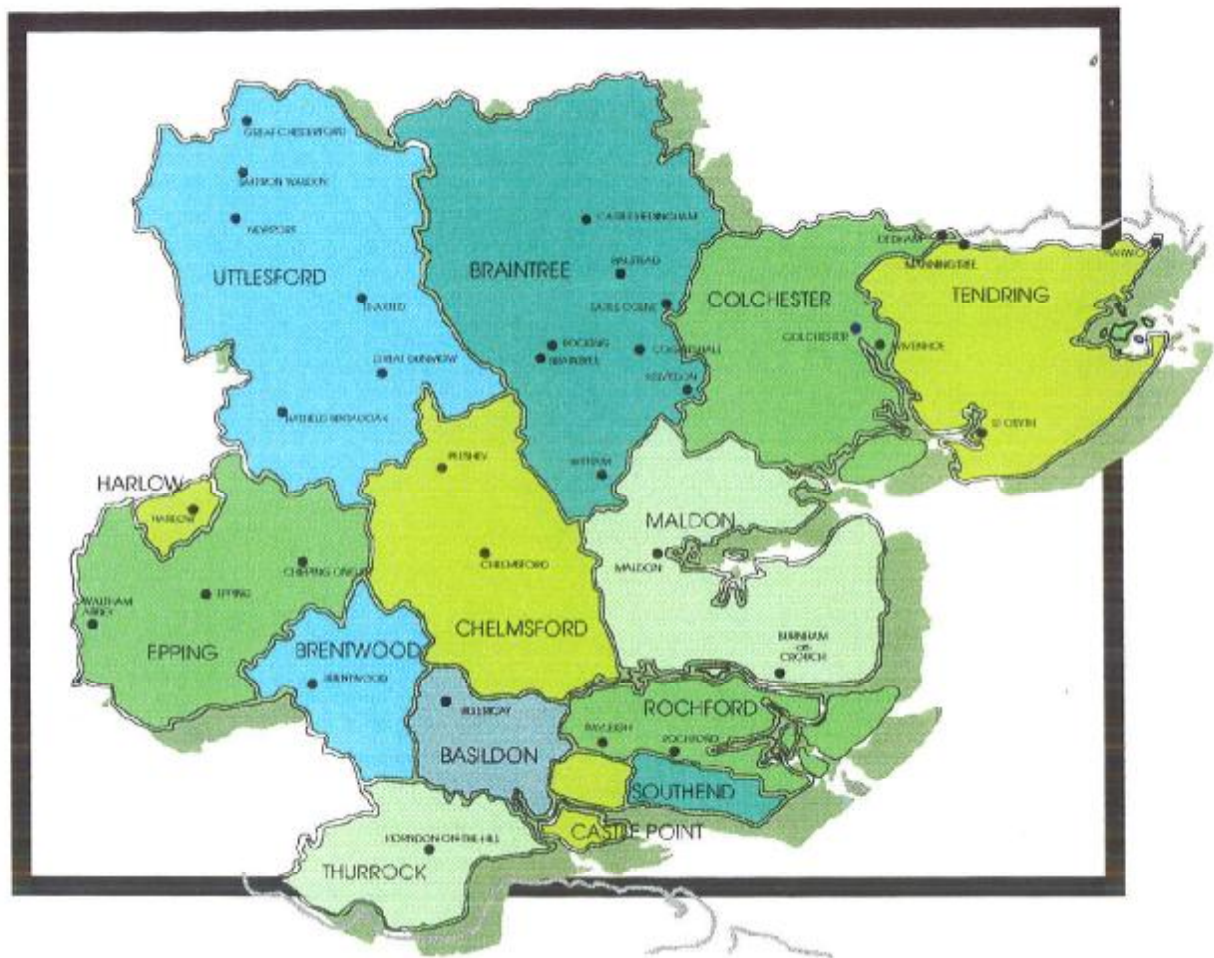


# WALTHAM ABBEY

## HISTORIC TOWN PROJECT

### ASSESSMENT REPORT

April 1999



Essex County Council  
Planning

HERITAGE CONSERVATION GROUP



# WALTHAM ABBEY

## HISTORIC TOWN ASSESSMENT REPORT

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# WALTHAM ABBEY HISTORIC TOWN ASSESSMENT REPORT

## 1. INTRODUCTION

This report is an archaeological and historical assessment of Waltham Abbey, it forms part of the Essex Historic Towns Survey. This is an extensive urban survey as defined by English Heritage (1992a) of 32 historic settlements in Essex. This project, funded by English Heritage, forms part of a nationwide reassessment of the management of the urban archaeological resource. The project is being carried out by Essex County Council's Planning Department and takes as its basis a survey carried out by the County Council in the early 1980's. This was published as Historic Towns in Essex (Eddy and Petchey 1983) and adopted as Supplementary Planning Guidance by the County and District Councils.

This report has been compiled using a number of sources, including the Essex Sites and Monuments Record (ESMR), the List of Buildings of Architectural and Historical Interest, an RCHME Level 1 Industrial survey, records held by the County Planning Department's Historic Buildings Section, and various cartographic and documentary records (following an assessment of such records by Dr Chris Thornton of the Victoria County History, Essex). The preparation of this report has involved the addition of information to the ESMR database and the digitising of spatial data onto a Geographic Information System (GIS).

For the purposes of this study the Roman period is the time-span between 43-410, the Saxon period is 410-1066, the medieval period is 1066-1536, the post-medieval period is 1536-1900 and the modern period is 1900 to the present day. This corresponds to the period divisions used by the ESMR.

## 2. LOCATION AND TOPOGRAPHY

Waltham Abbey (in the parish of Waltham Holy Cross) is in Epping Forest District. It lies in the valley of the River Lea, an important north-south waterway, which forms part of the western boundary of Essex. At Waltham Abbey the Lea is divided into several channels, dissecting a marshy flood-plain. The town centre and the Abbey precinct are sited on a remnant of gravel terrace, at the eastern end of a causeway across the Lea Valley marshes from Cheshunt, Hertfordshire. The valley bottom is at 18m OD.

## 3. BRIEF HISTORY OF THE TOWN

There is a general scatter of prehistoric material across both the town and abbey area, some dating to the Mesolithic and Neolithic periods, but majority being of Bronze Age date. There also appears to have been a Roman settlement in the area, although not appearing on a scale that would indicate anything of an urban density.

Historically Waltham Abbey consisted of the Abbey and the town, which were interdependent. There appears to have been a royal estate at Waltham Abbey, and it was also the hundred meeting-place. The

