Chapter 5 Discussion

THE PREHISTORIC EVIDENCE by Lisa Brown

The early prehistoric setting

The Iron Age settlement was established within a landscape with a rich history of human activity. No palaeolithic sites have been identified in the Winchester area, but finds of hand-axes and other material attest to activity of that period, probably concentrated on the river gravels at the base of the Itchen Valley. Although there is evidence for extensive Mesolithic occupation in south-east Hampshire (Draper 1966), little material of that date has been recovered close to the site. A lack of earlier Neolithic sites, apart from long barrows, is a feature of Hampshire archaeology, but the apparent absence of causewayed enclosures, henge monuments and other Neolithic constructions may reflect the intense pressure during the Iron Age and Roman periods to convert land to agricultural use, possibly resulting in the clearance of earlier monuments (Fasham 1980).

The best evidence for Neolithic occupation close to the current site has come from the chalk spur of Winnall Down overlooking the Itchen Valley, across the river from Winchester. Neolithic sites discovered during construction of the M3 motorway across the ancient chalk downland of Twyford Down include an interrupted ring ditch of uncertain function radiocarbon dated to 4690±90BP (Walker and Farwell 2000). A pit found close to the ring ditch provided evidence for high quality flint-working at around 2470-2040 cal BC (Pearson and Stuiver 1986). A curvilinear alignment of postholes in the same general area included two deep cone-shaped pits of possible ritual function. One contained a crouched inhumation accompanied by barbed-andtanged arrowheads (Fasham et. al. 1989). Residual early Neolithic pottery was found in sufficient quantity at nearby Easton Lane, just to the south of the Winnall Down sites, to indicate localised activity in this location (ibid., 142).

Bronze Age occupation evidence is relatively abundant in the Winchester area. Some 245 round barrows have been identified in the vicinity and post-built houses and pits indicate that occupation continued at Winnall Down during the middle Bronze Age (Fasham 1985). Evidence of activity spanning the entire Bronze Age was also identified at Easton Lane (Fasham *et al.* 1989). At West Hill, south-west of the modern city (James 1997), and at Twyford Down to the south-east, evidence of both

settlement and burial activity dating from the end of the early Bronze Age has been recovered (Stuart and Birkbeck 1936; Walker and Farwell 2000).

In general terms, however, the available evidence indicates that occupation within the area described by the modern city of Winchester was limited and perhaps sporadic during the earlier prehistoric period. The sparse scatter of Neolithic and Bronze Age features and flint, stone tools and pottery, including a Beaker found at Mew's Lane some *c* 500 m from the site (Beaumont James 1997), suggest that associated activity was peripheral to as yet undiscovered occupation foci, probably located on the higher ground surrounding the city.

The later prehistoric setting

Late Bronze Age-early Iron Age Winchester

Winchester and its environs undoubtedly possess natural geographical advantages that form a favourable position both as a crossing point of the River Itchen and as a location for settlement (Fig. 5.1). Although relatively little is known about the social and economic development of this location during the prehistoric period, it is clear that by the early Iron Age the lower terrace of the spur of chalk downland on the western side of the Itchen was occupied by an apparently unenclosed settlement. This western slope of the modern day St Paul's Hill, in the heart of city, was also chosen later in the Iron Age for the construction of the massive Oram's Arbour enclosure. The origin and development of the Roman and later town of Winchester may be directly linked to early Iron Age occupation of the Itchen Valley and surrounding downland. However, an apparent hiatus between late Iron Age settlement activity within the modern city and the establishment of the Roman town has yet to be firmly bridged by the archaeological evidence.

Late Bronze Age activity in the vicinity of Winchester is verified by finds of Deverel-Rimbury pottery at Winnall Down. The earlier settlement at this site continued as a cluster of at least four postbuilt houses associated with loomweights and querns, a rare example for central Hampshire of a late Bronze Age farming community (Fasham 1985, 126). Possible evidence for late Bronze Age occupation closer to the site comes from Staple Gardens, where a group of coarse flint-tempered pottery was recovered from a small pit or posthole (UAD 1195).

Residual late Bronze Age pottery found during excavations at the Westgate Car Park Site (Collis 1978, 200), resembled a late Bronze Age cremation vessel found in Tower Street (Biddle 1965, Pl. 48, feature 71). Other urns, since lost and therefore of unverified date, are reported to have been found also near St James Lane (UAD 380) and on St. Giles Hill (UAD 1698).

The transition from the late Bronze Age to the Iron Age is characterised in this part of Wessex by a marked development of hillfort construction and/or elaboration, a proliferation of 'celtic' field systems, many of which had earlier origins, and a proliferation of (mainly) enclosed farmsteads. The likely role of the early-middle Iron Age settlement at the Discovery Centre/Northgate site must be viewed within this wider context.

Several hillforts or hilltop settlements were constructed within 10 km or so of the current site at least as early as the Iron Age, but most have been examined only by geophysical survey at most (Fig. 5.1). Oliver's Battery (Farmer 2000) and Merdon Castle (Cole 1994) lie 3 km and *c* 7 km respectively to the south-west of the Discovery Centre/Northgate site and Norsebury Ring 10 km to the north (Payne *et al.* 2006). These monuments are of uncertain date and their primary function unclear. Only St. Catherine's Hill, sited some 2 km south of the city, has been excavated (Hawkes *et. al.* 1930). The limited excavation produced evidence of occupation from around 600 BC predating the enclosure of the hilltop in the middle Iron Age.

Slightly further afield, the comprehensively excavated Danebury hillfort occupies a high position above the Test Valley some 18 km northwest of the site, and the somewhat inaptly named Old Winchester Hill lies located almost 14 km to the south-east of Winchester near West Meon. Most of these hilltop sites would have been visible from long distances away, and so may have served as territorial landmarks or 'landmark enclosures' within the complex Wessex Iron Age landscape (Hamilton and Manley 1997; Payne et al. 2006).

The evidence for early Iron Age activity within the Winchester region has largely been recovered through excavation rather than stray finds or casual observation (UAD Section 3.2, 1). As for the earlier prehistoric period, however, much of the best evidence was recorded in the course of the M3 road workings across Twyford Down and, in particular, at Winnall Down. The early Iron Age enclosed (Phase 3) settlement discovered at this site was comprehensively excavated and remains to date the best-defined of such sites for the period (Fasham 1985). However, recent excavations at an apparently extensive middle Iron Age settlement site at Bereweeke Fields (UAD 942) to the north-west of Winchester produced early Iron Age furrowed bowl pottery, albeit residual in later features, indicating an early origin for the site (Fig. 5.1).

Traces of activity dating to the late Bronze Age/early Iron Age transition (*c* 800–600 BC) within the modern city are largely limited to pottery scatters and partially exposed features. A residual

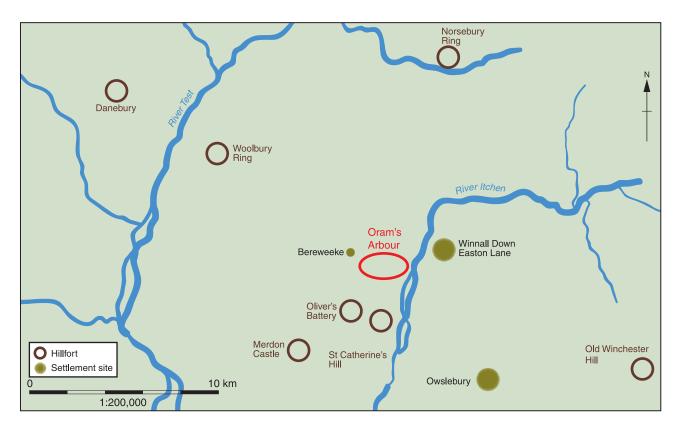


Fig. 5.1 The Iron Age settlement in its regional setting

8th–7th century BC type furrowed bowl fragment was found in a Roman deposit at Staple Gardens (Holmes *et al.* 2004, 57–9), and furrowed bowls resembling examples dated to the 8th–6th centuries at Potterne (Gingell and Morris 2000, 150) were found associated with a hearth in George Street, some 200 m or so from the current site (Cunliffe 1964, fig. 12, nos 1 and 2).

A scatter of excavated sites testifies to permanent settlement and agricultural occupation on the east-facing slope of St. Paul's Hill in Winchester from at least the 6th century BC onwards (Fig. 5.2). Although possible to date, the character and extent of the settlements are not fully understood due to the piecemeal evidence-gathering. It seems, however, that the inhabitants were engaged in a

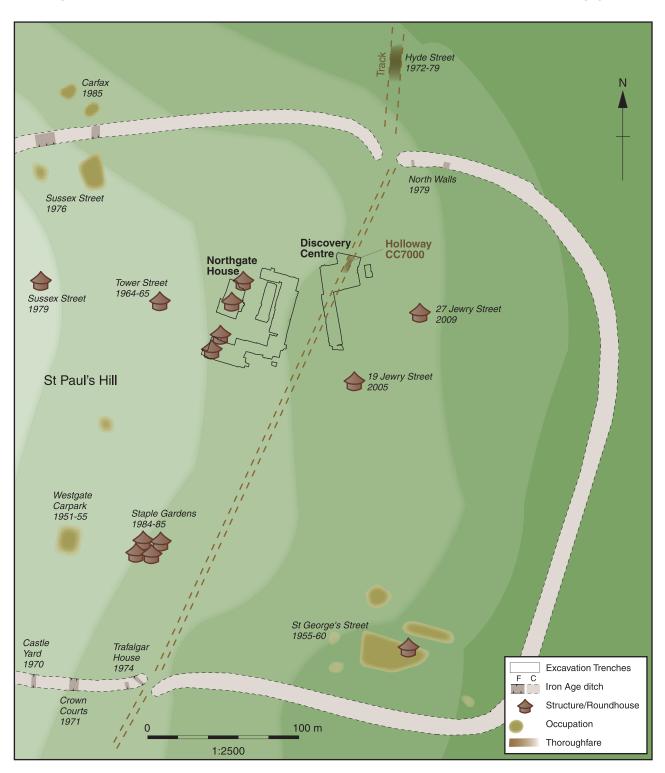


Fig. 5.2 The Iron Age settlement in its local setting

mixed agricultural regime. A postulated grainparching oven discovered at Staple Gardens in 1984-5, a short distance to the south of the Discovery Centre/Northgate site, was observed to predate a series of middle Iron Age roundhouses (Qualmann et al. 2004, 12). Evidence of early Iron Age agricultural activity was found some 100 m to the north-west of the site, where a complex of field boundaries and four-post structures, along with an early Iron Age pit and the base of a developed soil, were exposed in trenches at New Road and Carfax, close to the modern railway station. Two more early Iron Age storage pits, dated by finds of pottery, were found at Victoria Road, adjacent to the northern entrance of the later Oram's Arbour. The remains of another early Iron Age field system associated with stakehole alignments defining livestock pens was recorded at Crowder Terrace on the western side of the railway line, 0.5 km to the south-west of the Discovery Centre/Northgate House site. Buried Iron Age plough soils exposed at North Walls (UAD 1209) and Station Road (UAD 1370) indicate that the field systems were fairly extensive.

The Discovery Centre/Northgate House early Iron Age settlement

The two post-built roundhouses (Structures NH8502 and NH8508) were reasonably well-dated to the early Iron Age on the basis of a few pottery sherds, and by their stratigraphic relationship with later Structures NH8505 and NH8509, which were securely dated on the basis of distinctive middle Iron Age pottery from their gully fills. It is also clear that features previously excavated on this site by Cunliffe (1964) belonged to the same Iron Age settlement, but to which phase of occupation is unclear as only middle Iron Age sherds are described in the report on this site (Cunliffe 1964, 176). Spatially, his feature 15 (0.61 m across and 0.23 m deep) could represent a ring posthole of Structure NH8508 (see Chapter 2, Fig. 2.5), but it contained no dating evidence.

The surviving early Iron Age features, even considered in conjunction with Cunliffe's findings, provide only limited evidence for the layout and organisation of the settlement during this period. It seems likely, but not certain, that the settlement was aligned and contemporary with an early phase of Holloway CC7000, but this was also poorly dated. The early Iron Age domestic focus may have been largely confined to the western side of the holloway, as no clear evidence of pre-middle Iron Age roundhouses have been identified to date on the other side. The relationship between roundhouse Structures NH8502 and NH8508 and the undated structures represented by Posthole Groups NH9800 and NH9801 is uncertain, as their precise date and form could not be ascertained

The early Iron Age settlement sat within an apparently extensive agricultural field system, extending at least as far northwards as the Carfax

and North Walls and westwards beyond the modern railway station as far as Crowder Terrace. Within the agricultural complex were possible fenced animal enclosures and a small number at least of grain storage pits. The parching ovens identified at Staple Gardens and St George's Street testify to grain processing within the early Iron Age community.

At Winnall Down to the east during this period storage pits were far less common than four-post structures, and it may be that NH9800 and NH9801 supported similar structures. This pattern is not consistent for all farming communities of the period, however. At Houghton Down (Stockbridge) near Danebury, early Iron Age roundhouses and pits were found in close proximity (Cunliffe and Poole 2008), but this settlement was located entirely on chalk where the selection of pit positions was not dependent on avoiding lesser subsoils, as was the case at Winchester.

Middle-late Iron Age Winchester

Oram's Arbour

Sometime between *c* 300 and 100 BC an area of about 20 ha of previously unenclosed settlement on the downland spur was enclosed by a bank and ditch of defensive proportions (see artist's reconstruction in Plate 5.1). Sited at an intersection of several pre-existing routeways across the Iron Age landscape, and at a crossing point of the River Itchen, the Oram's Arbour enclosure would have marked a strategic point within an important prehistoric communications and trade network (see Figs 2.2 and 5.2). The enclosing of the Winchester settlement broadly corresponds to the floruit of the nearby unenclosed middle Iron Age Phase 4 settlement at Winnall Down (Fasham 1985, 18–30)

The enclosure exhibits some features of the late Iron Age 'oppidum' class of earthworks, especially its size and location, but recent consideration of the evidence favours an origin somewhere in the middle Iron Age (Qualmann et al. 2004, 87), with abandonment or at least decline in the decades preceding the Claudian invasion, at a time when the oppidum of Calleva at Silchester, the tribal centre of the Atrebates, was thriving. Although Oram's Arbour does not clearly qualify as an oppidum (Collis pers. comm.) several factors distinguish it from the hillforts and other contemporary enclosed sites in the Wessex region. It occupies a highly strategic position overlooking a major river ford and crossroads. The specific morphology of the enclosure exploits natural landscape features, including the floodplain on the eastern side and a break of slope on the northern and western sides. This position would undoubtedly have been ideal for controlling or at least encouraging access to the site from approach routes in all directions (Qualmann et al. 2004, 91). The find at the Discovery Centre/Northgate site

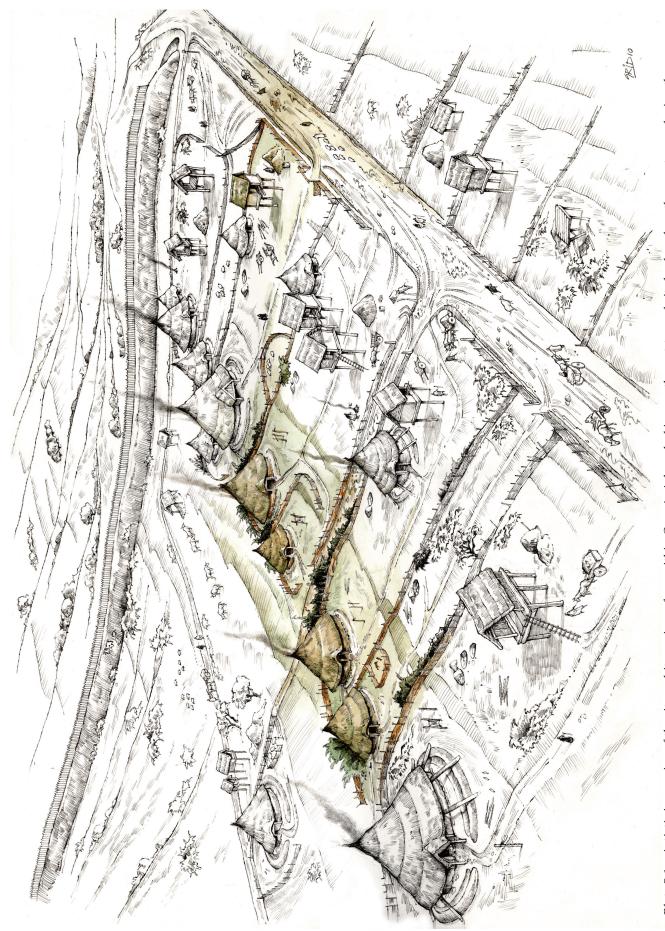


Plate 5.1 Artist's impression of the site and its environs from within Oram's Arbour looking north-west towards its bank and northern entrance during the 5th to 1st century BC, Phases 1.2–1.3: middle to late Iron Age

(albeit unstratified) of an exotic Dobunnic coin of *c* 40 BC (see Chapter 2, Plate 2.2) must also be taken into account with the other evidence when considering the role of the enclosure.

Qualmann has offered a possible model for the role of the enclosure within the wider middle Iron Age landscape of hillforts and low-lying settlements. He postulates that Oram's Arbour, sited centrally within the 'St Catherine's Hill-Worthy Down' ceramic style zone, may been created by the inhabitants of this area to exploit trade routes that were emerging as a result of increasing contact with the Roman world (Qualmann et al. 2004, 92-3). The site would have been more easily accessible than St Catherine's Hill, lying on a valley slope rather than a hilltop and dominating the north-south route from the south coast up the Itchen Valley. Although not particularly rich in exotic materials, evidence of coastal trade in the form of sea fish and briquetage have been recovered, along with native and exotic coins (Biddle 1983, 108). A small collection of Dressel 1 amphorae has also been collected from the enclosure and from sites nearby, including Owslebury (Collis 1970).

Evidence of middle Iron Age activity within Oram's Arbour is reasonably abundant, but it has rarely been possible to link specific finds and settlement features to the occupation and use of the enclosure itself, except where stratigraphic relationships with the earthworks were clear. The enclosure earthworks were not designed to incorporate the entire early Iron Age agricultural system, as the northern and southern ditches excluded, and indeed bisected, the field blocks at Carfax and at Crowder Terrace (Fig. 5.2). This could lend weight to the argument for a short period of abandonment of the settlement at the end of the early Iron Age (Qualmann *et. al.* 2004).

Observations and small scale excavations from the 19th century onwards have allowed the construction of a clearer picture of the configuration, if not necessarily the function, of the Oram's Arbour enclosure. By 1955 the northern and southern ditches of the enclosure had been recorded (Collis 1978, 245–255) and in 1966–7 the western entrance was identified (Biddle 1967, 254; 1968, 251). Finally, an inturned southern entrance was exposed during a salvage excavation at Trafalgar Street in 1974 (Biddle, 1975, 8; Qualmann et al. 2004, 8, 84) and by the late 1970s the entire circuit of the enclosure had been tentatively identified (Collis 1978), although the precise line of the eastern side remains unclear. Collaborative investigations by the Winchester Museums Service and King Alfred's College, Winchester in 2001–2 clarified the nature of the earthworks and of areas of the interior of the enclosure.

The combined evidence shows that Oram's Arbour was defined by a ditch surviving between 4 m and 11 m wide and up to 4.6 m deep (Thorpe and Whinney 2001). The eastern earthworks appear to have been constructed by enhancing the natural

valley-side terrace (Qualmann *et al.* 2004, 84-5). The holloway (CC7000) ran between the north-east and south-east entrances of the enclosure.

Traces of middle and late Iron Age activity, including roundhouses, postholes and pottery, have been found during excavations at numerous sites within the enclosed area, including at Tower Street, Staple Gardens and Westgate Street (Cunliffe 1964; UAD 893 Biddle 1965, 234–5; Collis 1978, 186–197; Fig. 5.2). A transect of the Roman wall in 1960 produced further indications of contemporary activity (Cunliffe 1964, 58–62; UAD 793). A probable roundhouse was also recorded at Castle Yard in 1930–31 (Qualmann *et al.* 2004).

By the middle Iron Age, the earlier settlement excavated at the Discovery Centre/Northgate site had clearly expanded to the east of the holloway. The discovery near Jewry Street Library of late Iron Age activity was recorded in the Hampshire Observer in 1939 (Qualmann *et al.* 2004, 82), and recent excavations at 19 Jewry Street have uncovered more middle-late roundhouses on the eastern side of holloway CC7000 (WA 2008, 6) (Fig. 5.2). These features were sealed in places by a Romanperiod chalk surface and elsewhere by a late Iron Age/early Roman soil horizon. Further excavations at 27 Jewry street in 2009 revealed the location of another probable roundhouse (Steve Teague pers. comm.).

There remains a lack of closely datable evidence from Winchester for the period between the immediate pre-Roman Iron Age and the establishment of the *civitas* capital at about AD 75, although recent fieldwork has enhanced the archaeological record (Qualmann 1991; Qualmann *et al.* 2004; Thorpe and Whinney 2001; Whinney 1994).

The Discovery Centre/Northgate House middle-late Iron Age settlement

The middle Iron Age settlement lay within the eastern sector of Oram's Arbour, later occupied by the north-west corner of the Roman walled town. Some idea of the settlement arrangement can be gleaned from the surviving evidence. Of the five roundhouses (Structures NH8504, NH8505, NH8506, NH8507 and NH8509) defined by gullies that superseded the early Iron Age buildings, four lay in a linear arrangement following the alignment of holloway CC7000. The roundhouses identified in Staple Gardens in 1984–5 (Qualmann et. al. 2004) may have continued the alignment southwards. The less well defined Structure NH8506 was possibly one of a second row of houses that occupied the unexcavated and/or disturbed area running southwards from it, but this is entirely speculative. Whether the roundhouses in Jewry Street on the opposite side of the holloway were part of the same settlement is unclear, and these, in any case, were dated somewhat later, but on limited ceramic

Little in the way of contemporary agricultural activity has been identified within the earthworks

and the main field systems may have been located beyond their limits. There were no storage pits in the vicinity of the structures, but a separation between domestic space and agricultural and storage space may have been a feature of the settlement, and the higher chalk a short distance to the west of the roundhouses would have been a more suitable position for features intended for grain storage. In fact, middle Iron Age pits were found in the western part of Oram's Arbour during the course of small scale excavation (Qualmann et. al. 2004, 82-5 and fig. 36). At the Phase 4 unenclosed middle Iron Age settlement at Winnall Down, there was a clear spatial arrangement wherein the roundhouses occupied the western area of the settlement and were separated by about 20 m from a relatively orderly range of pits, the two elements divided by a blank area, presumably a thoroughfare (Fasham 1985, fig. 15).

The domestic economy continued to be based on agriculture during the middle and late Iron Age. The charred plant evidence from the Phase 1.2 deposits indicated a slight increase in the cultivation of bread wheat (spelt/emmer) over barley during this time, suggesting that there was a change in the arable regime and in the local diet. However, an examination of the later prehistoric animal assemblage, which was dominated by sheep/goat and cattle, with some pig throughout the later prehistoric and early Roman period, failed to reflect a transition from a mutton dominated diet in the early Iron Age to one that favoured beef and pork, as has been cited as a feature of increased Roman influence (see Strid, Chapter 8). This small piece of evidence may have wider implications for the development of the later prehistoric settlement economy at Winchester but may merely corroborate the argument for a hiatus between the late Iron Age occupation of Oram's Arbour and the surrounding landscape and the establishment of the civitas capital at Winchester.

Conclusions

The results of the Discovery Centre/Northgate House site excavations have contributed significant evidence for the later prehistory of Winchester. Taken together with the results of piecemeal excavation and observations elsewhere within the modern city and in the surrounding area, the Iron Age settlement features add to the growing body of evidence that can help to establish the nature, sequence and changing status of the rural agrarian community that preceded the establishment of the Roman town. Topographic location was clearly a significant factor in influencing the evolution of the ancient trackway network that must subsequently have determined the orientation and arrangement of several phases of settlement during the early and middle Iron Age, and the construction of the somewhat anomalous Oram's Arbour enclosure. Whether there was a significant hiatus in activity in the late pre-Roman Iron Age period is a question that relies on the recovery of yet more archaeological evidence.

THE ROMAN TOWN by Edward Biddulph

Origins and the pattern of development

Roman Winchester was established in the late 1st century AD. The enclosure at Oram's Arbour was partly covered by the town, although earthworks were of sufficient preservation to be incorporated into Roman defences. The earthwork rampart was erected in the late Neronian-early Flavian period; coin evidence suggests AD 75 (Biddle 1975a, 110), although Wilson (2006, 12) speculates on a date closer to AD 100.

The Discovery Centre/Northgate House site occupied part of the north-west quarter of the Roman town (Fig. 5.3). The earliest Roman-period pottery recovered from the area of excavation included a terra nigra bowl, a South Gaulish samian platter (Drag. 15/17), and a North Gaulish white ware butt-beaker, which were in use after c AD 50 though likely to have been deposited before *c* AD 80 (see Biddulph and Booth, Chapter 7). Oram's Arbour, the Iron Age enclosure, had an indirect influence on the development of the Discovery Centre/Northgate site. The location of its north-east entrance subsequently marked the entrance of the Roman town's north gate, and it is thought that late 1st-century Street CC1703, which shared the orientation of the Iron Age holloway (CC7000), led to the north gate. Ditch CC3486 also extended along the line of the holloway. Apart from this, there is little evidence for continuity between the Iron Age activity and earliest Roman phase at the Discovery Centre site. Potentially occupation of the middle Iron Age structures extended to the mid 1st century AD, since globular jars of the sort recovered from Structures NH8505 and NH8506 (see Chapter 7, Fig. 7.1, nos 4 and 6) have long date ranges that continue beyond AD 43 (see Brown, Chapter 7). Furthermore, the rudimentary surface along the edge of the Iron Age holloway (CC7000) contained a cattle bone that was radiocarbon dated to 40 BC-AD 90 (OxA-16793). The shared orientation of the Iron Age holloway and the early Roman street and ditch has been noted, although the alignment may simply be a coincidence determined by the topography. Even assuming that the latest Iron Age activity dated up to the mid 1st century AD, the subsoil (NH8503 and CC7001) that covered the abandoned Iron Age features marks a break in domestic occupation of the area between the Iron Age and Roman period. The horizon, above which all earliest Roman features were placed, had the environmental signature of a ploughsoil (see Macphail and Crowther, Chapter 8 and Digital Section 17); charred corn cockle seeds suggest that the soil formed, or continued to form, after AD 43 (see Carruthers, Chapter 8).

