

Excavations at the corner of Kingswell Street and Woolmonger Street, Northampton

by

JIM BROWN

with contributions by

Philip Armitage, Paul Blinkhorn, Pat Chapman, Val Fryer, Tora Hylton, Helen Leaf
Iain Soden, Carol Simmonds, Tim Upton-Smith and Charlotte Walker

SUMMARY

Kingswell Street and Woolmonger Street are integral to our understanding of the layout and development of the medieval town of Northampton. The site is close to the heart of early Northampton and excavation has revealed a sequence of development that relates to the broader pattern of town growth.

In the mid-10th to early 11th centuries there was a large late Saxon cellared structure, similar to others found within the early town, although this area was marginal to the main focus of late Saxon occupation in Northampton. The cellar was succeeded by a Saxo-Norman timber building on the same alignment, although the larger part of the site was open ground, and the roads appear to have been less formally defined.

Intensive occupation of the site did not occur until the 13th-14th centuries when property boundaries were defined by areas of quarrying. Four medieval buildings were constructed within these plots, including a malthouse and a bakehouse. The arrangement of the buildings emphasised the formalisation of both adjacent streets for the first time, although a continuous frontage was not in evidence.

Pottery of the 15th century was sparse, seemingly due to documented civil improvements on Kingswell Street in 1641, but the frontage was developed during this century. Occupation of a medieval building on the Kingswell Street frontage continued in the 16th-17th centuries, with cess pits to the rear. There was no evidence for the Great Fire of Northampton in 1675.

The 17th-18th-century frontage contained at least one surviving medieval building, but this was lost with the erection of new buildings in the 19th century. Clay tobacco-pipemaking debris helped to identify the tenement of Master tobacco-pipemaker, George Henshaw (1767-1774) at 15 Kingswell Street. His tenure formed part of a substantial documented history of the site for the later post-medieval period.

INTRODUCTION

Northamptonshire Archaeology was commissioned in March 2005, by Westleigh Developments Ltd, to conduct an archaeological excavation on 0.3ha of land at the

corner of Kingswell Street and Woolmonger Street, Northampton (NGR SP 7532 6033; Fig 1). This was a condition of the planning permission for redevelopment. Northamptonshire Archaeology produced a Written Scheme of Investigation (Soden 2005) that was approved and monitored by the Northamptonshire County Council (NCC) Historic Environment Team Leader. Monitoring visits were conducted on a weekly basis during the course of the subsequent works.

The area excavation comprised a single near square area measuring 25m by 25m area, located within the frontage of the former properties of 14-16 Kingswell Street. This was the area where the evaluation had located the most extensive surviving deposits (Carlyle 2003). As part of an agreed method of reducing the ground level in the remainder of the site, a watching brief was maintained with a contingency for work where additional features survived outside the excavation. This article is a synthesis of results for the combined archaeological programme and is based on the original client report (Brown 2007). It includes details of a silver inlaid iron riding spur following its conservation, which were not available at the time of original reporting.

ACKNOWLEDGEMENTS

The project was managed by Iain Soden and the fieldwork was directed by Jim Brown. Excavation was conducted by Adrian Burrow, Giles McFarland, Nathan Flavell, James Aaronson, Mark Spalding, Sharon Cook, Mark Patenall, Rob Smith and Jennifer Jackson. Environmental processing was by Karen Deighton. The conservation of the finds was carried out through Buckinghamshire Museum Service by David Parish. The illustrations were prepared by Jim Brown, Carol Simmonds and Charlotte Walker. The documentary work and the report on the excavations were produced by Jim Brown. The published report has been condensed from the client report, which is available in archive, in the Historic Environment Record and online through the Archaeological Data Service (ADS) (Brown 2007).

TOPOGRAPHY AND GEOLOGY

The site lies on the northern slopes of the Nene valley. The natural contours of the former hillside slope

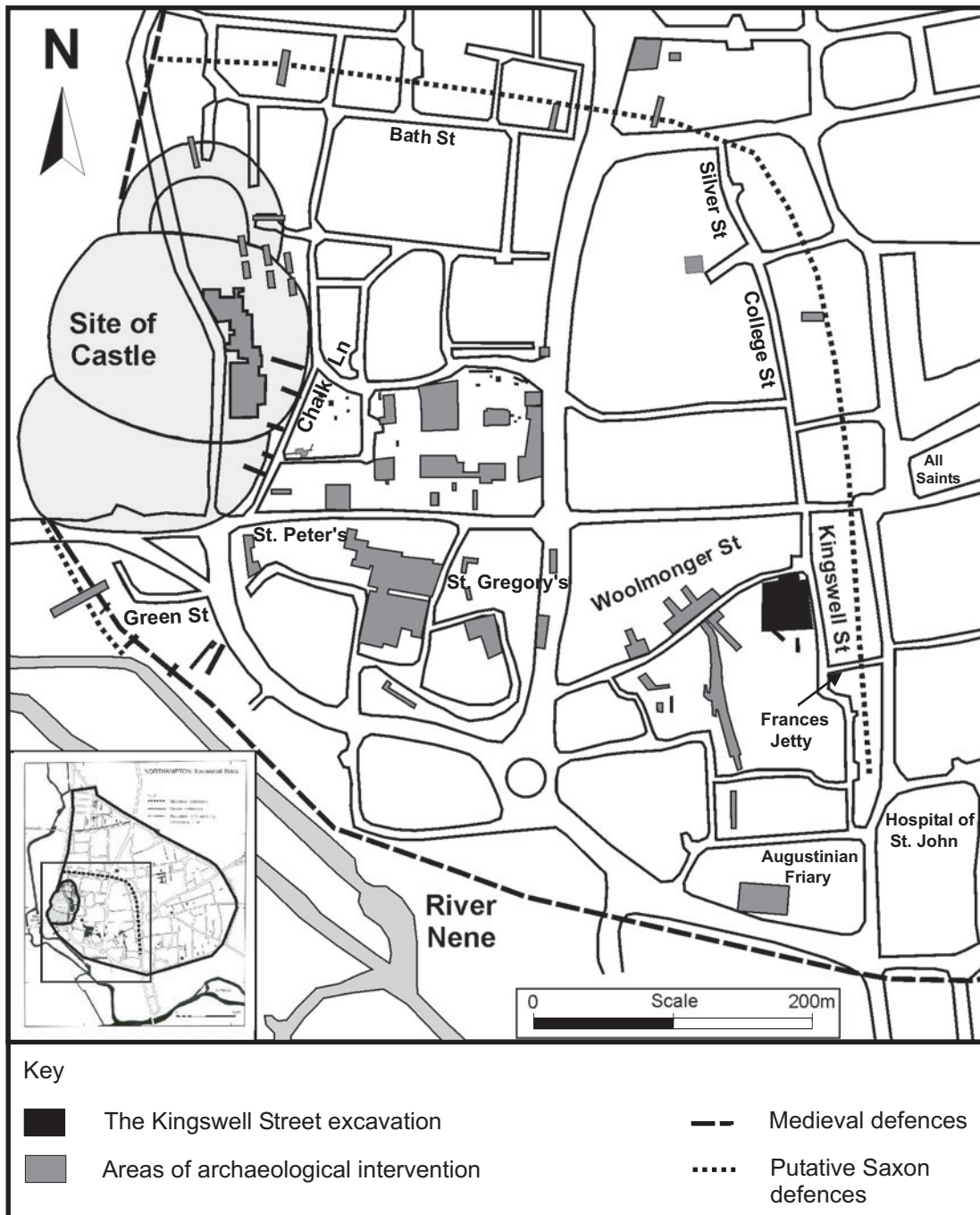


Fig 1 Site location and other archaeological interventions

gradually downwards from 68.2m OD in the north to 67m OD in the south of the excavation area. Modern terracing in the south and dumps of material in the north give the impression of a much sharper gradient. The site is bounded on the eastern side by Kingswell Street, to the north by Woolmonger Street, to the west by the shops around St. Peter's Square and to the south by the delivery access at the former Kingswell Terrace junction. The excavation area, formerly 4-16 Kingswell Street, had Kingswell Street on its eastern side and included an area of watching brief contingency to the north, formerly 1-7 Woolmonger Street.

The geology of the site consists predominantly of sedimentary Jurassic Ironstone and Northampton Sand with ironstone (<http://www.bgs.ac.uk/geoindex/index.htm>).

HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

The site was situated within the south-eastern quarter of the postulated late Saxon burh, but perhaps outside a middle Saxon precinct around the churches of St Peter and St Gregory (Fig 1; Lee 1954; Williams 1979, 5; Foard 1995, 112). It lay south-west of All Saints Church and the

Norman market place, and north of the Augustinian Friary, in the former parish of St. Gregory, encompassing an area of land on the west side of *Kyngeswell Lane*, south of the junction with *Welmonger Strete* (Williams 1982a, 82).

Archaeological evidence for early to middle Saxon occupation in Northampton comes from the excavations focussed on the land around St. Peter's Church, 300m west of the current site. Around St Peter's settlement was well established by the 8th century and may have formed a provincial or ecclesiastical administrative centre occupying a small precinct (Foard 1995, 111), and this was an early focus for growth throughout the middle and late Saxon periods.

Northampton was ceded to the Danes as part of the treaty between Alfred and Guthrum, c 886, fixing the boundary between Saxon England and the Danelaw (Williams 1982b, 21). The town spent 27 years in Danish control before Alfred's son, Edward, recaptured Northampton in 913. How this affected the economy is unclear, but Northampton continued to flourish despite the political upheavals, and evidence of the Danish occupation is scant. By the end of the 10th century the development of the town included a defensive circuit, and Alderman Lee suggested that to the north and east this followed the line of Bath Street, Silver Street, College Street and Kingswell Street (Fig 1; Lee 1954). The line of the defences has only been established archaeologically to the south of the West Bridge, where they have been dated to the 10th century, but with insufficient precision to determine whether they derive from the period of Danish control or were late Saxon in origin, perhaps a response to further Danish aggression (Chapman 1998-9, 42). Kingswell Street is thought to have been an intramural street parallel to these defences, which may have extended south towards the river.

Being enclosed by the defensive circuit did not necessarily mean that the land was intensively occupied or that it contained assets worthy of protection. Excavations conducted at Woolmonger Street, 70m west of the current site, indicate that prior to the 10th century there were few timber buildings in this area to the east of Horseshoe Street (Soden 1998-9, 112-113). This pattern changed from the 10th century onwards as cellared buildings were established in the late Saxon period (*ibid*, 76-78). Clearance and redevelopment took place at Woolmonger Street between the 10th and 11th centuries, when the same cellared buildings were destroyed and replaced by further timber halls, enabling formalisation of the street plan by the Norman authorities (*ibid*, 123).

The town had been a seat of parliament since the reign of Henry I (1100-1135). The New Borough and marketplace was established to the north-east as the town continued to grow and prosper, receiving its first charter in 1189. Such political decisions were catalysts for sustained growth. The construction of a Royal Castle in the mid-12th century under Henry II had a major effect upon the town as a consequence of the Royal investment and even the less important buildings of the town were being rebuilt in stone. Amongst the most influential arrivals were the ecclesiastical houses which were swift to acquire property in Northampton.

In the second half of the 13th century pressure for land in Northampton was intense. The town was a military

staging post for campaigns in the north of England and a centre of Royal power. In 1221 the Royal Field Army mustered at Northampton for campaigns in Lincolnshire and again in 1224 in preparation for the siege of Bedford (Norgate 1912). From both strategic and political standpoints Northampton was a key town in central England and a gateway to the north. The needs of Henry III, in his response to unrest, coinciding with the location of the Royal Castle made the town a viable choice for his headquarters. In 1225 Henry III chose to hold his Christmas Court at Northampton, attracting all the magnates in the land and their combined retinues (Turner 1907, 205-62).

The following centuries were less kind. Northampton's documentary record for the 15th century portrays a town in which some areas were in poor repair (Williams 1979, 6). Evidence from excavations at Woolmonger Street demonstrated a distinct lack of evidence for occupation in the 15th-century, combined with signs of property demolition along parts of the street, and no urban regeneration prior to the 17th century (Soden 1998-9). This is a phenomenon that fits a national pattern of urban recession (Schofield 1994, 209). Northampton suffered further at the flames of two large fires, the first in 1516 and a second in 1675. The impact of the Dissolution in the 16th century further curtailed the economic influences of the great ecclesiastical houses, already in decline, and Royal retribution for Northampton's parliamentary stance in the 17th century ended the town's strategic importance.

MAP EVIDENCE

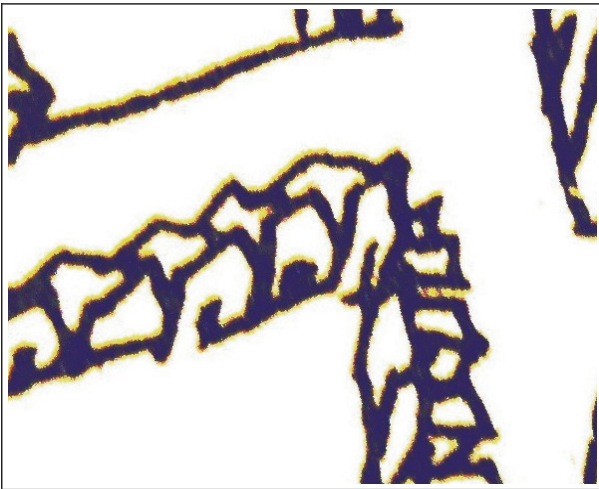
The earliest surviving depiction of Kingswell Street is the 1610 map by John Speed (Fig 2). The street is shown with numerous tenements forming a terraced block on the west side of the street from the junction with Woolmonger Street to the bottom of the hill opposite St. John's Hospital. As with all of Speed's maps the land at the back is not shown, but gives an impression of open space when compared to the walled precincts of the monastic estates.

Noble and Butlin's map of 1746 depicts the site still substantially built up on both frontages and shows a series of property divisions to the rear (Fig 2). The length of the row of buildings on the west side of the street appears shorter, extending beyond Frances Jetty and a large area of lightly-wooded ground occupied the former Augustinian precinct to the south.

Roper and Cole's map of 1807 (not illustrated) provides very little evidence of change from the map of 1746. The rear plots are identical except where two yards and an outhouse at the back of Woolmonger Street had been combined.

Wood and Law's map of 1847 depicts an increasing pressure for space on the site (Fig 2). Several of the rear yards had been developed with buildings and had become increasingly subdivided. Gaps along both streets were far fewer and many more properties had been established over the former Augustinian precinct to the south.

The Ordnance Survey map of 1885 depicts the development of the site with many subdivisions (Fig 2). Small ancillary buildings and outhouses were densely packed. Kingswell Terrace is depicted immediately to the south, with the end tenements, 20-22 Kingswell Terrace,



1610 Excerpt from the map by John Speed



1885 Excerpt from the 1st ed Ordnance Survey



1746 Excerpt from the map by Noble & Butlin



1899 Excerpt from Goad's Insurance plan



1847 Excerpt from the map by Wood & Law



1949 Excerpt from Goad's Insurance plan

Fig 2 Map regression 1949-1610

backing onto the south-west portion of the site. Two alleyways are depicted along Kingswell Street to give access to the rear yards.

The 1899 Insurance Plans of Northampton reveal that the former pattern of street numbers did not run in a predictable sequence (Fig 2; NRO Maps 5970-2). The two alleyways identified on the 1885 Ordnance Survey map lay between 17-17a Kingswell Street and between 17a-18 Kingswell Street, the latter being called J. T. Lowke Engineering Works. A third alley is shown between 15-16 Kingswell Street. The plans also show that a large yard space to the rear of 7-9 Woolmonger Street was succeeded by warehousing for Baines Rag Merchant. Some minor rearrangement of ancillary buildings to the rear of 16-17a Kingswell Street is apparent. A building to the rear of 14 Kingswell Street is labelled 'Bellhanger' and one adjacent, behind 15 Kingswell Street, is labelled 'Whitesmith'. The property at 17 Kingswell Street is labelled 'Carver'.

The Insurance Plans were resurveyed in 1949 and depict a less cluttered arrangement (Fig 2; NRO Maps 5970-2). The property at 10 Kingswell Street is marked as ruinous; 12 Kingswell Street had been demolished; 14 Kingswell Street was a Shoe Repair Factory; 15-16 Kingswell Street had been demolished; 17-17a Kingswell Street housed an Antique Furniture Dealer; and 18-23 Kingswell Street had been rebuilt to accommodate a modernised paintshop and store for Basset-Lowke Engineers. The houses at 24-28 Kingswell Street, immediately south of the excavation site, had been demolished. On Woolmonger Street the tenements between 1-5 and part of 10 Kingswell Street had been replaced by a 'Club'; 7-9 Woolmonger Street and the warehousing was occupied by E. Baines & Co Marine Store, with a skin drying room at the back. Terraced housing between 11-25 Woolmonger Street had been replaced by Ennals & Cooper Agricultural Engineers. Only one alleyway survived, beneath the archway at 18 Kingswell Street, which provided access to the Basset-Lowke yard.

Subsequent Ordnance Survey editions depict minor alterations to ancillary structures between 1927 and 1957. The next major changes were visible on the map of 1972 with the area of a car park replacing the former properties at 14-17a Kingswell Street. The corner plot, 10-12 Kingswell Street and 1-5 Woolmonger Street, had been combined into a public house. A single large building occupied the site of Basset-Lowke Engineers, marked as a 'Scale-model factory'. The south side of Woolmonger Street from east to west showed the club, a warehouse, engineering works and a motor repair works. All of these structures were demolished in 2005.

DOCUMENTS IN NORTHAMPTONSHIRE RECORD OFFICE

The published and archive account of the adjacent Woolmonger Street excavations (Soden 1998-9) contains a detailed account of the documentary information, the relevant parts of which include references to Kingswell Street: Kyngeswellstrete 1431 (Cox 1898); Kyngewell Street 1504 (NBC records 29); Kingswell Lane 1618 (NBC records 86); Kingy Lane 1695 (NRO: NPL 2216); and Lewnys Lane: Venella juxta domum... Lewelini

(Rental Edward I); Lewnyslane 1504 (NBC records 29); lane open towards Wolmongerstrete (NBC records 29).

The earliest surviving document that mentions property on Kyngeswell Strete is a Latin Assizes case in 1361 (NRO A97). The case addresses the claim of Henry Vynter against (the Duke of) Buckyngham for illegally appropriating the estates of Crik (Crick) called Vyntersmanere and those fields pertaining to it in Northampton, Coton, Crick and Lilleburne (Lilbourne) in the time of Henry's father, Almeric Vynter, burgager of the town. The land on Kyngeswell Strete is described as a message and nothing more, although research during the 1994-7 excavations demonstrated that a tenement belonging to the Vynter family lay at the southern end of Lewnys Lane, probably adjoining Kingswell Street (Soden 1998-9, 66-67).

No further occurrences are traceable until the 15th to 16th centuries. The documents are cited by Cox in his work on the Borough records in relation to Kingswell Lane (Cox 1898). Cox believed two inns were located on Kingswell Lane; 'The Harp' and 'The Lamb and Flag' (Cox 1898, 307). Two documents allude to an inn called 'The Harpe'; the first is dated 1555 and written in Latin; the second is a lease, dated 1568 and endorsed with the seal of the Hospital of St. John, for the 'The Harpe' on Golde Street (NRO YZ3630; FH1118). No reference survives for 'The Lamb and Flag'. In 1580 great overcrowding was noted amongst the poorer houses of Northampton and Kingswell Lane was in need of a refuse policy to clear the street of rubbish (Cox 1898, 264-6). The street is mentioned again in 1586 during the Town Property Survey amongst the 'Lands lying in the south quarter' (Cox 1898, 159-160, 535). Cox catalogues two entries in a list, thus:

(5) A space of ground lying from his broade gate from his Kingswell Lane to a ground called Rookes Mucke hyll, tenant William Rainsford, rental 4d.

(21) A hogge stye and a garden in Kingswell Lane; tenant Richard Freeman, rent 2s. 6d.

Rookes Mucke hyll was located in close proximity to St. Peter's Way at its junction with Gas Street (Soden 1998-9, 124). The apparent build up of waste material, its downwind proximity to Rookes Mucke hyll and the apparent late date at which the street was paved, in 1641, leaves the impression that Kingswell Street was low on the list of civic priorities, and probably not a particularly respectable part of the town. Further deeds are recorded for properties on Kingswell Street in 1571, 1608, 1622, 1676, 1696 and 1697; however, all of these documents refer to properties on the east side of Kingswell Street, generally fronting onto Bridge Street or else lying to the north of Woolmonger Street (NRO YZ5156, NPL402, YZ5075, YZ9045-117, NPL2216, NPL1202).

Two covenants are recorded for Benjamin Hill in 1731 for the seizure and lease of a message and garden in Kingswell Lane (NRO YZ9092-3). In 1765 Benjamin Hill, a distiller, left three messages in Kingswell Street to his wife Mary Hill (NRO YZ9094). According to her Will, written in 1782, these were to be transferred to her niece Mary Wye or to her nephews Benjamin and Joseph Hill upon her death (NRO YZ9095-6).