Saxon church also appears to have been a Minster church. The foundations of three successive pre-Norman churches have been identified (Huggins 1992). Church 1 is thought to date to the 7th century, and may possibly date to the period after the East Saxons were converted (in 604) by King Sabert and Bishop Mellitus. Its location on or adjacent to what is thought to be a royal site is certainly suggestive of royal patronage. It was this church which became the centre of the Minster parish whose establishment was confirmed by 673 at the Synod of Hertford. Church 2 has been dated to the 8th century, and it is to this church that legend has it that Tovi brought a miraculous stone cross in about 1030. Harold Godwinson (later King Harold) increased the original foundation by rebuilding and extending the church and creating a college of secular canons in c.1060, legend also has it that he was buried there. Saxon burials have been found within the monastic precinct, and a late 10th to 11th century hall to the north of the church has been excavated.

There is documentary and excavation evidence for a rectangular enclosure (known as the *Eldeworth*), within which the medieval market-place developed. However the angle of this enclosure in relation to the medieval street-pattern suggests that the enclosure may pre-date the market-place. The line of the ditch has been excavated at several places, revealing finds dating from the Bronze Age to the medieval periods. The dating of this enclosure is therefore obscure, however it is possible that it served as a boundary to the late Saxon/early medieval settlement.

Not much is known about the Saxon settlement, but the Domesday book shows it to have had a sizeable population in 1066. The 'Viking Hall' to the north of the church is thought to lie within the area of the royal enclosure, and the excavator suggests that it was the hunting-lodge that Tovi was building when he moved the miraculous cross to Waltham Abbey. The Minster church lay to the south of this enclosure, and to the south of the church was the Saxon village. It has been suggested that the Saxon settlement comprised small nucleated groups along the river, in what is Town Mead, Cob Mead, Padipol, Chingford Mead and Holyfield Mead (R. M. Huggins, 1998)

The Domesday book depicts a sizeable town with a growing population in 1086. In 1177 the secular canons were replaced by the Augustinian priory which in 1184 was upgraded to Abbey status. Two further successive churches were built on the site. Church 4 was the second collegiate priory church built c.1090-1150. Church 5 was the Augustinian church of 1177. The monastic precinct, following its establishment in 1177, formed the dominant topographical feature in medieval and post-medieval Waltham Abbey (the wall dates to c.1370). Within the precinct were the principal abbey buildings including the church and the canons lodgings.