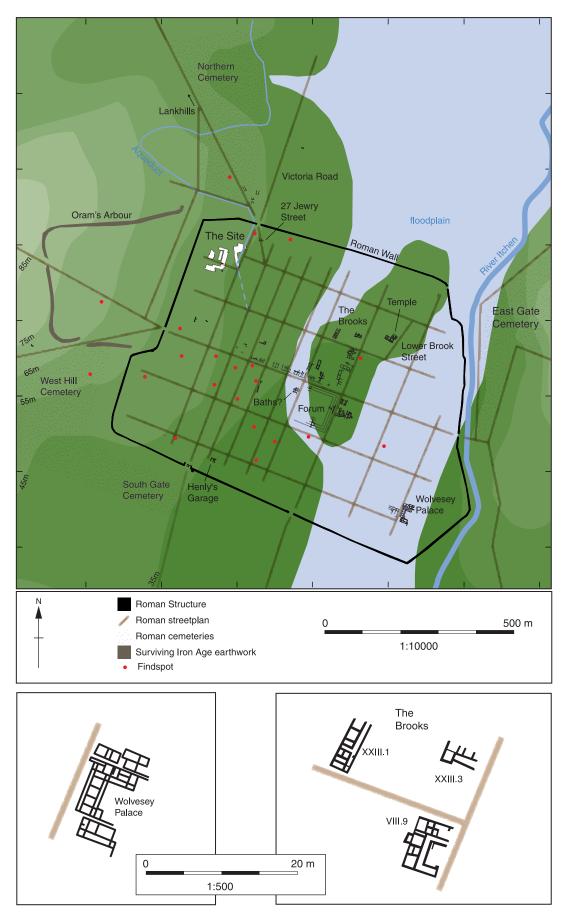


Fig. 5.3 Roman Winchester

Topography had a significant bearing on the development of the Discovery Centre/Northgate site. The site was situated on the south-east facing slope of the Itchen Valley (Qualmann 1993, fig. 4), and the street pattern reflected this. The earliest metalled street (Street CC1703) was orientated NE-SW, parallel with the river and aligned with the contours of the slope. The evidence is patchy, but judging by the orientation of posthole alignments and wall segments, structures fronting on to the street extended from it at right-angles. It is reasonable to suppose, too, that Street CC1703 dictated the alignment of the second street, NH8511/8513, which we assume extended NW-SE to meet Street CC1703 and mark the second side of the insula (the western and northern sides presumably being formed by the town walls). This is not confirmed by the excavated evidence, though, and in any case the street pattern in this quarter of the town need not have been so regular. Information relating to the dating of Street CC1703 adds little to the chronology of the street grid, which was established within the final quarter of the 1st century AD (Wacher 1995, 293), presumably coincident with the erection of the earthen ramparts. No dating evidence was recovered from the earliest deposits associated with Street CC1703. However, the fills of ditch CC3486, which may have served as a roadside drainage channel, contained some of the earliest Romanperiod pottery, including the terra nigra bowl and white ware butt-beaker mentioned above. It is also instructive that the first metalled surface was laid on the Iron Age subsoil. Street NH8511/8513 was metalled in the 4th century (gravel levelling below the surface contained 4th-century pottery), but probably replaced an earlier holloway. Amounting to little more than a track, this was shaped by the inhabitants of the town and its course may well have developed organically to reflect the short-cuts and meanderings of daily use.

Structures NH8519 and NH8521 perhaps never encroached on the metalled street, but instead were built alongside a street that wound its way around properties. Generally, though, the pattern uncovered in the north-west quarter of the town adds to the view that topography affected the development of the town as a whole. At The Brooks, situated on the floodplain of the River Itchen (Fig. 5.3), early Roman occupation was focused on the eastern part of the site, which sat on an island of tufa (Zant 1993, 46). Drainage and consolidation in the later 2nd century enabled the lower-lying western part of The Brooks to be occupied. Rees notes (forthcoming) that expansion into the eastern suburbs was restricted by a steep chalk slope, while the hillside rising from the Itchen meant that the western suburbs remained relatively sparsely occupied.

The evidence relating to a military presence in the town during the 1st century is almost nonexistent (Wacher 1995, 291). Ditches reputedly of military character below Flavian structures in Lower Brook Street could offer a location for a fort, but, as Zant (1993, 50) points out, unless the installation was a very minor post, the fort would have extended into the lowest-lying area of the floodplain, which was unavailable for occupation until the late 2nd century. Evidence from the Discovery Centre/Northgate House site included nothing of military character, at least not dating to the early Roman period. A copper alloy strap-mount from a Dark Earth deposit and a bow-brooch from Structure NH8518 could have been used by military personnel, perhaps serving in a unit engaged in policing duties, but in any case belong to the later 2nd and 3rd centuries (see Cool, Chapter 7). Still, the argument for a military or at least a state involvement in the early development of the town is not entirely lost given the date of the ramparts and the possible circumstances in which they were built; Wilson (2006, 30) suggests that the ramparts denote municipal status on a par with Verulamium.

Nature of occupation

Traces of three buildings dating to the later 1st century were found. There may have been more structures, but the medieval truncation makes it impossible to gauge the density of occupation. In any case, a yard surface (Group CC7002), immediately north of Structure CC7049, indicates that there were open areas. The marginal aspect to the location of buildings extends to their use. That the yard was a scene of industrial activity is clear from the soil reddened by burning and the remains of hearths, and is also well supported by a large quantity of material relating to metalworking recovered from a layer of trampled soil. Fragments of smithing hearth bottoms, hearth linings, and cinders provide unequivocal evidence for iron smithing (see Starley, Chapter 7); this on its own cannot confirm that the yard was the place of this activity and indeed the evidence may simply represent dumped material. However, hammerscale—a particularly useful indicator of location, typically being deposited very close to where it was produced—was recovered from pits associated with the yard surface. Whether smiths occupied any of the nearby structures is uncertain, although a small amount of fuel-ash slag from Structure CC7049 may identify this as a workshop that opened onto the yard.

Maltsters or brewers may also have been active in the north-west part of the town during the later 1st century AD. Deposit CC1766 within Phase 2.1 Structure CC7004 contained relatively abundant sprouted grains of spelt wheat, collapsed grains and detached embryos that indicate waste from malting (see Carruthers, *Digital Section 15*). In the late Roman period, malting would typically be carried out in a corn-drier and permit two of the essential stages to occur—germination to promote sprouting and heating to arrest it (Reynolds and Langley 1979). Such structures were not common in Roman Britain during the 1st and 2nd centuries. Instead, the grain was steeped in water-filled tanks or lined

pits to allow it to germinate before being removed and spread out on the floor of a warm, dimly-lit barn to continue the process (Dineley 2004, 2–3). The grain was then parched over hearths to arrest germination, or alternatively the maltsters rolled hot stones over it (ibid., 4). The excavation at the Discovery Centre site uncovered the sorts of features that an early Roman maltster might have utilised—chalk or mortar surfaces as malting floors, buildings as malthouses, hearths for parching, and a channel supplying water—but attributing them to malting specifically is problematic.

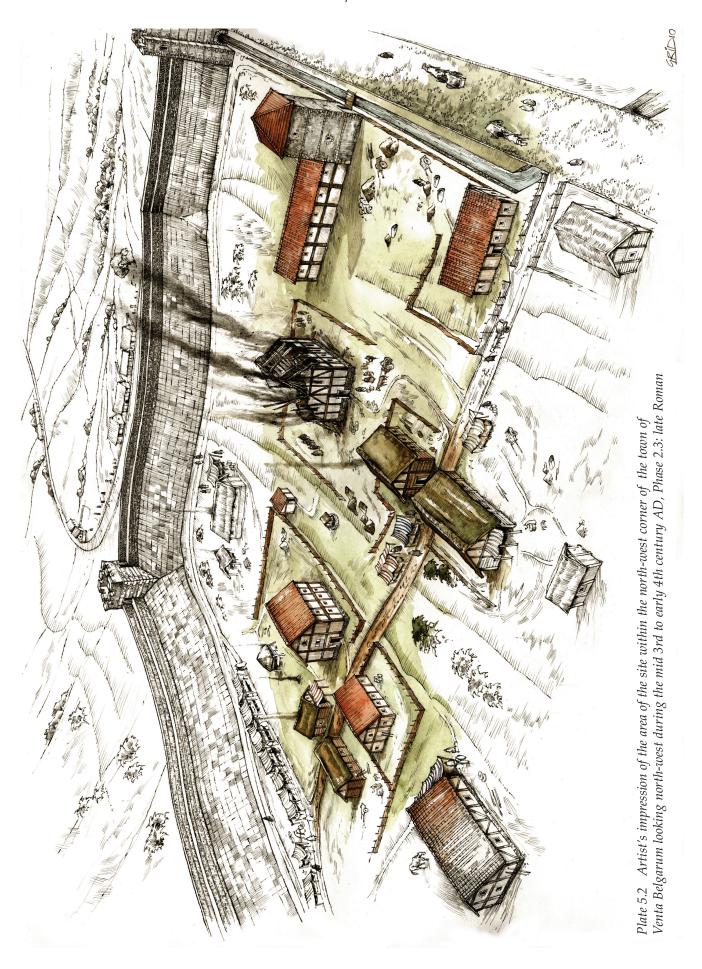
Little survived of the earliest structures in the Northgate House site, which dated to the 2nd century AD and survived as odd postholes and pits. Industrial debris, such as hammerscale, fuel ash slag, and hearth lining fragments from one pit (CC1688), suggests that smiths worked here. The building of Structure NH8522 in the first half of the 3rd century heralded a change in the use of the area. Its masonry footings, painted walls, possible paved floor, and a range of ceramic continental-style tablewares points to relatively high-status domestic occupation, although hammerscale retrieved from an associated pit suggests that ironworking continued nearby. Given the depth and condition of a well-worn holloway, the north-west quarter of the town saw a reasonable flow of traffic during this time. It was replaced by a metalled street (Street NH8511/8513) after AD 300, and this appears to have encouraged further building work, or was a product of increased structural activity. The buildings erected after AD 250 may have been principally domestic or were used for craft or industrial activity that left no trace (see artist's reconstruction in Plate 5.2). No ironworking evidence was recovered within the structures or from associated features, although smithing may have continued in this area during the 4th century (a small quantity of hammerscale was recovered from Pit Group NH8524) and expanded eastwards into the Discovery Centre site, as attested by 12 kg of slag, smithing hearth bottoms and hammerscale from pit CC1688. A waste glass fragment or moile, intrusive in a prehistoric subsoil, adds to evidence for glassblowing in Winchester, although such activity is unlikely to have taken place at the Discovery Centre/Northgate House site, as the amount of waste is too low (see Cool, Chapter 7).

Towards the middle of the 4th century, Street NH8511/8513 was re-surfaced. This proved an optimistic measure and soon afterwards maintenance ceased, allowing soil deposits to accumulate and structures to encroach. Structure NH8521 was erected across the street and it is possible that access through the area was by means of an irregular track which snaked around the buildings. Vitrified hearth linings and oven wall recovered from the structure may identify it as a workshop. Structure NH8520, probably contemporary with NH8521, was also potentially a workshop, though used for weaving. The discovery here of weaving tablets may help us to place the *procurator gynaecii*, *Ventensis* (weaving-

works' manager), mentioned in the Notitia Dignitatum, in Winchester, rather than Caistor-by-Norwich or Caerwent (Wacher 1995, 299). The marginal location of the Northgate House site makes it ideal for cloth-manufacture and unsocial activities like fulling, but whether this area supported the large industry implied by the post of procurator is uncertain. Cool (Chapter 7) reminds us that weaving tablets were more appropriately used in a domestic, rather than industrial, setting, and that the amount of textile working equipment from Winchester is very low. All buildings were probably abandoned by the late 4th century. Trenches cut across the channel flanking Street CC1703 to remove the structural material are perhaps suggestive of more extensive robbing, but in any case the landscape was sufficiently denuded to allow Dark Earth to form.

The low-status, artisanal character of the site is reflected in the diet of its inhabitants. Apart from malting, spelt was used, along with bread-type wheat, for everyday consumption. The charred remains suggest that the hulled cereals were cleaned and ground in the home on a subsistence level (see Carruthers, Chapter 8). Barley, oats and rye were grown, but used mainly for fodder. Evidence of diet was also collected from cess pit NH8521 in the form of peas and sloes or cherries, and charred shells from other features suggests that hazelnuts were foraged and consumed regularly. Together the evidence points to a diet with a low-status, rural character.

This is supported by the animal bone assemblage, which recorded a diet largely based on beef, lamb or mutton, and pork, supplemented by chicken and game. The assemblage was limited and there were relatively few individuals that could be aged and sexed. However, the data that are available suggest that most cattle were reared for meat. Cows did provide milk, but this was mainly the role of sheep and goats. Pigs provided meat and fat only and inevitably this led to an assemblage dominated by boars (see Strid, Chapter 8). This profile is consistent with urban sites in Roman Britain and may owe something to the influence of the military diet, which gives a similar profile. Dobney (2001, 36–7) contrasts the military and urban pattern with the Mediterranean diet, which, judging by recipes in Apicius and other ancient sources, was based around pork to a much greater extent. Winchester's location meant that fish inevitably contributed to the diet. Salmon, trout, eels and flounder-all represented at Winchester—are freshwater fish that may have swum in local rivers and streams. Herrings, sea bream and flatfish were imported presumably from nearby coastal waters, though perhaps arrived as preserved products (see Nicholson, Chapter 8). These were accompanied by oysters, mussels and periwinkles (see Campbell, Chapter 8). The animal bone suggests that some of Winchester's inhabitants enjoyed a distinctly north-west European diet, but while the ingredients were not, on the whole, exotic, they were used in continental ways. In the kitchen,



mortaria—items specified in *Apicius*—were used for mixing and grinding ingredients, and dishes for cooking on the hot ashes of the gridiron. In the dining room, an assortment of dishes, flagons, and beakers, some imported from Gaul or made in Britain in imitation of continental styles, were placed on the dining table.

The site's low status contrasts with the higherstatus occupation in other parts of the Roman town. Comparison of pottery assemblages from the Discovery Centre/Northgate House site and Victoria Road outside the north wall along the road leading out of the north gate (see Fig. 5.3) suggests that residents of the northern suburbs had better access to imported tablewares and were higher placed in social or wealth terms, at least during the 2nd and 3rd centuries (Rees forthcoming). The 1st and 2nd-century structures (insula VIII) at The Brooks in the central part of the Roman town (Fig. 5.3) were timber-built, like those at the Discovery Centre/Northgate House site, but possibly included a winged or courtyard house (Zant 1993, 51), which was almost certainly domestic. The contrast was starker in the late 2nd century when large private houses were built. Structures VII.10 and XXIII.1 at The Brooks were built to a double corridor plan; the latter incorporated elaborate mosaics (Zant 1993, 79). Further development took place in the 4th century. Building VIII.9 acquired mosaics, while a hypocaust was inserted into building XXIII.3 (Zant 1993, 83-127). A masonry town house built in the later 2nd century was uncovered at Henly's Garage inside the south wall (Rees forthcoming). The Wolvesey Palace site in the south-east corner of the town similarly developed from an area of street-front timber structures in the early-Flavian period into masonry buildings in the later Roman period. Building 2, which replaced an earlier timber structure in the mid Roman period, was a relatively grand town house with a courtyard, a well, veranda, and series of rooms extending off a corridor (Fig. 5.3). Another building had a tessellated floor (Biddle 1975b, 321–26).

We know little about what the buildings looked like above ground and how they were decorated internally. Fragments of ceramic building material and worked stone point generally to the use of limestone slabs and ceramic tiles for roofs and floors, but none was found in situ and, being often found in deposits laid after the identified structures were abandoned, need not have derived from those buildings. Poole and Shaffrey (Chapter 7), suggesting that much of the material arrived from elsewhere, note a higher than usual proportion of ceramic brick (most often used in ovens) and a conversely low proportion of roofing and flooring tile, a profile associated more with rural than urban sites, and in strong contrast to the relatively larger and more varied assemblage from The Brooks site, where town-houses were uncovered (Zant 1993).

There are, however, traces of evidence that give some impression of appearance. Structure NH8522

provides more clues than most buildings, since a fire that led to its abandonment also helped to preserve important structural elements. Removal of demolition layer NH2589 revealed in the soil the charcoal stain of burnt timbers. The stain retained the structural form of the timbers, which almost certainly formed part of a wall panel that collapsed during the fire. This had been left in place and was eventually covered in soil. A block of wall plaster recorded on top of a burnt timber suggests that the entire surface of the panel was plastered, and consequently the beams would have remained unseen by the building's occupants. The in situ plaster was painted red, but fragments with an orange wash and a greystriped motif were collected from the demolition deposit, pointing to a colourful decorative scheme overall (see Chapter 2, Fig. 2.15 and Plate 2.5). There are further clues to the building's appearance. The chalk and mortar footings that define the southern side of the building may have supported timber walls, while a slightly burnt limestone slab from chalk layer NH2646 possibly paved a floor within the building. An unpainted clay fragment with an impression of a lath or rod from demolition layer NH2589 could have formed part of the ceiling.

The evidence for the appearance of other buildings was sparser still. Structure NH8516 was a timber-framed building presumably walled with daub. Limestone slab fragments from two of the building's postholes were undoubtedly structural and, recovered from upper fills associated with abandonment, were probably from the building itself. However, it is uncertain whether they formed part of the roof or floor (either on top of or additional to a chalk surface).

Structure NH8519 also yielded evidence of flooring, but in this case a worn sandstone tessera and three limestone slab fragments found in the packing fills of two postholes are much less likely to have been used inside the building and instead relate to a structure that had been re-floored or abandoned when NH8519 was erected. The arrangement of postholes and postpads of Structure CC7003, dating from c AD 270 to the later 4th century, suggests that it was an aisled building, but the paucity of evidence for external walls points more strongly to a simple hall-type structure. Good parallels are known at Beddington villa, Surrey. Two late Roman buildings *c* 18 m by 7 m were defined by post-pits, or occasional post-pads, up to 1.5 m in diameter. Like Structure CC7003, there was no evidence of aisles, although the report authors did not regard the provision of aisles as impossible (Howell 2005, 32–5). A wattle-and-daub filling in between the posts of Structure CC7003 is suspected, but the small amount of daub assigned to the structure is not sufficient to settle the matter. Hall-houses have been regarded as domestic structures or industrial or craft buildings. A byre for livestock is another obvious possibility, although J T Smith (1997, 45) considers the necessary evidence, such as drains or space, to be limited generally. A piece of marble wall

veneer from a pit associated with Structure CC7003 need not have belonged to the building and may well have been deposited casually with waste drawn from a variety of sources. However, it can be grouped with other imported marble fragments found on the site that nevertheless point to buildings in the area that approached the luxury of the townhouses at The Brooks.

Returning to the building's function, fired clay with wattle impressions recovered from an upper fill of one of the building's postholes formed part of an oven dome, potentially giving the building a working, rather than domestic, role, for example as a bakery. Grain storage was important too. A deposit of bread-type wheat recovered from a late Roman midden associated with street surface NH8512 reminds us that large amounts of processed grain was a requisite for feeding the town's inhabitants; the wheat showed signs of insect damage and presumably had been burnt in order to eliminate storehouse pests (see Carruthers, Chapter 8). If the building was not associated with grain storage or baking, then an industrial use is an alternative possibility. The scale of the metalworking, and possibly weaving too, may have been significant, and a large hall provided well-needed space for working, storage and administration. The appearance of a large rural-type building in an urban setting cannot be regarded as completely unexpected. At Silchester, an aisled building constructed in the 2nd century contained the remains of hearths from which evidence of metalworking was recovered, allowing the excavators to describe it as a work hall (Clarke and Fulford 2002, 139-41).

The aqueduct

The conduit that extended along the edge of Street CC1703 offers tantalising support for the course of an aqueduct proposed by P J Fasham and R J B Whinney (1991). A watching brief at Woodham's Farm in the Itchen Valley uncovered a steep-sided and flat-bottomed channel up to 2.7 m wide. The observation that the feature followed the contours of the Fulflood valley, the presence within its waterlain fills of aquatic, open-land and wetland molluscs, and its similarity in terms of shape with the Dorchester aqueduct led Fasham and Whinney to interpret the channel as a section of an aqueduct servicing Winchester (ibid., 5-10). A source in an area of springs near Itchen Stoke is a possibility. The channel, if continuing a gentle downhill course along the side of the valley, would wind its way around Headbourne Worthy before arriving at the north gate in the north-west quarter of the Roman town, giving a total length of 23.75 km. K E Qualmann (1991, 11) suggested that deep deposits of silty clay uncovered at Andover Road immediately outside the north gate may mark the location of a reservoir or cistern, which could feed pipes and channels allowing water to be distributed to different parts of the town. Fasham and Whinney (1991, 8) put the height of the putative cistern at 47.72 m aOD. Potentially, channel CC1850 observed along the western edge of the street can be connected with such a cistern. Its profile, similar to that of the Woodham's Farm channel, and mortared flint lining make it ideal for carrying water, while the levels obtained along the base of the channel were appropriately lower than the level at the north gate and suggested a gentle fall to the south.

There is a difficulty, however, with identifying the channel with the aqueduct. How the channel was constructed is problematic. It is likely to have been covered if it was to avoid receiving the run-off from the street surface or casually-dumped waste material, and was almost certainly covered where it crossed the street itself. Unfortunately, the archaeological evidence is equivocal on the matter. We know that the channel was lined with a hard flint mortar surface, but what part, if any, the mass of ceramic building material found within the fill of the channel played is open to question. None was found in situ, but instead recovered from the backfill of a robber trench and the overlying Dark Earth. Bricks and flat tiles that could have covered the channel, or formed supports for a cover, were found in significant quantity, but roof tiles and flue-tiles were also collected, albeit in smaller quantity, indicating that the bricks were dumped as part of a mixed deposit of material potentially derived from elsewhere. Evidence of use that some bricks exhibited also pointed to other structures; burnt tiles, for example, could have been incorporated into a hypocaust, although it is possible that water flowing through the channel was responsible for the heavy abrasion seen on the underside of some flat tiles.

A street-side timber-lined channel from The Brooks may help with the interpretation here. The construction cut was substantial (the first phase was over 4 m wide and 2 m deep), but the wooden channel inserted into it was, at 2 m wide, only marginally wider than channel CC1850 (Zant 1993, fig. 23). The channel extended east-west to ultimately issue into the Itchen or a smaller stream and was dug to drain the land around and reclaim the floodplain (Zant 1993, 52). Its location surely means that channel CC1850 cannot have helped with land reclamation, but its construction (and no doubt regular maintenance and cleaning), like that of The Brooks channel, suggests an equally significant function. That said, street-side ditches designed to take rainwater run-off from the street surface were at times substantial depending on the size of the street. Ermin Street extending through Cirencester was at least 5 m wide and 1.5 m thick (though this included multiple episodes of resurfacing). The ditch flanking the street was a concaveprofiled feature measuring 2.5 m wide (Havard and Watts 2008, 35). The side-ditches associated with another part of Ermin Street were on average 2 m wide and 0.5 m deep (Evans 2008, 42). Still, the use of a mortared flint lining, even without tiled facing or capping, represents a work of engineering that must take the function of channel CC1850 beyond that of an ordinary street ditch. That it served as some form of aqueduct seems most likely, but how it related, if at all, with the leat that approached the north gate, or whether it was covered, is difficult to resolve on present evidence.

From urban to sub-urban

The buildings of the final phase of occupation in Winchester's north-west quarter were abandoned during the second half of the 4th century. Dating from pottery and coinage suggests that the process of structural abandonment spanned the period from about AD 340, when the last in the series of pits cut in the Northgate House area was filled, to AD 380 or later when Dark Earth was accumulating over the late Roman properties. The events of the intervening years are difficult to establish, but some clues are provided by the structural remains, which generally point to a period of deconstruction and robbing. Most of the postholes that define Structure NH8519 exhibited evidence of postpipes, indicating that the posts had rotted in situ and possibly that the building decayed and collapsed as disrepair and the elements took their toll. Such evidence appears to be exceptional, however, since the posts belonging to Structures NH8520 and NH8521 were almost certainly removed deliberately. The evidence lies with the character of the posthole fills. The postholes of both Structures NH8520 and NH8521 were filled with a single deposit, or occasionally a second and final fill. In these cases, the posts either sat on the base of the posthole and were packed with a single deposit or rested on a deposit of usually stonier material that formed a pad, and were then stabilised with packing. When the posts were removed, the packing fills collapsed into the void. This contrasts with the postholes of Structure NH8519, where the packing fill retained the shape of the post, which survived as a soil stain. We should note that all postholes undoubtedly suffered from later truncation and may therefore lack upper fills, but the differences between the postholes of Structure NH8519 on the one hand and Structures NH8520/NH8521 on the other are sufficiently marked to suggest contrasting treatment. That materials were removed from the site is shown more clearly by channel NH1850, or rather the trenches cut either side of the channel. Robbing of the channel and some of the structures was, it seems, a systematic operation.

