

Archaeological assessment of Droitwich, Hereford and Worcester

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Summary

The historic town of Droitwich was surveyed during the Central Marches Historic Towns Survey, a desk-based study of 64 smaller historic towns in Shropshire, Herefordshire and Worcestershire. Archaeological and documentary evidence relating to the historic core of Droitwich was carefully analysed, comprising topographic data, published and unpublished archaeological reports, museum collections, primary and secondary historical sources, historical maps, and field data recorded by the project team.

Detailed evidence is provided on the character and layout of the settlement in four periods of occupation (Roman, Anglo-Saxon, medieval and post-medieval). For each of these periods the available information is analysed and mapped in detail, and a model of the development of the town is proposed. In addition, the evidence for pre-urban occupation is considered, together with evidence of 19th century occupation. All archaeologically-relevant information has been recorded as part of the county Sites and Monuments Record. Specialist assessments of artefacts, ecofacts, standing buildings and documentary sources are included. A detailed archaeological research framework has been developed for Droitwich, which will inform future archaeological investigations as well as management decisions.

The historic core of Droitwich contains buried archaeological deposits, and these are judged to have very high potential. In addition there is high potential for the recovery of artefact and ecofact assemblages. Extensive waterlogged deposits have been recorded, which is rare in the region. The historic buildings constitute a complementary body of evidence, and are judged to have moderate potential for detailed study and recording. The surviving documentary sources are very extensive and consequently the potential for further study is high. Overall, the significance and potential of buried remains in Droitwich are very high, and may be judged to be of national importance.

1 Introduction

1.1 Location and landuse

The urban area of Droitwich is located at NGR SO 900 635 in Wychavon District. The modern settlement of Droitwich is a large area of 20th century industrial and residential development around what remains of the historic core.

1.2 Topography, geology and soils

Droitwich lies at a height of between 25m and 40m on both sides of the valley of the River Salwarpe. St Augustine's Church, Dodderhill, is situated at a height of about 50m on a spur to the north of the river overlooking the town. Although the soils are unmapped, soils of the surrounding area indicate that there are pelo-alluvial gley soils of

the Compton series along the river, surrounded by stagnogleyic argillic brown earths of the Whimple series, with bands of pelo-stagnogleys of the Spetchley series and typical argillic pelosols of the Worcester series in bands south of the river (Soil Survey of England and Wales, Beard *et al* 1984). The underlying geology consists of Keuper Marl and third river terrace deposits (British Geological Survey 1:63,560 sheet 182). Subsidence caused by 19th century and early 20th century brine extraction has affected a large area on the east side of the town, especially to the north of the High Street.

1.3 Chronological outline

Prehistoric activity. From earliest times humans and animals would have been attracted by the salt at Droitwich. The earliest evidence of human activity recovered from Droitwich so far, however, are flint tools dating to the mesolithic period. The first evidence of salt production on a substantial scale dates to the late Iron Age (see section 2).

Roman military occupation. The Roman invasion in AD 43 seems to have had little effect on the methods of salt production which continued in the Iron Age tradition into the 2nd century (Woodiwiss 1992, 15, 185). At sometime shortly after AD 43 a fort was built at Crutch Lane to guard the river crossing. After the Boudiccan revolt, in c AD 61 the Crutch Lane fort was replaced by one at Dodderhill. The main Roman road, now followed by the A38, was established at this time and was probably a military construction.

The Roman small town. An excavation just to the east of the A38 at Hanbury Street (Hughes and Lentowicz forthcoming) provided evidence that the Roman small town at Droitwich dates to the mid-1st century, and may be associated with the construction of the road. Burnham and Wacher (1990, 214) are in little doubt that the production of salt was the reason for the formation of the town. The extent of the settlement and its spatial relationship to the fort and to the saltworking areas is not known.

Excavations at Bays Meadow (Barfield forthcoming), Upwich (Hurst forthcoming a), and the Old Bowling Green (Woodiwiss 1992), suggest that in the middle of the 2nd century the methods employed in the extraction of brine, and in salt production and distribution changed. At about this time salt production at Old Bowling Green stopped, and at Upwich a large timber structure, identified as part of an apparatus for lifting brine, was built. At the same time a villa complex, overlooking the brine springs and the town, was constructed at Bays Meadow. This was an extremely wealthy establishment and the range and quality of the finds from the site is without parallel in the region.

The cessation of salt production in the Iron Age tradition at the Old Bowling Green site, increased exploitation of the brine indicated by the structure at Upwich, and the building of the villa complex at Bays Meadow, were all probably closely linked, and may indicate a change from indirect to direct Roman control over the salt industry. In the Roman Empire mineral resources such as salt were treated as imperial monopolies under the control of the state. The villa was probably the residence of a wealthy imperial administrator or an entrepreneur controlling the production of salt (Goodman nd). The principal villa building at Bays Meadow was burnt to the ground in the 3rd century. This coincided with a period of rebellion affecting the western provinces, and it is possible that the villa became a focus for anti-Roman feeling. There may have been some disruption of the salt industry at this time (Hurst 1992b).

Little is known about the nature of the Roman settlement of Droitwich. Excavation has concentrated on the salt producing areas but, at Hanbury Street, close to the Roman road there was some evidence of crop processing (Hughes and Lentowicz forthcoming). The degree of diversification at Roman Droitwich is still a matter for speculation, however, and it is possible that the settlement provided a range of economic and social services as

well as producing salt (Crickmore 1984b, 75).

The villa at Bays Meadow continued to be occupied until the end of the 4th century, although not on the same grand scale as in the 2nd and 3rd centuries. The decline of the villa may indicate a further change in the control of the salt industry, but excavation in the area of the brine well at Upwich (HWCM 4575) produced evidence that large scale production continued into the late Roman period.

Post-Roman salt production. The excavations at the Old Bowling Green (HWCM 600) and Friar Street (HWCM 605) uncovered only very slight traces of post-Roman activity, and at present there is no evidence that the Roman small town continued to function after the 4th century (Woodiwiss 1992). The excavation at Upwich, however, has provided evidence that salt making activity continued on a substantial scale between the 5th and the 7th centuries and that new methods of boiling brine were introduced in the 5th century (Hurst forthcoming a).

Anglo-Saxon salt production. In the mid-7th century severe flooding disrupted salt production. Salt-making became impossible as the brine springs were contaminated with fresh water and a thick layer of silt and clay was spread across the valley floor (Hurst forthcoming a). The economic importance of the brine springs meant that steps were soon taken to bring the industry back into operation. By the late 7th century the river bank was reinforced, and wooden trackways to the brine springs were constructed (Hurst forthcoming a). At this period Droitwich was in royal hands. Anglo-Saxon charter evidence has been interpreted to indicate that by the late 7th century Droitwich was a *wic*, although it should be noted that the documentary evidence is not very reliable (S Bassett pers comm). Anglo-Saxon *wics* (ie commercial centres) rarely appear as isolated phenomena, and are often associated with contemporary settlements providing royal, ecclesiastical and ceremonial functions. In this case the relevant site was probably the royal palace at Wychbold to the northeast.

The brine wells at Upwich, Middlewich and Netherwich are first documented in the 10th century. They were controlled by the King who also owned the largest single group of salt-making buildings (Hooke 1981, 129; Thorn and Thorn 1982). Documentary evidence indicates that from an early date salt rights were granted to individuals and institutions, and by the 10th century a large number of manors in Worcestershire, Buckinghamshire, Gloucestershire, Herefordshire, Oxfordshire, Shropshire and Warwickshire owned rights to salt or salt-making buildings in Droitwich. The importance of Droitwich at this period is evident from its tax yield which, in 1066, places it second only to London (Palliser 1987, 66).

The Anglo-Saxon settlement. Despite numerous archaeological observations in the town, little is known about the layout of Anglo-Saxon Droitwich. Documentary references to salt production suggest that there may have been a number of small settlements associated with the individual brine wells, rather than one homogeneous settlement. It is possible that the medieval parishes of St Nicholas, St Andrew, St Peter and St Augustine represent smaller estates, with their own salt production areas, created from one unified territory prior to the 10th century (Hooke 1981, 131). Archaeological evidence indicates that the settlement, or settlements, were located in the area of the present town, and on either side of the river and that Friar Street had been laid out by the 11th century. The church of St Augustine, Dodderhill, was probably the mother church of the Droitwich area. St Nicholas and St Andrew have been suggested as Anglo-Saxon churches but there is no evidence for this (S Bassett pers comm).

The borough of Droitwich. By the late Anglo-Saxon period salt-making was on a very large scale, and salt was traded over long distances. The saltways revealed by documentary evidence indicate a complicated network of routes radiating from the town (Hooke 1981; Whitley 1926). The Domesday Survey of 1086 mentions five brine wells in Droitwich with about 250 salt-making buildings (Thorn and Thorn 1982). Burgesses are

also mentioned, although the estimation of their number varies (Beresford and Finberg 1973, 182; VCH 1913, 73). The burgesses seem to be associated with franchises connected with the salt trade, and were possibly freed from a toll on salt in return for salt dues or *Salsae* paid to the king (Berry 1957, 45). The documentary evidence indicates that Droitwich had the status of a borough before 1066.

Droitwich is explicitly called a *burgus* for the first time in 1155-6 and by this time was clearly a single settlement. In 1215 King John gave the town of Droitwich to the burgesses, together with the brine pits and his salt rights, in return for an annual fee farm rent of £100 (Beresford and Finberg 1973, 182; Berry 1957, 39; VCH 1913, 74). This fee farm was very high for a town the size of Droitwich, and was more than double the assessments for towns of Hereford, Shrewsbury and Worcester. The fee farm of £100 ranked Droitwich on a level with important medieval commercial centres such as Newcastle on Tyne (Berry 1957, 40).

The medieval settlement. By the 13th century the layout of the town, as it survived into the 18th century, seems to have been established. There were burgage plots fronting the High Street, Friar Street and St Andrew's Street which formed a T-shaped plan to the west of the main north-south road crossing the Salwarpe. In the late 13th century, the town was almost entirely destroyed by a fire which started in St Andrew's church (VCH 1913, 75). Droitwich was dominated by the salt industry, and archaeological and historical work has concentrated on this aspect of the town with the result that little is known at present about other aspects of the settlement. The small size of the central market place may reflect the low importance of other trade.

During the medieval period salt production was centred on the three brine wells of Upwich, Middlewich and Netherwich, although Upwich was by far the most important. The Upwich brine well failed on a number of occasions during the 13th century and in 1264-5 the brine well was rebuilt on a massive scale (Hurst forthcoming a). Salt production and marketing were highly regulated as a town monopoly and, by setting prices, the salt makers maintained their profits. Salt rights, representing the amount of brine that could be extracted each year, were shared amongst certain of the townspeople. Town officials collected salt dues in order to pay the £100 per year owed to the King, the dues being calculated according to the amount of brine used by each person. Salt rights could only be passed on by inheritance, but over the centuries the original pattern of salt rights was broken up as family holdings were divided. From the mid-14th century there are also records of vats held by lease, sometimes for life, sometimes only for a season.

By 1400 annual salt production was at least 1500 tons and used about 11.35 million litres of brine. A further increase was made possible in the 15th century, when a pump was built at the Upwich brine well to replace the bucket method of extraction. By the late middle ages the Middlewich brine well had gone out of use leaving only Upwich and Netherwich in operation.

Post-medieval Droitwich. In the middle of the 16th century the antiquarian Leland visited Droitwich and commented on it at length:
the town itself is rather unpleasant and dirty when any rain fallsThe town owes its pre-eminence to the manufacture of salt. But although the profits from this industry are unusually large, yet in the main the towns people themselves are poor. This is because the majority of the income goes to the gentry, while the townspeople do all the work.....The Droitwich salters take advantage of their salt springs to draw off and evaporate the water for only six months each year from midsummer to Christmas. I imagine that this is partly to maintain a good price for their salt but also, and I think that this is the principal reason, so as to conserve wood. For salt making has been a large and significant destroyer of woodlands in the past, and will be in the future, unless the coppicing of young trees is practised to a greater extent (Chandler 1993, 515).

The town was seriously damaged during the Civil War, but the industry recovered and by the second half of the 17th century up to 3000 tons of salt was being produced in Droitwich annually. Droitwich salt was praised at this time for its purity and a larger market than ever before was reached with salt being sent as far as Ireland (Hurst 1992b). Production techniques in the salt industry continued to improve in the 16th and 17th centuries. Iron pans came into use for brine boiling and coal became the main fuel (Hurst 1992b). Despite these technical innovations the organisation of the industry remained basically as it had been in the medieval period.

Changes in salt production in the 17th century. The whole organisation of the industry changed in 1695, when Robert Steynor successfully challenged the monopoly of salt production exercised by the town and won the right to sink a brine well of his own. The impact of this legal decision on the salt industry was dramatic, as brine could now be extracted from sources other than Upwich and Netherwich, and was free from regulation and salt dues. All those who owned salt rights in the brine wells controlled by the borough were ruined almost overnight. Since production was no longer subject to limits set on the amount of brine extracted, the quantity of salt produced soared. The inevitable consequence of this, however, was that the value of salt fell.

The private brine wells opened after 1695 were built to a new design with brick-lined shafts sunk much deeper than before. By the early 18th century it became possible to construct shafts deep enough (*c* 61m) to reach the underground brine stream itself, with a consequent increase in production. By the end of the 18th century steam engines were introduced to pump out the brine. In 1772 nearly one third of the whole salt tax of the country was paid by Droitwich (Hodgkinson 1913, 73).

The salt manufacturers of Droitwich were not slow to realise the advantages of canals and the Droitwich Canal, built by Brindley and completed in 1771, joined Droitwich to the Severn at Hawford. The construction of a rail link in 1852 lead to large amounts of salt being transported by rail and a further increase in production. The peak of production was reached in 1872 when 120,000 tons of salt were produced. This increase in the size of the industry lead to an increase in the population and area of the town. A total of 1845 inhabitants were recorded in the 1801 census, but by 1901 this had risen to 4,201 (VCH 1913, 79).

The development of the spa. The therapeutic properties of brine had been discovered in the 1830s, and the Royal Brine Baths were opened in 1836. The development of this aspect of the town's economy increased during the 19th century and further brine baths and hotels were built. By the late 19th century the Droitwich salt industry was largely in the hands of one man, John Corbett. He relocated much of the salt production to Stoke Prior, 3.5 miles to the northeast, and concentrated on developing Droitwich as a spa town. Salt production finally ceased in the town in 1922. Droitwich has continued as a spa town through the 20th century and new brine baths and a hospital were constructed in 1985.