A consultation of the 1768 Election Plan was cross-

referenced to the Index of Freemen in the Northampton Record Office, producing a list of residents on the west side of the street and the trades they may have engaged in (NRO Map 1114). The names were recorded in order, but since no street numbers existed, it is not possible to tie these to specific properties:

From Woolmonger Street walking south
 John Ives, son of William Ives, Cordwainer, 1791
 Thomas Fawcitt, son of James Fawcitt, Tailor, 1766
 Thomas Hewlett, Cordwainer, 1761
 John Johnson, Turner, 1781
 Richard Fox, son of John Fox, Whitesmith, 1757
 James Seeton
 Henry Hewitt
 Charles Seers
 Richard Clayson, apprentice to William Lockett,
 Hairdresser, 1792
 Joseph Seslove
 George Henshaw, Master Pipemaker c.1768-71; Index
 of Freemen 1767
 Opening of yard space
 Henry Emmerson
 Names along Kingswell Street resume

Thomas Hewlett was a labourer recorded amongst the tenants in a lease of 1731 but was the only link to the 18th-century deeds consulted (NRO YZ9092). George Henshaw was traced amongst the master clay tobacco-pipemakers of Northampton (Moore 1980, 21). His occupancy of a former tenement, in direct relation to an alleyway and the waste remaining from his trade, make him easier to locate with confidence. The 19th-century maps suggest he lived at 15 Kingswell Street from where clay tobacco-pipe making waste was recovered. Unfortunately in the trade directory and census data for subsequent years, none of the family names continue and it is assumed that these properties did not continue to be occupied for more than one generation or so.

A legal settlement in 1774 provides a period of documentation to 1812 for one particular group of properties in the north of the site (NRO ZB135/32-4). The settlement was between Houghton Wilson and Elizabeth Fisher, and John and Cordelia Manning. Houghton Wilson was presumably a relative of John Wilson living at the eastern end of Woolmonger Street during the Great Election of 1768 (NRO Map 1114). The settlement concerns two adjoining messuages in Kingswell Street that were conveyed to Samuel Fitzhugh, an innkeeper, in 1804. The document records a third conveyance in 1812 from Samuel Fitzhugh to Dennis Slinn, a cordwainer and is inclusive of a messuage in Woolmonger Street with two sheds used as a blacksmith workshop. It seems probable that this relates to 3-5 Woolmonger Street.

A copy lease and release in 1787 between John George, his son Haddon, and John Feyes, records two messuages in Newlands, one in Bridge Street and a garden in Kingswell Street (NRO YZ9055). The same John Feyes is mentioned in a series of conveyance documents, 1800-3, for the messuage on Bridge Street and a garden with Kingswell Street on its east side (NRO YZ9059-61). Later 19th-century documents do not indicate where this might have been, although Roper & Cole's map of

1807 portrays a large area to the rear of the Kingswell Street plots that may have been an allotment belonging to properties not on the Kingswell Street frontage. There is a record of the indenture for lease and release of properties between Thomas Berridge and James Essex, to William Parker the shoe manufacturer and William Boswell in 1819 for a garden, newly erected leather shop and three cottages in Kingswell Street (NRO YZ9064-5). It is not stated which side of the street these lay upon.

TRADE DIRECTORIES

Consultation of Kelly's and Robert's trade directories for the years 1830-1967, combined with the census data from 1841-1901 and knowledge of the map evidence, displays a fairly thorough portrait of changing tenure over the last 200 years (Table 1). The first house numbers do not appear in the documentary record until the census of 1861. Subsequently none of the trades for the years 1791 and 1823 could be identified with specific properties as the family names did not continue.

The corner property at 10 Kingswell Street consistently housed a butcher's shop, 1869-1931, except during the mid-1880s when the tenure was held by H Webb, basket manufacturer. The neighbouring 12 Kingswell Street appeared to be a private tenement throughout the years 1861-1931, first appearing in trade directories under William Jays, turf commission agent. Number 14 was the private residence of Alexander Charles Dickens, 1877-1901. He seems to have been experiencing financial troubles at the turn of the 19th century, for in 1895 he mortgaged his house with George Raunds & Wickham Flower of London (NRO YZ9110-6). In 1899 he was leasing a building to the rear of the property to his neighbour, Henry Perrin, to use as a bellhanger's workshop (NRO Maps 5970-2). In 1911 he sold the property through Bell, Green & Stops Brokers to R T & F J Ashby, the butchers at Kisingbury (NRO YZ9116). They retained an agreement with the General Post Office for use of the yard space to the rear (NRO YZ9117). By 1949 the renovated property had become the site of Modern Shoe Repairs Ltd and was no longer a private residence. Henry Perrin, whitesmith, locksmith & bellhanger was the first 19th-century occupant at 15 Kingswell Street to utilise the buildings and yard space at the back of 14-16 Kingswell Street for trade purposes, around 1884. The house at number 16 appears to have served purely as a residence throughout the 19th century.

The Bosworth family were resident throughout the 19th century and mid-20th century at 17-17a Kingswell Street operating trades that were principally based around handmade wooden household furnishings. Their long tenure suggests that they acquired ownership of Kingswell Court by 1881, when it became known as Bosworth Yard. The differentiation between 17 and 17a, appears to divide the domicile from the shop front. In the 1891 census there is a clear distinction between the Bosworth residence and the workshop, in 1901 the census officer recorded William Bosworth's wife's name at 17. Plot 17a is marked as a 'Furniture Dealer' on the resurveyed Insurance Plan of 1949 (NRO Maps 5970-2). The ancillary building immediately to the rear of number 17, in Bosworth Yard, was marked as a workshop.

EXCAVATIONS AT THE CORNER OF KINGSWELL STREET AND WOOLMONGER STREET, NORTHAMPTON

Table 1: Trades and tenure on the Kingswell Street frontage

Date	No. 10	No. 12	No. 14	No. 15	No. 16	No. 17	Kingswell Court Nos 1 & 2	No. 17a	Nos 18-19 Archway	No. 20	No. 21	No. 22	No. 23
1830											William Cave (Furniture Broker)		
1841						William Bosworth (Cabinetmaker)				James Harley (Plumber)	Ebenezar Cave (Furniture Broker)		
1847						William Bosworth (Cabinetmaker)				William Harley (Painter)			
1851						William Bosworth (Cabinetmaker)	Thomas Humphrey (Plumber)			William Harley (Painter)	Sarah Cave (Widow)		
1854						William Bosworth (Cabinetmaker)				William Harley (Painter)			
1861	William H. Swindell (Shoemaker)	Iain Potter	Daniel Hewitt (Ironmonger)	John Martin (Boot Closer)	William Coleman (Carpenter)	William Bosworth (Pictureframe mfr)	#1 Thomas Humphrey (Plumber) #2 John Leasey (Groom) called Kingswell Court		Absalon Bassett (Boilermaker) called Wilson's Yard William Collins (Boot Closer) Room over the gate	William Harley (Painter)	John Cave (Builder)	Samuel Howard (Builder)	John Perrin (Whitesmith)
1869	John Blunt (Butcher)					William Bosworth (Pictureframe mfr)			Absalon Bassett (Engineer & Boilermaker)		Alexander C. Dickens (Tin Plate Welder)		John Perrin (Whitesmith)
1871	Charles Blunt (Butcher)	Matthew Blake (Chimney Layer)	Thomas Adams (Machine Closer)	Mary Linnell	John Cooper (Carver & Gilder)	William Bosworth (Pictureframe mfr)	#1 Neville Humphrey (Dressmaker) #2 Thomas Flavell (Carpenter) called Kingswell Court		Absalon Bassett (Boilermaker) George Johnson (Railway Labourer) Room over the gate	William Harley (Painter)	William Bell (Carpenter)	Thomas _____? (Butcher)	Mary Perrin (Whitesmith)
1877			Alexander C. Dickens (Tin Plate Welder)		Henry Perrin (Whitesmith)	William Bosworth (Pictureframe mfr)			Bassett & Son (Engineers & Boilermakers)				

Table 1 (cont.): Trades and tenure on the Kingswell Street frontage

Date	No. 10	No. 12	No. 14	No. 15	No. 16	No. 17	Kingswell Court Nos 1 & 2	No. 17a	Nos 18-19 Archway	No. 20	No. 21	No. 22	No. 23
1881	Richard Higgins (Butcher)	Mrs. Humphrey (Widow)	Alexander C. Dickens (Tin Plate Welder)	John Cross (Ostler)	Samuel Cox (Chairmaker)	William Bosworth (Pictureframe mfr)	#1 James Forskett (Salemonger) #2 William Jacob (Shoe Clicker) called Bosworth Yard		Absalon Bassett (Boilermaker)	William Harley (Painter)	Henry Firkins (Leatherdresser)		
1884	H. Webb (Basket mfr)	Mrs. Humphrey (Widow)	Alexander C. Dickens (Tin Plate Welder)	Henry Perrin (Whitesmith)	Samuel Cox (Chairmaker)	William Bosworth & Son (Carver & Gilder)			Bassett & Son (Engineers & Boilermakers)				
1890	Robert Roddis (Butcher)		Alexander C. Dickens (Tin Plate Welder)	Henry Perrin (Whitesmith, Locksmith & Bellhanger)		William Bosworth & Son (Carver & Gilder)					William Papworth (Milk Seller)	Ralph Smith (Shoemaker)	
1891		George Drage (Engine Fitter)	Alexander C. Dickens (Tin Plate Welder)	Henry Perrin (Whitesmith)	Joseph Ayres (Porter)	William Bosworth (Pictureframe mfr)	#1 Thomas Kirby (Miller's Labourer) #2 Charles _____? (Ostler) called Bosworth Yard	Bosworth & Son (Carver & Gilder)	A. Bassett (Engineer)		William Papworth (Dairyman)		
1892		George Drage (Engine Fitter)	Alexander C. Dickens (Tin Plate Welder)										
1894	Joseph Ashby (Butcher)		Alexander C. Dickens (Tin Plate Welder)						Bassett & Sons (Engineers)	Bassett & Sons (Engineers)	William Papworth (Dairyman)	George Smith (Shoemaker)	George J. Russell (Beer Retailer)
1899			Bellhanger	Whitesmith		Carver			Joseph T. Lowke (Engineering Works)				
1901		William Nash (Bricklayer)	Alexander C. Dickens (Electrical Engineer)		Harry Meeks (Driver)	Mary Bosworth (Housewife)			Joseph T. Lowke (Engineering Works)		William Papworth (Dairyman)		

EXCAVATIONS AT THE CORNER OF KINGSWELL STREET AND WOOLMONGER STREET, NORTHAMPTON

Table 1 (cont.): Trades and tenure on the Kingswell Street frontage

Date	No. 10	No. 12	No. 14	No. 15	No. 16	No. 17	Kingswell Court Nos 1 & 2	No. 17a	Nos 18-19 Archway	No. 20	No. 21	No. 22	No. 23
1910	Ashby & Sons (Butcher)			Henry Perrin (Whitesmith)		William Bosworth (Carver & Gilder)			Joseph T. Lowke & Sons (Engineers)	A. Bell & Co Ltd (Ironmonger)	A. Bell & Co Ltd (Ironmonger)	A. Bell & Co Ltd (Ironmonger)	A. Bell & Co Ltd (Ironmonger)
1924	Roland W. Garner (Butcher)			Ennals & Cooper (Agricultural Engineers)		William Bosworth & Sons (Carver & Gilder)			Joseph T. Lowke & Sons (Engineers)	A. Bell & Co Ltd (Ironmonger)	A. Bell & Co Ltd (Ironmonger)	A. Bell & Co Ltd (Ironmonger)	A. Bell & Co Ltd (Ironmonger)
1931	Roland W. Garner (Butcher)	William Jays (Turf Commission Agent)		Ennals & Cooper (Agricultural Engineers)		William Bosworth & Sons (Antique Dealer)				A. Bell & Co Ltd (Ironmonger)	A. Bell & Co Ltd (Ironmonger)	A. Bell & Co Ltd (Ironmonger)	A. Bell & Co Ltd (Ironmonger)
1940		William Jays (Turf Commission Agent)				William Bosworth & Sons (Antique Dealer)			C. E. Linnet Ltd (Mechanical Engineers) Alfred William Sims (Shopfitter)	A. Bell & Co Ltd (Ironmonger)	A. Bell & Co Ltd (Ironmonger)	A. Bell & Co Ltd (Ironmonger)	A. Bell & Co Ltd (Ironmonger)
1949	Ruinous	Demolished	Shoe Repair Factory	Demolished	Demolished			Furniture Dealer	Paintshop, Store & Fitters	Paintshop, Store & Fitters	Paintshop, Store & Fitters	Paintshop, Store & Fitters	Paintshop, Store & Fitters
1954			Modern Shoe Repairs Ltd			William Bosworth & Sons (Antique Dealer)		William Bosworth & Sons (Antique Dealers)	C. E. Linnet Ltd (Mechanical Engineers) O. Bolton (Joinery mfr) Goodman & Margerets (Leather Goods mfrs)	Basset-Lowke Ltd (Model Engineers)	Basset-Lowke Ltd (Model Engineers)	Basset-Lowke Ltd (Model Engineers)	Basset-Lowke Ltd (Model Engineers)
1967									C. E. Linnet Ltd (Mechanical Engineers) Gordon & Smith (Joinery mfrs) Roberts & Chick (Upholsterers)	Basset-Lowke Ltd (Model Engineers)	Basset-Lowke Ltd (Model Engineers)	Basset-Lowke Ltd (Model Engineers)	Basset-Lowke Ltd (Model Engineers)

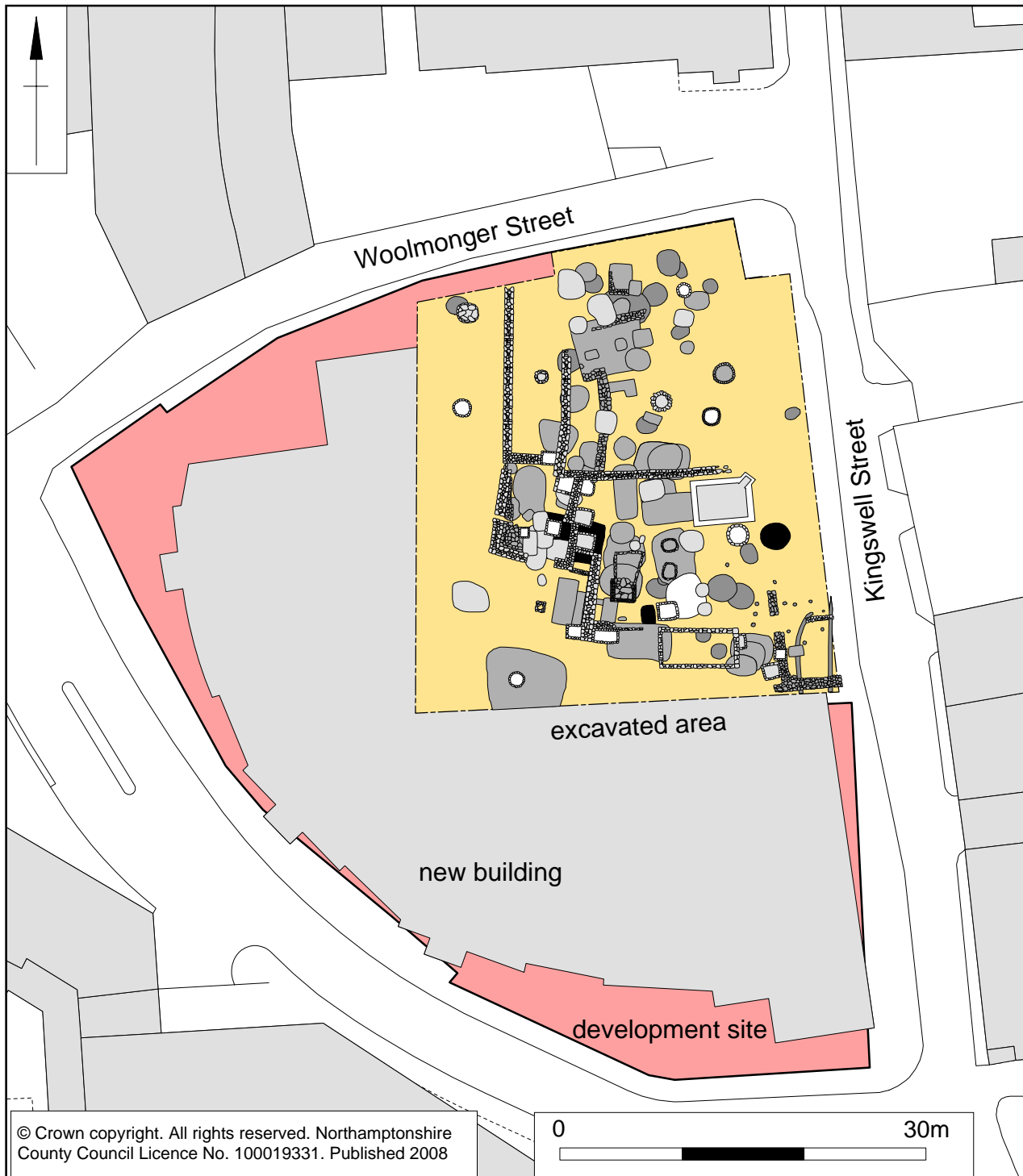


Fig 3 The development site and the excavated area

According to a series of conveyances the properties at 1-5 Woolmonger Street were sold by John Trasler to Kathleen Finnegan in 1898 (NRO ZB1348/3). These were subsequently sold to Northampton Tradesman's Club Co Ltd in 1930, which then expanded the premises in 1946 by purchasing 10 Kingswell Street from Joseph Basset-Lowke Ltd (NRO ZB1348/4).

BASSET-LOWKE LTD, MODEL ENGINEERS

The boilermaker Absalon Basset, occupied 18-19 Kingswell Street and enjoyed possession of the large works yard to the rear, 1861-1910. By 1894 Basset & Sons engineering works had expanded to occupy neighbouring number 20 and was no longer renting out the room above

the gateway. The yard moved into new ownership in 1899 under Joseph Thomas Lowke, then experimenting with an offshoot business based in the shop front of number 19 called Miniature Railways of Great Britain Ltd. Lowke kept the engineering works running at least until 1924. Over the following 40 years parts of the yard were sold for development and the buildings were leased to a series of smaller manufacturing firms. It seems likely that ownership of the property remained with the Lowke family until they had enough capital to establish a new factory facility on the site. In 1954 the trade directory records Basset-Lowke Ltd, railway model engineers, operating at 20-25 Kingswell Street and is recorded on the Northampton Insurance Plan of 1949 as a paint shop, store and fitters, presumably serving the new Basset-Lowke enterprise (NRO Maps 5970-2). The retail outlet was located at 78 Derngate Road and a considerable collection survives for the premises including photographs, greetings cards and the model railway catalogues 1914-1929 (NRO ZB498 1-67). The firm was still successfully manufacturing miniature railway models on the site in 1972. Corgi purchased the Basset-Lowke brand name in 1996 and re-launched the railway locomotive products in 1999 (www.bassetlowke.co.uk).

OBJECTIVES

The objectives were to determine the sequence of occupation on the site, giving attention to the former Kingswell Street frontage and the back-plots that supported it. This would establish the nature of the site during the early to middle Saxon, late Saxon, medieval and post-medieval periods. Remains of these were present in the nearby Woolmonger Street excavations of 1993-7 (Soden 1998-9). It was also desirable to realise the artefactual and ecofactual potential of the site and use this to identify changing industries and the domestic economy of the site. The cut-off date for this was established as the Great Fire of Northampton in 1675 after which the town centre was substantially redeveloped. The project aimed to place the site within the wider historic street-plan and

examine the possibility of features fronting the former Lewnys Lane, as identified by the 1993-7 work.

METHODOLOGY

The area of the main excavation and a portion of the watching brief area were excavated concurrently. The combined excavation area measured 25m by 36m, including the entire north-east corner of the development site, covering plots 10-17a Kingswell Street, 1-7 Woolmonger Street and the known location of surviving deposits (Carlyle 2003, 16) (Fig 3). Subsequent to excavation, the whole area was monitored under a continuous watching brief.

Ground clearance was conducted using a 360° excavator fitted with a toothless ditching bucket. Modern surfaces and underlying non-structural post-medieval and modern layers were removed under archaeological supervision. Deep homogeneous garden soils were also removed after examination and were monitored to identify archaeological deposits or undisturbed natural horizons as they were exposed. Mechanical excavation stopped at the surface of the archaeological horizon and a process of hand excavation was employed for the remainder of the works. Excavation extended to the back of the Kingswell Street frontage, over half of its length in one continuous trench and took in a large portion of the former Woolmonger Street frontage.

The late post-medieval building plots were identified and investigated in relation to underlying deposits before removal. Pits and structures of the 16th to 17th centuries were fully excavated and their distribution used to predict the layout of the back-plots. Late medieval soils were initially cleaned to identify cutting features, and these were excavated prior to the removal of soil layers. All features that were exposed were hand-cleaned and sampled sufficiently to determine their character and date, and to reveal the underlying stratum (Fig 4). A cross-section of deep features such as wells and quarry pits were sampled to a depth of 1.2-1.5m. Individual buildings or structures were fully excavated and their distribution used to interpret early plot divisions and alignments. Pits



Fig 4 General view of the site during excavation, looking south-west

and postholes that produced pottery of Saxon or Saxo-Norman date were fully excavated where undisturbed by later activity. A site record was maintained to include plans, section drawings, levels, photographs, context descriptions and details of environmental samples. Artefacts pre-dating the fire of 1675 were recovered from secure contexts and retained with the exception of large assemblages of non-diagnostic building materials.

The palaeo-environmental potential was reviewed and samples were retrieved from significant deposits at depth and processed for environmental and industrial residues.

Arrangements for the preservation *in situ* of significant unexcavated deposits such as the fill of wells and cess pits were made by Westleigh Developments Ltd who organised a concrete raft for the northern area of the site.

