 13th-century pottery (588g) and a large assemblage of animal bone (1688g). It did not contain limestone as identified in Ditch F2097. In places it was completely destroyed by its re-cut. The presence of residual early to middle Saxon pottery in Ditch F2097 may suggest an earlier ditch. What may have been the bottom of an earlier, heavily-truncated ditch, F2118, survived in places beneath Ditches F2056 and F2097. It contained no finds.

At their southern ends, Ditches F2097 and F2056 cut two perpendicular ditches aligned north-east to south-west (F2040 and F2044). Ditch F2044 (Fig 11, Grid Ref: O1-Q4) was the southernmost of these. It was *c.* 16m long in total, identified in two short lengths separated by an unexcavated baulk. The ditch had moderately-steep sides and a curving base (*c.*1.30m wide x 0.32m deep). It contained 11th to 12th-century pottery (13 sherds; 120g), CBM (16g), a small quantity of slag (36g) and animal bone (262g). The animal bone, which includes roughly equal proportions of sheep/ goat and cattle, as well as a partial dog, is well-preserved and was mainly found in one part of the feature (Seg. A); this may have represented a discrete dump of rubbish. To the south-west, Ditch F2044 ended in an abrupt rounded terminus *c.* 1.00m short of Ditch F2076. It is possible that this gap was an entranceway to one of the individual ditched enclosures. This ditch contained one fill throughout. A small section of the ditch had limestone within its fill, although not in the same quantity as the larger north-west to south-east aligned ditches. Five metres north of Ditch F2044 was Ditch F2040 (Fig. 11, Grid Ref. N2-Q5). It was parallel to Ditch F2044, extending for 17.50m from Ditch F2097 in the north-east towards Ditch F2076 (below) in the south-west. It was cut by both F2097 and F2076. Ditch F2040 had steep convex sides and a flat base (1.30m wide x 0.33 – 0.60m deep); its parallel alignment and identical size and profile to Ditch F2044 indicates that it formed part of the same boundary system. Ditch F2040 contained residual late 5th to 9th-century pottery (15 sherds; 99g). The presence of nine sherds (135g) of St Neots Ware and early medieval sandy ware indicate a likely 11th-century date. Animal bone (71g) was also present. Ditch F2040 contained two fills. Limestone rubble was present in its basal fill. The primary fill was a light brown-grey sandy silt. The smaller size of these

north-east to south-west aligned ditches suggests that they demarcated internal subdivisions within the main land units defined by the more substantial north-west to south-east boundaries.

Ditch F2076 (Fig. 11, Grid Ref: N2-O1) was the southernmost of the ditches which comprised the rectilinear boundary system. It ran north-west to south-east, parallel to Ditches F2097, F2056 and F2006. It was traced for 15m before extending beyond the southern boundary of the site/ being truncated by Phase 4 Pit F2166. Ditch F2076 was relatively shallow, with an undulating base. It contained mid 5th to mid 9th-century pottery (six sherds; 61g), 12th to 15th-century pottery (six sherds; 41g), CBM (98g) and animal bone (1.7kg). This ditched boundary continued to the north-west of Pit F2166 as Ditch F2151 (Fig. 11, Grid Ref: K5-M3). Ditch F2151 measured 15m long and extended north-west from the terminus of Ditch F2076, before ending in a slightly irregular rounded terminus. It was generally shallow with a concave base and contained mid 5th to 9th-century pottery (three sherds; 11g) and animal bone (270g). Its fill was consistently a mid grey-brown sandy silt, again consistent with a single episode of infilling. A probable south-eastward continuation of Ditch F2076 was noted during the 1974 excavations in this area (Fig. 2).

The rectilinear ditch system was the principal feature of the Phase 3 site. Contemporary features (mainly large pits) were clustered to the south-west of the ditched enclosures (Fig. 11, Grid Ref. K2-K3). They may have been outside the enclosed areas, or more likely (based on previous investigations on and around the site; Fig. 2), within a plot which was defined to the north by Ditches F2151 and F2076, and to the south by the possible 13th-century (or earlier) 'Intrenchment'. The large spaces between the boundary ditches were devoid of contemporary features. While this could be a result of modern truncation, it is perhaps more likely indicates the use to which the enclosures were originally put.

This ditch system is consistent with the development, in the later Anglo-Saxon period, of a formal and organised system of land divisions in this area of Walton (Farley 1976, Dalwood and Hawkins 1984). The north-west to south-east and north-east to south-west ditch alignments have a clear association with the line of Walton Street, to which they run either parallel or perpendicular. They also have a clear relationship with the earthworks of the medieval 'Intrenchment', within which they are sited, indicating that they may have been parts of the same boundary system. Contemporary boundaries to those excavated on the present site were identified immediately to the south during excavations in 1973-4 (Farley 1976). Several have clear spatial relationships to those found during the present excavations. All of the ditches contained small quantities of residual 5th to 9th-century pottery which might argue for the presence of an earlier ditch system on the site, or may be the result of disturbance of early to middle Saxon features during the construction of the late Saxon - medieval ditch system.

2.6.2 *Late Saxon and medieval pits*

Sixteen late Saxon/ early medieval pits were identified across the site. Four pits (F1009, F1011, F1030 and F1035) were excavated in Trial Trench 9 (Figs. 6 and 7), which was located c. 45m north-west of the first phase of open area excavation (Fig.2). The largest of the four, F1009 and F1011, were intercutting, while F1030 and

F1035 were isolated. All contained medieval pottery ranging between the 12th and 15th centuries, as well as CBM, animal bone and small quantities of shell, iron slag and flint. Pit F1011 contained a noteworthy pottery assemblage of 47 sherds (242g) in a variety of fabrics, including reddish-coloured late Brill wares, which are probably 14th-century or later. To the north-west, in the northern part of Trench 8, a buried soil layer (L1070) encountered immediately above the natural clay yielded 97 later medieval (13th to 15th-century) potsherds, many in Brill and Oxford-type buff and orange fabrics. The layer also contained a large assemblage of well-preserved animal bone dominated by sheep/ goat metapodials (Animal Bone Report, below). This is likely to represent a primary dump of tanning waste. The interpretation of these features in relation to the other medieval activity across the rest of the site is hindered by the small area of investigation and by their isolation from the main open area excavation. The relatively small size of the pits, their single fills, and the quantities of associated finds indicate that their most likely use was as rubbish pits. The date of some of the associated pottery suggests that, in contrast to the majority of the site, this north-western sector saw some activity during the late medieval period. Elsewhere, there was little sign of activity beyond the early 14th century. This continuity only in the far north-western part of the site, closer to the core of medieval Aylesbury, may reflect contraction of the settlement following the climatic downturn and plagues of the 14th century.

Eight additional pits were excavated in the area covered by the first phase of excavation. Pits F2199, F2160, F2159, F2150, F2153, F2155 and F2141 were located in the southern corner of the site (Fig. 11, Grid Ref: J5-K2). All but F2141 were intercutting. Pits F2153, F2155 and F2141 (Fig. 11, Grid Ref: J5-K4) were artificially separated from the other pits by an unexcavated baulk, but it is likely that had this area been fully excavated, they would have formed part of the same cluster of intercutting pits. All of the features contained 10th to 13th-century pottery (62 sherds; 516g in total) and animal bone (3kg+), and Pit F2141 contained frog and toad elements, which imply that the pits were not infilled immediately after use. Pit F2155 contained a residual early to middle Saxon burnished bowl rim, while F2160, stratigraphically one of the earliest pits in the group, contained a probably post-Conquest assemblage comprising St Neots and early medieval shelly limestone wares. Pit F2160 also contained slag (19g) and F2150, the largest of this group of pits, and stratigraphically the latest, contained fragments (1.4kg) from a glazed floor tile. Like the peg tile, plain floor tiles such as this were produced from the 13th century and continued to be used throughout the post-medieval period.

An isolated pit was excavated in close proximity to the south-eastern length of Ditch F2006. Pit F2015 (Fig. 11, Grid Ref: T12) was situated just north of the former council offices. It contained a single sherd of mid 11th to mid 13th-century pottery (11g). Thirty metres to the north-west of Pit F2015 were intercutting Pits F2182 and F2184. Both pits extended beyond the limits of the site, and as such their full extents could not be ascertained. The pottery from F2184 was post-Conquest. Two Phase 3 pits were excavated during the second phase of excavation. Pit F3025 was relatively shallow with vertical sides and a concave base. It contained 9th to 13th-century pottery (three sherds; 22g) and animal bone. Pit F3022 was slightly larger and contained 12th to 13th-century pottery, animal bone and a large assemblage of plant remains including cereal grains and chaff, legumes, nuts and various wild floras, thought to represent a deliberate deposition event.

It is difficult to assign specific functions to any of these Phase 3 pits. With the exception of the cluster of intercutting pits (e.g. F2150 & F2199) in the south-west corner of the main excavation area, there were no obvious patterns to their distribution. The location of four large pits in Trial Trench 9 (Figs. 6 and 7), all of which contained relatively large amounts of domestic pottery, might indicate a focal point of activity, perhaps of occupation, outside the bounds of the excavated ditch system. The pottery located within the pits in Trial Trench 9 is potentially of a later medieval date to that encountered elsewhere on the site (12th to 15th century).

The large group of intercutting Phase 3 pits excavated in the southern part of the site possibly represents small-scale extraction, although their inter cutting makes this seem unlikely (they were often dug into the fills of earlier pits rather than into undisturbed natural clay). If clay extraction was taking place, it was not on a major scale and the clay was perhaps being used for day-to-day maintenance of wattle and daub walls/ fences etc rather than being utilised for construction or in an industrial process (e.g. pottery manufacture). A more likely explanation is that the pits were primarily dug for the disposal of domestic rubbish. The moderate quantities of finds present (516g of pottery, occasional CBM and 3kg of animal bone) could have originally been deposited alongside organic waste, which has not survived.

2.6.3 Other Phase 3 ditches

Thirteen other ditches, identified during the course of the archaeological investigations, are dated to the late Saxon/ early medieval period, but do not all appear to directly relate to the rectilinear boundary system described above. Some of these ditches were identified during the trial trench evaluation of the site, and as such their full extents and nature remain unclear.

Ditch F1073 was the northernmost of the features assigned to Phase 3. It was located within Trial Trench 8 (Figs. 6 and 7) and was aligned north-west to south-east. The latter may tentatively suggest an association with the rectilinear plots described above. However, the associated pottery suggests a, slightly later, 13th to 15th century date. South-west of this feature were Ditches F1102 and F1095, both of which were located in Trench 6 (Figs. 6 and 7). Both contained small quantities of 12th to 14th-century pottery (four sherds; 65g in total), animal bone and CBM. Ditch F1102 contained an intrusive clay pipe fragment.

Trench 9 (Figs. 6 and 7) contained three possible medieval ditches. Ditch F1029 was aligned north-west to south-east and had steep sides and a rounded base. It contained 17 sherds (167g) of 13th to 14th-century pottery, animal bone and CBM. Ditch F1019 was also aligned north-west to south-east, and was similar in profile, with steep sides and a rounded base. It yielded two sherds of 11th to 13th-century pottery (11g). Ditch F1014 was aligned at right angles to Ditches F1029 and F1019; it contained a single sherd of 11th to 14th-century pottery (22g). Ditch F1014 was cut by Ditch F1019. It is likely that all three of these ditches were related to the more visible rectilinear boundary system to the south.

Three additional ditches were revealed during the most recent phase of excavation on the site. Based on their alignments, they are all likely to have been directly associated

with the rectilinear boundary system to the south. Ditch F3017 (Fig. 11, Grid Ref: G15-H13) was the earliest of these ditches; it was aligned north-west to south-east and had a variable profile (generally convex sides with a rounded base) and dimensions (c. 2.10m wide x 0.55m deep). It contained 6th to 9th-century pottery (three sherds; 23g) and three sherds (20g) of St Neots Ware, suggesting a late 9th to 10th-century date. Animal bone and some shell were also present. At its south-east end, Ditch F3017 was cut by much larger Ditch F3028 (Fig. 11, Grid Ref: F14-I12). The latter traversed the excavation area from north-west to south-east and was 3.30m wide at its north-west end, widening at its southern end to around 5.00m. It contained a moderate assemblage of 12th to 14th-century pottery (10 sherds; 106g), animal bone, CBM and iron nails. It is possible that it replaced Ditch F3017, to which it ran parallel for a distance of c. 7.5m. Adjacent to Ditch F3028 was Ditch F3049. The nature of this feature is unclear, as it was obscured on two sides by the site boundary. However, it is thought that it was a linear feature, aligned north-east to south-west. It contained six sherds 11th to 13th-century pottery (41g) and animal bone.

2.7 Phase 4: early modern (AD 1800 - 1900) (Figs. 14 and 15)

Early modern activity was recorded across the site. It comprised three pits (F1126, F2166 and F3020), five ditches (F1098, F2188, F2017 (=F2010, =F2018), F2013 and F3032), a curvilinear feature (F1124) and a possible watercourse (Channel F1145). All of the early modern ditches followed the alignments of the previous rectilinear enclosure system. Ditch F2188 was cut directly along the former course of Phase 3 Ditch F2006, and may have been associated with Ditch F2017 (=F2010, =F2018), with which it shared similar dimensions. The two ditches were at approximate right-angles to one another. Ditch F2013 seems to have been a continuation of Ditch F2017 (=F2010, =F2018), but was truncated by the former council office buildings. All of these early modern features contained large amounts of CBM and animal bone, moderate quantities of 18th to 19th and 19th to 20th-century pottery, and small amounts of glass, slag, clay pipe and slate. A single fragment of a Romano-British flat tile was residual in Pit F2166 (alongside medieval fragments and post-medieval material). This fragment is probably derived from a Romano-British box flue tile but is too small and abraded to be certain.

Full details and descriptions of each of these features can be located in the Interim Site Narratives for the two phases of excavation (Hallybone and Newton 2006 and Pozorski 2008) and in the Evaluation Report (Doyle and Williams 2005).

2.8 Unphased (Figs. 16 and 17)

Fifty-two features across the site remain unphased due to a lack of datable material recovered from them or an absence of stratigraphic associations with dated features. These undated features include 12 ditches (F1122, F1105, F1107, F1109, F1128, F1068, F1066, F1064, F1023, F2157, F2115 and F2022), 19 pits (F1130, F1100, F1037, F1007, F2036, F2058, F2026, F2190, F2020, F2024, F2027, F2034, F2038, F2060, F2082, F2094, F2138, F3042 and F3053), 9 postholes (F1175, F1184, F1041, F1021, F2032, F2008, F2088, F2092 and F2090), four gullies (F1182, F1132, F2070 and F3051), two stakeholes (F3007 and F3047), a beam-slot (F2030) and a wall (F3038). Of the unphased features the most intrinsically interesting is F2012. This

feature lay at the most westerly point of the site, to the north-east of the former council offices building. This part of the site was waterlogged (prohibiting excavation beyond a depth of 1.2m and thus meaning that the base of the feature was not encountered), and long term waterlogged conditions were indicated by the presence of alluvial layer L2107, through which the feature was cut. It has been suggested (D. Radford pers. comm.) that F2012 may be part of a flood defence system. A partial dog skeleton was recovered from the upper fill of this feature. Full details and descriptions of each of these features can be located in the Interim Site Narratives for the two phases of excavation (Hallybone and Newton 2006 and Pozorski 2008) and in the Evaluation Report (Doyle and Williams 2005).

3 SPECIALIST FINDS AND ENVIRONMENTAL REPORTS

3.4 The pottery

By Peter Thompson

The combined excavations produced 983 sherds weighing 8.960 kg. The site is multi-period spanning the Saxon to high medieval periods, with some prehistoric, Roman and post-medieval pottery also present. The assemblage is in mixed condition with the prehistoric and Saxon pottery mainly comprising small, abraded residual sherds.

Period	Sherd Number	Fabric Weight (g)	Sherd percentage of site total
Prehistoric	29	184	3
Roman	8	91	0.8
Saxon	216	1,609	22
Saxo-Norman	76	541	7.7
Medieval	526	5,309	53.6
Post-medieval to modern	126	1,226	12.9
	983	8,960	

Table 3: The pottery by period

Methodology

The pottery was examined under x35 binocular microscope and recorded by period and fabric type (Tables 3 and 4). Dating was made in accordance with the 2004 London medieval and post-medieval database and through comparison with published sites which are referenced in the text. A selection of sherds was also sent to pottery specialists in counties adjacent to Buckinghamshire for ware/fabric identification. The medieval and post-medieval fabrics have been assigned codes based on the Milton Keynes Archaeological Unit type-series (Mynard and Zeepvat 1992; Zeepvat et al. 1994). Wares not in this type series have been assigned codes from the London type-series (provided by Berni Sudds of pre-Construct Archaeology), and in one case each from the Oxfordshire type-series (Mellor 1994) and Bedfordshire type-series (Anna Slowikowski pers. comm.).

Ware/Fabric	Date Range	Sherd Number	Fabric Weight
Prehistoric			
Grog	Mid 3 rd millennium – mid 2 nd millennium BC	2	14
Flint	1 st millennium BC – 1 st century AD	16	103
Grog	1 st century BC – 1 st century AD	11	67
Roman			
Sandy oxidised ware	Mid 1 st -4 th century	1	7
Sandy grey ware	Mid 1 st – 4 th century	6	70
OXF RS	Oxfordshire red slipped ware: mid 3 rd -4 th century	1	14
Saxon			
Organics	Mid 5 th -8 th	82	574
Quartz and organics	Mid 5 th -9 th	44	262
Quartz	Mid 5 th -9 th	40	392
Sand	Mid 5 th -10 th	24	164
Sand and organics	Mid 5 th -9 th	12	70
Sand & sandstone	Mid 5 th -9 th	6	53
Shell	Mid 5 th -10 th	5	36
Granite & dark mica		2	10
Ipswich ware	8 th -late 9 th	1	19
Saxo-Norman			
SNC1: St Neots ware	mid 9 th -mid 12 th	76	541
Medieval			
MC 1: Medieval shelly ware	11 th - late 13 th	12	55
B13: Early Medieval Chalky ware	mid 11 th - mid 12 th	25	289
MSC 1: Sandy and shelly ware	late 11 th -13 th	57	491
MSC2: 'Sandy, flinty and shelly ware'	Sandy ware with sparse moderate coarse flint and some calcareous inclusions, brown surfaces with red-brown or grey cores:12 th /13 th -14 th	63	525
SHER: South Hertfordshire grey ware	Grey, occasionally brown sandy fabric with sparse to moderate coarse to very coarse flint: late 12 th – late 14 th	19	503
ESHER (DENM/M40): Denham-type	mid 12 th -13 th	7	60
MS3: Medieval grey sandy ware	late 11 th - early 15 th	152	1,412
MS3: Sandy grey ware	Fine to medium quartz fabric, dark grey to black	44	675

	surfaces and mid-light grey cores: late 12 th -15 th		
MS9: Boarstall-type coarse wares	Medium to coarse quartz, dark grey to black surfaces, red-brown cores: 13 th -15 th	24	183
MS9: Brill coarse ware (early)	13 th	3	55
MS3: South Hertfordshire grey ware (SHER)	Late 12 th -14 th	37	397
MS26: Sandy Oxidised ware	13 th -15 th	10	46
OXY: Oxfordshire-type	12 th -13 th	10	58
MS9: Brill-type	13 th -15 th	44	371
MS6: Potterspury ware	13 th -15 th	18	179
Brill (late)	14 th -15 th	3	9
Post-medieval to modern			
PM 8: Red earthenware	17 th – 18 th	19	516
ENGS: English stoneware	17 th -19 th	5	123
PM 23: Creamware	early 18 th -late 19 th	16	174
PM 27: English porcelain	Mid 18 th -20 th	5	80
PM 34: Wedgwood 'Black Basalt' ware	late 18 th -19 th	2	3
PM 25: Factory made white earthenwares	Mid 18 th -20 th	61	205
PM 25: Transfer Printed ware	Late 18 th -19 th	15	96
MOCH: Mocha type ware	Late 18 th -20 th	1	6
PMRE: Modern red earthenware	20 th	2	23

Table 4: The pottery by ware/fabric 126 1226

The Prehistoric and Roman Pottery

The earliest pottery came from Pit F2150 (L2162) and comprised two residual early Bronze Age decorated Beaker sherds in grog temper with a little flint (Figures 18.1 & 18.2).

Sixteen prehistoric flint tempered sherds date between the late Bronze Age and late Iron Age. Similar coarse gritted fabrics with few other inclusions excavated from other sites in Aylesbury have been assigned a middle Iron Age date (Rayner 1996, 37). These sherds are residual with two possible exceptions comprising a single sherd each from Ditch F2145 (L2176) and Pit F3011 (L3012).

A further eight small abraded grog tempered late Iron Age sherds were also residual, with the possible exception of the single sherd from Gully F3015 (L3016). Ditch F1166 (L1169) contained a single sherd of Roman sandy grey ware and Ditch F3013 (L3014) a sherd of Oxfordshire red slipped ware (OXF RS).

The Saxon Pottery

The early to middle Saxon pottery (216 sherds) which is generally moderately to heavily abraded made up 21.8% of the site assemblage. Organic or 'grass' tempering is the commonest fabric with 82 such sherds (37.9%), whilst a further 44 (20.3%) contained organics with sand or quartz. In Oxfordshire grass tempering appears to have been in use between the late 5th and early 8th centuries, at Oxford, no grass tempered pottery was present in contexts dated late 8th to early 9th century (Farley 1976, 192). Whilst this fabric was used at various times in different areas, including limited evidence from Berkshire for continuance into the medieval period, it seems to have been in contemporaneous use in virtually every county in southern England except Kent, between the mid 6th and 7th centuries (Hodges 1981, 55). Two sherds present in pink granite and dark mica fabric including one from Saxon Pit F2146 (L2148C) may have their source in Charnwood Forest, Leicestershire, which unusually for the period (late 5th - early 7th centuries) had a wide distribution for its handmade wares, stretching between East Yorkshire and the English Channel (Denison S. 1999). It is just possible however that the sherd could have originated from local drift deposits (Berni Sudds pers.comm.).

Pit F1075 (L1076) contained two burnished early Saxon sherds in coarse quartz sand fabric. One has a decorative stamp of an A4ai open ended circular cross (Briscoe 1981, 5) bordered by two vertical lines of one to three grooves (Figure 18.3). Such decoration became increasingly common throughout the 6th century after which its use reduced, but continued into the medieval period. The Walton Street example is suggested as 7th century (Berni Sudds pers. comm.).

Ditch F1177 contained 36 Saxon sherds in sand and quartz temper, some burnished, and including one simple slightly outturned jar rim. Eighteen Saxon sherds in mainly organic and quartz temper came from Ditch F1170 which also included a sherd of Ipswich ware. This middle Saxon pottery ware has a blanket distribution throughout East Anglia, but stops at its political frontier and is much less common beyond it, although it can be present as far afield as York (Wickham 2005, 810). The 1985-6 excavations at Walton in Aylesbury produced three sherds of Ipswich ware out of a total of 986 early to middle Saxon sherds (Dalwood et al 1989, 160). Ipswich ware can be closely dated between *c.* 720/740 and 850/900 when it was replaced by Thetford-type wares (Wickham 2005, 810 and Mortimer 2000, 21).

Rim forms or profiles were comparatively uncommon, but include a burnished bowl rim from Pit F2155 (L2156), whilst Ditches F2067 (L2140) and F2146 (L2148) contained burnished jar rims (Figure 18.4 and 18.5). The latter comprises an unusual heavy rim in a distinctive fabric of iron ore and pink quartz fabric (Figure 18.5) and has the appearance of late Saxon/early medieval forms, but the burnishing and association with Saxon sherds suggests an early to middle Saxon date (Berni Sudds pers. comm.). Saxon pottery is often difficult to closely date with the exceptions indicated above. A comparison between fabrics excavated at Walton Street Car Park and Walton shows that Walton was dominated by organic tempered pottery, whereas at Walton Street the disparity is not so great and finer quartz sand and coarser quartz fabrics are higher in number than at Walton (Table 5).

<i>Walton Street</i>	<i>Sherd percentage</i>	<i>Walton</i>	<i>Sherd percentage</i>
Organic	37.9	Organic	53
Organic and quartz	20.3	Organic and quartz	25.4
Sand/quartz	29.6	Sand/quartz	14.4
Other	12.2	Other	7.2

Table 5: Comparison of the main fabrics by percentage between Walton Street Car Park and Walton Street (Walton Street percentage based on Halwood et al 1989, 160)

Dalwood suggested a date of late 6th to 8th centuries for Walton, based on evidence such as the rarity or absence of early Saxon stamp decorated pottery and late Saxon St. Neots ware, and comparison with organic temper from other sites (Dalwood 1989, 163). At Walton Vicarage and Walton Lodge there was an increase in the use of organic tempering in the 6th and 7th centuries, (Dalwood et al 1986, 162). The Walton Street pottery is probably therefore of similar date, having organic tempered sherds in nearly all the contexts containing only Saxon pottery. Features containing Saxon pottery and nothing of later date are F1075, F1170, F1177, F2067, F2079, F2084, F2086, F2143, F2146, F2151, F2155, F2159, F2165, F3009 and F3013.

Saxo-Norman

St. Neots ware is the only Saxo-Norman ware present numbering 76 sherds (7.7% of the overall assemblage), it is commonly found in and around Aylesbury being produced in Bedfordshire, North Buckinghamshire and probably Oxfordshire. When added to the earlier Saxon sherd total it accounts for 29.5% of the Walton Street assemblage. At the Walton 1973-4 excavation, where St Neots ware appeared without other fabrics it was taken to indicate a 10th century horizon and where it continued side by side with newer forms, an 11th century date was assigned (Farley 1976, 230). Ditch F3017 contained three Saxon sherds including organic temper and burnishing, and three of St. Neots, suggesting a late 9th - 10th century date, although the sherds are all heavily abraded and so could be residual. Ditch F2097 also contained residual Saxon sherds alongside 13 sherds of St. Neots ware, including two hammerhead bowl rims from fills L2105 and L2106 (Figures 18.6 and 18.7). This group also contained a bowl rim in South Hertfordshire grey ware (Figure 18.8) indicating a late 12th century date, but Hurst suggests that hammerhead rims found at St. Neots itself are pre-Conquest (Hurst 1956, 50). Based on this criterion, and subject to residuality, features F1136, F2073, F2182, F3017 and F3025 containing St Neots ware only, or associated with earlier Saxon sherds, are probably *c.* 10th century. Ditch F2040 containing St. Neots ware and early medieval Grey Sandy wares is suggested as late 11th - 12th century. Features F1140, F2046, F2097, F2160 and F2184 containing St. Neots and early medieval Chalky wares, are assigned dates centred on the late 11th - mid 12th centuries.

Medieval Pottery

The medieval pottery comprises just over half of the site assemblage (526 sherds/53.5%), is in mixed condition and probably derives from a large number of sources. There is an overall paucity in good diagnostic forms with the exception of several contexts, in particular Ditch F2006 which contained over 100 sherds including some well preserved pottery and eight sherds have been illustrated. The fabrics can be divided into very broad site specific categories for ease of discussion.

Group 1 Shelly wares

Group I comprises 37 sherds (7% of the medieval total) in calcareous wares. Twelve sherds of medieval shelly ware (MC1), similar to St. Neots ware in appearance, are thought to derive from the Ouse valley (Mynard D.C. and Zeepvat 1992, 251), and include an open bowl rim with thickened, rounded end from Ditch F2006 (Figure 18.9). Twenty-five sherds with mainly buff-orange to grey-brown surfaces containing visible white chalky inclusions and cores containing decayed grey chalk up to 1.5 mm across with occasional voids, quartz and shell are early medieval chalky ware. This ware has been found at sites in North Buckinghamshire and around Leighton Buzzard including Chelmscote and Stanbridge Manor (Anna Slowikowski pers com and Abrams forthcoming). In London, early medieval chalky ware is securely dated to the mid 11th to mid 12th century, after which it ceased to be used, and it is also found in the St Albans area predating South Hertfordshire Grey ware (Vince and Jenner 1991, 70–2). The type B13 pottery from Stanbridge could be of a similar date, although at Chelmscote a mid 12th century date was suggested (Moore *et al.* 2007, 49) and so the fabric may have a greater longevity of use in Buckinghamshire and Bedfordshire. Pit F2141 contained a fairly simple bowl rim in early medieval chalky ware (Figure 18.10). In the Leighton Buzzard area all identifiable forms belong to jars and in London to cooking pots and spouted pitchers (Anna Slowikowski pers com and Vince 1985, 37) and so it is possible the source for Walton Street is an unidentified site.