The borough of Droitwich was represented by two members of Parliament in the late 13th and early 14th century parliaments of Edward I and II but was not represented again until the 16th century after which two members were sent regularly until 1832. Only one member was sent between 1832 and 1885 when the parliamentary representation was merged in that of a county division (VCH 1913, 78).

1.4 Placename studies

The Roman settlement at Droitwich has been associated with one of the two *Salinae* mentioned in the Ravenna List (Rivet and Smith 1979) although there is some debate over this (Burnham and Wacher 1990, 211).

The earliest surviving charters relating to Droitwich date from the 7th century. In these the

settlement is referred to as *Wic* (Hooke 1981, 125), a placename that usually indicates a coastal or riverine trading/industrial centre. The settlement was referred to as *Saltwic* from the 8th century, although in 1086 it is called *Wich* (Thorn and Thorn 1982; Hooke 1981, 125). By the 10th century the settlement seems to have consisted of three foci, centred around the brine wells at *Upwich*, *Middlewich* and *Netherwich* (ie the upper, middle and lower *wic*). The form *Dryghtwych* does not occur until the 14th century. The *Dryght* element may mean "foul or dirty" or "lord", ie the lordly or princely *wic* (Hooke 1981, 127).

1.5 Syntheses of documentary and archaeological data

General histories of Droitwich have been produced by Nash (1799), Noake (1848) and the Victoria County History (1906, 1913). More recent histories of the town, by Freezer (1978) and Hurst (1992b), have drawn heavily on the evidence of excavations undertaken in the last twenty years. The evidence for Roman occupation is discussed by St Joseph (1942), Crickmore (1984a and 1984b), and Burnham and Wacher (1990). The Anglo-Saxon documentary evidence is discussed at some length by Hooke (1981), and Berry (1957) produced a detailed assessment of documentary evidence for salt production in the medieval and early post-medieval periods. Droitwich History and Archaeology Society and Droitwich Spa Civic Society produced two audits of the town the first of which considered the archaeological resource (Droitwich History and Archaeology Society/Droitwich Spa Civic Society 1992a). The present assessment was carried out by the Central Marches Historic Towns Survey in 1995. No information published after December 1994 has been incorporated.

1.6 Cartographic sources

A number of cartographic sources have been used to aid in the identification of remains and the definition of components. These are the 17th century map of Droitwich copied by Hartshorne (1973), the 1786 map of the borough (Karver *et al* 1786), the tithe maps of the parishes of St Nicholas (1839), St Peter (1840), St Andrew (1840) and St Augustine, Dodderhill (1845), as well as the Ordnance Survey first edition 1:2500 maps (*Worcestershire sheets XXII.13-14; XXIX.1-2* (1885)).

1.7 Archaeological excavations and surveys

The first recorded discovery of archaeological remains in Droitwich was in 1770 when finds of Roman artefacts were reported during the construction of the Droitwich canal. Roman objects, principally coins and pottery, were also found during the construction of saltworks in 1846, the construction of the Droitwich Junction Canal in 1852 and the installation of the town sewers in 1878 (St Joseph 1942, 39). Throughout the late 19th century and 20th century large numbers of Roman and later artefacts and remains were found during construction work in the town (HWCM 252, HWCM 262, HWCM 481, HWCM 621, HWCM 636, HWCM 665, HWCM 666, HWCM 668, HWCM 669, HWCM 670, HWCM 671, HWCM 672, HWCM 673, HWCM 676, HWCM 679, HWCM 682, HWCM 693, HWCM 4152, HWCM 4990, HWCM 4994, HWCM 4995, HWCM 7071, HWCM 12548, HWCM 21391, HWCM 21403). A large number of artefacts recovered from Droitwich were collected by the H R Hodgkinson (HWCM 22015). Some of these are published (Hodgkinson papers published between 1928 and 1951) but the collection has not been studied in detail.

In 1847 a Roman villa was uncovered during the building of the railway through Bays Meadow (HWCM 21411; Allies 1852) and this area became one of the two focii for archaeological endeavour in the town until the 1970s. In 1924 to 1925 a number of trial excavations were carried out on the villa site beside the railway (HWCM 21409; Hodgkinson 1928; Whitely 1925). In 1947 levelling, prior to the construction of Nu-Way Heating factory at Bays Meadow, uncovered quantities of Roman building material and pottery and a number of *in situ* Roman features (HWCM 21410;

Hodgkinson 1949; Barfield forthcoming). In 1952-3 Hodgkinson observed Roman finds during the building of factory buildings in the same area (HWCM 22044; Gelling 1957, 1), and in 1954-5 excavations were carried out prior to the further extension of the factory. These excavations recovered more evidence of the villa discovered in 1847, as well as other associated features (HWCM 21412; Gelling 1957).

At some time between 1957 and 1967 a well was discovered and partially excavated on the premises of the Nu-Way Heating factory (HWCM 21414; Barfield forthcoming). Between 1967 and 1977 the University of Birmingham excavated at Bays Meadow in response to the threat of the proposed Droitwich by-pass. This excavation uncovered the remains of prehistoric occupation and salt production as well as a second villa and associated features (HWCM 21413; Barfield forthcoming).

The other area which has attracted archaeological fieldwork is the Roman fort on Dodderhill. In 1938-39 Hodgkinson and St Joseph excavated a number of small trenches along the defences (HWCM 21404; St Joseph 1938). In 1961 to 1962 further excavations on the defences were carried out, and provided evidence of a ditch with internal timber buildings (HWCM 21405; Whitehouse 1963). In 1977 a small excavation was carried out within the area of the fort prior to the extension of St Augustine's churchyard. This uncovered some traces of Roman occupation but also evidence of activity dating from the Anglo-Saxon and medieval periods (HWCM 21406; McAvoy in Hurst forthcoming).

A magnetometer survey was carried out on the northern and western defences of Dodderhill in 1981 (HWCM 22045; English Heritage 1981). Further excavations inside the area of the fort were undertaken by English Heritage in 1984-5, and these uncovered evidence of Iron Age, Roman, medieval and post-medieval occupation (HWCM 21407; McAvoy forthcoming). More recently a small excavation in advance of construction work at Dodderhill School was carried out by the County Archaeological Service (HWCM 21408; Edwards 1991), and this demonstrated the amount of damage to earlier archaeological deposits in that area caused by the landscaping associated with the 18th century house.

In the 1960s Droitwich was designated a development area and extensive plans were made to enlarge the town. The first recorded excavations within the area of the medieval and later town were carried out in 1968 in Friar Street (HWCM 10609), and the High Street (HWCM 10610). They were directed by David Peacock (Southampton University), but they have not been published and their exact location is unknown.

Between 1971 and 1974 the County Museum undertook watching briefs during the construction of the Droitwich outer relief road (HWCM 666, Bond and Babb 1971; HWCM 694, Bond and Babb 1971), and in 1975 carried out salvage recording during the construction of St Andrew's shopping centre, the Saltway and associated developments to the south of Friar Street (HWCM 3911, SMR site file; HWCM 4144, Woodiwiss 1982a; HWCM 4145, Woodiwiss 1982b; HWCM 4146, SMR site file; HWCM 4147, SMR site file). Between 1973 and 1975 the Service also carried out an excavation at 45 Friar Street which uncovered a continuous sequence of occupation dating from the Iron Age to the present (HWCM 605; Hughes and Hunt 1992).

By the mid-1970s it had been demonstrated that the archaeological potential of Droitwich was very high, and that there was a need for archaeological advice during the redevelopment of the town centre. In response to this the Droitwich Archaeological Committee was formed in 1976 and the post of Droitwich Archaeological Officer was created within the County Museum. Unfortunately financial restrictions and local circumstances meant that the archaeological fieldwork in the town was severely restricted and large amounts of important archaeological deposits were destroyed throughout the late 1970s and 1980s without adequate record.

Despite severe restrictions on the type and extent of archaeological fieldwork undertaken a considerable amount of archaeological work was carried out between 1976 and 1991, when the post of Droitwich Archaeological Officer was abolished. Most of this archaeological field work, particularly in the later 1970s and early 1980s was in the form of watching briefs and salvage recording during construction. Some of these have been reported on (HWCM 4099, Woodiwiss 1983; HWCM 4574, Woodiwiss 1983; HWCM 4167, Hillelson 1985) but the majority have not been published and the information is held as manuscript notes in the relevant SMR site files (HWCM 602, HWCM 680, HWCM 2343, HWCM 2355, HWCM 3512, HWCM 3880, HWCM 3681, HWCM 3682, HWCM 4093, HWCM 4094, HWCM 4095, HWCM 4099, HWCM 4156, HWCM 10599). These archaeological observations demonstrated that substantial waterlogged deposits, representing continuous occupation from at least the Iron Age, were located underneath the modern town of Droitwich. In the later 1980s a number of evaluations prior to development were carried out. These were at Vine's Lane (HWCM 4097, Hurst 1988a; HWCM 7050, Hurst 1988b) and in burgage plots behind the High Street (HWCM 7313, Hurst 1988c).

Small excavations were carried out in 1977 at the site of the Middlewich brine well (HWCM 602, Freezer 1978, 12), in 1984 at Covercroft, outside the historic town (HWCM 4168, SMR site file), and in 1987 at 55-73 Vines Lane (HWCM 4096, SMR site file). Geophysical survey and trial trenching was undertaken in the area of the fort at Crutch Lane in 1985 (HWCM 4154; Hurst, Roberts and Woodiwiss 1987, Bartlett 1985). Other small but important excavations include that in 1980 at Hanbury Street where Roman domestic occupation was uncovered (HWCM 681, Hughes and Lentowicz forthcoming), the excavation of part of a well-organised Roman cemetery and later occupation at Vines Lane in 1986 (HWCM 6000), observations of early prehistoric and later occupation at Bays Meadow in 1987 (HWCM 3956; Hurst 1987), and the excavation of late Anglo-Saxon, medieval and post-medieval domestic occupation at the Old Fire Station in Friar Street in 1988 (HWCM 7072, SMR site file).

The most important excavations undertaken in the town have been the Old Bowling Green in 1978-9 (HWCM 600; Woodiwiss 1992), and those on the site of the Upwich brine well in 1983-4 (HWCM 4575, Hurst forthcoming a). These have, amongst other things, provided the earliest evidence for organised exploitation of the brine springs and the best archaeological evidence so far for the methods used in extraction and production of salt from the late Iron Age to the 18th century.

By the later 1980s the redevelopment of the historic core of Droitwich had slowed down. Since the introduction of PPG 16 in 1990, a number of small-scale field projects have been carried out. Evaluations have been undertaken at St Augustine's Church, Dodderhill (HWCM 606, Brown 1991a), to the south of the Kidderminster Road (HWCM 12215; Cook 1992a, 1992b), behind Priory House (HWCM 609; Jackson 1992), Norbury House (HWCM 672; Wichbold 1993), and 97 Friar Street (HWCM 9553; Brown 1991b).

Fieldwork was undertaken by the Central Marches Historic Towns Survey in October 1994. This identified remains, investigated and revised the extent of components, and recorded 18th and 19th century cellarage and modern developments in the urban area.

1.8 Acknowledgments and personnel

This assessment was greatly assisted by Mrs L Blewitt and Dr S R Bassett, who kindly commented on earlier versions of the report. Survey fieldwork was carried out by Victoria Buteux and Nigel Topping. Analysis and report writing were carried out by Victoria Buteux and Derek Hurst. The report was edited by Hal Dalwood.

2 Pre-urban evidence

Chance finds of flints dating to the mesolithic and neolithic period have occurred in the Droitwich area (HWCM 4154, 605, 21413, 678, 4575). At Bays Meadow, however, a concentration of flintwork, possibly, dating to the mesolithic period, was found *in situ* (HWCM 3956; Hurst 1987). At the Old Bowling Green site charcoal, radio carbon dated to 1045 to 838 cal BC, suggested some occupation in the area in the early first millennium BC (HWCM 600, Woodiwiss 1992, 8).

The earliest definite evidence for salt production dates to the Middle Iron Age, c 500-100 BC, and comes from the excavation at Bays Meadow (HWCM 21413; Barfield forthcoming). More intensive salt making has been identified on the east on the south bank of the river in the later Iron Age, c 100 BC-43 AD (HWCM 600; Woodiwiss 1992) and evidence of late Iron Age activity has been uncovered during much of the fieldwork undertaken in the town (HWCM 694, HWCM 602, HWCM 6000, HWCM 4575, HWCM 21391, HWCM 21412, HWCM 21407).

In the Iron Age Droitwich was in the territory of the *Dobunni*. Iron Age roundhouses have been found under the villa building at Bays Meadow (HWCM 21414; Barfield forthcoming), but it is possible that there was no permanent settlement here at that time. If, as in later periods, salt production was seasonal, the area may have been occupied only at certain times of the year. It has been suggested that at this period the control of the production and distribution of salt was based at nearby Hanbury hillfort (Hurst 1992b).

3 Roman archaeological evidence

3.1 Roman remains and buildings

The only surviving earthwork of Roman date in Droitwich is part of the rampart of the Bays Meadow villa complex. Many artefacts have been discovered during construction work in the town, and a large number of archaeological interventions, particularly since the 1970s, have produced evidence of Roman military, civilian and industrial occupation (see above section 1.7). These excavations, evaluations, salvage recordings and watching briefs have demonstrated that substantial Roman deposits survive. These include the foundations of stone and timber buildings and contemporary ground surfaces, as well as structures such as hearths and brine tanks associated with the salt industry. In the valley of the Salwarpe deposits are waterlogged and contain substantial structural timbers and organic artefacts such as barrels (HWCM 4575, Hurst forthcoming; HWCM 605, Woodiwiss 1992; HWCM 600; Hughes and Hunt 1992).

3.2 Roman urban components

Analysis of the evidence summarised above indicated the existence of eleven urban components. The characteristics of these urban components are summarised below.

Fort (HWCM 603). The first fort in the Droitwich area was that at Crutch Lane (HWCM 10571). This was associated with the original Roman advance and seems unrelated to the settlement at Droitwich (Hurst 1992a, 8). The second Roman fort was constructed at Dodderhill (HWCM 603) in the second half of the 1st century, and may be contemporary with the main north-south road and the roadside settlement observed at Hanbury Street (see below). Dodderhill fort occupied the high ground overlooking a road junction, river crossing and the salt-making areas in the valley.