THE EXCAVATED EVIDENCE

SUMMARY OF CHRONOLOGY

The excavation identified a clear sequence of development (Fig 5):

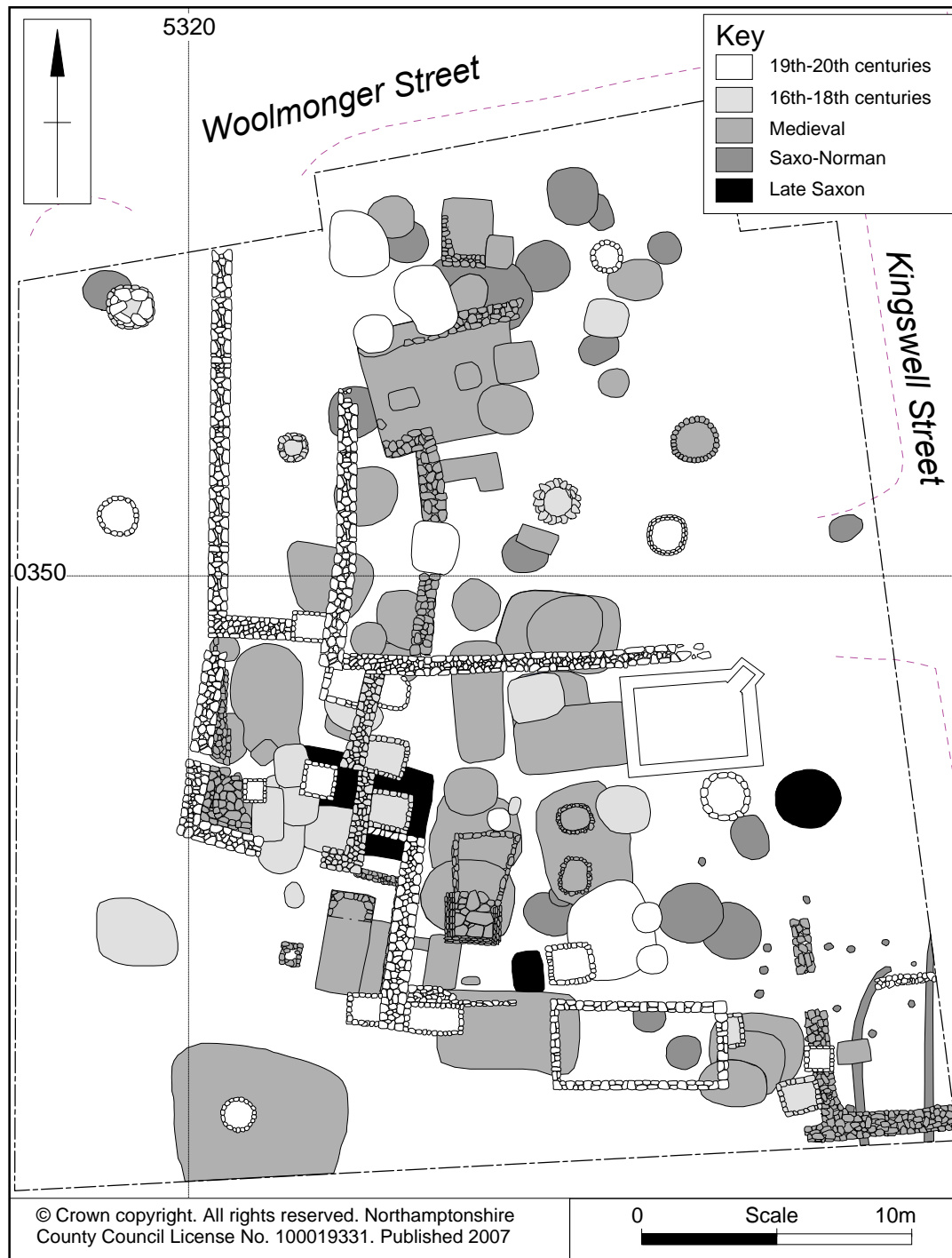


Fig 5 General plan showing all periods of activity

PERIOD	FEATURES
Late Saxon (mid-10th to early 11th centuries)	A cellared building and three large pits
Saxo-Norman (mid-11th to 12th centuries)	Two gullies and a timber building next to Kingswell Street
Medieval (13th to 15th centuries)	Four stone buildings, two malting ovens, a bread oven, two wells and numerous other pits
Post-medieval (16th to 18th centuries)	Late occupation of a tenement on Kingswell Street; four cess pits, three wells and robbing of medieval features
Late post-medieval & modern (19th to 20th centuries)	Below ground disturbance included five wells, two cellars, six boundary walls and nine cess pits

A LATE SAXON CELLAR AND PITS

THE CELLAR (BUILDING A)

A rectangular cellar with near vertical sides and a flat base measured 5m long by 3.5m wide by 1.16m deep and was aligned west-north-west to east-south-east (Fig 6; Building A). The fill comprised a sequence of seven layered deposits forming tipping lines from the backfill process. The lowest of these comprised an accumulation of firm mid-greyish brown silty clay with frequent charcoal inclusions and fragments of ironstone that contained coarse St. Neots ware pottery. The top four layers were disturbed by 16th to 17th-century pits, particularly at the southern side of the cellar. The cellar was of the type observed during the 1993-7 Woolmonger Street excavations (Soden 1998-9, 76-78). It was somewhat larger and deeper than the 10th-century Grubenhäuser described amongst the St. Peter's Street excavations (Williams 1979, 92-94). The best preserved Northampton example was post-pit building B79 excavated at Chalk Lane with which these dimensions compare favourably (Williams and Shaw 1981, 98). The distribution of sunken buildings at Chalk Lane and St. Peter's Street each reflected an arrangement based on social and economic paradigms with no clear alignment (Williams and Shaw 1981, 100). In all three instances this unplanned settlement growth was succeeded by timber buildings arranged upon a street frontage and attributed to the Norman reorganisation of the town.

The pits

Three large pits lay in close proximity to the cellar and produced exclusively late Saxon pottery (Fig 6; 54, 82, 316). Each pit was unique in shape and size. Pit 54 was circular, 1.98m in diameter and 1.66m deep with steep sloping sides and a broad rounded base. It was filled with domestic waste and garden soils, and sealed with a crushed ironstone cap. The pottery was highly fragmented and may have been stored in a midden before burial. Animal bone amongst the waste included evidence for butchery at all stages of meat preparation. It also produced a small, heavily corroded oval buckle. Pit 82 was sub-circular and so heavily truncated by later medieval pits that its true dimensions could not be defined. Pit 316 was sub-rectangular, 1.78m long by 1.1m wide and 1.6m deep, with steps cut into the southern side.

A SAXO-NORMAN TIMBER BUILDING AND PITS

THE TIMBER BUILDING (BUILDING B)

In the south-east corner of the excavation, extending beyond the modern frontage of 17-17a Kingswell Street, lay a timber-framed structure comprising twelve postholes (Figs 6 and 7). The dimensions of the building were estimated to be over 8m long by 6m wide. The main postholes defining the corner of the building were roughly circular, with the largest 0.4m in diameter by 0.27m deep and the smallest 0.22m in diameter by 0.1m deep. The interior postholes had no clear alignment. Only the rear of Building B was exposed within the excavated area and the southernmost extent of the structure was destroyed by later medieval activity. The front of the building is likely to survive beneath the modern road. Its alignment matched the earlier Saxon Building A, it either did not front Kingswell Street or the angle of the street has moved.

Within Building B was a small pit, 28, that was roughly circular with shallow sloping sides and a bowl-shaped base, 0.75m wide by 0.15m deep. The pit contained dark reddish-brown heat-scorched silty loam, 27, with charcoal flecks, noted in the evaluation as a possible hearth (Carlyle 2003, 16). A high proportion of charcoal, together with herbaceous seeds indicative of burning dried grasses, grassland herbs and hedge brush was found (sample 3). A crude musical flute or whistle was recovered from the floor of the building. The floor was similar to the Saxo-Norman buried soil, although more compacted. The building is thought to have been a dwelling.

Cutting the floor of Building B, were two gullies, 24 and 193. Both were aligned roughly north to south and were of similar size, up to 0.45m wide and 0.18m deep. They were probably drainage gullies cut after the building was demolished, and suggest a period where the ground remained open.

THE BURIED SOIL

A patchy deposit of light mid-orangey-brown silty clay, 137, less than 80mm thick, overlay the natural ironstone. It was the first definable occupation or cultivation soil layer and was only found in proximity to the features in this part of the site since it was mixed into later medieval soils elsewhere.

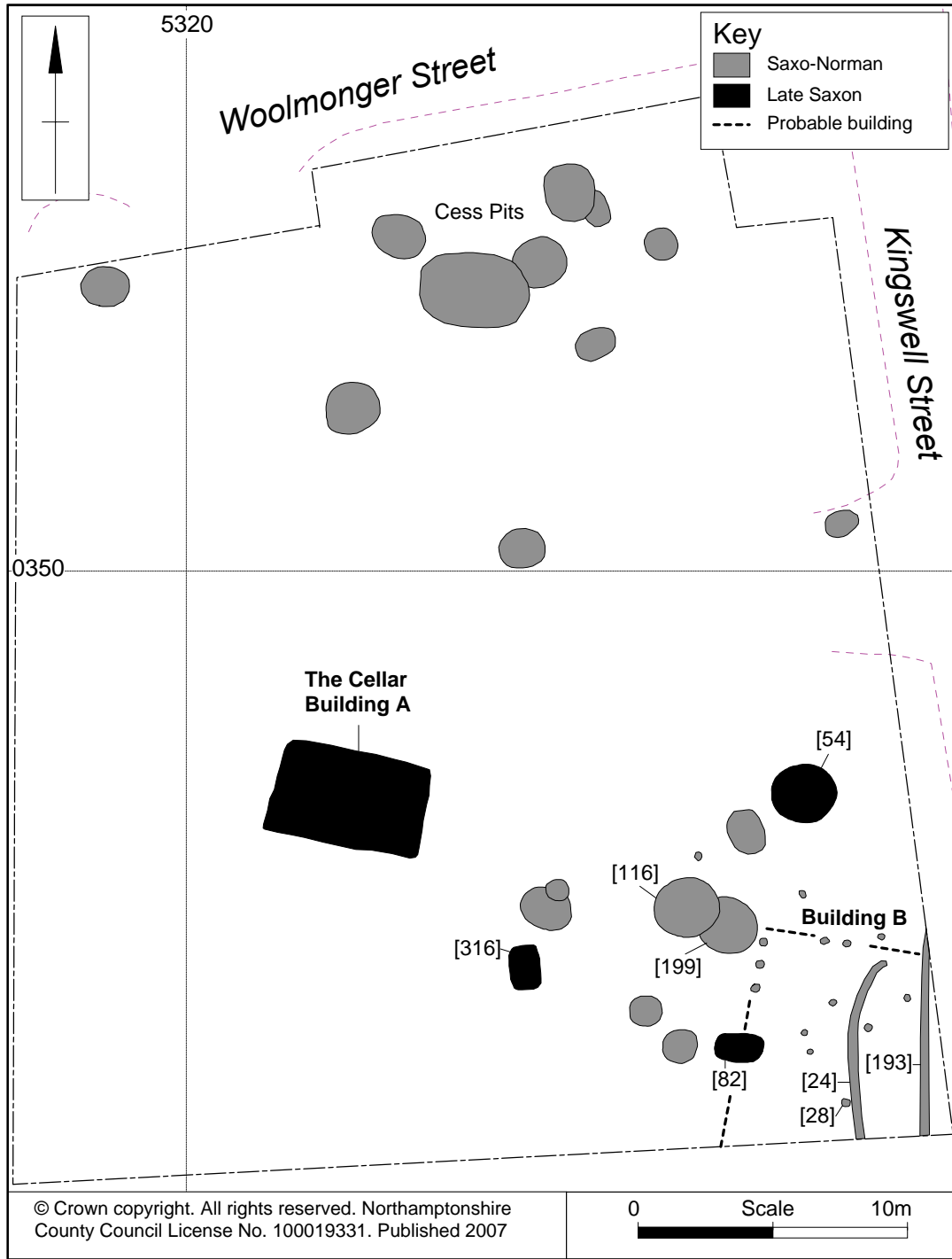


Fig 6 Late Saxon and Saxo-Norman features



Fig 7 Saxo-Norman timber building, Building B, looking east

RUBBISH PITS

Immediately west of the building were two large circular pits (Fig 6). Pit 199 was 2.25m wide and 1.34m deep, and cut by a similarly sized pit 116. Both had steep sides, broad flat bases and were filled with ash layers, garden soils and substantial quantities of pottery. The primary fill of pit 116 contained loose pulverised ironstone. Much of the Saxo-Norman pottery was recovered from this pit and comprised 67.4% jar forms. Soil samples indicated a high density of bread wheat grains. The pit also produced a small axe and a knife. It is probable the pits were dug to clear midden waste from outside the dwelling and the finds suggested domestic activity nearby.

CESS PITS

In the north of the site was a substantial scatter of pits that were filled by firm greenish-brown and mid- to dark brown silty clay, often containing charcoal and dated by pottery. The pits varied in size, the largest measured 3.7m long by 2.8m wide, but most were considerably smaller and more circular around 1.7m wide. As these lay in an area of watching brief contingency, excavation was limited to a level of sampling sufficient to characterise and date the nature of the features and precluded full excavation (Fig 8). The pits were for the disposal of sewage, as demonstrated by the high level of faecal concentrations amongst the samples.



Fig 8 Saxo-Norman and medieval cess pits sampled by watching brief

MEDIEVAL LAND PLOTS AND BUILDINGS

THE MEDIEVAL BURIED SOIL

A spread of homogeneous soil lay up to 0.28m thick comprising firm dark greyish-brown silty clay, 22, with frequent charcoal flecks mixed with domestic waste. The soil was found throughout the site. It predated construction of later medieval buildings, possibly the result of garden horticulture, subsuming evidence of earlier soil layers, and producing a relatively late deposit containing residual material.

THE MEDIEVAL LAND PLOTS

The 13th to 14th centuries were an intense period of activity (Fig 9). Four possible medieval land plots were indicated with little concordance to later mapped layouts. It seems appropriate to discuss the medieval features within the context of these divisions. Initial activity within each comprised the quarrying of ironstone, perhaps for the buildings that occupied them.

THE STREET CORNER (PLOT 1)

This area lay within the watching brief and was sampled within the scope of the contingency but precluded full excavation. The area was heavily truncated by 20th-century cellars and the possibility of surviving features had been considered relatively low.

Cess pits and refuse pits

A total of eleven pits were recorded and investigated. They varied between 1m and 2.2m in diameter, six of them were rectangular and the rest were sub-circular. Most of the pits were filled with light to mid-greenish brown silty clay indicative of faecal content. Pits 385 and 387 were filled with firm dark blackish-brown silty loam soils mainly comprising ash and domestic waste.

The largest pit was partly stone-built, 373 (Fig 10). The stonework was shaped but un-coursed ironstone forming a sturdy retaining wall against earlier disturbed ground. Where the pit cut natural ironstone no retaining wall was constructed. It was rectangular, 2.2m by 1.6m, and was sampled to 0.7m deep showing alternating bands of dark greenish-brown silty clay and decayed organic brush. Within a couple of weeks of excavation this pit was heavily colonised with moss, germinating amongst the high levels of mineralised faecal concretions found in the soil. The moss growth was not only an indicator of rich organic matter, but perhaps also of the toiletry habits of those who deposited its original contents.

An ancillary building (building C)

A rectangular area, 6.5m long by 4.75m wide, was filled by a 0.21m thick deposit comprising firm mid-greyish brown clay loam. It defined a probable building of which the walls only partially survived, c 0.96m wide, unbonded, with only one course. The masonry comprised ironstone blocks up to 340mm by 280mm by 150mm in size, roughly-shaped and faced on both sides with a rubble core. On the east and south sides they had been obliterated by robbing. Wall 367 extended south from the structure probably linking with wall 296, but broken by 20th-century disturbance. It was suggestive of a back wall for a plot on Kingswell Street.

Three square pits lay within the interior (369, 385 and 389) and were most likely linked to the building itself. The pits varied between 0.2-0.6m deep and were largely filled with a mixture of domestic waste, ash and green tinged soils, perhaps belonging to a yard building rather than a tenement or workshop.

A medieval well

Well 330 was 1.55m in diameter and its fill was excavated to 0.63m deep. The stonework was roughly hewn, unmortared, arranged in an interlocking pattern and faced

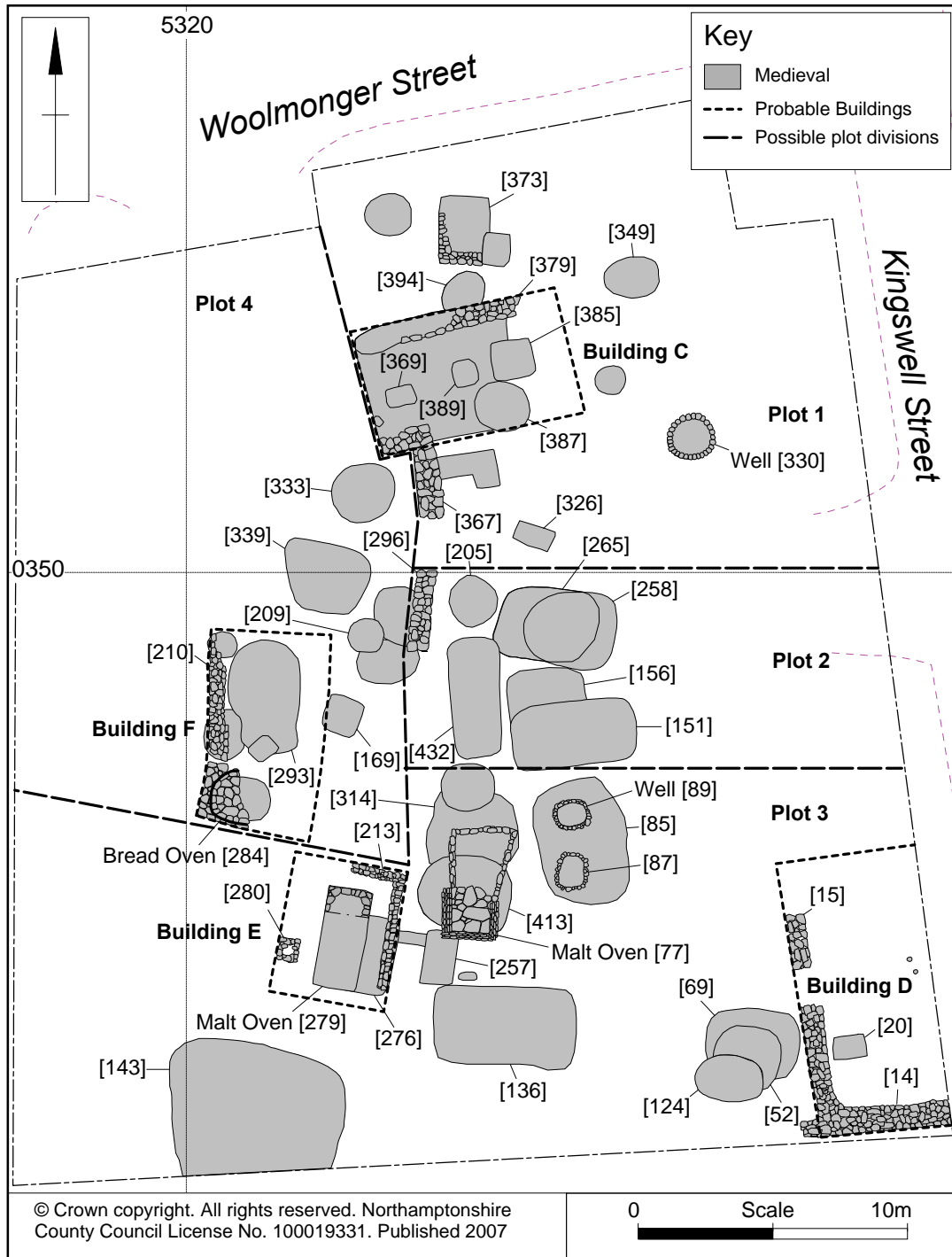


Fig 9 Medieval features

Fig 10 Medieval stone-lined cess pits, [373] & [394]

internally. No construction pit was present. The fill comprised firm dark brown silty clay, 329, with frequent chunks of ironstone and exclusively 13th to 14th-century finds. An augur was used in an attempt to determine the full depth, which was still not reached at 2m below the archaeological level (65.96m above OD). The solid ironstone natural provided stable sides for construction provided it was wide enough for a man to dig by hand.

BENEATH THE SHOE REPAIR FACTORY (PLOT 2)

The 20th-century brick cellar of 14 Kingswell Street had heavily truncated deposits in this plot and there was much disturbance in the upper horizons (Fig 9).

Quarry pits

Pit 258 was sub-rectangular, 1.8m wide by 3.9m long by 1.89m deep. Within the pit there was a stack of quarried ironstone blocks, which were generally 260mm by 150mm by 120mm in size. These were irregularly-shaped, laid flat, eight courses high and stacked edge to edge. The pit had been backfilled with dumps of domestic waste, garden soils and shattered ironstone. It was later used as a sump, 265, containing material similar to the nearby cess pits.

Three other sub-rectangular quarry pits were also identified. All of these pits contained dumps of fragmented ironstone, domestic waste and mixed soils (151, 156, 265 & 432). Pit 151 was 2.5m by 4m and 1.45m deep. The south side was cut by pit 156, which was 2.5m by 1.23m and 1.72m deep. A soil sample contained faecal waste.

A cess pit

Pit 205 was circular with vertical sides, 1.6m wide by 1.6m deep. The fill comprised firm mid-brown silty clay with the characteristic greenish tinge suggestive of cess. As with cess pit 373, this became heavily colonised with moss within a short time of exposure.

The rear boundary wall

Wall 296 had been built at the rear of the plot within a foundation trench aligned from north to south. It was probably the southern extension of wall 367. Further sections of the wall had been destroyed by post-medieval activity.

BENEATH 15-17 KINGSWELL STREET (PLOT 3)

The 19th-century maps show these properties as three distinct tenements, which is not visible amongst the later medieval features (Fig 9). Quarrying on the site was succeeded by construction of two stone buildings (Buildings D and E). There was a building on the frontage, and a malthouse at the back. The longevity of the malthouse was shorter than that of the frontage building, the latter surviving well into the post-medieval period.