The monastic grange was located to the north-east of the precinct. It was partially excavated (with adjoining Veresmead) in advance of the construction of a relief-road and car-park. Parchmarks in Veresmead indicate that further buildings were located there. Three water-courses run into Waltham Abbey; from east to west these are the Corn Mill Stream, the Lower Mill Stream and the River Lea. The first two of these are artificial watercourses; the Lower Mill stream is thought to have been constructed to serve the mill that had been present in 1066, whilst the Cornmill Stream may have been built by 1086 to serve the additional mills mentioned in the Domesday Book.

The medieval town lay immediately to the south of the monastic precinct. An excavation at 6, 6A and 7 Church Street showed that the start of the medieval urban sequence in this area may date to the Saxo-Norman period (Clarke, Gardiner and Huggins, 1993). Permission to hold a fair was granted in the early twelfth century, and a market confirmed at the end of that century. Excavation (Huggins, 1988b) in the centre of the Market Square found a building which has been interpreted as the Moot Hall (mentioned in 1456). It was built after 1250 and remained in use until the post-medieval period. A rental of c.1235 also mentions the presence of a number of shops and The Cage (the Abbot's prison) in the Market Square. Excavation on the ground adjacent to the Crown Inn on the east side of Romeland and at Reformation House on the west side showed that the area had been a swamp until the ground level was raised in the late 12th or early 13th century. Excavations in Sewardstone Street

revealed medieval occupation beginning in the 11th century, with the town extent expanding southwards down Sewardstone Street in the 15th century.

The medieval Moot Hall was replaced by the Market House in 1670/80. The livestock market and butchers' shambles used to take place in the market place and the yards of the inns along Sun Street. This portion of the market was moved to the Romeland area in the 1850's, thus relieving the central area of the congestion and disturbance caused by the movement of livestock. Some of the buildings on the western and northern sides of the Market Square date to the 16th century. The abbey was dissolved in 1540, and by the 1550's the demolition of the main portion of the abbey buildings had taken place, with the exception of the nave of the monastic church which was retained as the parish church. In the 1590's Abbey House was built immediately to the north-east of the church. Some of the medieval farm buildings continued in use until the nineteenth century when they were supplemented by additional post-medieval structures.

One of the major employers in the post-medieval period was the Royal Gunpowder Factory, located to the west of the town. There is documentary evidence that by the mid-1660s gunpowder was being produced in various water-driven mills on North Site. These were purchased by the Government in 1787, and between 1801 and 1806 the factory expanded southwards with the creation of the Lower Island Works. By the 1880s the factory was to expand again with the creation of South Site, a purpose-built guncotton works. This was quickly followed by a nitro-glycerine and guncotton works on North Site. Many technological innovations and developments in working practices took place on the Waltham Abbey site, and when explosive manufacture ended in 1945 it became the most important non-nuclear research centre in Britain. In addition post-medieval Waltham Abbey had the usual collection of small-scale manufacturing sites that were needed to service the requirements of an urban population; these included flour mills, an iron smithy and several breweries. In the 18th century there was also a calico printing works, later silk printing, in the fields to the west of the abbey. By 1935 a substantial chemical factory, the 'Britannica Works' had been established on the eastern side of the town.