A number of excavations have been undertaken in this area (HWCM 21404, St Joseph 1938; HWCM 21405, Whitehouse 1963; HWCM 21406 and HWCM

21407, McAvoy forthcoming). Coin and pottery evidence indicates that the fort was constructed *c*50-75, which suggests that it may have been built in response to the Boudiccan rebellion in 60-61. Reused timbers found during excavations at the Upwich brine well (HWCM 4575, Hurst forthcoming a) were dendrochronologically dated to 61 to 65 and may have come from Dodderhill (Hurst forthcoming a). The fort was not occupied for very long and the ditch seems have been filled in by at least the early 2nd century (McAvoy forthcoming).

The fort was irregular in shape, perhaps following the 50m contour. Its defences consisted of a V-shaped ditch at least 3.5m to 4m wide and 2.5m deep with a small "ankle breaker" on the outside. No traces of a rampart survive (St Joseph 1938, Whitehouse 1963). Traces of internal timber buildings and other features have been found (Whitehouse 1963, McAvoy forthcoming) but these may relate to later Roman use of the site. There is some evidence that the area was used as a cemetery at the end of the Roman period (McAvoy forthcoming).

Street system (HWCM 22016). The present line of the A38 through Droitwich follows the Roman road, linking the town with the fort at Metchley to the north and the towns of Worcester and Gloucester to the south (Margary 1973: road 180). To the north of the river this road is joined by the road from Greensforge (Margary 1973: 192). A section of the Greensforge road, including possible side ditches, was observed in 1971 during the excavation of a cutting for the Droitwich Relief Road (HWCM 694, Bond and Babb 1971). To the south of the river, the Metchley to Worcester road is joined by the road from Alcester (Margary 1973: road 56b). A further road is also thought to approach Droitwich from the west (HWCM 10630), and the presence of a cemetery in the Vines Park area suggests that its line may have been close to that of the present Vines Lane. No direct archaeological evidence for this road has been discovered so far, however.

In addition to the main roads, tracks, providing access to domestic occupation and the salt making areas and associated buildings to the west of the road, must have existed. One such track, running broadly east-west, was observed during the excavation of the Old Bowling Green site in 1978-9 (HWCM 600; Woodiwiss 1992, 20-21).

Bridging point (HWCM 22024). The main road between Metchley and Worcester crossed the Salwarpe and a bridge or ford must have been constructed. The exact location of this bridging point is not known, as it is likely that the present course of the river in this area is different to its course in the Roman period.

Administrative centre (HWCM 678). The villa complex at Bays Meadow was constructed *c* 150 and seems to have acted as the administrative centre of the reorganised salt industry (see section 1.3). A number of excavations have been undertaken on the site since its discovery in 1847 (HWCM 21409, Hodgkinson 1928, Whitely 1924-5; HWCM 21412, Gelling 1957; HWCM 21413, Barfield forthcoming) as well as salvage recording and finds recovery (HWCM 21410, Hodgkinson 1949; HWCM 21414, Barfield forthcoming). The two villas on the site were built at the same time by a specialist team of builders who constructed their own lime kilns, mosaic workshops etc. The villas were sumptuous with painted and veneered walls and fine furniture (HWCM 21413, Barfield forthcoming).

At some time around 289 the site was fortified by a rampart and double ditch, and the internal arrangements were reorganised. Buildings such as an aisled barn and other timber structures were erected and a roadway and well constructed. This complex was destroyed by fire *c* 296. The fortification and destruction of the villa complex may have been associated with a series of rebellions affecting the western provinces at this time (Salway 1981).

At some time in the second half of the 4th century there was a period of reconstruction and reuse of the site but this was not on the same scale as the earlier villas, the remains of which continued to be robbed throughout the Roman period and probably after. Medieval ploughing has removed most of the ground surfaces and the date of the final abandonment of the site is not known (Barfield forthcoming).

Occupation areas (HWCM 22019, HWCM 22020, HWCM 22021, HWCM 22022). Excavations and chance finds have indicated that Roman occupation at Droitwich was extensive, particularly to the south of the river. Despite this, the chronological development and layout of the settlement is virtually unknown and the components have been drawn with the intention of including rather than defining the area of Roman occupation.

Component HWCM 22019 to the south of the river and west of the road includes most of the evidence for activity during the Roman period. A considerable number of Roman finds have been recovered from this area (HWCM 481, HWCM 666, HWCM 671, HWCM 672, HWCM 679, HWCM 4152, HWCM 4153), and Roman deposits have been observed on numerous occasions (HWCM 600, HWCM 602, HWCM 605, HWCM 680, HWCM 3682, HWCM 3880, HWCM 3911, HWCM 4144, HWCM 4145, HWCM 4146, HWCM 4147, HWCM 4167, HWCM 9553). This area seems to have been the focus of late Iron age activity in Droitwich, and there is evidence of Iron Age type salt production continuing up to the mid-2nd century (HWCM 600, HWCM 605; Woodiwiss 1992). It is possible that prior to the mid-2nd century the area to the south of the river did not contain domestic occupation.

Evidence from the excavation at Hanbury Street (HWCM 681; Hughes and Lentowicz forthcoming) indicates that, unlike component HWCM 22019, the area to the east of the road was first occupied in the early Roman period and seems to have been purely domestic and/or agricultural in nature. It is possible that HWCM 22020 and HWCM 22021, and perhaps the eastern edge of HWCM 22019, formed a linear roadside settlement associated with a salt-making area to the west.

The reorganisation of the salt industry which seems to have occurred in the mid-2nd century may have resulted in a change of focus away from the road and towards the villa complex at Bays Meadow. This may explain the abandonment of the Hanbury Street site by the early 3rd century, and the appearance of buildings of a more domestic nature to the west in component HWCM 22019 from the mid-2nd century (HWCM 681, Hughes and Lentowicz; HWCM 600, Woodiwiss 1992; HWCM 605, Hughes and Hunt 1992). Evidence of salt production also becomes more scarce in HWCM 22019 after the mid-2nd century, and it is possible that the industry had concentrated on sites such as Upwich at this time.

Finds of coins (HWCM 669) in the area between the villa and the river suggest some activity in this area but its function is not known (HWCM 22022).

Salt-making area (HWCM 22023). Evidence from excavations to the south of the river (HWCM 600, HWCM 605, Woodiwiss 1992) suggest that up until the 2nd century salt production was being undertaken in the late Iron Age tradition over the area covered by the historic town (see above). The excavation at the site of the Upwich brine well (HWCM 4575, Hurst forthcoming) has provided evidence of a substantial timber structure, possibly a crane base, dating to the mid-2nd century. This, with the villa complex at Bays Meadow, seems to be associated with a radical reorganisation of the salt industry at that time.

Cemeteries (HWCM 22017, HWCM 22028). A number of finds of human burials have been found in the Vines Lane area and these may be part of a road side cemetery (HWCM 252, HWCM 4093, HWCM 4156, HWCM 6000). The most extensive excavation (HWCM 6000) uncovered 14 burials. These were radio-carbon dated to 407-568 cal AD and contained no grave goods (HWCM 6000, SMR site file). Other burials of similar date have been identified on Dodderhill just to the east (HWCM 603; McAvoy forthcoming).

3.3 Roman urban form

Definition and classification. The Roman urban form (HWCM 22025) has been defined and mapped, based on the extent of the identified urban components. The available evidence indicates that the Roman urban form of Droitwich can be classified as a Roman small town (English Heritage 1992).

Survival. With the exception of the surviving length of rampart around the villas and the Roman roads, no evidence of the Roman urban form is visible in the present townscape. Chance finds of artefacts and archaeological observations and excavations have demonstrated that substantial Roman buried deposits survive at Droitwich although the natural topography and post Roman landuse has greatly affected the pattern of this survival.

On the hills to the north of the Salwarpe, archaeological deposits are close to the surface. At the site of the villa complex at Bays Meadow occupation did not continue after the Roman period and medieval ploughing destroyed the original Roman surfaces over most of the site. Occupation levels were only preserved under the ridges of the ridge and furrow and the majority of the deposits excavated were, therefore, truncated features cutting the subsoil (HWCM 21403, Barfield forthcoming).

At Dodderhill, to the east of Bays Meadow, Roman features were disturbed by the construction of the church and other medieval occupation in the area, but traces of the internal features of the Roman fort and later Roman activity on the hill have survived (HWCM (HWCM 21406, 21407; McAvoy forthcoming)). Excavations on the line of the fortifications found ditches *c*2.5m deep, but no evidence of a rampart (HWCM 21404, St Joseph 1938; HWCM 21405, Whitehouse 1963). It is possible that the rampart had been destroyed by ploughing. The small excavation in the grounds of Dodderhill School undertaken in 1991 demonstrated that the 18th century landscaping of this area had removed virtually all evidence of earlier deposits (HWCM 21408; Edwards 1991).

In the valley of the Salwarpe, despite intensive later activity, Roman deposits survive particularly well. This is due in large part to the severe flooding in the 7th century (see section 1.3), which laid down at least 0.5m of alluvium which protected Roman and sub-Roman deposits from damage by later activity (HWCM 4575; Hurst forthcoming a). The deposits in this area are waterlogged, so preservation of organic remains is exceptional. Observations throughout the town have indicated that Roman deposits can be found at a depth of 2m to 3m below the present ground surface (HWCM 4099, HWCM 602, HWCM 671), although in some areas such as Vines Park, where there was substantial dumping of industrial waste in the post-medieval period, the deposits may be deeper (HWCM 3880, SMR site file).

4 Anglo-Saxon archaeological evidence

4.1 Anglo-Saxon remains and buildings

There are no standing remains of Anglo-Saxon date in Droitwich, but artefacts have

been discovered during construction work in the town and a number of archaeological interventions in the town, particularly since the 1970s, have produced evidence of Anglo-Saxon domestic and industrial activity. These excavations, evaluations, salvage recordings and watching briefs have demonstrated that Anglo-Saxon deposits do survive and that these include possible road surfaces, buildings, ditches, pits and industrial areas (HWCM 605, Hughes and Hunt 1992; HWCM 4575, Hurst forthcoming; HWCM 9553, Brown 1991a).

4.2 Anglo-Saxon urban components

Analysis of the evidence summarised above and of documentary sources indicated the existence of seventeen urban components. The characteristics of these urban components are summarised below.

Churchyards (HWCM 21396, HWCM 21420, HWCM 21428). The three medieval churches at Droitwich have been claimed to have Anglo-Saxon origins, and may have served separate settlement nuclei (see below).

The present structure at St Augustine's, Dodderhill, dates from the 12th century (HWCM 606, Pevsner 1968) and is the only one of the town's churches to have a sizable churchyard (HWCM 21428). The church is probably an Anglo-Saxon foundation (Bond 1988, 123) and it has been suggested that it was the Anglo-Saxon minster (Bond and Hunt 1992, 1900; S Bassett pers comm). This suggestion is supported by its association with the royal palace of Wychbold to the north (Hooke 1981). Its topographical location is also suggestive, on a hill overlooking a river crossing, a situation replicated by other minsters in the region, such as Bromsgrove and Kidderminster. Blocks of land containing a vicarage and parsonage next to the graveyard are marked on the post-medieval maps of the town (Hartshorne 1973). It is possible that these blocks of land, with the present churchyard, were originally part of a larger minster precinct.

The present church of St Andrew dates to the 13th century (HWCM 607; Pevsner 1968), but it has been argued that the church was founded in the Anglo-Saxon period, and it has been identified as a possible minster church (Bond 1988, 123). However there is no direct or indirect documentary evidence for this supposition (S Bassett pers comm). The churchyard (HWCM 21420), as recorded in the 17th and 18th centuries, is very small, and was probably even smaller in the medieval period (see below, section 5.2). If St Andrew's was originally a minster church, there is no trace of a large graveyard; however a churchyard component has been provisionally defined (HWCM 21428).

The church of St Nicholas on Friar Street (HWCM 255) is first mentioned in 1170, but has been argued to have originated as an 11th century chapel (Bond 1988, 123, 133). As such it may not have had a churchyard in the Saxo-Norman period. The extent of this component (HWCM 21396) has been provisionally defined using the 1839 tithe award in an attempt to include the early chapel.

Salt-making areas (HWCM 686, HWCM 21426, HWCM 21427). Early charter evidence indicates the presence of brine wells, "leaden furnaces", and sheds on the Salwarpe in the 7th century (Hooke 1981, 135). References to brine wells in charters of the 8th, 9th, 10th and 11th centuries mention structures such as brine boiling furnaces, buildings, vats, casks, ovens and other features connected with salt manufacture. Salt production seems to be occurring undercover. The location of the wells is not mentioned but they appear to be limited in number (Hooke 1981, 135-137)

The Domesday survey is confusing, but seems to indicate the presence of five brine

wells of which only three, Upwich (HWCM 21427), Middlewich (HWCM 21426), and Helpridge are mentioned by name (Hooke 1981, 137; Thorn and Thorn 1982). Netherwich (HWCM 686) is not mentioned.

The most important brine well in the Anglo-Saxon period and later was that at Upwich (HWCM 21427). Unfortunately excavation revealed that the late Anglo-Saxon structures, referred to in the Domesday Survey and other documents, were destroyed by the reconstruction of the brine well in 1264-5 (Hurst forthcoming a). No excavation has been undertaken at Middlewich (HWCM 21426), but pottery likely to be of middle or late Anglo-Saxon date was observed in this area when the new canal basin was constructed (HWCM 602). Netherwich is first mentioned in a charter of 972 (Hooke 1981), and operated throughout the medieval and earlier post-medieval periods. There have been no excavations or archaeological observations in this area.

The Upwich and Netherwich salt making areas have been defined using the 17th century map of Droitwich (Hartshorne 1973). The extent of the Middlewich pit is harder to define as it went out of use by the early 17th century and is not mapped.

Street system (HWCM 22029). The street system of the Anglo-Saxon town is hard to define, although it is fairly certain that the main Roman roads in the area continued in use during this period. In the Anglo-Saxon period Droitwich may have consisted of three settlements, one around each of the main brine wells. The east-west Friar Street/High Street alignment may date to the 13th century, but there is evidence for a track or road on the Friar Street alignment in the Saxo-Norman period (HWCM 9553; Brown 1991a, 4).