Quarry pits

Six large quarry pits lay to the rear of the plot. Pit 136 was rectangular, aligned east to west, with vertical sides 4m long by 3m wide by 2.2m deep, truncated at the eastern end by a 19th-century cellar. Pit 143 was sub-circular, with irregular overhanging sides 6.4m long by 3.6m wide; the base was not reached within 1.6m. Pit

257 was rectangular, aligned north to south, with sharp 80° sloping sides that were excavated down to 1.78m without encountering the substrate. A 2.5m length of walkway of weathered ironstone separated this from pit 276. Its surviving extent suggested proportions in excess of 2.5m wide and 1.47m deep. Pits 413 and 314 were also heavily disturbed and their proportions would not have been dissimilar. These pits had been cut with vertical sides to a sufficient depth that the unweathered natural Jurassic ironstone bedrock could be quarried in substantial blocks. The fill comprised dumps of firm greyish-black silty clay containing ash, charcoal, animal bone, pottery and shattered ironstone.

The frontage building (building D)

The east wall of the building lay beyond the excavated area and the north wall did not survive. It is estimated to have been 10m long by 5m wide (Figs 9 and 11). Remnants of the western wall, 15 and 14, were 0.63m wide, with two courses. The southern wall was 0.8m wide, with three courses. The walls were faced on both sides and built from ironstone blocks up to 330mm by 220mm by 140mm in size. The stones interlocked such that minimal rubble packing was necessary to maintain its integrity.



Fig 11 Medieval tenement, Building D

Within the south-west corner was a rectangular pit, 20, that was 1.4m by 1.3m and 1m deep. The pit had steep sides and a slightly rounded base, filled with brownish-grey silty clay and shattered ironstone.

A series of refuse pits

Several large pits lay behind Building D. The earliest and largest of these pits, 69, measured over 2.8m wide and 0.5m deep, and had been disturbed by later pits (52 and 124). They were filled with household waste that included predominantly shelly ware pottery and some medieval glazed wares of ceramic phases Ph2/0 and Ph2/2.

The malthouse and ovens (building E)

Wall 213 formed the north-east corner of Building E which was 5m long by 4.5m wide (Fig 12). It was built from shaped ironstone blocks, 190mm by 180mm by 90mm in size. The stone was arranged in a non-uniform

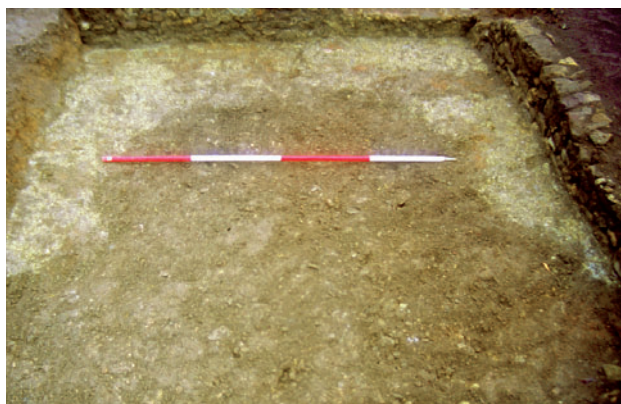


Fig 12 Medieval malthouse, Building E



Fig 13 A medieval wall built over a quarry pit [276], Building E

dry-stone fashion with a crude inner face. The walls were 0.22m thick and 0.4m high comprising four courses. Additional supporting foundations had been established where the wall crossed quarry pit 276 (Fig 13). Here the wall foundation was 0.94m deep comprising eleven courses supported by a buttress. The position of the west wall was estimated by the sudden change in ground level (Fig 9). A stone pillar support 280 was located 3m from both the north and east sides of the building and marked the socket of a timber upright.

Malt oven, 279, was inside the building (Fig 14). Between the malt oven and the wall was a 20mm thick deposit of compact pale yellowish-grey clay all around the outside of the pit. The malt oven was 2.1m wide at the top with sharply angled sides sloping to 0.5m depth before becoming vertical and joining a flat base, 1.38m wide by 1.04m deep. An ironstone hearth lay at the base of the pit formed by two courses of unshaped stone set at the sides and filled with charcoal rich scorched red silty clay, 80mm thick. Samples produced puffed cereal grains from combustion at high temperatures and amphibian remains following disuse. The pit was filled with firm mid-brown silty clay, fragments of ironstone, broken roof tiles and pottery. Above this the whole of the interior of Building E was covered by loose pale greyish-brown silty loam, fragmented ironstone and large quantities of green glazed roof tile. The layer formed a levelling deposit, 200mm thick, in the footprint of the building. Pottery suggests that the building was demolished prior to the 15th century.

Outside, malt oven 77 was roughly rectangular, aligned north to south and opened out slightly at the northern end (Fig 15). It measured 1.45m across at its narrowest point and was 1.9m across at its widest point. The oven chamber was 1.8m long by 0.58m deep with a broad flat base. It was constructed using shaped ironstone blocks to form the sides



Fig 14 Medieval malt oven [279], Building E



Fig 15 Medieval malt oven [77]

and flagstones lining the base. The stoke hole had been robbed on the northern side during the 17th century. The ironstone blocks averaged 250mm by 170mm by 100mm in size, arranged to interlock in a non-uniform dry-stone fashion. The flagstones were irregular, arranged to provide the best coverage of the base and measured up to 550mm by 390mm by 60mm. The sides were built at a 45° angle to the base. There were four courses surviving at the southern end and only one course surviving where robbing had taken place. The flagstones showed evidence of scorching concentrated in a circle at the centre, within the lost flue opening. The majority of the feature was filled with compact mottled creamy-white clay containing flecks of orange, red and grey, overlain by 0.22m of compact brownish-grey clayey silt.

A medieval well

A large sub-rectangular construction pit, 85, measured 4.5m long by 3m wide and was 1.25m deep. Within the pit was well 89 comprising shaped ironstone slabs varying in size, 240-380mm across, forming a circular shaft that was excavated to 0.9m deep. The well was 1.4m wide at the top with an internal shaft, 0.74m wide. The well had been filled with loose dark brown sandy silt containing frequent charcoal and small ironstone fragments. The top of the well had been robbed away by a pit of similar proportions, removing stone to 0.5m deep. Cut into the well pit, was a stone lined pit 87. The pit was rectangular, 1.2m long by 0.75m wide by 0.9m deep. It was lined with seven courses of rough unfaced ironstone no larger than 180mm across.

BENEATH BAINES & CO MARINE STORE (PLOT 4)

Quarry Pits

The area at the back of 7 Woolmonger Street contained many pits. Pits 293, 333 and 339 were associated with quarrying, as elsewhere. Pit 293 was excavated showing an irregular oval shape, aligned north to south along the plot. It was 4.7m long by 2.7m wide and was excavated to a depth of 1.4m showing different tip lines of shattered ironstone and silty clay. Frequent charcoal flecks were evident throughout together with dumps of charcoal, ash, sand and blue-white powdered lime, perhaps waste from building work nearby.

A cess pit

Pit 169 was rectangular, 1.6m long by 1.2m wide, excavated down to 1.72m. The sides were vertical, cutting into the natural, and the fill was firm dark greenish silty clay.

The bakehouse (Building F)

The dimensions of the building were estimated to be 7.5m long by 4.5m wide. The west wall 210 was constructed from ironstone blocks up to 380mm by 320mm by 120mm. The stone was mostly unfinished although a clear face survived on the exterior. The wall survived in two parts, 6.3m long and 0.58m wide, having partially collapsed in antiquity. Accumulated against the wall was compact mottled silty clay 285, 0.25m thick, containing ironstone chips scorched by heat radiated from a bread oven, 284, above (Fig 16).

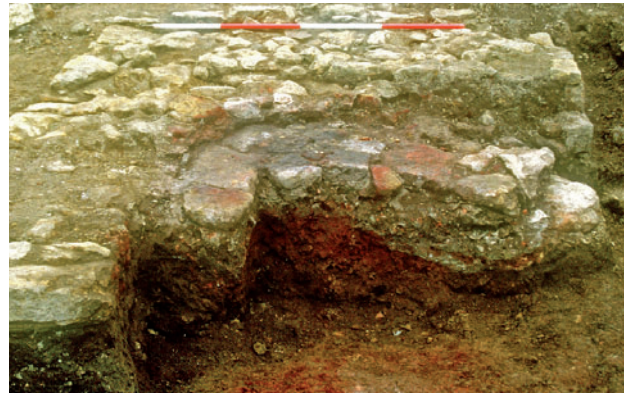


Fig 16 Medieval bread oven [284], Building F

The circular bread oven, 284, was 1.65m in diameter. Only the hearthstones survived, large flat slabs of scorched ironstone, up to 400mm by 300mm by 100mm thick. The stone had been interlocked directly on top of a silty clay and ironstone gravel bed. It had been incorporated into wall 210 indicating that it was an integral part of Building F (Fig 9). Much of the building been destroyed by 19th-century disturbance.

POST-MEDIEVAL PITS AND WELLS

The 16th to 18th-century activity was largely confined to scattered pits and wells (Fig 17). The frontage houses that they served had been lost to later redevelopment. Property boundaries had moved implying a continuous process of redevelopment in which new arrangements were regularly re-defined. Stone lost from medieval walls and structures was robbed during this period creating a 190mm thick spread, 166, of mixed silty clay and charcoal above the remains of the demolished bakehouse. It extended north and east creating a horizon mixed with later garden soils and burning. It is probable that if there had originally been a horizon for the Great Fire of Northampton in 1675 it had been blended and mixed with these later deposits.

REFUSE PITS

Five pits were cut into spread 166, three of which were excavated (161, 163 and 254) (Fig 17). The largest of these, pit 161, was 0.97m deep. Most of the pits contained tip lines generally comprising greyish-brown silty clays flecked with charcoal and ironstone. The rear of post-medieval was littered with refuse on what was probably open ground. Pottery dates bridged the 15th to 17th centuries.

THE WELLS

Three wells predated the 1885 buildings and were situated where other structures would eventually have been built over them (295, 297 and 365). The construction of the shaft was similar in each case, comprising roughly-shaped blocks of ironstone arranged in an interlocking dry-stone fashion, including pieces of reused masonry (Fig 18). These produced pottery of 15th to 17th-century manufacture.

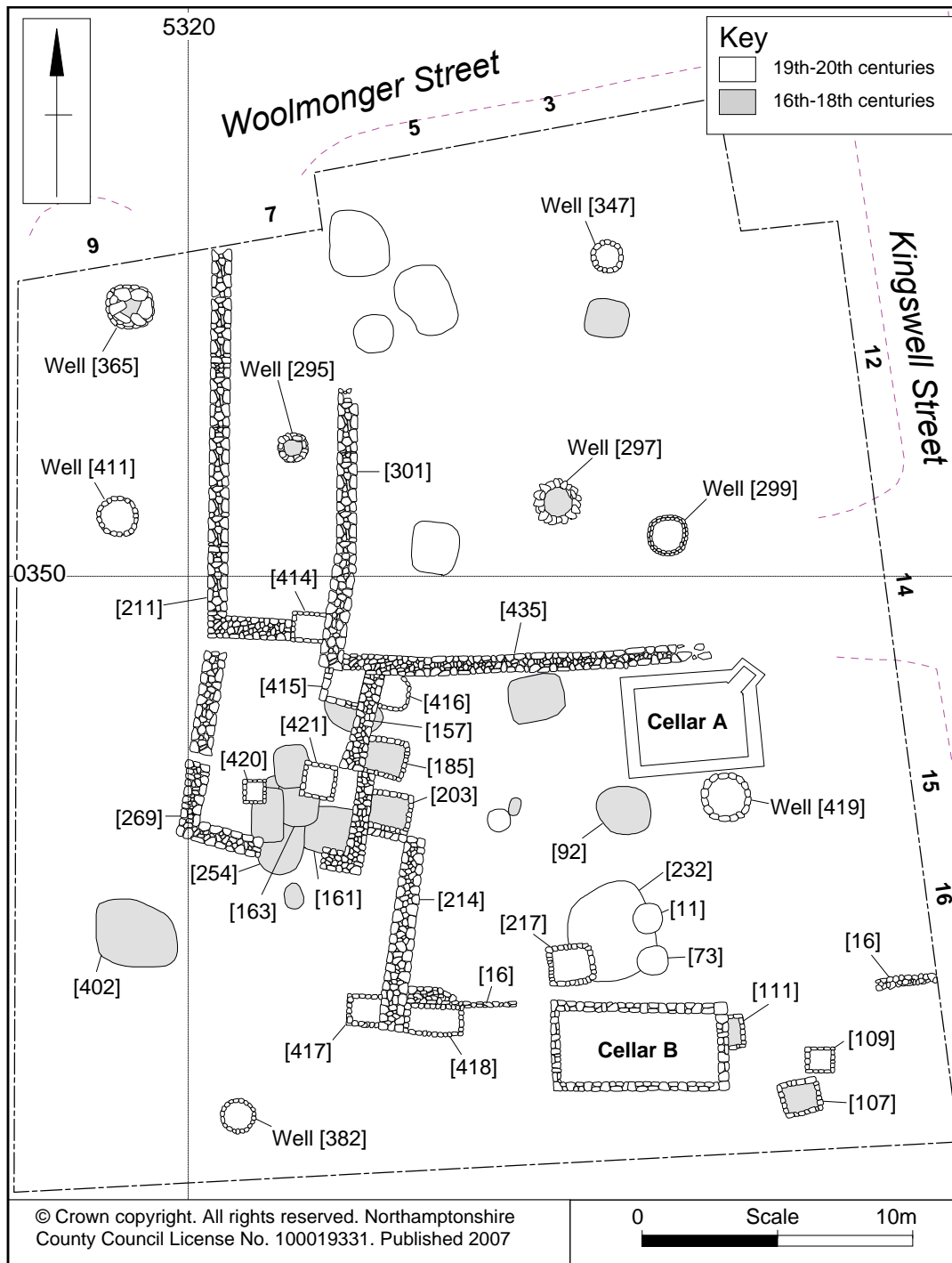


Fig 17 Post-medieval and modern features

THE REAR BOUNDARY WALL OF 14-16 KINGSWELL STREET

Above the pits two sections of wall established the rear of the plot comprising ironstone blocks, shaped and faced on both sides with rubble fill 157. The wall was 7.8m long by 0.6m wide with one course of stone, 200mm high. The boundary survived as a partition into the 19th century according to the historic map evidence (Fig 2).

STONE-LINED CESS PITS

Pits 107 and 111 were each 1m by 1.4m long, rectangular and no deeper than 0.3m. The stonework lining the pits was crude, comprising roughly-shaped ironstone with a rough interior face. The fills were dark greyish-brown clay loam containing animal bone and pottery. Their shallow depth suggests a degree of truncation by later buildings. Sampling produced no evidence for faecal mineralization normally associated with cess pits, although items of



Fig 18 Post-medieval stone-lined well [365]

food debris recovered from pit 107 included bones of eel, pike and herring. The pit also contained part of a broken candlestick. It abutted the outside of the medieval Building D and produced 16th to 17th-century pottery, suggesting that the building was still in existence when the pit was constructed. This supports the view that the building was still occupied up until the late 17th century (Carlyle 2003).

Two other cess pits, 185 and 203, were roughly square, being 1.0-1.3m wide by 0.4-0.6m deep. Both pits were lined with rough hewn, unshaped, ironstone up to 250mm by 260mm by 100mm in size, with a crude inward face and an irregular interlocking pattern. Various dumps of dark greyish-brown and black soils filling them contained late 17th to 18th-century pottery, clay tobacco-pipe and animal bone. Other finds included window and vessel glass, a knife, a bow-saw and a decorated riding spur. Pit 185 also produced the remains of a whole perch, a fish adding diversity to food remains evident on the site. The cess pits were to the rear of a tenement yard space and marked the western extent of the property occupied by George Henshaw, master clay tobacco-pipemaker, c 1768-71 (Moore 1980, 21).

CLAY TOBACCO-PIPE WASTE

Pit 232 at 16 Kingswell Street (Fig 17) was filled with various dumps of garden soil, ironstone shale and domestic waste including clay tobacco-pipes debris (Fig 22, 16). Documentary sources suggest that this was a shared yard during the Great Election of 1768 and was divided between the properties before 1885. It is likely that the clay tobacco-pipe muffle and wasters are from the occupation of 15 Kingswell Street by George Henshaw.

LATE POST-MEDIEVAL AND MODERN ACTIVITY

There were five wells, two cellars, five boundary walls and nine cess pits of the 19th to 20th centuries. Many of the later features are identifiable on the 1885 Ordnance Survey map or can be associated with a mapped structure (Fig 17).

WELLS

All of the wells were filled during the 19th to 20th centuries and cannot have had long periods of use. They were constructed using a level of engineering unavailable in previous centuries. Two of the wells had been capped and exposure of the archaeological horizons by machine had disturbed the brick cap, allowing demolition material to fill the void below (382 and 419). Where this was not the case, wells were examined to confirm the period of backfill (299, 347 and 411). Each well had its own peculiar characteristic patterns of stonework and had been finished in a different style. Most reused building masonry or roughly shaped and unfinished ironstone. Four of the wells lay within buildings, suggesting that they were situated within well houses depicted upon the maps of 1885 (347, 382, 411 and 419). One well was situated in the yard space of 14 Kingswell Street, 299.

CELLARS

Cellar A was 5m long by 4m wide and 1.4m deep. The walls were of red brick, and it had been filled with demolition rubble. The rubble contained an assortment of materials including a champagne magnum, several jars in Nottingham stoneware and an assortment of poorly preserved shoes and leather offcuts. Cellar A served the Shoe Repair Factory which was present from around 1949 (NRO Maps 5970-2). None of these items were retained.

Cellar B was situated at the back of 17 Kingswell Street and beneath the former 'Carver's workshop' (NRO Maps 5970-2). The cellar, 6.5m long by 2.2m wide and 1.6m deep, was constructed from ironstone blocks, shaped and finished on both faces. There were no finds of interest from within the cellar fill.

BOUNDARY WALLS

Many of the property boundaries survived that are visible on the 1899 and 1949 Insurance plans (NRO Maps 5970-2). Most of these were aligned on 18th-century precursors. The walls which formed the boundaries of 7 Woolmonger Street were present (211, 269 and 301). The north boundary wall of the 1899 Bellhanger's workshop was present to the rear of 14 Kingswell Street, 435. This was later incorporated into the 1949 shoe repair factory. The rear wall, 214, of 16 Kingswell Street was visible along with the partition with 17 Kingswell Street. The latter having abutted Cellar B below the 1899 Carver's workshop.

CESS PITS

Most of the cess pits lay within small ancillary buildings, likely to have been outhouses (414, 415, 416, 417 and 418). Two cess pits were situated in the open yard at 7 Woolmonger Street, 420 and 421. One cess pit was situated in the yard space of 16 Kingswell Street, 217, and one lay behind 17 Kingswell Street, 109.

MODERN DISTURBANCES

Four other pits were dug within the bounds of 5 Woolmonger Street. They post-date the demolition of the

tenement, but predate the construction of *The Cobblers* public house, which was demolished in 2005. There were three minor surface disturbances located within the yard of 15-16 Kingswell Street that probably originated around the time when Henry Perrin was in residence at 15 Kingswell Street, but had no relationship with his trade as a whitesmith.

THE POTTERY

Paul Blinkhorn

The pottery assemblage comprised 3,975 sherds with a total weight of 76.517kg. The estimated vessel equivalent (EVE), by summation of surviving rimsherd circumference was 44.66. The range of pottery indicates continuous occupation at the site from the 11th century onwards. The assemblage is typical of the period for Northampton, comprising local wares and a small number of regional and continental imports. It is well-preserved, with many large sherds and reconstructable vessels (Figs 19-20).

METHODOLOGY

The pottery was bulk-sorted and recorded using DBase IV software. The material was recorded by context, number and weight of sherds per fabric type. Feature sherds such as rims, bases, lugs and decorated sherds were recorded individually. For rimsherds, the form, diameter and the percentage remaining of the original circumference were recorded. This figure was totalled for each fabric type to obtain the estimated vessel equivalent (EVE).

The terminology is defined by the Medieval Pottery Research Group (MPRG 1998; MPRG 2001). All the statistical analyses used a Dbase package, which interrogated the original or subsidiary databases, with final calculations made with a calculator. Statistical analyses were carried out to the standards suggested by Orton (1998-9, 135-7).

FABRICS

The pottery was quantified using the Northamptonshire County Ceramic Type-Series (CTS) (table below):

F100:	St Neots ware	c 850-1100	6 sherds, 74g	EVE = 0.3
F110:	Rhenish greyware	12th-13th centuries	2 sherds, 29g	EVE = 0
F111:	Pingsdorf ware	11th-13th centuries	1 sherd, 4g	EVE = 0
F130:	Northampton ware	10th-11th centuries	29 sherds, 404g	EVE = 0.66
F200:	T1 (2) type St Neots ware	c1000-1200	1777 sherds, 18170g	EVE = 18.19
F205:	Stamford ware	c850-1250	50 sherds, 466g	EVE = 0.03
F319:	Lyveden/Stanion A ware	c1150-1400	27 sherds, 876g	EVE = 0.16
F320:	Lyveden/Stanion B ware	c1225-1400	57 sherds, 2650g	EVE = 0.31
F324:	Brill/Boarstall ware	c1200-1600	85 sherds, 2299g	EVE = 0.84
F329:	Potterspury ware	c1250-1600	293 sherds, 5391g	EVE = 3.84
F330:	Shelly coarseware	c1100-1400	1471 sherds, 38150g	EVE = 19.38
F331:	Developed Stamford ware	late 12th to early 13th centuries	10 sherds 146g	EVE = 0
F343:	London ware	12th-14th centuries	3 sherds, 29g	EVE = 0
F345:	Oxford ware	late 11th-14th centuries	6 sherds, 92g	EVE = 0.20
F347:	Nuneaton ware	13th-15th centuries	3 sherds, 22g	EVE = 0
F360:	Miscellaneous sandy coarsewares	c1100-1400	22 sherds, 233g	EVE = 0.17
F365:	Late medieval reduced ware	c1400-1500	1 sherd, 9g	EVE = 0.
F403:	Midland purple ware	c1450-1600	10 sherds, 843g	EVE = 0.22
F404:	Cistercian ware	c1470-1550	15 sherds, 250g	EVE = 0.2
F405:	Tudor green ware	c1450-1600	10 sherds, 48g	EVE = 0.16
F406:	Midland yellow wares	c1550-1700	1 sherd, 19g	EVE = 0
F407:	Red earthenwares	c1400 onwards	1 sherd, 212g	
F408:	Rhenish stonewares	c1450 onwards	1 sherd, 4g	EVE = 0
F409:	Staffordshire slipwares	c1680-1750	18 sherds, 1077g	
F410:	Tin-Glazed earthenwares	17th-18th centuries	16 sherds, 350g	
F413:	Staffordshire manganese ware	late 17th-18th centuries	20 sherds, 801g	
F426:	Iron-glazed earthenwares	late 17th-18th centuries	6 sherds, 2435g	
F1000:	Miscellaneous wares	19th-20th centuries	22 sherds, 926g	

The following, not included in the CTS, were noted:

F1 Early-middle Saxon organic-tempered ware 1 sherd, 12g
Moderate to dense organic voids up to 5mm.