Group 2 Sandy and Shelly wares

Group 2 comprises 57 sherds (10.8%) in MSC 1 sandy and shelly ware which is unsourced and comprises usually grey quartz sand tempered fabrics with white shell and limestone. An expanded jar rim came from Ditch F2157 (L2158).

Group 3 Flinty tempered wares

Group 3 Flint with sand tempered wares totals 89 sherds (16.9%), with the majority comprising a fine sandy fabric with sparse to moderate flint and occasional white calcareous and black opaque inclusions. Surfaces are mainly brown with grey or red brown cores. These fabrics are fairly similar in description to unsourced MSC2 from Milton Keynes, a comparatively rare fabric there, and the presence of 63 such sherds (11.9%) at Walton Street is a little unusual. They include two jar rims from Ditch F2006 (Figures 18.11 and 18.12) and a profusely thumb decorated strap handle from F1036 (Figure 18.13). It is possible this category is related to a group of fabrics known as 'M40 wares' from South Buckinghamshire and Berkshire. Seven similar sherds with distinctive comb decoration (ESHER) are likely to provenance from one such site at Rush Green, Denham in South Buckinghamshire, thumbing to jug handles was also a characteristic there (Farley and Leach 1988, 73-4 and 82-4). Nineteen sherds (3.6%) of South Hertfordshire grey ware (SHER) containing flint temper complete this group. Among them are two large bowls from Gully F2013 and Pit F1035, one with thumb decorated applied strips. These are probably curfews indicated by internal sooting (Figure 18.14 and 18.15).

Group 4 Sandy wares

The majority of the medieval assemblage (343/65.3%) is in this category comprising all the sand tempered fabrics. The majority are sandy grey wares MS3 which includes Hertfordshire Grey wares (19) and Boarstall-type coarse wares (24) with dark grey to black surfaces and red-brown cores (McCarthy and Brooks 1988, 292). The latter includes a thickened internally beaded rim from either a jug or small jar (Figure 18.16). Four MS3 sandy grey ware jars came from ditch F2006 (Figures 18.17 – 18.21). A squat cooking pot with splayed overhanging flanged rim (Figure 18.20) quite closely matches an example from George Street, Aylesbury dated to the early 13th century (Yeoman 1983, 26 no. 5). Additionally a flanged reduced sandy cooking pot rim (Figure 18.21) is also of similar type to forms from George Street dated to the 13th century (Yeoman 1983, 26 no. 4). Ten Oxford and Brill-type sherds further support a 13th century date. It is probable that some of these coarse wares come from Brill and in particular a group of 47 reduced sherds with medium to coarse sandy fabrics may be related to the Brill fabric listed as OXAW in the Oxfordshire type-series which Mellor suggests is a successor to Oxfordshire ware OXY (Mellor 1994, 111). Two rims in this fabric from Layer L1070 and Pit F2150 (L2162) are similar respectively to T5/6 (a squared, undercut rim) and T12 (Figure 18.22) in the Oxfordshire Brill typology.

Finer fabrics for table ware are present in glazed Brill ware MS9 (44/8.3%), in buff fabrics, Oxfordshire ware OXY (10/1.9%), and unglazed Potterspury ware MS 6 (3.4%) from just over the border in Northamptonshire. The latter included an unusual jug with a slash decorated rod handle (Figure 18.23). At Great Linfoed rod handles were uncommon and always plain (Mynard and Zeepvat 1992, 264). The site yielded very little evidence to indicate late medieval pottery. The Brill-type fine ware fabrics are virtually all buff or orange which Yeoman suggests is early in the range, appearing in the mid 13th to early 14th. The 3 small sherds in reddy fabrics and patchy clear glaze are probably late Brill products, as Yeoman suggests the colour became pinker and then red brickier throughout the 14th century, but these are residual (Yeoman 1983, 22)

Post-medieval Pottery

Following this apparent gap, a pancheon rim in early post-medieval red earthenware with clear glaze over white slip line decoration (giving the appearance of brown over green), came from Ditch F1098 (L1099). The post-medieval to early modern pottery consists of red earthenwares, English stonewares, and mid 18th-19th century factory made white earthenwares including Creamware and Victorian 'Willow Pattern'. Ditch F2012 (L2108) produced two tiny sherds of Wedgwood 'black basalt' ware of similar date.

Summary

The combined Walton Street Car Park excavations produced a sequence of pottery spanning the middle Saxon to high medieval period, although there is quite a large degree of residuality in keeping with a site continuously occupied over several centuries. The pottery ties in well with previous excavations carried out in Aylesbury with organic temper predominant in the Saxon assemblage which, comparison with

other sites locally and further afield, indicates is of 6th - 8th century date. The presence of several sherds from as far afield as Leicestershire and Suffolk suggests a wide trade net-work operated, but the vast majority of pottery would have been locally produced. In keeping with the earlier excavations, St. Neots ware was the only one of the Saxo-Norman trio present due to its local availability.

The medieval fabrics are very mixed and only 20% comprising Brill, Boarstall, Potterspury and Rush Green, Denham can be provenanced to known kiln groups. Others such as South Hertfordshire grey ware and early medieval chalky ware can be attributed to regions to the east and north-east respectively of Aylesbury, but not to specific production sites. Approximately 50% of the material, mainly MS3 sandy grey wares could not be sourced, and probably come from unlocated production sites. However, the overall distribution suggests pottery is sourced both locally and from all surrounding areas particularly the north-east and east. The exception is to the south where there is less evidence for imported pottery unless the MSC2 pottery derives from the Thames Valley in the South Buckinghamshire/Berkshire region. Approximately 13% of the assemblage can be classed as finer table ware in Oxfordshire, Brill and Potterspury fabrics. The lack of imported pottery from further afield however, does not necessarily mean the site was of lower status as Brill itself is a high quality fine ware.

Acknowledgement

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3.5 The ceramic building materials

By Andrew Peachey

The excavations produced a total of 282 fragments (19,551g) of CBM including medieval peg and floor tile, post-medieval to early modern brick and rare fragments of Roman CBM. With the exception of the post-medieval to early modern CBM contained in Drain F2188, the CBM is very highly abraded and fragmented.

The Romano-British CBM was residual in Pits F2166 (alongside medieval fragments and post-medieval material) and F2146. Pit F2166 (L2177) contained a single fragment of flat tile in an entirely-oxidised, sand-tempered fabric with a combed oblique lattice on one surface. This fragment is probably derived from a Romano-British box flue tile but is too small and abraded to be certain. The second Romano-British fragment, in Pit F2146 (L2148), is in a contrasting fabric with oxidised surfaces and a thick reduced core, tempered with common fine quartz, common reduced grog (0.5-3mm) and sparse calcareous/ shell inclusions (1-4mm). It is the flange of a tegula roof tile. Both fragments appear residual in their respective contexts.

The medieval CBM assemblage is almost entirely comprised of peg roof tile, with fragments from a single floor tile also present. The fabric of the medieval tile has oxidized orange to red surfaces (2.5-5YR 5/6), usually with a thin, reduced core.

Inclusions comprise common quartz (0.2-0.5mm), sparse iron-rich grains (0.1-0.25mm) and sparse calcareous grains or voids (0.5-4mm).

The peg tile is 13-15mm thick and flat, although it has often become warped during firing. Other diagnostic features include pre-firing circular, tapering peg holes (15mm wide at the top) and a sanded base. Peg tile of this type was probably produced in the 13th to 15th centuries; however, it may have continued or survived into the early post-medieval period. Low quantities of peg tile were ubiquitous in features containing CBM. Notable concentrations were contained in Channel F1145 (32 fragments; 1534g) and Pit F1095 (10 fragments; 708g), while less substantial concentrations were contained in Layer L1070 (Trench 8) (seven fragments; 305g), Linear Feature F1029 (Trench 9) (11 fragments; 310g) and Pit F3020 (eight fragments; 340g).

The floor tile was contained in Pit F2150 (L2161). All 23 fragments (1426g) are derived from a single tile but do not all cross-join. The upper surface of the tile is partially covered with an uneven green lead glaze and the base of the tile is sanded. The tile is 14mm thick and otherwise comparable to the unglazed peg tile that is common in the assemblage. Like the peg tile, plain floor tiles such as this were produced from the 13th century and continued to be used throughout the post-medieval period.

The most substantial concentration of CBM in the assemblage was contained in Ditch F2188 (L2189) (in total 65 fragments; 10,495g), accounting for 23.05% of the assemblage by fragment count (53.68% by weight). Sparse fragments of peg tile (as described above) were also present in this feature, but the group is mainly comprised of fragments of brick, the bulk of which are abraded and fragmented without any diagnostic features. They could originate from any time in the post-medieval/ early modern period. However there are also three well-preserved bricks in the assemblage, two of which are complete and date to the late 19th to 20th century. These bricks have dimensions of 230mm x 115mm x 70mm and a broad frog stamped with the initials 'L&S', suggesting a late 19th to early 20th-century origin.

3.6 The Small Finds

By Nina Crummy

Five objects were recorded as Small Finds on site. SFs 1, 2 and 3 are in fact slag fragments. The other two objects, a fragmentary antler comb, and part of a glass bead, are Anglo-Saxon.

Fig. 19. SF 4. (L2148) F2146. Pit fill. Fragments of a double-sided composite antler comb with iron rivets. The connecting-plates are narrow and plain, but scarred from the cutting of the teeth. The surviving end-plate is also plain. It projects only very slightly beyond the end of the connecting-plates, and has been trimmed at the centre to match them exactly. The teeth on each side are the same width, rather than coarse on one side and fine on the other. The length cannot be estimated accurately, but was greater than 120mm; width 52.5mm.

Fig. 19: SF 5. (L2179) F2143. Pit fill. Fragment of a globular blue glass bead of Guido's Group 6xiii (1999, 54), with one complete and two partial white eyes with

red centres. The surface of the glass is degrading and covered with iridescence. Length 10mm, diameter 15mm.

3.4 The industrial residues

By Jennifer Jones and Philip Clogg

Seven samples (total weight 956g) of industrial residues were submitted for examination and identification. The samples derive from seven different contexts including pit, posthole and ditch fills. The date range of these contexts is late 9th to mid 13th-century.

Methodology

The aim of the examination was to characterise the material and to identify the industrial processes from which it originated. The material was examined visually and under x16 magnification, and classified by morphology, density, colour and vesicularity. The category criteria used are based on the English Heritage Centre for Archaeology Guidelines on Archaeometallurgy (Bayley *et al.* 2001).

Results

Pit F2026 (L2029): Fragments of undiagnostic, non-magnetic ironworking slag. This was originally one piece, representing waste from a single metalworking event. The lump was originally roughly plano-convex and *c.* 70mm in diameter. Examination of the interior shows that the residue is vesicular throughout. The top, flatter, surface shows some iron corrosion products.

Ditch F2044 (L2049): A piece of very dark coloured tap slag, with some air bubbles. It has been broken in antiquity from a larger cake. Its top surface has the characteristic flowed appearance, which shows that the material was once molten. The underside is rougher, probably reflecting the shape of the surface onto which the molten material flowed.

Posthole F2073 (L2075): Piece of industrial residue, vesicular around the outside edge and very dense towards the centre. This may be smelting slag, although it does not have the flowed surface of tap slag. Alternatively, it could be well-compacted smithing slag. A fragment was detached, homogenised by crushing to a powder and pelletised for analysis using EDXRF (energy dispersive X-ray fluorescence). Major elements detected were iron and silica, which together made up over 80% of the sample. A range of minor elements were also present, deriving from impurities in the iron ore and the fuel. These included aluminium, magnesium and calcium. The results are consistent with those obtained by other researchers for rather inefficiently produced iron smelting and smithing slags (Bachmann 1982). The exact identification of this sample therefore remains uncertain.

Ditch F2097 (L2106): A jagged fragment of tap slag, broken in antiquity from a larger cake. The slag is very dark coloured and dense, with some fairly large air bubbles visible in the matrix. Its top surface has the characteristic flowed appearance, which shows that the material was once molten. The underside is rougher, probably

reflecting the shape of the surface onto which the molten material flowed.

Ditch F2097 (L2111): A splash of undiagnostic ironworking slag with adhering semi-vitrified sandy soil from the ground surface onto which it fell.

Ditch F2097 (L2124): This is not industrial residue from primary production, but an accumulation of small drips of molten lead, possibly representing waste from a workplace using lead as part of an unknown manufacturing process.

Pit F2160 (L2164): A piece of dark coloured tap slag, with some vesicularity. It has been broken in antiquity from a larger cake. The top surface has the characteristic flowed appearance, showing that the material was once molten.

Discussion

The assemblage includes three contexts (L2049, L2106 and L2164), which produced small quantities (total weight 366g) of tap slag, a waste product of the iron smelting process. During primary extraction of the metal from the iron ore (smelting), the resultant molten slag would periodically be tapped out through a hole in the furnace. This produces the ‘flowed’ pattern characteristic of the upper surface of tapped slag. The underside is usually rough and uneven and can reflect the shape of the surface onto which the molten material flowed.

The assemblage as a whole is small and is not directly associated with any features connected with iron smelting or production. It seems very unlikely that iron smelting was occurring in the near-vicinity. Other metalworking activities on the site, such as smithing, which may have produced the small quantities of non-diagnostic ironworking slags, are likely to have been intermittent and probably domestic in nature.

3.5 The animal bone

By Dr. James Morris

Introduction

In total, 5485 fragments of animal bone were recovered from the site. Hand-recovery resulted in the collection of 2951 fragments; the remaining 2534 elements were recovered from bulk soil samples. Faunal remains were recovered from contexts of all four phases, but the majority of the remains were recovered from features dated to Phase 2: middle Saxon (AD 550 – 850) and Phase 3: late Saxon to medieval (AD 850 – 1300).

This animal bone report consists of two main sections. The first section considers the faunal assemblages of Phases 1, 2 and 3 and the second section discusses the overall results within a regional setting.

Methods

All animal bones were recorded individually into a *Microsoft Access* database (see

data CD accompanying this report). Where possible, bones with recent breaks were reconstructed and have been counted as single specimens. Where appropriate, the following information for each fragment was recorded: context, phase, species, anatomy, zone(s) of bone present, fusion data, taphonomic condition, tooth ageing data, pathological data, butchery data, metrical data, and any other comments. Taxonomic identifications were checked utilising available reference collections.

When fragments can be assigned to a particular size of mammal but not to species, the categories 'SAR' (small ungulate size; for indistinguishable fragments from sheep/goat or pig-sized mammals) and 'LAR' (large ungulate size; for indistinguishable fragments from cattle-sized mammals) are used. When it is not possible to identify the bones of small mammals (mouse-sized), the elements are recorded as 'USM'. When it is possible to identify a small mammal to genus but not subgenus (*i.e.* field mouse), the element is recorded as species indeterminate (*i.e.* mouse indeterminate). Other unidentified mammal fragments are recorded as 'MAM' (unidentified mammal). Bird bones are identified to species where possible, or otherwise recorded as 'BIRD' (unidentified bird). Where possible, sheep and goat are separated using the methods of Boessneck (1969), Payne (1985) and Halstead and Collins (2002).

Counts of the number of identified specimens present (NISP) include any identified limb bone fragments, ribs, skull fragments, loose teeth and vertebral bodies. When remains from the same individual animal were identified they are described as Associated Bone Groups (ABGs). Many of these deposits were identified during excavation as the articulation of elements was noted by the excavators. The term ABG is used as it removes any interpretive connotations. For example in the past such deposits are often called 'animal burials', however the use of the term burial may imply some sort of special event, therefore ABG is used (Morris 2008).

Tooth eruption and wear stages are recorded following Grant (1982). Long bone epiphyseal fusion is recorded and used to estimate the age profiles for cattle, sheep/goat and pig following Silver (1969). Measurements following von den Driesch (1976) were taken and withers heights estimated using those recommended by von den Driesch and Boessneck (1974). Evidence of gnawing, burning, butchery (knife cuts, chopping, deliberate smashing, sawing), pathology and any taphonomic effects are also recorded.

Results

Common name	1	2	3	4	5	Total
Cattle		143	254	66* (2)	13	476
sheep/goat	1	138	375	90	10	614
Sheep		5		2		7
Goat			3			3
Pig		49	115* (28)	18		182
Horse		4	30	42* (5)	4	80
Dog		10	84** (52)	49** (26)	15* (10)	158
Cat		11** (8)	24* (2)	6		41
red deer			1			1
Roe				1		1
Rabbit			4			4
Hare			1			1
domestic fowl		2	12	6		20
Goose		6	5	4		15
Duck				1		1
Partridge			2			2
Pheasant			1			1
Pigeon		1	1			2
Crow			3			3
small passerine			3			3
Fringillidae			1			1
field vole			1			1
vole, indeterminate		7	13		1	21
Mouse, indeterminate			12			12
rat, indeterminate	1	3	2			6
Shrew			3			3
Mole			5			5
Frog/Toad		38	158	1	11	206
Herring			6			6
LAR (large ungulate size)		166	413	150	21	750
SAR (small ungulate size)	2	267	777	75	41	1162
USM (unidentified small mammals)		27	163	5	8	203
MAM (unidentified mammal)	4	294	1073	38	62	1471
BIRD (unidentified bird)		1	16		1	18
FISH (unidentified fish)		2	1			3
Total	8	1174	3562	554	187	5485

Table 6: Total NISP count of species per phase, from hand-collection and environmental samples. *indicates that an ABG (Associated Bone Group) is included in the count; the number of asterisks indicates the number of ABGs. The number in brackets indicates the number of elements from ABGs present.

Details of the main species elements are present in Appendix 2.

Phase 1: late Bronze Age to early Iron Age (1300 – 400 BC)

Only a small proportion of the animal bone assemblage is dated to the first phase of the site (Table 6). In total, eight elements are present in this period, all of which were recovered from environmental samples taken from Pit F3011 (L3012). Due to the small and fragmented nature of the assemblage, it is only possible to identify two elements to species. A sheep/goat (*capra/ovid*) first phalanx is present, with an unfused proximal epiphysis, indicating that the animal was less than 16 months old. Also present are four fragments of unidentified mammal bone and two fragments of small ungulate -sized rib. The other identifiable element is the tibia of a brown rat (*Rattus norvegicus*). The brown rat is not a native species and appears to have reached and spread through Britain in the 18th century (Armitage 1994; Yalden 1999). The species is known to burrow, so this is highly likely to be an intrusive find.

Phase 2: middle Saxon activity (AD 550 – 850)

A large proportion of the animal remains from the site date to this phase, with 1174 fragments recorded (Table 7). In total, 781 of these fragments were recovered by hand; the remaining 393 were recovered from environmental samples.

Species	Southern pit group	Other features	Total
Cattle	134	9	143
Sheep/goat	136	2	138
Sheep	5		5
Pig	49		49
Horse	4		4
Dog	8	2	10
Cat	11		11
Domestic fowl	2		2
Goose	6		6
Pigeon	1		1
Vole	7		7
Rat	3		3
Frog/toad	38		38
Fish	2		2
LAR (large ungulate size)	148	18	166
SAR (small ungulate size)	267		267
USM (unidentified small mammals)	27		27
MAM (unidentified mammal)	294		294
UBIRD	1		1
Total	1143	31	1174

Table 7: Total NISP count of species for Phase 2 feature types, from hand-collection and environmental samples

It is possible to identify 45% (356 fragments) of the hand-collected assemblage to both species and element. Due to the small and fragmentary nature of the animal remains recovered from the soil samples, it is only possible to identify 15% (61 fragments) to species and element. The majority of the bones recovered from the soil samples consist of indeterminate fragments of mammal bone, often less than 10mm in length.

Phase 2 pits in the southern sector of the site

In total, 1143 (97%) of the 1174 animal bone fragments from Phase 2 were recovered from the group of pits in the southern part of the site.

Pit F2067

The largest assemblage, 592 fragments, was recovered from Pit F2067. Faunal remains were recovered from all six fills. The lower fill of the feature (L2068=L2140=L1168) contained only a small quantity of animal remains (40 fragments), from which sheep/goat and cattle are the only identifiable domestic species. Butchery evidence is present on one cow astragalus: this consists of repeated medial to lateral knife marks across the dorsal aspect of the trochlea. Such a mark is likely to have resulted from the cutting of the ligaments around the distal tibia and astragalus for the disarticulation of the hock joint. Canid gnawing is present on a fragment of cow tibia and cat gnawing is present on a fragment of pigeon (*Columba sp*) humerus. The pigeon is the only bird bone to be found in the lower fill of the pit. One frog/toad (*Anura/Bufonidae*) tibia was identified from the environmental samples. The rest of the assemblage from the lower fill comprises unidentifiable mammal fragments. Some residual Roman pottery was present in the lower fill of the pit which could indicate that some of the animal bone is also residual, and which could explain the relatively poor preservation.

A much larger and more diverse faunal assemblage was recovered from the upper fill (L2068=L2139=L1169) of Pit F2067. Cattle are the most common species, followed by sheep/goat and pig. It is possible to positively identify a mandible and a loose lower deciduous premolar 4 (dp4) as belonging to a sheep rather than a goat. An equal proportion of cattle elements are present in the fill, indicating that all parts of the carcass were being deposited. The sheep/goat elements show a somewhat different pattern; although all elements of the body are represented, radii make up 19% (13) of the sheep/goat assemblage. This could indicate that a higher proportion of front limbs were deposited within the feature. The other common elements are the mandible and tibia. As these are some of the densest elements, they tend to survive the taphonomic process better than other skeletal elements (Brain 1967; Lyman 1994, 237). That 41% of the assemblage consists of pig mandible and loose teeth may be a similar reflection of the durable nature of these elements.

Butchery is observable on a small number of cattle elements; this includes disarticulation knife cuts at the proximal aspect of a radius and the vertical midline splitting of a metatarsal. Knife marks are also present on a sheep/goat astragalus, and were probably caused by the cutting of the ligaments around the distal tibia and astragalus.

Elements from both domestic fowl (*Gallus sp*) and goose (*Anser sp*) are also present in the upper fill. A number of elements of frog/toad and vole (indeterminate) were recovered from the environmental samples.

Posthole F2073 was cut into the bottom of Pit F2067. Some 78 fragments of animal bone were recovered from Fill L2075. It is only possibly to identify 24% of the fragments to species and element. These include sheep/goat (eight fragments), cattle

(six fragments), dog (two fragments), cat (two fragments) and horse (one fragment). The assemblage is well-preserved. Four elements (all sheep/goat) have canid gnawing marks present and one SAR fragment is burnt to the point of calcification, indicating that it has been subjected to heat higher than around 600°C (Shipman *et al.* 1984).

51% of the fragments were recovered from the soil samples taken from this feature. Only three elements from the soil samples can be identified to element and species. These comprise a sheep/goat maxilla fragment, the loose tooth of a cow and a cat's caudal vertebra. The rest of the elements consist of mammal bone fragments. Only two small mammal (mouse/vole-sized mammal) long bone fragments were recovered from the soil samples. The lack of small mammal or amphibian elements within what is a relatively large assemblage for a fairly small feature indicates that the posthole was probably not left open for a long period of time. It may have been in-filled at the same time that the lower fill of F2067 was deposited.

Pit F2146

In total, 156 fragments of animal bone were recovered from Pit F2146. Only 22 fragments of animal remains were recovered from the lower fills (L2149, L2174 and L2080), of which only 12 are identifiable to species. They include cattle (four fragments), sheep/goat (four fragments), pig (three fragments) and dog (one fragment). The rest of the fragments are from large and medium-sized ungulates. The assemblage from the lower fill is relatively well-preserved; a small amount of canid gnawing is present on three elements, including the dog femur which is present. Residual Roman pottery is present in the bottom fill of this feature, and it is possible that some of the faunal remains from the lower fills may also be residual. Butchery is present on two pig and one cow elements. A pig humerus from L2149 has knife cuts on the trochlea, which are likely to be associated with the dismemberment of the upper forelimb. A pig rib from the same context has a chop mark present on the tubercle, which is likely to have been caused during the dismemberment of the ribs from the vertebral column. A distal humerus fragment from a cow found in Fill L2080 has been vertically split, probably for marrow extraction. A sheep/goat mandible fragment, consisting of a tooth row, from Fill L2174, displays pathology. This takes the form of the re-absorption of the alveolar bone around the fourth premolar and first molar; pitting in this area is also present and the two teeth would appear to have been lost ante-mortem. The sheep/goat therefore suffered from periodontal disease. As this is the only sheep/goat mandible recovered to display such pathology, the cause would not appear to be environmental (*i.e.* the ingestion of mineral particles from substrate grazing). It is more likely to have been caused by the oral environment of the individual animal (Davies 2005).

A much larger sample of 137 fragments was recovered from the upper fills (L1171 and L2148), of which 74 fragments can be identified to element and species. Sheep/goat (34 fragments) is the most common species, followed by cattle (26 fragments), cat (six fragments), pig (five fragments) and dog (three fragments). The rest of the assemblage comprises long bone shaft, rib and skull fragments of SAR (16 fragments), LAR (15 fragments) and MAM (11 fragments). The assemblage is well-preserved, with only five elements eroded and eleven with canid gnawing present.

The six cat elements come from a partial ABG recovered from Fill L1171. The ABG

was identified during the post-excavation process and was not identified on site; therefore, it is unknown if it was found in an articulated state. Fragments of skull and pelvis are present, as well as the right scapula, humerus, radius and ulna. The proximal epiphysis of the humerus and distal epiphysis of the radius and ulna are unfused. The other long bone epiphyses present are fused. This would indicate that the cat was between 12 and 18 months old when it died (Smith 1969).

The only elements with butchery present were recovered from Fill L2148. One sheep/goat astragalus has a knife cut present on the medial condyle, which represents the removal of the lower hind limb. Knife marks are also present on two cow elements. Three fine knife cuts are present on the lateral aspect of the body of the ischium. These may have been created during the removal of meat from the pelvis. A knife cut was also recorded on a cow mandible, between the coronoid process and the condyle. This is likely to have occurred during the disarticulation of the jaw from the skull. Further processing is indicated by a cow radius which has been split medial-laterally, probably to gain access to the marrow.

Pit F2145

A relatively small sample of 86 bones was recovered from Pit F2145. Although the faunal remains are divided and recorded between three separate contexts (L1174, L2147 and L2176), these simply represent the different archaeological sections excavated through the feature. The feature is thought to have had just one fill event. It is possible to identify 41% of the assemblage from this feature. With the exception of three goose bones, the remains come from domestic mammals. Cattle (19 fragments) are the most common species, followed by sheep/goat (nine fragments), horse (two fragments) cat (two fragments) and pig (one fragment). It is possible to positively identify a mandible as being from a sheep (rather than sheep/goat) due to the nature of the deciduas premolar 4. The assemblage is well-preserved; none of the elements are eroded. Five elements are damaged as a result of canid gnawing. Butchery evidence is present on a cow first phalanx: this consists of four knife cuts on the ventral aspect of the proximal end, just below the articulation facet. These marks were probably created during the removal of the feet from the rest of the limb.

The two cat elements consist of a humerus and radius, which appear to be from the same individual. It is unknown if these were recovered in isolation; they may represent the deposition of a partial cat ABG. As the feature was not fully excavated, it is not possible to ascertain whether they represent the recovery of disturbed elements from a complete ABG deposit. Residual Bronze/Iron Age pottery was also present in this feature. However the good preservation along with the presence of possibly articulated elements would suggest that the faunal remains are not residual.

Pit F2086

In contrast to the other pits in the southern corner of the site, only one animal bone fragment was recovered from Fill L2087. It consists of a large ungulate-sized long bone fragment.

Pit F2165

In total, 94 fragments of animal bone were recovered by hand and from soil samples taken from Fills L2168, L2170 and L2172. Unlike the other pits within this group, the majority of the faunal remains from this pit were recovered from the lower (above the basal layer, L2167) fill (L2168). The majority of the animal remains from this fill were recovered from soil samples. It is possible to identify 36% to species and element. The most common elements come from frog/toad (50%), followed by cattle (11%) and sheep/goat (5%); one dog caudal vertebra is also present. The assemblage of frog/toad elements includes all the major long bones. As well as the frog/toad bones, 10 unidentified small mammal long bones were also recovered from the soil samples. The accumulation of amphibians and small mammals is likely to indicate that the feature was left open for some period of time and the lower fill may represent natural silting.

Six fragments of small mammal bone, including the pelvis and mandible of a brown rat (*Rattus norvegicus*), were present in the soil samples from Fill L2170. Two frog/toad bones were also recovered, which could indicate that this fill naturally accumulated to some extent. There is only a small amount of other bone material from this fill, with only single elements of cow, pig, and horse recorded. The assemblage consists of just 22 fragments. The remaining elements consist of unidentified mammal fragments.