If the picture that emerges of demolition, rather than gradual decay, is tentative, being based on limited evidence, it is nonetheless consistent with that from other parts of the town. A similar phase of demolition was recorded at The Brooks. Building VIII.9 (Fig. 5.3) was demolished by the third quarter of the 4th century, while others continued into the final quarter (Zant 1993, 152). Evidence for this phase comes from scatters of building material around the structures. Such spreads were largely

missing from the Discovery Centre/Northgate House site, but this may be because the buildings were mainly timber-built. Zant makes a similar observation with regard to The Brooks. *Insula* VIII had relatively little demolition material associated with it compared with *insula* XXIII, but its masonry features were limited to footings and roofing (Zant 1993, 133). The town house at Henly's Garage was poorly maintained during the second half of the 4th century, and it too succumbed to robbing (Rees, forthcoming).

The second half of the 4th century was clearly a period of upheaval, as buildings were taken down, the materials removed in some cases, and remaining upstanding structures levelled. But while the formal structures of town life were being dismantled, occupation of some sort continued; after all, there must have been people around to carry out the demolition. Structures associated with this occupation are hard to detect, presumably because they comprised temporary wooden buildings that left few remains. Evidence possibly relating to such structures was identified within the rubble at The Brooks; rough surfaces and hearths were recorded overlying the demolition deposits of building VIII.1, but the nature of this occupation—domestic, industrial or both-could not be determined by the excavators (Zant 1993, 154). Stakeholes and an oven seen at the southern end of the Discovery Centre area may relate to a similar period of post-urban occupation, but these features were dated broadly and cut into the prehistoric subsoil, and it was therefore not possible to assign the features to a period of less formal occupation. Floor surfaces and postholes cut into a levelling deposit covering Structure NH8522, destroyed by fire in the 3rd century, may similarly be dated to the late Roman period, but again do not necessarily belong to the Roman town's final phase.

The final decades of the 4th century or the early years of the 5th century saw the accumulation of Dark Earth. Brian Yule (1990; 2005, 80) attributes the formation of Dark Earth in late Roman London to 'reworking', but, largely ruling out cultivation and dumping, suggests that it led to a truncation horizon

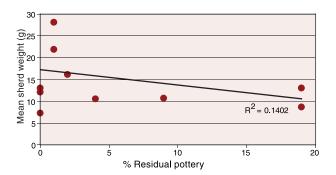


Fig. 5.4 Dark Earth pottery: scattergram showing relationship between the percentage of residual pottery by sherd count and mean sherd weight

which sealed chronologically varied stratigraphy. We can see that process to some extent at the Discovery Centre/Northgate House site, since some Dark Earth deposits meet levels pre-dating the late Roman period; the interfaces separating the Dark Earth and underlying deposits seem as varied as they are in London (Yule 1990). But it is worth reviewing the character of the soil from Winchester. Micromorphological analysis records biological reworking, an aspect shared by London Dark Earth, but also lenses of material, for example charcoal, that point to middening and occupation (see Macphail and Crowther, Chapter 8). Pottery groups recovered from Dark Earth deposits were usually large, in relatively good condition, and contained little obviously residual material. Admittedly, where the soil covered much earlier horizons, the proportion of residual pottery increased (19% by sherd count above a Phase 2.1 level, compared with, say, 1% over a Phase 2.3 horizon), but otherwise the assemblages had no obvious reference to the underlying deposits and could not have been brought up from below. The conclusion must be that the material had been cleared from dumps of occupation waste and redeposited above the demolished late Roman buildings and pockets of earlier stratigraphy.

Once the soils were laid, it can be argued that they were subject to reworking. This could have been responsible for bringing up some material from underlying layers. While the levels of residuality offer some support for this, assuming that redeposition can lead to further fragmentation of material, there is surprisingly no strong correlation between the percentage of residual pottery and the size of sherds. Regression analysis (Shennan 1997, 141) comparing mean sherd weight and residuality percentage values (Fig. 5.5) indicates that just 14% of the variation in one variable is explained by variation in the other. In other words, the residual pottery could well have derived from elsewhere and may have accompanied the midden material. Whatever form the reworking took, it potentially continued into the 5th century or later, although only a single sherd of early to mid Saxon pottery was recovered from the Dark Earth during the present excavations (see below). At The Brooks, however, 10th-century pottery was recovered from upper parts of the Dark Earth (Zant 1993, 156; Biddle and Kjølbye-Biddle 2007, 194).

THE ANGLO-SAXON BURH, AND THE ANGLO-NORMAN AND LATER MEDIEVAL CITY: OVERVIEW AND DISCUSSION OF THE EVIDENCE by Steve Teague

Early and mid Saxon Winchester

The date and circumstances of the re-establishment of Saxon Winchester as an urban centre are key research questions that have been pursued by archaeologists in the city over the past 50 years. Apart from a single sherd of early to mid Saxon pottery no evidence (either finds or structural) was found for occupation in the area of the present excavations between the late Roman period and the mid to late 9th century, the time at which the Anglo-Saxon *burh* was established. The nature of the Dark Earth that built up in the area after it ceased to be occupied in the late Roman period is reviewed by Biddulph (above), and the implication is that the area saw little or no activity of any kind after the early years of the 5th century. The earliest evidence for the post-Roman use of the city still derives largely from Martin Biddle's excavations at Lower Brook Street (1975b, 295-338; 1975c). Biddle has suggested that by the second half of the 7th century the south-east quarter of the old Roman town housed both the Old Minster with an associated residence for the bishop and his community, and a royal palace close by. A small number of private estates may have existed in the vicinity (Biddle 1975c, 126) but occupation was evidently very limited in extent and in no sense urban. Part of what may have been one of these proposed estates, excavated by Biddle at Lower Brook Street, consisted of a small late 7th-century cemetery with a richly furnished female burial. This was succeeded in the 8th and 9th centuries by a sequence of three buildings, two of which were built in stone and reused elements of a nearby ruined Roman workshop. Evidence for gold working was found in association with the latest of the buildings, which Biddle suggested could have been a secure two-storey structure for the storage, assay and working of precious metals. The presence of other potential early enclosures has been proposed on documentary grounds at Coitebury, in the north-east sector of the Roman walled area, at Wolvesey (Wulf's Isle), at the New Minster, and the area bounded by Colebrook Street that was given as an endowment to the Nunnaminster (James 1997, 40). Despite large-scale excavations at The Brooks, located less than 100 m to the west of Biddle's site, no further evidence for contemporary occupation was found (Scobie et al. 1991). However, nearby at The Square, the remains of timber workshops were found (Teague 1989b) that pre-dated a street known to have defined the northern extent of the New Minster, established in or shortly after 901 (Biddle 1976, 313-5). One of the structures produced a sceat, provisionally dated to 720-30 (Zant 1990).

The creation of the burh

The creation of the *burh*, which is reviewed in Chapter 1 above, is believed to have involved the reinstatement of the Roman defences and the laying out of a grid pattern of new streets (see artist's reconstruction in Plate 5.3). The defences lay outside the area investigated as part of the present project, but new evidence was recovered for the date at which the streets were laid out here, and for the establishment of occupied tenements along their frontages.



Plate 5.3 Artist's impression from the south-east showing the area of the site and the north-west corner of the late Saxon burh during the mid-10th to mid 11th century, Phase 4.2: later late Saxon

The streets

The streets of Winchester have long been regarded as an integral element of the original design of the late Saxon burh (see Chapter 1, above). Opportunities to test this by archaeological excavation and dating remain rare, since the street pattern has remained essentially unchanged and the late Saxon levels are rarely accessible beneath the city's modern road system. The survey of 1110 (Survey I) provides both the earliest and at the same time the largest group of street-names available from any English town before the 13th century (Biddle 1976, 231), two of them in the area of the present excavations: Brudene Street (presently Staple Gardens) and Snitheling Street (a precursor to Tower Street). The only significant changes that are known to have been made to the late Saxon street system occurred during the mid 10th century, when the monastic precincts were enlarged, and around a century later during the construction of the Norman castle (Biddle 1975c, 127), both of which resulted in the closure of a number of streets.

Evidence for an early date for Winchester's streets has been recovered archaeologically at a number of sites. During excavations at Castle Yard, two hitherto unknown streets were identified below the earthworks of Winchester Castle (attributable to c 1067), both of which had been repaired on up to eight or nine occasions resulting in a total depth of over 1.5 m of mud and metalling prior to the construction of the castle. A radiocarbon date of 880±60 (HAR 295), recalibrated to 902±60 was obtained on material from the lowest surface, and an iron stirrup of Wheeler's Type C of 10th- or 11thcentury date was found in the cobbling of the fourth surface of the north-south street (Biddle 1975d, 27). Excavation across Gar Street (closed during the 19th century) revealed six superimposed streets of flint and gravel that were separated by black earth (Biddle 1965). The first street produced no closely datable material, although a silver penny of the later years of Edward the Elder (899-924) was found under the second; the third and subsequent streets were dated from the 11th to the 16th centuries and later. A coin of Alfred was recovered from levels associated with a workshop adjacent to Gar Street during excavations at the Lower Barracks (Teague 1989a); during recent excavations at 28 Jewry Street, a second coin of Alfred, struck by the moneyer Lulla between 875 and 880, has been found within the earliest levels of a structure alongside the Saxon precursor to Jewry Street (Paul McCulloch, Wessex Archaeology, pers. comm.). At Henly's Garage 'early-type pre-850' pottery was found in a pit associated with loomweights, and suggests some form of domestic occupation dating to c 850 or earlier (Rees et al. 2008, 393-4).

During the present excavations at Northgate House, it became clear that late Saxon Snitheling Street lay beyond the area of the archaeological investigations. However, the earliest surfaces of Brudene Street were seen in numerous locations along the Northgate House frontage of Staple Gardens (see Chapter 3, Figs 3.3-6). The best sequence was seen at the east edge of Properties BW 2 and BW 3 (Fig. 3.3, section NH271). Here, the earliest surfaces (NH4701–2) directly overlay the Dark Earth and consisted of a single layer of tightly packed small flint cobbles (NH4702), which probably formed the base for a directly overlying surface of fine angular flint gravel (NH4701). This surface had become very worn, and was overlain by a thick accumulation of trampled green-stained silt (NH4700) from which sherds of pottery with simple undeveloped rims in the early chalk-tempered fabric MBX were recovered. This pottery is likely to be of mid to late 9th-century date (see Cotter, Chapter 7). The surface was repaired with chalk and gravel, and further silts accumulated above. The presence of animal bone, madder-stained sherds of pottery and a spindlewhorl in these silts provides evidence that domestic occupation had been established nearby by this time, and evidence was recovered for early contemporary structures respecting the street line on Property BW 2. Charcoal from the silts was radiocarbon dated to 770-940 (OxA-17177) and 780-990 (SUERC-13909). Bayesian modelling (see Chapter 6) has further refined these dates to 770-890 and 770–920 respectively, and if the earlier dates are taken to be reliable, this would suggest that the street had been in use for a significant period of time before 890, or at least that it had been subject to heavy wear.

A second phase of resurfacing (Street NH8607) comprised two layers of well-compacted, thick orange gravel, the later layer supporting a surface of tightly packed, rounded flint pebbles. The first of these layers appeared to extend some 2 m further west than the earlier surfaces, over the structures on Property BW 2, suggesting that the street had been widened. However, the west edge of the street was subsequently encroached upon by buildings (see Property BW 2, Chapter 3) and narrowed again by some 3 m on its west side. The latest phase of street surfaces (Street NH8609), datable to before 950, consisted of two well-compacted coarse angular gravel surfaces (NH4684 and NH4644), which had become very rutted and uneven, suggesting that the street continued to be heavily used.

Taking into account further dates derived from within adjacent buildings, the Bayesian model provides an estimate for the start of Saxon occupation here in the period 810–890, with a high probability that this occurred after 840 but before the 880s (se Chapter 6). This is comparable to the evidence found at Castle Yard, where the first three street surfaces could feasibly be dated to the second half of the 9th century. However, the dating derived from the present excavations suggests that the street grid was first laid out earlier than the conventional model suggests, early in Alfred's reign (871–899), or before, rather than during the 880s or later.

Analysis of documentary evidence suggests that the streets of late Saxon Winchester were significantly wider than their modern counterparts and

were encroached upon by properties from an early date, and probably by the late 11th century (Keene 1985, 48-50). Keene has suggested that the side streets (horbes rues or blind streets that lead off the High Street) were originally 12.2-15.25 m (between forty and fifty feet) in width (ibid.). There has been little opportunity to test such theories archaeologically, though small-scale excavations close to the west side of Upper Brook Street (Shulworth Street) revealed a succession of street surfaces ranging in date from the 12th to the 15th century that were up to 4.5 m wider than the existing street (Webster and Cherry 1979, 265). Excavations on the site of the former Masons Hall on Parchment Street revealed substantial encroachment by 12th-century structures over earlier flint metallings alongside the south side of St George's Street, suggesting that the present 'dog-leg' on this part of this street had its origins by the 1100s (Teague 1991). On the south side of the High Street, a substantial encroachment onto the medieval street by predecessors of the buildings that form 'The Pentice' was probably in progress by the 11th-12th centuries (James and Roberts 2000, 187). The existing width of Staple Gardens/Brudene Street within the area of the site is c 5.5–6 m, although it is now clear that it was originally substantially wider, at least on its western side. Here, the evidence, particularly within Property BW 2, shows that the earliest levels of the street extended c 5 m west of its present line (see Chapter 3, Fig. 3.3). Any evidence for the original extent of its eastern side has been removed by later terracing on the Discovery Centre site, though thick metalling directly overlying Dark Earth was observed within a service trench cut along the eastern edge to the existing street, implying that the street had originally extended this far east from an early date. If a similar degree of encroachment occurred along its eastern side, then the street may originally have measured 15-15.5 m in width. However, this does not take into account the topographical difficulties for such an encroachment from properties on the east side of the street, given the inherent west-east slope. The contemporary levels on the east side of the street are unknown though there is an appreciable drop (c 1.5 m) between the level of the underlying natural found in the service trench and the truncated level found along the western edge of the Discovery Centre excavations. Any structures that would have lined its east side would have been terraced into the slope such that the street would have effectively occupied a raised terrace. Evidence for this raised terrace has been found during excavations on the east side of Staple Gardens at 28-29 Staple Gardens (Teague 1990, 6-8) and at 31 Staple Gardens (Nenk et al. 1995, 220) both of which contained well-preserved late Saxon levels. On the former site, a trench located 3 m east of the existing frontage showed that late Saxon levels occurred at 1.9 m below the level of the extant pavement, and late Saxon levels occurred at a similar depth on the latter site. Though the contemporary level of the

street is not known at these points it seems unlikely that a subsequent accumulation of 1.9 m of medieval and later deposits has occurred over the late Saxon street.

Land apportionment and tenement formation

By the time of the survey of 1148, and probably by *c* 1057, most of the tenements in Winchester fell within the one of the seven great fiefs of the king, the bishop, the Cathedral Priory, Hyde Abbey and the nunneries of St Mary's of Winchester, Wherwell and Romsey (Biddle 1976, 341, 349, 456 and fig. 19; Keene 1985, 184). The way in which these tenements appear in the survey of 1148, disposed as blocks of adjacent small properties under a single lordship throughout the city and the suburbs, suggests that they may preserve the outline of earlier larger holdings that had subsequently been subdivided (Biddle 1976, 452). Neither the nature nor the date of origin of such early large holdings is known (ibid., 341), although it is suggested that they could have been in some way comparable to (or belonged to) rural estates, with the lord having associated rights of territorial jurisdiction and sometimes a private church (ibid., 341, 452). In considering the way in which such a system might have operated from the earliest years of the burh, Biddle and Keene (ibid., 340–4) speculated that once the street system was established, the frontages and lands behind them might have been parcelled out to individual lay and ecclesiastical lords in large blocks of perhaps the order of 0.2-0.4 ha in size. They might then have been provided by their owners with a principal dwelling and a private church, and could have provided temporary accommodation for people and their livestock from the neighbouring estates of the lord in times of trouble (ibid., 453-4). Within the area of the present excavations, the 1148 survey shows small contiguous blocks of properties under the ownership of the king (410-411, 403-405, 379–380), the bishop (412–414) and the reeves of Worthy (406–409) (Fig. 5.5).

Biddle and Keene review evidence for the process of subdivision of the proposed early large holdings and note that this was clearly underway in Winchester in the 10th and 11th centuries (Biddle 1976, 343) and parts of the High Street may even have been crowded by c 901 (ibid., 314, 454). The increasing evidence from archaeological excavation suggests, however, that the creation of small tenements fronting onto the streets occurred at an even earlier stage in the city's development, at least in some areas. The earliest structures seen in the present excavations were two small buildings towards the street frontage of Property BW 2, which were contemporary with the first surfacing of Brudene Street. Subsequently, the buildings appear to have burnt down and the street was widened westwards over the early building line. This was possibly associated with a hiatus in occupation. The next structure to be built on Property BW 2, Structure



Fig. 5.5 Land ownership in 1148 of the tenements in the region of Brudene Street and Snitheling Street (after Biddle 1976, fig. 19)

NH8526, encroached some 3 m eastwards over the street, establishing a new street edge that was respected by the subsequent surface. On Properties BW 4 and BW 5 the earliest structures also encroached onto the western edge of the street, suggesting that they might be contemporary with Structure NH8562. The radiocarbon dating estimate derived from Bayesian modelling for these properties suggests a high probability that this all happened before the end of the 9th century (see Chapter 6).

These structures are discussed in more detail below, but it is worth noting here that the early buildings are all of a similar size, located on the street frontage, with evidence for gravelled yards on Properties BW 2 and BW 4, and evidence for boundaries on all three properties. Moreover, the associated finds and environmental evidence suggests predominantly domestic occupation at all three, with some evidence for craft working. In itself, this does not prove the laying out of a sequence of small, long, narrow tenements for rent, as the structures described above could equally have formed street-frontage elements of larger properties. However, it is notable that, once established, the pattern of buildings on these properties remained remarkably consistent through subsequent phases of recon-

struction, and by the later 10th and early 11th centuries there is clear evidence for sequences of contiguous tenements with buildings on the street frontages, and sometimes behind, and rows of backyard pits and wells (see Chapter 3, Fig. 3.2).

Excavations at The Brooks during 1987–88 revealed substantial lengths of the late Saxon and medieval frontages of Upper and Middle Brook Street (Sildwortenstret and Wunegrestret), and provide important evidence for the early development of properties, although the excavations remain currently unpublished (Scobie forthcoming). The distribution of the very numerous pits on the site during the late Saxon and Anglo-Norman periods has shown that distinct regularly apportioned properties were in existence from the outset. On the Middle Brook Street frontage the distribution pattern of the pits suggests that a standard width of between 10.5–11 m (approximately 2 perches, poles or 11 English yards) was used here (Fig. 5.6). The boundary lines inferred from these distributions appeared, significantly, to be respected by all late Saxon features. The boundaries were found to remain unchanged throughout the medieval period, although several properties were amalgamated into single larger tenements towards the end of the period. The same property divisions remained unchanged until the later 19th century and can be accurately tied to the 1st Edition OS map of the area. Further afield, during excavations around Cheapside in London, similar conclusions were

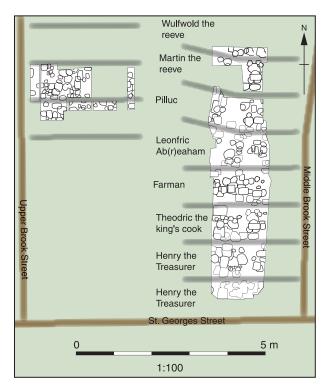


Fig. 5.6 Saxon-Norman properties at The Brooks, Winchester with conjectural correlations with occupants named in survey of Edward the Confessor (c 1057) (after G Scobie, Winchester Museums Service)

reached concerning the alignment of pits from as early as the late 9th century into the 11th (Schofield and Vince 2003, 80) and particularly the regular spacing of cess pits along the boundaries at intervals of 5 m or so (one perch). Excavations at 28–29 Staple Gardens (Teague 1989) revealed the well-preserved remains of two properties, each containing a house, whose boundaries were shown to have remained unchanged from the outset of occupation during the late Saxon period through to the post-Conquest period.

Following Scobie's methodology, the distribution of pits was used to suggest the location of property boundaries for the present excavations, along with other evidence such as the extent of structures and (in a few cases) clear fence lines. Here, as on Scobie's site, the widths of the proposed properties show a marked consistency in size (Table 5.1), most forming near whole multiples of perches (equivalent to $5^{1/2}$ English yards or 5 m), with two perches being the most common width, though there are two properties on the east side of Brudene Street that measured three perches. Assuming that two perches was used as a standard measurement, then eight of the properties have widths that have an accuracy of at least 95% (or within 0.1 m of a perch) offering compelling evidence that a standard system of measurement was being deployed. The most notable anomaly is Property BW 3, which measured 2.8 perches in width, although if the lane that may have occupied its north side is taken into consideration (measuring c 4.2 m in width or c 0.8 perches) then a width of 2 perches can be suggested. Other anomalies could be explained by early encroachments (for example in Property SE 1) and/or by uncertainties in the determination of these boundaries (for example Property BE 2). The degree of uniformity of width of the properties and the use of a standard measurement

Table 5.1 Widths of properties

		Width of proper	ty
Property	Metres	Yards	Perches (5.5 yards)
BE 1	9.5?	10.4?	1.9?
BE 2	11.4	12.4	2.3
BE 3	10.2	11.2	2.0
BE 4	15.2	16.6	3.0
BE 5	15.2	16.6	3.0
BW 1	?	?	?
BW 2	10.5	11.5	2.1
BW 3	13.9	15.2	2.8
BW 4	9.5	10.4	1.9
BW 5	10.5	11.5	2.1
BW 6	?	?	?
SE 1	11.4?	12.4?	2.3?
SE 2	9.6	10.5	1.9
SE A	10.1	11.1	2.1
SE B	8.8	9.6	1.8
SE 3	10.3	11.2	2.0

implies a highly planned and organised layout, which seems more likely to have originated from a central authority than from a gradual subdivision of early large properties for which no positive evidence was seen in the present excavations.

Within Winchester, therefore, as elsewhere, it seems increasingly likely that small, regularly sized tenements aligned on the street frontages were an early, if not an original, feature of the city layout. The very earliest evidence from Property BW 2 suggests that there may have been a hiatus in the development of Brudene Street, and the appearance of buildings encroaching onto the west side of the street may represent a second phase of development, although still probably datable to the later 9th century, after an interruption and reorganisation.

Biddle and Keene (Biddle 1976) have noted that the streets leading to the gates were the first to be built up, and the evidence from the present excavations clearly supports their conclusion that parts of the city were densely built up by the middle of the 10th century.

Concordance with the surveys of 1110 and 1148

Neither of the two early surveys of Winchester (Surveys I and II) gives sufficient information about the order, size or location of properties in Snitheling Street and Brudene Street to allow any of them to be identified with any degree of certainty within the site. Both streets were of approximately equal length at around 120–125 m, though it is not known

Table 5.2: Concordance of Surveys I and II within the area of the site (after Biddle 1976)

Surv	ey I (c 1100)	Survey II (1148)			
No	Entry	No	Entry		
Bruc	denestret (East) (North-South)				
131	The tenement of Brunstan paid 30d and the customs TRE. Now Arnulf Burdin and Ulf owe the same	410 (BE 5 East?) 411 (BE 5 west) 412 (BE 4) 413 (BE 3) 414 (BE 2/1?)	Ulf's land pays the king 15d Reginald of Sees pays the king 15d Silvestor pays the bishop 30d from the land of the barons William of Caen pays the bishop 30d from land of the barons The daughter of Henry's son Thurstin pays the bishop 4s fror the land of the barons. She again pays the bishop 2s from the land of the barons & receives 4s in rents. And on another tenement she has her servants & chattles		
Bruc	lenestret (West) (South-North)				
134	Peter Paid 10d and the customs TRE. Now Cheping (a moneyer) son of Alvera owes the same	(BW 1) 403	Hugh (a moneyer) son of Chepping pays the king for his kitchen 4d. and has from it his living-accommodation(?) quit; and Hugh receives from it 5s		
132	Eustace paid 8d and the customs TRE. Now Godwin Withmunding owes the same.	404 (BW 2)	Osmoth pays the king 8d		
133	Odo Ticchemann's son held a land which was free except for Watch TRE, and from royal demesne 8 pennyworth of land. Now his son William owes the same	405 (BW 3)	The sons of William son of Odo pays the king 8d		
		406 (BW 4)	Pain (son of) Picard pays the reeves of Worthy 24s (sic) and receives from the land 5s		
		407 (BW5)	William the palmer ought to pay the same reeves 25d; but the land is waste		
		408 (BW 6)	Wazo the clerk pays the reeves (of Worthy) 25d		
Snid	lelingestret (East) (North - South)				
	-	378 (SE 3)	Hoppecole pays the bishop 3s		
128	Godric King's son (possibly a moneyer) paid 4d and the customs TRE. Now Harding the blacksmith owes the same	379 (SE 2) 4d quit in return	Harding the blacksmith's son holds 1 land of the king worth for his services and receives 18d. And from the same land Roger the painter receives 4s. 6d; and from the		
	Harding the blackshifth owes the same		same land Harding the brewer recieves 4s. ou, and from the		
129	Anod Stud paid 6d and the customs TRE. Now Odo the monyer owers the same	380	Richard Son of Odo pays the King 6d and receives 2s		
	,	381	Drew Blond pays Hugh de Hahela 6d for 1 land which Hugh holds quit		
		382 (SE 1)	Richard the painter pays the bishop 12d from the land of the barons and receives 2s		

whether they originally extended further north and up to the city defences (Collis 1978, 165). Analysis of the evidence from the survey of 1148 (Biddle 1976, table 26) suggests a possible total of 35 properties on each street frontage and although a complete listing is not available from the survey of 1110 (as only the king's properties are recorded) this may not have been very different.