F377 Ely ware, 12th-15th centuries. 8 sherds, 297g. (Spoerry 2002)

Generic name for a quartz sand and calcareous tempered group of pottery fabrics mainly manufactured in Ely, with a second possible source in Huntingdonshire. Jars, bowls and jugs dominate. Earlier vessels hand-built and turntable finished, later vessels finer and usually wheel-thrown. Formerly Grimstone software, Kings Lynn.

CHRONOLOGY

The late Saxon and medieval pottery is dated using the Relative Seriated Phase (RSP) chronology (Blinkhorn 2006, 114-115). In addition to the previously published RSP, phase LS4, for the period *c* 1000-1100, is defined by F200, T1 (2) type St. Neots ware (Table 2).

The data shows that there was intense activity at the site from the 11th century until the 15th century. The sherd size is large due to the number of near-complete vessels. All the deposits are of a primary nature, comprising waste from the dwellings on or close to the site (Table 3).

The occurrence of the major wares demonstrates a pattern typical of the Saxo-Norman and medieval periods in Northampton. The Saxo-Norman assemblage is dominated by St. Neots ware, with Shelly coarsewares dominant in the 12th century. From the 13th century onwards, Shelly coarsewares remain important, but first Lyveden/Stansion wares, then Brill and Potterspury wares make up the bulk of the glazed fabrics. Residuality is fairly low, apart from during the first half of the 13th century, when considerable disturbance of Saxo-Norman deposits is caused by quarrying.

THE ASSEMBLAGE

LATE SAXON TO SAXO-NORMAN (LS4, *c* 1000-1100)

The period is dominated by T1(2) St Neots ware, forming over 98% of the phase assemblage with small quantities of Stamford and Northampton wares. The presence of Northampton ware in 11th-century contexts, despite it being a primarily 10th-century type, is probably not evidence of earlier occupation at the site. Denham (1985) has noted this phenomenon at other sites, and it may represent a late flourish of the industry.

Rimsherds largely comprised jars and bowls. Other vessels included a St Neots ware pedestal lamp and a Stamford ware crucible. Decorated sherds were largely absent, other than a St Neots ware storage jar with thumbled applied strips.

Over two-thirds of this pottery came from pit [54], weighing 8.1kg, but produced few refitting sherds and no vessels were reconstructable. The pottery was very fragmented and despite some large sherds, the average sherd weight was only 9.8g, which is very low. The lack of refitting sherds indicates probable secondary deposition cleared from a midden for burial.

Table 2: Pottery occurrence per ceramic phase by number, weight (g) and EVE

RSP	Period	Quantity	Weight (g)	EVE	Mean sherd weight (g)
LS4	<i>c</i> 1000 - 1100	1240	12107	12.95	9.8
Ph0	<i>c</i> 1100 - 1150	483	14105	8.69	29.2
Ph1	<i>c</i> 1150 - early 1200s	129	7719	2.50	59.8
Ph2/0	<i>c</i> early 1200s - late 1200s	1069	18657	10.46	17.5
Ph2/2	<i>c</i> late 1200s - 1400	834	15228	8.33	18.6
Ph4	<i>c</i> 1400 - 1450	34	348	0.31	10.2
Ph5	<i>c</i> 1450 - 1500	69	1001	0.83	14.5
	<i>c</i> 1500 - early 1600s	5	274	0	54.8
	<i>c</i> 1600s	3	211	0.20	70.3
	<i>c</i> late 1600s - 1700s	72	3178	0.39	44.1
	<i>c</i> 1700s - 1800s	5	2002	0	400.4
	<i>c</i> 1800s	28	1134	0	226.8

Table 3: Pottery occurrence per ceramic phase by weight (g) expressed as a percentage of the total phase assemblage

Phase/Fabric	LS4	Ph0	Ph1	Ph2/0	Ph2/2	Ph4	Ph5
F130	1.1%	0.1%	1.0%	0.3%	0.7%	0	0
F205	0.7%	0.4%	0.3%	1.5%	0.2%	0	0
F200	98.1%	13.5%	6.0%	17.9%	2.5%	56.0%	0
F330	-	85.8%	89.5%	60.8%	47.1%	0	57.9%
F319	-	-	3.0%	2.1%	1.7%	0	0
F331	-	-	0.1%	0.4%	0.4%	0	0
F320	-	-	-	12.9%	1.5%	4.9%	0.4%
F324	-	-	-	1.7%	11.6%	0	21.4%
F329	-	-	-	-	33.4%	13.2%	13.3%
F365	-	-	-	-	-	2.6%	0
F403	-	-	-	-	-	9.8%	1.9%
F405	-	-	-	-	-	12.4%	0
F408	-	-	-	-	-	1.1%	0
F401	-	-	-	-	-	-	0
F404	-	-	-	-	-	-	2.9%
Total	12107	14105	7719	18657	15228	348	1001

T1(1) St. Neots ware occurred in this phase, such pottery had a period of use into the mid-11th century. There was a lack of Anglo-Saxon pottery dating to before the 11th century, unlike the nearby St. Peters Walk excavations (Soden 1998-9). A single residual sherd of early to middle Saxon pottery was noted in a high medieval context and it would appear that this area of Northampton was marginal until the 11th century.

SAXO-NORMAN (PH0, c 1100-1150)

Shelly coarsewares, the major ware at medieval sites in the northern and eastern areas of Northamptonshire, were introduced. The material forms over 85% of the phase assemblage, along with smaller quantities of St. Neots ware, Stamford ware, Lyveden/Stanion unglazed wares, Northampton ware, and Developed Stamford ware. A single bodysherd from a glazed Oxford ware tripod pitcher was present. The Stamford and Oxford wares were the only glazed pottery available at that time, with the latter less common on sites at St. Peters Walk (Soden 1998-9, 88) and Derngate (Blinkhorn 2002, 46).

Vessel forms were limited to jars, bowls and jugs, with jars forming a 67.4% of the phase assemblage. There were four rims from cylindrical jars, a speciality of the shelly ware industry. Finds from West Cotton suggest that they were specialist cooking vessels, and all the vessels from this phase showed heat scorching. Vessels were represented by large fragments, including the complete profiles of two shelly ware jugs (Fig 19, 1). One of these vessels shows sooting on half of the base and part of the lower body from having been placed on the edge of a fire to heat the contents. The location of the sooting indicates that the handle was positioned over the heat source and would have been extremely hot when removing it from the fire.

Also of note are two bodysherds from a shelly ware storage jar with stamped applied strip decoration, and another in the same fabric from a pitcher, with rouletted decoration. Decoration of any kind is extremely rare on shelly wares.

The phase assemblage was fairly fragmented, although a number of vessels were represented by more than one sherd. As in the preceding phase, the majority of the refuse was removed from a midden for burial, with a few vessels thrown in at the time of burial.

SAXO-NORMAN (PH1, c 1150-1200)

Shelly wares continued to dominate making up nearly 90% of the phase assemblage, along with Lyveden/Stanion A ware, another type of unglazed shelly limestone-tempered ware. St. Neots ware represented only 6%, which saw the end of the industry. Residual Northampton ware was also noted, along with Stamford and Developed Stamford ware and a bodysherd from a Rhenish greyware vessel. German imports have been noted before on sites in Northampton, they are always rarities, none were noted at St. Peter's walk or Derngate.

The range of vessel types is typical of the early medieval period, dominated by an 82.4% proportion of jars with smaller quantities of bowls and jugs. One decorated sherd from a St. Neots ware bowl with rouletting on the rim was present. The pottery was well preserved with

two near-complete shelly ware jars apparent (Fig 19, 2). These vessels showed a similar sooting pattern to those noted earlier. The first of the jars has sooting on half the base and side, and extensive internal limescale from heating water beside a fire. The second has two areas of sooting on the base and sides, showing heating a similar manner on more than one occasion.

MEDIEVAL (PH2/0, c 1200-1250)

Medieval glazed wares from Lyveden and Stanion in the north-east of the county, and Brill on the Oxfordshire and Buckinghamshire border were introduced. The former comprises nearly 13% of the phase assemblage, with jugs, often with slip stripe decoration, being the sole glazed product of the industry. Brill jugs, which were also often highly decorated, make up 1.7% of the assemblage (Fig 19, 3). One of the Lyveden/Stanion B ware jugs has crude incised facemasks. Two very similar vessels were noted at the Derngate excavations (Blinkhorn 2002, fig 9, 1 & 2). Other glazed wares were also noted; three sherds of London ware jugs, rare in Northampton; and two sherds of Oxford ware baluster jugs, a typical product of the tradition in the 13th century.

The unglazed assemblage consisted mainly of shelly wares, nearly 61% of the phase assemblage with 16 sherds of F360 Sandy coarseware also present. Shelly ware jugs were well represented, some of them showed scorching consistent with heating. One, rather unusually, had a strap handle covered in stamping (Fig 19, 4). Another had rows of triangular rouletting. A large shelly ware jar with applied strip decoration was also present (Fig 19, 5).

Pingsdorf ware was present, an import from the Rhineland. One sherd was also found at the Moat House Hotel on King Street (Blinkhorn 2001, 99).

Eight non-joining bodysherds of a curfew (*couvre feu*) or fire-cover were present in Ely ware. They were partially scorched on the inside, with applied strips and incised wavy lines on the outside. Curfews are occasionally found on medieval sites, particularly in the towns, used to cover the fire at night and allow the embers enough oxygen to keep them glowing. At a time when many buildings were made of thatch and timber, fire was a constant danger.

The assemblage was dominated by 75.4% jar forms, with bowls and jugs making up roughly equal proportions of the remainder. Residual fragments of two St. Neots ware pedestal lamps and a Stamford ware crucible were present.

LATE MEDIEVAL (PH2/2, c 1250-1400)

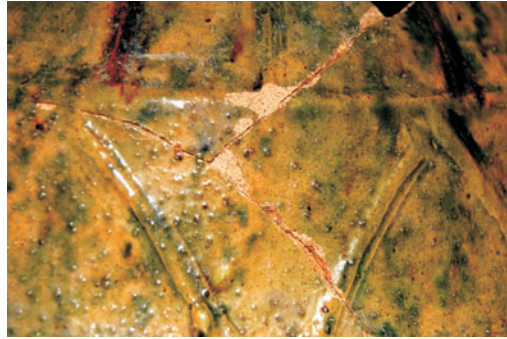
Potterspurys ware was introduced, common in Northampton in the later 13th-14th centuries. The material comprises 33.4% of the phase assemblage, although shelly wares are still the major pottery type. Brill wares are also common, comprising over 11%, whereas Lyveden/Stanion glazed wares are much less common, representing only 1.5%. Six sherds of early medieval Sandy ware were present, with two sherds of glazed Oxford ware and Nuneaton ware. These are likely to be contemporary, although the Oxford ware was reaching the end of its manufacturing period. A fragment of a Rhenish Paffrath ladle was



1



2



3



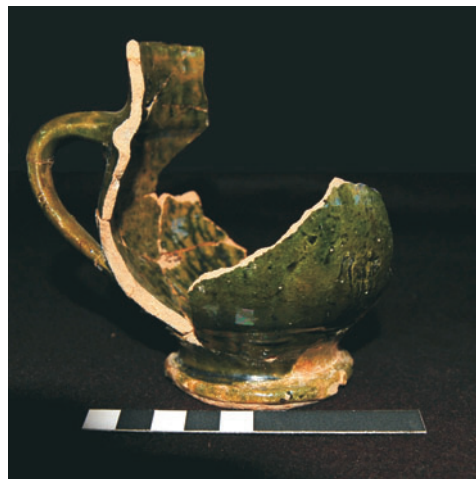
4



5



6



7



8

Fig 19 The medieval and post-medieval pottery, 1-8 (Scales 200mm and 100mm)

present, more common in later 11th and 12th-century contexts.

The Potterspurty assemblage is fairly fragmented, with no vessels reconstructable to a full profile. Residuality is low, comprising only 3.4% of the group. One residual sherd of note was an early-middle Saxon hand-built pot. Over 100 such sherds were noted at St. Peters Walk (Soden 1998-9, 84), confirming that the area of the town was marginal until the 11th century.

Jars are the most common vessel type forming 49.1% of the phase assemblage. Jugs are also well represented, making up 35.1% of the assemblage. The rest of the group comprises bowls and a single fragment of a Brill skillet. A residual St. Neots ware lamp rim was present. Non-rim sherds included the base of a Potterspurty drinking jug, which is a miniature version of the larger vessels and is quite a rare find (Fig 19, 6).

The pattern of vessel consumption at this site is typical. Jars dominate in the early part of the period, with jugs becoming more and more common. By the end of the 14th century, specialist pottery like the skillet and the drinking jug came into use.

LATE MEDIEVAL (PH4, c 1400-1450)

The low occurrence of pottery reflects the depressed nature of the economy of the later 14th century. Contemporary pottery comprised jars, bowls and jugs in Potterspurty, Lyveden/Stanion B ware, a single sherd of Reduced

ware, and Midland purple ware. Drinking pottery such as cups and mugs in 'Tudor Green' types and German Stonewares were also present, all highly fragmented.

LATE MEDIEVAL TO EARLY POST-MEDIEVAL (PH5, c 1450-1550)

Pottery of this date is lacking, residuality is high, with nearly 58% of the pottery being shelly wares. Brill wares comprise over 21% of the phase assemblage as 'Tudor Green' wares, particularly mugs and cups (Fig 19, 7). A large group of late 15th-century kiln waste of this type was recently discovered at Ludgershall near Brill (Blinkhorn and Saunders 2004, 131-144). Cistercian ware was present, along with Potterspurty ware, Midland purple ware and Nuneaton ware, no other contemporary pottery was noted.

LATER POST-MEDIEVAL POTTERY

Post-medieval pottery was generally sparse, although a number of near-complete vessels from the late 17th-18th centuries were noted. The pottery is typical, comprising utilitarian, plain tin-glazed earthenware plates, dishes and mugs in Staffordshire earthenware (Fig 19, 8). A pictorial Staffordshire slipware plate has a suspension hole and initials, possibly of the maker, at the top (Fig 20, 9). The overall scheme is uncertain, although the hind quarters of an animal are visible.



9



10



11



12

Fig 20 The post-medieval pottery, 9, ceramic ridge tiles, 10-11 (Scales 100mm) and a ceramic water pipe, 12 (Scale 200mm)

CATALOGUE OF ILLUSTRATED POTTERY (Figs 19 and 20)

- 1 Two 12th-century shelly ware jugs (scale 200mm)
- 2 Two shelly ware jars (scale 200mm)
- 3 Brill jug showing detail of slip stripe decoration
- 4 A stamped jug handle (scale 100mm)
- 5 Applied strip decoration on a shelly ware jar (scale 100mm)
- 6 Base of a Potterspur drinking jug (scale 100mm)
- 7 A 'Tudor green'-style cup (scale 100mm)
- 8 A Staffordshire slipware bowl (scale 200mm)
- 9 Fragments of a Staffordshire slipware pictorial plate (scale 100mm)

THE BUILDING MATERIALS*Pat Chapman*

CERAMIC ROOF TILES

This assemblage of 156 fragments of roof tiles weighs 13.8kg and comprises 113 fragments of unglazed flat peg tiles and 43 fragments of green-glazed ridge tiles with four crests. The majority are from two contexts; a 14th to 15th-century demolition layer (212) of the malthouse (Building E) and a 15th to 16th-century garden soil (64) above it.

The ridges are gently curved with straight sides. Calculations based upon the most complete ridge tile from Corby Road, Stanion in Northamptonshire, show that the height of the ridge tile from the base to the apex of the ridge would be 135mm, with an estimated base width of 260mm (Chapman 2008).

The main fabric is smooth and sandy, varying from red to buff, with occasional small calcareous inclusions and a dark grey to black core. This is similar to CTS Fabric F322, Lyveden/Stanion 'D' ware. It dates to *c* 1350-1500 according to the revised date of the waster kilns at Stanion (Blinkhorn 2008) and is similar to the Greyfriars tile fabric 1 (Eames 1978, 125). A few tiles are in a sandy fabric with frequent fine crushed shell and occasional small ironstone inclusions, fired to brown, orange-brown or red and usually with a medium grey reduced core. They vary in thickness from a thin streak to the whole fabric excepting its surfaces. This is identical to the ridge tile from Corby Road, Stanion.

The ridge tiles are 8-10mm thick, the only measurable dimension. They are almost all copper glazed varying in shade from a light to a very dark green. One end of the single unglazed tile is decorated with three upstanding knife cut triangles with curving rather than straight edges, probably as part of a series (Fig 20, 10). Similar ridge tiles have been found at the Fishergate House site in York (Spall 2005, plate 9) and in Southampton, dated to the 13th-14th century (Garside-Neville 1996, 295; Dunning 1975, 189). A similar fragment has been found at a tile kiln site at Bread and Meat Close, Warwick (Chapman 2007). Tiles from the Laverstock kilns in Salisbury are dated to the 13th century (Saunders 2001, 174, fig 62, Cat 293).

A green-glazed ridge tile has a stubby cylindrical crest rising 20mm above the tile (Fig 20, 11). It has an external diameter of *c* 50mm and a slightly oval internal diameter of 30mm by 22mm which narrows to a point, but does not penetrate the body of the tile. It has been made from

added clay. The crest does not appear to be part of a broken dome style crest as the rim has some remnant glaze and it is smooth where it is undamaged. A finial may have been separately made to socket into it.

The peg tiles are 10-12mm thick, the only measurable dimension. The pegholes are 12mm in diameter and the three pieces with two holes for fixing to laths have gaps between them of 65-72mm, thus one tile was probably about 155mm wide. The fabric is fine orange to orange-pink to brown, with fine grog and ironstone and occasional bigger ironstone inclusions. The core is sometimes a medium grey of varying thicknesses. A few tile fragments are in shelly ware.

CATALOGUE OF ILLUSTRATED ROOF TILE (Fig 20)

- 10 An unglazed decorated ridge tile (scale 100mm)
- 11 A green glazed decorated ridge tile (scale 100mm)

STONE ROOF TILES

There are eight perforated limestone roof tiles of varying sizes. They are generally rectangular and the pegholes are all neatly drilled to an average 8-10mm in diameter, narrowing from the top surface down. Two other pieces are possible fragments, while the remaining four pieces are small surface fragments split from other stones.

The largest rectangular tilestones are almost complete. They are 613mm long and up to 270mm wide, and 500mm long up to 250mm wide, with both up to 40mm thick. Each tapers in at the top, to reduce the overall weight of the tiles on the parts that were concealed by the overlapping row of tiles above. Neither has extant pegholes.

One medium sized example measures 240mm long and up to 190mm wide, with a remnant peghole close to the left hand edge and a possible remnant on the right hand side. An iron fragment adhering to the back of this tile may be the head of the nail fixing the tile that was overlapped, indicating a vertical overlap of at least 50%.

Two smaller tiles are 180mm by 110mm wide and up to 25mm thick, with the pegholes more central. The complete surviving edge of one has been chamfered out from the top along one side and the base.

One example is slightly trapezoidal, measuring 50mm at the apex to 145mm at the base and is 13mm thick. It may have been used as a ridge or valley tile.

The tile sizes are similar to those from a medieval moated manor at Tempsford, Bedfordshire (Chapman 2005, 97, Fig 37.12). Stone tiles were graded, with the biggest laid at the eaves with courses of diminishing size to the ridge. Stone tiles were laid at quite a steep pitch, 50 degrees or more, being pegged or nailed to laths that were attached to the rafters (Brunskill 1978).

FLOOR TILES

There are seven fragments of floor tile, four of which are green glazed, one is lead glazed, another is plain and the last is too worn to determine. Six of them come from 13th-14th-century contexts and one was residual in a 17th-18th-century pit.

DRAINPIPE

An unglazed coil made, wheel-finished red brown ceramic waterpipe came from an 18th-19th-century layer (140). It measures 402mm (16½ inches) long with an external diameter of 110mm (4¼ inches) at one end, c 15mm thick, tapering to 65mm (2½ inches) in diameter and 5mm thick at the other end. The internal diameter of the pipe is 60mm. The narrow end has a collar 25mm below the top and 20mm wide to fit inside another pipe, while the wide end has an internal collar 20mm deep to fit over another pipe (Fig 20, 12).

ILLUSTRATED WATER PIPE (Fig 20)

12 An unglazed coil-made ceramic water pipe (scale 200mm)

A green glazed water pipe of similar dimensions, tapering rather than being flanged, was found at Ely in 1964, together with 13th-century pottery (Briscoe and Dunning 1967, 86). Pottery water pipes were used for secular and monastic houses and can be of either the tapering or the flanged type. Similar looking pipes were also found at Basing House, Hampshire, dating to c 1540 (Moorhouse 1991, 110-112, fig 8.12).