## 4. EVIDENCE

### 4.1 DOCUMENTARY

#### 4.1.1 *Summary assessment of the documentary and cartographic evidence*

by Chris Thornton (Victoria County History)

The medieval sources which derive from Waltham Abbey include an early survey from 1222 and a series of cartularies which probably contain much of significance. From the 15th century onwards there are some broken series of account rolls. Probably the most important 16th century sources found are the surveys and rentals of the town dating from the suppression of the Abbey by Henry VIII. There are various medieval deeds (see ERO D/DJg classmark) and the British Library also preserves a large number of grants, of 13th-16th century date, to and from the Abbey (see B.L. cumulative catalogue under Add. Ch.). For later periods, detailed manorial records (see ERO D/DJg, M1-42, 45-6) survive for the manor of Waltham Holy Cross from the early 17th century to the 20th century. The parish also has a large collection of maps including some of the Royal Gunpowder Works. The town may be poorly represented in contrast, with one early estate map in c.1590 and another two estate maps of the 18th century. The most useful historic map may be a detailed plan of the town from 1826 and of the parish in 1825. The main secondary work is: *Victoria County History Essex*, V (1966), pp.151-80. There are a large number of books and articles concerning excavations at the Abbey and church for which see the list in: *VCH Bibliography*. Also Ransford, R. 1989 'The early charters of Waltham Abbey, 1062-1230' in *Studies in the History of Medieval Religion, Vol. II* and Watkiss, L. and Chibnall, M., 1994, *The Waltham Chronicle*, Oxford Medieval Texts. For the Gunpowder Factory

see: W.H. Simons, *A short history of the Royal Gunpowder Factory at Waltham Abbey* (1963); RCHME survey: *Royal Gunpowder Factory, Waltham Abbey*, (1994).

#### **4.1.2 Place-name and documentary evidence**

The foundation legend for Waltham Abbey is that it was founded by Tovi (Tofig) in c.1030. He had brought a miraculously revealed stone cross from Montacute in Somerset to Waltham and housed it in the church there. Prior to this event the place of Waltham was said to have been little more than a hunting-lodge in the forest.

However, the place-name evidence suggests a possible early Saxon settlement of the area (Reaney, 1935). Waltham derives from weald-ham, a forest-homestead or enclosure. It has been suggested that Waltham was a royal estate or held by those associated with royalty (Tovi himself was Cnut's royal standard-bearer). It formed the administrative centre for the weald or forest of Waltham and later became the hundredal meeting-place. The church was the Minster church for the Minster parish.

Harold Godwinson (later King Harold) increased Tovi's foundation by creating a college of secular canons in c.1060. King Harold is traditionally supposed to have been buried at Waltham following his death at Hastings. The earliest reference to this dates to 1177 when the author of *The Waltham Chronicle* states that within the period of the author's residence in Waltham Abbey (1124-1177) the body was moved no less than three times due to building work in the church.

*Waltham* is first referred to by that name in 1062, and as *Holyrode Waltham* in 1285.

The Domesday book depicts a sizeable settlement with a growing population in 1086.

*Lands of the Bishop of Durham in Essex*

*Half-Hundred of Waltham*

*Harold held Waltham (Holy Cross) before 1066 as one manor; 40 hides.*

*Always 80 villagers; 24 smallholders. Then 6 slaves, now 7. Then 7 ploughs in lordship, now 6. Always 37 men's ploughs.*

*Woodland, 202 pigs; meadow, 80 acres. 2 cobs, 20 cattle, 80 sheep, 12 goats, 40 pigs. Pasture is there worth 18s; then 1 mill, now 3; 5 fisheries; then 20 tributaries, now 36; 1 plough can be restored in the manor.*

*To this manor belong 2 freemen who held 6 hides before 1066, now 5. Holy Cross has half of the sixth hide. William of Warenne took the other part. 4 freemen with 2 hides and ½ virgate. 1 hide less 15 acres still belongs to this manor, which the same William took from it. Ranulf brother of Ilger (holds) 30 acres of land and 4 (acres) of pasture.*

*All the freemen who are there now have 7 hides and 15 acres. Before 1066 they had in their lordship 4 ploughs; now 4½.*

*Always 1 villager. Then 6 smallholders, now 8; then 2 slaves, now none.*

*Woodland, 182 pigs; meadow, 16½ acres; pasture, 4 acres.*

*From the whole of this and from the manor, Harold had £36 before 1066. The Bishop's men are assessed at £63 5s 4d. But now as other men of the Hundred testify, value £100.*

*In London there are 12 houses which belong to the manor (and) which pay 20s, and a gate which the King gave to the Bishop's predecessor and which also pays 20s.*

The Canons of Waltham Holy Cross also held land in a number of other areas in Essex.