Bridging points (HWCM 22024, HWCM 21440). A ford, bridge or possibly ferry must have existed where the main north-south road crossed the Salwarpe (HWCM 22024) and possibly where the Winnetts Lane/Hampton Road access road to the Netherwich and Middlewich pits joined the main road out of the town to the west. As in the Roman period the location of these bridging points cannot be accurately pinpointed at present as the early course of the river has not been charted.

Occupation areas (HWCM 22030, HWCM 22031, HWCM 22032, HWCM 22033, HWCM 22034, HWCM 22035, HWCM 22036, HWCM 22037). Excavations and chance finds have produced evidence of Anglo-Saxon occupation over a wide area. Despite this the chronological development and layout of the settlement is virtually unknown, and the components have been drawn with the intention of including rather than defining the area of Anglo-Saxon occupation. As mentioned above it is possible that there were three settlements at Droitwich each focussing on one of the main brine wells of Upwich, Middlewich and Netherwich.

To the south of the river (HWCM 22034, HWCM 22035, HWCM 22036, HWCM 22037), Anglo-Saxon pottery has been recovered (HWCM 601, HWCM 672), and on a number of occasions very fragmentary features of Saxo-Norman date have been identified. On Friar Street fieldwork at Priory House (HWCM 609, Jackson 1992), and the Old Fire Station (HWCM 7072), identified possible Saxo-Norman features.

Most of the evidence for this period comes from excavations on the north side of Friar Street (HWCM 605, Hughes and Hunt 1992; HWCM 9953, Brown 1992b). At HWCM 605 the land seems to have been in agricultural use after the Roman period. In the late Anglo-Saxon period, however, features associated with drainage, rubbish disposal and a fenceline were found as well as tanning pits containing large quantities of decayed wood and organic material (Hughes and Hunt 1992). At 97 Friar Street (HWCM 9553) a gravel road surface with associated ditches and possible buildings were recovered (Brown 1991b). On the Old Bowling Green site to the north of Friar Street (HWCM 600) a possible building was recovered

(Woodiwiss 1992).

To the north of the river, archaeological evidence for Anglo-Saxon settlement is more sparse and components (HWCM 22031, HWCM 22032, HWCM 22033) are based largely on their proximity to known Anglo-Saxon features. In HWCM 22030, to the east of Dodderhill church, excavations uncovered Anglo-Saxon pottery and two pits which may be Saxo-Norman in date (HWCM 21407, HWCM 21428, McAvoy forthcoming).

4.3 Anglo-Saxon urban form

Definition and classification. The Anglo-Saxon urban form (HWCM 22026) has been defined and mapped, based on the extent of the identified urban components. The available evidence indicates that the Anglo-Saxon urban form of Droitwich can be classified as a commercial centre (English Heritage 1992).

Survival. With the exception of the A38, which is thought to follow the route of the Roman and later road through Droitwich, little evidence of the Anglo-Saxon urban form is visible in the present townscape. Chance finds of artefacts and archaeological observations and excavations have demonstrated, however, that Anglo-Saxon buried deposits do survive at Droitwich. Four sherds of 5th to 10th century pottery were discovered during excavations at Dodderhill (HWCM 21405; McAvoy in Hurst forthcoming), but any occupation of that date in this area seems to have been greatly disturbed by later activity.

The majority of the archaeological evidence for this period comes from sites in the valley of the River Salwarpe. Unfortunately at the most important site excavated in this area, the Upwich brine well (HWCM 4575; Hurst forthcoming), the later Anglo-Saxon evidence had been destroyed by the large-scale refurbishment of the area which took place in the mid-13th century. However, important deposits dating from the end of the Roman period to the 8th century were observed. A large area of the Middlewich brine well with deep waterlogged deposits dating from at least the late Saxon period to the present was severely damaged with almost no archaeological work when the new canal basin was constructed in 1985 (HWCM 602). No archaeological work has been undertaken at the site of the Netherwich brine well but what information is available from Upwich and Middlewich suggests that important Anglo-Saxon deposits still survive in this area.

Anglo-Saxon deposits are generally less well preserved than Roman deposits in Droitwich, as there is no buffer of alluvium to protect them from medieval and post-medieval disturbance (see section 3.3). The deposits are extensive and often waterlogged, however, and in the low-lying areas are generally at least 1m below the present ground surface (HWCM 9553; Brown 1991b), although they can be more deeply buried (HWCM 4099; Woodiwiss 1983).

5 Medieval archaeological evidence

5.1 Medieval remains and buildings

Priory House (HWCM 609) and 31-35 High Street (HWCM 640) contain fragments of the only surviving medieval secular buildings in Droitwich. Of the three medieval churches within the town two, St Andrew's and St Augustine's, survive and these date from the 13th century, and late 12th to early 13th century, respectively. These churches have been described and planned, and the sequence of construction interpreted (HWCM 606, Pevsner 1968, 131; HWCM 607, VCH 1913, 82-86, Pevsner 1968, 134-135).

Chance finds and archaeological fieldwork have demonstrated that medieval

archaeological deposits do survive in Droitwich. Remains of medieval houses, boundary ditches and rubbish and cess pits have been uncovered in areas off Friar Street (HWCM 4990, HWCM 605, HWCM 672, HWCM 7072, HWCM 9553, HWCM 609), the High Street (HWCM 600, HWCM 7313), Hanbury Street (HWCM 681), Vines Lane (HWCM 600), and Dodderhill (HWCM 21407). Evidence of medieval industrial activities, such as tanning, has also been uncovered (HWCM 605; Hughes and Hunt 1992). Important evidence of medieval salt making from the mid-13th century was discovered at the site of the Upwich brine well (HWCM 4575; Hurst forthcoming).

5.2 Medieval urban components

Analysis of the evidence summarised above and of cartographic and documentary sources indicated the existence of thirty eight urban components. The characteristics of these urban components are summarised below.

Churchyards (HWCM 21428, HWCM 21400, HWCM 21396). Although the origin of the three churches in Droitwich is not clearly established (see above, section 4.2), it is known that there were two churches and a chapel in the medieval town.

The present church of St Augustine's, Dodderhill was probably begun about 1180 although it was not dedicated until 1220 (VCH 1913, 65). The churchyard (HWCM 21428) has been defined using the post-medieval maps of the town and its medieval extent cannot be determined at present.

The boundary of the small churchyard of St Andrew's, High Street (HWCM 21400) has also been drawn using 18th century and later maps of the town. A reference to an extension of the graveyard in 1700 (Nash 1799) suggests that it was even smaller in the medieval and early post-medieval period.

St Nicholas' church probably originated as a chapel of ease. After 1291 it was constituted as a rectory and subsequently served as a parish church (Bond and Hunt 1992, 194). Its status seems to be reflected in its very small graveyard (HWCM 21396). Both St Andrew's and St Nicholas' were damaged in a late 13th century fire (Bond and Hunt 1992, 194).

Religious houses (HWCM 683, HWCM 689). The Augustinian Friary (HWCM 683) was founded in 1331. At this time it occupied a plot of land 300 feet square. This was extended in 1343 by a plot of land 299 feet long and 60 feet broad. Later in the 14th century more plots of land were granted to the friars. The Friary included church, oratory, accommodation for the friars and an anchorite's cell (VCH 1906, 173-174). By 1531 the house was very poor and the prior had sold off so much that "in the house is not left one bed, one sheet, one platter or dish" and the house was not habitable (VCH 1906, 114). Several private individuals were keen to acquire the site and it was eventually bought by a Mr Pye in 1543 (VCH 1906, 173-4). The exact location of the Friary is not known but the 1786 map (Karver *et al*) and the 1839 tithe map show an area marked "Friars" with fishponds (HWCM 21416) on the western edge of Droitwich to the south of the Netherwich pit. This component has been defined using those maps.

In 1255 William de Dover, rector of the church at Dodderhill founded and endowed a small hospital with two brethren and a master (HWCM 689, VCH 1906, 179). St Mary's Hospital was the subject of numerous legal disputes throughout its life and was finally suppressed by its patrons, the prior and convent of Worcester, in 1535 or 1536 (VCH 1906, 180). The majority of the building seems to have been demolished and the building materials sold but in the late 18th century Nash noted that the "edifice is still subsisting as a pigeon house near the bridge" (Nash 1799, 343).

Some 60 years later Noake noted that "the skeleton of the old hospital at Dodderhill is still in existence, at the foot of the bank on which the church stands, and is known as the pigeon house. It is a timber framed structure" (Noake 1848, 384-5). The exact location of the hospital is not known but the most likely place is on the eastern edge of Dodderhill next to the road and bridge (Bond and Hunt 1992, 195). On the tithe map of 1845 a small block of land here is marked as belonging to the parish of Marlborough rather than Dodderhill and this may mark the extent of the hospital.

Manorial enclosure (HWCM 21421). The Raven Inn, which incorporates a 16th century or earlier listed building (HWCM 647), has been identified as the site of the medieval manor house of the parish of St Andrew's (Hodgkinson 1935, 39). The extent of the manorial enclosure is not known and this component has been drawn using boundaries represented on 18th and 19th century maps.

Street system (HWCM 21447). Documentary evidence indicates that High Street, Friar Street, St Andrew's Street, Winnett's Lane, Tower Hill, Rickett's Lane (also called Bagbridge Street) and Queen Street (also called Gosford Street) were in existence in the middle ages (Bond and Hunt 1992, 194). The rest of the street system has been drawn using the mid-17th century map of Droitwich (Hartshorne 1973). Documentary evidence suggests that the medieval form of Droitwich was not greatly altered until the burgesses lost control of the salt industry after the breaking of the borough monopoly in 1695 (see above section 1.3). It is possible, however, that some of the streets shown may have originated in the post-medieval period.

The kink in the line of Friar Street and High Street close to St Andrew's Church suggests that they were not laid out at the same time. Bond and Hunt (1992, 195-196) consider Friar Street to be a secondary medieval development. Recent excavations (HWCM 9553, Brown 1991b) suggested that Friar Street was in existence by the 11th century; however more extensive excavations at 97 Friar Street dated this street to the 13th to 14th century (Hughes and Hunt 1992, 125-6). The question of the origins of the medieval street pattern has yet to be resolved.

No murage grant was made to the borough but there may have been a ditch and gates to control traffic for commercial purposes (VCH 1913, 79; Bond and Hunt 1992, 194).

Market places (HWCM 21435, HWCM 21436, HWCM 21460). Medieval Droitwich may have had three market places. The central market place, considered by Bond and Hunt (1992, 192) to be the oldest, was a small triangular area to the north of St Andrew's Church (HWCM 21435). This may have developed from informal Sunday trading in the churchyard. The Town Hall or Exchequer House (see below) was situated here and a cross, probably medieval in origin, was recorded in 1629 (HWCM 21418, Bond and Hunt 1992, 192).

A second market and market house is documented in the Queen Street area (HWCM 21436) in the post-medieval period, but may date to the medieval period. This market place is also very restricted in size and suggests that the markets played a comparatively small part in the economic life of the town (Bond and Hunt 1992, 194).

The area just to the east of the Bromsgrove Road (HWCM 21460) appears on 19th century maps to be an infilled open space. This area was known as Horse Fair in the 18th and 19th centuries but may represent a much earlier market place. It is may be medieval in origin but it is possible that it may have started as a market place associated with the Anglo-Saxon settlement based on the Upwich brine well and St Augustine's Dodderhill. This area is shown as part of the parish of Dodderhill on the 1845 Dodderhill tithe map but part of St Peter's parish on the 1840 tithe map.

On the 1786 map (*Karver et al*) the borough boundary makes a kink to include this area although it is not shown on the late 17th century map of the town (Hartshorne 1973).

Town hall (HWCM 22040, HWCM 22041). The meeting place of the burgesses of Droitwich may date to 1215 when the borough received its charter. This building (HWCM 22041) was destroyed by fire in the 1290s, and was replaced by another building (HWCM 22040) on the same site. This second building was replaced by the "Old Exchequer House" (HWCM 10572) in 1581 (Sterry-Cooper 1934, 64-74). All three buildings probably acted as a market hall as well as a meeting place for the burgesses. Sterry-Cooper (1934, 64-74) suggests that the "Old Exchequer House" and, by inference, the earlier buildings were on the site of the 19th century Town Hall at the corner of Friar Street and St Andrew's Street. The description of the building he quotes, however, suggests a location to the north of St Andrews church within the triangular market place. The Old Exchequer House" may be the building shown in this position on the the 1786 map (*Karver et al*).

Bridging points (HWCM 698, HWCM 21438, HWCM 21439, HWCM 21440). The main bridging point of the Salwarpe in the medieval town was Chapel Bridge (HWCM 698) on the line of the old Roman road. In the 1540s the bridge was described by Leland as having four stone arches and it was noted that at the southern end was a fine new timber chapel (Chandler 1993, 515).

Three other bridges are known downstream of Chapel Bridge. The first of these is New Bridge at the end of Frog Lane (HWCM 21438). This is first shown on the late 17th century map of the town but it is probably medieval in origin.

Just to the west of New Bridge at the end of Rickett's Lane is Bag Bridge leading directly to the Upwich salt making area. This is shown on the 17th century map of Droitwich (Hartshorne 1973) but Rickett's Lane is documented in the medieval period and this may be the wooden bridge referred to by Leland in the 16th century (Chandler 1993, 514).

The most westerly bridge in the town is Grantham Bridge (HWCM 21440) This gives access to the Middlewich and Netherwich brine wells and may be medieval in origin.

Tenement plots (HWCM 21419, HWCM 21422, HWCM 21423, HWCM 21424, HWCM 21425, HWCM 21429, HWCM 21430, HWCM 21431, HWCM 21432, HWCM 21433, HWCM 21434, HWCM 21437, HWCM 21441, HWCM 21442, HWCM 21443, HWCM 21444, HWCM 21445, HWCM 21446). The major changes brought about by the development of large-scale salt production in the 18th and 19th centuries, and the construction of the canal and railway, mean that it is difficult to reconstruct the medieval town plan. The 17th century map of Droitwich (Hartshorne 1973) gives some idea of the extent of the settlement prior to these major changes but is diagrammatic and does not show property boundaries. Some traces of pre-late 19th century burgages plots can be seen on the first edition 1:2500 Ordnance Survey maps, however.