The assemblage from the uppermost identified fill (L2172) is even smaller, with only seven elements present. Four of the elements are from sheep/goat and consist of two loose teeth and two scapula fragments (possibly from the same bone). The other three elements are SAR long bone shaft fragments. None of the elements from this feature display evidence of having been affected by preservational factors and no butchery marks are observable.

Pit F2143

In total, 133 elements were recovered by hand and from environmental samples taken from Pit F2143. The faunal assemblage came from three contexts (L2144, L2179 and L2180; the bottom, middle and top fills, respectively). The majority of the assemblage came from the bottom and middle fills, with only five fragments recovered from L2180 (two sheep/goat and three unidentified mammal fragments).

The largest assemblage (71 fragments) came from the middle fill; however, it is only possible to identify 12 fragments to species and feature. This includes sheep/goat (three fragments), frog/toad (five fragments), cattle (one fragment), dog (one fragment), cat (one fragment) and one brown rat. The majority of the assemblage (38 fragments) consists of unidentified mammal fragments, which were recovered from the environmental sample. One of the sheep/goat elements displays evidence of canid gnawing.

The bottom fill of Pit F2143 (L2144) contained 57 fragments, all of which were recovered from environmental samples. Because of this, only three elements can be identified, all frog/toad. Seven unidentified small mammal long bones are also present. The rest of the elements are either SAR fragments (11 fragments) or

unidentified mammal fragments (34 fragments). The SAR fragments do confirm that a small amount of domestic waste was deposited within Pit F2143. The presence of frog/toad and small mammal elements could indicate that the pit was left open for a period of time and was filled in gradually.

Other Phase 2 features

Faunal remains were also recovered from four Phase 2 pits in the northern part of the site. In each case, animal remains were only present in a single fill, and in much smaller quantities than in the Phase 2 pits in the south of the site. Two Pits (F1075 and F3015) had only one animal bone each: a fragment of cow mandible from F1075 and a large ungulate -sized long bone fragment. Pit F3009 (L3010) contained only two animal bones: a fragment of cow pelvis and a small skull fragment from a large ungulate -sized mammal.

A larger assemblage of 27 fragments was recovered from Gully F3013. Most of the identifiable fragments are from cattle (26%), followed by sheep/goat (7%) and dog (7%); however, the majority of the fragments (59%) are from unidentifiable large ungulate -sized mammals. The dog bones consist of skull and mandible fragments. The skull is highly fragmented into 35 refitting pieces, from the occipital, perioticum, frontal and maxilla areas. It is likely that the skull and mandible are from the same animal.

Phase 3: late Saxon to early medieval (AD 850 – 1300)

The largest proportion of the site assemblage, 65% (3562 fragments), was recovered from contexts dated to Phase 3 (late Saxon to early medieval). Faunal remains were recovered through hand-collection and from environmental samples.

Species	Boundary ditches	Other ditches	Pits	Layer L1070	Other	Total
Cattle	140	39	55	13	7	254
Sheep/goat	186	40	68	72	9	375
Goat	3					3
Pig	57	1	10	10	37	115
Horse	15	7	8			30
Dog	75	8		1		84
Cat	12	5	4		3	24
Red deer			1			1
Hare			1			1
Rabbit	3		1			4
Domestic fowl	6	1	5			12
Goose	3	2				5
Partridge	1		1			2
Pheasant			1			1
Pigeon	1					1
Crow	3					3
<i>Fringillidae</i>			1			1
Small <i>Passerine</i>	1		2			3
Vole	8		5			13
Field vole	1					1
Mole	2		3			5
Mouse	8	1	3			12
Rat	1		1			2
Shrew	3					3
Frog/toad	119	2	33		4	158
Herring	5	1				6
LAR (large ungulate size)	216	83	89	12	13	413
SAR (small ungulate size)	508	43	160	29	37	777
MAM (unidentified mammal)	681	32	339	2	19	1073
USM (unidentified small mammals)	124	2	33		4	163
BIRD	9		7			16
FISH	1					1
Total	2192	267	831	139	133	3562

Table 8: Total NISP count of species, from hand-collection and environmental samples, for Phase 3 feature types

It is possible to identify 31.4% (1119 fragments) to both species and element. The majority of the unidentified remains are from the environmental samples. Of the 1573 hand-collected fragments, it is possible to identify 52% (822) to species and element.

Phase 3 rectilinear boundary ditches

In total, 61% of the Phase 3 faunal remains were recovered from the rectilinear boundary ditches (Table 8). During the excavation, eight boundary ditches were excavated, with the faunal assemblages from each feature ranging from three to 780 bones.

Ditch F2006

Excavation of Ditch F2006 resulted in the collection of 167 animal bone fragments. The animal remains were recovered from five separate contexts. The relationship between these contexts is not clear as the number of fills within the ditch varied along its length. The majority of the faunal remains (85%) were recovered from the upper fills (L2005 and L2007). Only 16 fragments came from the secondary fills (L2004 and L2193) and eight from the bottom fill (L2198).

A small number of domestic mammal remains were recovered from the lower fill of the ditch. These consist of four sheep/goat, one cow and one pig fragments. Two SAR long bone shaft fragments are also present, one of which is charred. It is possible to positively identify two horn cores as goat, rather than sheep. One of the goat horn cores is still attached to a fragment of skull and has butchery marks present. These consist of nine knife marks round the base of the horn core, which would have been caused when the horn was removed.

The faunal remains from the middle and secondary fills (L2004 and L2193) were recovered from the environmental samples. It is only possible to identify one fragment, a frog pelvis, to species and element. Two unidentified small mammal long bones were also recovered, as were two SAR rib fragments. The rest of the remains are unidentifiable.

Of the 143 fragments from the two upper fills (L2005 and L2007), it is possible to identify 67 to both species and element. The majority of the identified remains are from domestic mammals, of which sheep/goat is the most common (68%), followed by cattle (32%), pig (13%), horse (3%) and cat (1.5%).

One of the horse elements present is the right third metacarpal with the second metacarpal (medial splint bone) fused to it. This condition, *desmoiditis ossificans ligamentum interosseum*, occurs due to the ossification of the interosseum ligament.

One domestic fowl humerus and one fragment of rabbit (*Cuniculus oryctolagus*) pelvis are also present. Rabbit is not a native British species and appears to have been introduced by the Normans in the late 11th century (Yalden 1999, 160). If the element is not intrusive, this would indicate that the deposition of the upper fill of the ditch occurred in the latter part of the phase. The remains are well-preserved, although a higher proportion (30%) of the sheep/goat elements are canid-gnawed compared to those of other species. The large faunal assemblage from the upper fills of the feature compared to the lower fills may indicate that the top fill represents the deliberate deposition of domestic waste rather than a natural accumulation. The lower fills may have accumulated as the feature was left open, although only a small number of amphibian and small mammal elements are present.

Ditch 2040

Boundary Ditch F2040 produced 148 fragments of animal bone from four fills (L2041, L2042, L2043 and L2081). Most of the faunal remains were recovered from Fill L2043, which was the upper fill of the ditch. Only three bones are present from the bottom fill (L2042). These consist of two SAR and one LAR long bone shaft

fragments. The stratigraphic positioning of Fills L2041 and L2081 is unclear and both have small animal bone assemblages. A fragment of cow mandible with no teeth present and a sheep/goat loose tooth are the only identified remains from Fill L2041. One LAR rib and two SAR fragments are also present. A larger assemblage of 24 fragments was collected from Fill L2081. The majority of the identifiable bones are from sheep/goat (33%), with five pig and three cow elements also present. The rest of the assemblage consists of LAR and SAR ribs and long bone fragments. One of the sheep/goat elements is a complete right radius, which gives a withers height of 0.58m. This is close to the average height of sheep/ goats in the late Anglo-Saxon assemblages from West Stow and Wicken Bonhunt (Crabtree 1994).

A large proportion (64%) of the remains from the top fill (L2043) were recovered from the environmental samples. This is why it is only possible to identify 18 fragments to species and element. In total, nine sheep/goat bones can be identified, along with three cow, three frog/toad, one pig, one cat and one indeterminate mouse fragments. The majority of the remains present consist of very small fragments (10mm or less) of mammal bones. It is possible to identify 34 fragments to SAR mammal size, of which thirteen fragments are rib and twenty are long bone shaft fragments. The assemblage appears to be well-preserved despite the large proportion of unidentified fragments. Only one eroded and one canid-gnawed element are present.

Ditch F2044

An assemblage of 156 fragments was recovered from this ditch. The ditch appears to have only one fill, although this was numbered separately in each archaeological section. Therefore, the animal remains are recorded under the separate contexts L2045, L2049 and L2062. It is noticeable, however, that the majority of the assemblage (124 fragments) was recovered from L2045 (Segment A). This may indicate that domestic waste was sporadically deposited in discrete dumps at points along the length of the ditch. Overall, it is possible to identify 41% of the fragments to both species and element. The most common elements are of dog (43%) followed by cow (20%), sheep/goat (20%), pig (7%), frog/toad (4%) and rabbit (2%). The rabbit element present is a cervical vertebra and may indicate the feature was filled-in in the later part of Phase 3 (see F2007 discussion, above).

All the dog elements present are from a partial ABG recovered from L2045. The ABG consists of all the cervical vertebra, nine thoracic, nine ribs (five right, four left) and a left scapula. Two loose dog teeth are also present, but it is unknown if these are from the same individual. All the vertebrae are fully-fused, which indicates the animal was an adult and at least four years old (Harcourt 1974). No butchery marks are present on the ABG. This could indicate that the animal was originally deposited complete.

The preservation of the assemblage is good. None of the elements are gnawed and only three elements are eroded. This may suggest that the faunal remains within the feature represent primary deposits. Butchery is present on one element: a pig skull from L2045. The right occipital and parietal are present and they appear to have been chopped through the medial-lateral axis, slightly to the side of the parietal suture. The skull is likely to have been split to access the brain tissue.

Ditch F2056

Ditch F2056 contained the second largest assemblage from the Phase 3 rectilinear boundary ditches. In total, 555 fragments were collected from eight contexts (L1137, L1180, L1181, L2066, L2102, L2103, L2113 and L2126). The largest samples came from L2102 (124 bones) and L2103 (183 bones), which are basal and top fills, respectively. The majority of the assemblage from the known bottom fill (L2102) was recovered from soil samples. The number of identified bones is small, with only 26% of fragments identifiable to element and species. The majority of the assemblage (82 bones) is made up of small (10mm or less) fragments that can only be identified as mammal. The bones that can be positively identified are frog/toad (seven fragments), herring (*Clupea harengus*) (two fragments), cow (one fragment), sheep/goat (one fragment), domestic fowl (one fragment) and vole (indeterminate) (one fragment). Herring is represented by two vertebrae fragments. Their presence indicates that saltwater fish were being traded inland to the late Saxon/ early medieval settlement.

The one cow bone present is a metatarsal, which has extensive butchery marks. These consist of shave marks on the lateral posterior aspect, which would have been created by running a heavy knife down the side of the bone to remove the meat. Four heavy knife marks are also present around the middle of the shaft, and three chop marks are below these, one of which split the bone into proximal and distal halves. The heavy knife marks are likely to have been caused by attempts to remove soft tissue around the area that is to be chopped. The bone may have been chopped so that the marrow could be accessed.

151 bone fragments were recovered from the remaining contexts (L1137, L1180, L1181 and L2126). As with the previous context, a large proportion of the faunal remains were recovered from environmental samples. It is possible to identify 28% to species and element, including frog/toad (21 fragments), sheep/goat (11 fragments), cattle (eight fragments), pig (one fragment), horse (one fragment), dog (one fragment), domestic fowl (one fragment) and pigeon (one fragment). Fifteen unidentified small mammal long bones are also present. One of the cattle elements is a patella which displays evidence of butchery consisting of three overlapping knife cuts on the proximal posterior aspect. These are likely to have been caused by the dismemberment of the knee joint.

The three upper fills of the ditch (L2066, L2103 and L2113) produced a combined assemblage of 280 bones. The identified elements consist of cattle (19 fragments), sheep/goat (16 fragments), frog/toad (16 fragments), pig (13 fragments), crow (*Corvus corax*) (three fragments), dog (two fragments), cat (two fragments), vole (two fragments), domestic fowl (one fragment) and mole (*Talpa europaea*) (one fragment). A cow and a sheep/goat element, both from Fill L2113, have butchery marks present. A pelvis fragment has been chopped straight through the acetabulum during the disarticulation process. A sheep/goat proximal tibia fragment has knife cuts present on the posterior aspect just below the epiphysis, which are likely to have occurred during the disarticulation process.

It is noteworthy that a large proportion of loose teeth are present in the cattle and sheep/goat assemblages from the upper fills of the ditch. As with the previous fills of

this feature, a large proportion of the remains consist of small unidentifiable bone fragments recovered from the environmental samples. Eighty-two SAR fragments are also present, most of which are rib or long bone shaft fragments. Compared to the other features discussed above, the remains from the top fill of F2056 are not well-preserved. A number of identified elements have weathering cracks as well as erosion and canid gnawing. The presence of small mammal and amphibian remains could indicate that the top fill may not have been deposited in one event and may have been left open for a period of time. This would account for the relatively poor preservation of the elements within this feature. The top fill may represent the gradual accumulation of domestic waste.

Ditch F2076

Ditch F2076 had a single fill which was recorded as three separate contexts (L2077, L2078 and L2175). In total, 296 fragments of animal bone were collected from the feature: 191 from L2077, 104 from L2078 and 31 from L2175. The smaller assemblage from L2175 compared to the other contexts could indicate that domestic waste was not deposited to the same extent in all parts of the feature. The assemblage from each context is well-preserved, with only twelve elements being canid-gnawed and seven elements with erosion present.

It is possible to identify 42% of the fragments to species and element. The most common species present is sheep/goat (48 fragments), followed by frog/toad (36 fragments), cattle (11 fragments), pig (nine fragments), horse (seven fragments), cat (four fragments), dog (three fragments) and domestic fowl (two fragments). One partridge (*Perdix perdix*) tibia is present in the hand-collected assemblage. The four cat elements present may be from the same individual and could represent a disturbed partial ABG. The elements consist of a left pelvis, right femur and left and right tibia. The right femur and tibia appear to be from the same individual. It is unknown if the elements were recovered in articulation. The frog/toad elements were recovered from the soil samples along with three shrew (indeterminate), one vole (indeterminate) and 46 USM elements.

Butchery marks are present on sheep/goat and horse elements from Fill L2078. A sheep/goat humerus has a small knife cut present just below the deltoid tuberosity and another knife cut above the olecranon fossa. These were probably caused as the muscles in these areas were severed during the disarticulation process. A right distal horse radius fragment also has a number of butchery marks. Three chop marks are present on the medial aspect of the radius shaft. These marks are just below the fracture in the bone, which suggests that they were created when breaking the bone to access the marrow. A small knife mark is also present on the lateral-posterior aspect just above the epiphysis. This may be associated with disarticulating the carcass.

The horse radius also has pathology present (Plate 1). This consists of osteophyte activity, with excessive new bone formation occurring around the distal epiphysis. The new bone formation has resulted in a slight alteration to the joint surface. A small area of pitting and eburnation is also present on the joint surface (see Plate 1). Such changes indicate the pathology is due to osteoarthritis and the excessive new bone formation indicates the joint may have also become infected. A proximal fragment of a horse left third metatarsal with pathology present was also recovered from this

context (Plate 1). The cuneiform (3rd tarsal) has fully-fused to the proximal joint surface of the metatarsal. Osteophyte activity has resulted in new bone formation around the anterior aspect of the cuneiform and the metatarsal epiphysis. Pitting is also present on the proximal joint surface of the cuneiform. Such pathological changes indicate the animal suffered from spavin (*chronica deformans tarsi*), which is a degenerative joint disease of the intertarsal or tarsometatarsal joint (Daugmore and Thomas 2005). The presence of two horse elements with joint disease may indicate that the bones are from the same animal. The presence of spavin may indicate that the animal was used for heavy labour/ draught (see discussion, below).



Plate 1: Horse radius (left) with pathology around the distal epiphysis and horse metatarsal (right) with spavin.

Ditch F2097

This boundary ditch, which was a re-cut of Ditch F2056, produced the largest animal bone assemblage from the site. In total, 780 fragments of animal bone were collected from 12 separate contexts (L1178, L2047, L2048, L2063, L2104, L2105, L2111, L2112, L2123, L2129 and L2132). The large number of contexts is due to the ditch fills in each archaeological section being separately numbered. The section drawings indicate that the ditch generally had a sequence of three separate fills: an upper (L2048, L2063 and L2106), middle (L2105, L2111, L2119 and L2132) and lower (L2047, L2104, L2112 and L2123). The assemblage from each of the contexts is well-preserved overall, with 12 eroded elements, and 15 elements exhibiting canid-gnawing. A large proportion of the assemblages from the upper and lower fills come from environmental samples, which increases the number of MAM fragments present in each assemblage. As with Ditch F2056, animal remains from this feature are common in both the top and bottom fills, indicating that domestic waste may have gradually been deposited within this feature. The presence of small mammal and amphibian remains in each fill could also indicate that the ditches gradually filled up with waste and were open for some period of time (Table 9).

Overall, domestic mammals dominate the hand-collected assemblages for each fill. Cattle and sheep/goat are the most common species present for all fills, with small numbers of pig, horse dog and cat also present. The bottom fill, L1178, is an exception, with 36 dog elements present. The dog remains come from a partial ABG,

which consists of the posterior aspect of the skull, all cervical vertebrae, the first thoracic vertebra, nine ribs, three lumbar vertebrae, sacrum, pelvis, left and right femur, right tibia, two phalanges and a scapula. The elements are all fused, indicating that the animal was two or more years old at time of death (Silver 1969). No butchery marks are present and it is therefore unknown if the animal was deposited within the feature complete, or as a partial skeleton. As the ABG is present in a bottom fill of the feature, its partial nature is unlikely to be due to post-deposition movement/ slumping. The partial nature of the ABG may therefore be due to secondary deposition of the dog carcass.

Ditch fill	Upper	Middle	Lower	Total
Cow	23	11	15	49
Sheep/goat	18	19	9	46
Goat		1		1
Pig	5	3	3	11
Horse	2	2		4
Dog	4	1	36	41
Cat	2	2		4
Rabbit			1	1
Goose		2	1	3
Small passerine			1	1
Mouse	4			4
Rat			1	1
Vole	3			3
Mole		1		1
Frog/toad	9	11	5	25
Herring			3	3
LAR (large ungulate size)	25	9	45	79
SAR (small ungulate size)	78	15	116	209
USM (unidentified small mammals)	17	10	3	30
MAM (unidentified mammal)	139	29	90	258
BIRD (unidentified bird)	3	2		5
FISH (unidentified fish)			1	1
Total	332	118	330	780

Table 9: Total NISP count of species, from hand-collection and environmental samples, for Ditch F2097 (upper, middle and lower fills)

Only two elements from this feature display butchery marks: a pig ulna from Fill L1178 and cow horn core from Fill L2106. The pig ulna has a knife cut present across the trochlear notch, which was probably created when the animal was being disarticulated. The cow horn core has been completely sawn through at the ventral end to remove the horn from the skull. Further evidence of bone working is present in L1178: a pig fibula with a hole drilled into the proximal and a highly-polished distal end was recovered.

Ditch F2151

Boundary Ditch F2151 had only one fill, L2152. This produced a relatively small assemblage of 85 fragments. The majority of the elements came from the environmental samples, which is why it is only possible to identify 18 to species and element. These consist of cattle (eight fragments), sheep/goat (five fragments), mouse (three fragments), pig (one fragment), frog/toad (one fragment) and field vole

(*Microtus agrestis*) (one fragment). The majority of the bones present can only be identified as mammal. Four USM long bones are also present. The assemblage is well-preserved, with only four elements eroded.

Ditch F2157

Boundary Ditch F2157 had one fill, L2158. This produced the smallest boundary ditch assemblage, comprising only three bones, one each of cow, pig and LAR. The cow bone, a metatarsal fragment, has been canid-gnawed.

Other Phase 3 ditches

Other ditches were also recorded from Phase 3. The majority of these produced very small assemblages, especially in comparison to the principal boundary ditches discussed above. With the exception of F3017 and F3028, all the ditches had only one fill. Overall, 267 fragments of animal bone were collected from these ditches, with the most commonly-identified elements coming from sheep/goat and cattle (Table 10).

Feature	1019	1029	1073	1093	1102	3017	3028	3049	Total
Cattle		2	1		3	13	19	1	39
Sheep/goat		5	2		2	6	22	3	40
Pig		1							1
Horse			1				6		7
Dog						2	5	1	8
Cat							5		5
Domestic fowl							1		1
Goose		1					1		2
Mouse		1							1
Frog		1					1		2
Herring		1							1
LAR (large ungulate size)		3		1	1	17	56	5	83
SAR (small ungulate size)	2	3			3	2	29	1	43
USM (unidentified small mammals)		1					1		2
MAM (unidentified mammal)		15			12	4	1		32
Total	2	34	4	1	21	44	161		267

Table 10: Total NISP count of species, from hand-collection and environmental samples, for other Phase 3 ditches

The largest samples came from Ditches F3017 and F3028. Faunal remains from F3017 were collected from both the upper (L3018) and lower (L3019) fills of the feature. Both produced faunal assemblages of similar size and composition, with the exception of the dog remains. Both dog elements were recovered from Fill L3018. One is a cranium fragment of the frontal and zygomatic bones. The other is a right maxilla fragment with the first and second molars present and in wear. Both may have come from the same individual and might represent a deposited dog skull. Some residual Roman pottery is present in the ditch fill, but the good preservation of the faunal assemblage would suggest that it is not residual.

In comparison, the number of bones collected from the fills of Ditch F3028 is variable. The lower fill (L3029) produced a small assemblage of 18 fragments, the middle fill (L3030) had 40 fragments present and the upper fill (L3031) contained 89 fragments.

The top fill, L3031, contained a cow metatarsal fragment with pathology present. This consists of exostoses on the anterior and posterior aspects of the distal end, just above the condyles. This could have been caused by excessive stress on the ligaments and muscles in this area and may be linked with use of the animal for traction. A dog mandible with pathology present came from Fill L3050 of Ditch F3049. Periodontal disease has resulted in the loss of the second, third and fourth premolars as well as the first molar. Extra bone growth has occurred over the crypts of the third and fourth premolars, indicating that these teeth were lost first.

Phase 3 pits

Overall, 831 fragments of animal bone were collected from thirteen separate Phase 3 pits. Most of the pits had just single fills. The exceptions to this were Pits F2150 (Fills L2161 and L2161), and F2199 (Fills L2200 and L2201), although, in any case, there is no discernible difference between the faunal assemblages from the upper and lower fills of these pits. The majority of the pits produced small animal bone assemblages ranging from one to thirty bones (Table 11). Five pits do have larger faunal assemblages (F2141, F2150, F2153, F2155 and F2160); however, the majority of the faunal remains from these pits were collected from environmental samples, which is why a large proportion of each assemblage consists of unidentified mammal fragments.

Feature	1009	1011	1030	1035	2141	2150	2153	2155	2159	2160	2184	2199	3025	Total
Cow		2		1	5	7	8	6	1	15		10		55
Sheep/goat	2	8	2	10	2	17	2	4		15	1	4	1	68
Pig		1		2	1	3				3				10
Horse				3		1	1					3		8
Cat						2	1			1				4
Red deer								1						1
Rabbit						1								1
Hare										1				1
Domestic fowl		1		1		1	1			1				5
Partridge						1								1
Pheasant							1							1
Finch										1				1
Small passerine										1	1			2
Vole					2	2					1			5
Mouse							1			2				3
Rat						1								1
Mole					3									3
Frog/toad		1			9	12	2	1		6	2			33
LAR (large ungulate size)	1	2		8	8	18	23	7		14		8		89
SAR (small ungulate size)	4	5		5	40	28	19	13		40	3	3		160
USM (unidentified small mammals)					5	16	3	3		6				33
MAM (unidentified mammal)		1			99	86	48	37		63	5			339
BIRD (unidentified bird)		2			1	3	1							7
Total	7	23	2	30	175	199	111	72	1	169	13	28	1	831

Table 11: Total NISP count of species, from hand-collection and environmental samples, for Phase 3 pits

The majority of the identified fragments from the Phase 3 pits are from domestic mammals. Sheep/goat and cattle are the most common species present. A number of frog/toad elements were collected from Pits F2141 and F2151, possibly indicating that these features were left open for a period of time. All body areas of the main species are represented, with loose teeth, mandibles, metapodials and humeri the most common elements. This is likely to be because these elements are the densest and survive the taphonomic process best.

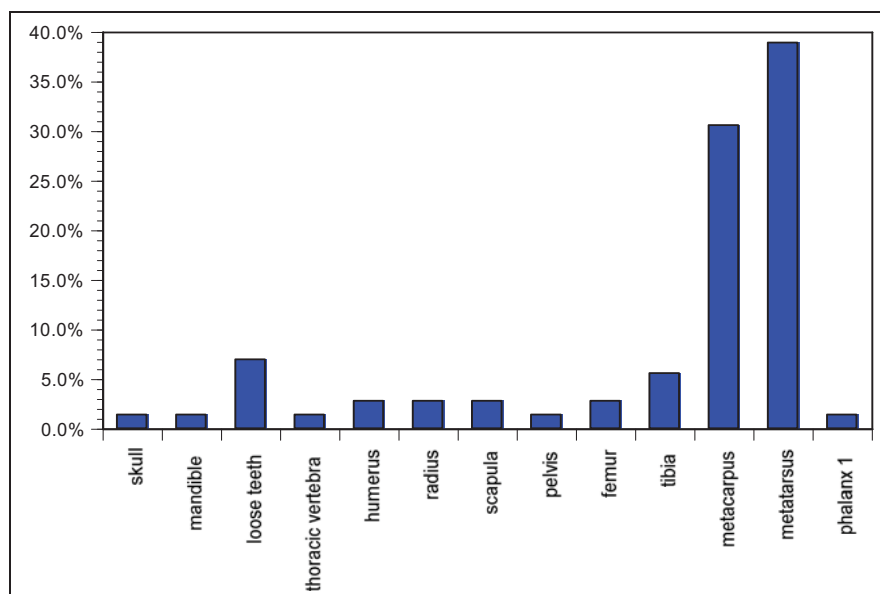
Butchery evidence is only present on three elements. From Pit F2160, a cow femoral head fragment has been chopped in half during the disarticulation process. Also from this pit, a cow metatarsal has a knife cut present on the medial side below the proximal epiphysis, which would have also occurred during the disarticulation process. A cow first phalanx from Pit F2163 has been sawn in half, removing the distal epiphysis. This would have occurred during the removal of the hooves.

Two examples of pathology are present in the pit assemblages. A sheep/goat metatarsal from Pit F1035 has a healed spiral fracture present in the proximal aspect of the shaft. The fracture has healed misaligned and has resulted in a thickening of the shaft. A horse tibia from Pit F2119 has pathology present on the distal epiphysis. This consists of exostoses around the margins of the distal joint surface; eburnation is also present on the joint surface, indicating that the animal suffered from osteoarthritis.

Layer L1070 and other Phase 3 features

An assemblage of 139 animal bones was hand-recovered from Layer L1070. The assemblage is well-preserved, with only one eroded and four canid-gnawed elements. It is possible to identify 69% to species and element and, of the 96 identified bones, 72 are from sheep/goat (*Table 9*). This is the only context from the site to be dominated by a single species. The sheep/goat assemblage is dominated by metapodials, with metatarsals making up 38% and metacarpals 30% of the sheep/goat assemblage (*Graph 1*). Other body areas are represented, but by only a small number of bones. Although metapodials often survive burial better than other elements, we would also expect there to be an equal number of loose teeth, mandible and humeri if the element range was caused just by taphonomic effects. Therefore, the sheep/goat metapodials have been deliberately deposited within this context. The elements could represent the disposal of primary butchery waste. However, if this was the case then a large proportion of head and toe elements would also be expected. A possible explanation is that the metapodials represent tanning waste.

Animal remains were also recovered from a number of other features, which include Pits F1039 and F3022, Ditch F2056 and Gully F1140. With the exception of Pit F1039, which produced an assemblage of 79 bones, the features produced small assemblages which consist mainly of unidentified fragments. Of the 79 elements from Pit F1039, 28 come from a partial pig ABG. This consists of thoracic, lumbar and caudal vertebrae, the right pelvis, the right hind limb (femur, tibia, fibula and metatarsals) and left femur. None of the long bone elements are fused and the bones are porous, which suggest the animal died when it was three to six months old (Silver 1969). No butchery marks or taphonomic indicators are present; therefore, the elements present may represent a disturbed complete pig ABG.