OTHER FINDS

Tora Hylton

There are 91 finds from the Saxo-Norman to the post-medieval period. A single heavily corroded oval buckle was recovered from pre-Conquest deposits. Small

numbers of finds were recovered from 11th to 12th-century features relating to Saxo-Norman Building B. The greatest numbers of finds were recovered from the 13th to 14th-century pits which covered the site. A few residual medieval finds occurred in later deposits.

The range of finds provides a brief insight into some aspects of life at the site and forms a small assemblage that may be compared to the excavations at St Peter's Street and Woolmonger Street (Oakley *et al* 1979; Hylton 1998-9). There is evidence for domestic settlement that includes items for personal use and recreation. A small group of tools attests to textile manufacture and woodworking. With the exception of nails there is a distinct lack of structural fittings. Most finds were recovered from quarry backfill deposits.

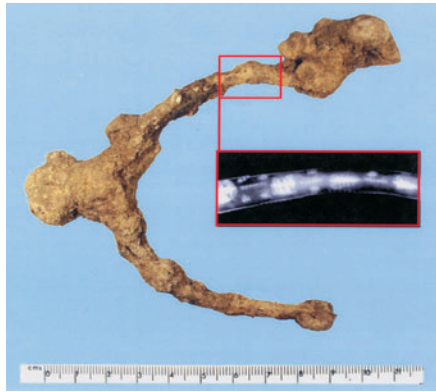
A total of 26 iron objects, excluding nails and small fragments, were submitted for X-ray by David Parish of the Buckinghamshire County Museum Service. This provided a permanent record of identification and revealed technical details not previously visible. One iron object, a spur, coated in a silver inlay, was chosen for further investigation (Fig 21, 1). This entailed selective cleaning, using air abrasive to reveal decorative features (Fig 21, 2) (Table 4).

HOUSEHOLD ITEMS

Items for household use include a limestone mortar recovered from medieval pit 349, and part of a candlestick from a post-medieval pit 107. Mortars for the preparation of food are common finds on medieval sites. About a quarter of the original object survives

Table 4: Finds quantified by functional category

Functional category	Late Saxon	Saxo-Norman	Medieval	Post-medieval	Late post-medieval
<i>Personal possessions</i>					
Costume and jewellery	1	2	6	3	-
Recreation	-	1	1	-	-
Miscellaneous objects	-	-	1	-	-
Equipment and furnishings	-	-	1	-	-
<i>Building materials</i>					
Nails	-	8	14	6	-
Glass - window	-	-	1	5	-
<i>Household items</i>					
General	-	-	2	1	-
Glass - vessel	-	-	2	4	2
Knives	-	1	-	1	-
Hones/sharpeners	-	1	2	-	1
<i>Tools</i>					
Textile working	-	-	4	-	-
Woodworking	-	1	-	1	-
Miscellaneous tools	-	-	1	-	-
<i>Transport</i>					
Sledge runners	-	-	1	-	-
Horse fittings	-	-	1	1	-
<i>Miscellaneous and unidentified</i>					
Copper alloy	-	1	10	1	1
Iron	-	5	4	1	-
Stone	-	-	-	2	-



1



2



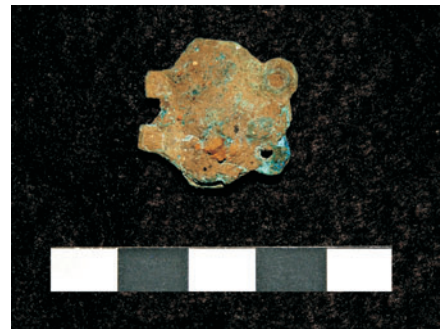
3



4



5



6



7



8

Fig 21 Other finds, 1-8 (scales 10mm intervals)

and would have measured *c* 220mm in diameter. The internal diameter of the mortar is *c* 100mm. The exterior surface is smooth, the wall and base are *c* 65mm and *c* 60mm thick respectively. The rim is flat topped with external moulding and a vertical rib protrudes from one side. Originally there would have been two or four ribs furnished with a runnel. The vertical edge of the rib is decorated with a simple motif.

The candlestick is incomplete and comprises a cup with circumferential grooves, a short stem and an angled collar above a socket (Fig 21, 3). This would have been fixed to a branched double socket candleholder (Brownsword 1985, fig 3, 4). Candleholders of this type have a base with supporting stem, surmounted by a spike which is flanked by two curved branches with sockets or cups at their ends, they generally date to the late 15th and early 16th centuries.

PERSONAL EQUIPMENT

There are two knives, a whittle-tang knife from Saxo-Norman pit 116 and a scale-tang knife from post-medieval cess pit 185 (Fig 21, 4). The former terminates in a tapered prong, onto which an organic handle of wood, horn or bone would have been hafted. In contrast, scale-tang knives terminate in a parallel-sided strip, to which scales of wood or bone would have been fixed. This particular example has a tang with biconvex terminal and displays similarities to an example from London which dates to the 16th century (Egan 2005, fig 63, 354).

The excavation produced three whetstones for sharpening ferrous metal knives and tools (Fig 21, 5). Two types are represented, small hones, perforated at one end for suspension from a leather thong and larger unperforated hones. The former is represented by a small slate hone recovered from the floor of Saxo-Norman Building B and the latter by two unperforated hones of micaceous schist (Norwegian Ragstone) from later deposits.

PERSONAL POSSESSIONS

This category comprises small portable items which would have formed part of a persons clothing such as costume fittings, items worn as jewellery or items held by an individual for personal use such as recreational items like musical instruments and toys.

COSTUME FITTINGS

One buckle and two buckle plates were recovered. An iron buckle with a plate attached was recovered from late Saxon pit 54. Although heavily encrusted in corrosion deposits, the X-ray reveals a buckle with simple oval frame with part of a rectangular plate furnished with a recess for the pin and two perforations (Egan 1991a, fig 41, 265). A copper alloy buckle plate was recovered from a layer of post-medieval soil dumping (Fig 21, 6); the plate is small with concave sides and pierced terminal lobes, patches of gilding are evident on the surface and the presence of a slot for the pin is the only thing that confirms its identity. This piece is medieval in date.

Pins

There are ten pins, one from the Saxo-Norman gully, 24, which is intrusive, four from medieval pits and soil dumping, and five from a post-medieval well, 295. With the exception of one that has lost its head, the remainder are all drawn copper alloy wire pins with wound wire heads, that measure up to 39mm long. Oakley's classification of pins from St Peter's Street, Northampton shows that there are two main types; five Type H1 pins with simple wire wound heads and four Type H2 pins with wire wound heads moulded into a spherical shape (Oakley 1979, 260).

Other objects associated with dress include a complete strap loop from a medieval pit, 52 and a copper alloy lace chape from a medieval quarry pit, 339. The strap loop comprises a rectangular frame with two internal projections (Fig 21, 7). A similar example from London was recovered from *c* 1200-1400 deposits (Egan 1991b, fig 139). The lace chape is made from a rolled copper alloy sheet and would have been used to secure the lace terminals, which would in turn have fastened items of clothing. It is comparable with examples from St Peter's Street (Oakley 1979, fig 103, 254, 278).

Jewellery

One item of jewellery was recovered, an incomplete finger ring from a medieval pit, 339 (Fig 21, 8). It is made from four circular-sectioned wires comprising two large tapered wires of 3mm diameter and two fine wires of 1mm diameter. The wires have been twisted together in a clockwise direction to produce a ribbed coil. Chunky finger rings were common in the Viking period and occur as late as the 1170s (Pritchard 1991, 331). A similar example was recovered from a late 10th to early 11th-century context at Winchester (Hinton 1990, fig 165, 2064).

A goose ulna whistle

Helen Leaf

This object is a crudely made whistle from the floor of the Saxo-Norman Building B (Fig 22, 9). It has been made from a goose ulna, a bone used for just under a third of all currently known flutes (Leaf 2006, 13). A typical goose ulna flute has a D-shaped window or sound hole at the proximal end, three finger holes at the distal end, and uses the entire length of the ulna once the epiphyses have been removed. Though this example differs from this, its features have parallels elsewhere.

The whistle is short; it measures 67mm long and 11mm in diameter, and uses only about a half of the possible length of bone. The blowhole is sited 7mm from the distal end. The visible cut marks indicate that this is its intended length. Comparable whistles without finger holes have been found at Rayleigh Castle and Winchester (Francis 1912, 171; Megaw 1990, 718-723). It may have originally been longer and subsequently shortened, as appears to have occurred with the example from Folkestone (Pitt-Rivers 1883, 464).

The window of this whistle measures *c* 6mm across and is roughly oval, an uncommon shape evident on the whistle from Westbury-by-Shenley (Riddler 1995, 392). In the process of manufacturing a whistle, a block of wood or other substance is fitted into the proximal end



9



10



11



12



13



14



15



16

Fig 22 Other finds, 9-16 (scales 100mm)

to direct the stream of air to the window when blown. If fitted well this gives a strong and clear sound. The oval window of the Kingswell Street example, along with the presence of spongy cancellous bone on the internal surface of the bone, may have made it more difficult to fit a good block and the resulting sound would have been of low quality.

A feature seen on the external surface of this example, and common to many, is the presence of 'chatter marks' made during manufacture when the bone was scraped with the blade of a knife.

The 'buzz-bone'

The 'buzz-bone' is manufactured from a pig metapodial, perforated laterally through the anterior and posterior surfaces and the terminals have been knife-trimmed to remove unwanted protrusions (Fig 22, 10). Seven similar examples were recovered from St Peter's Street where they were identified as bobbins or toggles (Oakley 1979, 313). They may also be spinning, buzzing musical toys (MacGregor 1985, 102-3; Lawson & Margeson 1993, 213-4). In recent years this latter interpretation has gained support, with an example from Beverley recovered with a knotted leather thong (Foreman 1992, fig 74, 505; Lawson 1995).

EQUIPMENT AND FURNISHINGS

There is a dearth of structural related ironwork with little to characterise the nature of the buildings on the site. Many fittings which may have been in use were notable by their absence and appear to have been removed, possibly reused or recycled. Twenty-eight nails were recovered, eight from Saxo-Norman deposits, four from later medieval deposits and six from post-medieval deposits. The majority are undiagnostic, but those identifiable are mainly flat sub-circular heads and square-sectioned shanks. There is one wedge-shaped nail with a tapering profile and no distinct head.

TRANSPORT

THE SLEDGE-RUNNER

Of particular interest is the presence of a sledge-runner found within later medieval soil dumping deposits (Fig 22, 11). The sledge runner has been made from a horse metapodial and measures 234mm long and, although fairly well preserved, the posterior surface shows signs of decay. The distal (toe) and proximal (heel) ends have been modified, the articular surfaces have been partially removed and both ends have been perforated by a 9mm hole drilled through the shaft. The toe is slightly upswept, formed by oblique cuts from either side. The underside of the runner (anterior surface) appears to display little sign of wear, suggesting that it may not have been used. Very few sledge-runners have been identified from England and their dating is largely dependant on continental examples (MacGregor 1985, 145). Similar 14th-century examples manufactured from horse radii have been recorded at West Fen Road, Ely and in post-medieval deposits at Stonea, Cambridgeshire (Riddler 2005, fig 4.16, 277; Smithson 1996, fig 237, 1 and 2).

Sledge-runners resemble bone skates, the main difference is that runners have vertical holes to fasten the runners to the sledge, while bone skates have horizontal toe holes or transverse heel holes for attaching straps. Sledge runners manufactured from the metapodials or radii of horses were introduced during the middle to late Saxon period and were in use until the early 19th century.

RIDING EQUIPMENT

A harness pendant was recovered from late medieval pit, 124 (Fig 22, 12). It comprises a gilded, circular, openworked frame with integral suspension loop. The frame has a reversed 'Z' motif and at its centre there is a circular collet, the interior of which retains the remains of a paste that would have secured a cabochon. Horse harness pendants were common in the 13th-14th centuries (Griffiths 1986).

An iron spur was recovered from a pit 185. The X-ray image revealed a spur decorated with an inlaid silver motif (Fig 21, 1). This has since been cleaned and conserved by David Parish at Buckinghamshire Museum Service (Fig 21, 2). It is 85mm long with a span 80mm wide, the neck is 10mm long and the length of the rowle box is 13mm.

The spur is complete with slightly tapered sides and a D-shaped cross-section. The terminals broaden to accommodate two circular holes for attaching fittings which would secure the spur to leather straps. The neck is divided for most of its length by the rowle box but the rowle is missing.

A buckle and a hooked fitting are still attached to one of the terminals. The buckle is asymmetrical and there is a sheet roller on the outside edge of the frame, in addition, a pin and an attachment plate for connecting the buckle to the terminal of the spur is attached to the central bar. The motif which occurs on the sides of the spur is also repeated on the buckle. A hooked fitting is attached to the other hole in the terminal, it has an integral plate with a button or knob for connecting to a leather strap, and is not dissimilar to that seen attached to a buckle from London (Egan 2005, fig 18, 121).

Initially the type of terminal, which is a Ward-Perkins Type Bii, and the style of the spur suggested a relatively early date around the 13th century, but its fragile proportions, the fittings and the type of decoration suggest that the piece probably dates to the 17th century, when the spur became an object of fashion, with a variety of decorative finishes (Ellis 1990, 1038). Of the two main types in vogue, one had tapered straight sides and a small neck rather like the Kingswell example. Stylistically and functionally spurs of this type would be more suitable as an item of fashion rather than for use on long journeys (Ellis 1990, fig 321, 3872-3).

CRAFT MATERIALS AND TOOLS

TEXTILE WORKING MATERIALS

Two spindle-whorls relate to hand spinning and were recovered from later medieval pits, 151 and 326 (Fig 22, 13). One is manufactured from the base of a shell-tempered pot (F330). The edges have been knife trimmed

to form a disc measuring 40mm in diameter, at the centre there is a waisted, circular perforation, cut with a knife. The other is a lath turned biconical, limestone whorl measuring 35mm in diameter. Examples of both types have been found in Northampton. Ceramic whorls pre-date 1450 and limestone whorls may be of late Saxon or early medieval date (Oakley 1979, 286).

Two pin beaters manufactured from animal bone were recovered from a later medieval quarry pit, 257 (Fig 22, 14). The earliest is a double-pointed pinbeater for use with a warp-weighted loom. This example is incomplete and is 65mm long, it has an oval cross-section and it tapers to a rounded point. The exterior surface is highly polished and a series of short oblique grooves are present on the anterior and posterior surfaces, set just above the point. Such tools are commonly found on settlement sites of early to middle Saxon date. The later example has a pointed terminal at one end and a squared, 'chisel-like', end at the other. It has a D-shaped cross-section, tapers to a rounded point and measures 101mm in length. There is a worn groove or notch on the right hand side, on both anterior and posterior surfaces, suggesting contact with the threads on the loom. This example would have been for use with the vertical two-beam loom, which was introduced in the 9th century and was in use until the 13th-14th centuries (Brown 1990, 227-31).

WOOD WORKING TOOLS

Wood has always been an important material used in the manufacture of items, building materials and as a fuel. No wooden objects survive from this site, but there are two items that provide evidence for the preparation of wood. An axe head was recovered from Saxo-Norman pit, 116, adjacent to Building B. Much of the blade is missing and what remains suggests that the axe was quite small for light tasks such as chopping kindling or honing timber. The socket is complete with an oval-shaped eye and flat top.

A bow-saw was recovered from a post-medieval cess pit, 185. The saw comprises a parallel single-sided blade, with six teeth per 20mm, set at 90° and 35° to the back of the blade. The example is probably a rip saw as the teeth are alternately angled out. A vestige of the tang onto which a handle would have been hafted protrudes from one end of the blade and the other end is perforated for securing to the handle.

Miscellaneous tools

A bone implement of unknown use was recovered from a medieval quarry pit, 257. It has been manufactured from a small splinter of hollow bone that is the radius of a sheep or goat. The terminal has been knife-trimmed to form a short faceted point, rather like a pencil. The exterior surfaces are extremely worn, suggesting that it was hand-held. A shallow depression, close to the point, shows signs of extreme wear from the fingers and thumb when the tool was in use.

GLASS

The glass is a poor representation of the types which are known to have been in use. Much of it is abraded,

with the decayed surfaces display lamination, flaking and crumbling, characteristics of dehydration. There are six fragments of window glass from post-medieval deposits and soil dumping layers. Only one fragment has blackened manganese surfaces and grozed edges, indicating that it is medieval in date.

Eight fragments of vessel glass were recovered; two fragments from 13th-14th-century deposits, four from 17th-century deposits and two from a 19th-century pit. The clearly identifiable pieces were a rim from a clear glass flask decorated with heavy spiral mould-blown ribbing, the lower portion of a wine glass and a complete phial in opaque bluish-green glass. These three were recovered from a cess pit, 185.

CLAY TOBACCO-PIPES AND MUFFLE

Tim Upson-Smith

A group of 117 clay tobacco-pipe fragments were recovered, 79 examples were from a pit, 232, and 23 were from a cess pit, 185. The majority of bowls provided a closely dated range *c* 1660-1710. A small quantity of pipe kiln muffle was also recovered from a pit, 232. The assemblage was dominated by 39 examples of Oswald's Type G9, *c* 1680-1710, and 20 examples of Type G18, *c* 1660-1680 (Oswald 1975). Two examples of Oswald's Type G8, *c* 1680-1710, were recovered from a cess pit, 185. One of these was marked in relief with the initials 'JA' within a circle on the foot and could possibly be attributed to John Anderson of Wellingborough who died in 1723 (Moore 1980, 19; Fig 22, 15). Two bowls both 18th-century, Type G23, *c* 1760-1800, were also recovered from cess pit, 185.

The majority of bowls and stems were burnished and all the bowls were ornamented with a partial or complete milled band or groove below the lip of the bowl, a common motif until *c* 1710 (Moore 1980, 6). The majority of the pipe bowls show no signs of use and are wasters from the manufacturing process. The stem fragments measured up to 147mm long and 11 examples retained their mouthpieces.

Four fragments of muffle-kiln debris were recovered from the pit, 232, in light buff coloured clay reinforced with pipe stems. The clay matrix contained small voids, a result of burnt-out organic matter. The exterior surfaces were fired-damaged, resulting in a pale grey surface (Fig 22, 16). A further single fragment was recovered from cess pit, 185, that consisted of an Oswald G9 pipe bowl with stem of 112mm length and a fired clay lump adhered to it.

One clay tobacco-pipe manufacturer is documented living at 15 Kingswell Street, *c* 1767-1774, called George Henshaw (Moore 1980, 21). The two features which produced the assemblage were located within the yard of this property. The pipes and the kiln waste date to *c* 1680-1710, although the pottery and two of the clay tobacco-pipe bowls date the pits to *c* 1680-1800. It is unlikely that there was an earlier manufacturer on the site since there was a complete lack of earlier clay tobacco-pipe manufacturing waste elsewhere. It seems probable that George Henshaw was using an older mould producing pipes with a short stem length. These pipes

would have been up to 10 inches (255mm) long, the fashionable length for clay pipes in the second half of the 18th century was up to 15 inches (378mm) long, but were not practical for labourers or craftsmen.

CATALOGUE OF ILLUSTRATED FINDS (Figs 21 and 22)

- 1 An iron riding spur as recovered, with X-ray inset (scale 120mm)
- 2 The iron riding spur showing the silver inlay, after cleaning (scale 20mm)
- 3 A 15th to 16th-century candle holder (scale 100mm)
- 4 A Saxo-Norman whittle tang knife (top) and a 16th-century scale tang knife handle (bottom) (scale 100mm)
- 5 Whetstones (scale 100mm)
- 6 A copper alloy buckle plate (scale 50mm)
- 7 A medieval copper alloy strap loop (scale 50mm)
- 8 A 12th-century copper alloy finger ring (scale 50mm)
- 9 A whistle made from a goose ulna (scale 100mm)
- 10 A 'buzz-bone' made from a pig metapodial (scale 100mm)
- 11 A sledge runner made from a horse metapodial (scale 100mm)
- 12 A gilded horse harness pendant (scale 100mm)
- 13 Two spindle whorls (scale 100mm)
- 14 Two bone pin beaters (scale 100mm)
- 15 A manufacturer's stamp on the base of a clay tobacco-pipe bowl
- 16 Examples of muffle from a clay tobacco-pipe oven (scale 100mm)

MAMMAL, BIRD AND FISH BONES

Philip Armitage

A total of 2,994 hand-collected and sieved animal bone specimens were analysed (Armitage 1998-9, 102-103). A total of 2,112 specimens are identified to species and the part of the skeleton, forming 70.5% of the assemblage, the remaining 29.5% were unidentified owing to fragmentation or the absence of surviving diagnostic features.

SPECIES

Of the 2,112 identified specimens, 81.9% are from mammals, 13.4% from birds, 4.1% from fish and 0.6% from amphibians. The species represented are listed below:

BIRDS

- Grey-lag/domestic goose, *Anser anser*/domestic
- Domestic fowl, *Gallus gallus* (domestic)
- cf Partridge, *Perdix perdix*
- Teal/domestic duck, *Anas platyrhynchos* (domestic)
- Carrion crow, *Corvus corone*
- Turdidae cf Songthrush, *Turdus ericetorum*

FISH

- Cod, *Gadus morhua*
- Haddock, *Melanogrammus aeglefinus*
- Herring, *Clupea harengus*

- cf Turbot, *Scophthalmus maximus*
- Thornback ray (or roker), *Raja clavatus*
- Freshwater eel, *Anguilla anguilla*
- Pike, *Esox lucius*
- Perch, *Perca fluviatilis*
- Amphibians
- Common frog, *Rana temporaria*

MAMMALS

- Horse, *Equus caballus* (domestic)
- Cattle, *Bos* (domestic)
- Sheep, *Ovis* (domestic)
- Goat, *Capra* (domestic)
- Pig, *Sus* (domestic)
- Dog, *Canis* (domestic)
- Cat, *Felis* (domestic)
- Fallow deer, *Dama dama*
- Brown hare, *Lepus cf. capensis*
- Rabbit, *Oryctolagus cuniculus*
- Black rat, *Rattus rattus*
- House mouse, *Mus musculus*

Fragmented mammal bones form 96.4% of the specimens not identified to species, with only 2.5% from indeterminate fish species, and 1.1% from indeterminate bird species. This area small mammal bone fragments from sieved samples.