Evidence from cartographic, documentary and archaeological evidence suggests that medieval burgage plots fronted Friar Street (HWCM 21430, HWCM 21425, HWCM 21419), St Andrew's Street (HWCM 21424, HWCM 21423), High Street (HWCM 21422, HWCM 21434, HWCM 21431, HWCM 21432) and Queen Street (HWCM 21432, HWCM 21433, HWCM 21441, HWCM 21442). The plots are quite short and, particularly at the west end of the town, quite broad (Bond and Hunt 1992, 192). It has been suggested that the tenement plot components fronting Friar Street form a secondary plan unit (Bond and Hunt 1992, 196). However, archaeological evidence indicates that Friar Street was in existence by the 11th

century. The location of a tannery on the Friar Street at that period (HWCM 605) does not necessarily indicate that it was the edge of the town as such industries were often in central locations until the end of the 19th century (Hughes 1994).

The evidence of standing (HWCM 609) and recorded medieval buildings (HWCM 292, HWCM 21417) and of excavations (HWCM 605, Woodiwiss 1992) indicate that Friar Street was a high status area in the middle ages and that tenement plots were in existence from at least the 12th century.

Where it can be determined, it would appear that tenements to the north of the High Street/Friar Street axis did not usually stretch back to the river. These areas may have contained lower status housing or industry more closely associated with salt production. On the 17th century map of Droitwich the components to the north of the river (ie HWCM 21443, HWCM 21444 and HWCM 21445) are marked with little cottages, as opposed to what seems to be the symbol for built up areas seen on the main street frontages (Hartshorne 1973). Unfortunately the area between the backs of the tenement plots fronting Friar Street and the High Street and the river (HWCM 21446, HWCM 21437) is not shown in any detail on this map, and was one of the areas most changed by late post-medieval development.

Archaeological excavation (HWCM 21407, McAvoy forthcoming) has demonstrated that the area between St Augustine's and St Mary's Hospital (HWCM 21429) was occupied in the medieval period. The cess pits and ditches found on this site may be associated with an early vicarage or other clerical building.

Salt-making areas (HWCM 686, HWCM 21426, HWCM 21427). The Domesday Survey mentions (?five) brine wells, but from the early 13th century only three salt-making areas: Upwich, Middlewich and Netherwich, are documented (Berry 1957, 41). The pits were held and administered jointly by the bailiffs and burgesses, but each person's salt rights consisted of so many portions or vats of brine and it was upon these vats that the assessment for *Salsae* dues was made each year. These dues went towards the £100 borough fee farm paid to the King (Berry 1957, 43).

The antiquarian Leland visited Droitwich in the mid-16th century and described the salt making going on there in some detail. Due to the conservative nature of the salt industry at Droitwich this probably represents a good picture of the medieval situation.

At present there are three brine springs in the town of Droitwich and the main one is less than a bow shot from the right bank of the river.... This spring produces twice as much salt water as the other two put together.... There are a large number of salthouses or furnaces near the well where the salt is evaporated to leave a residue of pure white salt. The other salt springs are on the left bank of the river at a considerably lower level than the large spring and right on the edge of the town. At these springs too are several furnaces for making salt but the income and the yield from these two springs stands no comparison with the large spring (Chandler 1993, 515).

Excavation at the site of the Upwich brine well, the "large spring" of Leland's report, uncovered evidence of a substantial wooden structure of medieval date. This was the well head built in 1264-5. It was c 3m square and at least 9m deep. Some evidence of associated salt making workshops was also recovered (HWCM 4575, Hurst forthcoming a).

Mill (HWCM 21390). There are medieval documentary references to "Frog Mill" alias the "King's Mill" and it has been suggested that this was on the site of the post-medieval town mill on the eastern edge of the site (VCH 1913).

5.3 Medieval urban form

Definition and classification. The medieval urban form (HWCM 22027) has been defined and mapped, based on the extent of the identified urban components. The available evidence indicates that the medieval urban form of Droitwich can be classified as a medium-sized medieval market town (English Heritage 1992).

Survival. Chance finds of artefacts, archaeological observations and excavations have demonstrated that medieval deposits survive in Droitwich. These deposits contain datable artefacts and ecofacts and in some cases are waterlogged. The natural topography, combined with subsequent land use has affected the pattern of survival within the medieval town. On the higher ground to the north of the river, deposits are close to the surface and have been damaged by more recent land use (HWCM 21407, McAvoy forthcoming). The best preserved deposits are found in the low lying area near the Salwarpe. At 97 Friar Street, for example, successive floor layers of a 14th century building were preserved less than 0.3m below the present ground surface (HWCM 9553, Brown 1991b). Further to the east, however, behind the High Street, late medieval deposits were located at a depth of c 2.5m below the present ground surface (HWCM 4099, Woodiwiss 1983). The reason for this variance in the depth of medieval deposits seems to be a combination of the effects of 19th century subsidence and the presence of substantial dumps of post-medieval waste products of salt making in many areas of the town. Some of the latter are marked on the first edition 1:2500 Ordnance Survey maps.

In the area immediately to the north and south of the Salwarpe the layout of the medieval salt industry and associated housing was destroyed by the construction of the canal and the railway and the building of massive 19th century saltworks. In the rest of the town the remnants of the medieval burgage plots were largely obliterated by the developments of the 1970s and 1980s. A large area of the Middlewich salt making area which is well documented in the medieval period was destroyed with hardly any archaeological work being carried out when the new canal basin was constructed in 1985 (HWCM 602). At present, however, it can be assumed that important deposits relating to medieval salt industry still survive on the site of the Netherwich brine wells. With the exception of the churchyards and churches of St Augustine and St Andrew, and the remnants of burgage plots fronting Friar Street and the High Street, the medieval urban form is poorly preserved in the modern town.

6 Post-medieval archaeological evidence

6.1 Post-medieval remains and buildings

As well as finds of post-medieval pottery recovered during construction work in Droitwich, post-medieval remains have been observed in a number of places within the town. Evidence of post-medieval occupation including boundaries, cobbled surfaces, a well and foundations has been observed on Friar Street (HWCM 602, HWCM 605, HWCM 672), Hanbury Street (HWCM 4094), Rickets Lane (HWCM 600), and Gurneys Lane (HWCM 4099). Other sites have produced evidence of 18th century canal wharfs (HWCM 3681), and buildings and residues from post-medieval salt production (HWCM 4097, HWCM 6000, HWCM 4575).

Despite extensive redevelopment in the 19th and 20th centuries, Droitwich still contains a number of standing buildings of post-medieval date. The majority of these buildings, including five listed 16th century buildings, six listed 17th century buildings and 17 listed 18th century buildings have not been studied in any detail. The majority of the historic buildings in Droitwich are situated on Friar Street and High Street.

6.2 Post-medieval urban components

Analysis of the evidence summarised above and of cartographic and documentary sources indicated the existence of 51 urban components. The characteristics of these urban components are summarised below.

Churchyards (HWCM 21396, HWCM 21400, HWCM 21428). The medieval church of St Nicholas was in ruins by the later 17th century (Nash 1799, 331). It is not mentioned by Leland in the mid-16th century, which suggests that it may have fallen out of use by this date (Chandler 1993, 514). The churchyard (HWCM 21396) and the ruined church are marked on the 1786 map (Karver *et al* 1786). By 1839 when the tithe map was drawn the church had been demolished, although the churchyard was still marked.

St Andrew's is described by Leland as "a modest church" (Chandler 1993, 514). In 1700 part of the parson's garden (48 yards long and 16 yards wide) adjoining the churchyard was consecrated as an extension to the burial ground (Nash 1799). This suggests that prior to that date the churchyard was even smaller than that shown in 1786 map (HWCM 21400; Karver *et al* 1786). Even with the extension the graveyard was very constricted and throughout the post-medieval period some parishioners of St Andrew's were buried at St Augustine's on Dodderhill. By the late 18th century buildings had been constructed between the church and the High Street frontage (Karver *et al* 1786). These are not shown on the 17th century map of the area (Hartshorne 1973) and may have been a later encroachment onto the churchyard.

St Augustine's is described by Leland in the mid-16th century as a "church on a small hill beyond the wooden bridge, a short distance outside the town on the right bank of the river and a little above the main salt springs" (Chandler 1993, 514). The central tower of St Augustine's is said to have been demolished in the Civil War (VCH 1913, 65), and excavations within the churchyard in 1991 uncovered deposits relating to the 17th century demolition of the nave and later graves (HWCM 606, Brown 1991). The extent of the post-medieval churchyard of St Augustine's (HWCM 21428) has been drawn using the 18th and early 19th century maps of the town. It is not clear how much of the churchyard was truncated by the construction of the railway cutting in the middle of the 19th century, however.

Vicarage (HWCM 21468). A large building called "the vicarage house" is marked to the east of the St Augustine's on the 17th century map of Droitwich and a building (HWCM 10602), now demolished, is shown on the 1885 Ordnance Survey map. Excavation in this area in 1984-85 (HWCM 21407) uncovered evidence of "the vicarage house" which was a post-Civil War rebuilding of an earlier structure (McAvoy forthcoming).

Parsonage (HWCM 21469). This block of land contains the "parsonage house" (HWCM 10608) marked on the 17th century map of Droitwich to the north of St Augustine's. The exact location of this house cannot be determined. The most likely site is, however, the area of the 18th century Hill Court. Excavations here have shown that in some areas landscaping associated with the construction of the Court has removed all earlier deposits (HWCM 21408, Edwards 1991). This component has been defined using the boundaries of Hill Court as shown on the 1885 Ordnance Survey map.

Chapel (HWCM 21394). On the 1786 map of Droitwich a graveyard is shown between Vines Lane (then Hill Bank) and the Salwarpe. This may be the site of a non-conformist chapel, although there is no indication of this on the map. It is possible that the chapel itself was situated in the centre of the town. The graveyard

was built over by 1885. The scarcity of pre-19th century non-conformist meeting houses in Droitwich is unusual.

Almshouses (HWCM 657). The Coventry Hospital was founded in 1686 by Henry Coventry (VCH 1913, 80). The building has been much modernised and the north wing was demolished in 1934.

Street system (HWCM 22039). The post-medieval street system of Droitwich has been drawn using the late 18th century map of the town (Karver et al 1786) in conjunction with the 17th century map and the 19th century tithe and Ordnance Survey maps. Until the 18th century the street system of Droitwich seems have been remained largely as it was in the medieval period. In the mid-16th century Leland noted that "the town's main attraction is a single street although there are many lanes in addition..... The town itself is rather unpleasant and dirty when any rain falls as the streets which carry most of the traffic are either badly paved or not paved at all" (Chandler 1993, 514). At the beginning of the 18th century it was noted that the old Roman road linking Droitwich with Worcester and Birmingham was almost impassable for nine months of the year due to "the great and many loads and carriages of salt and other goods which daily pass through the said road" (Bond and Hunt 1992, 198). The road was the first Worcestershire road to be turnpiked in 1713. Further roads radiating from Droitwich were turnpiked in 1755 and renewals and amendments to the earlier Turnpike Acts continued through to the mid-19th century (Bond and Hunt 1992, 198).

Bridging points (HWCM 698, HWCM 21438, HWCM 21439, HWCM 21440). Leland's description of Droitwich in the mid-16th century mentions two bridges. The main bridge "of four stone arches across the brook" (Chandler 1993, 515) was Chapel Bridge (HWCM 698). The other, wooden, bridge crossed the Salwarpe underneath Dodderhill church (Chandler 1993, 514) and may have been New Bridge (HWCM 21438) or Bag Bridge (HWCM 21439). Despite the fact that Leland mentions only one wooden bridge it is probable that both New Bridge and Bag Bridge were medieval in origin. New Bridge was still in existence in 1786 but was destroyed by the construction of the Droitwich Junction Canal in 1852. Bag Bridge just to the west was destroyed by the construction of the Droitwich Canal in 1771. Grantham Bridge (HWCM 21440), to the west of the town, is shown on 17th, 18th and 19th century maps of Droitwich.

Market places (HWCM 22043, HWCM 21436, HWCM 21459). In the mid-16th century Leland noted that "in the main street is a modest church and the weekly market held in the town has a reasonable reputation" (Chandler 1993, 514). This is a reference to the market place in the centre of the town (HWCM 22043). The "Old Exchequer House" and its 17th century shambles were in this area and it seems to have been the main market area from the medieval and through the post medieval period.

Perhaps as a response to the restricted space on the High Street two other market areas operated in the post-medieval period. The first of these was at the junction of Hanbury Street and what was known as Market Street, now Queen Street (HWCM 21436). This market place was no longer used by the late 18th century when it was mentioned by Nash (Nash 1799, 305).

The third market place (HWCM 21459) was on the Bromsgrove Road just to the east of Dodderhill. It is marked as "Horse fair" on the 1786 map of the town (Karver et al 1786) and may be a remnant of an earlier larger market place (see section 5.2 HWCM 2140). The Horse Fair, unlike the market places at High Street and Queen Street, was not associated with any market buildings (see below) and may have been an occasional rather than a regular market place.

Market halls and Town Hall (HWCM 654, HWCM 10572, HWCM 21401). As mentioned above, the High Street and Queen Street market places had associated market buildings. In 1581 what became known as the "Old Exchequer House" was constructed on the site of a 14th century building (HWCM 22040). This was the meeting place of the burgesses of Droitwich and was in effect the town hall as well as a market hall. In 1628 a range of butcher's shambles were added to the east end of this building (HWCM 21401). These structures were demolished in the 19th century. Glass from the windows of the "Old Exchequer House" was incorporated into the windows of the Raven Hotel (HWCM 647).

On Queen Street the market house, now demolished, was also constructed in the 17th century (HWCM 654).

Tenement plots (HWCM 21419, HWCM 21422, HWCM 21423, HWCM 21424, HWCM 21425, HWCM 21431, HWCM 21432, HWCM 21433, HWCM 21434, HWCM 21437, HWCM 21441, HWCM 21442, HWCM 21443, HWCM 21444, HWCM 21445, HWCM 21448, HWCM 21449, HWCM 21450, HWCM 21451, HWCM 21452, HWCM 21453, HWCM 21454, HWCM 21455, HWCM 21456, HWCM 21457, HWCM 21458). Archaeological and cartographic evidence suggests that, until the breaking of the borough monopoly in 1695, the layout of post-medieval Droitwich was very similar to that of the medieval town. However, after the end of the 17th century changes in the location of the salt-producing areas led to a change in the location of other industrial and domestic activities. The increasingly industrialised nature of salt extraction and processing led to the destruction of the medieval tenement plots boundaries particularly to the north of Friar Street. Other changes to the townscape were due to the large increase in population brought about by the expansion of the salt industry in the 18th and 19th centuries.