Using Biddle and Keene's conclusions (Biddle 1976) concerning the sequence of the survey of 1148, and assuming an average size for the properties surveyed, then on spatial considerations alone Table 5.2 lists those properties that may fall within the bounds of the site and tentatively attempts to correlate them with the excavated properties. An attempt to correlate the properties with the king's properties from the survey of 1110 has also been made where continuity of tenancies has been identified (after Biddle 1976). However, if Brudene Street and Snitheling Street originally extended up to the city defences there could be room for a margin of error of up to three properties.

Houses and occupants

The development of buildings

Up to 48 buildings or structures were recognised on the site, of which 7 can be allocated to Phase 4.1 (c 850–950), 12 to Phase 4.2 (c 950–1050), 10 to Phase 5 (c 1050-1225) and 10 to Phase 6 (after c 1225). Although not a complete record, these provide a good sample of changing building styles in the area over time. The structures of the late Saxon phases were without exception built of timber as were the majority from the Anglo-Norman Phase 5, although wells with chalk-block linings, and stone ovens, were present on some properties at this time. The chapel and stone house that belonged to the Archdeacon of Winchester by the 13th century were the first structures to be built entirely of stone in the area, and were probably constructed during the 12th century. Much more widespread construction of stone houses with tiled roofs, chimney pots and tiled floors is evident from the late 12th or early 13th century. In Phase 6 (after c 1225), most of the excavated buildings were of stone. The construction of masonry houses in the 13th century is generally reflected elsewhere in the city, though the poor continued to live in timber buildings such those at Tanner Street (Biddle 1976, 348). This would suggest that the substantial stone structures that were found in Properties BW 1 and BE 5, like those within the Archdeacon's residence, belong to inhabitants of higher status.

The buildings can be divided into two types; principal structures largely located on the street frontage; and ancillary structures located to the rear of the properties. Due to truncation of deposits that often occurred to the rear of the properties, ancillary structures are poorly represented, and in some cases, the presence of a building was indicated only

by floor deposits that had slumped into the upper fills of earlier pits. Consequently these structures are only found within Phase 4.2 or later levels.

Principal structures

The earliest structures on the site were found along the west frontage of Brudene Street, and appeared to be confined to the area immediately adjacent to the street. The best surviving examples were found within Properties BW 2 and BW 4, which contained well-preserved floor levels and were also subject to greater excavation. Within Property BW 2, the earliest structure (Structure NH8525) was built before the westward extension of Brudene Street and constructed with a double-line of closely spaced postholes along its east side and a possible sill alongside its south wall, a method of construction not paralleled elsewhere on the site. However, building with paired uprights seems to reflect a tradition that dates back to the 6th-8th centuries as evident at Cowdery's Down, West Stow and Mucking (James 1999, fig. 4.9). After its apparent destruction by fire, it was replaced by the more typical type of timber structure found on the site, Structure NH8526, constructed on surface-based sill-beams whose presence was sometimes identified as shallow, flatbased slots formed by internal and external deposits abutting the ground beam. A similar sequence of structural remains was found at 28-29 Staple Gardens where the earliest structures, of possible mid-late 9th-century date, utilised a close post-built technique and were succeeded by structures utilising sill beams measuring some 4.5 m in length (Teague 1990). Interestingly, here this earliest structure had also been destroyed by fire. These early buildings appear to be small rectangular structures aligned at right-angles to the street, the earliest structure within Property BW 4 (Structure NH8566) measuring 4.1 m in width and at least 5.8 m in length and Structure NH8568 within Property BW 2 at least 3.8 m by 2.9 m. The structures were enlarged by the end of Phase 4.1 especially eastwards and encroaching onto the street, although their rear limits remained unchanged.

No evidence for the upper wall construction of the structures survived, though at The Brooks parallels were drawn with the woodworking traditions seen in the timbers within Anglo-Norman timberlined pits that were well preserved in the anaerobic conditions on the site (Scobie forthcoming). In these pits, rectangular or wedge-shaped oaken base plates were laid on the level base against two or more sides of the pit. The corner posts and upright members were formed of less substantial rectangular or wedge-shaped timbers sharpened to a point, and driven through slots cut through the base plates at the corners and at regular intervals along the sides. The upper lining of the pits did not survive in situ, but collapsed timbers suggest that the lining was tied together by a top plate to form a rigid box structure. The width of the beamslots

(0.2–0.3 m) of the ground beam based buildings found on the site compared well with that of the base plates in the timber-lined pits (Scobie forthcoming). It is assumed that the infilling of wall panels comprised wattle and daub, although unless it was burnt, daub would eventually decay to an unrecognisable state. A similar process would also occur with cob infilled walls, though curiously part of one such filling survived within Phase 4.2 Structure NH8566 (Property BW 4).

For the same reasons the nature of the roofing materials used is unknown, though at 28–29 Staple Gardens charred remains of possible thatch were found on the floor of a burnt building of possible late 9th-century date (Teague 1990). At Lower Brook Street waterlogged conditions allowed for the preservation of oak roof shingles from houses dating from the 10th century to the early 13th century and this is suggested to be the usual roofing material for private houses, though thatch may have been used for small houses and outbuildings (Keene 1990a, 320).

During Phase 4.2 (c 950–1050) a number of developments can be seen. The building on Property BW 2 seems to have developed into an L-shaped plan, occupying the whole of the street frontage, and with a rear wing on its northern side; an early instance of a layout that is generally more characteristic of later tenements. This layout was maintained on the property into Phase 5, and another L-shaped building was also constructed during Phase 5 on Property BW 4. A number of cellars are also seen in this phase. At least one of these (Property BE 4, pit CC2343) was found towards the street frontage, although its full extent was not revealed within the excavated area. However, it seems likely that it was of similar dimensions to the cellar on the property immediately to the north, and if so it would have extended to the street frontage, measuring some 7.5 m by 5 m in plan and 2 m deep. Other cellars of this phase were found set back from the street frontages and are considered further below.

This period was also marked by the introduction of structures built with large rectangular-sectioned posts (0.4–0.6 m) set into the ends of deep elongated pits. Structures of this type are best illustrated by Phase 4.2 Structure NH8622 within Property SE 2 and Structure NH8630 within Property BW 2. This technique continued to be used into the Anglo-Norman period, and was seen in the present excavations in Phase 5 buildings Structure NH8566 within Property BW 4 and Structure CC7031 within Property BE 5. This more substantial building technique has been associated with houses of higher rank in 11th- and 12th-century Winchester (Biddle 1976, 345–8) and may have come into use as early as the end of the 10th century (Keene 1985, 171). Certainly there is a growing body of archaeological evidence for these structures, such as Houses VI and VII at Tanner Street (Biddle 1965, 248-9, fig. 3), Building B.9 at The Brooks (Scobie forthcoming) and more recently a structure within the northern suburb at Swan Lane (Teague 1998b). It is suggested that the wall panels of such structures comprised interlocking quarter-cut planks with grooves along the wider edge, a methodology commonly used in contemporary structures in northern Europe (Keene 1985, 171). The substantial nature of such structures suggests that they could easily have supported more than one storey, the size of the timbers employed implying a considerable expenditure of wood. Presumably such structures would have a greater life-span than the earlier and less substantial structures.

The first buildings entirely of stone to be constructed in the area were the stone chapel and house of what became the Archdeacon of Winchester's residence. The construction of these buildings is not closely datable but both seem more likely to have been built in the 12th century than not, the chapel perhaps earlier than the house. Stone houses were also constructed on Property BW 1 (amalgamated with Property SE 1) and on the east frontage of Brudene Street, although most of these fell outside the scope of the present excavations. These appear at the very end of Phase 5 and the beginning of Phase 6, and the best dating evidence for their construction comes from the latest fills of the postholes and pits associated with the preceding occupation of Phase 5. In most cases this can be dated by pottery to the period *c* 1175–1250. The substantial stone building CC7038 on the street frontage of Property BE 5 East had an internal length of *c* 9.6 m (if the street frontage is assumed to not have altered since its construction), which is comparable to the Archdeacon's house, and it appears to have been slightly wider at c 6.1 m (c 20 ft), suggesting that this too may have been a building of considerable pretensions.

Evidence elsewhere in the city shows that throughout the medieval period the majority of private houses of low to middling status nevertheless continued to be constructed mainly with timber, and increasingly timber-framed, with the sills supported upon a low (dwarf) wall of flint and chalk rubble (Keene 1985, 171).

Internal features

The floors of the earlier buildings on the site were of compacted chalk, and these were frequently recorded where they had survived subsided into the settling fills of earlier pits. In Phase 6 structures such as the stone cellar CC2100 on Property BE5 West and Structure NH8615 on Property BW 1/SE 1, bedding layers were recorded that probably formed the base for floors of stone flags or ceramic tiles. Often, thick accumulations of domestic and industrial debris were allowed to build up over the floors before they were eventually covered with new floors. Analysis of the plant remains from floor occupation deposits within the late Saxon structures on Properties BW 2 and BW 4 showed that most contained small quantities of mineralised seeds

suggesting that faecal or midden material had been spread or trampled around the structures. Micromorphological analysis also revealed trampled coprolitic bone and dung (stabling waste) from Phase 4.2 and Phase 5 floor deposits within Properties BW 2 and BW 3. Given their likely filthy state at this time, this material was probably trampled in from the back yards and adjacent street. It is difficult to establish from the plant remains whether any of the charred grains present represent straw floor coverings. The most suitable would have been barley straw, though this was also used as animal fodder (see Carruthers, Chapter 8). Small quantities of hulled barley grain were present on the floors of structures on Properties BW 2-4, possibly surviving only by accidental contact with hearths. By far the highest levels come from a slumped Phase 5 floor deposit within Property BE 5, though it is possible this material may have been derived from malting for the brewing of ale.

Hearths were present within most of the late Saxon buildings along the west side of Brudene Street, sometimes represented by scorched areas on the floors themselves, and sometimes by shallow pits. As far as can be ascertained, hearths were most commonly located close to or against walls of the structures rather than being centrally placed. During Phase 5 the hearths within kitchen areas of the structures within Properties BW 2 and BW 3 were replaced by stone built ovens. In both these properties the ovens were placed against the south wall of the structure, with evidence for a narrow wall possibly acting as a 'fire-break' at the front of an oven in Property BW 2. Stakeholes around some of the hearths may represent the position of associated structures to suspend cooking vessels or spits over the fires. Some of the hearths were associated with debris from metalworking, but others were clearly domestic in function with only food remains present in rakeout deposits. The division of internal space for different functions is clear in a number of properties. On Property BW 2, the south end of Structure NH8530 appears to have been used as a kitchen, a function that it retained into Phase 5. Clear subdivision of space was also evident in Structure NH8567 on Property BW 4 in Phase 4.2, possibly to separate working areas from living quarters. Postholes inside the substantial Structure NH8622 on Property SE 2 in Phase 4.2 and Structure NH8530 on Property BW 2 in Phase 5 may have been the supports for staircases.

Ancillary structures

Two main types of structures were recognised: those which are interpreted as cellars, and outbuildings that enclosed wells and possibly latrines or served as workshops, stables or kitchens.

Cellars

Cellars appeared during Phase 4.2, the largest and deepest occurring within Properties BE 4 (CC3260)

and BW 6 (NH7713). These features are characterised by their regular rectangular plan and stood out as being considerably larger than the other pits on the site, measuring 8.5 m and at least 4.9 m in length respectively. Both were set well back from the street frontages and were unattached to the principal structures on the property. Unfortunately the limited excavation undertaken on both does not provide much information about their form, though cellar CC3260 did show evidence for a timber lining constructed of horizontal planks retained by timber uprights. This is a form of construction well known from elsewhere, and particularly from the very well-preserved late 10thcentury examples in Coppergate, York (Munby 1985, fig 68); a similar example was found to the rear of a late Saxon house excavated at 28–29 Staple Gardens (Teague 1990). Assuming that the contemporary ground level was at least 0.3 m above that which survived, the original depth of cellar CC3260 may have been 1.5 m or more, enough to allow full headroom. It was not possible to ascertain whether these cellars contained structures above them, though evidence elsewhere in London and Chester suggests the presence of an upper storey (Richards 1991, 61). It has been suggested that cellars developed in the second half of the 10th century as a response to the revival of trade and growth in English towns (ibid.). They met the growing need for secure storage of stock and could also have provided cool conditions for foodstuffs. The concentration of padlocks and keys found within Property BE 4 during Phases 4.2 and 5 supports the view that there was an increased need for security here at this time. A similar cellar excavated on the High Street at Oxford contained imported pottery in its backfill and was interpreted as perhaps the property of a merchant (Mellor 2003, 340). In this context it is interesting to note that one of the very few sherds of imported French pottery found in the present excavations was associated with Property BE 4 in this phase.

The heavily disturbed and robbed Phase 6 stonebuilt cellar (CC2100) found in Property BE 5 may be a direct successor to the timber counterpart found in Property BE 4, its dressed wall perhaps reflecting an increase of wealth of the occupants or at least reflecting the latest styles. Certainly in plan, and allowing for the thickness of its walls, it would be similar in size to the earlier example, although somewhat deeper at c 2 m but presumably serving a similar purpose. It too was set back from the street although the example from Property BE 5, given its location, may have formed a subterranean part of a larger structure flanking the north-east corner of Brudene Street. Goods were brought in by means of an external entrance on its east side, probably from the street to the north, without the need to access the main house. In some ways this arrangement has parallels with the vaulted undercrofts of medieval merchant houses in Southampton that often had external spur walls enclosing stairs that led down from the street (Faulkner in Platt and Coleman-Smith 1975, 80 and figs 21–2).

Outbuildings

There is little surviving evidence prior to Phase 5, apart from cellars, for outbuildings and workshops in the back yards. Most survived as floor and occupation deposits slumped over earlier Phase 4 pits, and the close proximity of much of the evidence to the main structures could suggest that they represent enlargements rather than separate structures. There are large areas to the rear of some properties that are devoid of late Saxon pits (eg Properties BW 4, BW 5, SE 1, BE 3) that could have been occupied by such structures whose slight remains had otherwise been removed by later truncation. Alternatively, the lack of pits may simply be because the areas were kept free for use as yards or perhaps gardens.

On Property BE 2 evidence for sill-beam structures (CC7014 and CC7009) located up to 16 m from the existing street frontage perhaps suggests outbuildings rather than extensions. Of these, Structure CC7009 may have been a smithy, whilst the adjacent Structure CC7014 may have been a kitchen given the abundant evidence for food waste found there. Both apparently had a relatively long period of use extending into Phase 5, with evidence that Structure CC7009 was rebuilt and extended further eastwards. Both structures, if correctly interpreted, housed activities that required intense heat and it could be suggested they were separated from the main living quarters in order to the reduce the risk of fire. This may also have been the case within Property BW 1/SE 1 in Phase 6, where the slight remains of a timber structure, possibly a kitchen, were found to the rear of the main range of buildings that formed part of that substantial residence.

At least two structures have been identified as well-houses, both of which are dated to Phase 5timber Structure NH8618 (Property SE 1) and most notably Structure NH3547 within Property BW 3. The latter, an elaborate and 4 m deep chalk-lined pit, was aligned with, and situated c 2 m from the rear side of, the principal building (Structure NH8532) on the property. A pit was found at its base, situated against its west wall and shown by augering to have served as a well. Access to the well is suggested to have been from the east side via steps, and therefore presumably directly from the house. Like the many other contemporary wells on the site, it was constructed with chalk, the cheapest available local stone. This would not have had the strength and durability to support a vaulted roofwhich it appears to have had—so buttresses composed of Quarr limestone blocks were employed to support its weight. Quarr was imported from the Isle of Wight and was used to adorn the great religious and royal houses in southeast England (Tatton-Brown 1980, 213-5) such as St Augustine's Abbey and Canterbury Castle. It was also much used in the Norman rebuilding of Winchester Cathedral and may have been quite readily available within Winchester during the late 11th and 12th centuries. Depletion of the Quarr quarry meant that the stone ceased to be much used after the 12th century and this provides a possible terminus ante quem for the construction of the wellhouse, since the stones appear not to have been reused.

Examples of early well-houses are rare outside monastic and religious houses, but it is interesting to note that a 12th-century example was found within the main courtyard of the Bishop of Winchester's Norman palace in the south-east corner of Winchester (Biddle 1972, 130 and plate XLVb; Biddle 1975b, 330–1). It appears to have been built ornately with the highest quality imported stone ashlar throughout, judging by the reconstruction published on-line by English Heritage (http://www.english-heritage.org.uk/daysout/ properties/wolvesey-castle-old-bishops-palace/ history/medieval-plumbing/). A second example within an apparent domestic context is known from Bedford and dated to the 13th -14th centuries (Baker et al. 1979, 115-20). It was 1.5 m deep and walled on three sides and had a flight of seven stone steps that led down to the well-head, which was outlined with timbers and was probably roofed. At High Street, Southampton a 13th-century house of a wealthy burgess contained a stone-lined well chamber attached to and entered from the rear side of its vaulted cellar (Platt and Coleman-Smith 1975, figs 68 and 71).

Water supply

The location of the site, on the highest area of the western slope within the city walls, presented difficulties from the outset for water supply, a situation that must have prevailed since the Roman occupation of the site. The Romans attempted to alleviate this by constructing a water conduit (see Chapter 2) alongside the lower slopes on the eastern part of the site. In the early medieval period, it is possible that domestic needs were met by water-bearers who could have accessed the plentiful supply located within the public brooks on the valley floor, some 300-400 m to the east. This seems to have been the case in some parts of medieval London (Schofield 1994, 117). However, by the 12th century, the wide distribution of chalk-lined wells across the site showed that this had become the normal method of obtaining water (Table 5.3).

Although it was not possible for all wells to be fully investigated, it seems likely that no property contained more than one well at any given time, and the wells tended to be located immediately behind the street frontage buildings. In at least two instances the wells were seen to be enclosed within structures (see Chapter 4—Phase 5, Properties BW 3, SE 1 and BE 5). Wells were often located against property boundaries and this may indicate that they were sometimes shared with the occupants of the

Table 5.3: Augured wells and the deeper unlined-pits that probably served as wells (*base not reached)

Context	Phase	Property	Int. Dia(m)	Int. Dia(ft)	Depth	Base (aOD)	Туре
CC1128	5	BE 1	1.80	5.9	12.4	34.89	Chalk-lined well
NH3547	5	BW 3	?	?	12.9	37.70	Well-head within well-house
NH9632	6	BW 3	1.25	4.1	10.7*	38.05*	Chalk-lined well
CC2039	5	BE 4	2.10	6.9	9.0	38.66	Chalk-lined well
CC3043	5	BE 5	1.50	4.9	8.6	38.69	Chalk-lined well
NH2495	5	BW 5	1.50	4.9	10.5	39.38	Chalk-lined well
CC1114	6	BE 3	2.90	9.5	7.4	39.88	Pit
NH4019	5	BW 2	1.48	4.9	9.5	41.27	Chalk-lined well
CC3077	6	BE 5	2.00	6.6	5.1	41.70	Chalk/flint-lined well
CC1457	5	BE 2	1.40	4.6	5.4*	41.90*	Pit
CC3150	5	BE 5	2.70	8.9	4.9	42.32	Pit
CC2002	5	BE 4	2.00	6.6	4.4	42.96	Pit
NH4300	4.1	BW 2		0.0	6.8	43.49	Pit

adjacent property, although elsewhere (as for example in Properties BE 4 and BE 5 in Phase 5) adjacent properties clearly contained their own wells, of identical construction and depth. The Phase 5 chalk-lined wells were of three distinct diameters (c 4.9 (1.5 m), 5.9 (1.8 m) and 6.9 (2.1m) ft respectively), the smallest corresponding to three of the wells. This may suggest that the wells were dug to order (perhaps by a 'specialist' contractor) using pre-determined standard diameters (5, 6, and 7 feet?). Well CC2039 (Property BE 4), perhaps apart from the well-house in Property BW 3 the largest and finest on the site, may have been intended to impress with its lining of chalk-ashlar. However, this was also the largest property on the east side of Brudene Street, so its size may have had a bearing on the needs of the inhabitants. No similar size correlations were apparent with the earlier wells, although there is evidence that their upper levels may have been lined with timber.

It is of some significance that no inflow of water or anaerobic deposits were encountered in any of the wells, the deepest of which were dug to depths of 7.4-12.9 m (34.89-41.27 m OD) below the extant surface implying that the medieval watertable level was significantly higher than today. The differences in the level of their bases would also imply that the watertable was subject to marked fluctuations during the later Saxon and medieval period, even between the broadly contemporary wells in adjacent Properties BW 2, BW 3 and BW 5 (NH4019, NH3547, NH2495). If Phase 4.1 pit NH4300 (Property BW 4) is accepted as a well then its base (43.49 m OD) was several metres above that of the Phase 5 chalked-lined wells in the immediate vicinity (37.70-41.27 m OD). Similarly the bases of the Phase 5 unlined pits within Properties BE 2-4, some feasibly of pre-Conquest origin, tended to be several metres above their chalk-lined counterparts.

Data from geotechnical boreholes included in the Winchester Urban Archaeological Database (UAD) show that the modern watertable on the hill slope between Jewry Street and St Peter Street (UAD)

Record No's 1652, 1653, 1677) varies from 32.90-36.91 m OD. More reliable data obtained during The Brooks excavations (UAD No 1465) located on the valley bottom showed a fairly consistent level, from 34.30 to 35.14 m OD across the site. Analysis of the changing level of the watertable within the city over time was undertaken during the Winchester Urban Archaeological Assessment (Teague 1998) and revealed that it had risen significantly after the end of the Roman period. At The Brooks the floor levels of late Roman town-houses were often below the modern watertable during the winter months and it is estimated that the contemporary water level was between 32.7–33.9 m OD, or up 2.4 m below its modern level. The lack of anaerobic deposits would suggest the level had risen some time after the withdrawal of the Roman administration, probably as a consequence of the breakdown of the drainage system that had previously been put in place. The survival of the timber linings of early medieval pits suggests that the level of the contemporary watertable may have been up to 1.2 m above that of its Roman level, seemingly coinciding within the construction of the Upper and Middle Brooks from the late 9th century. Less is known concerning its medieval level, though the supposed effects of the Medieval Warm Period (800–1300) may also have had an impact on its level (Hughes and Diaz 1994, 109–42). Consequently the combined effects seem to have had an impact on the availability of water during the later medieval period and this may have contributed in some way to the decline of occupation on the site.

Pit distribution and function

Excluding probable structural features or wells (see above), a total of 402 pits were assigned to Phases 4–6, 41.8% to Phase 4, 41.3% to Phase 5, and only 14.7% to Phase 6 (Table 5.4). A total of 170 pits (42.3%) were not bottomed by hand-excavation, though the bottoms of eight pits on the Discovery Centre site were established by augering. Thus the

Table 5.4: Quantities and shapes of pits over time

Phase	4		5		ϵ	5	All Phases	
	All	>1.5 m	All	>1.5 m	All	>1.5 m	All	>1.5 m
Circular	76	31	96	51	31	15	198	97
	44.2%	36.0%	56.1%	63.0%	52.5%	55.6%	50.5%	50.0%
Rectangular	89	52	68	29	25	12	178	89
	51.7%	60.5%	39.8%	35.8%	42.4%	44.4%	45.3%	47.9%
Unknown	7	3	7	1	3	0	17	4
	4.1%	3.7%	4.1%	1.2%	5.1%	0.0%	4.2%	2.1%
Total	168	82	166	77	59	27	402	194

original purpose of numerous pits could not be established as only their later fills were investigated. However, some general conclusions can be drawn regarding their size, shape and possible function over the main phases of the site. The pits have been subdivided into rectangular and circular types. Table 5.4 shows that rectangular pits slightly predominated (51.7%) during the pre-Conquest phases, especially pits that were greater than 1.5 m across (60.5%). However, during the post-Conquest phases circular pits began to dominate (56.1%), especially those whose diameters were greater than 1.5 m (63%). By Phase 6 the use of circular pits began to decrease though they still predominated over the rectangular pits. It is unclear whether this reflects a trend seen elsewhere in the city, since published evidence of other large-scale sites with intensive pitting is still awaited. A brief inspection of the numerous late Saxon and medieval pits found during the excavations at the French Quarter, Southampton (Brown and Hardy forthcoming) could suggest a similar preference for circular pits in the post-Conquest period.

The distribution of pits in each property is difficult to assess since they were dug over a long period of time. However, some general conclusions can be suggested about their clustering and spatial relationships with structures and property boundaries. As we might expect, most pits were confined to the rear of the principal structure on the property, although in a few cases pits were seen at the street frontage (see for example Properties BW 2, BW 3, BE 4 in Phase 4; Property BW 4 in Phase 5). Phase 6 pits towards the street frontage of Properties BW 3 and BW 5 were probably by this time concealed behind the wall enclosing the Archdeacon's residence.

Within some properties strips of land remained free of pitting (and apparently structures) throughout Phases 4–6 and may indicate access routes or lanes, the best examples of which can be found on the north side of Property BW 3 and within Properties BE 3 and BE 4. The reduction in evidence for pits in Phase 6, at least on the west side of Brudene Street and Snitheling Street, is probably to be related to the reorganisation of the area at the time into fewer and larger properties, and the decline in absolute numbers of people living there.

Pits continued to be dug in the back yards of properties facing onto the east side of Brudene Street in this phase.