Graph 1: Percentage of sheep/goat elements present in Layer L1070 (total sample size=72)

Distribution Analysis (Fig. 21)

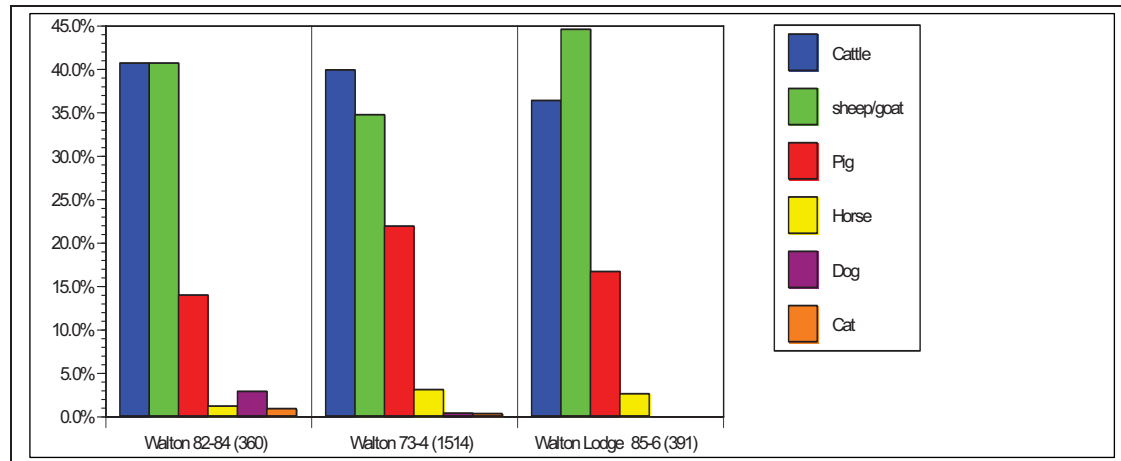
Distribution analysis conducted on the Phase 2 and 3 animal bone across the site yielded little information of value. There was a general spread of material across all areas of the site where features were present, with a general concentration in the south-west corner of the site focussed on the large Phase 2 pits and the western most of the Phase 3 boundary ditches. It is thought that the animal bone present in these features derive from the deposition of domestic refuse within open features. Aside from a general concentration in the south-west corner of the site (which corresponds to a concentration of features), there were no particular or extraordinary concentrations of material across the site which might aid our interpretation of the activities taking place.

Discussion of results

As can be seen from the above description, the 82-84 Walton Street assemblage is variable between periods and feature types (Fig. 21). Overall sheep/goat, cattle and pig are the most common species present. A number of dog bones were also recovered, most of which come from identified ABG deposits. A number of dog ABGs dating to the post-medieval period were also recovered (Table 6). A large quantity of frog/ toad remains were present in the bulk environmental samples. Along with the small mammals, these clearly indicate that a number of features were left open for a period of time between episodes of infilling or natural silting. Only a small number of wild mammals and birds are present in each period. Red and roe deer are represented only by antler fragments. The presence of rabbit bones in some Phase 3 features, if they are not intrusive, indicates that these features date to the later part of Phase 3 (*i.e.* post-Norman Conquest).

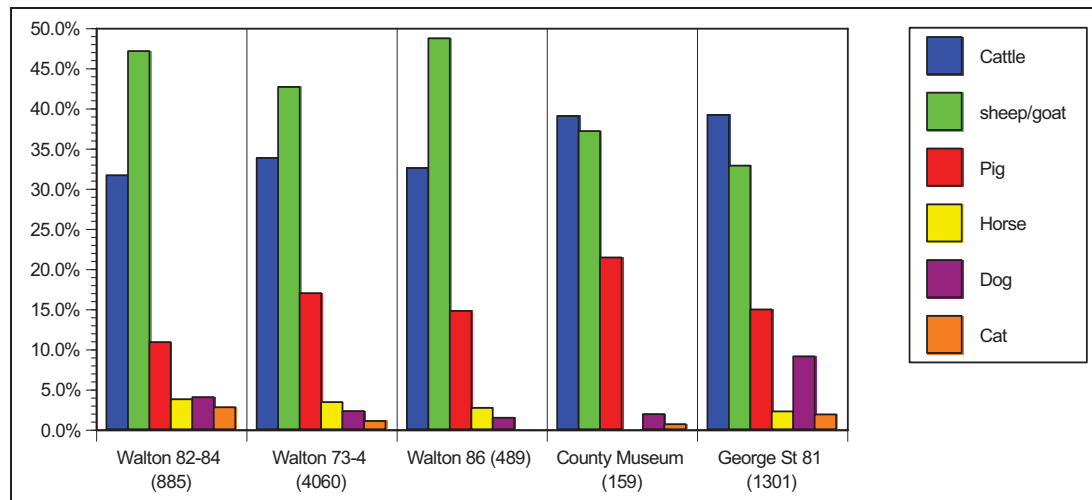
The proportion of species does change between Phases 2 and 3. Cattle and sheep/goat are found in roughly equal proportions in the middle Saxon period. However, sheep/goat become much more common in the late Saxon/ early medieval period. The

proportions of domestic species present in the middle Saxon period do differ slightly to the results from other excavations, at 73-4 Walton Street (Noddle 1976) and 85-6 Walton Lodge (Sadler 1989a). However, the overall pattern remains broadly comparable (Graph 2).



Graph 2: Percentage NISP of the main domestic species compared to 73-4 Walton Street (Noddle 1976) and 85-6 Walton Lodge (Sadler 1989a). NISP samples sizes are in brackets.

The medieval species proportions are also similar to the results from other excavations in the area. The results from the nearby sites of 73-74 Walton Street (Noddle 1976) and 86 Walton Street (Sadler 1989a) are directly comparable, with sheep/goat making up around 45% of each assemblage (Graph 3). However, the faunal remains from the excavations at the County Museum (Sadler 1996) and 81 George Street (Jones 1983) have a different pattern, with cattle remains more prevalent. This could indicate that the processing of different species occurred in different areas of the settlement, or that different craft and trade activities are present in each location.



Graph 3: Percentage of main domestic mammals in the medieval period compared to 73-4 Walton Street (Noddle 1976), 86 Walton Street (Sadler 1989b), County Museum (Sadler 1996) and 81 George Street (Jones 1983). NISP sample sizes are in brackets.

The cattle element data for Phases 2 and 3 indicates that all body areas were deposited on the site (see Appendix 2, Table AP2.1) There are no specific patterns to indicate that one particular part of the carcass was being deposited on the site, in direct contrast with the sheep/goat data (see above and Appendix 2, Table AP2.2). Due to the fragmentation of the assemblage, it is only possible to calculate withers heights from a single Phase 2 cattle humerus and a Phase 3 metacarpal. Both elements give calculated withers heights of 1.10m. Unfortunately, it was not possible for the withers heights to be calculated for the other assemblages from Aylesbury, but the results are similar to those from other Anglo-Saxon (Crabtree 1994) and medieval settlements (Grant 1988). Only limited tooth wear data is available from the assemblage, but epiphyseal fusion data suggests that in Phase 2 and Phase 3, 77% and 80% of the cattle population (respectively) was at least four years old or older at death. Therefore, in both phases the majority of cattle appear to have been kept into adulthood. This could indicate that cattle were kept for secondary products before being slaughtered. Some cattle elements do have pathologies present that may have been caused by ploughing, but which also affect older animals (see above).

Similar pathologies are also present within the horse assemblage. It is noteworthy that 12% of the combined Phase 2 and 3 horse elements have pathology present. These include osteoarthritis, ossification of the interosseum ligament, and spavin. It has been suggested that such pathologies can occur due to trauma or working the animal on a hard surface (Daugnore and Thomas 2005). It is possible to age one horse mandible, from Phase 3 Ditch F3028. The second molar has a crown height of 26.6mm, which using Levine (1982), equates to an age of around 16 years. It would therefore appear that both cattle and horses were possibly being kept until old adulthood and may have been worked for traction. Horse meat is not commonly consumed in this period, but animals may have been knackered with the skin and bones being utilised, the meat may also have been used to feed dogs. In Phases 3 and 4 all body parts are represented indicating that the animals were probably slaughtered and deposited of on site (Appendix 2, Table AP2.4)

In contrast, the ageing data for sheep/goat from Phases 2 and 3 indicates that a large proportion of the population was being killed off much earlier. The ageing data for

Phase 2 is limited, with tooth wear data only available from five mandibles, and little fusion data present. The majority of the mandibles are aged to two to three years old using Hambleton (1999, 64), with one from a four to six year old animal. A similar number of mandibles are present in Phase 3, but this phase has a much larger fusion dataset. Fusion data is available for 108 sheep/goat elements. The data shows that 14% of the early fusing elements (3-10 months) are unfused, 15% of the middle fusing elements (15-36 months) are unfused and 65% of the late fusing elements (30-60 months) are unfused. This shows that a large proportion of the sheep/goat population did not live long enough for the late fusing elements to fuse, and they therefore appear to have been killed off at around three to four years of age. This would suggest that the majority of the sheep were being utilised for meat rather than the primary focus being secondary products. Davis (2002) indicates that this would have been the prime kill-off age for mutton. Unlike the other main domesticates, there appears to be some preferential deposition of specific sheep/goat elements, with the large proportion of metapodials from Phase 3 Layer L1070 (see above). O'Connor (1984, 22) has suggested that a reasonable explanation for such deposits would be to attribute them to waste from the processing of sheepskins and such deposits have been discovered in association with tanneries (Serjeantson 1989). The site is positioned on the outskirts of Aylesbury and tanning often occurs on the outskirts of settlements due to the odorous nature of the work and the waste it produces. Similar deposits dating to the 17th century were also recovered by the excavations at the County Museum site (Sadler 1996), which could indicate that the process changed location as Aylesbury developed.

As with most Anglo-Saxon and early medieval settlements, pig remains make up only a small proportion of the assemblage. This is common across the periods, as the only secondary product produced by pigs is manure (Grant 1988). All body areas are represented suggesting that the animals were slaughtered and butchered within the sites vicinity (Appendix 2, Table AP2.3) The pig remains that are present were killed young for meat, with the fusion data from Phase 3 indicating that 88% of the animals were killed before the middle fusing epiphysis had fused (24-30 months). Therefore, the majority of pigs appear to have been killed before reaching two to three years old.

Conclusions

The excavations at 82-84 Walton Street have produced a good-sized animal bone assemblage, with the majority of the remains coming from features dating to Phase 2 (the middle Saxon period) and Phase 3 (the late Saxon to medieval period). The animal remains are variable between features and the remains from the environmental samples indicate that some of the archaeological features may have been left open for a time before being in-filled. The faunal remains provide evidence for the dumping of domestic waste into open features during Phases 2 and 3, in particular the Phase 3 boundary ditches. Layer L1070 also produced possible evidence for the processing of sheep/goat skins taking place close to the site. It has been possible to compare the faunal remains to those from other sites in this part of Aylesbury. Analysis indicates that in the medieval period, specific species were more commonly deposited in certain areas of the town, possibly due to different craft activities or areas of animal processing. Overall, the assemblage adds to our growing knowledge of the environment, economy and activities that took place in Anglo-Saxon and medieval Aylesbury.

Acknowledgments

Thanks to Shelia Hamilton-Dyer for her help with small mammal identification.

3.6 The plant remains

By Dr. Alexandra Livarda

Introduction

During excavations at Walton Street environmental bulk samples were taken for the recovery of plant remains and other organic material. The samples derived from contexts dated to the middle Saxon (Phase 2: *c.* AD 550 to 850) and the late Saxon to medieval (Phase 3: *c.* AD 850 to 1300) period. Most of the samples were from contexts date to the late Saxon to medieval period. Only two of sampled contexts were not assigned a date due to the lack of diagnostic finds and/or associations with other dated features.

Sampling and processing methods

Thirteen environmental samples of between 30 and 40 litres were collected on a judgement-based sampling strategy from a variety of contexts, including postholes (Sample 1), pits (Samples 7, 11 and 14), ditches (Samples 3, 5, 6, 9, 10, 12), gullies (Samples 4 and 13) and a layer (Sample 8). Processing was carried out by flotation, using meshes with 1mm and 0.25mm apertures for the retention of the heavy (residue) and the light fraction (flot) respectively.

All samples were fully scanned using a stereoscope with magnifications ranging from x7 to x45. Charred plant remains were recorded and fully counted on the basis of the minimum number of characteristic plant parts. Uncharred material was recorded and their abundance was estimated on the following rating system: + = scarce <10; ++ = moderate 10-50; +++ = frequent >50. Plant names and wild plant order follow Stace (1997). Charcoal fragments and other organic material were also noted, estimating their abundance with the same method applied for the uncharred material.

Results

Both charred and uncharred plants were present in all samples (see Appendix 2 for summary table), except in Sample 13 from Gully F3051, which was void of this type of material, including only a high number of land snails. Overall the archaeobotanical evidence was low and poorly to moderately preserved, apart from that encountered in Sample 7 (Pit F3022). A detailed presentation of the results by phase follows.

Phase 2: middle Saxon

Three samples, collected from a posthole (Sample 1, F3009) and two gullies (Sample 3, F3013 and Sample 4, F3015), were dated to this period. They all included charred barley (*Hordeum vulgare* L.) grains, while Samples 1 and 4 had also grains of free-threshing wheat (*Triticum aestivum/turgidum* L.). Some more charred plants were

found in Sample 1, including a few possible peas (*Pisum sativum* L.) and an indeterminate grass seed (Poaceae).

The uncharred material varied in the three samples. A few campion (*Silene* L. sp.) and sun spurge (*Euphorbia helioscopia* L.) seeds were present in Sample 1, a seed of the carrot family (Apiaceae) was the only identifiable specimen in Sample 3 and, finally, some elder and goosefoot seeds complemented the plant assemblage in Sample 4.

Gullies F3013 and F3015 contained residual Roman material, but it is not thought that the environmental remains contained within the samples were similarly residual.

Phase 3: late Saxon to medieval

Ditches

Three ditches were sampled for plant remains: F3017 (L3018 and L3019), F3028 (L3029 and L3030) and F3049 (L3050).

Both fills of Ditch F3017 (Samples 5 and 6) had a very low amount of archaeobotanical remains, represented mostly by cereal grains. In particular, the material in Sample 5, which was the lower fill of the ditch, was very poorly preserved inhibiting the identification of most seeds to species or even genus level. Apart from the few charred cereal grains it included a legume and a single brome grass seed (*Bromus* L. sp.). Uncharred material was also rare, represented only by a few elder seeds (*Sambucus nigra* L.). In the upper fill of the ditch (Sample 6) the charred cereal grains were better preserved and the complete ones were all identified as barley (*Hordeum vulgare* L.). No other plants were found in this fill, except for a single uncharred knotgrass (*Polygonum aviculare* agg.).

A similar picture was encountered in the two fills of Ditch F3028 (Samples 9 and 10). In terms of charred plants, Sample 9 had only one poorly preserved wheat grain (*Triticum* L. sp.), while Sample 10 had a few more cereal grains, including barley and free-threshing wheat (*Triticum aestivum/turgidum* L.). Furthermore, both fills contained a small number of uncharred elder seeds, while Sample 9 had in addition some uncharred seeds of the deadnettle family (Lamiaceae).

The final ditch sampled (F3049, Sample 12) produced some more archaeobotanical evidence, although still in statistically insignificant amounts. Cereals with preserved diagnostic features were identified as barley and free-threshing (bread/rivet) wheat in comparable numbers. An indeterminate legume was the only other charred plant remain in the assemblage, while uncharred seeds included elder and a few docks (*Rumex* L. sp.).

Pits

The three samples taken from pits were quite distinct in their archaeobotanical content. Sample 14 (F3035) was the poorest and had only some very poorly preserved charred cereal grains and a few uncharred elder seeds. Samples 7 and 11 were considered to be two fills of the same pit (F3022), which had a relatively more precise date (12th to 14th century AD). The two fills differed largely in terms of the quantity of

their archaeobotanical component. Sample 11, which was a much smaller deposit (10 litres), produced very little organic material. It included a few charred grains of barley and free-threshing wheat, a possible pea (*Pisum sativum* L.) and some uncharred goosefoot (*Chenopodium* L. sp.) seeds. Sample 7, on the other hand, was a much more diverse and rich sample in terms of both its charred and uncharred material. It contained a mixture of cereal grains, cereal chaff, legumes, nuts and wild species. In terms of its charred items, the majority was cereal grains, and in particular bread/riquet wheat, followed by barley. Rachis segments are usually the best indicators of the wheat species, but in this case, the rachis parts present were too badly fragmented to allow a fuller identification. In addition, there were oat (*Avena* L. sp.) and possibly rye (cf. *Secale cereale* L.) grains in smaller quantities. Determining the oat species was problematic due to the absence of florets. Pea was positively identified in this sample together with a few more vetches/peas. Wild species were represented mostly by plants commonly associated with grassy places. They included brome grass (*Bromus* L. sp.) and other indeterminate grasses (Poaceae), ribwort plantain (*Plantago lanceolata* L.) and bedstraw (*Galium* L. sp.). The uncharred remains of the assemblage were a combination of various wild species, occurring in low quantities. According to their modern ecological requirements (Hanf 1983; Clapham *et al.* 1987; Stace 1997), most species, such as the goosefoot seeds, common chickweed (*Stellaria media* (L.) Vill.), wild radish (*Raphanus raphanistrum* L.), dead-nettles (*Lamium* L. sp.), bristly ox-tongue (*Picris echioides* L.) and even elder, are more likely to be found in waste/rough or cultivated ground. Buttercups (*Ranunculus acris/repens/bulbosus* L.) were also found in this sample, which are often associated with pastures/grasslands.

Unphased

Samples 8 and 13 were unphased, with the latter producing no archaeobotanical material. Sample 8 was among the poorest samples, including a single wheat grain and a few goosefoot seeds.

Discussion and Concluding Remarks

The archaeobotanical assemblage was generally poor, allowing little insight into practices related to agricultural economy and other potential activities involving the use of plant resources at the site. This is particularly the case for the middle Saxon assemblage. The low density of plant items (Table 13) in the middle Saxon (Phase 2) and most of the late Saxon/medieval (Phase 3) samples points to their accidental incorporation into various deposits. As their overall poor preservation state further indicates, when initially deposited, these remains were possibly subjected to weathering and/or mechanical damage (e.g. trampling) prior to their final incorporation into the archaeological contexts. The uncharred remains were probably part of the local vegetation, but they were too few to allow reliable environmental reconstructions. The only deposit with a relatively high density of rather well preserved charred plant remains was encountered in Sample 7 taken from Phase 3 Pit F3022, which might represent a single, deliberate depositional event, and can provide some more information on the relative importance of the various species. Sample 11 was interpreted during excavation as a separate fill of the same pit, but its overall consistency, preservation and archaeobotanical content strongly suggests that it might be part of the same fill with Sample 7.

The majority of the charred plants in Pit F3022 (Samples 7 and 11) were cereal grains, and in particular free-threshing wheat and barley, which seem to be the two major crops consumed in the area. By the Saxon period, free-threshing wheat was favoured over other types of wheat, as its grains separate freely from their husks after threshing (e.g. Hillman 1981; Jones 1984), which renders their processing relatively easy and fast. Barley is a resilient crop that survives adverse conditions better than wheat and has a long tradition in Britain, since the prehistoric periods, both as food and fodder. Oat and rye were present in very small quantities and they may have been discarded crop impurities. Similarly, the few chaff fragments, most of the charred wild species, and probably the vetches/peas may have been crop impurities. Although most wild seeds were not identified to species level, which would allow determination of their qualities and, hence, the stage of crop processing from where they derive, their more or less similar size to the cereal grains may be a first indication that these were by-products of hand cleaning of the crop prior to cooking. Pea, which like all legumes, is an important source of protein, also seems to be part of the diet, with its charred remains being possibly accidental spillages from cooking. The diet was finally complemented, according to the available evidence, by hazelnut, the discarded by-products (nut shells) of which were preserved by charring. The mixed nature of the whole deposit points to discard of cooking refuse that may have been accumulated in a nearby hearth/oven. The uncharred material included wild species that could have grown in the area and incorporated into the refuse pit. They were mostly species partly indicative of waste/rough ground conditions, while some of them (buttercups) may further hint the presence of nearby pasture, which accords with the available archaeological, archaeozoological and documentary evidence.

It is interesting to note, finally, that across the excavated area in both Phase 2 and 3 the more recurrent economic plants were free-threshing wheat, barley and pea, supporting their role as the major crops at the site. Taking into account, however, that a more substantial archaeobotanical assemblage was present only in Phase 3 in combination with the large amount of terrestrial molluscs and some evidence for small mammals, the possibility that the archaeobotanical content of the Phase 2 samples was intrusive cannot be completely dismissed.

In conclusion, reliable archaeobotanical evidence exists only for the late Saxon/medieval period of the site. These showed that wheat, barley, and probably pea were among the most important staples, suggesting that common consumption patterns of the period were also followed at the area. The function of the site cannot be determined with certainty solely by this line of evidence, but some contexts appeared to have been used, at least partly, as refuse ground. Most plant remains were waste of domestic activities taking place nearby, which was accidentally mixed and integrated into the ground to be later incorporated into the various fills of ditches, gullies and pits.

4 DISCUSSION

Middle Saxon activity

The initial discovery of middle Saxon activity along Walton Street during excavations in the 1970s was unexpected (Farley 1976, 166). However, since this time extensive settlement evidence has been recorded. It is likely that the core of the Saxon settlement was located to the west of the present junction of Walton Street and Walton Road, where sunken-featured buildings have been excavated (CAS 0093, CAS 2163; Fig. 5), with more dispersed settlement areas to the north, along Walton Road (CAS 6145). A putative middle Saxon 'roundhouse', with associated postholes and pits, has been found on the north side of Walton Street (CAS 5499), while at the Orchard Site, across the road and only *c.* 100m east of the present site, ten 6th to 8th-century structures have been excavated. These included eight post-built halls, one sunken-featured building and one foundation-trench building, as well as fence-lines, pits and external hearths (Ford and Howell 2004; CAS 6107). Six early Saxon SFBs and two post-built halls were excavated at the Walton Road Stores site in 1994 (CAS 6145). However, in contrast to the evidence from some of the other Walton sites, the early Saxon buildings here appear to have been fairly randomly scattered, not respecting the surviving rectilinear Romano-British field boundaries in the area. Later structures, which took the form of post-built rectangular halls rather than sunken-featured buildings, were found to have been arranged within clearly-defined rectilinear plot boundaries and fenced enclosures to either side of Walton Street (CAS 2163, CAS 6108, CAS 5490). Traces of later Saxon tenement and plot boundaries are fairly frequent in the area, and were found within the assessment site during the Police Houses excavation in the 1980s (Dalwood and Hawkins 1987; CAS 5555).

The middle Saxon phase of activity on site was represented by a cluster of fairly large, but generally shallow pits (F2067, F2145, F2146, F2165, F2084, F2086, F2143), situated in the central southern part of the site and in the northernmost trial trench (Tr.8). The size and shape of the larger pits (F2067, F2145 and F2146) indicates that their primary function was probably related to small-scale extraction of the chalk, clay and flint which make up the underlying geology of the area. The extraction was on a small scale and the quarried material was almost certainly used in the immediate area, perhaps for construction and maintenance of wattle and daub walling in the buildings and fence-lines of the contemporary settlement to the east. It is likely that following the extraction activity, some of the pits took on a secondary use as ad hoc rubbish pits, because while some pits filled in gradually over time (e.g. F2165), others seem to have been backfilled in a single event (e.g. F2145). The final infilling of some of these pits likely corresponded with the establishment of the formal late Saxon boundary system. Alongside these large pits were smaller pits, probably deliberately dug for waste disposal. One or two of the pits may have had more specialised uses. Pit F2165, for example, appears to have remained open for some time and been at least periodically waterlogged; it may have been a watering hole for livestock.

The middle Saxon pits all contained 5th to 9th-century pottery, commonly in organic or grass-tempered fabrics (Fig. 20). Dalwood suggested a late 6th to 8th-century date for the settlement at Walton, based on the rarity/ absence of early Saxon stamp-decorated pottery and of late Saxon St Neots Ware, and on comparison with organic-tempered fabrics from other sites (Dalwood *et al.* 1989, 163). The middle Saxon pottery

assemblage from 82-84 Walton Street has a similar composition, and a similar late 6th to 8th century date range seems likely.

The nature of the middle Saxon activity suggests that the site was on the western periphery of the main Anglo-Saxon settlement. The presence of large pits, possibly for mineral extraction, is in keeping with an area of scrub/ wasteland away from 'core' inhabited areas. This type of area on the periphery of a settlement would have accumulated small quantities of rubbish from the nearby occupation areas.

Late Saxon and medieval rectilinear enclosures

The late Saxon to medieval period was the principal phase of activity on the site. During this phase, a formal system of large rectilinear boundary ditches was laid out across the site. The layout of the enclosures displays a clear spatial relationship with both the north-west to south-east course of Walton Street, and with the position of the large medieval ditch and earthwork embankment, identified on historic maps as an 'Intrenchment' (Fig. 2). These 'intrenchments' are still extant in the local landscape, and their orientation mirrors the formal layout of Walton Street thought to have been established in the 11th century (BCC 2000, 6). Tenth-century tenement boundary gullies were noted within the current site during the 1980s Police Houses excavation, as was a substantial medieval ditched boundary, which was interpreted as a continuation of the manorial enclosure (CAS 5555). Further 13th-century plot boundaries were found at the adjacent Walton Road Vicarage site (CAS 2163), to the south-east, in 1973. Direct evidence of medieval occupation has been found close to the site, for example, at 95-97 Walton Road, to the north-east, where the basement of an oblong house or hut was found. Throughout the interior, a significant scatter of pottery (mostly 13th-century, but also 11 post-medieval sherds), animal bones and a few iron and other objects was found (CAS 0311). Other medieval occupation features found close to the site include a stone oven and scatter of associated features (CAS 5499), and boundary ditches, pits and a well (12th to 13th -century) to the east (CAS 5500).

The rectilinear boundary system was formed by six parallel north-west to south-east aligned ditches, all of which were substantial features (*c.* 2m+ across by 1.00m deep) and similar in profile. While the smaller ditches in the system (e.g. F2151, F2076, F2157, F2040 and F2044) generally appeared to have been filled in purposefully in a single event, the larger ditches (e.g. F2006, F2056) and F2097) contained sequences of multiple fills and were probably open for a considerable length of time. Evidence of re-cutting and scouring clean (visible in some sections) also points to the longevity of the enclosures. There was some evidence that internal subdividing ditches (e.g. F2040 and F2044) may have been removed, with the aim of enlarging the enclosures formed by the ditch system, a development which could have coincided with the re-establishing of the central boundary ditch (F2097). Interestingly, both Ditch F2097 and Ditch F2006 contained limestone rubble, suggestive of a ditch lining, or more likely, slumped embankments. It is possible that the removal of the internal dividing ditches, and the re-cutting and re-emphasising of the central boundary may have been contemporary and the result of changing use of the enclosures.

The ditch system reflects the development of a formal and organised system of land division in this area of Walton, beginning in the late Anglo-Saxon period. Several of

the ditches contained probable pre-Norman Conquest St Neots Ware, with some diagnostic bowl rim profiles present, alongside sherds in less diagnostic locally-produced fabrics. The consistent north-west to south-east and north-east to south-west ditch alignments have a clear relationship with the line of Walton Street, to which they run either parallel or perpendicular. Property boundaries shown to the north-west of the site on early Ordnance Survey maps follow the same pattern (Fig. 4). Also following the same north-east to south-west alignment of the ditches were the medieval 'Intrenchments', or earthworks, that are still visible today, indicating that they may have been parts of the same boundary system. Contemporary boundaries to those excavated on the present site were identified immediately to the south during excavations in 1973-4 (Farley 1976). These ditches were interpreted by the excavators as internal divisions within a much larger enclosure demarcated by the surviving 'Intrenchment'. This is possible, although the ceramic evidence recovered during the present excavation would suggest that the 'internal' dividing ditches were slightly earlier than the medieval Intrenchment (Farley 1976). All of the ditches contain small amounts of residual 5th to 9th-century pottery. The consistency with which this material was found might be evidence that a similar ditch system was in use during the middle Saxon phase of the site, and that this was re-cut, and perhaps enlarged in the late Saxon - early medieval period.