Medieval tenements survived into the 19th century to the south of Friar Street (HWCM 21425, HWCM 21419), to the north and south of the High Street (HWCM 21422, HWCM 21434, HWCM 21431, HWCM 21432, HWCM 21437), on Queen Street (HWCM 21433, HWCM 21442), and on St Andrew's Street (HWCM 21424, HWCM 21423). This area was redeveloped in the mid-18th century due to the increased prosperity of the town in that period, and it has been suggested that the boundaries between properties were altered at that time (see section 8.4). This is unlikely unless the plots were all owned by the same individual. Post-medieval deposits and artefacts have been observed at Friar Street (HWCM 672; Wichbold 1993), St Andrew's Street (HWCM 4144; SMR site file), High Street (HWCM 4167; SMR site file) and Queen Street (HWCM 681; Hughes and Lentowicz forthcoming).

In the areas of cottages and plots associated with the Upwich brine ground (HWCM 21443, HWCM 21444, HWCM 21445, HWCM 21441) changes must have occurred after 1695, but it is not clear what these entailed. The Upwich brine well itself declined and the area was redeveloped, but comparisons of the 17th, 18th and late 19th century maps suggest that some of the cottages shown on the 17th century map, especially to the east of the Upwich brine ground, may have survived into the 19th century. To the north of the Upwich brine well (HWCM 21445) excavations in 1986 and 1987 uncovered the remains of post-medieval buildings and evidence of 18th and 19th century saltworking (HWCM 6000; SMR site file).

There are no buildings shown in the area of the Middlewich brine well on the 17th century map of Droitwich. This well had been abandoned by the end of the medieval period, and the function of this area (HWCM 21449) in the earlier post-medieval period is not clear. Buildings are shown in the area on the 1786 map and cobbled surfaces and 18th century pottery were observed during the

construction of the modern canal basin (HWCM 602; SMR site file).

The decline of the Upwich and Netherwich brine wells in the earlier 18th century, and the construction of the canal across the northern part of the town in the later years of that century, led to massive changes in the areas to the north of Friar Street (HWCM 21450). In the medieval period Friar Street had been a high-status area, but by the 18th century it was a mix of saltworks and residential houses with a few inns. Archaeological evidence from the northern frontage of the street (HWCM 605) suggests that the medieval buildings were subdivided and extended and then replaced by smaller workers houses in the 19th century (Hughes and Hunt 1992, 129). Post-medieval deposits have been observed at other sites (HWCM 9553, Brown 1991; HWCM 600, Woodiwiss 1992, 29).

Aarchaeological evidence (Friar Street, HWCM 605) suggests that the population increase in the 18th and 19th centuries meant that the old core of Droitwich was more densely occupied than previously. In addition, by the middle of the 18th century the town had expanded (HWCM 21454, HWCM 21452, HWCM 21453, HWCM 21458, HWCM 21455, HWCM 21457, HWCM 21458), and included land previously occupied by the medieval hospital, Friary and manorial enclosure (HWCM 21448, HWCM 21451, HWCM 21456).

Mill (HWCM 21390). The 17th century map of Droitwich shows "the town mill" with a waterwheel on an island in the River Salwarpe. It is suggested (VCH 1913) that this is the site of the medieval mill. The mill continued to function throughout the 18th and 19th centuries.

Salt-making areas (HWCM 686, HWCM 21470). The Middlewich brine well stopped operating by the end of the medieval period but Upwich and Netherwich continued to function in the post-medieval period and are first shown, with their associated salt houses, on the 17th century map of Droitwich (Hartshorne 1973). Until the breaking of the borough monopoly in 1695, available evidence suggests that the industry, based on these two wells, continued to operate much as it had done in the medieval period, and as it was described by Leland in the 16th century.

During the 18th and 19th centuries, however, brine wells were opened up in other areas of the town and the importance of Netherwich and Upwich declined rapidly. At Upwich (HWCM 2147), recent excavations (HWCM 4575) have uncovered evidence of the pre-1695 saltmaking sheds and brine well, but also shown how, in the 18th century, the area was cleared and some domestic buildings constructed (Hurst forthcoming a). The Upwich brine ground was cut by the Droitwich canal in 1771. Whilst cartographic and archaeological evidence indicates that saltworking was greatly reduced in this area in the 18th century it probably continued on a smaller scale as saltworks in the area of the Upwich brine well are shown on the 1885 Ordnance Survey map (HWCM 10585). In the 18th century salt works sprang up along Vines Park and outside the town to the southwest (Bond and Hunt 1992, 198). These continued to operate into the 19th century.

Canal and wharf (HWCM 20660, HWCM 21393). The Droitwich Canal, linking the town with the River Severn, was completed in 1771. It was intended to carry coal in, and salt out, of Droitwich and is unusual in that it could accommodate barges of 100 tons rather than the more usual 25-30 ton vessels (Hodgkinson 1913, 74). Comparison of the 17th and 18th century maps suggest that in the centre of the town the canal followed the line of the Salwarpe, which was diverted to the north at this point. The canal head was lined with wharves and bordered with saltworks. A watching brief in this area (HWCM 3681, SMR site file) recorded a large ashlar wall on timber piles which was interpreted as part of the original wall of the wharf. By 1913 the canal was almost derelict and was finally abandoned in 1939. The wharf area has now been demolished.

6.3 Post-medieval urban form

Definition and classification. The post-medieval urban form (HWCM 22028) has been defined and mapped, based on the extent of the identified urban components. The available evidence indicates that the post-medieval urban form of Droitwich can be classified as an industrial town (English Heritage 1992).

Survival. Chance finds of artefacts, archaeological observations and excavations have demonstrated that post-medieval deposits survive in Droitwich. These deposits contain datable artefacts and ecofacts and in some cases are waterlogged. In most areas it would seem that the earlier post-medieval deposits, ie those that pre-date the breaking of the borough monopoly at the end of the 17th century, do not survive particularly well. This is because, in the northern part of the town, close to the Salwarpe, large areas were seriously damaged by the construction of the canal, railway and large saltworks. In one area of Vines Park, for example post-medieval deposits lie directly over middle Anglo-Saxon flood deposits (HWCM 3880). To the south of the town around St Andrew's Street post-medieval deposits have been seriously damaged by 20th century development. Despite this destruction post-medieval deposits do survive. At present it would seem that they are best preserved on either side of Friar Street and the High Street (HWCM 600, HWCM 9553, HWCM 605, HWCM 4099), although substantial remains of post-medieval salt making were uncovered at Upwich (HWCM 4575, Hurst forthcoming) and Vines Lane (HWCM 6000). Thick deposits of 19th century salt-making waste have also been located close to Vines Lane where they were more than 1.3m thick (HWCM 4097, Hurst 1988a). To the east of the A38 similar deposits are at least 2m thick, and may protect earlier archaeology (HWCM 10590, SMR site file).

The large-scale redevelopment of Droitwich in the second half of the 20th century has meant that with the exception of Friar Street, the High Street and Dodderhill the character of the post-medieval town is poorly preserved in the modern settlement.

7 Post-1800 archaeological evidence

The remit of the present study has not allowed for a detailed survey and assessment of the archaeological evidence relating to Droitwich in the period from 1800. Further work is required before such an assessment can be carried out. Major archaeological remains have been identified, however, including the Droitwich Junction Canal (HWCM 21392), the railway station and railway lines (HWCM 10574, HWCM 10578, HWCM 10581, HWCM 10582, HWCM 10583), saltworks and associated spoil heaps (HWCM 10575, HWCM 10579, HWCM 10585, HWCM 10586, HWCM 10587, HWCM 10588, HWCM 10589, HWCM 10590, HWCM 10591), clay pit and kiln (HWCM 10576, HWCM 10577), timberyards and saw mill (HWCM 10584, HWCM 21397, HWCM 21402), malthouse (HWCM 10598), gasworks (HWCM 10580), workhouse (HWCM 10573), schools (HWCM 10604, HWCM 10606, HWCM 10607), and chapels (HWCM 10603, HWCM 10605). There are 20 listed buildings dating to the 19th and 20th centuries within the study area.

8 Specialist assessments

8.1 Assessment of artefactual evidence J D Hurst

A great deal of artefactual evidence is available for Droitwich, including objects from waterlogged deposits. Finds are so numerous that this assessment will discuss broad categories of artefact rather than individual objects.

The earliest artefacts from the study area are flints, possibly of Mesolithic date, from

Bays Meadow (HWCM 3956, HWCM 21413), and Friar Street (HWCM 605). Other flints of neolithic and Bronze Age date are known from elsewhere in Droitwich (eg HWCM 4575). The earliest ceramics are possibly of neolithic or Bronze Age date from Bays Meadow (HWCM 3956) and Friar Street (HWCM 605; Hurst 1992c 134). Several sites have produced pottery and other objects of middle and late Iron Age date (HWCM 600), including specialised ceramic vessels known as briquetage (Rees 1986), and other objects associated with salt production (Woodiwiss 1992). A rare find of a late Iron Age gold stater has also been recorded (HWCM 21391).

The quantity of Roman finds is large. Excavations at the fort on Dodderhill produced a good assemblage of artefacts, particularly 1st century pottery. The numerous observations and excavations at the Bays Meadow villa complex (HWCM 678) recovered a number of unusual finds such as wall veneer of Greek marble and several gold and silver objects, as well as a considerable number of coins and other types of artefacts, including bone inlay, shale bracelets, copper alloy *styli* and spoons, iron keys and knives, glass beads, and jet pins. Other sites in the town have also been very productive (HWCM 605, HWCM 681, HWCM 4575). The Upwich site in particular (HWCM 4575) has produced a number of unusual wooden objects of Roman date. In addition a range of Roman finds, often recovered by chance, were collected by H R Hodgkinson earlier this century (HWCM 22015).

An important assemblage of post-Roman pottery, associated with salt production and dating to the 5th/6th to early 7th century, has been recovered during the excavations at Upwich. Other Anglo-Saxon finds from this site included fragments of lead pan used for brine boiling. Later Anglo-Saxon artefacts have been represented at several sites, and comprise mainly ceramics (HWCM 605; Vince 1984, Hurst 1992c).

Many artefacts of medieval date have been excavated, especially from Friar Street (HWCM 605), and the Upwich area (HWCM 4575). These objects have included specialised equipment used by the salt makers. Such objects are usually made of wood and have survived as a result of waterlogging. The presence of substantial waterlogged deposits in Droitwich has meant that large numbers of wooden objects, ranging from small wooden pegs to large tuns, have survived. A quantity of other organic finds include silk, and leatherwork have also been preserved. Although salt production was the dominant industry in the town throughout the medieval period, other industries included floor tile manufacture (HWCM 10611; Eames 1980) are known to have operated. Chance finds of medieval date have included several coins (HWCM 007).

Post-medieval artefacts recovered during fieldwork in Droitwich are numerous and from sites such as Upwich (HWCM 4575) include waterlogged material.

8.2 Assessment of environmental evidence E A Pearson

Droitwich has produced a very large body of environmental data, comparable in quantity to the cities of Hereford and Worcester, but more varied and generally better preserved. This is in large part due to waterlogged conditions around the river, and in particular the widespread deposition of marsh and alluvial deposits from the 7th century. Specialist studies of environmental remains from the major excavations in the town have provided information on some of the main areas of importance. Detailed information is available from the salt-making areas at the Old Bowling Green (HWCM 600) and Upwich (HWCM 4575), from the Roman administrative centre at Bay's Meadow villa (HWCM 21413), the Roman fort at Dodderhill (HWCM 21406, HWCM 21407), and residential areas in Friar Street (HWCM 605) and Hanbury Street (HWCM 681).

Also of relevance are the well-preserved fauna and flora of Late Pleistocene date (42,000 BP) from Upton Warren (HWCM 4151; Coope, Shotton and Strachan 1961) just north of the town. In prehistory the salt springs at Droitwich are likely to have

attracted the mammoth, bison, reindeer and lemming recovered from Upton Warren, as they would have acted as "salt-licks". A mammoth tusk has also been found in Droitwich (HWCM 22046), and indeed it is possible that remains similar to those found at Upton Warren may survive in the area of the modern town. A summary of the different types of environmental remains recovered to date follows.

Human burials. The majority of the burials recovered are of Roman date from the main cemetery areas of Vines Lane (HWCM 4093, HWCM 4156, HWCM 6000) and Dodderhill (HWCM 667, HWCM 21404, HWCM 21406, HWCM 21407), although isolated burials have also been found at Hampton Road (HWCM 7071) and Old Bowling Green (HWCM 600). The only post-Roman burial recovered to date is a medieval or post-medieval burial at Vines Lane (HWCM 4096).

The largest assemblage of human remains studied in detail was that from Vines Lane (HWCM 6000, Lee nd). These burials are of late Roman/early Anglo-Saxon date and show, in many cases, signs of disease, deformity or injury, perhaps indicative of a poor lifestyle. Particularly notable was the high incidence of oral or dental disease and signs of infection on the bone. In one case, a young adult showed signs of widespread infection throughout the body. Fractures and signs of injury were common, notable cases including a man who appears to have died as a result of a violent attack with a blade, and a man who may have suffered injuries as a result of a fight. Various bone deformities associated with age or physical labour were also recorded.

At the Old Bowling Green (HWCM 600), a young male appears to have been thrown into a brine pit, possibly indicating death under suspicious circumstances. The skeleton also showed signs of previous starvation and/or illness or psychological stress (Nellist and Woodiwiss 1992).

The above remains were all well-preserved. A case of unusually good preservation was discovered at Hampton Road (HWCM 7071), where the remains of a middle-aged woman were recovered, including part of the brain which was preserved as "grave wax" (Oakley 1960, Powers 1960).