The animal bones from Kingswell Street were divided into three main periods based on the dating from finds and the structural and stratigraphic relationships. The periods are defined as follows:

Table 5: Period groups of analysed bone

Site phase	Period	Chronology
Phases 1 & 2	Late Saxon to Saxo-Norman	Pre-Conquest to 12th century
Phase 3	Medieval	13th to 15th centuries
Phase 4	Post-medieval	16th to 18th centuries

CONDITION

The preservation is good with relatively few specimens exhibiting weathering, erosion or leaching. Even in the bones from pit 54, which on the ceramic evidence included midden material, there is little sign of these effects. Of note is the apparent 'brittleness' of bones from the later medieval quarry pit 293, the result of lime present in the fill. The incidence of dog gnawing is relatively low, only 2% of the total NISP, and the frequency of burnt bones makes up 1.8% of the assemblage. There is no direct association between the burnt bones and hearth pits or malting ovens. There are eleven specimens of burnt sieved mammalian bone fragments from soil layer 294, probable food detritus.

RECORDED DATA

The data is a useful resource for larger scale studies. Determinations of the ages at death of the major domestic species based on dental eruption and wear were

examined and recorded. This data and the epiphyseal fusion in these same species are held in the site archival records. A summary of the identified females, males, and castrates in the domestic livestock, and sex profiles for the adult domestic fowl are also retained. There are also GL measurements on mammal and bird bone elements together with estimates of the withers heights for cattle, sheep, pigs and horses.

THE ASSEMBLAGE

LATE SAXON AND SAXO-NORMAN (MID-10TH TO 12TH CENTURIES)

A total of 670 bones were examined, of which 73.6% are identified to species and anatomy. Pit 54 yielded 62.9% of the total identified bone specimens from this period. On the basis of anatomical distributions this is debris from primary and secondary butchering, intermingled with kitchen waste. The overall diet was dependant on the meat of domestic livestock, predominantly cattle and sheep, some pig, and supplemented with domestic fowl. There are no wild game species such as deer or hare, and fish are limited to the occasional cod and freshwater eel. The thrush, cf Songthrush, humerus may also represent food debris as discussed by Sergeantson (2006, 142), the bones of thrushes are found quite often 'confirming that these birds were eaten from an early period'. The carrion crow bones from pit 54 do not represent food debris, this bird was as common an urban scavenger as it is today (O'Connor 1993, 159).

There is an absence of dog bones, a feature also noted in general amongst later deposits which presumably indicates their burial elsewhere. The lack of dog bones is in marked contrast to the quantities of dog bones, including partially articulated skeletons, recovered from Woolmonger Street, 1994-7 (Armitage 1998-9, 103-4). Cat bones are also absent but do feature in later deposits.

MEDIEVAL (13TH TO 15TH CENTURIES)

A total of 2,149 bones were examined of which 69.9% are identified to species and anatomy. The diet of the inhabitants during the later medieval period comprised beef and mutton, augmented by pork, domestic fowl, lamb and veal. Warren-bred rabbits also featured in the diet and along with domesticated duck. Unlike the earlier deposits there is evidence for the consumption of venison and hare. Wildfowl were also represented by the part-skeleton of a young partridge recovered from the malt oven fire pit, 279. There was increased consumption of geese and an expanded variety of both marine and freshwater fish. The fish include at least one pike comparable to a modern specimen of 457mm length. Pike in the later middle ages was generally associated with a high status diet (Woolgar 2000, 39; Dyer 2000, 106-8). Dyer discusses the cost of fish quoting a price of 2-3 shillings in the 15th century for a mature pike, the equivalent to a week's wages for a skilled craftsman.

On the basis of the meat quality the food debris indicates that the dietary profiles of the inhabitants were beyond subsistence needs, and even beyond 'solid

sufficiency', reflecting a certain degree of affluence (Ervynck *et al* 2003). The food remains do not reveal evidence of the luxurious or extravagant dietary levels enjoyed by the privileged classes, which often featured exotic and prestigious foods like swan. Local inhabitants merely enjoyed a prosperous standard of living.

Much of the meat, fowl and fish consumed locally would have been procured from butchers, poulterers, and fishmongers in the town. The keeping of small livestock such as chickens, pigs and goats supplemented domestic provisioning. Evidence of this is strongly indicated by the domestic fowl bone elements. The age and sex profiles established for the 32 domestic fowl represented suggested they had been kept primarily as egg producers with a higher ratio of hens to cock birds (Albarella *et al* 1997, 48). Meat production was of secondary importance. The newly hatched chick was probably a natural casualty indicative of fowls raised on the site. Such urban backyard chicken rearing was a common subsistence enterprise in the medieval period, with the birds being fed on household scraps (Serjeantson 2006, 137-47). The medieval birds would have been somewhat scrawny to the modern eye, of a size similar or smaller than modern Bantams.

Anatomical distributions of the cattle and sheep indicate that some of the animals may have been slaughtered on site. This accounts for the presence in the refuse of all body parts, including those of the head and extremities of the feet. Whole untrimmed carcasses of these animals may also have been purchased from the local meat market (Armitage 1998-9, 105). The market place was a short walk to the north-east of the site and ideal for transporting goods. The close proximity of the Augustinian precinct to the south and both the Hospitals of St. Thomas and St. John would have also been large affluent consumers.

An alternative interpretation is that butchers', tanners' and horn-workers' waste had been dumped in the area, becoming intermixed with the household refuse of the local district. The presence of two detached and chopped sheep horn cores, a cranium with the horn cores removed and a single goat horn core add support to this suggestion. They may represent the waste products of leather and horn working in the area. The soils in which they were found predated the establishment of the later medieval street frontage and were not confined to a single part of the site.

It will be of interest to scholars researching the early history of sheep breed-types in Britain that the later medieval deposits also yielded a cranium of a polled, naturally hornless, sheep. This was recovered from the demolition layer of the malthouse which was deposited before the 15th century. A cranium with a scur, a small bony 'knob', in place of a horn was recovered from a well, 330. No examples of such polled or scurred sheep are represented in the Saxo-Norman and medieval deposits, where all the sheep appear to have been horned. Polled and scurred sheep crania were also recorded in the 1994-7 excavations along Woolmonger Street which produced identical results (Armitage 1998-9, 105).

Two rodent species are present in the later medieval deposits. Black rat is represented by one innominate bone and one metapodial bone from a well, 89. A house

mouse skull, one lower jawbone and one femur were amongst sieved samples from a cess pit, 373. Rodent activity is evident from three rat-gnawed sheep bones post-dating the later medieval street frontage, and in one case, the demolition of the malthouse. Given the presence of vermin, it is not surprising that a population of domestic or feral cats were present, attested by the recovery of 39 bone elements from at least 14 cats, 8 of which were adults and 6 of which were kittens. These cats also scavenged kitchen scraps as indicated by a cat-chewed chicken ulna.

Frog bones were recovered from sieved samples taken from the malt oven fire pit, 279. Two individuals were represented. Other frog bones included one vertebra from the outdoor malt oven, 77, and a femur from a cess pit, 373. An aquatic habitat is not essential outside of the breeding season for the common frog but their presence indicates that at least part of the site was overgrown and close to wetland countryside. Frogs were often attracted to urban sites in large numbers due to an abundance of household refuse and middens providing the ideal environment for the proliferation of flies and a bountiful food source for frogs (O'Connor 2000, 17). Deposits from which amphibian evidence was recovered comprise mainly demolition debris predating the 15th century with some silting towards the base of the pits. The pits themselves were left open after disuse, at least long enough for the frogs to inhabit them. They appear to have been backfilled when the malthouse was demolished.

POST-MEDIEVAL (16TH TO 18TH CENTURIES)

A total of 175 bones were examined, of which 66.9% are identified by species and anatomy. Analyses of the food debris from a pit, 107, and a cess pit, 185, indicate a surprisingly varied diet, which included both freshwater as well as marine fish. The sieved contents of the pit, 107, yielded freshwater eel, pike and herring. Cess pit, 185, yielded four fin spines and 28 scales from a perch. From the same deposit came the skull of a domestic duck. In addition to the consumption of beef, veal, mutton, pork, and chicken, at least one suckling piglet had been eaten as evidenced by a tibia from a pit, 402. A foetal or neonatal calf is represented by 14 bone elements from a pit, 73, perhaps an aborted or still born calf of a milk cow, kept locally. Overall the diet of the inhabitants from the 17th century onwards appears to have been substantial, indicating a rejuvenation of prosperity.

DISCUSSION

The results are compared against the faunal assemblages from the 1994-97 excavations along Woolmonger Street (Armitage 1998-9; Locker 1998-9). Food bones from the different sites highlight the paucity of fish in the diet of the Saxo-Norman and medieval inhabitants in the district. This is in marked contrast to the rich spectrum of both marine and freshwater fish consumed further to the west (Locker 1998-9). Meat consumption patterns in the later medieval period exhibit a much greater diversity compared with the adjacent site. Evidence suggests that

local inhabitants supplemented their staple fare of beef, mutton and pork with wild game species that included deer, hare, partridge, rabbit and duck. They also enjoyed a variety of fish species, predominantly marine, but also including freshwater eels and pike. In stark contrast, the meat, fowl and fish eaten by the inhabitants further westwards along Woolmonger Street appears to have been somewhat restricted.

Caution should be exercised in considering the differences outlined above. The quantity of bones from Saxo-Norman and medieval deposits in the 1994-97 excavations is much greater than that from the Kingswell Street excavation, whilst the reverse holds true for the respective later medieval assemblages.

Settlement at Kingswell Street was still fairly peripheral to the core of the parish of St Gregory in the 11th to 12th centuries, as emphasised by the low density of features and smaller quantity of period material from the site. Woolmonger Street was, however, already well established in this period and the full extent of urbanisation was not to reach Kingswell Street until the 13th century. Evidence for the food consumption of Saxo-Norman inhabitants is therefore likely to be a reflection of occupation density.

Later medieval patterns are more complex. Fishing rights on the Nene may have been restricted by the Augustinian Friary in the 13th century. It was not uncommon for monasteries to have fishing rights on the local river, whilst the opportunities to fish for the common man were restricted. There is evidence that the various monasteries and richer individuals over-fished the Dee at Chester in the late 12th century (Barraclough 1988, 264, doc 263). According to the Coventry Benedictine Priory Cartulary the monks were at pains to claim their fishing rights at nearby Styvechale, despite their ownership of fishponds (National Archives E164/21, 62-5). In turn this opened the way to poaching. The same Benedictine Priory which had been so ready to assert its fishing rights was now complaining that its stocks in its own fishponds were regularly filched during the night. Restrictive practises had to be relaxed as the economic constraints suffered by the monasteries began to bite towards the turn of the 15th century, forcing them to let out previous monopolies to tenants.

Another possibility is the presence of mills on rivers which severely effect fish stocks. Milling practises regularly empty the ponds and kill the fish. The construction of fish-weirs keeps them away to such an extent that large stretches upstream of a mill can be devoid of fish. The Nene close by certainly contained numerous mills and at various times the banks of the Nene may have been unsuitable for fishing.

The local economy may also have been responsible. Wealthy local consumers within the Kingswell Street area were the Augustinian Friary and the Hospitals of St. Thomas and of St. John. The site was situated in easy walking distance to the market, ideal for anyone whose livelihood was based on food preparation. It is possible that produce was not necessarily being consumed by the people of Kingswell Street, but slaughtered and prepared for the tables of these more affluent consumers.

PLANT REMAINS

Val Fryer

Soil samples were taken from undisturbed single phase features and bulk floated by Northamptonshire Archaeology with flots collected in a 500 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x16, and the data of the plant macrofossils and other remains noted were recorded according to recognised nomenclature (Stace 1997). A small number of mineral replaced macrofossils were recorded, the majority of the plant remains were charred. Modern contaminants, including fibrous and woody roots, seeds, arthropods and fungal sclerotia, were present throughout.

Table 6: Sampled features

Features	Interpretation	Samples
54	Late Saxon pit	4
28, 82, 116	Saxo-Norman pits	3, 7, 6
77, 279	Medieval malting ovens	2, 10
89	Medieval well	17
294	Burnt spread within later medieval garden soil, Plot 4	12
373, 394	Medieval cess pits	14, 15, 16
432	Medieval quarry pit	18
107	Post-medieval	9

PLANT MACROFOSSILS

Cereal grains, chaff, seeds of common weeds and wetland plants, together with tree and shrub macrofossils were present within all thirteen samples. Preservation was variable, although a high density of the cereal grains and seeds were heavily puffed and distorted through combustion at very high temperatures.

CEREALS AND OTHER FOOD PLANTS

Oat (*Avena* sp.), barley (*Hordeum* sp.), rye (*Secale cereale*) and wheat (*Triticum* sp.) grains were recorded, with wheat occurring most frequently. Cereal chaff was generally rare, bread wheat (*T. aestivum/compactum*) type rachis nodes with diagnostic crescentic glume inserts were present within Saxo-Norman pit, 116, and medieval cess pit, 394. A single poorly preserved rivet wheat (*T. turgidum*) type node with persistent glume bases was in medieval cess pit, 373. Detached cereal sprouts and grains with concave profiles were present within malt oven 77. This is indicative of the presence of germinated grains, the quantity recovered was very low and it was not possible to state whether deliberate or accidental germination was represented. Possible charred pea (*Pisum sativum*) seeds were noted within post-medieval pit, 107, and malt oven 279, although neither retained an intact testa or hilum. Indeterminate fragments of large charred pulses (*Fabaceae*) were also recorded with mineral replaced bullace or damson (*Prunus domestica* ssp. *insititia*) type fruit and apple (*Malus* sp.) seeds.

WILD FLORA

Common segetal weeds were present within most of the

assemblages studied. Taxa noted included corn cockle (*Agrostemma githago*), fat hen (*Chenopodium album*), small legumes (*Fabaceae*), corn gromwell (*Lithospermum arvense*), knotgrass (*Polygonum aviculare*), dock (*Rumex* sp.), corn spurrey (*Spergula arvensis*) and scentless mayweed (*Tripleurospermum inodorum*). The presence of seeds of stinking mayweed (*Anthemis cotula*) within all but three of the assemblages indicates that most crops were being grown on the local heavy clay soils. Grasses (*Poaceae*) and grassland herbs including medick, clover, trefoil (*Medicago*, *Trifolium*, *Lotus* sp.) and ribwort plantain (*Plantago lanceolata*) were all present.

Seeds of wetland plants occurred relatively infrequently. Taxa recorded from the burnt spread (294) included sedge (*Carex* sp.), spike-rush (*Eleocharis* sp.), rush (*Juncus* sp.) and reed mace (*Typha* sp.). Tree and shrub macrofossils, namely hazel (*Corylus avellana*) nutshell fragments and elderberry (*Sambucus nigra*) 'pips' were also rare, occurring in only four assemblages.

OTHER PLANT MACROFOSSILS

Charcoal fragments and charred root or stem were abundant. Mineral replaced root and stem fragments were recorded from a cess pit, 394, and a quarry pit, 432. Other plant macrofossils included indeterminate buds, culm nodes, inflorescence fragments and thorns.

OTHER REMAINS

Black porous, tarry material and the siliceous globules, which occurred at varying densities in all samples, are probable residues of the combustion of organic remains at very high temperatures, including cereal grains and straw/grass. Mineralised faecal concretions were common or abundant in samples 14-18. Other remains included pellets of fired clay within the Saxo-Norman pit, 116.

DISCUSSION

LATE SAXON AND SAXO-NORMAN (MID-10TH TO 12TH CENTURIES)

The assemblages are broadly similar in composition and all would appear to be derived from small deposits of burnt domestic detritus. Wheat and barley grains, some of which may have been accidentally spilled during culinary preparation, are recorded throughout and include a large number of oats. The latter may be present as contaminants of the main cereal crops as, in the absence of oat floret bases, it is not possible to ascertain whether grains from wild or cultivated species are present. Cereals used on site may have been imported as batches of semi-cleaned grain as weed seeds are also common, in particular larger specimens of a similar size to the grain such as corn cockle, brome (*Bromus* sp.), smaller legumes and large grasses. Some contaminants like oats and larger grasses may have been tolerated, others, like the corn cockle seeds, were toxic if consumed and would have been removed by hand during the final stage of processing.

The assemblage from pit 116 contains a high density of wheat grains along with a number of bread wheat type

rachis nodes and some weed seeds. As eggshell and fish bone are also present, this assemblage is likely to be derived from domestic hearth waste.

Wood and charcoal appear to have been the principal fuels used during this period, although other materials including dried grasses, grassland herbs and hedge brush may have been used as kindling and to add aroma to the fire (sample 3).

MEDIEVAL (13TH TO 15TH CENTURIES)

Samples from the malt ovens represent the residues from the last firing of the ovens mixed with silting at the base of the abandoned pits. The assemblages are less than 0.1 litres in volume, but both contain a moderate to high density of cereal grains and weed seeds, many of which are severely puffed as a result of combustion at very high temperatures. Germinated grains and detached cereal sprouts are present in sample 2. The density of material recovered is insufficient to be indicative of primary malting waste. Similarly composed assemblages have recently been recorded from other contemporary ovens in Norwich (Fryer, forthcoming). In Norwich they have been interpreted as either batches of semi-cleaned grain accidentally destroyed during drying, or residues of the fuel used within the ovens.

Samples 9, 14, 15 and 16 are all from cess pits (107, 373, 394). The assemblages differ greatly in composition. Pit 107 contained only a very small quantity of charred material, with no evidence of the phosphatic mineralisation commonly seen within sewage deposits. Sample 14 is largely composed of charred remains constituting backfill material. Sample 15 consists almost entirely of mineralised faecal concretions. Sample 16 represents the entire contents from the bottom half of a shelly coarseware jug, used latterly as a poe and dumped in pit, 394. This variety of composition clearly indicates that the cesspits were non-specific features and were commonly used for the deposition of a range of waste materials. Faecal concretions are abundant within Sample 18, illustrating that sewage and dung became mixed into features across the excavated area. Sample 18 was retrieved from the lower fill of a quarry pit, 432, and it was clear from the stratigraphic sequence that fluid cess deposited in pits percolated down into the fills below.

Sample 12 is the only sample studied which contains a moderately high density of wetland plant macrofossils, namely sedge and spike-rush fruits. The assemblage may include burnt flooring materials and domestic hearth waste, burnt and raked into the soil, 294.

SUMMARY

Assemblages from both the Saxo-Norman and medieval deposits are composed of domestic waste. Similar assemblages were also noted at Woolmonger Street (Caruthers 1998-9). The two samples from the medieval period indicate that they were also used for corn drying rather than for malting alone, since medieval ovens were multi-functional structures. Pits across the site were used for the deposition of both charred refuse and sewage.

Cereals appear to have been of considerable importance to the occupants of the site, and much of the grain present

was probably produced on the local clay soils. Wheat appears to have been of particular importance, probably due to its suitability to clay land production. Oats are also common in some assemblages, probably as contaminants of the main wheat crop. The same may also be true of the barley, rye, peas and other large pulses, none of which appear in any significant quantity, but all of which can survive as weeds. The presence of small legume seeds may indicate that some attempts at soil improvement by rotational cropping were being undertaken.

The assemblages give little indication of the environment of the site during either the Saxo-Norman or medieval periods, although the few wetland plant remains indicate the proximity to the river margins. Dried grasses and grassland herbs were being used as kindling for both the ovens and the domestic hearths and were within easy reach of the site.

DISCUSSION

The earliest features show an alignment orientated west-north-west to east-south-east (Fig 6). Residuality of the late Saxon pottery was limited and suggests that the extensive disturbance by later features was not responsible for the low level of late Saxon activity present. A late Saxon cellar, Building A, was present in an area of the town that was perhaps largely marginal until the 11th century. The pit was probably a cellar of the type observed at Woolmonger Street (Soden 1998-9, 76-78), Chalk Lane (Williams and Shaw 1981, 98) and Sol Central, Marefair (Miller *et al* 2006). The pit alignment was repeated in the later Saxo-Norman timber building, Building B, and was also evident in the 13th-14th-century malthouse, Building E. Although the land was initially marginal to occupation further north and west, the early foundation laid a pattern which was apparently incorporated into the subsequent growth of the area.

When Building B was established in the 12th century, the majority of the area was still sparsely occupied. The building extended to the east of the site and evidence for the frontage was lacking. Enquiries into Kingswell Street as an internal route along Lee's postulated defensive perimeter remain inconclusive (Lee 1954). The Saxon defences have been clearly identified on the western side of the burh at Green Street, they have not been positively identified on the eastern side of the burh (Foard 1995; Chapman 1998-9; Soden 1998-9). It is possible the street existed by the 12th century, but given the sparse occupation of the site at the time, the building could have occupied an open area of ground, not necessarily adjacent to a road and set some distance back from Woolmonger Street or aligned upon its earlier course. Woolmonger Street was not fully metalled upon its present alignment until after c 1250 (Soden 1998-9, 113). Several Saxo-Norman pits produced household waste, presumably relating to the occupation of the Building B since animal bone represented primary deposition that was unexposed to the effects of weathering, erosion or leaching. The pottery showed that a good deal of other rubbish was being stored in middens as evidenced by the level of fragmentation and lack of cross-fits and supports a more peripheral location casting doubt on the extent of urbanisation at this time.