The apparent absence of contemporary features on the interior of the enclosures could be the result of modern truncation. However, it is perhaps more likely to be a reflection of their original use. The small areas enclosed by the ditches make little sense in terms of arable production (bearing in mind, for example, the amount of space required to turn a plough team). The evidence from plant remains suggests that wheat, barley and pea were staple crops, but these were not present in such quantities as to suggest that they were being cultivated in the immediate area. The layout of small enclosed and seemingly 'empty' plots on the outskirts of the growing late Saxon and medieval town would fit an interpretation as small paddocks/ pastures for livestock. Later documentary sources point to manorial flocks being grazed on this land, and record that those living on Walton Street were obliged to keep their flocks in the same place (Farley 1976). While the animal bone assemblage points to roughly equal proportions of cattle and sheep/ goats having been utilised in the middle Saxon period, the proportion of sheep/ goats was much higher by the late Saxon - medieval phase of the site. The pattern is broadly comparable to that found at other sites in Walton, but contrasts with excavations at the County Museum and 81 George Street, where cattle were more prevalent during the medieval period. This might point to some zoning of activity, with this area on the south-eastern outskirts of the developing late Saxon and medieval town being used for grazing and processing sheep. Cattle were kept into adulthood during both the middle Saxon and late Saxon to medieval phases, suggesting that they were being kept primarily for secondary products (milk, cheese etc.). By contrast, sheep/ goats in both phases were generally killed off at prime meat age. One of the other uses to which sheep/ goats were put was indicated by the dump of tanning waste found in later medieval Layer L1070. It is unsurprising to find evidence for unpleasant/ odorous trades being conducted on the periphery of the urban area. The picture of animal husbandry provided by the animal bone assemblage therefore fits well with the archaeological evidence for an area of long-lived enclosed pasture, and with the land use described by later documentary sources.

BIBLIOGRAPHY

- Abrams, J, forthcoming Archaeological Investigations at Stanbridge Manor, Stanbridge, Bedfordshire, *Bedfordshire Archaeology Journal*
- Armitage, P. L. 1994 'Unwelcome companions: ancient rats reviewed', *Antiquity* 68, 231 - 40
- Babtie, J. 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 Unpublished Report
- Bachmann, H. G. 1982 *The Identification of Slags from Archaeological Sites*. Institute of Archaeology Occasional Paper 6, London
- Bayley, J., Dungworth, D. and Paynter, S. 2001 *Archaeometallurgy*. English Heritage Centre for Archaeology Guidelines, London
- Boessneck, J. 1969 'Osteological Differences between Sheep (*Ovis aries* Linné) and Goat (*Capra hircus* Linné)' in Brothwell, D & Higgs, E. S. (eds.) *Science in Archaeology*. Thames and Hudson, London, 331-358
- Bonner, D. 1994 *An Interim Report on Archaeological Investigations on Land Adjacent to Walton Lodge Lane*. Buckinghamshire County Museums and Archaeological Service.
- Brain, C. K. 1967 'Hottentot food remains and their bearing on the interpretation of fossil bone assemblages' in *Scientific Papers of the Namib Desert Research Station* 32, 1-11
- Briscoe, T. 1981 'Anglo-Saxon Pot Stamps' in Brown D., Campbell J., and Hawkes S. (eds.) *Anglo-Saxon Studies in Archaeology and History* 2. BAR British Series 92, 1-37
- Buckinghamshire County Council 2000 *A Future for Our Past*. Buckinghamshire Archaeological Management Plan: Environmental Services
- Clapham, A., Tutin, T.G. and Moore, D.M. 1987 *Flora of the British Isles*. Cambridge University Press, Cambridge
- Crabtree, P. 1994 'Animal exploitation in East Anglian villages' in Rackham, J. (ed.) *Environment and Economy in Anglo-Saxon England*. Council for British Archaeology Research Report. 89, London, 40-54
- Dalwood, H. and Hawkins, A. 1984 *Late Saxon and Medieval Occupation at the Police Houses, Walton Street*. Typescript in BCC CAS
- Dalwood, H. and Hawkins, A. 1987 *Excavations in Walton, Aylesbury, 1984: late Iron Age, Roman, Saxon and medieval occupation in Croft Road and at Police Houses*. Buckinghamshire County Museums and Archaeological Service.

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

Daugnore, L. and Thomas, R. 2005 'Horse burials from middle Lithuania: a palaeopathological investigation' in Davies, J., Fabiš, M., Mainland, I., Richards, M. and Thomas, R. (eds.) *Diet and Health in past animal populations: current research and future directions*. Oxbow Books, Oxford, 68-74

Davies, J. 2005 'Oral pathology, nutritional deficiencies and mineral depletion in domesticates a literature ' in Davies, J., Fabiš, M., Mainland, I., Richards, M. and Thomas, R. (eds.) *Diet and Health in past animal populations: current research and future directions*. Oxbow Books, Oxford, 80 - 88

Davis, S. J. M. 2002 'British agriculture: texts for the zoo-archaeologist', *Environmental Archaeology* 7, 47-60

Denison, S., 1999 Early Saxon Pots in Wide Trade Network *British Archaeology*, March Issue No. 42

Department of the Environment 1987 *List of Buildings of Special Architectural or Historic Interest: Buckinghamshire: Aylesbury Vale District*. Department of the Environment.

Doyle, K. and 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

Driesch, A., von den 1976 *A guide to the measurement of animal bones from archaeological sites*. Peabody Museum Bulletin, Cambridge Massachusetts

Elvey, G. R. 1976 'Notes on the History of Walton', *Records of Bucks* 20(2), 155 - 159

Farley, M. 1976 'Saxon and Medieval Walton: Excavations 1973 - 1974', *Records of Buckinghamshire* 20(2), 151 - 291

Farley, M 1986 'Aylesbury', *Current Archaeology* 9

Farley, M., and Leach, H., 1988 Medieval Pottery Production Areas near Rush Green, Denham, Buckinghamshire *Records of Buckinghamshire* Volume 30, 53-102

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

Grant, A. 1982 'The use of tooth wear as a guide to the age of domestic ungulates' in Wilson, B., Grigson, C. and Payne, S. (eds.) *Ageing and Sexing Animal Bones from Archaeological Sites*. BAR British Series 109, Oxford, 91-108

- Grant, A. 1988 'Animal resources' in Astill, G. and Grant, A. (eds.) *The Countryside of Medieval England*. Blackwell, Oxford, 149-187
- Griffin, S. 1998 *Aylesbury in the Civil War*. Stuart Press, Aylesbury
- Guido, M. 1999 *The Glass Beads of Anglo-Saxon England c. 400-700*. Boydell Press, Woodbridge
- Hallybone, C. and Newton, A. 2006 82 - 84 *Walton Street, Aylesbury, Buckinghamshire: An Archaeological Excavation - Interim Site Narrative*, Archaeological Solutions Unpublished Report No. 2085
- Halstead, P. and Collins, P. 2002 'Sorting the Sheep from the Goats: Morphological Distinctions between the Mandibles and Mandibular Teeth of Adult Ovis and Capra', *Journal of Archaeological Science* 29, 545-553
- Hambleton, E. 1999 *Animal Husbandry Regimes in Iron Age Britain*. BAR British Series 282, Oxford
- Hamerow, H., 1993 *Excavations at Mucking Volume 2: the Anglo-Saxon Settlement Excavations*. English Heritage Archaeological Report No. 21
- Hanf, M. 1983 *The Arable Weeds of Europe*. BASF, Ludwigshaven
- Hanley, H. and Hunt, J. 1993 *Aylesbury: a pictorial history*. Phillimore, Chichester
- Harcourt, R. 1974 'The dog in prehistoric and early historic Britain', *Journal of Archaeological Science* 1, 151-175
- Hawkins, A. 1989 'Medieval and post-medieval occupation at Teacher's Centre, Walton Road', *Records of Buckinghamshire* Vol. 31, 137 - 225.
- Hillman, G. 1981 'Reconstructing crop husbandry practices from charred remains of crops' in Mercer, R. (ed.) *Farming Practice in British Prehistory*. Edinburgh University Press, Edinburgh, 123-162
- Hodges, R., 1981 *The Hamwih Pottery: The Local and Imported Wares from 30 Years Excavations at Middle Saxon Southampton and their European Context* Southampton Archaeological Research Committee Report 2; CBA Research Report 37
- Holgate, R (ed.) 1995 *Chiltern Archaeology: recent work. A handbook for the next decade*. Dunstable: The Book Castle.
- Hurst, J. G. 1956 'Saxo-Norman Pottery in East Anglia: Part I St Neots Ware', *Proceedings of the Cambridgeshire Archaeological Society* 50, 29-60.
- Hurst, J., G., 1976 'The Pottery' in Wilson, D. (ed) *The Archaeology of Anglo-Saxon England*. Cambridge University Press pp 299-312
- Jones, G.E.M. 1984 'Interpretations of archaeological plant remains: ethnographic models from Greece' in Van Zeist, W. and Casparie, W.A. (eds.) *Plants and Ancient*

Man: Studies in Palaeoethnobotany. Balkema, Rotterdam, 43-61

Jones, G. G. 1983 'The medieval animal bones' in Allen, D. and Dalwood, C. H. 'Iron Age occupation, a middle Saxon cemetery and 12th to 19th century urban occupation: Excavations in George Street, Aylesbury, 1981', *Records of Buckinghamshire* 25, 31-44

Levine, M. A. 1982 'The use of crown height measurements and eruption-wear sequences to age horse teeth' in Wilson, B., Grigson, C. and Payne, S. (eds.) *Ageing and Sexing Animal Bones from Archaeological Sites*. BAR British Series 109, Oxford, 223-250

Lyman, R. L. 1994 *Vertebrate Taphonomy*. Cambridge University Press, Cambridge

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

McCarthy, M., R., & Brooks, C., M., 1988 *Medieval Pottery in Britain AD 900-1600*. Leicester University Press

Mellor, M., 1994 Oxford Pottery: A Synthesis of middle and late Saxon, medieval and post-medieval pottery in the Oxford Region, *Oxoniensia* 59, 17-217

Moore, R., Byard, A., Mounce, S. and Thorpe, S., 2007, 'A4146 Stoke Hammond and Linslade Western Bypass: Archaeological Excavations 2005', *Records of Buckinghamshire*. 47 (1), 1-62

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

Morris, J. 2008. 'Associated bone groups; One archaeologist's rubbish is another's ritual deposition' in Davis, O. Sharples, N. and Waddington, K. (eds.) *Changing Perspectives on the First Millenium BC*. Oxbow, Oxford, 83-98.

Mortimer R. 2000 'Village Development and Ceramic Sequence: The Middle to Late Saxon Village at Lordship Lane, Cottenham, Cambridgeshire', *Proceedings of the Cambridge Antiquarian Society* 51, 33-65.

MPRG 1998A Guide to the Classification of Medieval Ceramic Forms. *Medieval Pottery Research Group Occasional Paper 1*.

Mynard, D.C., and Zeepvat, R. J 1992 *Great Lindford*. Bucks Archaeological Society Monograph Series 3

Newton, A. 2006 *Archaeological Assessment and Updated Project Design of Excavations at 82 - 84 Walton Street, Aylesbury, Buckinghamshire*. Archaeological Solutions Unpublished Report No. 2116

Noddle, B. 1976 'Report on the animal bones from Walton, Aylesbury' in M. Farley. 'Saxon and Medieval Walton, Aylesbury: excavations 1973-4', *Records of Buckinghamshire* 20(2), 269-287

O'Connor, T. P. 1984 *Selected Groups of Bones from Skeldergate and Walmgate..*

Council for British Archaeology, York

Payne, S. 1985 'Morphological distinctions between the mandibular teeth of young sheep, Ovis, and goats, Capra', *Journal of Archaeological Science* 12, 139-147

Pearson, A. 2000 *St Mary's School, Friarage Road, Aylesbury, Buckinghamshire: an archaeological desk-based assessment*. Buckinghamshire County Museums and Archaeological Service

Pozorski, Z. 2008 *82 - 84 Walton Street, Aylesbury, Buckinghamshire: An Archaeological Excavation - Interim Report*. Archaeological Solutions Unpublished Report No. 2085

Rayner, L. 1996 'The Pottery' in Bonner, D. (ed.) *Investigations at the County Museum, Aylesbury, Records of Buckinghamshire* 38, 37-46.

Sadler, P. 1989a 'The animal bones' in Dalwood, H., Dillon, J., Evans, J. and Hawkins, A. 1989 'Excavations at Walton, Aylesbury, 1985 - 1986', *Records of Buckinghamshire* 31, 137 - 225

Sadler, P. 1989b 'The animal bones' in Hawkins, A. 'Medieval and post-medieval occupation at the Teacher's Centre, Walton Road', *Records of Buckinghamshire* 31, 210-217

Sadler, P. 1996 'Animal remains' in D. Bonner. 'Excavations at the county museum, Aylesbury', *Records of Buckinghamshire* 38, 64-78

Serjeantson, D. 1989. 'Animal remains and the tanning trade' in Serjeantson, D. and Waldron, T. (eds.) *Diets and Crafts in Towns*. BAR British Series 199, Oxford, 129-146

Shipman, P., Foster, G. and Schoeninger, M. 1984 'Burnt bones and teeth: an experimental study of color, morphology, crystal structure and shrinkage', *Journal of Archaeological Science* 11, 307-325

Silver, I. A. 1969 'The ageing of domestic animals' in Brothwell, D., Higgs, E. S & Clark, G. (eds.) *Science in Archaeology*. Thames and Hudson, London, 250-268

Smith, R. N. 1969 'Fusion of ossification centres in the Cat', *Journal of Small Animal Practice* 10(9), 523-530

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

Stace, C. 1997 *New Flora of the British Isles*. Cambridge University Press, Cambridge

Turner-Rugg, A. 1995 'Medieval Pottery from St Albans', *Medieval Ceramics* 19, 46-64

Vince, A.G. and Jenner, M.A., 1991, 'The Saxon and Early Medieval Pottery of

London', in Vince, A.G. (ed.), *Aspects of Saxo-Norman London: 2, Finds and Environmental Evidence*, London Middlesex Archaeology Society Special Paper **12**, 19–119

Von den Driesch, A. and Boessneck, J. 1974 'Kritische Ammerkungen zur Widerristhohenberechnung aus Langenmassen vor- und fruhgeschichtlicher Tierknochen', *Saugetierkundliche Mitteilungen* 22, 325-348

Wickham C. 2005 *Framing the Early middle Ages: Europe and the Mediterranean*. Oxford University Press, Oxford

Yalden, D. 1999 *The History of British Mammals*. T & A D Poyser, London

Yeoman, P. A., 1983 'The Medieval Pottery' in Allen, D. and Dalwood C. H. (eds.) 'Iron Age Occupation, a Middle Saxon Cemetery and 12th to 19th century urban occupation: excavations in George Street, Aylesbury 1981', *Records of Buckinghamshire* 24, 20-29

Zeepvat, R. J., Roberts, J. S. and King, N. A. 1994 *Caldecotte, Milton Keynes. Excavation and Fieldwork 1966 – 1991*. Bucks Archaeological Society Monograph Series 4

APPENDIX 1: LIST OF CAS DATA

CAS	NGR SP	Description
Neolithic (4000-2500 BC)		
0093	82250 13190	Two Neolithic stone axes found during excavation, one of quartzite and one of Group XX in 1973
Bronze Age (2500-800 BC)		
5500	82528 13345	A small amount of early Bronze Age pottery found and a larger amount of Late Iron Age pottery, together with 'Belgic' brick. Small amounts of Roman and Saxon pottery also found
6107	824 132 8242 1329 8244 1327 8243 1325 8240 1327	A number of pits; numerous postholes (although no definite buildings were identified); a gully, possibly representing a boundary; Two hearths and a small cremation cemetery were found during excavations (1994). Finds indicate a possible origin in the Late Neolithic or Early Bronze Age, although the majority of the features seem to date from the Middle to Late Bronze Age (Pit, posthole, cremation cemetery, gully, hearth, vessel, cinerary urn, armet, animal remains and human remains)
6724	823 132	Remains of pits and at least four circular post-built structures, possibly small roundhouses, were identified during excavations (1994-1995). Associated pottery and flint work indicated a date from the Middle Bronze Age to the Late Bronze Age or early Iron Age (1600 – 401 BC). The circular structures ranged in size from 5.3m diameter to 8.8m diameter, and none appeared to have central postholes, porches or eaves-drip gullies
6732	824 133	Part of a middle to late Bronze Age (1600 – 701 BC) roundhouse and a number of pits recorded during excavations at the southern end of the site
Iron Age (800 BC - AD 42)		
6377	825 132	Possible Farmstead, late Iron Age to Romano-British 2nd century AD, a possible agricultural settlement, with some traces of activity in the early to middle Iron Age
6377/01	825 132	Two pits or a pit and a ditch were dated by pottery finds to the early-middle Iron Age, although the finds might have been residual as the sherds were abraded. A large ditch surviving to a depth of 0.8m and 2.1m wide was interpreted as a late Iron Age boundary ditch and contained finds of pottery and 'Belgic Brick', possibly indicating the presence of an oven or kiln in the vicinity. Features thought to date to the Romano-British period comprise two pits, one of which may have been a clay pit and had Romano-British material only from the latest of its fills; a possible building foundation or robber trench; and a rammed limestone floor or yard surface laid on top of a sand levelling layer. Undated features included pits and ditches. Pottery finds were indicative of domestic activity, with Iron Age material comprising 30% and Romano-British material 49% of the total assemblage, the Romano-British pottery dating largely from the 2nd century AD. It is suggested that the miscast Romano-British brooch may indicate that metalworking was possibly taking place in the vicinity, whilst the hobnails may indicate a military presence nearby. Parts of the site had been heavily disturbed by modern service trenches, long jump pits and tennis courts and by a 19th century brick well
5555	8221 1329	No prehistoric features but some flint tools and flakes and some Iron Age and also Romano-British pottery
6108	823 133	Residual finds of late Iron Age and Romano-British pottery were present in later contexts

Roman sites (AD 43 - AD 410)		
0093	82250 13190	Earliest occupation represented by scatter of Romano-British sherds. No structural evidence for prehistoric and Romano-British periods
0147	82980 13520	Quern Stone, fragment of pottery; part of a possible amphora handle or spindle whorl
0255	82290 13180	Denarius of Augustus; bronze coin of Claudius II (Gothicus), Walton Court = Aylesbury Conservative Club building
0532	-	Mr Grace's Farm, Walton, Aylesbury. Found in 1823, some old coins, one of the Roman Emperor L.A.A. Commodus, Aug., AD 180
1931	8229 1369	Roman coin, possibly of Vespasian, re-interpreted as a follis of House of Constantine, AD 330-335, Obverse: VRBS ROMA. Reverse: Wolf and twins (RIC 331)
2163	82277 13216	Scatter of Roman material
5500	82528 13345	Small amounts of Roman and Saxon pottery also found
6733	824 133	Excavations (1994) recorded a series of boundary ditches, aligned parallel or at right angles to Walton Road, containing early Romano-British pottery and 'Belgic brick' and with evidence for later recutting and relocation of the ditches, which probably represent a field system. Part of a circular timber building contained an oven-like structure of uncertain function was also thought to date from the 1st century AD, as was a small inhumation cemetery. Little later Romano-British material was found, apart from a few unstratified coins recovered from the overburden and a small quantity of building material, residual in later features. The boundaries ditches suggest that the orientation of the later Saxon streets and property boundaries at Walton may have originated as early as the 1st century AD
Saxon sites (AD 410 – 1066)		
0093	82250 13190	Two Saxon SFBs located. Palisade trench of late Saxon date excavated. Definite occupation commenced in the 5 th century AD and continued in 7th. Structures of this phase included five SFBs and three halls. Probably occupation continued in 8th – 9th century
1944	8297 1341	Dagger blade: scramasax, Anglo-Saxon c. 600-800 AD; found near remains of three skeletons at depth of 2ft in newly consecrated portion of Aylesbury cemetery, while drain was being dug. Bones found when laying out recently consecrated portion of cemetery at Aylesbury found near but not actually with these, August 1921. Old Museum Record map shows site of discovery at SP 8297 1341 and in same location is recorded (1930's) two Anglo-Saxon spearheads, also two loom weights, one spearhead in possession of Rev. C.N. White, Ellesborough and seen by curator 13/10/55. It was reported to the Rev. White that pottery was also found but he was not shown any. Nothing now being found on this site. This discovery, together with other finds in area, probably came from one Anglo-Saxon cemetery, perhaps containing both inhumations and cremations. Skeletal remains survive from 1921 find and recent study shows bones came from at least six adults.
2163	82277 13216	Two further mid-Saxon SFBs and three pits. Finds included loom weights, comb, brooch and pottery. Probably in occupation towards the end of the 5 th century. A small sherd recently excavated from the fill of a SFB at Walton appears to be the top end of a boss from another pot made in this workshop. It will be seen that the boss is drawn up to a pointed head provided with dots for eyes.
5208	82545 13510	Anglo-Saxon base silver 'sceat' or penny of 2nd quarter of 8th century and minted in East Anglia, Middle Anglia or Lindsey. Coin is thin and weighs 0.89g. Rigold classification series Q. Animal and bird design of simple style. No inscription

5499	8238 1325	Area excavated revealed an early / middle Saxon rectangular post-built hall 7 x 5m. with probable gable-end entrance – finds few but included three Ipswich ware sherds and other mid-Saxon pottery. A number of Bronze Age features also excavated including a probable roundhouse and post-holes / pits – produced some Deverel-Rimbury type sherds
5555	8221 1329	Excavations located late Saxon features (gullies – relating to layout of tenements in 10th century – no actual buildings; 244 sherds including St Neots). Most significant feature was a large medieval ditch forming a substantial boundary, being a continuation of the medieval manorial enclosure. Also medieval rubbish pits and post-holes lying outside manorial enclosure. Much medieval pottery including some Brill / Boarstall wares. Post-med material related to row of cottages (‘Prospect Place’) which stood on site in 19th century, wells and service trenches. No prehistoric features but some flint tools and flakes and some IA (and also RB) pottery
5593	8249 1342	Two-post type Saxon sunken-floored building
6108	823 133	Middle Saxon settlement remains revealed during excavations (1994-5). 10 structures were identified comprising eight post-built halls, one sunken-floored building and one foundation trench building. Several construction phases are suggested with up to seven of the buildings possibly in use at any one time. Other features included three probable fence lines which appear to lie between buildings and might indicate separate properties; three external hearths; six shallow gullies, some of which may be medieval in date; 19 pits or larger postholes and 12 shallow scoops. The low quantities of Ipswich and Maxey-type wares in the pottery assemblage would seem to indicate occupation in the late 6th to early 8th centuries, however it is suggested that much of the pottery and animal bone from the site was redeposited. Residual finds of late Iron Age and Romano-British pottery were present in later contexts
6145	824 133	Six sunken-featured buildings and two post-built halls of early Saxon date recorded during excavations (1994). Unlike evidence from some of the nearby Walton sites, the early Saxon buildings appear to be randomly scattered across the site and do not respect the rectilinear Romano-British field boundaries. One of the sunken-featured buildings was unusually small (only 2m long), whilst another appeared to have been destroyed by fire and contained remains of burnt timbers. Finds associated with the buildings included loom weights, fragments of bone combs and gaming pieces. There was little evidence for middle Saxon occupation other than a couple of unstratified sceattas. Late Saxon property boundaries were recorded, probably associated with buildings along the frontage of Walton Street or possibly Walton Road
Medieval sites (AD 1066 – AD 1539)		
0254	82115 13465	Groat of Henry VII and groat of Edward IV
0311	82632 13476	95-97 Walton Road, an ancient excavation through a thin stratum of Portland rock traced; resolved itself into what seems to have been the site of basement of a house or hut, entirely without masonry; an elongated but rectangular oblong. Also an irregular additional portion on NW at a higher level. Also a bank, access to house was by a descending passage. Very numerous fragments of pottery, bones and a few iron and other objects scattered thickly over whole interior. Re-interpreted as either one pit or more than one intersecting pits. Mostly 13th century pottery, but also 11 post-medieval sherds

0093	82250 13190	Walton Court Farm house in the Domestic style, with gable ends, is supposed to be the house where the Manor Courts were formerly held. In the undulating ground adjoining, foundations of buildings have been dug up. Entrenchment, possible fragment of a manorial work. Only a 50m stretch of L-shaped earthwork now remains to the rear of R.D.C. Offices. Prior to development, excavation carried out in area of earthwork. In 12th century a mound at least 50m long and ditched on both sides was constructed - ?pillow mound / rabbit warren. Main earthwork thrown up in the 13th century – almost certainly part of a manorial work. Small timber outbuilding and two large stone-cut storage pits. 1973 excavations investigated earthwork and interior. In 10th – 12th century boundary features indicate gradual consolidation of landholding in area and emergence of a manorial regime
1813	82255 13250	Site of Aylesbury Rural District Council Offices, Walton Street, during levelling of the site for building, sherds of medieval pottery found, including two rims; in somewhat soapy calcite-gritted ware and in hard sandy ware, blackish with grey core. 12th – 13th century. A small collection of sherds found during building works and includes eight sherds of sandy 13th century ware. Of the three shell-gritted sherds, one is a body sherd with applied finger-pressed strip decoration; one is an upright rim and one is a typical in-turned rim of St Neots ware
2130	82535 13300	Walton Grange is a two-storied house of timber and brick built in 16th century, now almost entirely covered with rough-cast or tile-hanging. Plan originally L-shaped with internal angle of L facing west. Modern wing at E corner is 19th century. Walton Grange demolished after being severely damaged by a landmine which fell by Walton Pond in WWII. This was the only bomb to fall on Aylesbury during the war.
2163	82277 13216	Further work carried out adjacent to previous year's site, following demolition of Vicarage. Vicarage site, which lies inside main earthwork excavated in 1973 found to be sub-divided internally by a rock-cut V-shaped ditch. Whole of this area of Walton adjacent to manor house now appears to have been laid out in large rectangular plots in 13th century. No major structure of this period. A spread of 12th century and Saxo-Norman material and a deep ditch and gullies
2318	82569 13397	After demolition of depot and during digging of footings for new flats, the site was checked for medieval occupation in view of proximity to known 12th century site. From the entire site only eight unstratified medieval sherds were recovered together with two 12th century sherds from a dark soil-filled pit, approx. 2.20 x 4.50m and presumably medieval
2857	82750 13870	Watermill, Walton Mill (Corn). Domesday records two mills worth 23s. on the King's land at Aylesbury, directory entries suggest the mill ceased working by water power in 1915. The mill still survives and indeed still functions as a corn mill, operated by Messrs. Hills and Partridge Ltd.
5499	8238 1325	Area excavated revealed medieval occupation in the form of a stone oven and scatter of associated features; site undoubtedly lay near a house at this time
5500	82528 13345	Evidence for medieval occupation; boundary ditches, five pits, a well and other features. Dated to 12th – 13th century. Also post-medieval occupation: wall foundations and yard surfaces
5555	8221 1329	Most significant feature was a large medieval ditch forming a substantial boundary, being a continuation of the medieval manorial enclosure. Also medieval rubbish pits and post-holes lying outside manorial enclosure. Much medieval pottery including some Brill / Boarstall wares
5593	8249 1342	Numerous boundaries – medieval ones may relate to boundaries at excavated site to south. Charles II farthing (1672-1675) found in topsoil
5629	8215 1341	Medieval sherds, animal bone and a leather shoe sole

6731	824 132	Four large pit clusters and a few postholes were found during excavations (1994), although the excavation area seems to have lain to the rear of the main focus of medieval occupation associated with Walton Road. Some of the pits appeared to have been re-used as rubbish pits, with large quantities of medieval ceramic floor and roof tile, presumably resulting from demolition or construction activities associated with medieval houses along Walton Road. The majority of the pottery dates to the 11th - 14th centuries although a small number of residual Saxon finds were recovered from later or unstratified contexts
6783	82314 13188	16 sherds of medieval pottery recovered from beneath topsoil during watching brief (2002). Other post-med material (tile, glass, bone and slag) was also observed from the same layer
Post-medieval sites (AD 1539 – 1750)		
0448	81950 13645	Sir John Baldwin was the greatest benefactor this town ever had, the Causeway leading towards London being raised at his Cost. The road described is probably the present Wendover Road, though it is possible that the London Road was via Walton Street, Walton Road and the present A41
1808	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
2952	9180 1435 to 8220 1346	Aylesbury branch of Grand Junction (later Grand Union) Canal. After several disputes reported complete in May 1815. Authorised 1794, wholly opened 1815. Length: 6.5 miles, 16 locks. Still in use. In May 1802, Mr. John Holland started on work for railway between Aylesbury and Broughton Mill, but little actually done. In 1806 Aylesbury tried to force Grand Junction to build canal. In 1810 firm agreement to build canal from Marsworth to join Wilts and Berks near Abingdon, via Aylesbury, Stone, Thame. But scheme opposed by Kennet and Avon. In August 1813 work started to build branch to Aylesbury. Completion date uncertain, either end of 1814 or beginning of 1815. New reservoirs at Tringford and Startopsend built 1814-1815 for branch. Length 6m.1.5 fur. 16 locks fall 94ft. 8in to Aylesbury. 7ft. beam
4701	82140 13430	Baptist Chapel and burial ground. 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 now occupied by a garage
18th – 19th Century		
5555	8221 1329	Post-med material related to row of cottages (‘Prospect Place’) which stood on site in 19th century, wells and service trenches
5674	82966 13715	30-32 Victoria Street
6386	8255 1390	Aylesbury Vale Park, present layout is 20th century as a Municipal Park. Marked on the 1st and 2nd edition 6” maps as a cricket ground
6388	8300 1350	Mid 19th century layout (subsequently extended) with chapels by Poulton and Woodman of Reading (also designed chapels at Amersham). Unfortunately the matching gates and lodge have gone, and the ensemble is incomplete