Undoubtedly most of the pits were used to dispose of domestic, industrial and craft waste, or at least this was their ultimate function. It is possible that some of the pits that were not augered may originally have served as wells, such as the line of Phase 5 circular pits that abutted the northern boundary of Property BW 4. Some of the larger pits may have been used to quarry chalk for flooring, well linings and wall footings, and it seems likely that the very large pit NH1034 (Property SE 3) generated the chalk for the footings of the Archdeacon's chapel, given its close proximity. Some of the small and usually rectangular or nearly square pits seem originally to have served as cess pits since their basal levels were found to contain cessy silts often rich in mineralised faecal remains containing bran, fruits seeds, pulses and fly pupae. A typical example was Phase 4.2 pit CC2458 (Property BE 4) which measured 1.8 by 1.4 m in plan, and was 1.5 m deep as found (but possibly 2 m deep originally). These pits tended to cluster close to the principal structures (for example, in Properties BW 4 and BW 5). Three cess pits clearly abutted the east wall of Phase 5 Structure NH8618 (Property SE 1) in a way that suggests they might have been associated with upper storey garderobes (see Chapter 4).

The clustering of cess pits suggests that areas were purposely set aside for latrines over sustained periods of time, the number of pits dug suggesting that they were not cleaned out. Dumps of cess often also appeared as secondary fills in other pits, sometimes adhering to their sides, which may represent more casual disposal, for example from night-pans. The latest cess pits (Phase 6) all occurred within properties on the east side of Brudene Street. This period saw the introduction of stone-lined cess-pits though only one example was found on the site, within Property BE 2 (CC1518). Unlike other well-known examples of stone-lined latrines within the city (Teague 1991; Scobie et al. 1991) and Southampton (Brown and Hardy forthcoming), this was smaller, circular and significantly deeper at 3.4 m (perhaps originally around 4 m allowing for the terracing). It would seem unlikely that such a pit could be emptied easily, so perhaps it acted (like the other cess pits on the site) as a septic tank, holding the waste to allow the liquid to leech away through porous chalk on its (presumably unlined) lower levels, while the solids gradually settled on its base (Newman 2001, 139). It is not possible to establish whether this served a latrine attached to the principal structure, though given its proximity to the street frontage and the effort undertaken in its construction, this would seem likely.

Industry and craft

The evidence from early street names indicates that Winchester had developed as a centre of manufacture and trade by the late 10th century. The street of tanners (Tænnerestret, later Tanner Street and now Lower Brook Street) is recorded in 990, and the streets of shield-makers (Scyldwyrthtana, later Shulworth Street and now Upper Brook Street) and of the butchers (Flæscmangere, later Fleshmonger Street and now St Peter Street) in 996 (Biddle 1976, 427). The Winchester Mint, ranked fourth in the country, had six moneyers working in Winchester in 925-35, and may have had as many as fourteen by 1050-53 (ibid., 396). The archaeological evidence recovered from Winchester (much of it unpublished) certainly reflects the wealth and diversity of trades practised in the late Saxon and medieval city and its suburbs (Biddle 1990; Rees et al. 2008). Winchester is particularly rich in archaeological evidence for metalworking industries, and for the manufacture and working of textiles and leather, the latter focused in the low-lying north-east part of the town, an area that has easy access to large quantities of water.

The present excavations recovered evidence principally for iron working, elements of cloth production (dyeing, spinning and, to a lesser extent, weaving), and bone and antler working. There was also evidence for horn working, copper alloy working and the fur trade. Figure 5.7 shows that many of the properties were used for two or more of these activities, with an increasing diversity of the evidence into Phase 5 when most of the evidence for bone and horn working appears. The evidence falls off sharply in Phase 6, and this is probably to be associated with the depopulation and changing character of occupation of the area at this time.

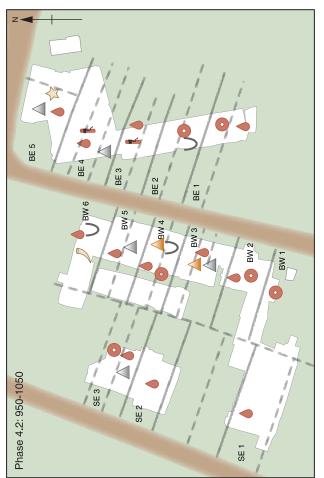
Iron working

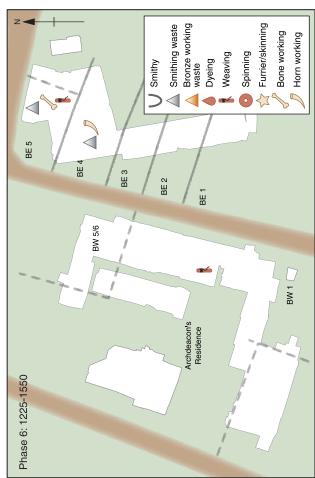
Evidence for iron working on the site was widespread in the late Saxon period and continued throughout the Anglo-Norman period, though by Phase 6 (after *c* 1225) most or all of the material is likely to have been occurring residually. Nevertheless the overall quantities on the site are not large compared to the other published sites within Winchester. The site at Henly's Garage, for

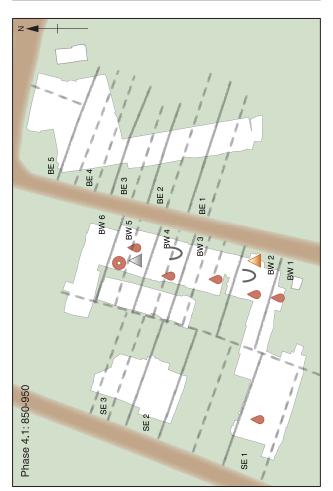
example, produced 82 kg of slag from 9th- to 12thcentury working surfaces and hearths within a relatively small area (Rees et al. 2008, table 37 and 356–7), compared with only 36 kg from the present site. A single evaluation trench at the Lower Barracks that sampled deposits pertaining to a late Saxon smithy produced about 42 kg of slag (Winchester Museum Service - Site Archive LB 89). Indeed if the weight of the material is divided by the number of contexts that produced it, the difference is much more marked, with an average of 2.28 kg from Henly's Garage against only 0.15 kg from the present site. This is very similar to the relatively low quantities found at sites within the suburbs, such as Victoria Road, which recorded an average of 0.20 kg, and Chester Road, with an average of 0.19 kg (Rees et al. 2008).

Evidence for smithing occurs from the outset within four of the properties (BW 2, BW 4–6) along the west side of Brudene Street. Here, much of this evidence occurred within internal occupation deposits, usually charcoal-rich silts, rich in hammerscale, and associated with structures on the street frontages. On the east side of Brudene Street, despite the truncation of most of the structural evidence within the properties, enough evidence survived from the sweepings of debris into pits to suggest pre-Conquest smithing within Properties BE 2, BE 4 and BE 5. There is also relatively strong evidence for iron working in Property SE 3. The presence of hammerscale is often taken as a sign of in situ smithing activity, and if all these properties were functioning as smithies this would suggest a very intensive zone of activity. Given the relatively modest quantities of smithing debris recovered, however, this seems rather unlikely. Analysis of floor deposits (see this chapter, above, 'Internal features') showed that these contained foul matter and stabling waste that had probably been accidentally incorporated from the street and yards outside, and it is possible that smithing waste was also moved around in this way. In other cases, it might be suggested that smithing debris was the result of the manufacture of composite objects such as knives and combs, or discrete episodes of iron working, perhaps during building works, or resulting from a smith's visit to re-shoe horses or mend carts or tools on individual properties.

Some of the most extensive and consistent evidence for smithing came from Properties BW 2, BW 4 and BW 5 where hammerscale and smithing hearth bottoms were recovered from within the structures as well as from pits to their rear. The process of blacksmithing involves heating pieces of iron or steel until the metal becomes soft enough to be shaped with hand tools, typically a hammer and chisel. Within the earliest structure in Property BW 2 (Phase 4.1 – Structure NH8525) a small shallow pit (NH4713) contained a rich concentration of hammerscale. The pit had probably remained open for some time in order for the hammerscale to accumulate on its sides and it is perhaps significant







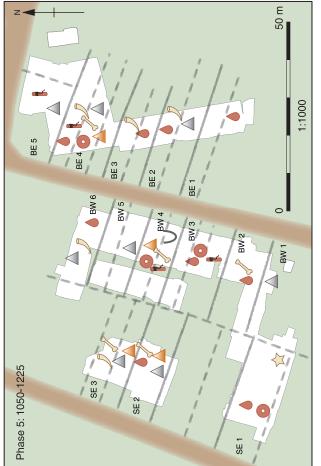


Fig. 5.7 Concordance of industrial and craft activity on the properties through time

that it was located near to a hearth (see Chapter 3, Fig. 3.13, NH4733). It is possible that the pit may have been used for quenching, its apparent lining having served to contain the water. Smithing hearth bottoms were found within all three properties, those within BW 4 and BW 5 discarded within pits to the rear of the structures. However within Property BW 2, three complete examples were found used as make-up for the floor of the second structure on the property (Phase 4.1, Structure NH8526) and they may have come from the demolished remains of its predecessor (Structure NH8525). A fourth example was found within the demolished remains of Structure NH8643—apparently a separate building behind Structure NH8526. Within Phase 4.1 Structure NH8595 in Property BW 5, a smithing hearth bottom was found associated with a hearth.

There was less evidence for possible structural remains associated with iron working. Although the forge (hearth) could be at ground level (within a pit), it would have been easier to work if built to waist level (see Starley, Chapter 7) and in these circumstances remains would not normally survive in the ground. It is possible that fragments of vitrified furnace lining that were found in some of the pits of these properties derived from discarded furnaces, though the amounts recovered were relatively small and those found during Phase 5 contexts are more likely to be residual. However, a fragment with possible tuyere hole (for blowing air into the hearth) was found in association with the smithing hearth bottoms within Structure NH8526 (Property BW 2). Areas of scorched floors such as floor 3056 found within Phase 4.1 Structure NH8566 (Property BW 4) and its Phase 4.2 successor (Structure NH8567) could indicate the position of raised furnaces. The use of such furnaces would have required access to good quality charcoal in order to reach the high temperatures required to heat the metal. The possible quenching pit found within Phase 4.1 Structure NH8525 produced an assemblage dominated by oak, a species notable for producing high quality charcoal that can be used for fuel to obtain such high temperatures (see Challinor, Chapter 8). Carruthers (see Chapter 8) suggests that the very numerous charred hazelnut shells found in some of the hearth rakeout samples could suggest that they were used as kindling for smithing hearths and kilns. However, analysis of the data showed no association between contexts with high levels of charred hazelnut shells and contexts with hammerscale within the properties under discussion. Only within a slumped deposit within Property BE 2 on the east side of Brudene Street did high levels of charred nutshells occur with smithing debris, although even here the nutshells could simply have been food waste since appreciable quantities of fish remains and animal bone were also present.

Evidence for smiths' tools was very limited, although part of a tanged punch (SF Cat No. 274,

Fig. 7.29) commonly used by blacksmiths for finishing was found within a Phase 4.2 pit to the rear of Structure NH8567 within Property BW 4, a pit that also produced a smithing hearth bottom. There were many more examples of tools for finishing and sharpening, 28 of which were recovered from the post-Roman phases of the site. Although many of these may have been for domestic use, the fragments of rotating whetstones that were present on the site came from Properties BW 2-4 and suggest the presence of a smith's workshop (see Shaffrey, Chapter 7). Rotating whetstones (or grindstones) were operated by crank handles, as shown in the Carolingian Utrecht Psalter of the mid 9th century (McNeil 1990, 389). Two of the fragments from the present site were quite thin and may have been used for sharpening small blades.

Two 'postholes', one of which apparently formed part of the north wall of Structure NH8567 (Property BW 4, Phase 4.1) and a second within the area of Structure NH8586 (Property BW 5, Phase 4.1), were both rich in hammerscale. The former also contained ten nail shank fragments and iron debris, the latter including a knife and horseshoe fragments. Starley suggests (see Chapter 7) that they may represent footings for anvil blocks, which later became filled with debris from the workshop floor. However, it is also possible, given the number of iron objects found in them, that these were in fact small pits used to store scrap material for re-use.

The blacksmith is likely to have been employed in the manufacture or repair of objects such as knives, tools, nails and horseshoes, with their manufacture requiring a stock of iron bars, rods or worn-out implements to be re-worked into new objects (Clarke 1984, 163). If such items were being made on the site (rather than simply being sharpened by the blacksmith), and given that smelting of iron was not being undertaken, we could expect to find evidence for stock items or for the recycling of iron objects. Significantly a high number of iron bars were obtained from Property BW 4, all within Phase 5 pits, which could conceivably represent raw material brought in for the production of small items such as knives and nails. Property BW 4 also contained relatively high numbers of knives and bladed tools (see Cool, Chapter 7). Similarly, in the case of iron nails, Property BW 4 produced the largest number of these objects on site during Phases 4.2 and 5 when the evidence for smithing was most prevalent, whereas Property BW 2 produced the most during Phase 4.1 (5 out of 7 on site) when smithing was most evident in this property (see Cool, Digital Section 3, Table 15). Horseshoes were concentrated within Properties BW 5 and BE 4 during Phases 4.1 and 5, three in contexts that also contained high levels of smithing debris, and it is tempting to suggest that these represented waste from re-shoeing of horses that was undertaken by the smith within the property. It may also be significant that these properties were located towards the north of the site, relatively close to the lane that led to the North Gate. Perhaps these smiths were shoeing horses for travellers while they otherwise conducted their business elsewhere in the town.

Non-ferrous metalworking

In contrast to the iron smithing evidence, there is only limited evidence for non-ferrous metalworking on the site, comprising a handful of crucible fragments and a small amount of copper alloy debris. This seems to derive from the small-scale production of small bronze or brass objects, since no evidence was identified for the working of precious metals (see Mortimer, Chapter 7 and Macphail, Chapter 8). This is in contrast to the abundant evidence for silver working found during Martin Biddle's excavations in Winchester at the Assize Courts, Lower Brook St, Cathedral Green and Wolvesey Palace (Biddle 1990, 85) and more recently at the southern end of Staple Gardens (Winchester Museums Service archive SG 84-85) and at St Peter Street (Teague 2002).

The bulk of the evidence for the crucibles was confined to, and fairly evenly spread between, Properties BW 2 and BW 4, though such activity only occurred within Structure NH8529 (Property BW 2) during its use in Phases 4.1 and 4.2 and from Phase 5 pits within Property BW 4. The activity within Property BW 4 occurred alongside the evidence for iron working, which had commenced here as early as Phase 4.1. A few fragments of iron slag with copper alloy corrosion were found within Property BW 4 suggesting the use of copper alloys in the production process, perhaps for brazing, coating or inlaying (see Starley, Chapter 7). Fragments of bronze sheet and a bent fragment of a possible box mount found in contemporary contexts within the property may have originated as stock to be melted down for use in this process. On the east side of Brudene Street within Property BE 4, Phase 5 pits produced a small quantity of crucible fragments and several fragments of twopiece moulds, which were probably used to cast a decorative object or fitting (see Poole, Chapter 7).

Taken together, the evidence would suggest some diversification during Phase 5 within Property BW 4 and probably Property BE 4, since previously (particularly within Property BW 4) only iron working had been undertaken. However, within Property BW 2 iron working appears to have been superseded at an earlier date by the manufacture of copper alloy objects and had apparently ceased by Phase 5.

Dyeing, spinning and weaving

About 300 sherds (2%) of the late Saxon and Anglo-Norman pottery assemblage had been stained purplish-red or reddish-brown internally (Table 5.5), probably as a result of contact with boiling solutions that contained the purple-red plant dye

madder (Rubia tinctorum) (see Cotter, Chapter 7). No analysis of the staining was undertaken for the present assemblage, but the presence of madder has been confirmed by chemical testing of similar sherds from The Brooks in Winchester (Walton Rogers 1996). The *c* 300 sherds from the present excavations probably represent the largest quantity of madder-stained pottery recovered from a single archaeological site in England. Madder-stained pottery has not been reported from other published excavations in Winchester (Cunliffe 1964; Collis 1978), although these mainly deal with small-scale excavations within the suburbs of the city. However, given that substantial assemblages of post-Roman pottery remain unpublished from sites within the walls, it is not currently possible to assess how widespread this activity was in Winchester. Recent excavations at 26-27 Staple Gardens did not identify any stained pottery from an assemblage comprising c 900 sherds of late Saxon and Anglo-Norman pottery (Vince and Steane 2008, 147–61) so perhaps this may suggest that the practice was not widespread along Brudene Street. No evidence was found for the cultivated remains of the plant on the site and therefore it is likely that the dye arrived ready processed, and possibly imported; the merchants of Saint Denis, Paris, had established a trade in the dye by the 9th century, although there is some evidence for its cultivation in England by the 10th century (Wild 1988, 60). Dyer's greenweed, Genista tinctoria, was probably present among waterlogged plant remains in a late 10th- to 11thcentury pit at The Brooks (Carrott et al. 1996, 4) though the authors suggest this could have been brought in incidentally with cut grassland vegetation. The dye-pots at the present site were apparently re-used medium to large cooking pots since deposits such as limescale, evidence of their former use, were sometimes visible under the staining.

Most of the properties contained some evidence for dye-pots, though the material tended to occur in small quantities across a wide number of contexts, the highest quantities occurring within Properties SE 1, BW 3, BW 4 and BE 4 (see Table 5.5 and Fig. 5.8). Dyeing was occurring from the outset since a significant quantity (27%) of the sherds came from contexts attributable to Phase 4.1, which cannot have been redeposited. Some 73% of the madder pot assemblage comprised the ubiquitous chalktempered pots that occur throughout the late Saxon period and into Phase 5. It is difficult to assess levels of redeposition among the material occurring in Phases 4.2 and 5, but the presence of madderstained sherds in ceramic wares that appear for the first time in Phases 4.2 and 5 confirms that the dyeing activity continued into these phases (for example, Fabrics MAV and MAD respectively). There were no examples of madder-stained pottery in fabrics of later medieval (Phase 6) date.

By far the largest assemblage came from Snitheling Street Property SE 1, from the infill of Phase 4.2 pit (possible cellar) NH6158, which

Table 5.5: Concordance of dyeing, spinning and weaving evidence

		Phase 4.1			Phase 4.2	2		Phase 5			Phase 6	
Property	/ Madder	Spindle	Weaving	Madder	Spindle	Weaving	Madder	Spindle	Weaving	Madder	Spindle	Weaving
	Sherds	Whorls	implement	Sherds	Whorls	implement	Sherds	Whorls	implement	Sherds	Whorls	implement
BE 1	*			*	(1)							
BE 2				1(0)	1		1(1)			*		
BE 3	*			*		2	*			*		
BE 4				22(19)	2	2	6(2)	1	1			
BE 5									1			1
BW 1	2(2)			1(1)			2(0)			1(0)		
BW 2	10(10)	1		3(1)	3		4(0)	1		1(0)		
BW 3	1(1)			4(1)			26(11)	2	1	8(0)		1
BW 4	23(23)			12(0)	2		22(3)	2	2			
BW 5	2(2)			7(0)			2(0)					
BW 6	*			*			*					
SE 1	5(5)			88(6)			14(0)	1				
SE 2				3(2)			17(0)					
SE 3	*			*	(1)		*					
Totals	55(55)	1	0 1	141(30)	8	4	94(19)	7	5	10(0)	0	2

Note: * Pottery no catalogued but noted during assessment (numbers in brackets: quantity of sherds of fabrics new to that phase)

produced a total of 80 madder-stained sherds derived from at least a dozen vessels, which may suggest a single clearance episode from dyeing activity close-by. Some of these particularly wellpreserved pot sherds showed staining around the brim of their rims suggesting that the pots had been filled full of the dye. One vessel also had evidence of iron working debris under its base, suggesting that both activities had been taking place simultaneously in the vicinity. Similar evidence came from Property BW 4, where iron working evidence was present within Structure NH8566 and madderstained pot sherds were recovered from the contemporary (Phase 4.1) pit, NH3464. On the east side of Brudene Street a large part of a dye pot was found in a charcoal-rich dump (hearth sweepings?) within a Phase 4.2 pit (CC2135) on Property BE 4.

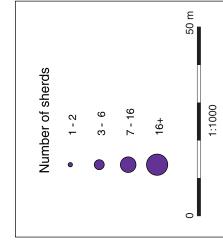
Given the lack of evidence otherwise on the site it must be assumed that dyeing was undertaken on a small scale, especially given the difficulties of access to the large quantities of water and heat that would have been required to operate large dyeing vats. The process of dyeing can occur at any stage between the spinning and the finished cloth, but it would seem more likely that the process was undertaken before weaving, and involved the dyeing of a hank of yarn that could easily be accommodated within a domestic cooking pot (Rogers 1999).

Other stages of cloth production were also carried out within the excavated area. A possible iron heckle tooth and iron comb teeth, used for the preparation of wool prior to spinning, were found in late Saxon pits within Properties BW 3 and BW 4, and a total of 19 spindlewhorls of bone or stone were recovered from the site as a whole and offer convincing evidence for the spinning of wool. It

may be significant that higher numbers of these occurred within Properties BE 4, BW 2 and BW 4, which also contained some of the larger assemblages of madder-stained pottery, suggesting both activities may have been occurring concurrently. Within Property BW 2 the spindlewhorls were found on the floor of Structure NH8529 (Phase 4.1) and within fills of internal features of its Phase 4.2 successor (Structure NH8530), though by then they may have been occurring residually. The earlier structure also contained madder-stained pottery on its floor levels, which suggests that yarn was spun and then dyed there. It interesting to note that there was a group of tightly spaced stakeholes within the structure against its west wall that could have formed part of a rack used to dry the dyed yarn.

A rubbish dump in pit NH2126, within Property BW 4, contained two madder-stained sherds from a post-Conquest pot found in association with a spindlewhorl, offering evidence for the continuation of spinning and dyeing on this property in Phase 5. Post-Conquest madder-stained pottery and spindlewhorls also occurred in Properties BW 3 and BE 4. It is perhaps significant that no spindlewhorls were found in Phase 6 contexts, at a time that corresponds with the gradual introduction of the spinning wheel by the 14th century, if not before (Whitney 2004, 122, Clarke 1984, 131); however, this could also simply reflect the depopulation and changing use of the area at the time.

Evidence for weaving is largely confined to Properties BW 2, BW 4 and BE 4, the same properties where there is association of spinning and dyeing. In common with published evidence from elsewhere within the city (Keene 1990, 203–6), there is a notable absence of the weights that were used



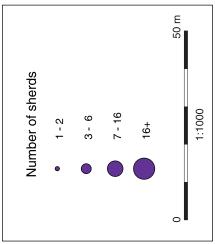
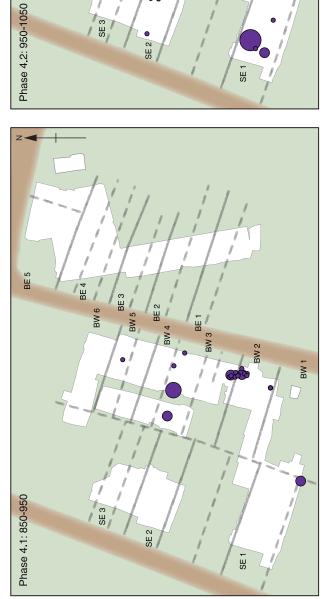


Fig. 5.8 Distribution of madder-stained pottery



BE 5

BE 4

BE 2

BW 3

BW 1



for the early medieval upright warp-weighted looms. At Back Street, located within St Cross, a row of doughnut-shaped fired clay loomweights that had fallen from an upright loom were found within a structure of 11th- to 12th-century date, suggesting that such looms persisted into the post-Conquest period (Hedges 1978). It possible that the fragmented remains of such items were not recognised by the excavators or remain unidentified among the amorphous fragments of the fired-clay assemblage on this site. However, a pin beater (SF Cat No. 174), used to adjust the weft whilst weaving on an upright warp-weighted loom, was found in a Phase 4.2 context within Property BE 4. It has been suggested that the paucity of evidence in the city for the warp-weighted loom is a reflection of the introduction during the mid to late Saxon period of the upright two-beam loom; picker-cum-beaters, used for such looms, have been found in pre-Conquest contexts (Keene 1990, 204). On the present site the only stratified picker-cum-beater was found in a posthole associated with Phase 5 Structure NH8573 within Property BW 4, though it is likely that the object was occurring residually from a pre-Conquest context.

A single tenterhook found within Property BW 5 (Phase 5), used to stretch lengths of cloth after it had been fulled to allow even drying, offers only very limited evidence that finishing of cloth was undertaken on the site, though such items are difficult to recognise given the poor quality of the preservation of the ironwork on the site (see Cool, *Digital Section 3*).

Skinning and furriering

The identification of 745 bones of cat, fox, squirrel, ferret/polecat, stoat and other small mammals from a single late 12th- to early 13th-century pit (NH5169) on the east side of Property SE 1 (Phase 5) offers convincing evidence of a furrier/skinner within the property during the later part of Phase 5. The remains of the small mammals consisted entirely of the lower legs and feet suggesting that skinning was undertaken elsewhere, as the feet were usually removed from the pelt at its final destination (see Strid, Chapter 8). However, the cat remains comprised semi-articulated skeletons of at least 10 individuals aged 8.5-11.5 months, one of which showed typical skinning cut marks on the frontal bone of its skull and on its mandible. At Victoria Road, in the northern suburb of Winchester, the remains of at least 50 cats, a few with skinning marks, were found in 14th- to 15th-century pits, and half had died before the age of 11 months. It is suggested, on account of their similar age at death, that cats were purposely reared in spring before being killed at the onset of the following winter when the fur was in prime condition, and presumably at the time of greatest demand (Serjeantson and Rees 2009, 178). The pit also contained the bones of neonatal lambs/kids with higher than

expected representation of metapodials. None showed evidence for skinning, but an association with cat bones has been noted elsewhere in medieval Winchester and within other medieval towns and suggests that the lamb skins were used to make garments on the site. It is possible that the furs and lamb skins were used to make entire small garments such as hoods, or to provide robes with fur linings or trimmings, work that was occasionally commissioned by tailors (Keene 1985, 286). Garments made or decorated with the coarse furs such as cat fur or budge (from lamb) were typically worn by the lower orders of society whilst those using finer furs such as fox and squirrel were reserved for the lesser nobility and middle classes (Emberley 1998, 47). The very fine furs of martens and ermine generally adorned princely or court garments and it is interesting to note that a possible pine marten bone was found in a Phase 4.2 pit within the west part of Property BE 5.