Animal bone. Animal bone has been observed at a number of locations (HWCM 600, HWCM 605, HWCM 681, HWCM 3880, HWCM 4575, HWCM 12215, HWCM 21403, HWCM 21404, HWCM 21409, HWCM 21406, HWCM 21407, HWCM 21412, HWCM 21413) but only assemblages for which there is a detailed specialist report are discussed here. Large assemblages of animal bone have been recovered from the Old Bowling Green (HWCM 600), Upwich (HWCM 4575), Dodderhill Roman fort (HWCM 21406, HWCM 21407), Bays Meadow Roman villa (HWCM 21413), and Hanbury Street (HWCM 681). In all cases detailed information is given in the form of tables on ageing and metrical data.

With the exception of Upwich (discussed below), the dominant domestic species found on these sites are cattle. Most remains appear to represent domestic refuse, although there is some evidence for disposal of bone from tanning waste in medieval Friar Street (Locker 1992). Unusual Roman assemblages from Bay's Meadow villa complex include numerous cow mandibles and scapulae embedded in a cobbled surface. This may be waste from a specialised activity. The almost complete skeleton and detached antlers of a red deer was also discovered within the fill of a well on the site, presumably a ritual sacrifice (Noddle forthcoming b). Also in the fill of the well were various small mammals, which were interpreted as being a pitfall assemblage following abandonment of the well (Rackham forthcoming b).

Reports on animal bone from the following sites provide detailed information on the demography of the animal populations. The assemblages from Bays Meadow and Dodderhill produced results which can be usefully contrasted. At Bays Meadow villa the bone refuse indicated affluent farming. Cattle, sheep and pigs were slaughtered at the

optimum age for meat production, a system requiring a large amount of maintenance for the least return (Noddle forthcoming b). Moreover, cattle, sheep and pig were all relatively large for the Roman period. In contrast, the bone waste from Dodderhill appeared to represent primary butchery waste from predominantly retired dairy cows (the size of which compared well with cattle from other Roman sites) and butchery waste from juvenile sheep. The bones were in general crudely butchered (Davis forthcoming b).

At Upwich sheep or goat bones are unusually numerous and in many phases predominant. Their importance peaks in the Anglo-Saxon period, declining slightly with successive phases. Ageing data suggests that until the middle Anglo-Saxon period sheep and goat were kept for meat production, after which, maintenance for wool production became more important (Meddens forthcoming a).

Organic deposits and remains. Some time after the Roman period large areas on either side of the river became wetter and more marshy. Thick deposits of peat continued to form until the medieval period and these have been observed in a number of places (HWCM 600, HWCM 602, HWCM 680, HWCM 3880, HWCM 4575). At some of these sites (HWCM 600, HWCM 4575) and at Bays Meadow (HWCM 21413) environmental sampling has resulted in the recovery of a variety of organic remains, preserved by waterlogging, which have been reported on in detail.

Waterlogged plant and insect remains. Detailed analysis of plant and insect macrofossils from the Old Bowling green (HWCM 600) and Upwich (HWCM 4575) has been undertaken in order to determine the nature of the surroundings. Conditions at both sites were relatively wet (Colledge and Greig 1992; Greig forthcoming a). Only at Upwich are the results discussed according to phase. A noticeable difference is that there is considerably less evidence of cultivars and general occupational waste at the Old Bowling Green than at Upwich. At the latter site, the majority of this material is likely to have been brought onto the site as straw, hay, fodder and peat. Analysis of diatoms (Juggins 1992; Juggins forthcoming) confirms the salinity of both sites. Plant and insect remains (Greig forthcoming b, Osborne forthcoming b) from the well at Bay's Meadow villa provided information on the surroundings of the well following its abandonment and subsequent use for the disposal of rubbish.

Wood. Wood preserved by waterlogged conditions has been recorded at various locations in Droitwich, particularly in areas covered by alluvium. In several cases wood associated with salt extraction structures has been recorded (HWCM 600, HWCM 602, HWCM 680, HWCM 3682). Only the wood from the Old Bowling Green site (HWCM 600) has been recorded in detail, however. Other finds include wooden pipes made of elm trunks which were used to carry brine found at Hanbury Road (HWCM 4995) and remains of timber from the canal wharf wall (HWCM 3681).

Charred plant remains. Waste from cereal crop processing activities has been found at a number of locations (HWCM 681, HWCM 4575, HWCM 12215 and 21413). At Hanbury Street (HWCM 681), well-preserved charred crop remains of Roman date were evidently from various stages of crop processing, and came from an area near to a barn and threshing floor. They were probably burnt by an accidental fire (de Moulins forthcoming b). At Upwich (HWCM 4575) rivet wheat and rye were found in medieval contexts. Both crops are particularly characteristic of the period, although the former crop is a rare find (Greig forthcoming a).

8.3 Assessment of documentary sources D Guyatt, J D Hurst and P A Stamper

The number of Anglo-Saxon charters relating to Droitwich (Finberg 1972) and in particular to the operation of the salt industry is notable (Hooke 1981). The arrangement of salt rights and other aspects of the industry such as fuel for the brine boiling pans, is extensively detailed in Domesday Book (Thorn and Thorn 1982).

For the medieval period there are large quantities of documents relating to Droitwich. These include documents which give detailed insights into the operation of the salt industry at the time when it was a borough monopoly. There are tyesmen's rolls and lists of *salsae* dues that record the extent of individual holdings. Some deeds, such as those for Westwood Nunnery, provide a detailed set of accounts for the running of a salt making workshop in the later medieval period. A total of 49 tyesmen's rolls survive up to 1432, including two for the 13th century (Berry 1957, 45, fn 44). The growth of holdings can be followed in the *salsae* rolls (Berry 1957, 46, fn 51). Such detailed evidence for a medieval industry recording the costs of salt production and the methods of manufacture, is rare. Some of this evidence has previously been used to provide an account of the salt industry in Droitwich from 1215 to 1700 (Berry 1957).

The level of documentary evidence for the early post-medieval period for the salt industry is also excellent. The nature of the documentary evidence changes with the decline of the traditional method of salt making in the early 18th century, but there is still a wealth of records relating to the later industry as demonstrated by Crickmore (1984c), who was able to locate the lost position of the Upwich brine well through historical research. Principal groups of primary sources are listed in section 11.

The main secondary sources consulted during the assessment include Berry (1957) Hooke (1981), Hurst (1992), Nash (1799), Noake (1848) and the Victoria County History (1906, 1913). Secondary sources identified, but not consulted for this assessment, include Cooper (1935), Whitley (1923), and the Victoria County History research notes (WRO BA 527).

8.4 Assessment of buildings R Morriss

Droitwich was redeveloped and expanded in the late 19th century and Edwardian period, and has been subject to extensive changes especially in the past two decades. The historic core of the town is based on one long east-west street (High Street and Friar Street) with St Andrew's Street to the south. The junction of these three roads is marked by the medieval parish church of St Andrew. There are very few surviving medieval and early post-medieval buildings in Droitwich and many timber-framed buildings have been demolished within the last 20 years or so. One of these, Chorley House in Friar Street, considered to be one of the best timber framed houses in Worcestershire (Pevsner 1968, 57), dated back to the 14th century and consisted of a hall range parallel to the street with cross-wings at either end (Charles and Charles 1960). Also in Friar Street are fragments of another large medieval house, probably of 15th century date but refronted in the 17th century (HWCM 609, 36 to 38 Friar Street). More substantial medieval remains survive behind 31-35 High Street (HWCM 640).

There is a contrast between the layout of the surviving medieval buildings on Friar Street and the High Street. In the High Street the medieval building was constructed on quite a narrow plot and is thus perpendicular to the street. The two medieval buildings recorded at the western end of Friar Street were both built on wider plots, perhaps indicating less pressure on land but also possibly a higher status. It should be remembered that the construction of the Saltway has all but removed pedestrian and vehicular traffic from Friar Street changing it from a central to a peripheral part of the town.

The few surviving later 16th and 17th century timber-framed buildings are too scattered and too disparate in design to allow any firm conclusions on the nature of the town in this period. Survival of later historic buildings on the High Street and Friar Street is fairly good, particularly near to St Andrew's church. This area seems to have been redeveloped in the mid-18th century, judging from the numbers of similar brick buildings of that period that line the road. Several of these houses share the same basic design and details. For example, on the south side Nos 4 and 4a (HWCM 266) is a

five-bay building similar to Nos 6-8 (HWCM 267/4907), and No 10 (HWCM 624) is very similar to No 12 (HWCM 625) but separately built. The number of these buildings suggest a fairly comprehensive redevelopment of this central area in the mid-18th century, and one that was planned within a relatively short period of time rather than one that resulted from piecemeal replacement of time-expired buildings. This confirms the historical evidence of prosperity at this period. Despite this, there seems to have been no massive pressure on land as most of the Georgian buildings lie parallel to the street and are of at least three bays. The uniformity of facade widths could indicate that historic property boundaries were either remarkably uniform near the town centre, or that they were altered as a precursor to the mid-18th century redevelopment.

Analysis and survey. There has been an Environmental Audit of the town, including a volume on the historic buildings (Droitwich History and Archaeology Society/Droitwich Spa Civic Society 1992b). A number of surveys of individual buildings have been carried out (Andrews 1913; Charles and Charles 1960; Cooper 1934) but no synthetic analysis has been undertaken.

Assessment of the listing details. The list dates to 1971 and is reasonably comprehensive. There are omissions, however and it is often inaccurate. It fails, for example, to pick up either of the two medieval buildings known to survive in the town (HWCM 609, HWCM 640) although both, fortunately, are listed because of their frontage ranges. Few buildings are dealt with in any detail. The Environmental Audit has identified a list of additional buildings which are recommended for listing (Droitwich History and Archaeology Society/Droitwich Spa Civic Society 1992b).

9 Archaeological research framework

9.1 Model of urban development

A model of the Roman, Anglo-Saxon, medieval and post-medieval town of Droitwich has been produced which is predictive and capable of testing through archaeological investigation. This model has both chronological and spatial (landuse) dimensions (see sections 2 to 7) and is based on an analysis of documentary, cartographic and archaeological sources. The model is derived from the current academic understanding of urban development in Britain, and forms one element of a developing regional research framework. The model is provisional and will be subject to confirmation or revision in the future as new information becomes available, or new studies lead to changing understandings of towns in the region.

9.2 Chronological framework

The archaeological evidence indicates that urban occupation had commenced by the end of the 1st century AD but probably developed from the nucleus of an Iron Age industrial centre. The settlement was continuously occupied until the present. Archaeology has shown that flooding by the River Salwarpe severely disrupted salt making in the 7th century but remedial measures were taken and salt production continued throughout the Anglo-Saxon period. The chronology of the development of the town during the later Anglo-Saxon and medieval periods is not understood. In particular there is some disagreement over the date of the development of the High Street and Friar Street. This cannot be resolved without further fieldwork.

Documentary evidence suggests that during the medieval and early post-medieval period the production of salt was tightly controlled and growth constrained to a certain extent. After the breaking of the borough monopoly at the end of the 17th century, however, the town expanded rapidly and its character was changed fundamentally with numerous individual entrepreneurs exploiting the brine resource. Unregulated extraction and

production reduced the price of salt and the economic viability of many brine wells and led to a concentration of the industrial processes into the hands of a few individuals. This concentration reached its apogee in the later 19th century when almost the entire salt industry was owned by one individual.

Brine continued to be extracted and processed in larger and larger amounts throughout the post-medieval period and the population and town expanded accordingly. Salt production finally ceased in the 1920s. The development of the town from the later 18th century is well documented, but for the earlier periods this chronological framework is provisional and requires testing through archaeological investigation.

9.3 Urban landuse

The Roman, Anglo-Saxon, medieval and post-medieval components identified here (sections 3.2, 4.2, 5.2 and 6.2) have been mapped and constitute a model of urban landuse for each period. These landuse models are partial and provisional and capable of testing through archaeological investigation.

Archaeological work in Droitwich has demonstrated that substantial Roman deposits do survive but the small scale of most of the fieldwork means that very little is known about the nature and extent of the components which make up the Roman town. Of particular interest would be more information on the spatial and temporal relationships between the salt producing areas to the west of the main Roman road and the first and second century agriculturally based roadside settlement observed at Hanbury Street. A fundamental change seems to have occurred in the middle of the 2nd century when Roman control over salt production may have been tightened. The scale of timber construction in the vicinity of the Upwich brine springs makes it clear that they were being extensively exploited in this period. There are some indications that the whole industry and associated settlement was reorganised at this time but a greater understanding of this period is not likely to be achieved without more archaeological fieldwork.

Excavations at the site of the Upwich brine well have demonstrated that there are no significant breaks in salt production between the 4th and the 10th century. However, it is clear from the abandonment of at least part of the Roman settlement area (ie Bays Meadow villa) that major changes in the organisation of Droitwich occurred in this period. Almost nothing is known about the development of the Anglo-Saxon settlement. Documentary and archaeological evidence suggests that it occupied a similar area to that of the medieval town, but little is known of its layout. The foundation dates of the three medieval churches are not known and the status of them is a matter of dispute. The position of St Augustine's at the extreme southern end of its large parish is of particular interest as this site represents the last visible link between the Anglo-Saxon royal palace of Wychbold and the Droitwich salt industry. The area of Friar Street may be particularly important for an understanding of the Anglo-Saxon settlement in Droitwich, since late Anglo-Saxon and Saxo-Norman finds form a prominent component of assemblages from this part of the town.

More can be deduced about the development of the town from the 12th century. Documentary, cartographic and archaeological evidence helps to define the extent of the brine grounds, the layout of the street system and the development of the burgage plots in the medieval period. Of particular interest, however, would be more evidence of the presence or absence of zoning of housing and industry within the medieval town. In the mid-16th century the antiquarian Leland notes the sharp division between the wealth of the "gentry", ie those who own salt rights, and the poverty of the rest of the townspeople. This marked division in wealth is likely to date from at least the 12th century and may be reflected in the buildings and artefact assemblages within each tenement plot. Some evidence of zoning has been found on Friar Street. Archaeological evidence combined with information about the medieval buildings which survived into the 20th century suggests that this was a high status area in the medieval period. At

present, however, there is little evidence from the rest of the town to compare this data with.

Little is known about the relationship of Droitwich and Witton, to the south, though it has been suggested that the latter is an agricultural centre associated with Droitwich (Bond and Hunt 1992, 191). Other links between Droitwich and its hinterland (ie the provision of fuel and other materials used by the salt makers) have generally received little attention.