0309	82300 13820	High Street Railway Station – the new station was opened on June 5th 1889, replacing the original station. Comprises a single platform, 400ft long and was partially covered by an overall glass roof, with a typical LNWR glass side screen, from which baskets of flowers hung. Halfway down the platform a milk loading stage extended into the goods yard in order that road transport could come alongside. A further loading dock together with a carriage siding were provided alongside the platform road. The station was repainted shortly before closure (Feb 2nd 1953) and remained standing for some years, the interior being used for storage purposes before being demolished in 1960. Now only the crumbling grass-covered platform remains. The line closed completely with the ending of freight traffic on Dec 2nd 1963
0310	82210 13900	Aylesbury Railway Station, the remains of the original terminus can still be seen on the north side of the goods yard. The remaining building is a single road brick engine shed, which has not been used for many years. Aylesbury's first railway station was built in 1839 at the corner of Railway Street and Station Street when the railway opened as a single-track branch line from Cheddington on the London and Birmingham main line
0314	822 139 to 922 186	Aylesbury Railway Company formed on Nov 10th 1835n to connect Aylesbury with the London and Birmingham Railway at Cheddington. Construction commenced May 12th 1838. Public opening June 10th 1839. Various plans to extend, e.g. to Oxford, Wolverhampton, never executed. Only station (apart from terminus and junction) was Marston Gate, 4.5 miles from terminus. Line runs into branch platform at Cheddington. Three daily return trains
6388	8300 1350	Mid 19th century layout (subsequently extended) with chapels by Poulton and Woodman of Reading (also designed chapels at Amersham). Unfortunately the matching gates and lodge have gone, and the ensemble is incomplete
6719	822 133	Holy Trinity Church, Walton, built 1843-5, for the sum of £1600 raised by subscription. The church lies next door to the former vicarage, now Walton House. The church with its stone spire, was designed by David Brandon, a fairly prolific architect, whose local work includes the Royal Bucks Hospital, the former Town Hall and Corn Exchange and the Market Square clock tower. One of the few surviving examples of Victorian church buildings in Aylesbury
6722	822 135	A mission hut at the end of the canal was set up b 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
6734	824 133	Part of the foundation of an 18th century structure was encountered during excavations (1994). This was part of an orphanage run by a charity associated with John Wilkes. Farmhouse purchase in 1759 for use as a branch of the London Founding Hospital. The scheme failed when John Wilkes, one of the local committee members, was accused of embezzling the funds. The farmhouse was rebuilt in the 19th century as Walton House, and demolished around 1945
9306	82304 13148	Farmyard – an undated surface of compacted limestone was revealed at a depth of 0.55m, beneath a make-up layer and topsoil. Probably a farmyard surface associated with Walton Court Farm, it is suggested that the surface was left intact when the grounds of Walton Court were landscaped possibly in the late 19th century. The remains of a brick boundary wall (of unfroged bricks with vitrified headers) were also recorded
Modern (AD 1901 - Present)		

6721	822 135	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
6721/01	822 135	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 north-west may be original?
6721/02	822 135	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?
Undated sites		
6246	822 134	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

APPENDIX 2: ANIMAL ELEMENT TABLES

Anatomy	2	3	4	5
horncore	6	6		
skull	12	11	2	
maxilla	2	2		
mandible	12	22	1	3
loose teeth	14	54	2	4
atlas	1	1		
axis		1	1	
cervical vertebra				
thoracic vertebra	1	2	1	
lumbar vertebra		2	5	
caudal vertebra		1		
rib	5	6		
hyoid	1			
sternum		1		
humerus	11	18	7	
radius	9	12	3	
ulna	2	3	3	
scapula	11	13	4	
pelvis	11	21	4	1
sacrum		1		
femur	11	18	8	
tibia	8	14	9	1
patella	1	2		
metacarpus	5	11	7	3
carpal		1		
metatarsus	5	11	3	
astragalus	4	5	1	
calcaneum	1	4	1	1
Carpal or Tarsal		1		
cuboid		1		
tarsal	1			
phalanx 1	5	5	2	
phalanx 2	2	3	1	
phalanx 3	1	1		
total	142	254	65	13

Table AP2.1: Summary of the number of cattle elements recovered from each phase.

Anatomy	1	2	3	4	5
horncore			4		
skull		2	9	2	
maxilla		4	4	1	
mandible		21	28	6	
loose teeth		17	40	8	3
atlas			1		
axis		2	1		
cervical vertebra		1	1	2	
thoracic vertebra		4	3	1	
lumbar vertebra		1	4		
caudal vertebra			1	1	
rib			5	1	
humerus		12	27	7	
radius		18	22	7	1
ulna		2	2		
scapula		8	15	5	1
pelvis		1	11	3	
femur		8	15	8	1
tibia		15	41	2	
patella			1		
metacarpus		7	59	20	1
carpal			1		
metatarsus		13	58	15	3
astragalus		2	1	1	
calcaneum		3	4		
Carpal or Tarsal			1		
phalanx 1	1	2	12	2	
phalanx 2			1		
phalanx 3			6		
Total	1	143	378	92	10

Table AP2.2: Summary of the number of sheep/goat elements recovered from each phase.

Anatomy	2	3	4
skull	4	4	1
maxilla	4	3	
mandible	6	16	3
loose teeth	11	24	
axis		1	
thoracic vertebra		1	
lumbar vertebra	1		
rib	1		
scapula	4	3	2
humerus	6	6	3
radius		4	
ulna	1	2	1
pelvis	3	3	2
sacrum		1	
femur	1		4
tibia	4	3	2
fibula			
metacarpus	1	7	
carpal		1	
astragalus	1		
metapodial	1		
phalanx 1		7	
phalanx 2		1	
total	49	87	18

Table AP2.3: Summary of the number of pig elements recovered from each phase.

Anatomy	2	3	4	5
skull		1	1	
mandible		1	3	
loose teeth	1	2	5	1
axis			1	
thoracic vertebra			3	
lumbar vertebra			1	
rib			7	
scapula			1	
humerus			2	
radius	1	3	2	
ulna			1	
carpal		1		
metacarpus		4	1	
pelvis		2		
sacrum			2	
femur		4	3	1
tibia		4	1	1
patella		1		
metatarsus	1	1	2	1
astragalus		1	1	
calcaneum			2	
phalanx 1		2	3	
phalanx 2		2		
phalanx 3	1	1		
TOTAL	4	30	42	4

Table APP2.4: Summary of the number of horse elements recovered from each phase.

APPENDIX 3: SUMMARY TABLE OF PLANT REMAINS

Sample Size (l)	1	3	4	5	6	7	8	9	10	11	12	13	14
Feature	3009	3013	3015	3017	3017	3022	3005	3028	3028	3022	3049	3051	3025
Context	3010	3014	3016	3019	3018	3023	3029	3029	3030	3024	3050	3052	3026
Description	Posthole Fill	Ditch Fill	Gully Fill	Ditch Fill	Ditch Fill	Pit Fill	Layer	Ditch Fill	Ditch Fill	Pit Fill	Ditch Fill	Gully Fill	Pit Fill
Period	AD 550-850	AD 550-850	AD 550-850	AD 850-1300	AD 850-1300	AD 1100-1300	un-phased	AD 1100-1400	AD 1100-1400	AD 1100-1300	AD 1000-1300	un-phased	AD 850-1300

Latin name

CARBONIZED

Latin name	6	4	8	fr	English name
cereals					
<i>Triticum aestivum/turgidum</i> grain	91				bread/rivet wheat
<i>Triticum</i> sp. grain			1		wheat
<i>Triticum</i> sp. rachis	2				wheat
<i>Hordeum vulgare</i> L. grain	52				barley
cf. <i>Hordeum vulgare</i> L. grain				2	cf. barley
cf. <i>Secale cereale</i> L. grain	3				cf. rye
<i>Avena</i> L. sp. grain	5				oat
<i>Cerealeae indet</i> grain straw node	30+fr			2	indet. cereal

legumes

<i>Vicia</i> L. sp.	1				vetch
<i>Vicia/Lathyrus</i> sp.	5				vetch/pea
<i>Pisum sativum</i> L.	1				garden pea
cf. <i>Pisum sativum</i> L. indet.	1			1	cf. garden pea legume indet.

nuts

<i>Corylus avellana</i> L. shell	1fr					hazelnut
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Table AP3.1: The archaeobotanical remains of AS 940 Walton Street, Aylesbury, Buckinghamshire (fr=fragments, + = scarce, ++ = moderate, +++ = frequent)

Sample Size (l)	1	3	4	5	6	7	8	9	10	11	12	13	14
Feature	3009	3013	3015	3017	3017	3022	3005	3028	3028	3022	3049	3051	3025
Context	3010	3014	3016	3019	3018	3023	3005	3029	3030	3024	3050	3052	3026
Description	Posthole Fill	Ditch Fill	Gully Fill	Ditch Fill	Ditch Fill	Pit Fill	Layer	Ditch Fill	Ditch Fill	Pit Fill	Ditch Fill	Gully Fill	Pit Fill
Period	AD 550-850	AD 550-850	AD 550-850	AD 850-1300	AD 850-1300	AD 1100-1300	un-phased	AD 1100-1400	AD 1100-1400	AD 1100-1300	AD 1000-1300	un-phased	AD 850-1300

Latin name

Wild

Plantago lanceolata L.

Galium L. sp.

Poaceae

Poaceae small

Bromus L. sp.

TOTAL charred items
Density (items/litre)

UNCHARRED

Wild

Ranunculus

acris/repens/bulbosus L.

Chenopodium L. sp.

Stellaria media (L.) Vill.

Silene L. sp.

Polygonum aviculare agg.

Rumex L. sp.

Raphanus raphanistrum L.

Euphorbia helioscopia L.

Apiaceae

English name

ribwort
plantain
bedstraw
grasses
small grasses
brome grass

buttercups

goosefoot

common

chickweed

campion

knotgrass

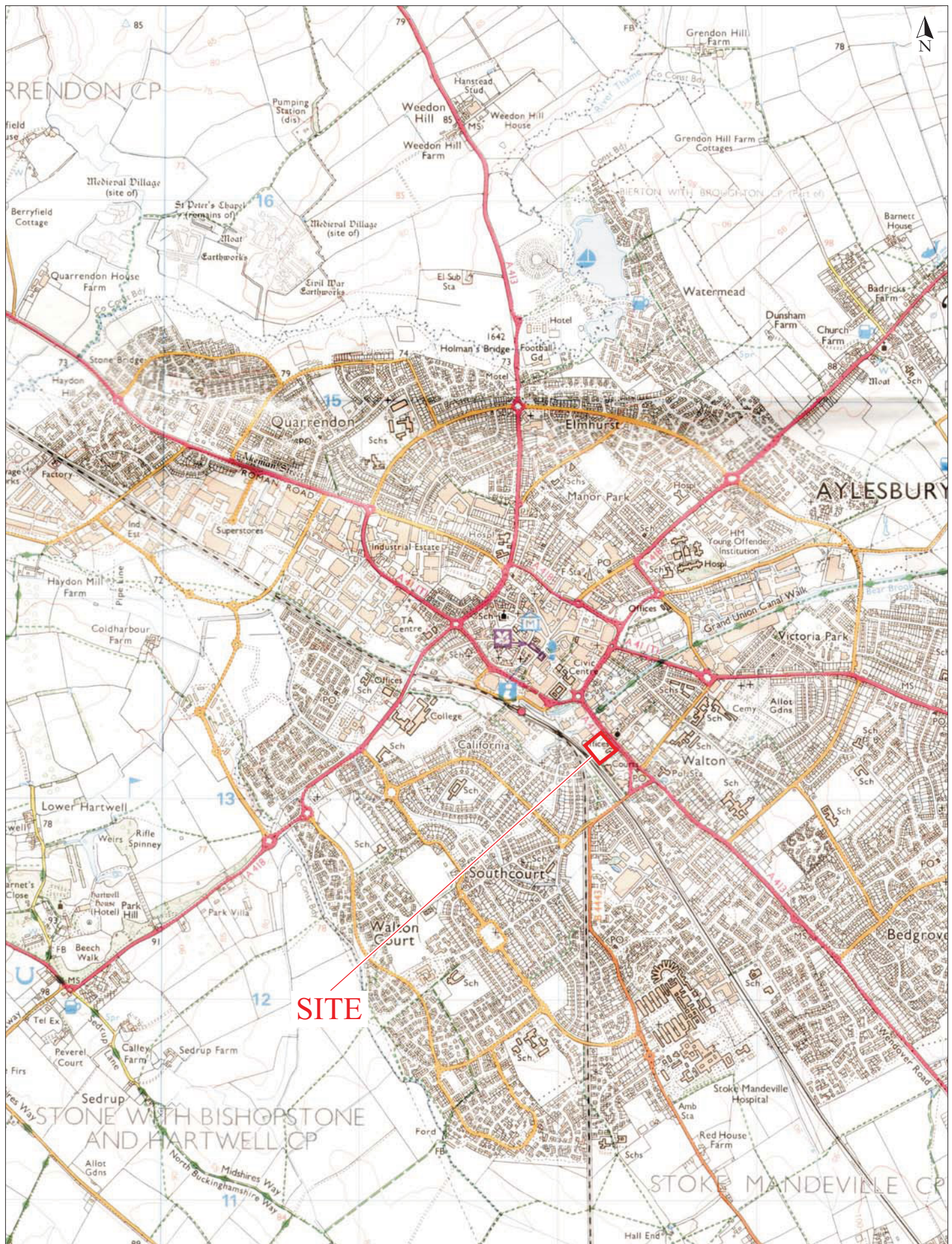
dock

wild radish

sun spurge

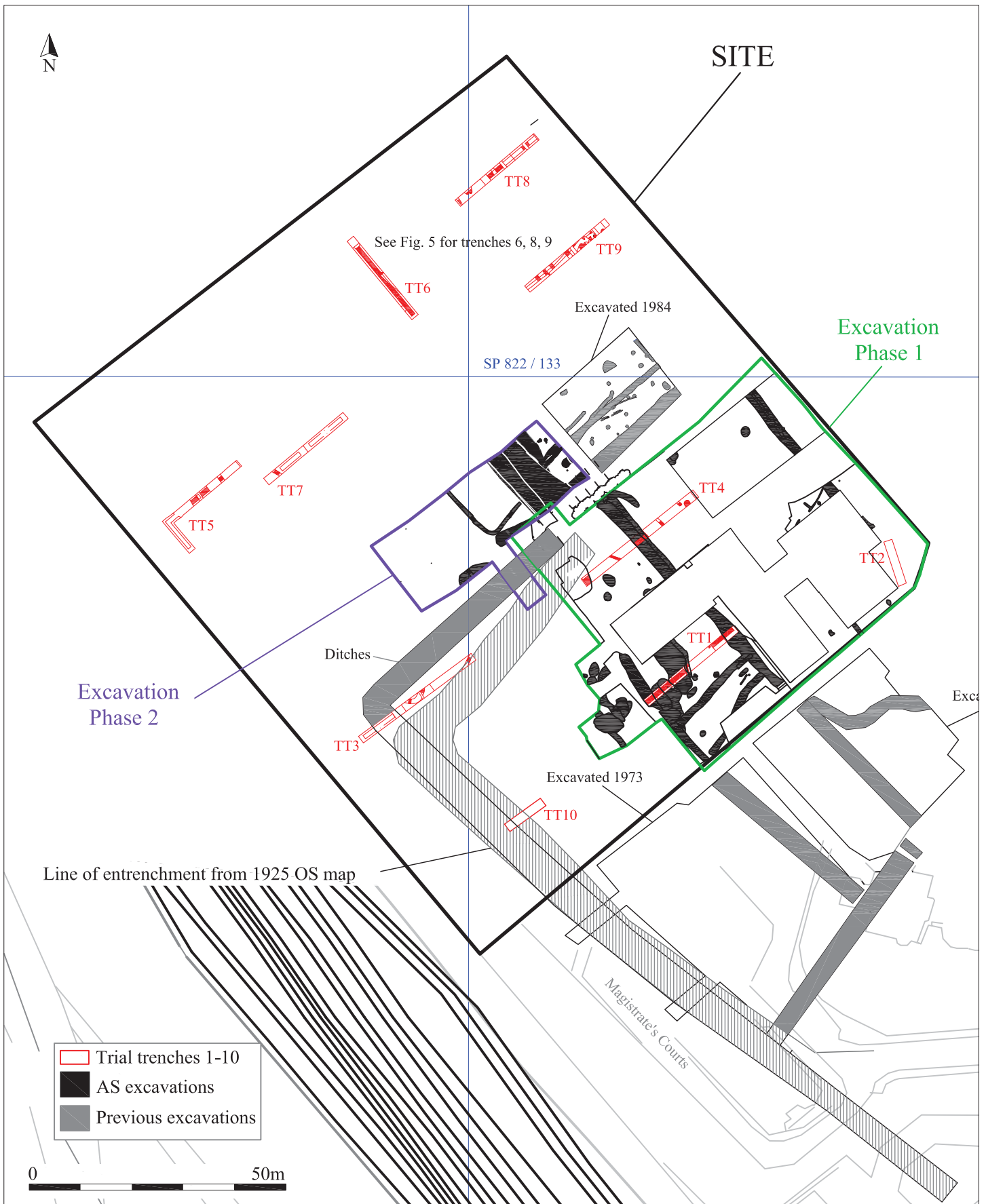
carrot family

Table AP3.1: (continued)

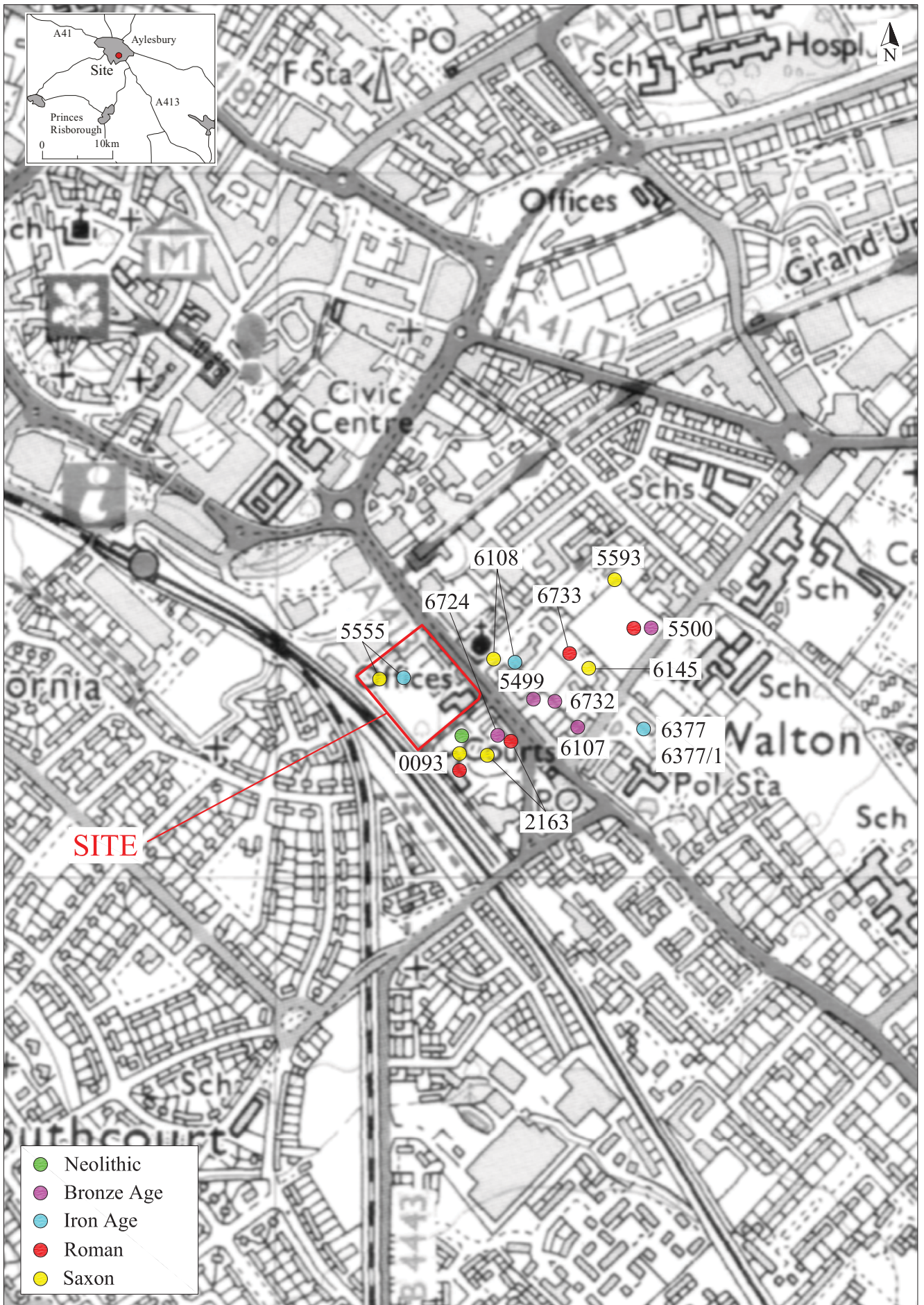


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Fig. 1 Site location plan
 Scale 1:25,000



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Fig. 2 Detailed site location plan
 Scale 1:1000 at A4

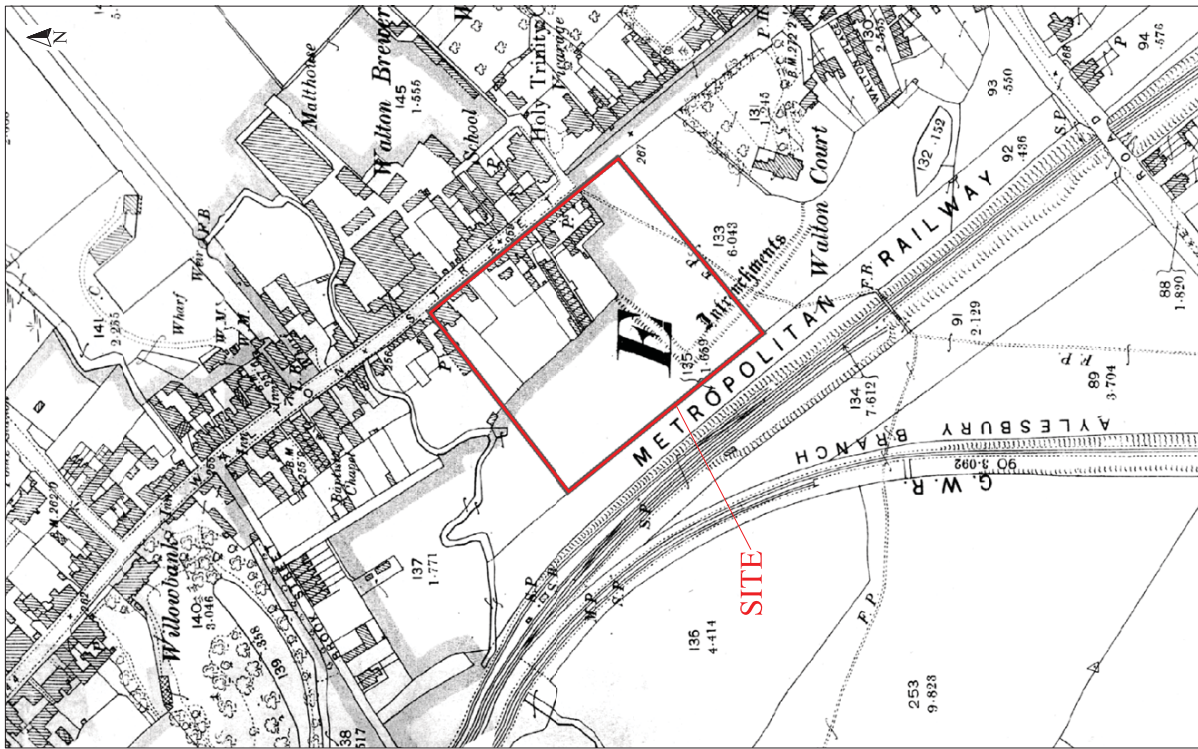


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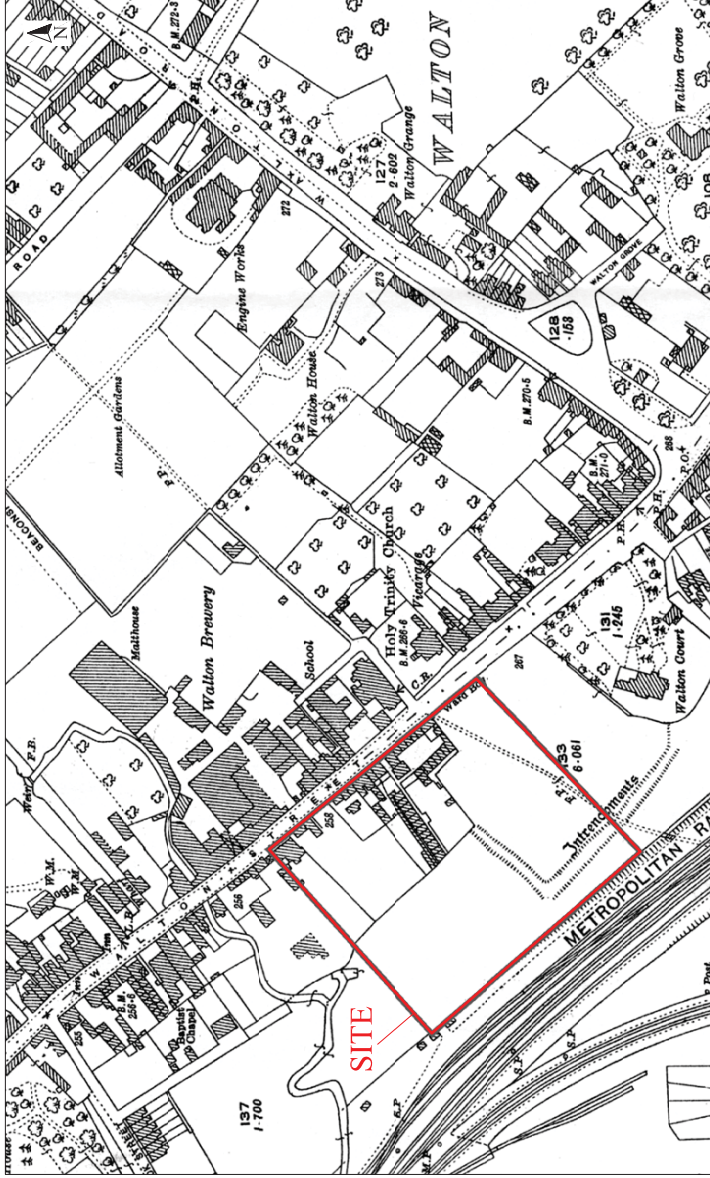
Fig. 3 CAS data

Scale 1:7,500 at A4



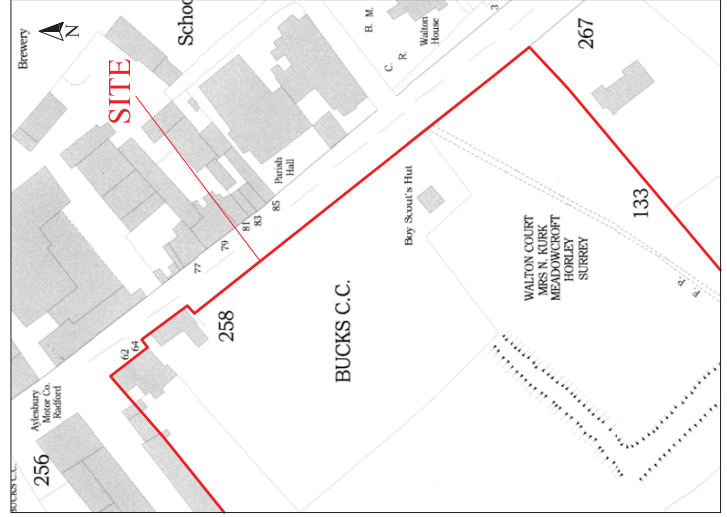
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1899 OS map