Bone and horn working

Low-level evidence from the site of sawn bone waste suggests that the manufacture of objects from bone was undertaken on a small scale in most properties, perhaps as a sideline to the other activities (see Strid, Chapter 8). Indeed the absence of major workshop activity, as denoted by substantial deposits of waste material from the various stages of manufacture, mirrors the lack of such evidence from the medieval suburbs (Rees et al. 2008, 360–3). The work may have complemented the other crafts since a drilled femur head, probably an unfinished spindlewhorl (see Cool, Chapter 7), was found on the floor of Phase 4.2 Structure NH8569 in Property BW 4, at a time when spinning seems to have been undertaken there (see Table 5.5). The raw material for the small-scale production of such items was at hand in the domestic refuse that was generated on the properties.

The outer sheath of the horn was of value to Saxon and medieval craftsman since it could easily be bent and moulded and made into various commodities such as knife handles, buttons, combs and spoons. The casing was removed from the core by boiling, or alternatively the horn was allowed to decay to such an extent that the sheath could easily be twisted off. Only the horn-core waste survived on the present site. Given that there is no firm evidence that butchery was undertaken on the site it must be assumed that the horns had been bought in, perhaps from butchers in Fleshmonger Street (originally Parchment Street but later allocated to St Peter Street), or cut off from hides and skins delivered to the tanners and tawyers, the former residing on Tanner Street (Lower Brook Street) (Serjeantson and Rees 2009, 176). Evidence for horn working derived almost entirely from Phase 5, and horn cores were found in appreciable quantities in pits within adjacent Properties BE 3 (CC1268) and BE 4 (CC2035, CC2043), and within Property SE 3

(NH1598) (see Strid, Chapter 8). Property SE 3 offers the best evidence that bone working had been undertaken on any scale, since the same pit also produced 589 fragments of large mammal ribs, many with their inner faces smoothed, and some with holes drilled down their mid-line for iron rivets. The purpose of these bone mounts is not fully understood (see Cool, Chapter 7) though Biddle has argued (1990, 678-83) that they represented strengthening plates for double sided horn combs. Certainly there is a clear association between these mounts and horn-cores within this pit. It also contained significant quantities of smithing waste, which might conceivably derive from the manufacturing of small iron rivets for the making of composite combs on this property.

Economic status and trade

The finds and environmental assemblages were analysed in detail for indicators of the economic and social status of the inhabitants of the area (Table 5.6). However, there were few clear trends and results were not necessarily consistent between different assemblages. At a general level most assemblages were consistent with low to middle status occupation, but differences between properties do emerge in the detail of the more unusual elements. This is considered further below, but overall Property SE 1 is the most conspicuous, with some evidence for a more varied and elaborate diet during Phase 5 and the largest group of glazed tripod pitcher ware pottery. Some of the more

unusual items found in the excavations were recovered from this property, including a stylus, two balances of a type that may have been used for weighing coin, part of an elaborate casket fitting and French pottery. The other conspicuous group of properties are those on the east side of Brudene Street. Here all the other examples of balances and French pottery occurred together within Properties BE 2-4, all but one in contexts of Phases 4.2 and 5, and in association with other rare finds types from the site—a decorated bone spatula from BE 2 and a stylus and casket mount from BE 3. Property BE 4 included a cellared structure in Phase 4.2 and more than half of all the locks and keys found in the excavations. Although these differences are not reflected in any of the other assemblages, they may be indicative of inhabitants whose trading activities were becoming both wider and increasingly profitable.

Animal bone assemblages were dominated by sheep/goat, cattle and pig, with very low quantities of game and wild fowl. There was no clear evidence for status differences between properties in terms of the meat component of the diet, although more beef may have been consumed at late Saxon Property BW 5 and Anglo-Norman Property BW 4 than elsewhere (see Strid, *Digital Section 11*). Property BW 3 contained the largest diversity of bird species, including woodcock, which could suggest higher status (Ticehurst 1923, 33). Although burnt bone was generally scarce, a higher than average quantity (7% of the assemblage) came from the Anglo-Norman phase of Property SE 1, and

Table 5.6: Status indicators

Phase/ Property	4.1	4.2	5	6		
BE 1				P (Imp.)		
BE 2		W, L/K, P (imp.)	P (imp.)	Pot (imp.),BM (Roof & b floor tile)		
BE 3		SF (dec. Spatula and stylus)	SF (vessel glass), BM (Chimney pot, AN flanged roof, floor tile)	W, BM (Chimney pot, stone latrine)		
BE 4		LK (4), SF (?Ivory pin beater), P (imp)	LK (2), W, B (Ashlar well)			
BE 5		LK (1)	B (Ashlar well), P (imp.)	P, P (imp.), B, BM (dec. floor tiles)		
BW 1			_	В		
3W 2		M	L/K			
BW 3			M, B, L/K(2), P (Imp.)	P; B (roof tiles, dec. floor tile), SF (Chess piece),		
BW 4		P	M, L/K (2), P (Imp.)	B (roof tiles)		
BW 5	PR(fig?)	M, P	SF (Cu stylus), L/K			
BW 6						
SE 1		PR (fennel)	M*, F, PR (grape, peach), SF (Casket fitting), W(2), P (Imp.), B (Purbeck marble slab)	SF (silver brooch pin)		
SE 2		В	SF (Figurine), B	В		
SE 3						

Kev

Fish F Cereal/fruit PR Meat M Pot P Finds SF Building material BM Building B Locks/Keys L/K Weighing W

suggests differences in the preparation of meat. In comparison to stewing, roasting is expensive in terms of fuel and labour and can be seen as a sign of increased wealth (Woolgar *et al.* 2006, 70).

The plant remains (see Carruthers, Chapter 8) provide an interesting insight into possible dietary differences that may be related to status and to changing tastes. The late Saxon cess pit samples produced significant quantities of pulses, suggesting that cheap, protein-rich peas and beans formed a major component of the daily diet at the time. Samples from Anglo-Norman cess pits, however, suggest that there was a decline in the consumption of pulses in the post-Conquest period. In the light of the evidence for roasted meat noted above, it is interesting that Property SE 1 also produced seeds of grape and fennel, and a possible peach stone, suggesting that its inhabitants had access to imported fruit and flavourings, and were less dependent on cheap pulses, which were present in only comparatively low concentrations. In general the staple diet is likely to have been bland, and the main possible flavourings identified were seeds of mustard, carrot and poppy.

Fish consumption (see Nicholson, Chapter 8) appears to follow a similar pattern within all the properties, with herring and eel making up 60% and 30% respectively of the Phase 4.2 recorded assemblage. A variety of other fish were also present but evidently only as a minor and occasional component of the diet. The composition of the assemblages from the present site is similar to that of the contemporary assemblages found within the suburbs of Winchester. The increasing quantity and diversity of marine fish consumed reflects the national trend, which saw a marked expansion in sea fishing around the year 1000. Amongst the Anglo-Norman (Phase 5) assemblages the proportion of herring increased to 80%, while eel declined to only 6.5% and was overtaken amongst the numbers of identified bones by flat fishes, particularly plaice/ flouder/dab. The assemblage is very similar to that from the recent excavations at Southampton, and Southampton was probably the primary source of fish for Winchester. The consumption of shellfish seems to have increased in the Anglo-Norman period, with mussels and periwinkles becoming particularly popular, whereas oysters had predominated in the late Saxon assemblages (see Campbell, Chapter 8). The only notable fish was a sturgeon scute that was found with late 12th- to early 13thcentury pottery, near the bottom of Phase 5 pit NH5169 on Property SE 1, a very expensive fish only available to the most affluent. This adds to the evidence noted above for a higher status diet on this property than elsewhere on the site. Elsewhere in Winchester sturgeon has been found in a monastic context (St Mary's Abbey, located within the monastic south-east corner of city) and from a 13thto 14th-century house in the western suburb during excavations on Sussex Street (Serjeantson and Rees 2009, 180).

The Phase 4 and Phase 5 pottery assemblages (see Cotter, Chapter 7) were dominated by functional vessels for cooking and storage in coarse local wares that provide no evidence for differences in social status. Tablewares such as bowls, cups and dishes are rare in the assemblage and many households may have used wooden tableware, such as the examples found at Lower Brook Street (Keene 1990c, 959-65), which date from the 10th up to the 13th centuries. The introduction of relatively small amounts of brightly glazed Winchester Ware during the second half of the 10th century, occurring as jugs or spouted pitchers, would have been in stark contrast to the dull pottery that previously dominated the household. Winchester Ware seems to have been made locally but in imitation of the exotic North French yellow glazed ware that was imported into Southampton and London (see Cotter, Chapter 7). Glazed wares tended to be used for tablewares, mainly jugs for the serving of wine and other beverages, and it is generally accepted that there is a connection in the medieval period between glazed wares, increased prosperity and social drinking. However, all properties apart from BW 6 contained some evidence for this ware, suggesting it was used by most households, but perhaps on special occasions rather than on a day to day basis. The distribution of its successor, tripod pitcher ware, introduced during the early part of Phase 5, suggests that these large glazed pitchers and jugs were more abundant on the properties on the west side of Brudene Street, and at Property SE 1, and less well represented on the east side of Brudene Street. Taken at face value this could suggest that the properties on Brudene Street West were more prosperous, but this is not obviously reflected in other assemblages. In broad terms, on the basis of the pottery evidence, it can be suggested either that there were no marked differences in social and economic status between the different properties, or that the pottery assemblages (particularly those of the late Saxon and Anglo-Norman periods) are not a very sensitive reflector of these.

Pottery from Phase 6 was not subject to the same level of analysis as it was not all recorded in detail. It is notable, however, that high glazed ware sherd counts were recorded for Properties BW 3 and BE 5. The sherds from Property BW3 were mostly from the backfill of the Phase 5 stone well-house, and were presumably deposited in the well after it had gone out of use, at a time when the property had been incorporated into the residence of the Archdeacon of Winchester. A more exotic assemblage recovered from his infilled cellar included a sherd from a 15thcentury Valencian bowl (Cunliffe 1964, 144). The highest glazed ware sherd count for any phase was from the stone cellar and stone-lined well of Phase 6 Property BE 5, which John Cotter comments may indicate wealthy occupants (see Chapter 7). Most of the scant imported pottery came from the properties on the east side of Brudene Street, and in Phase 6 high quality imported pottery was found (albeit in

very small quantities) at Property BE 5 and Property BE 2, including a sherd of polychrome Saintonge ware from south-west France that was probably imported into Southampton. This could suggest that the occupants had a comparatively wide range of contacts and were perhaps traders or merchants. A substantial house excavated on The Brooks that belonged to wealthy wool merchant John de Tyting between 1299–1312 (Scobie *et al.* 1988, 40–5) also produced jugs of Saintonge ware.

The distribution of ceramic oil lamps (see Cotter, Chapter 7) may have some bearing on the activities and wealth of the occupants, although again the evidence is inconclusive. Most date from the 10th to 12th century, at a time when most domestic lighting was probably in the form of rush lamps. The possession of such ceramic lamps could be seen either as an indication of slightly greater wealth or as an accessory to activities such as textile working or writing. During Phases 4.2 and 5 Properties BW 4, BW 5 and BE 4 had the greatest concentration of lamps at a time when spinning, bone working and copper alloy working (perhaps inlaying objects) were being undertaken, activities that require good lighting especially during the dark winter months. Conversely, where there was little or no evidence for craft activities, for example within Properties BW 2 and BW 3 during Phase 5, there were few lamps. The same conclusion was reached at Lower Brook Street where a high incidence of lamps from two medieval houses was interpreted as the use of these buildings for light industry, requiring long hours of indoor work (Barclay and Biddle 1990, 986).

Status is also reflected by the buildings that the occupants lived in, and here the differences become more apparent, especially during Phases 5 and 6. The late Saxon structures were of timber throughout the period, comprising small mainly single-room buildings used both for domestic occupation and as workshops. The enlargement of such structures (for example, in Properties BW 2 and BW 3) during Phase 4.2 could reflect increased stability and prosperity. The appearance of cellared structures (Properties BE 4, BE 5, SE 1 (?) and BW 6 (?)), allowing for the secure storage of considerable quantities of valuable stock or personal possessions, may also be a sign of expanding trade and increasing prosperity, and a growing need for security may also be reflected in the unusually high numbers of locks and keys that were found on the site (see Cool, Chapter 7). Significantly nearly half of the 14 items were found within Property BE 4 during Phase 4.2 at a time when a large cellar had been built to the rear of the property.

Cool also draws attention to the number of balances that were found on the site and suggests that they may have been used for checking the weight of coin. Single examples occurred in Properties BE 2 and BE 4 in Phase 4.2, two in Phase 5 contexts within Property SE 1 and one (possibly residually) from a Phase 6 context within Property BE 3. Most of the handful of imported pottery from

the site came from the properties where balances were found: late Saxon Beauvais-type ware (Fabric MBEAU; c 900–1100) from north-east France (Phase 4.2, Property BE 2), early medieval Pingsdorf-type ware (Fabric MPIN; c 925-1250) from the Middle Rhine (Phase 5, Property BE 3), North French grey ware (Fabric MFGY; c 875–1000) (Phase 5, Property BE 4) and Normandy gritty ware (Fabric MFI; c 1070-1250) (Phase 5 Property SE 1). Taken together the evidence could suggest the presence of traders or merchants here. Certainly these properties (particularly BE 3 and SE 1) contained some of the few higher status personal objects found in the excavations, notably the decorated bone spatula from Property BE 2 (SF Cat No. 189, Phase 4.2; Fig. 7.26) and the casket mounts found in Phase 5 contexts within Properties BE 3 and SE 1. Part of a copper stylus of late Saxon type (SF Cat. No. 218; Fig. 7.27) came from a pit on Property BE 3, suggesting writing on waxed tablets was undertaken. Two further Saxon styli were recovered from the site, one residually in a Phase 5 pit within Property BW 5 and the other intrusively within the subsoil on Property SE 1.

By the end of the 13th century (Phase 6) the structural evidence shows that substantial residences occupied a number of the proprieties (BW 1/SE 1, BE 5 and the Archdeacon's residence combining BW 2–5 and SE 2–3). Unfortunately very little of these properties fell within the area of detailed excavation of the present project, and information about them therefore remains limited. Finds of a 12th- to 14thcentury chess piece from a robber trench within Property BW 3 and a silver brooch pin from Property SE 1 (both contained within the Archdeacon's residence during this time) provide a hint of higher status. Elsewhere the evidence from the present excavations is only indirect, but other masonry buildings appear to have been constructed on Properties BE 2 and BE 3, from perhaps late Phase 5 onwards. Pits on Property BE 2 in this phase contained mortar and chalk rubble in their upper fills, while the upper fills of pits within Property BE3 contained fragments of building materials such as chimney pot, floor tiles and Anglo-Norman flanged roofing tiles.

The project area from the 13th century

Winchester probably remained stable in terms of its size and population between the first half of the 12th century and the early 14th century (Keene 1985, 93). However, there is a general impression (ibid., 142–3) of a shift away from the higher western side of the city towards the low-lying eastern part over this period. This could reflect an increase in the numbers of people engaged in the trades relying on the water resources of this part of the city. Snitheling Street was one of the more densely populated parts of the city in 1148 (according to Survey II) with 35 properties, but it appears to have been virtually deserted by around 1300 when only four are known (ibid., 148 table 3).

During the course of the 14th century Winchester underwent a marked contraction (ibid., 93) and Keene comments that the streets of the north-west quarter suffered considerable depopulation during this time. In the project area, there was a significant reduction in the number of properties in Brudene Street, although the decline of Brudene Street was slower than that of Snitheling Street. There were 35 properties in Brudene Street in 1148, 26 in 1300, 15 in $\bar{1}41\bar{7}$ and 13 in 1550 (ibid., 148, table 3), though the tarrage survey of 1417 lists only one house and three cottages—the remainder comprising gardens and a croft—testament to the depopulation of this area of the city. This contrasts with the contiguous Shulworth Street, Wongar Street and Tanner Street, located in the heart of the industrial east side, where the numbers of properties grew in the period 1148–c 1300 and where there appears to have been much less depopulation by *c* 1500 (ibid.).

The 13th and early 14th centuries

These changes were very marked in the evidence from the present excavations, even allowing for the probable truncation of later medieval levels in parts of the site. By the late 12th to early 13th century it is clear that the earlier pattern of rows of narrow plots occupied by the timber houses of artisans and traders was breaking down. Most of the excavated tenements along the west side of Brudene Street and the east side of Snitheling Street were subsequently amalgamated and incorporated into the spacious urban estate of the Archdeacon of Winchester. To the south, Properties BW 1 and SE 1 were amalgamated and substantial stone buildings were constructed on the newly enlarged plot; stone houses with tiled roofs, chimneys and tiled floors were constructed on the east side of Brudene Street, and on the northernmost excavated plot the surviving remains of a substantial stone cellar and a stone house suggest that these may also have been buildings of considerable pretensions. The development of the Archdeacon's residence is considered in more detail below.

Although this change of use is apparent in documentary evidence, the archaeological results are key to understanding exactly when this process began, and how it proceeded. The excavated evidence suggests that the decline of the Phase 5 Anglo-Norman tenements is broadly datable to the period c 1175–1250, since sherds of Early South Hampshire red ware are a characteristic component of the backfills of the associated pits and postholes. A make-up layer in the top of Anglo-Norman pit NH5105 on Property SE 1, probably consolidation associated with the construction of the Phase 6 buildings above, contained five sherds from tripod pitchers in South-east Wiltshire coarseware (MADW), datable up to 1250, along with single sherds of sandy ware MDF (probably 1150–1350) and high medieval glazed white ware MMH, which appears c 1225. This would be consistent with a date

around the second quarter of the 13th century for the construction of these buildings, and by implication the amalgamation of Properties BW 1 and SE 1 into a single tenement facing Brudene Street. Similar evidence comes from Property BW 4, where the upper fills of Phase 5 pit NH2084 contained large fragments of tripod pitcher (fabric MAD; *c* 1050–1225) together with sherds of Laverstock type anthropomorphic jug (Fabric MNX; *c* 1230–1350).

Although several of the Anglo-Norman tenements were incorporated into the Archdeacon's residence, the evidence for a prosperous tenement with numerous masonry buildings on the amalgamated Property BW 1/SE 1, and the new buildings on the east side of the street, suggests that the 13th century was not a time of decay and decline in the project area, but rather a phase of redevelopment which saw the construction of fewer, but larger and more elaborate properties. There is, nevertheless, a clear sense that properties were being reorientated towards Brudene Street, which is consistent with the evidence that there was a much more rapid decline along Snitheling Street to the west.

From the 13th century much more documentary evidence is available to help to identify some of the people who held these properties. Documentary information that relates to the area of the excavations from the 13th to the 17th centuries is summarised in Chapter 1 and a proposed correlation with the excavated tenements is shown in Figure 1.5 (after Keene 1985, 637-41). This initially seemed to suggest that by 1303 the area of Property BW 1 had been incorporated into the Archdeacon's residence, and was identifiable with a property formerly owned by Agnes Greyshank. At this time it extended from Brudene Street to Snitheling Street and lay between the Archdeacon's property on the north and Petronilla's (widow of Adam de Northampton) property to the south. However, this seems to be at odds with archaeological evidence which suggests that the boundary wall that defined the southern extent of the Archdeacon's residence had been constructed about this time but lay to the north of Property BW 1 (see Chapter 4). Therefore it seems more likely that Agnes Greyshank's property was actually Property BW 2, since it is located to the north of the wall. The substantial structural remains that were revealed within Properties BW 1 and SE 1 may therefore have formed part of the capital tenement of Adam de Northampton and his wife Petronilla (see Chapter 1). It is interesting to note that beforehand and by 1249 this tenement was inhabited by the Silvester family whose ancestors appear to have been moneyers, including Hugh Silvestre who in 1248 was a moneyer at the Winchester Mint (Keene 1985, 1347). The name can be traced back to the survey of 1148 (Siluester), which lists two occurrences on Brudene Street (Biddle 1976, 172) though neither of these appear to have been connected to any of properties on the site.

There is no clear archaeological evidence for the amalgamation or enlargement of the properties on

the east side of Brudene Street in the 13th century or later. Documentary research suggests, however, that Properties BE 4 and BE 5 were one property by 1300 (see Chapter 1, Fig. 1.5b, Property 253) and by 1417 Properties BE 1–3 formed the rear part of a single property that fronted Jewry Street (see Fig. 1.5c, Property 267). However, the archaeological evidence suggests that Property BE 5 remained a separate entity at least until the construction of the substantial cellared building (CC2100) within its western part sometime in the 13th century, as this building appeared to be abutted by the wall that had formed the boundary with Property BE 4 to the south since at least the period 950–1050 (Phase 4.2). This elaborate but heavily robbed cellar, possibly originally dressed with expensive stone and with a stone or tiled floor, must have been part of a property of some pretension. Such elaborate cellars have been excavated elsewhere in Winchester, for example the 13th- to 14th-century cellar found at the former Masons Hall, 2 Parchment Street that belonged to a wealthy wool merchant (Teague 1991). Property BE 5 was located opposite the parish church of St Saviour, which was situated across the lane that defined the north side of the property. Documentary research (see Chapter 1; Keene 1985, 643) suggests that Thomas de Modesfont, chaplain, who was probably the rector of the nearby church, held part of a property here by 1304 (property 253, which can be equated with the excavated Properties BE 4–5). It would seem reasonable to assume that he resided adjacent to his church, though it is not clear that a priest would have needed the elaborate cellar (possibly used to store wine or other valuable merchandise), so perhaps he occupied the house to the east which would have been directly opposite the site of the church. It is of note that a second tenant is also listed in the same entry, Henry de Preslonde (ibid.), who might therefore have occupied the west part of Property BE 5.

The project area after the early 14th century

The 13th-century redevelopment of the area was, in the event, to prove short-lived. The excavations recovered almost no material datable after the late 13th or 14th centuries. Indeed, apart from 19thcentury material, only three sherds of pottery (Tudor green ware, c 1375–1500) need date to later than the 14th century. By the late medieval period, the properties on the west side of Brudene Street, including the Archdeacon's residence, appear largely to have been abandoned, and documentary evidence suggests that the area was used for gardens and orchards (see Chapter 1; Keene 1985, 640-2). The pottery associated with demolition rubble and the final fills of pits on the Phase 6 properties here suggests that this change of use happened no later than c 1350–1450. On the east side of Brudene Street the abandonment is best represented by the robbing and infilling of the cellar, CC2100, within Property BE 5, which had happened before the end of the 14th century. A thick dark loamy soil survived over its upper levels suggesting that the area remained open as garden and this would correspond with the description of what may have been this property in 1371 as the garden of Sibyl de Preslonde (see Chapter 1; Keene 1985, property 253). Evidence from the pits within Property BE 2 suggests that occupation did not continue later than the 14th century. The lack of later pits, if not evidence for complete abandonment, does at least suggest a marked change of use within this part of the property. By the end of the 14th century it probably formed the rear (garden?) of a large property fronting Jewry Street to the east (Keene 1985, Property 267). The lack of Phase 6 pits within Property BE 1 and the infilling of well CC1128, possibly as early as the early 13th century, might also be consistent with amalgamation and reorientation, if not with complete abandonment.

THE RESIDENCE OF THE ARCHDEACON OF WINCHESTER by Alan Hardy

Taken together, the evidence of Cunliffe's excavations in 1960 and the present excavations along the west side of Brudene Street suggest that numerous tenements in the area were amalgamated to form a single large property that is identifiable in the 13th century as the residence of the Archdeacon of Winchester. The proposed final layout of this property is shown in Figure 5.9 and an artist's reconstruction is shown in Plate 5.4.

A summary of Cunliffe's structural interpretation

The footings defining the groundplans of two distinct buildings were identified by Cunliffe, one interpreted as a church or chapel, and the other (the cellar of) a hall building. Part of a short wing was found abutting the west side of the south end of the hall, and was interpreted as a garderobe tower. In addition, two later walls were partially revealed, one extending to the east and one to the south of the hall, and one short length of possible wall was found to the south-east of the hall. With the exception of the west end of the church/chapel none of the structural remains revealed by Cunliffe were reexamined in the present project.