Whilst a great deal more is known about the post-medieval town there are still some questions about spatial organisation. It has been suggested, for example, that there may have been a reorganisation of the boundaries of tenement plots in the town centre in the 18th century (see section 8.4). Without further documentary and archaeological research, however, this cannot be proved or disproved. Another problem is that little is known archaeologically about salt-making structures and equipment during the period of greatest change in the earlier 18th century.

9.4 Potential for survival of buried remains

The information recovered during archaeological excavations and observations in Droitwich indicates that despite the redevelopment occurring in the late 18th and 19th centuries the potential for the survival of buried remains is very high. It is clear, however, that deposits of some periods survive better than others (see above). This survival pattern is due to a combination of natural and man made factors. For example, prehistoric and Roman deposits are exceptionally well preserved close to the river as they are water logged and protected by 7th century alluvial deposits, but the large scale redevelopment of the town in the 1970s and 1980s has resulted in damage to medieval and post-medieval deposits in the area to the west of St Andrew's Street.

Despite the destruction of deposits during the construction of the canal, railway and saltworks in the 18th and 19th centuries it is clear that some of the worst damage has occurred in the more recent past. For example, the construction of the new canal basin in 1985 removed huge amounts of deposits relating to the Middlewich brine well but no financial provision was made for their archaeological recording.

It is clear that, despite all, Roman, Anglo-Saxon, medieval and post-medieval deposits do survive to depths of 3m to 4m in some places, and that these contain datable artefactual and environmental assemblages. Excavations such as those at Upwich demonstrate that the potential of these surviving deposits is enormous and that a proper understanding of them is important for both regional and national studies.

The area with the most potential is the low ground on both sides of the river in the areas of the Upwich, Middlewich and Netherwich brine wells. It has been demonstrated that these deep waterlogged deposits contain information on the exploitation of the natural brine springs from the prehistoric period onwards. The destruction of substantial sections of these deposits by the 18th and 20th century canal works, and by 19th and 20th century industrial developments, means that the deposits which have survived are even more important.

Fieldwork was undertaken by the Central Marches Historic Towns Survey in October 1994. The extent of 18th and 19th century cellarage was mapped, together with the extent of 20th century development (new buildings and major landscaping work). This showed that there was little observable cellarage along the main streets but extensive modern redevelopment within the historic core. It is likely that evidence for more extensive cellarage has been obscured by modern refurbishment of frontages and pavements.

9.5 Potential for artefactual studies J D Hurst

The archaeological excavations and observations which have already taken place in Droitwich mean that the extent of surviving artefactual evidence in buried deposits can be assessed in some detail. Waterlogging occurs in the vicinity of the river, and artefactual evidence is exceptionally well preserved here. Alluvium has also been recorded in the lowest part of the river valley, and this has been instrumental in the preservation of Anglo-Saxon and earlier deposits and their associated finds assemblages.

The potential of these deep and well-stratified deposits is particularly high as they can be independently dated. The nature of the industrial processes occurring in Droitwich throughout its history means that *in situ* charcoal deposits suitable for radiocarbon dating are relatively common (eg at Upwich, HWCM 4575). In addition the preservation by waterlogging of large timbers in the low lying areas of the town provides opportunities for dendrochronological dating. Artefacts are, therefore, often found in close associations with deposits that may be precisely dated.

The artefactual evidence from Droitwich is unusual in a number of different ways. The quantity and range of objects from the later prehistoric period onwards is consistently high and a number of specialised objects associated with the salt industry have been recovered. In addition a number of well preserved artefact groups have been found which can be closely dated due to the availability of independent scientific dating and good documentary evidence.

Ceramics. The analysis of the ceramics from two town sites (HWCM 605 and HWCM 600) has been used to establish a regional fabric reference series (Hurst and Rees 1992), extending the work undertaken by E Morris in Worcester (Morris 1980). In general pottery assemblages from sites in Droitwich have been of large size (ie greater than 1000 sherds), and suitable for statistical analysis. Many profiles of vessels dating from the Iron Age onwards have been published.

Briquetage vessels account for a large percentage of prehistoric pottery, and were presumably produced in Droitwich, as they are directly related to salt production and trade. Despite the large quantity of briquetage that has excavated, however, no complete example has yet been recorded.

The Roman pottery from Dodderhill fort (HWCM 603) includes a wide variety of types, a feature that is characteristic of early Roman fort sites. Regionally important groups of Roman pottery have been recovered from Bays Meadow (HWCM 21413) and sites in the town (HWCM 4575, HWCM 600, HWCM 605, HWCM 681). A very important group of post-Roman ceramics was recovered from the Upwich site (HWCM 4575). This is the first substantial group of sub-Roman to Anglo-Saxon date to be discovered in the county. Petrological study of this pottery has confirmed that several sources supplied Droitwich with pottery, at this time although none has yet been identified.

One of the most important medieval ceramic assemblages so far recovered was group from the backfill of the Upwich brine well construction pit. The operation of the medieval and post-medieval salt industry is very well documented and this group was dated by documentary evidence to 1264-5.

Other artefacts. A whole range of classes of artefacts for all periods have been recovered although not all are published at present. Important published groups of artefacts include ceramic roof tile, and metalwork from the Roman, medieval, and post-medieval periods (Hurst 1992b).

Much of the archaeological evidence so far recorded from Droitwich has been connected with the salt industry. Some relates to domestic occupation from the Roman and medieval to post-medieval periods, however. In addition evidence of industries not

related to salt production have been found in the area. One example of this is the floor tile wasters found close to St Mary's, Witton, just south of the town which indicate the presence of tile makers.

Although a substantial amount of information has been recovered on saltworking several ancillary industries such as the manufacture of briquetage vessels and wickerwork baskets for the packing and transportation of salt have not yet been detected in the archaeological record.

Unpublished material. The reports from a number of sites with important artefact assemblages have not yet been published, although they are available in typescript. These include the excavation of prehistoric and Roman deposits at Bays Meadow (HWCM 21413, Barfield forthcoming), the brine well at Upwich (HWCM 4575, Hurst forthcoming a), the early Roman settlement at Hanbury Street (HWCM 681, Hughes and Lentowicz forthcoming), and the Roman and later features at Dodderhill (HWCM 21407, McAvoy forthcoming).

The results of salvage recording undertaken on a number of areas during development of the town centre in the late 1980s have not been published. All these sites are associated with useful artefact assemblages, but have yet to be fully analysed. They comprise a buried prehistoric ground surface and associated flints found at Bays Meadow (HWCM 3956), a late Roman/early post-Roman cemetery in Vines Lane (HWCM 6000), and medieval back plots in Friar Street and Winnets Lane (HWCM 7072).

9.6 Potential for environmental remains E A Pearson

Despite the relatively small scale of most of the archaeological fieldwork in Droitwich a considerable amount of well preserved environmental remains have been recovered to date. Detailed specialist analysis of some of these remains has highlighted the need for further work.

Large areas of the town have deposits which contain environmental remains. The area of greatest potential is that on either side of the river. Here, organic remains are well preserved by waterlogging and sealed by the alluvium which built up from the end of the Roman period. This material has provided information relating to the surrounding environment and to occupational rubbish imported onto the sites. The extent to which domestic activities (as opposed to industrial) can be identified on salt-making sites may become apparent from further analysis of such remains, as some difference between the Old Bowling Green and Upwich has already been noted. The geographical extent of the natural salt springs may also be understood from further analysis of diatoms over a wider geographic area.

Pollen evidence from sites near Droitwich has suggested that the area was largely deforested at an early date. It is possible that this is due to the huge amount of fuel needed in salt production. It would be useful, however, to compare pollen spectra from additional local sites in order to improve the understanding of human impact on the local area. Study of the alluvial deposits would also be worthwhile in this context. These not only seal and protect archaeological deposits, but also provide information on the surrounding landscape. Further work could determine whether the alluviation at Droitwich is part of a major process affecting the whole river system in this region, or whether it is more localised, perhaps caused by clearance to supply timber. Analysis of the sediments may be useful for determining the source of the alluvium and the nature of the flooding. In addition the alluvium at Droitwich is particularly useful as it can be closely dated.

Aspects of woodland management may be understood from a detailed analysis of wood. Although waterlogged timbers have been observed on many sites, they have only been studied in detail at Old Bowling Green (Crone 1992). This report illustrates how much

information on the management and use of wood can be gained by such studies.

The study of the environmental remains from Droitwich has provided some information on the population and life in the town. In many cases, particularly at the Roman cemetery at Vines Lane (HWCM 6000), detailed study of human burials has provided evidence of disease, deformity, injury, or even death under suspicious circumstances. Such findings may suggest that many people at that period lived a poor, under-privileged lifestyle, not inconsistent with Leyland's comments on Droitwich in the 16th century (Chandler 1993, 515). A larger group of burials would be needed before this hypothesis could be tested, however.

The analysis of animal bones from a variety of sites in Droitwich has provided basic information on aspects of animal husbandry, for example the size of domestic animals and whether they were used for meat, wool or milk production, and the data available is sufficient to make basic comparisons between sites. In some cases information on the social status of a site or area can also be determined. At the Roman villa complex at Bay's Meadow, for example, animal bone refuse suggested that cattle, sheep, goat and pig were reared for optimum meat production (Noddle forthcoming b). Such finds are consistent with the high social status of the site. In contrast to this, the bone assemblages from high-status medieval houses in Friar Street did not give any indication of the status of the site.

The results of archaeological fieldwork to date have demonstrated that large areas of Droitwich have very high environmental potential. In future sampling policies and post-excavation work should be designed in order to obtain maximum information on past environments, diet, living conditions and economy, and more specifically to address the research questions outlined above. Sampling and wet-sieving deposits should be undertaken in order to recover plant, insect, molluscs and small animal remains. In some cases, specialist sampling for soil and pollen analysis may be required.

9.7 Potential for the study of standing buildings R Morrise

Droitwich has a sufficient number of historic buildings to warrant an extensive survey and a synthetic analysis. More detailed intensive survey should be carried out on the medieval structures within 31-35 High Street (HWCM 640) and 36-38 Friar Street (HWCM 609).

9.8 Summary of research potential

The historic core of Droitwich contains buried archaeological deposits, and these are judged to have very high potential. In addition there is high potential for the recovery of artefact and ecofact assemblages. Extensive waterlogged deposits have been recorded, which is rare in the region. The historic buildings constitute a complementary body of evidence, and are judged to have moderate potential for detailed study and recording. The surviving documentary sources are very extensive and consequently the potential for further study is high. Overall, the significance and potential of buried remains in Droitwich are of national importance.

10 Management framework

10.1 Urban archaeological area

The mapped extent of the Roman, Anglo-Saxon, medieval and post-medieval urban forms defined above indicated the extent of the urban area (Droitwich Urban Archaeological Area).

10.2 Existing protection measures

The archaeological urban area of Droitwich has been defined above. The different parts of the urban area are afforded different measures of protection through legislation and the planning process. Directly relevant measures are outlined below.

Scheduled ancient monument. There are two Scheduled Ancient Monuments in Droitwich, Dodderhill Roman fort (Here and Worc no 339a and b) and the villa complex at Bays Meadow (Here and Worc no 241). It is possible that following the current Monument Protection Programme English Heritage may modify the scheduled area or add other monuments in Droitwich to the schedule.

Listed buildings. There are a total of 50 buildings listed as of historical or architectural importance within the urban area. Buildings of special architectural or historic interest should receive very special attention. Such buildings are limited in their number and there is a need to protect and preserve them. The presumption when considering applications to demolish or alter is in favour of preservation. This presumption is also likely to preserve archaeological remains beneath and immediately around such buildings from development. It is important that the architectural and archaeological interests are considered together.

The alteration of listed buildings requires the greatest skill and care to avoid damage to historic structures. Specialist architectural advice is given by the County Conservation Architect or through the District's own conservation officer where that District Council has their own specialist staff.

Conservation Area. A Conservation Area has been defined which entirely encompasses the archaeological area (Wychavon District Local Plan. Written statement: deposit version (1992)).

10.3 Management approach

The archaeological urban area of Droitwich contains earthworks and buried remains relating to Roman, Anglo-Saxon, medieval and post-medieval occupation. For the medieval and post-medieval period these deposits are associated with contemporary buildings. The buried remains vary in complexity and depth, and demonstrably contain significant archaeological information. It is desirable that any proposed development within the urban area that has a potential impact on earthworks or buried remains should be assessed by the appropriate archaeological body as early as possible in the planning process.

The course of action recommended will depend upon the nature of the development and current planning legislation and frameworks. The archaeological response will be framed using both the archaeological information summarised in this document and any subsequent information recorded on the Sites and Monuments Record, supplemented by other sources as and when available.

11 Principal groups of primary sources

compiled by D Guyatt, J D Hurst, and P A Stampfer

(WRO: St Helen's Record Office, Worcester)	
WRO BA 92	Manorial account roll 1425-7
WRO BA 1101 and BA 7584	St Nicholas's parish, estate plans 1731-2
WRO BA 1572	Tithe maps and apportionments for Droitwich St Andrew's, St Nicholas's, and St Peter's
WRO BA 3221, BA 5955 etc	Many sets of deeds which record bullaries of salt and other property in Droitwich
WRO BA 3762	Manorial extent c 1550
WRO BA 4842	Miscellaneous deeds relating to Upwich brine well
WRO BA 5306	St Mary de Witton, Trimmell's lands. Plan 1781
WRO BA 5476	Parish records. Registers of St Peter's from 1544
WRO BA 6293	Droitwich borough, 17th century
WRO BA 7335	Vernon family archives
WRO BA 3851	Hampton family archives
WRO BA 5025	Norbury family archives
WRO BA 3964	Bearcroft family archives

The Society of Antiquaries Library, London, holds copies of some borough archives which are now missing from the borough archives.

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13 Mapping

The illustrations for this report comprise CAD plots of the urban components for each period and a location plot of archaeological remains combined with OS digital map data (1995) at 1:5000. These plots are current at the date of the completion of this report (March 1995). After this date new information will be held by the Hereford and Worcester County Council Sites and Monuments Record.

- * Historic buildings (listed and other recorded buildings) and urban area
- * Archaeological remains and urban area (2 maps)
- * Roman urban form and components
- * Anglo-Saxon urban form and components
- * Medieval urban form and components
- * Post-medieval urban form and components
- * Observed cellarage and 20th century development
- * Urban area and scheduled ancient monuments