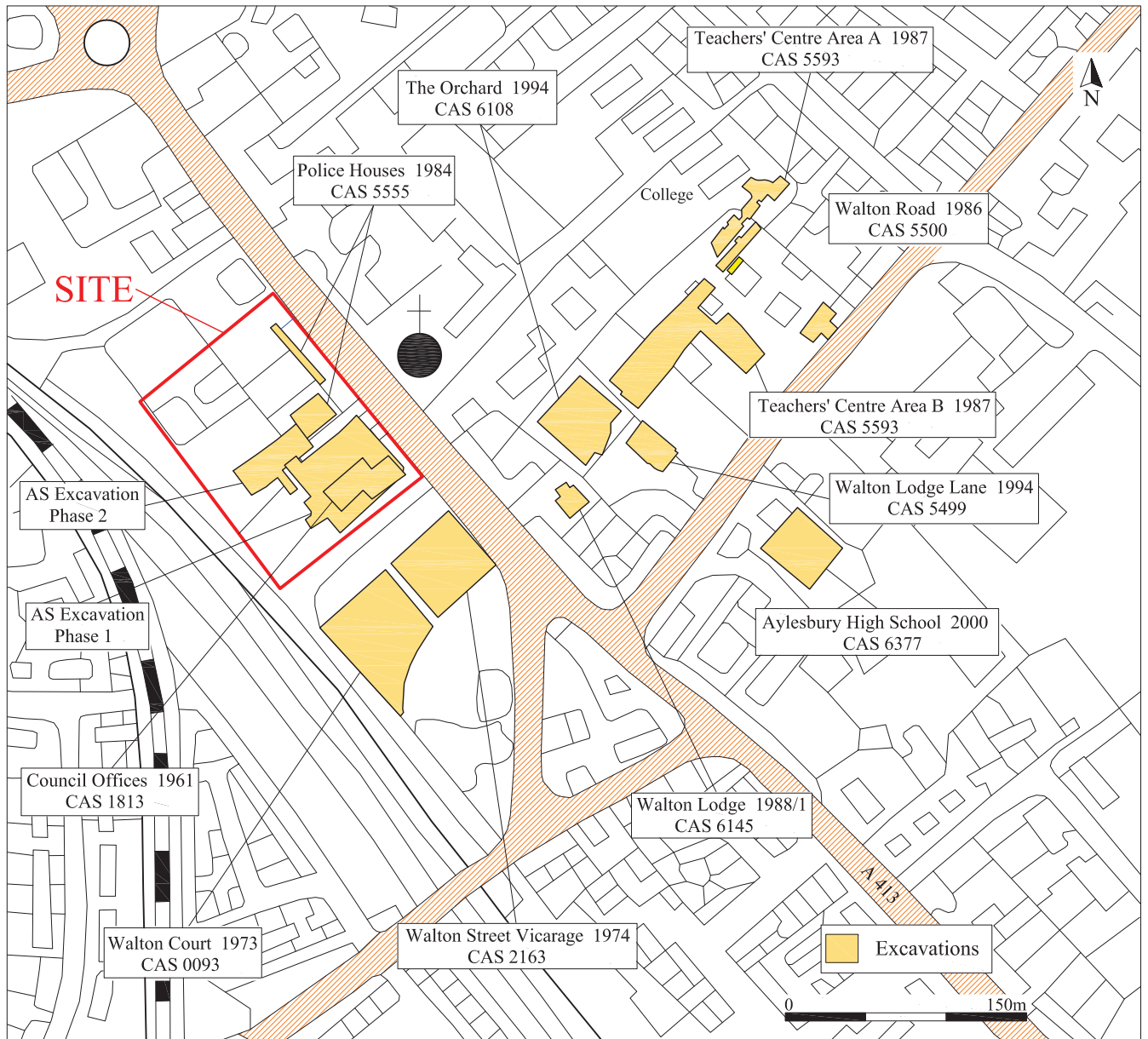


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1925 OS map

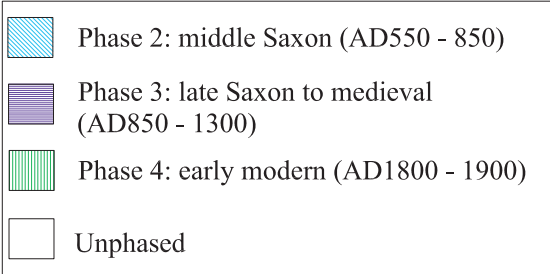
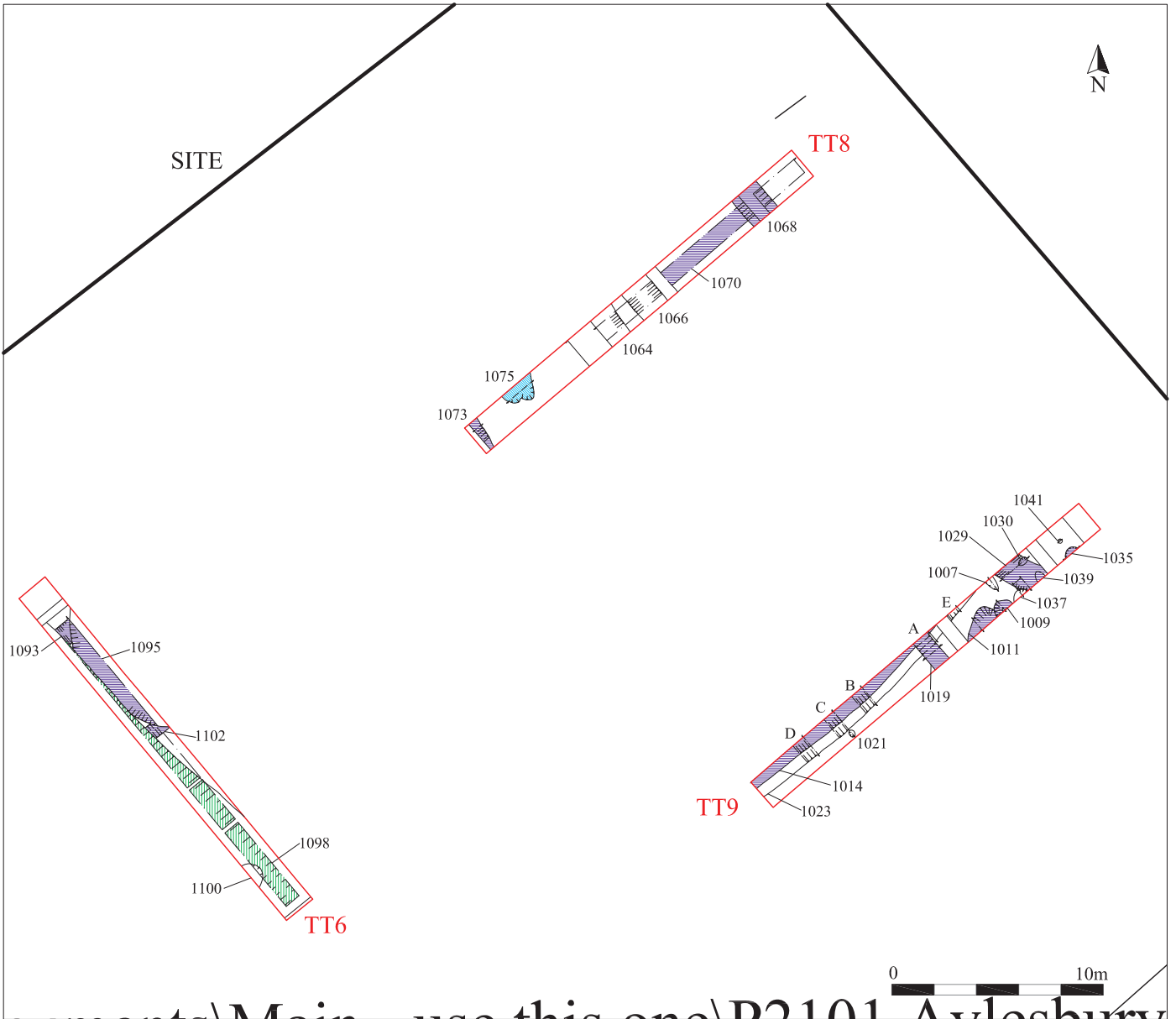


1944 OS town development plan



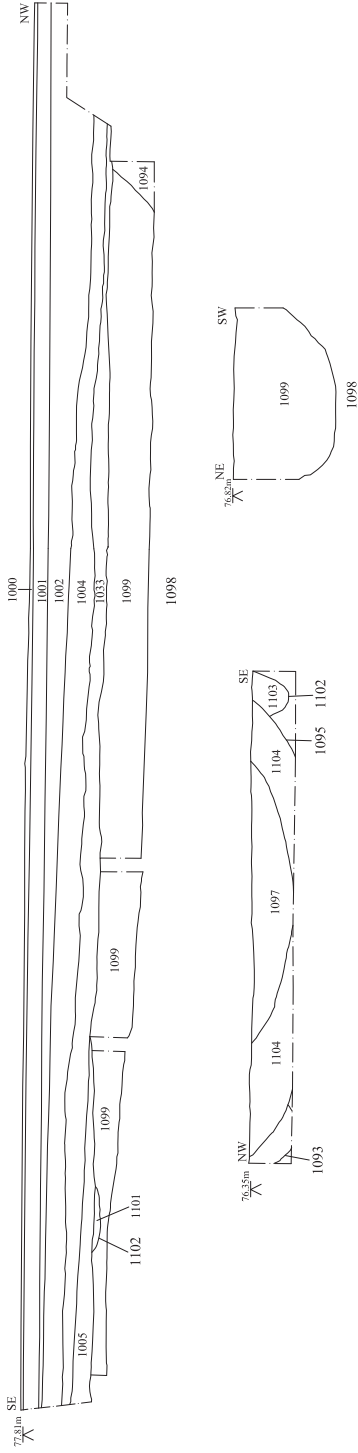
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Fig. 5 Previous excavations in the Walton Street area
 Scale 1:4000 at A4

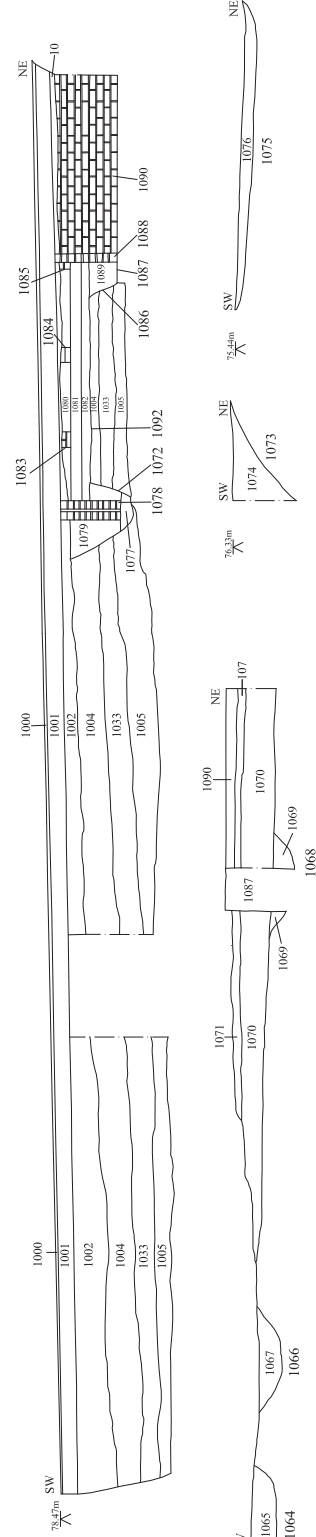


Archaeological Solutions Ltd
Fig. 6 Trial trench plans
 Scale 1:300 at A4

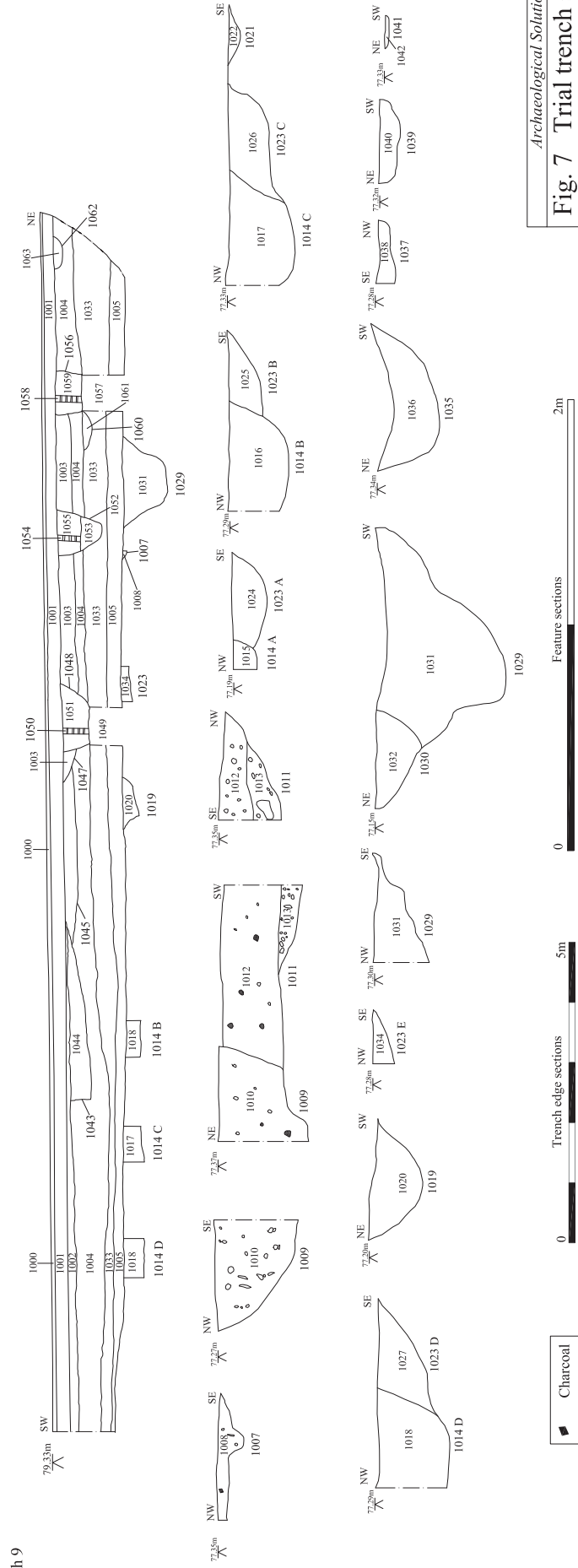
Trench 6



Trench 8



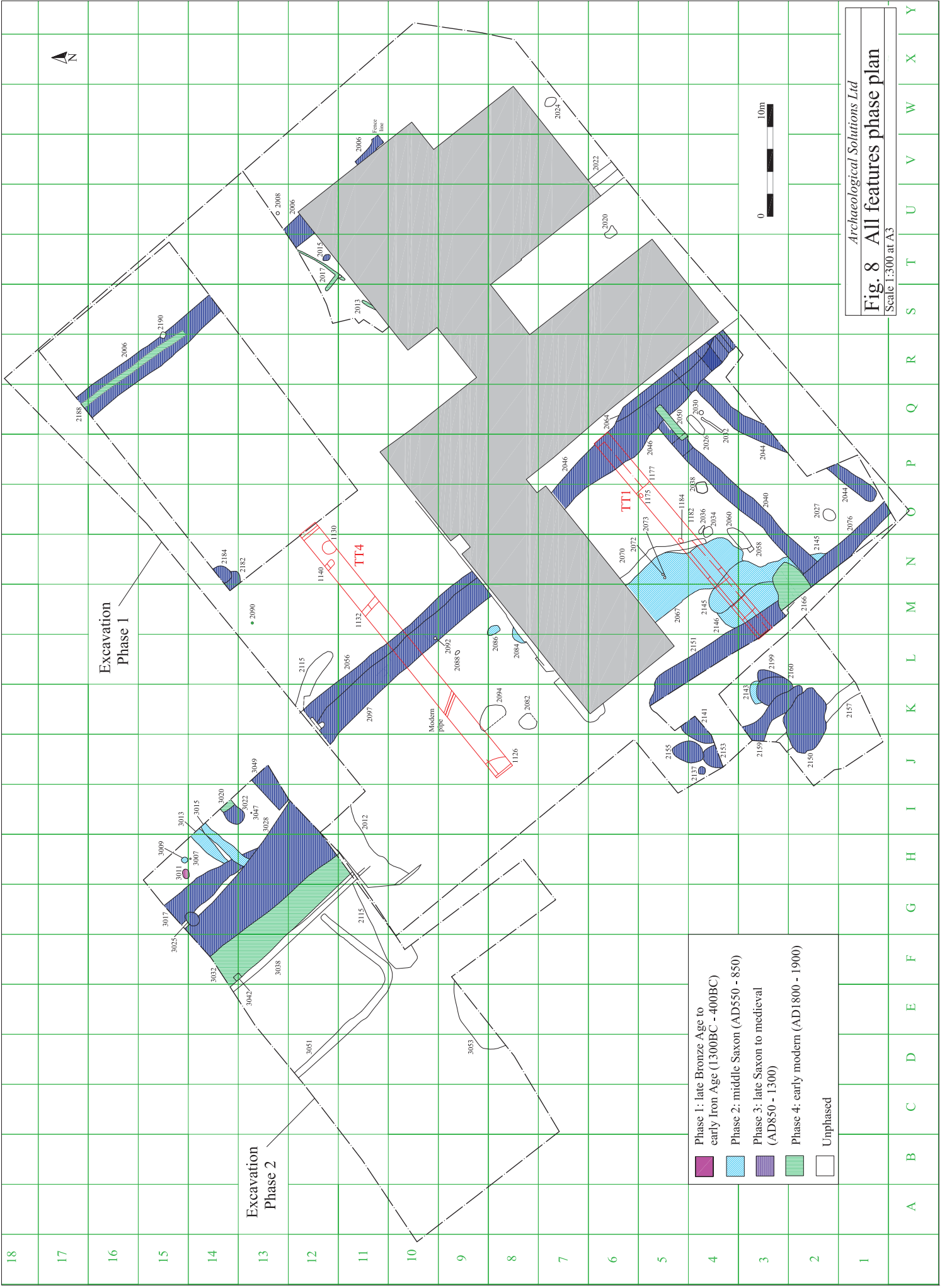
Trench 9



Trench edge sections 5m

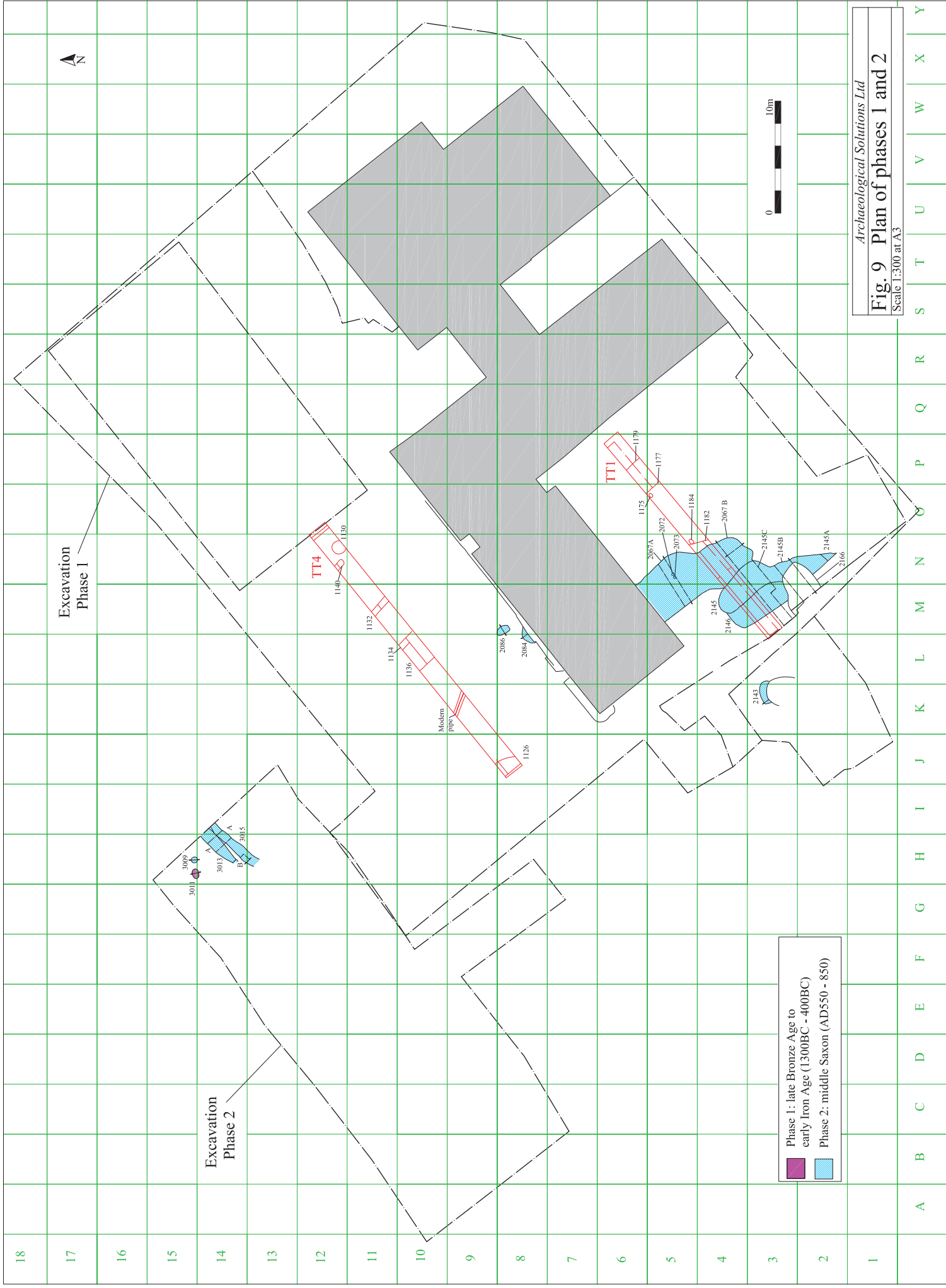
Feature sections 2m

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Fig. 7 Trial trench sections
 Scale: Trench edge sections 1:7.5, feature sections 1:25 at A3



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Fig. 8 All features phase plan
 Scale 1:300 at A3

- Phase 1: late Bronze Age to early Iron Age (1300BC - 400BC)
- Phase 2: middle Saxon (AD550 - 850)
- Phase 3: late Saxon to medieval (AD850 - 1300)
- Phase 4: early modern (AD1800 - 1900)
- Unphased



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Fig. 9 Plan of phases 1 and 2
 Scale 1:300 at A3

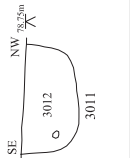
Phase 1: late Bronze Age to early Iron Age (1300BC - 400BC)
 Phase 2: middle Saxon (AD550 - 850)

Excavation Phase 1

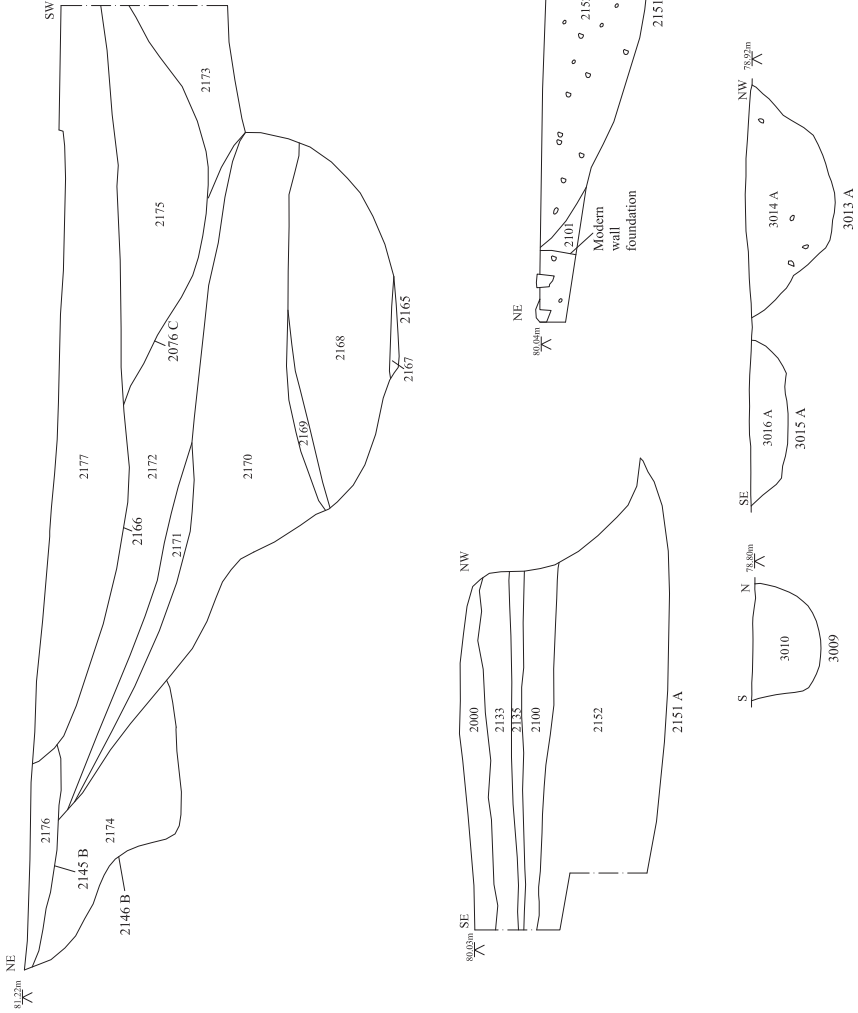
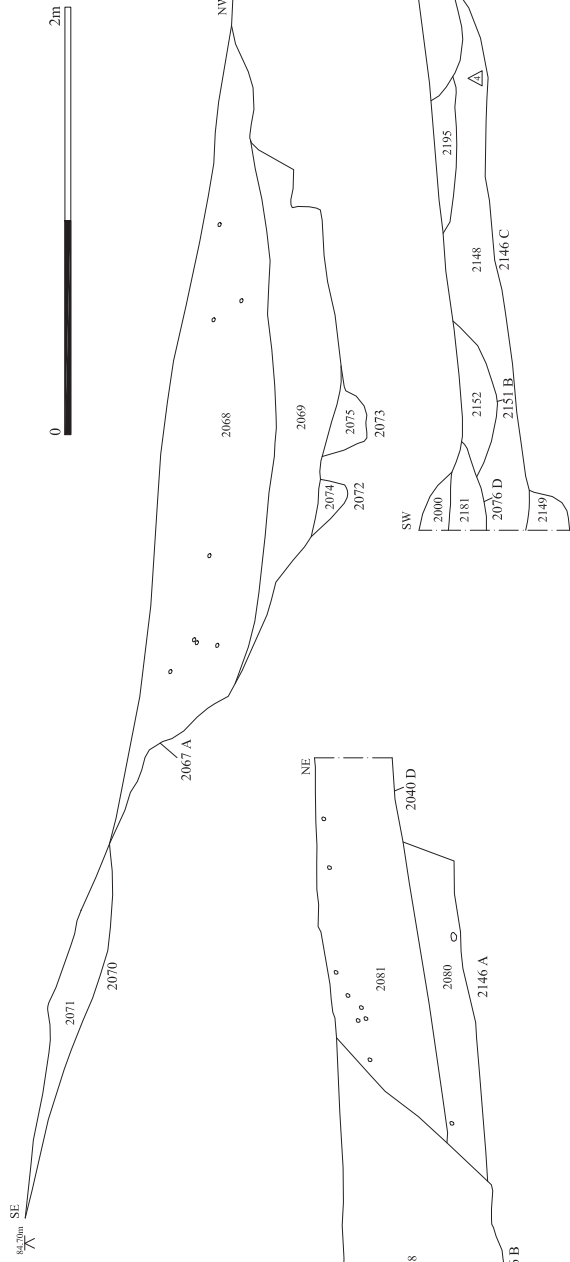
Excavation Phase 2