The chapel

The present project revealed the footings of the west end of the chapel, and confirmed the building footprint as determined by Cunliffe. The archaeological evidence recovered by both Cunliffe and the present project found no dating evidence from within the fabric of the footings. However, pottery from the layers inside the chapel footprint and from a number of associated pits includes fine sandy ware fabric MBK (1050–1150) and Newbury B-style ware (1050–1200). Although not closely datable, this is clearly an Anglo-Norman assemblage. The

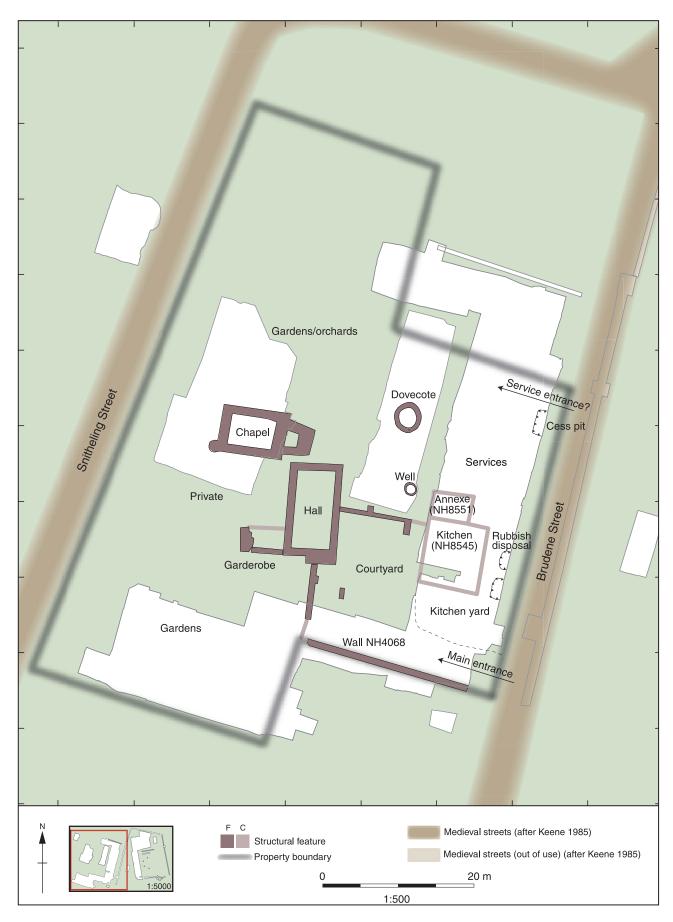
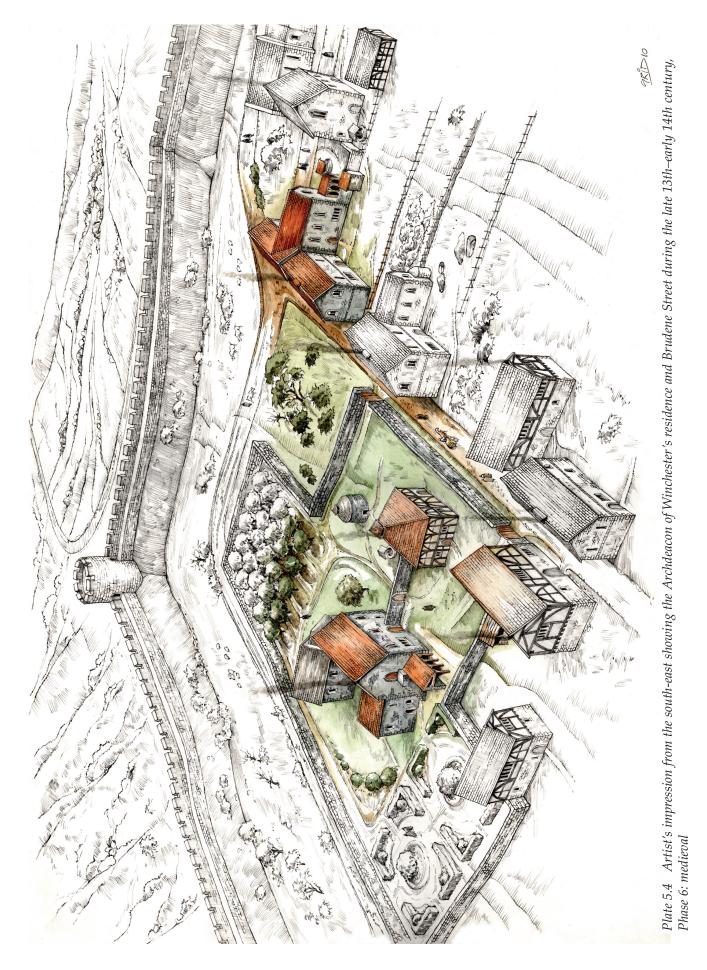


Fig. 5.9 Conjectural layout of the Archdeacon's residence at the end of the 13th century



presence of sherds in fabric MBK and the absence of wares introduced in the later 12th and 13th century would support a tentative dating for the construction of the chapel perhaps in the early to mid 12th century, although a late 11th-century date cannot be ruled out on the evidence available. It is not clear whether the chapel and the stone house were built at the same time; it is possible that the chapel was originally built to accompany a principal residence towards the Snitheling Street frontage of the unexcavated area to the south of Property SE 2. What is reasonably clear, however, is that it was not contemporary with the imposing timber-built Structure NH 8622 excavated to its west, since the pottery from the backfilled postholes and pits associated with Structure NH 8622 is entirely late Saxon in character, and suggests that the structure had been demolished before Anglo-Norman ceramics came into general use. There was no evidence in the area of the chapel to suggest that an earlier church had been built here.

The small size of the structure (as judged from its footings) is notable, as is the apparent lack of any subsequent structural modification or enlargement (or at least such as would affect the groundplan). Keene notes the typically modest size of some of the parish churches in Winchester, at least in their original phase (1985, 126). Figure 5.10 shows the groundplan of the chapel alongside those of other parish churches in Winchester in the 11th-12th centuries. The church of St Mary in Tanner Street is of a comparable size, but clearly more substantial, and the churches of St Peter in Macellis and St Pancras were clearly more developed. Keene suggests that the small size of the chapel under investigation may reflect its private foundation, and certainly its very close proximity to the hall could be seen as supporting this contention. The width of the foundations of the smaller cell of the church/chapel as revealed by Cunliffe led him to suggest that they might have supported a tower (1964, 170). Equally, however, these foundations could have supported an apsidal end similar to those seen at St Peter in Macellis or St Mary Tanner St, and this possibility is illustrated in the reconstruction of this period (see Plate 5.4).

The linking of the chapel and the hall as two parts of a single enterprise is in keeping with a trend of the late Saxon period. Blair's survey of the late Anglo-Saxon church in England concludes that individual seigneurial initiative was much more common, especially in the context of the new urban courts ('hagae') belonging to the many established rural manors in the region (Blair 2005, 402–3). Furthermore there was no distinctive urban church architectural style at this time, except where space constrictions dictated, and a conventional one- or two-cell plan was the norm (ibid.). Identification of the builder and early owner of the property is problematic, and is considered further below.

The chapel becomes a church?

If the chapel did for a time serve as a parish church, the apparent absence of any associated burials, either within the building or close by, is noteworthy. However, while this could be seen as support for the option that the building was a private chapel and not a church, the absence of a dedicated burial ground seems to have been common in the 12th and 13th centuries for the parish churches in Winchester. Until the 14th century the Cathedral restricted the parish churches' rights to burial (Keene 1985, 107–8). In some cases practical considerations played a part; some churches had no room for a burial ground until the depopulation of the late medieval period provided space in adjacent empty tenements.

Whether it ever became the parish church, as Keene and Biddle suggest (Biddle 1976), and if so for how long, is still unclear, and the archaeological evidence can currently add little new information. It is interesting to note, however, that the lane or passage identified along the north side of Property BW 3 could have provided access to the chapel from Brudene Street (see Chapter 4, Fig. 4.1). Keene notes the survival of meandering lanes that originated as ad hoc means of access from the nearest street through the tenements to the churches, which were often set back from the frontages (1985, 51). This passage originated in the late Saxon period, when there is no reason to propose the existence of a church or chapel in this location, but it could have become a means of

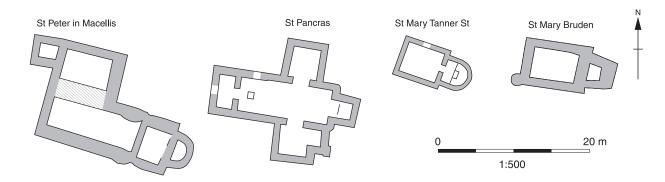


Fig. 5.10 Contemporary 11th to 12th century church footprints in Winchester

access to the chapel for the people of Brudene Street during the 12th century. No physical evidence of a lane or road surface was found in the immediate vicinity of the chapel, although a small area of cobbling was seen to the north.

If this did in fact change from being the private chapel of the builder and occupier of the hall to being the parish church of St Mary, Keene suggests that it remained as such 'for most of its life' (1985, 641). However, other churches within the city, such as St Mary in Tanner Street, or St Pancras, show a steady sequence of structural change and enlargement, responding (presumably) to the increasing parish populations, at least through the 12th and into the 13th centuries. There is no sign that this chapel was ever enlarged in this way, and documentary evidence suggests that it had fallen down or been demolished by the middle of the 15th century. In the context of a decline in population in the area underway from the later 12th century onwards, there may perhaps never have been any need to enlarge the chapel to cater for a growing congregation. The evidence that the Archdeacon enclosed his property during the 13th century and obstructed a public lane in the area might equally suggest an attempt to discourage public access to the church through his land, and a reversion of the chapel to essentially private use.

The hall

The remains of the cellared hall excavated by Cunliffe, along with its later structural additions, did not come within the perimeter of the trench outline of the current project. We are still, therefore, entirely dependent upon the original published description and interpretation of the structural evidence. In summary, Cunliffe interpreted the building as a two storey house of 'the upper-hall type', comprising a vaulted cellar, with a compacted chalk floor some 2 m below contemporary ground level. His interpretation that the enlarged footing at

the south-east end of the building represented an external staircase implies, according to Keene's discussion (1976, 347 n.), the possibility of two above-ground storeys, which Cunliffe did not consider in his excavation report. A possible parallel can be seen in the form of the manor house at Boothby Pagnell in Lincolnshire, built at the beginning of the 13th century, which has a simple vaulted cellar below an open hall, with a solar at one end (Fig. 5.11; also Wood 1965, fig. 6).

Faulkner's model (1958) of the self-contained building consisting of a first-floor hall over a basement clearly formed the basis for Cunliffe's interpretation, and was the accepted model for English medieval houses of status. However, the wealth of archaeological data made available in succeeding decades has warranted a re-examination of this model. It is worth, therefore, reconsidering the hall that Cunliffe found, in the light of these developments. By examining the archaeological evidence in association with documentary references and the contemporary terminology used to describe properties, Blair (1993) has argued that what was seen as the two-storied 'hall' 'aula' was actually typically the chamber block 'camera' associated with a separate open hall, an arrangement with its origins in late Saxon manorial houses such as Goltho. Particularly in ecclesiastical properties, these buildings might be arranged to form a courtyard, perhaps echoing the claustral arrangement of monasteries (ibid. 10-11). Examples cited by Blair include the alien priory at Grove in Bedfordshire; this originated as a plain hall with a possible partitioned end, and a separate chamber block, later converted to a chapel. A third structure was rebuilt as a replacement (but still separate) chamber block (ibid., 7; Fig. 5.11).

If this was the case with the Archdeacon's residence, and Cunliffe's hall is in fact the chamber block only, then it could indeed have been a single storey over a cellar. In which case the enlarged footing at the southern end could not be a staircase

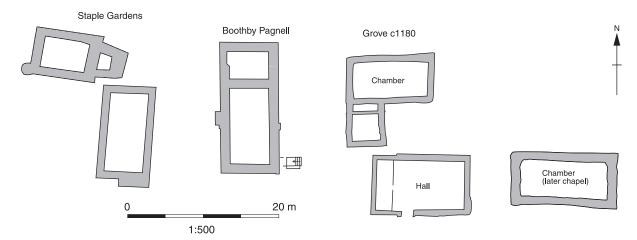


Fig. 5.11 The footprints of the hall and chapel at Staple Gardens compared to those at Boothby Pagnell, Lincolnshire, and Grove, Bedfordshire

and perhaps was no more than some sort of buttress. So is there any evidence—from his excavations or the present ones—of a separate hall on the property, which might add support to Blair's model in this instance? A hall in Blair's model need not be as substantial a building as the chamber (1993, 8), and its footprint need not necessarily be defined by equally substantial footings. While there is fragmentary but reasonably convincing evidence for a probable timber-framed building to the east of the residence, in the form of beam slots, remnants of a clay floor surface, and an internal hearth base, the putative structure seems better characterised as a service range, incorporating a square kitchen and an annexe, with two large rubbish pits close by.

It is just possible that the later walls Cunliffe found to the south and east of the hall represent parts of later buildings. Both of the footings were shallow and only 0.5 m to 0.75 m wide—much less substantial than the hall or chapel footings. Following Blair's argument, either could represent one side of a timber-framed hall set on plinth stone footings, of which no further trace has survived. However, the easterly wall meets the hall at an oblique angle, and the southerly wall meets the hall at the point where the putative staircase (or buttress) ascends. The small length of footing exposed to the east may represent a parallel wall, but it is only 3.6 m away, too close to represent the opposite wall of a hall, although some sort of gallery might be a possibility. Taken as a whole, however, Cunliffe's evidence does not provide strong evidence for a large hall in addition to the two he identified—the rectangular hall and the chapel.

While Cunliffe's excavation area was modest, and the present project, though more extensive, was still limited in area and depth of investigation, on balance it seems more likely that Cunliffe's original interpretation (with Keene's modification in regard to the number of storeys) was correct. The flint wall with expanded foundations added to the southwest corner of the hall building was interpreted by Cunliffe as probably a garderobe (1964, 168). The size of this addition (at approximately 8 by 5 m) is too large for this sole function, but it is possible that a garderobe over the backfilled pit at the west end was joined to the main building by a wardrobe. Similar interpretations have been suggested for added structures at Penhallam, Cornwall (Beresford 1974, 106, and fig 27) and the manor of the Barentin family at Chalgrove, Oxon (Page et al. 2005, 161–2 and fig. 2.3).

Possible support for Cunliffe's original interpretation (and Keene's elaboration of it) may lie both in the relatively constrained size of the building plot and the depth of the watertable. For the plot to accommodate both the dwelling and the chapel, the hall and chamber and cellar would be better combined in one three-storey structure. The low groundwater meant that there would be little risk from groundwater flooding in constructing a full-depth cellar.

The extent and layout of the original property

While the present project has revealed significant evidence of the surroundings of the chapel and hall, there are still many unanswered questions surrounding the early life of this property. The relationship between the chapel and the hall is significant. The chapel was, unsurprisingly, orientated west-east. The alignment of the hall was clearly dictated by that of the chapel, the effect being to achieve a courtyard between them. The fact that there is very little gap between the two suggests a desire to create a 'private' space. No physical evidence was found of boundaries to the property within which these two buildings were constructed, but setting the two building footprints within the conjectural tenement boundaries of Phase 4 and 5 (see Chapter 4, Fig. 4.1), suggests that the property was a composite of SE 2 and the unexcavated property to the south. If the quarry pits for the buildings were also part of the same property, this would incorporate Property SE 3 as well.

Biddle and Keene suggested that the evidence of the 1110 Survey (Survey I) might mean that Brudene Street was favoured by magnates and barons for occasional visits to the city (Biddle 1976, 387), although their analysis of the later survey indicates this character may have become influenced by incoming traders and craftsmen. In contrast, they see Snitheling Street as the backwater it topographically was, a street of low rents and high population density.

Cunliffe argued that the juxtaposition of the two buildings implied that the original 'front' of the property was to the west, onto Snitheling Street. His documentary research suggested a possible tenant cited in the 1148 survey—one Drogo (Drew), who held a 'messuage there and servants and chattels'. The survey's description at least suggests a substantial property. However, Keene and Biddle argued (1985) that this entry related to a property fronting onto Brudene Street, not Snitheling Street. They suggested that the buildings could possibly be associated with tenements 379, 380 and 381 (see Fig. 5.5 above), of which the first two belonged to the king, and whose entries are as follows in the 1148 survey:

- 379 Harding the blacksmith's son holds 1 land of the king worth 4d quit in return for his services and receives 18d. And from the same land Roger the painter receives 4s. 6d; and from the same land Harding the brewer receives 2s
- 380 Richard Son of Odo pays the King 6d and receives 2s
- 381 Drew Blond pays Hugh *de Hahela* 6d for 1 land which Hugh holds quit

Is Cunliffe's conclusion about the orientation of the property in its original guise correct? Unfortunately the current excavations did not add any useful information to the issue. The 'back' of the property, or eastern boundary is (in Cunliffe's scenario) conjectured to be congruent with the south-east corner of the hall. No physical trace of a boundary was found, which is not necessarily conclusive, but there is no clear documentary evidence to suggest that, in the early/mid 12th century, there were any single properties extending from Brudene Street right through to Snitheling Street, in the area of investigation. Even if the evidence cannot put a name or occupation to the builder of the hall and chapel, they were clearly of some considerable status, which stands in sharp contrast to the view espoused by Biddle and Keene (Biddle 1976, 387) that by the mid 12th century Snitheling Street was an area of a high density of population and low property values.

Phase 6: The later development of the residence

The 'service range' (Structure NH8545/NH8551)

The most problematic structure by far was Structure NH8545/NH8551, the successor to the elaborate Phase 5 tenement in Property BW 3. This was the only part of the Brudene Street frontage to see continuous activity running through Phase 6 until at least late in the 14th century, and, although the stratigraphic sequence was badly disturbed by later wall foundations and generally truncated by postmedieval and modern levelling, the possible remains of a timber framed building or buildings were identified. On the basis of the structural evidence, its spatial relationship to the hall to the west, and the proximity of the well (NH9530) and two contemporary rubbish pits (NH3233 and NH 3235), it is suggested to be a service range. It appeared to be in the form of two cells; the southern one (Structure NH8545) is suggested to be approximately square, measuring 8 m across, with the northern cell (Structure NH8551) a smaller square annexe, possibly around 5 m across (Fig. 5.9).

The small annexe displayed a sequence of chalk and clay floor surfaces, and the larger cell contained the latest stratigraphic evidence of burning located in the area. The surface of this was archaeomagnetically dated to 1046–1227 (WOB), and by radiocarbon to 1430–1470 (OxA–17175). The disparity between the two dates is clear. It is considered that, given the stratigraphic position of the context, the archaeomagnetic date is likely to be suspect, and has probably been affected by subsidence (see Chapter 6).

The presence of a large free-standing kitchen would be consistent with the residence requirements and layout. Its construction in wood, rather than stone, would encourage the siting of the principal cooking area in the centre of the building, to minimise fire risk. The clay surface found within Structure NH8545 was burnt, but not excessively so, and showed no evidence that there had ever been a brick or stone superstructure on it, or incorporated

within it. This may suggest that a metal brazier stood at this spot. By their very nature timber-framed kitchens will be less robust in the archaeological record than those built of stone or brick, but comparable constructions have been identified. For instance, at Northolt Manor, Middlesex, the early 14th-century kitchen was a square timber-framed building with a central hearth (Hurst, 1961, 214–5 and fig. 61).

Structure NH8575, the 'dovecote'

The function of this chalk-block lined pit feature is not at all clear from the evidence revealed (Fig. 5.9; see also Chapter 4, Fig. 4.15 and Plate 4.26). There is little—beyond its circular shape—to support the excavator's provisional interpretation that it was a well. The internal diameter is much larger than any other well on the site, and the stone lining is much more substantial than would seem to be required; it was surely intended to support a substantial superstructure. Furthermore the chalk and flint lining is unfaced, in contrast to all the other wells (especially the contemporary well just a few metres to the south). Given that it was a structure within the grounds of the Archdeacon's residence, one would expect a reasonable level of finish to any visible stone structure. Although the base of the pit was not reached, there was no evidence from the pit fill, or surrounding deposits, for the pit having a craft or industrial use, and no staining or apparent residue on the lining itself.

A circular, vertically sided pit, lined with chalk rubble and flint was identified in Property BE 2, on the eastern side of Brudene Street, and interpreted, from the coprolites and cessy material found in its fills, to be a purpose built cess pit—the earliest stone-built cess pit found on the site. Though broadly contemporary, it is suggested that Structure NH8575 was unnecessarily large to be a cess pit—nearly three times the diameter of CC1518—and much more substantial.

A similar feature, of a broadly contemporary date, was fully revealed during excavations at The Brooks, in the north-east corner of the medieval city, in 1987–8 (Scobie et al. 1991). It was slightly larger in diameter (3.1 m internally) and fully excavated to a depth of 3 m, revealing a shallow round pit in the centre of the flat base. The tentative interpretation at the time was that the structure was the base of a dovecote (ibid., 52-4); this interpretation has been confirmed and elaborated, with the conclusion that the below-ground shaft acted as a receptacle for pigeon droppings, and the central pit in its base was the setting for the potence (the revolving scaffold enabling access to all the nestboxes which would have lined the above-ground circular superstructure (G. Scobie pers. comm.)). This interpretation is supported by a documentary reference to a dovecote on the site in 1400, and the absence of any other structural candidate of that period found during the excavation.

Dovecotes were very much emblems of status and wealth; apart from the doves providing a useful food resource, dove dung was valued as a potent fertiliser (Thirsk 1967, 168). The major problem with the interpretation of this circular structure as a dovecote is the subterranean aspect. The floor of a dovecote is typically at ground level or above. Archaeological evidence for dovecotes having a 'sunken' floor is very rare. In 1989, excavations along part of the medieval city walls in Southampton revealed a circular free-standing dovecote, dating to around 1300, and probably built by the adjacent God's House Hospital (Gaimster et al. 1990, 186-7). The floor contained a rectangular stone-lined pit, with surviving traces of a wooden lid, and was thought possibly to be a receptacle for the collection of pigeon droppings, although no residue of droppings was mentioned in the report. In this instance the presence of surviving nest boxes confirms the identity of the structure as a whole, but still leaves uncertainty with regard to the function of the pit. In 1984, excavations in Greyhound Yard, Dorchester, Dorset, revealed the base of a circular dovecote (Woodward et al. 1993). The internal floor surface of the structure was the surface of the natural chalk bedrock, which was a little over 0.5 m below contemporary ground level. In the centre of the structure was a circular pit, 1 m wide by 2.5 m deep, interpreted as a collection pit for droppings.

Only one standing example of a dovecote with a sunken floor has been identified, in the late medieval dovecote within the churchyard at Norton sub Hamdon, in Somerset. The (modern) internal floor is approximately 0.5 m below the external ground surface (McCann and McCann 2004). In this instance one wonders if the discrepancy in levels has more to do with the accretion of graveyard soil outside as any design element inside.

The examples cited above at Dorchester and Southampton were definitely dovecotes—each had surviving nesting boxes. The example in the Archdeacon's residence revealed none (and neither, it should be remembered, did the example in Brook Street). In conclusion therefore, the identification of Structure NH8575 as a dovecote remains somewhat qualified, and the purpose of the surviving sunken element of it remains unclear.

Well NH9630

The well to the south of the possible dovecote shows, in its original construction and finish, the attention to detail and quality that would be expected in the context of the high status property owner (Fig. 5.9; see also Chapter 4, Fig. 4.14 and Plate 4.25). The fact that the construction trench only extends around the northern half of the feature is interesting, a characteristic not shared with the construction cuts of any of the other wells on the other tenements of the site. This is probably an indicator of the firmness of the ground into which the well was dug, and the absence of recent disturbance of the area, the site being on the

putative line of the Phase 5 lane leading off Brudene Street (see above).

The layout of the Phase 6 residence

The fragmentary nature of both the present investigations and those of Cunliffe, coupled with the degree of truncation and disturbance of the whole area, mean that the layout of the property of the Archdeacon is still far from clear, but some consideration of the way the residence may have functioned is warranted (Fig. 5.9).

The enlarged property now had a frontage on Brudene Street, and the layout of the hall and associated structures suggest that it now faced east. While the original hall footings cannot in themselves indicate a 'volte face' of the building, the later additions to the range, and the disposition of the other buildings and structures lend weight to the possibility. If, as seems most likely, the additional wing attached to the south end of the hall incorporated a garderobe, it would be reasonable to expect that to be sited away from the 'public' face of the building. Similarly, with the demise of Snitheling Street, it would be odd in these circumstances to retain a western orientation of the property. It would be much more likely now to present the residence to the east, with (presumably) a main entrance somewhere along the eastern boundary. The substantial boundary wall identified along the southern edge of the residence gives some indication of the likely scale of a boundary wall running along Brudene Street. No trace of it was found in the excavation, so it must have lain immediately to the east. However, the watching brief on the service trench excavated approximately 6 m to the east revealed a consistent deposit of stone and mortar demolition material lying over the medieval street surfaces; this could represent the demolished wall.

Access to the residence

Following the acquisition of the properties along the Brudene Street frontage and the establishment of the Archdeacon's residence in the early 13th century, the possible lane surfaces in the northern half of Property BW 3 were covered by floor surfaces and beamslots relating to the Phase 6 buildings. In addition, a chalk-block lined well (NH9630), also possibly of 13th-century date, was constructed, again on the conjectural line of the original lane (see above). If the original lane was blocked, where was the main entrance to the residence?

Most of the frontage contains, at sporadic intervals along its length, features post-dating the clearance of the Phase 5 tenements and pre-dating the final abandonment of the residence. Only the area of Property BW 2, alongside the southern boundary wall of the residence, is apparently devoid of open or 'active' Phase 6 features, and so could, on that basis, have been the site of a putative entranceway (Fig. 5.9). A 2 m deep Phase 5 cess pit (NH4339)

displayed what might be seen as an excessive sequence of five capping layers of gravel and chalk (see Chapter 4, Fig. 4.4). However, this effort makes sense if it is seen as part of the consolidation of the entranceway into the residence. Interestingly, the truncated base of a west-east aligned stone-lined drain (NH4109), surviving to a length of 5.6 m, extended from close to the southern edge of the Phase 5 well NH4019 towards the frontage to the east, and may have been associated with the putative entranceway. Some support from documentary sources can also be suggested, as Property BE1 (Keene's property 267 West; 1985, 644) is referred to in the early 14th century as being opposite the curia (courtyard) of Dorkyngge (the contemporary name of the Archdeacon's residence).

Could there have been another entranceway to the residence, possibly a service entrance? Keene noted the discrepancy in the stated measurements of the residence property (as recorded in the Tarrage of 1590) and the actual measurements. This discrepancy can be explained in two ways. Firstly the cited orientation of the measurements assumed (whether by accident or convenience) that the line of Brudene Street represented the west-east axis of the property. Secondly, the cited measurement along this axis—of 38³/₄ yards (35.4 m)—fits if allowance is made for the width of a track of approximately 5 m.