There remained a lack of growth into the second half of the 12th century. Few features were positively identified to the period, limited entirely to a sparse scatter of pits. Pottery supported domestic occupation close by in the form of soot-stained cooking vessels (Fig 19, 2).

In the early part of the 13th century the ground was still open and undeveloped. Garden soils sealed the features associated with Building B showing that it had been demolished and the ground left vacant. Topsoil continued to be mixed, possibly by garden horticulture, eradicating earlier soil layers, and producing a loamy deposit.

In the second quarter of the 13th century quarrying was taking place on the site to extract blocks of the natural ironstone for building. It was apparent from the distribution of the extraction activities that some degree of demarcation had been introduced on the site. Quarries were reinstated soon after their excavation with whatever materials were easily available to hand, largely comprising midden waste. Quarrying had been demarcated on loose principles with some comparison to property divisions in later centuries (Fig 9). The general pattern was recognisable as a series of yard spaces, but the exact positions of boundaries were subject to variation. Certain quarries were contained within the partitions of the later plots, fossilising these divisions upon the 19th-century maps.

In the second half of the 13th century pressure for land in Northampton was intense and the site had become fully developed. The town became a military staging post for campaigns in the north of England and a Royal Castle was built (Norgate 1912; Turner 1907, 205-62). From both strategic and political standpoints Northampton was a major town in England and a gateway to the north, a major factor in sustained growth.

Four stone buildings lay within the medieval land plots. One of the buildings is thought to have been a tenement, Building D, possibly attached to a neighbouring building, fronting onto Kingswell Street. The frontage was established around the time that we know Woolmonger Street to have been replanned and diverted north of its previous course (Soden 1998-9, 112-3). This tenement was located on top of the former Saxo-Norman timber building, Building B, with a clear soil horizon between the two demonstrating a break in the occupation. It would seem that the building was not replaced in stone as swiftly as had happened along Woolmonger Street (Soden 1998-9, 112-3, 123). Substantial walls survived beneath 17a Kingswell Street, partially extending into 17 Kingswell Street. The remainder of the original frontage had not survived redevelopment in subsequent centuries or had not extended the full length of the street.

The three other buildings would appear to have been workshops or ancillary structures comprising; a malthouse (Building E), a bakehouse (Building F) and a yard house (Building C). The malthouse was in the south of the site and may have fronted a narrow street or alleyway, its alignment slightly eccentric to Building D and yet consistent with a timber building that had already been demolished over half a century before. This is potential evidence of the alignment of Lewnys Lane, a narrow street that is documented as connecting Woolmonger Street to Kingswell Street from the late

13th century until the turn of the 16th century (Soden 1998-9, 66, 112-3). Combined with the building remains in Trench 3 of Woolmonger Street 1994-7, it lends further weight to this short-lived thoroughfare.

The medieval pattern was subject to alterations in later centuries. The shortening of the rear of 15-16 Kingswell Street indicated that after the medieval period the formalisation and restructure of the properties only partially incorporated existing boundaries so that it is the boundaries between neighbouring properties that continued in use rather than the position of the rear wall, which appeared staggered and irregular in all periods.

On the basis of the stratigraphy and the amphibian remains, the malt ovens were disused some time before they were backfilled. Pottery dates the demolition debris of the malthouse to before the 15th century, probably at some point in the mid-14th century. A broad distribution of feral activity associated with a district in poor sanitary condition was apparent from the presence of rat, frog and cat bones. This is in stark comparison to the century immediately thereafter. There was a distinct lack of evidence for 15th-century activity, limited to small dumps of waste material in the vicinity of the demolished malthouse, and the construction of the pit, 107, abutting the rear of Building D. The tenement property was still inhabited, although the ground to the rear of the property appears to have been left undeveloped. Extensive spread deposits of post-medieval garden soils suggest that the ground remained undeveloped through to the documentation of 'gardens' to the west of Kingswell Street, 1787-1803, which were associated with detached properties on Bridge Street (NRO YZ9055; 9059-61). Pottery for the period *c* 1400-1550 was limited to small groups indicative of low density habitation with virtually no dumping of perishable waste. There was no evidence for the fire of 1516. In 1580 the area was documented as overcrowded and in need of a refuse policy (Cox 1898, 264-6). A good deal of material may have been removed outside of the town for disposal before 1641 when civic improvements were made to the area and Kingswell Street was paved.

Occupation of the street frontage continued in the 17th-18th centuries with the establishment of distinct pit groups along the rear wall of 15 Kingswell Street and within a yard space shared with 16 Kingswell Street. These cess pits, together with a pit behind 16 Kingswell Street, produced clay tobacco-pipe manufacturing evidence. The pits were securely dated *c* 1680-1750 by Staffordshire manganese ware and Staffordshire slipware pottery. Food debris recovered from the pits suggest that the diet of the inhabitants in the 17th century was varied and of relatively high status including such foodstuffs as perch, suckling pig and venison indicative of a return of prosperity in the area following the civic investment.

It is not clear at what date the later medieval tenement building was replaced. Documentary evidence suggests it had been lost before the 18th century, and although it survived the Great Fire of Northampton in 1675, the refurbishment of the district in 1641 indicates that many medieval tenements could have been demolished before the fire.

BIBLIOGRAPHY

- Albarella, U, Beech, M, and Mulville, J, 1997 *The Saxon, Medieval and Post-medieval Mammal and Bird Bones Excavated 1989-91 from Castle Mall, Norwich, Norfolk*, English Heritage Ancient Monuments Laboratory Report, **72/97**
- Armitage, P L, 1977 *The Mammalian Remains from the Tudor Site of Baynard's Castle, London: A Biometrical and Historical Analysis*, PhD Thesis, Royal Holloway College & British Museum of Natural History
- Armitage, P L, 1998-9 Faunal remains, in I Soden 1998-9, 102-106
- Bailey, G, Charles, R, and Windsor, N, (eds) 2000 *Human Ecodynamics*, Oxford: Oxbow Books
- Barracough, G, 1988 The Charters of the Anglo-Norman Earls of Chester, 1071-1237, *Record Society Lancashire & Cheshire*, **126**, doc 263, 264
- Biddle, M, (ed) 1990 *Object and Economy in Medieval Winchester: Artefacts from Medieval Winchester*, Winchester Studies, **7.2**, Oxford
- Blinkhorn, P, and Saunders, J M, 2004 A late 15th-century manufactory of the Brill/Boarstall pottery industry at Ludgershall Buckinghamshire, *Medieval Ceramics*, **23/24**, 131-144
- Blinkhorn, P, 2001 The Saxon and medieval pottery, in A Chapman 2001, 99
- Blinkhorn, P, 2002 Excavations at Derngate, Northampton, 1997-2000, *Northamptonshire Archaeol*, **30**, 31-61
- Blinkhorn, P, 2003 The pottery, in A Thorne 2003, 116-119
- Blinkhorn, P, 2006 Saxon, medieval and early post-medieval pottery, in J Brown 2006, 114-117
- Blinkhorn, P, forthcoming The medieval pottery from St. James' Abbey, Northampton, report submitted to Northamptonshire Archaeology
- Blinkhorn, P, 2008 The medieval pottery, in P Chapman *et al* 2008
- Bond, J M, and O'Connor, T P, 1999 *Bones from Medieval Deposits at 16-22 Coppergate and Other Sites in York*, The Archaeology of York, **15/5**, York Archaeological Trust
- Briscoe, G, and Dunning, G C, 1967 Medieval pottery roof-fittings and a water-pipe found at Ely, *Proceedings Cambridge Antiquarian Society*, **60**, 81-89
- Brown, A E, (ed) 1991 *Garden Archaeology Papers presented to a conference at Knuston Hall, Northamptonshire, April 1988*, Council British Archaeology Research Report, **78**,
- Brown, D, 1990 Weaving Tools, in M Biddle 1990, 225-232
- Brown, J, 2006 The archaeology at 46-50 Sheep Street, Northampton, *Northamptonshire Archaeol*, **34**, 103-123
- Brown, J, 2007 Archaeological excavations at the corner of Kingswell Street and Woolmonger Street, Northampton: March-May 2005, *Northamptonshire Archaeology*, **07/60**
- Brownword, R, 1985 *English Latten Domestic Candlesticks 1400-1700*, Finds Research Group 700-1700, Datasheet **1**
- Brunskill, R W, 1978 *Illustrated Handbook of Vernacular Architecture*, Faber
- Carlyle, S, 2003 *Desk-based assessment and archaeological trial excavation of land off Kingswell Street and Woolmonger Street, Northampton, September 2003*, Northamptonshire Archaeology report
- Carruthers, W, 1998-9 Charred Plant Remains and the Arable Environment, in I Soden 1998-9, 108-112
- Chapman, A, 1998-9 Excavation of the Town Defences at Green Street, Northampton, 1995-6, *Northamptonshire Archaeol*, **28**, 25-60
- Chapman, A, 2001, Excavation at the Moat House Hotel, Northampton, 1998, *Northamptonshire Archaeol*, **29**, 93-101
- Chapman, P, Chapman, A, and Blinkhorn, P, 2008 A medieval potters' tenement at Corby Road, Stanion, Northamptonshire, 2002, *Northamptonshire Archaeol*, **35**
- Chapman, P, 2005 Stone roof tile, in A Maull and A Chapman 2005, 97
- Chapman, P, 2007 Ceramic and stone building materials, in D McAree 2007
- Chapman, P, 2008 Ceramic roof tiles, in P Chapman *et al* 2008
- Cox, J C, 1898 *The Records of the Borough of Northampton*, Volume 2
- Denham 1985 The pottery, in M Shaw 1985, 213-133
- Dunning, G C, 1975 Roofing Materials, in C P S Platt and R Coleman-Smith (eds) 1975, 186-93
- Dyer, C, 1994 (reprinted 2000) *Everyday Life in Medieval England*, London and New York, Hambledon and London
- Eames, E, 1978 The Ceramic Tiles, in J H Williams 1978, 121-128
- Egan, G, & Pritchard, F, 1991 *Dress Accessories c.1150-c.1450; Medieval Finds from Excavations in London*, **3**
- Egan, G, 1991a Buckles, in G Egan and F Pritchard 1991, 50-123
- Egan, G, 1991b Mounts, in G Egan and F Pritchard 1991, 162-246
- Egan, G, 2005 *Material Culture in London in an age of transition: Tudor and Stuart period finds c1450-c1700 from excavations at riverside sites in Southwark*, MoLAS Monog, **19**
- Ellis, B, 1990 Spurs, in M Biddle 1990, 1037-41
- Ervynck, A, van Neer, W, Hüster-Plogman, H, & Schibler, J, 2003 Beyond affluence: The zooarchaeology of luxury, *World Archaeology*, **34 (3)**, 428-441
- Evans, D H, and Tomlinson, D G, 1992 *Excavations at 33-35 Eastgate, Beverley 1983-86*, Sheffield Excavation Report, **3**
- Foard, G, 1995 The early topography of Northampton and its suburbs, *Northamptonshire Archaeol*, **26**, 109-122
- Fock 1966 in A von den Driesch and J Boessneck 1974
- Foreman, M, 1992 Objects of bone, antler, and shell, in D H Evans and D G Tomlinson 1992, 163-74
- Francis, E B, 1912 Rayleigh Castle: New Facts in its History and Recent Explorations on its Site, *Transactions of the Essex Archaeological Society*, **12**, 171
- Fryer, V, forthcoming Plant microfossils from the Millennium Library Site, Norwich, *East Anglian Archaeol*
- Garside-Neville, S, 1996 Ceramic Building Materials, in R L Kemp and C P Graves 1996, 294-299
- Griffiths, N, 1986 *Horse Harness Pendants*, Finds Research Group 700-1700, Datasheet, **5**
- Grigson, C, 1982 Sex and age determination of some bones and teeth of domestic cattle: a review of the literature, in B Wilson *et al* (eds) 1982, 7-23
- Gryspeerd, M, 1978 The Pottery, in J H Williams 1978, 133-47
- Hinton, D A, 1990 Metal Finger-Rings, in M Biddle 1990, 646-652
- Hylton, T, 1998-9 Small finds, in I Soden 1998-9, 97-101
- Ivens, R, Bushby, P, Shepherd, N, 1995 *Tattenhoe and Westbury. Two Deserted Medieval Settlements in Milton Keynes*, Buckinghamshire Archaeol Society Monog, **8**
- Jackson, R P J, and Potter, T W, 1996 *Excavations at Stonea, Cambridgeshire, 1980-85*, British Museum Press
- Jones, E T, Laughton, J, and Clark, P, 2000 *Northampton in the Late Middle Ages*, Centre for Urban History, University of Leicester
- Kemp, R L, and Graves, C P, 1996 *The Church and Gilbertine Priory of St Andrew, Fishergate*, The Archaeology Of York, **11-2**, York
- Kiesewalter 1888 in A von den Driesch and J Boessneck 1974
- Lawson, G, and Margeson, S, 1993 Musical Instruments, in S Margeson 1993, 211-15
- Lawson, G, 1995 Pig *Metapodial 'Toggles' and Buzz-discs: Traditional Musical instruments*, Finds Research Group 700-1700, Data Sheet, **18**

- Leaf, H, 2006 English Medieval Bone Flutes: A Brief Introduction, *The Galpin Society Journal*, **59**, 13-19
- Lee, F, 1954 A new theory on the origins and early growth of Northampton, *Archaeol Journal*, **110**, 164-74
- Locker, A, 1998-9 Fish bone, in I Soden 1998-9, 106-108
- MacGregor, A, 1985 *Bone, Antler, Ivory & Horn: The Technology of Skeletal Materials since the Roman Period*, London & Sydney: Croom Helm
- Margeson, S, 1993 *Norwich households: The Medieval and Post-Medieval Finds from Norwich Survey Excavations 1971-1978*, East Anglian Archaeol, **58**
- Maull, A, and Chapman, A, 2005 *A medieval moated enclosure in Tempsford Park*, Bedfordshire Archaeol Society Monog, **5**
- Mayer, J J, and Brisbin, I L, 1988 Sex identification of *Sus scrofa* based on canine morphology, *Journal of Mammalogy*, **69** (2), 408-412
- McAree, D, 2007 *Archaeological excavation at Bread and Meat Close, Warwick, Warwickshire, 2003*, Northamptonshire Archaeology, **07/108**
- McCarthy, M, 1979 The Pottery, in J H Williams 1979, 151-242
- Megaw, J V S, 1990 Bone Whistles and Related Objects, in M Biddle 1990, 718-723
- Miller, P, Wilson, T, and Harward, C, 2006 *Saxon, medieval and post-medieval settlement at Sol Central, Marefair, Northampton: Archaeological excavations 1998-2002*, Museum of London Archaeological Service Monog, **27**
- Moore, W R G, 1980 *Northamptonshire Clay tobacco-pipes and pipemakers*, Northampton Museums and Art Gallery
- Moorhouse, S, 1991 Ceramics in the medieval garden, in A E Brown (ed) 1991, 100-117
- MPRG 1998 *Guide to the Classification of Medieval Ceramic Forms*, Medieval Pottery Research Group Occasional Paper, **1**
- MPRG 2001 *Minimum Standards for the Processing, Recording, Analysis and Publication of post-Roman Ceramics*, Medieval Pottery Research Group Occasional Paper, **2**
- Mudd, A, and Hallam, T, 2000 *Former Burgess Site, St. Peter's way, Northampton: Archaeological Evaluation, May 2000*, Northamptonshire Archaeology report
- Norgate, K, 1912 *The minority of Henry III*, London
- O'Connor, T P, 1993 Birds and the scavenger niche, *Archaeofauna*, **2**, 155-162
- O'Connor, T P, 2000 Human refuse as a major ecological factor in medieval urban vertebrate communities, in G Bailey *et al* (eds) 2000, 15-20
- Oakley, G E, 1979 The Copper Alloy Objects, in J H Williams 1979, 248-64
- Orton, C, 1998-9 Minimum Standards in Statistics and Sampling, *Medieval Ceramics*, **22-23**, 135-8
- Oswald, A, 1975 *Clay pipes for the Archaeologist*, British Archaeological Report, **14**
- Payne, S, 1973 Kill-off patterns in sheep and goats: the mandibles from Asvan Kale, *Anatolian Studies*, **23**, 281-303
- Peacey, A, 1996 *The Development of the Tobacco Pipe Kiln in the British Isles* (www.intarch.ac.uk/journal/issue1/peacey/toc.html)
- Pearce, J, 1992 *Border Wares*, Her Majesties Stationary Office
- Pitt-Rivers, A H L F, 1883 Excavations at Caesar's Camp near Folkestone, *Archaeologia*, **47**, 439, 456, 464, and Pl. XX, No. 35
- Platt, C P S, and Coleman-Smith, R, (eds) 1996 *Excavations in Medieval Southampton 1953-69*, **2**, Leicester
- Pritchard, F, 1991 Finger rings, in G Egan and F Pritchard 1991, 325-35
- RCHME 1985 *An Inventory of Archaeological Sites and Churches in Northampton*, Royal Commission on Historical Monuments of England
- Riddler, I, 1995 in R Ivens *et al* 1995, 392
- Saunders, P, (ed) 2001 *Salisbury Museum Medieval Catalogue, Part 3*, Salisbury and South Wiltshire Museum
- Schofield, J, 1994 Medieval and Later Towns, in B Vyner (ed) 1994, 195-214
- Serjeantson, D, 2006 Birds: Food and a mark of status, in C M Woolgar *et al* (eds) 2006, 131-147
- Shaw, M, 1985 Excavations on a Saxon and medieval site at Black Lion Hill, *Northamptonshire Archaeol*, **20**, 113-138
- Shaw, M, and Steadman, S, 1993 *Archaeological Evaluation at St. John's Street, Northampton, 1990*, Northamptonshire Archaeology report
- Shaw, M, and Steadman, S, 1994 Life on the Medieval Backstreet: Archaeological Excavations at Swan Street, Northampton, 1989, *Northamptonshire Archaeol*, **25**, 127-159
- Smithson, V, 1996 Post-medieval Bone Objects, in R P J Jackson and T W Potter 1996, 668-670
- Soden, I, 1998 *St. Peters Walk, Northampton: Archaeological excavations on Woolmonger Street, 1994-7*, Northamptonshire Archaeology report
- Soden, I, 1998-9 A story of urban regeneration: Excavations off St. Peter's Walk, Northampton 1994-7, *Northamptonshire Archaeol*, **28**, 61-127
- Soden, I, 2002 *Pettifer Estates Ltd, Former Burgess Site, St. Peter's Way, Northampton: Archaeological Mitigation Strategy*, Northamptonshire Archaeology report
- Soden, I, 2005 *A written scheme of investigation for pre-emptive archaeological excavation of land at Kingswell Street and Woolmonger Street, Northampton*, Northamptonshire Archaeology
- Spall, C A, and Toop, N J, (eds) 2005 *Blue Bridge Lane & Fishergate House, York. Report on Excavations*, Archaeological Planning Consultants (APC), Monog, **1**
- Spall, C, 2005 Medieval building material, in C Spall and N J Toop (eds) 2005
- Spoerry, P, 2002 Medieval pottery production, marketing and the growth of urban forms and functions: evidence from Ely, *Proceedings Cambridgeshire Antiq Soc*, **91**, 152
- Stace, C, 1997 *New Flora of the British Isles, 2nd edition*, Cambridge University Press
- Starkey, D, Ramston, J, and Reid, C, (eds) 2000, *England's Sea Fisheries: The Commercial Sea Fisheries of England and Wales since 1300*, Chatham Publishing, London
- Thorne, A, 2003 Excavation of a medieval tenement at Deene End, Weldon, Northamptonshire, *Northamptonshire Archaeol*, **31**, 105-124
- Turner, G J, 1907 The minority of Henry III: Part II, *Trans Royal Historical Soc, 3rd series*, Vol **1**, 205-62
- von Becker, C, 1980 *Untersuchungen an Skelettresten von Haus- und Wildschweinen aus Haithabu, Neumunster*, Karl Wachholtz Verlag
- von den Driesch, A, and Boessneck, J, 1974 Kritische Anmerkungen zue Widerristhöhenberechnung aus Langenmassen vor-und frühgeschichtlicher Tierknochen, *Saugetierkundliche Mitteilungen*, **22**, 325-348
- Vyner, B, (ed) 1994, *Building on the Past*, The Royal Archaeological Institute
- Ward-Perkins, J B, 1993 *London Museum Medieval Catalogue 1940*, reprinted 1993
- West, B A, 1982 Spur development: recognising caponised fowl in archaeological material, in B Wilson *et al* (eds) 1982, 255-261
- Williams, J H, 1978 Excavations at Greyfriars Northampton 1972, *Northamptonshire Archaeol*, **13**, 96-160
- Williams, J H, 1979 *St. Peter's Street, Northampton: Excavations 1973-1976*, Northampton Development Corporation, Archaeol Monog, **2**
- Williams, J H, 1982a Northampton's Medieval Parishes, *Northamptonshire Archaeol*, **17**, 74-84

- Williams, J H, 1982b *Saxon & Medieval Northampton*, Northampton Development Corporation
- Williams, J H, and Shaw, M, 1981 Excavations in Chalk Lane, Northampton, 1975-1978, *Northamptonshire Archaeol*, **16**, 87-135
- Wilson, B, Grigson, C, and Payne, S, (eds) 1982 *Ageing and Sexing Animal Bones from Archaeological Sites*, British Archaeological Reports, British Series, **109**
- Woolgar, C M, Sergeantson, D, and Waldron, T, (eds) 2006 *Food in Medieval England: Diet and Nutrition*, Oxford University Press
- Woolgar, C M, 2000 'Take this penance now, and afterwards the fare will improve': seafood and late medieval diet, in D Starkey *et al* (eds) 2000, 36-44