Modern pipes

Phase 1

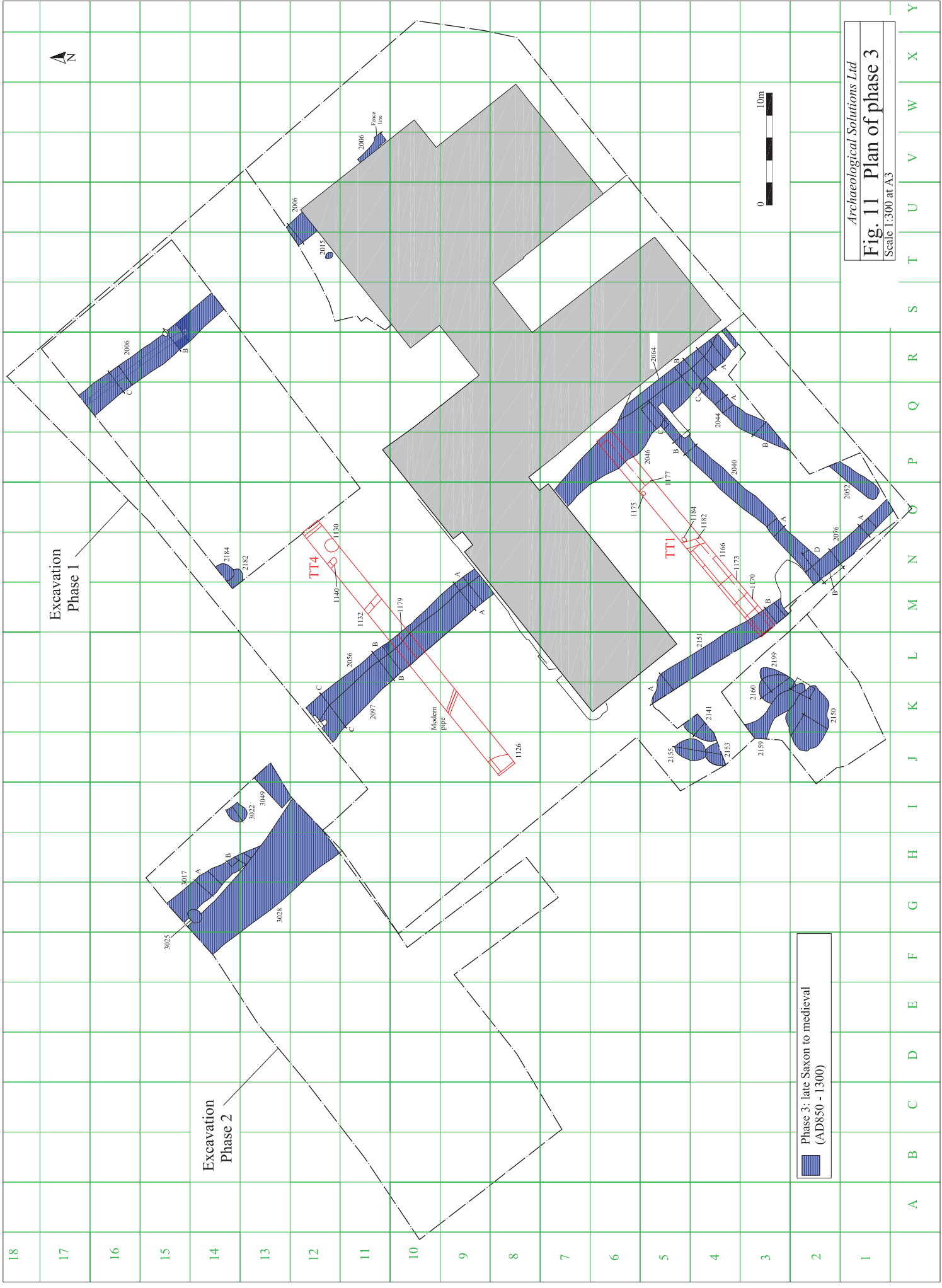


Phase 2



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Fig. 10 Phases 1 & 2 sections
 Scale 1:25 at A3

Charcoal	(Circle)
Concrete	(Square)

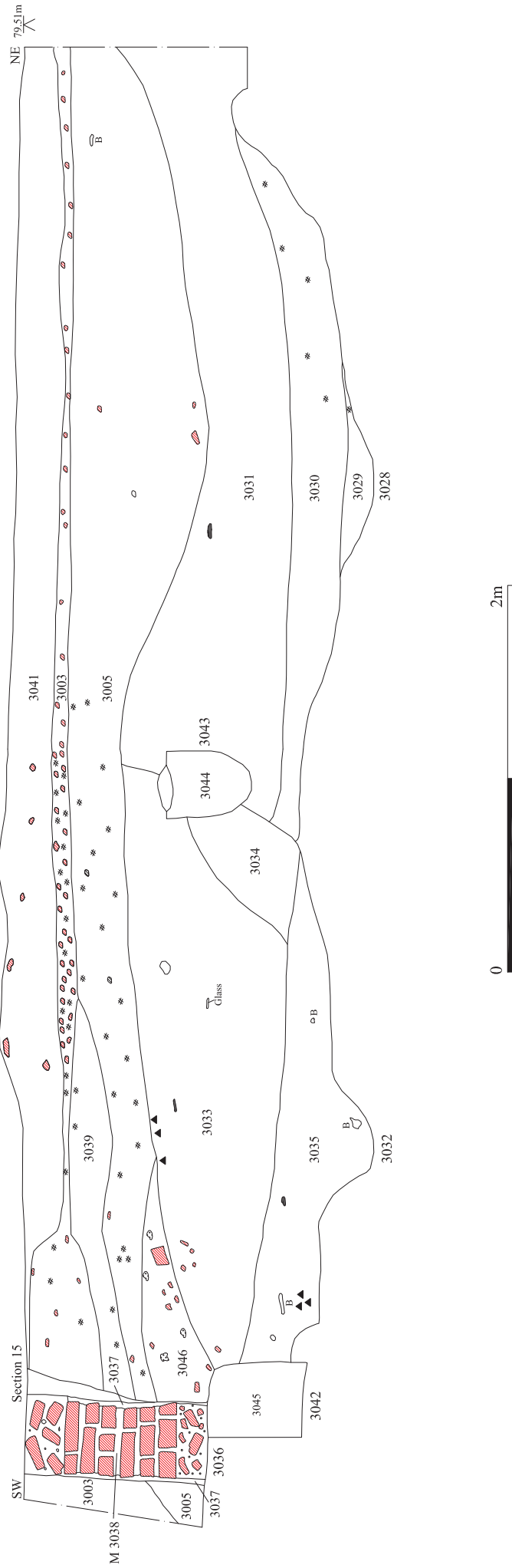


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Fig. 11 Plan of phase 3
 Scale 1:300 at A3

Phase 3: late Saxon to medieval
 (AD850 - 1300)



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Fig. 12 Phase 3 sections
 Scale 1:25 at A3

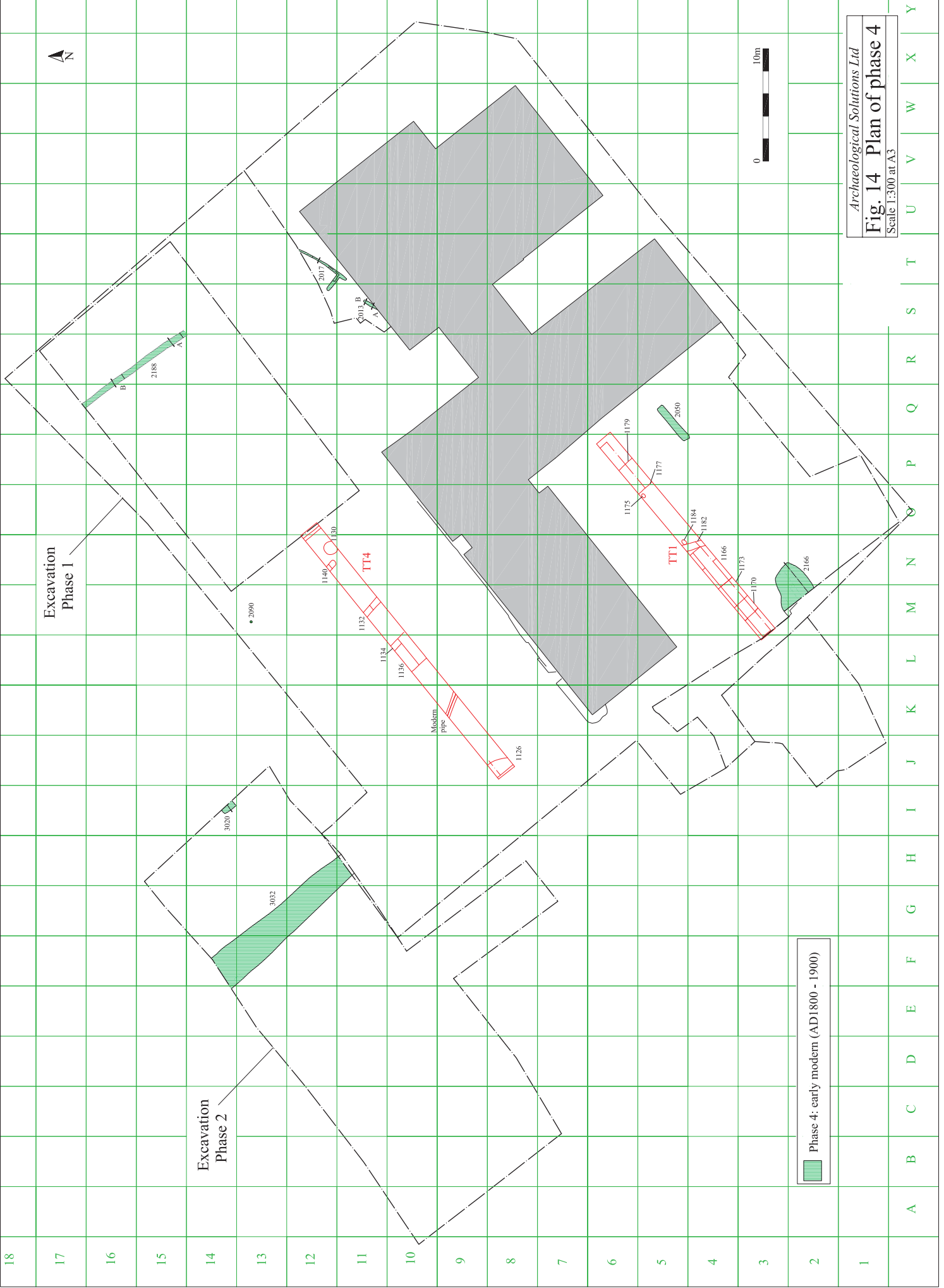


	Stone
	Charcoal
	Pottery
	Mortar
	Iron objects
	Brick
	Bone

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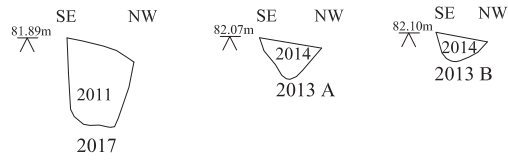
Fig. 13 Phase 3 sections cont.

Scale 1:30 at A4

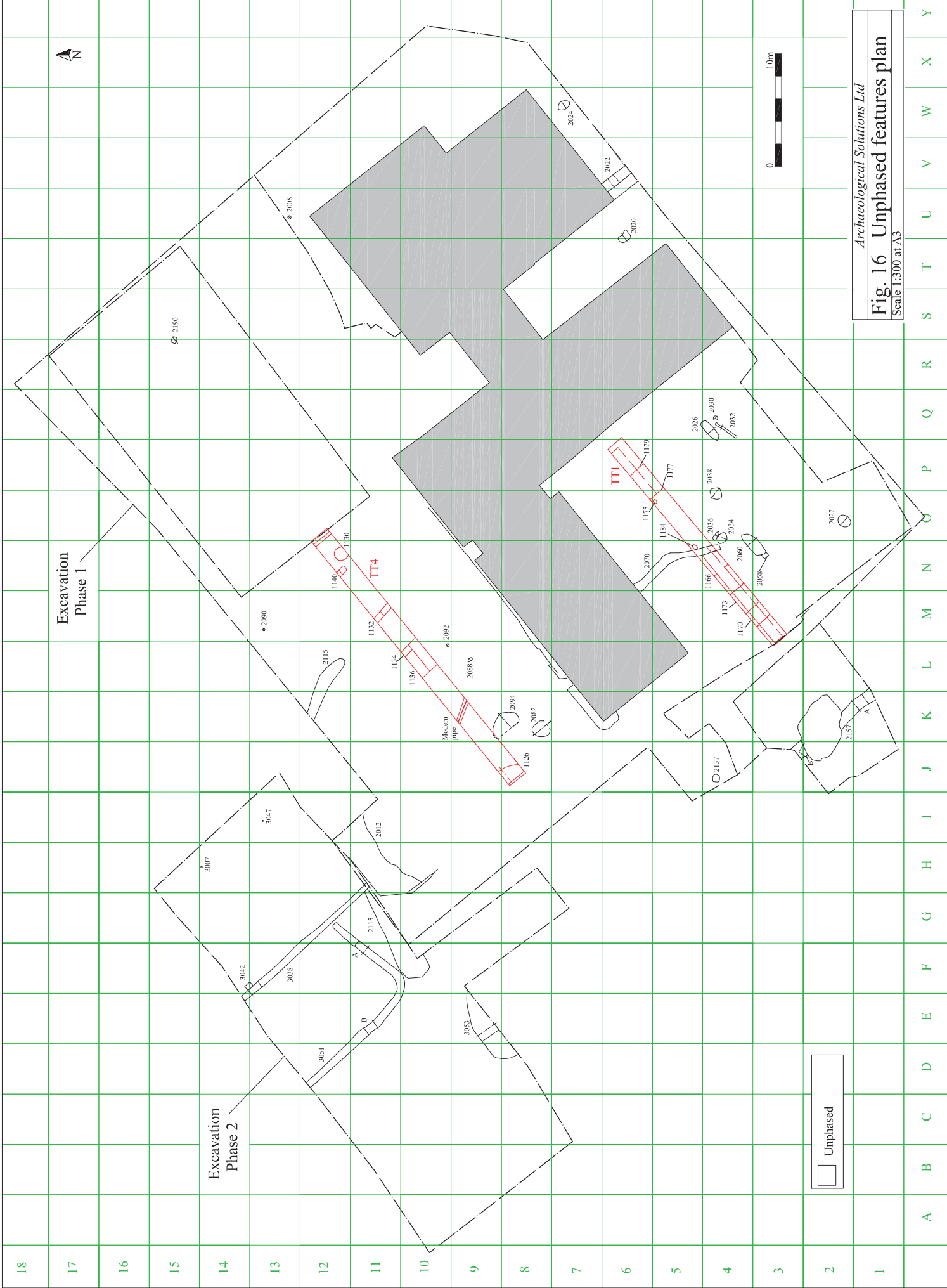


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Fig. 14 Plan of phase 4
 Scale 1:300 at A3

Phase 4: early modern (AD1800 - 1900)

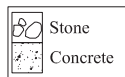
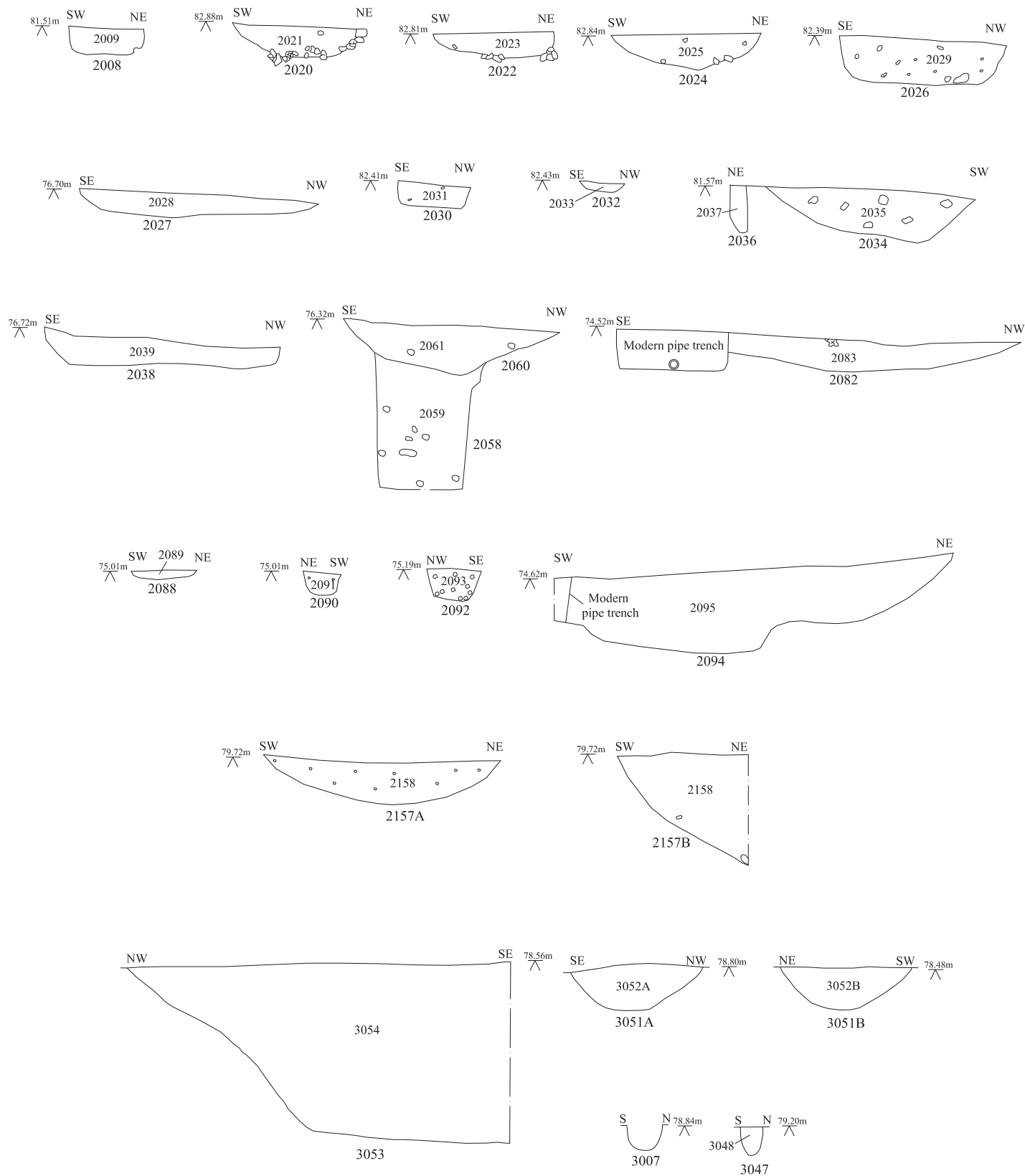


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Fig. 15 Phase 4 sections
Scale 1:25 at A4

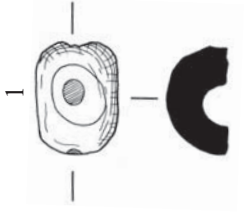


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Fig. 16 Unphased features plan
 Scale 1:300 at A3

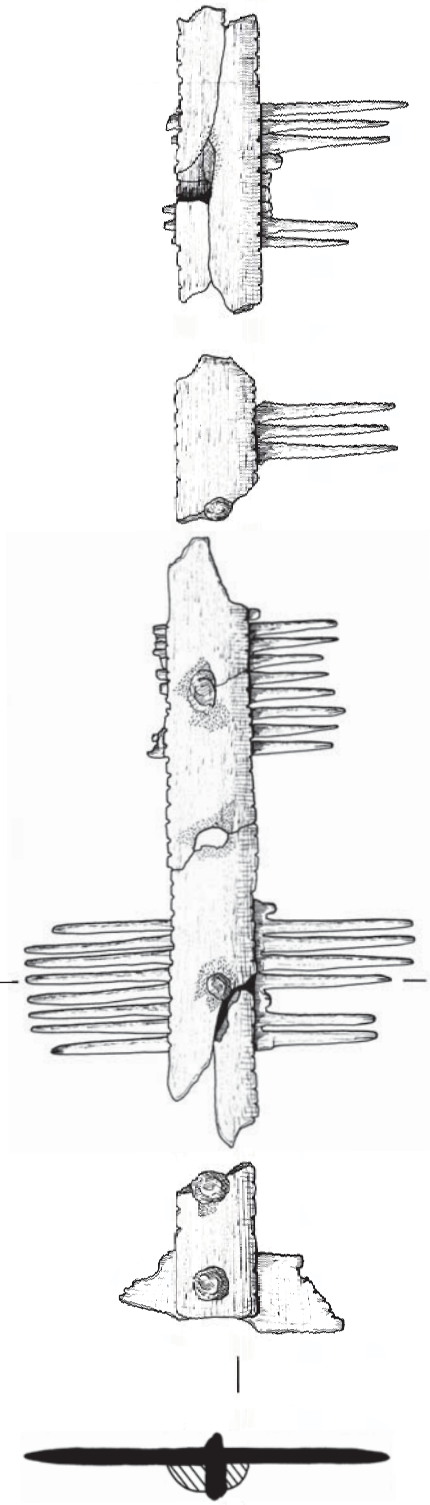
Unphased



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Fig. 17 Unphased sections
 Scale 1:25 at A4



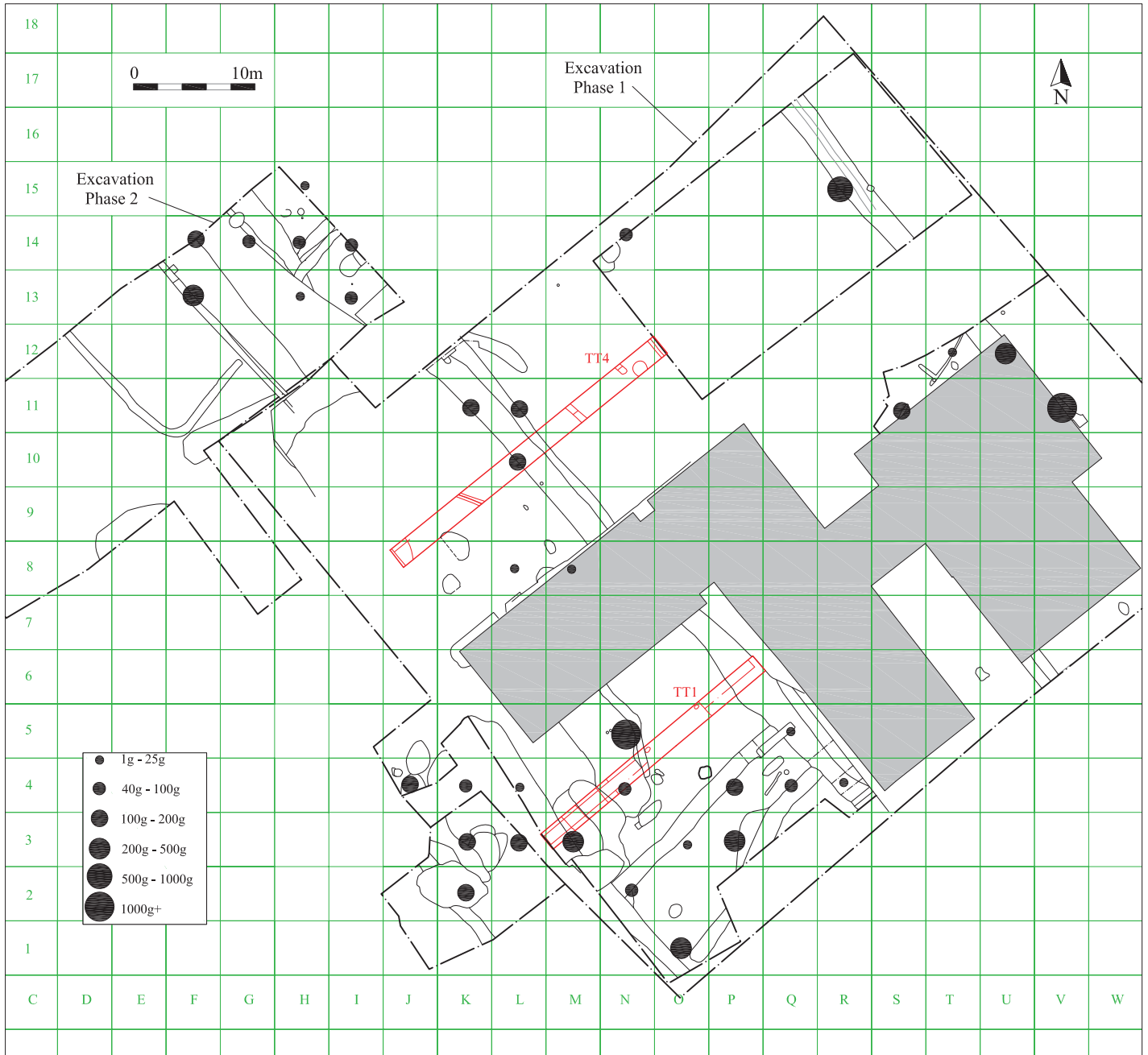
0 5cm



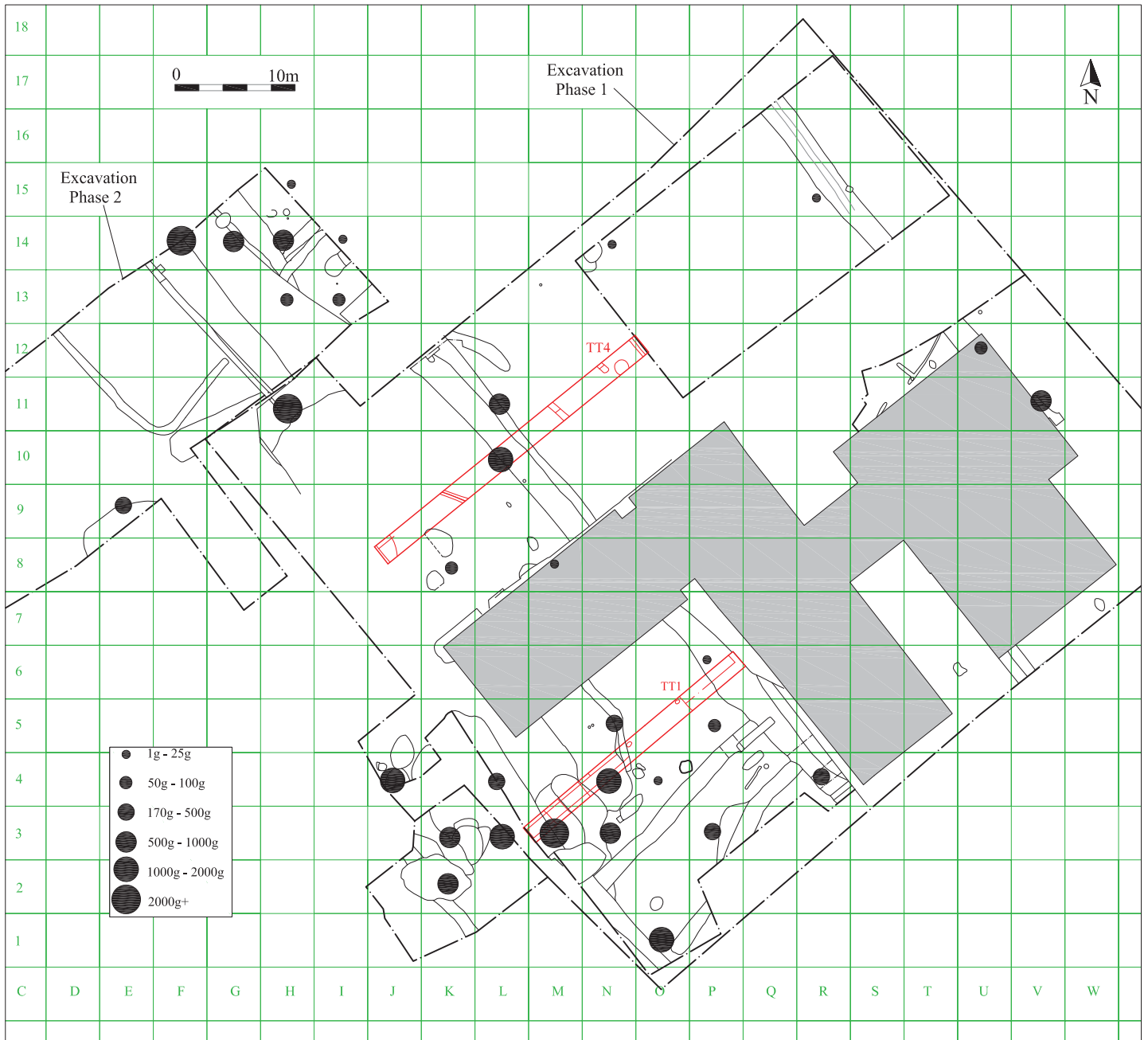
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Fig. 19 Small finds illustrations

Antler comb and glass bead scale 1:1



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Fig. 20 Pottery distribution plan
 Scale 1:500 at A4



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Fig. 21 Animal bone distribution plan
Scale 1:300 at A4