Keene cites an order in 1271 for the Archdeacon not to obstruct the public lane called *Dorking* which he had enclosed (1985, 641). The description of the lane as 'public' suggests it was not part of the Archdeacon's property. A later description of the property to the north (Keene's no. 248; Property BW 5/6) describes it as being 'a garden next to the gate of Dorking'. The gate would, presumably, give onto a lane or entranceway. The width of such a lane, especially if was by the 14th century effectively just an entrance way leading into the residence, need not have been wider than a cart width. As a comparison Keene cites the record of a private cart gate in the rear of property 474 (1985, 791), situated on Tanner Street, measuring 9ft 6in (2.95 m) wide.

A possible location for such an entrance would be hard by the boundary to property 248, to the north. A lane or track here could have skirted around the north side of the possible dovecote (Structure 8575), and also have given access to the service area to the south. It is possibly not a coincidence that Godson's map of 1750 (see Chapter 1, Fig. 1.7c), which shows the site as gardens and completely cleared of all buildings, still indicates, by dotted lines, a track or pathway heading westwards from Brudene Street towards the city wall, approximately along what would have been the northern boundary of the residence.

The updated design of the residence

The acquisition of the tenements along Brudene Street and the reorientation of the residence is indicative of a design that was taking advantage of an enhanced space, and applying the rationale of a layout more usually seen in rural manors of this period. Much of the early analysis of urban high status houses, for instance by Pantin (1962–3), focused on the development of medieval building plans in the context of tightly packed tenements with a shortage of space. As Schofield and Vince have pointed out (2003, 87), where resources and space permitted, the design parameters of a rural manor, where the space around the central hall is a key part of its design, were readily adapted to an urban situation. This was of course much more likely to be the case if the occupier (as in the case of the Archdeacon) was not a manufacturer or seller of goods or commodities and was not obliged to use the space for shops, workshops, or warehousing.

So in this instance it is pertinent to compare the layout of the Archdeacon's residence with that of a contemporary high status secular property, for instance that in Upper Brook Street, which by the late 13th century was a complex arrangement of interconnected rooms and buildings, the property of a wealthy wool merchant John de Tytyng, leaving almost no open space except a small back yard (Scobie *et al.* 1991, fig. 34; James 2007, fig. 4). Within this restricted space was accommodated a street-side shop front, warehousing, private rooms, public rooms, a kitchen, latrines, workshops and well, all in an area of less than 30 m by 40 m.

The material culture of the residence

There is sound archaeological and documentary evidence that the density of occupation and the intensity of activity in the area was beginning to decline during Phase 5. That during Phase 6, or between the late 13th and the 15th centuries, it declined to the point where occupation effectively ceased altogether to the west of Brudene Street, is evident. But during the period when the area was the Archdeacon's residence, the material evidence would arguably give a similar impression in many ways. There would be a much smaller population, principally a household staff, occasional guests, and the Archdeacon himself. The number of rubbish pits or cess pits that could be confidently ascribed to this period was very low. Three substantial ones were located along the eastern edge of the site (Fig. 5.9), supporting the conclusion that the Phase 5 building frontage onto Brudene Street had been cleared. The most northerly pit (NH2007) appeared to have served originally as a cess pit or latrine, later being used as a general rubbish pit, with successive dumps of material.

Although residual pottery from these three pits was unsurprisingly evident, a high proportion of 13th- and 14th-century material was present, commensurate with the lifespan of the residence. The proximity of the southern two of these pits to the proposed kitchen and annexe could be seen as

supporting its interpretation as a detached service range. A number of medieval roof tiles were recovered from their fills, possibly indicative of the building's roof. A possible glazed costrel (flask) from this site and a ceramic cistern for ale-brewing also point both to wine or ale consumption and a degree of self-sufficiency in that regard, as do a couple of small sherds from a Tudor Green ware cup (*c* 1375–1500)—the latest type of medieval pottery recovered from the site.

The animal bone assemblage in this phase shows reduced slaughter-age patterns and a high percentage of lambs on the site, perhaps indicative of high status consumption. No samples were retrieved of fish remains from the residence, and across the whole site there was some indication of a decline in the consumption of shellfish generally, but a single dump of 38 oyster shells in Phase 6 pit fill NH3236 (of pit NH3235) suggests occasional feasting.

The characterisation of this area as part of a high-status residence can be seen as much in the quantities and types of material *not* present on site at this time. A scarcity of rubbish pits, and a scarcity of accumulated occupation layers such as would be expected in an 'active' urban environment, means also a lack of small finds of metal, bone or stone. There was no evidence of on-site craft or industrial work. The two smithing hearth bottoms from Phase 6 contexts in Property BW 2 are almost certainly residual material from earlier activity.

To the west of the Brudene Street frontage only a few of the isolated pits encountered in Cunliffe's excavations were investigated, in particular where they related directly to the exposed foundations of the chapel or hall. Those that were sample-excavated produced generally 11th- or 12th-century material. In the present excavation there were very few contemporary pits outside the proximity of the service range (Structure NH8545/NH8551). This would be consistent with the function of the whole property.

The abandonment of the residence and the clearance of the site

The archaeological evidence suggests that the tenement may have been abandoned as the residence of the Archdeacon in the first half of the 14th century. Although it is likely that the property continued to be occupied by tenants, the quantities of 14th- and 15th-century pottery recovered are low, suggesting that the property was never intensively used from then on.

The documentary sources offer some support to the archaeology. In a reference dated to 1417 (see Chapter 1; Keene 1985, 641), the tenement (called *Dorkynge*) is stated as belonging to the Archdeacon and held by Thomas Smaile (vintner and chamberlain) and John Frenshe (butcher and mayor); from this it might be inferred that at that time the buildings may still have been standing, although by the

late 16th and 17th centuries the site is only referred to as gardens. There is no known documentary evidence to explain the reasons for the abandonment of the residence. The area seems to have become progressively depopulated for both demographic and commercial reasons. A residence that was becoming increasingly isolated from the ecclesiastical and secular centre of activity, now retreating back to the High Street and the Cathedral precinct, may no longer have been appropriate for a leading member of the clergy. His status could not be satisfactorily maintained while he resided in what had become a deserted backwater of the city, used increasingly as a convenient wool storage area, and a general rubbish dump. The modern name for the area 'Staple Gardens' originates in the establishment of the Winchester Staple on this site in 1326, for the storage and marketing of wool (Keene 1985, 472). The land assigned to this role had been confiscated from the Austin Friars by the king (after pressure from the bishop). However, by the late 14th century, the changing pattern of the wool trade reduced the importance of the Winchester Staple, and the land became a rubbish dump, and was later rented out piecemeal as gardens (ibid.,72–3).

Post-medieval activity

No archaeological features of the post-medieval period were discovered, which is consistent with Speed's depiction of the city in 1611, showing the area as totally devoid of any building (see Chapter 1, Fig. 1.7a). Godson's map of 1750 shows that by the 18th century the whole area had been put down to cultivation, and this is supported by the absence of significant deposits of domestic or craft debris of the post-medieval period. However, it is worth noting the possible west-east track marked by Godson crossing the northern part of what would have been the residence grounds. In an area otherwise denoted on the map as a uniform expanse of gardens and orchards, this track may possibly be a relic of the putative gateway into Dorking (Keene 1985, 641), as discussed above.

The Archdeacon's residence: overview and conclusions

Cunliffe's excavation, although limited in extent, revealed the remains of the groundplan of two buildings in some detail, and Biddle and Keene's documentary analysis (Biddle 1976) provided a plausible historical context within which to set these structures. The present investigation, also limited in extent (albeit in different ways) has broadened that context and allowed the buildings to be considered as elements within a whole property.

While some conclusions can be drawn, setting the archaeology in the documentary context, there are still some fundamental uncertainties. It is principally because of its role as the residence of a high church official (rather than, for example, a merchant or tradesman) that the material evidence is so slight. Nevertheless, a plausible narrative for the residence can be reconstructed, still speculative in parts, but generally consistent with both the archaeological evidence and the documentary history.

In summation, it is suggested that, sometime between the late 11th and mid 12th century a person of some considerable wealth held or acquired the two or three tenements north of Property SE 1, and built a stone chapel along the east side of Snitheling Street. Sometime during the 12th century the chapel became the parish church of St Mary Brudene Street and may have been accessed via the lane or passage leading across the north end of Property BW 3 from Brudene Street. Whether the chapel was built at the same time as the hall, or whether the hall was a later addition, remains unclear on the basis of the archaeological evidence.

By or during the 13th century the property passed to the Archdeacon of Winchester. Whether the Archdeacon acquired the hall and chapel with the property or whether he built them remains unclear from the archaeological evidence. A number of tenements fronting Brudene Street were acquired, probably during the early 13th century, and incorporated into the Archdeacon's property. The old frontage was cleared, and replaced with a new service block, serving the hall, which was reordered to face to the east. Lands to the south and north of the hall/chapel were cleared and set down to gardens; a final territorial acquisition was the western part of the tenement of Petronilla, widow of Adam de Northampton (Keene 1985, 641), to the south of the residence, which augmented the gardens. In addition to the wardrobe/garderobe block added to the west side of the hall, two boundary walls led from the hall to the east and south defining the more expansive estate, and defining the private, public and service areas of the property.

Sometime in the first half of the 15th century the residence was finally abandoned, although it may well not have served as the Archdeacon's residence for some time. The archaeological record suggests the last domestic activity occurred around the third decade of the 15th century, about the same time (according to the evidence from Cunliffe's excavation) as the demolition of the hall and the chapel. Indeed, the only reference to the church of 'Our Ladye in Burdenestrete' (St Mary) comes from 1452, citing it as one of the 17 parish churches of Winchester to have fallen down in the previous eighty years (Keene 1985, 641).

From the mid 15th century the residence grounds were leased out as gardens or intramural pasture. With the possible exception of the rebuilding of the well (NH9630), no further development or building took place on the site until the 19th century.

CONCLUSIONS by Steve Teague

The date of the establishment of the burh

The present excavations revealed no new evidence for the period between the decline of the Roman city and the establishment of the late Anglo-Saxon burh. Although it is clear that there was occupation of some kind in the city in the mid Saxon period (see this chapter, above), this did not extend to the north-western corner of the walled area. Here, at least on the western frontage of Brudene Street, the stratigraphic evidence suggests that the establishment of occupation was broadly contemporary with the laying out of the late Saxon street itself. A substantial programme of scientific dating formed part of the excavation strategy in this area in order to refine the dating of the occupation sequence, and particularly its start. Bayesian modelling was used on dates obtained from five adjacent properties (BW 2–6) that included 32 radiocarbon dates (17 from the earliest phase, Phase 4.1) and incorporated archaeomagnetic dating from 14 hearths (7 from Phase 4.1) (see Chapter 6). The model predicted that occupation within Properties BW 2, BW 4 and BW 5 began during the second half of the 9th century, with an 86.3% probability that occupation commenced before 880 and an 87.1% probability for a date after 842, when there may have been a Viking raid at Hamwic (although see Morton 1992, 76 for the arguments against this). However, it was not possible to establish whether these properties were established before or after the documented Viking raid on Winchester in 860 (the probability that they existed before 860 is 41.1%, or only after 860 is 58.9%). The model also suggested that occupation of Properties BW 2, BW 4 and BW 5 commenced more or less contemporaneously and that the earliest inhabitants of these properties probably knew each other.

The model therefore suggests that the laying out of Brudene Street and the establishment of occupation in the area is most likely to date to the period between c 842 and 880, which would challenge the conventional view that urbanisation of Winchester was prompted by the establishment of the burh by Alfred during the 880s. An earlier date for the establishment of the streets would be supported by the thickness of the occupation sequences of late Saxon date found at the Northgate House site, and at others within the city (eg 28–29 Staple Gardens, Castle Yard, the Lower Barracks and Henly's Garage) which can reach over 1 m in depth (see this chapter, above, 'The streets'). References to 'fortress work' first begin to appear regularly in West Saxon charters from the reign of Aethelbald (855-60) (James 1997, 41; Yorke 1984, 67), and it is possible that the refurbishment of the Roman defences and the laying out of the street grid began shortly after or even prompted the Viking attack on Winchester in 860 that is recorded in the Anglo-Saxon Chronicle. This also corresponds closely to the traditional date for the re-bridging by St Swithun of the Itchen outside the east gate around 859, which would have had a positive impact on the trade and economy of the city (Biddle 1976, 271–2; James 1997, 44).

There is some evidence (Chapter 3 and this chapter, above, 'Land apportionment and tenement formation') that the initial laying out of Brudene Street for occupation may have suffered a temporary setback; the first buildings here, on Property BW 2, burnt down and were not immediately replaced. However, this hiatus seems to have been followed by a phase of determined redevelopment to a new building line, with the construction of at least three, and probably all six, of the properties excavated on the west side of Brudene Street before the end of the 9th century. Although less evidence survived, it is likely that this also happened on the east side of the road. If so, the area may have been quite densely populated from an early date.

This is supported by results from excavations undertaken at the south end of Staple Gardens in 1984-85 and 1989, which revealed part of a cemetery that comprised at least 282 inhumations (from an estimated original total of 2000-3000 individuals) in close proximity to the presumed site of the medieval parish church of St Paul. This densely occupied cemetery included a sequence of 15 intercutting burials. A programme of radiocarbon dating and Bayesian modelling suggests that the cemetery originated before the end of Alfred's reign, and that it was probably in use over the period c 850–975, and perhaps a decade or two longer at either end (Helen Rees pers. comm., ex inf Alex Bayliss). The cemetery appeared to have been delimited by Brudene Street to its east and had gone out of use when a street representing a western extension of St George's Street was laid out over it, which itself had gone out of use by the end of the 12th century (Kipling and Scobie 1990). It seems reasonable to assume that individuals living on Brudene Street had been buried here, although there is currently no evidence for the contemporary church. Keene suggests that the medieval parish church of St Paul was located in this area, where 'great quantities of human bones' were found in the 19th century (1985, 467–8 and fig. 52). The church is first recorded in 1256, but had been amalgamated with the church of St Peter Whitbread along the High Street to the east possibly by the early 15th century.

Winchester and Hamwic

The origins of such a large early population invite some speculation. The coincidence of Winchester's reappearance as an urban centre and Hamwic's disappearance as a trading centre and royal mint by the later 9th century has often been remarked upon (eg Biddle 1993, 119–26; Morton 1992, 75–7; Andrews 1997, 255–6). There is no actual archaeological evidence that the Vikings caused widespread disruption to Hamwic itself (Morton

1992, 76–6; Andrews 1997, 256), but it was clearly vulnerable, and the fact that it could not be readily defended may have contributed to a decision to transfer its key administrative functions to the relative security of Winchester. Whether this also involved moving Hamwic's inhabitants to Winchester is unclear, but Winchester clearly experienced a significant influx of population in the later 9th century, and the first new inhabitants of Brudene Street seem to have been essentially artisans, involved in iron working and the spinning and dyeing of yarn.

However, there is not much evidence in finds assemblages for direct links between Hamwic and Winchester (Biddle 1990; Rees 2008; Serjeantson and Rees 2009), although there are typological similarities between the main coarseware pottery traditions, which are represented at both Hamwic and at Winchester by chalk-tempered wares. The clay for both traditions was probably sourced from the same Reading Beds outcrop immediately south of the chalk escarpment. It is just feasible that some Hamwic potters moved closer to Winchester around this date and continued production, though this needs further investigation by scientific analysis (see Cotter, Chapter 7). The very low levels of imported pottery found at Winchester are in marked contrast to both Hamwic (Brisbane 1998) and the late Saxon and later phases of recent excavations at the French Quarter in Southampton (Brown D H, forthcoming). This is not in itself, however, an argument against the presence in Winchester of former inhabitants of the trading settlement at Hamwic. Low levels of both coin finds and imported pottery generally in southern England for the 9th and 10th century are thought to reflect a sluggish regional economy and a decline in overseas trade; by contrast 10th-century towns in the Danelaw, such as York and Chester, provide evidence for intensifying industry and trade. Grenville Astill has suggested that this could reflect a reorientation in trade away from the traditional southern English contacts with the Low Countries and the Rhineland to the northern English contacts with the Scandinavian kingdoms across the North and Irish seas (2000, 37). Morton also usefully reminds us that from c 825 onwards the West Saxon kings had access to the ports of south-east England (1992, 77) including, from the 880s, London itself. A general resurgence in trade in southern England is evident from the 970s onwards, and is mirrored archaeologically by the growth of new ports such as Southampton and Bristol; while late Saxon Winchester must have benefited from its proximity to Southampton (the source, for example, of much of the fish consumed in the city), it never seems to have taken on Hamwic's function as a port of trade. Whatever the connection between Hamwic's demise and Winchester's renewal, by the early 10th century Winchester replaced Hamwic as the administrative centre of Hampshire, with a mint rated fourth in the country and with a thriving population.

Late Saxon occupation in Brudene Street and Snitheling Street

The formation from the outset of regular narrow properties, at least alongside the frontages of Brudene Street, suggests a high degree of centralised planning. There was no evidence in the present excavations to suggest that the properties had been created by the subdivision of larger properties or urban estates, and if this did take place it must have happened at a very early stage. Indeed on other excavations where such early property boundaries have been recognised (for example at The Brooks and 28–29 Staple Gardens) the evidence would similarly imply that such narrow properties were in existence from the start. The impression of early planned development is reinforced by the apparent use of standard measurements based on whole multiples of poles or perches $(16^{1}/_{2} \text{ feet}/5^{1}/_{2})$ yards) for the width of the 14 properties identified along the frontages of Brudene Street and Snitheling Street and on the 10 Anglo-Saxon properties excavated at The Brooks (see this chapter, above, 'Land apportionment and tenement formation'). Philip Crummy has previously noted the regularity of the layout of the streets of Colchester, London and Winchester, which he demonstrated made use of the 4-pole unit (Crummy 1979, 149-64).

In those properties where evidence was obtained, the earliest occupants seem for the most part to have been craftworkers occupying small lightly built timber structures located adjacent to the street frontage that served both as homes and workshops. These rectangular structures were constructed either using small shallow earthfast posts or using surface-based beams against which the floors of beaten chalk accumulated. The most widespread evidence in these early properties was for smallscale blacksmithing (Properties BW 2, BW 4-5), probably for the manufacture or repair of everyday objects or tools and the shoeing of horses. The scale and nature of this activity is comparable to the evidence found within the late Saxon suburbs of the city in which the level of expertise was perhaps quite basic (Rees et al. 2008, 399). In most of the properties smithing waste was found in conjunction with evidence for spinning and dyeing of wool, again apparently practised on a small scale. The dyeing of wool with the reddish-purple dye madder could have been for private use within the household, but it seems possible that it could also have been a more organised industry, with the spun and dyed yarn being sold on to weavers or tailors. The dye seems to have been readily available, suggesting its production or supply nearby. The survey of 1148 lists three individuals described as a Waranchier who occupied properties in the western and eastern suburbs of the city (Biddle 1976, 430, table 48). Von Feilitzen suggested that this Old French name referred to 'one who manufactures, or dyes in, madder' (Biddle 1976, 217; Crowfoot et al. 2006, 200), which suggests it could refer to traders of madder as well. The evidence from the present excavations shows that this craft had been established in the city from the later 9th century. Perhaps the association of purple with the church and the rapidly growing monastic quarter of the city would have provided a ready market for such dyed yarn.

Over time, evidence for larger, more elaborate and more diverse buildings suggests growing stability and prosperity in the area as the late Saxon period progressed, with the enlargement of houses and the appearance of the first substantial post-pit buildings. This is accompanied by some evidence for a shift in emphasis in the activities of the inhabitants, although craftworking clearly persisted in this area throughout the late Saxon period. However, the decline in evidence for metalworking at the enlarged Properties BW 2 and BW 3, and the appearance of cellars for the storage of goods and merchandise at Properties SE 1, BE 4, BE 5 and BW 6, suggests that some of the inhabitants at least may have been trading on a larger scale than their late 9th-century predecessors, and their activities may have been diversifying.

The Anglo-Norman period

The Norman Conquest appears to have had little immediate impact on the area of the present excavations, by comparison with other parts of the city. Within the south-western quadrant of the city the construction of the castle, which commenced within months of the surrender of the city in November 1066, saw the destruction of a whole street and the houses that stood alongside it, and the construction of a new extramural street (Biddle 1976, 470). By contrast, there is little evidence for disruption along Brudene Street; no properties appear to have been abandoned or amalgamated, and several new buildings in the substantial post-pit tradition were constructed (Properties BW 2, BW 4 and BE 5). Property BW 2 may have become largely residential by this time, but metalworking continued at Properties BW 4 and BE 4, where there is evidence for the use of copper alloys in brazing, coating or inlaying, and for the manufacture of small decorative objects or fittings. It is also clear that the spinning and dyeing of yarn continued in the area in the Anglo-Norman period. Three Anglo-Norman properties (BE 3, BE 4 and SE 3) produced evidence of horn working in this period; by contrast there had been little evidence for horn or bone working in the area in the pre-Conquest period. Supplies of horn and bone would have been readily available from the butchers within the city, several of whom were concentrated on the High Street close to the West Gate by 1148 (Biddle 1976, 437).

The only hint of the widespread social and economic disruption that followed the Conquest comes from Property SE 2 on Snitheling Street, where the substantial late Saxon post-pit building was subsequently demolished. The pottery associated with the fills of the post-pits was entirely late

Saxon in character, which suggests that the building was dismantled before Anglo-Norman ceramics came into general use, and a date around the time of the Conquest is therefore a strong possibility.

More tangible evidence of Norman impact can be found in the use of chalk-lined wells that were introduced in many of the properties, reinstating a method of construction that seems to have been lost in the city since Roman times. Prior to the Conquest very few properties produced any definitive evidence for wells; if they were present on the site they probably remained unidentified within the mass of partially excavated pits and all were probably timber-lined. Alternatively water may have been brought in by water carriers, and it is interesting to note that the survey of 1110 records that Alwin (the) Wet-Monger (a seller of water?) held a property in Brudene Street before the Conquest (Biddle 1976, 55, 429).

Some of the wells, especially the large well found in Property BE 4 and the elaborately constructed 'well-house' within Property BW 3, were particularly ostentatious in the use of finely dressed chalk ashlar, work that presumably required the services of skilled masons at some appreciable cost. Chalklined wells are a common feature of other late 11th-to 12th-century sites in Winchester, though the finer examples are often associated with wealthier residences, such as the example found at The Brooks identified as belonging to Roger the Vintner (a wine merchant listed in the survey of 1148) adjacent to a finely constructed chalk-ashlar cellar (Scobie et al. 1991, 54–7).

By the late 12th or early 13th century there is evidence for a wealthy household associated with the fur trade on Property SE 1 (see this chapter, above, 'Economic status and trade'). The 1148 survey records three individuals called 'parmentarius' in Snitheling Street, which is usually translated as 'tailor' (Biddle 1976, 203 and table 48). Keene (1985, 285) has noted that skinners ('pelliparii'), who dealt in fur, were the most numerous craftsmen in 14th-century Winchester but no record of 'pelliparii' exists in the 12th-century surveys, when demand for skins and furs had probably reached its peak. However the largest group of tradesmen recorded in the 1148 survey are listed as 'parmentarius', a term that is not current in the later medieval documentation, and some of these at least may also have been associated with the fur trade. Given the uncertainties of the precise direction of the 1148 survey within this part of the city (Biddle 1976, fig. 4) it would be unwise to suggest any correlation with any named 'parmentarius', though one (Robert) may have occupied a property located towards the north of the street (Biddle 1976, 96 and fig. 23). The association of the area with skinning is later noted by Keene (1985, Properties 245-46) when Adam de Northampton, citizen and skinner, acquired a substantial property on Brudene Street during the later 13th century that may be identifiable (in part at least) as Property BW 1 (see above). By this time the documentary evidence suggests that the property may already have extended to Snitheling Street, incorporating Property SE 1. It would seem that the apparent increase in prosperity noted in this property began prior to the occupancy of Adam de Northampton.

The 13th century onwards

In the late 12th and early 13th century the area of the excavations saw a major change in the character of occupation. A new phase of redevelopment saw the construction of fewer, but larger and more elaborate properties, replacing the smaller properties that once occupied these frontages (see this chapter, above, 'The project area from the 13th century'). This suggests that the decrease in occupation evident in the documentary record was not associated with decline in the status and character of the area at this time, but rather the reverse. Buildings of good quality stonework with tiled roofs and floors were being constructed within the project area and the earlier tenements were being amalgamated to create more spacious properties. The largest of these belonged to the Archdeacon of Winchester (see this chapter, above, 'The residence of the Archdeacon of Winchester'); the amalgamated Properties BW 1 and SE 1 may have been in the hands of the wealthy skinner Adam de Northampton in the later 13th century (see above), and the stone cellar that was built on Property BE 5 may have been the property of a substantial merchant. Biddle and Keene (Biddle 1976) have suggested that there was a general shift in population from the west of the city towards the heart of the industrial east side where much better water resources were available. The lack of evidence for craft working in the excavated properties by this time would be consistent with the abandonment of the area by artisans, and this may have provided the opportunities for the acquisition and amalgamation of vacant properties by a smaller number of wealthier occupants. It is equally possible, however, that the acquisition of tenements by wealthy people with a view to creating larger properties could in itself have encouraged this process.

In the event, this was to prove a relatively shortlived development, and the depopulation of the area is evident from the later 14th century onwards in both the documentary and the archaeological record. Although no longer inhabited, however, the land did not remain unproductive during the 15th and 16th centuries as there was significant increase in the extent of orchards and later the cultivation of hops became important, even close to the High Street (Keene 1985, 153). In essence many parts of the city, especially north of the High Street, resembled an agricultural landscape and this is best illustrated on the depictions of the city by Speed (1611) and later by Godson (1750) (see Chapter 1, Fig. 1.7). Not until the coming of the railway during the 19th century did the project area again see redevelopment.