The town was sacked by Geoffrey de Mandeville in 1144 and although the church survived the fire, both the canons' houses and those of the town were said to have been burnt. In 1177 the secular canons were expelled and a house of Augustinian canons established.

Annual or biennial fairs were granted by Maud, wife of Henry I, and a market confirmed to the Abbot and canons by Richard I.

## 4.2 ARCHAEOLOGICAL

### 4.2.1 Above ground remains

The above ground remains can be broken into three groups. Firstly the Abbey, this consists of the Parish Church, the Gatehouse, Midnight Chapel, Vicarage, Stony Bridge, the slype and various walls, also the artificial watercourses of Cornmill Stream and Lower Mill Stream and the fish-ponds and water garden moat. Secondly there is the town where the only upstanding remains are those of the built environment; 46 buildings are Listed and part of the original medieval street-pattern still survives. Finally there is the Royal Gunpowder Works to the west of the town, where earthworks and structures still survive.

### 4.2.2 Excavations

Waltham Abbey is one of the most extensively excavated towns in Essex (see Table 1), largely due to the work of the Waltham Abbey Historical Society who have conducted numerous excavations since 1966, both within the monastic precinct and in the historic town. They have also undertaken recording projects and documentary studies. Their publication record is exemplary, only Reformation House in Romeland and the most recent trial-trenches remaining unpublished. The Essex County Council Field Archaeology Group have undertaken fieldwork on a number of sites, all of which have been published. Passmore Edwards Museum and the Department of the Environment have excavated a site each (Abbey Meads site and the Chapter House site respectively) but these remain unpublished. In 1993 an earthwork and architectural survey was undertaken by the RCHME (1994) at the Royal Gunpowder Works. An intensive watching brief was also maintained by a professional archaeologist during groundwork at the Royal Gunpowder Works North Site (Chaddock 1995 and Ford 1995). At the Royal Gunpowder Factory South Site a full survey was undertaken (Chaddock 1996).

**Table 1: List of sites (excavations, evaluations, watching-briefs and surveys)**

ESMR	SITE	ARCHIVE LOCATION	PUBLICATION
100, 3846	8, Sun Street 1954	Archive & finds: Epping Forest District Museum	Huggins, P.J., 1970, "Waltham Abbey: Monastic site and prehistoric evidence, 1953-67" <i>Trans. Essex Archaeol. Soc.</i> , 3rd ser., vol. 2
102	Medieval Bridge, Veresmead 1968	Archive & finds: Epping Forest District Museum	Huggins, P.J. 1970, "Excav. of a Med. Bridge at Waltham Abbey, Essex, in 1968" <i>Medieval Archaeol.</i> 14, p.126-47
104-6	Veresmead 1970-2	Archive & finds: Epping Forest District Museum	Huggins, P.J., 1972, "Monastic Grange & Outer Close excavs., Waltham Abbey, Essex, 1970-72" <i>Essex Archaeol. Hist.</i> 4, p.30-127
14541-2	Romeland (WA5)	Finds: Montrose Rd	Lavender, N.J. & Wade, A., 1992, "Romeland, Waltham Abbey", ECC Int. Rep., ESMR
16689-92	1-5 Sun Street (WA4)	Finds: Montrose Rd; Archive: County Hall	Brown, N., 1995, "Excavations at 1-5 Sun Street, Waltham Abbey", <i>Essex Archaeol. Hist.</i> 26, p.105-25
16693-4	Abbey Gardens House 1993	WAHS	Huggins, P.J., 1994, "Excavs. in Essex", <i>Essex Archaeol. Hist.</i> 25, p.246
16695-6	Baptist Church 1990	WAHS	Huggins, P.J., 1990, "Excavs. in Essex" <i>Essex Archaeol. Hist.</i> 22, p.160
16720	Abbey Mead: Countryside Centre (WA6)	Finds: Montrose Rd	Havis, R. & Austin, L., 1994 "Waltham Abbey: Countryside Centre" <i>Essex Archaeol. Hist.</i> 25, 229
16720	Grange Yard 1992	WAHS	Huggins, P.J., 1993, "Archaeology in Essex", <i>Essex Archaeol. Hist.</i> 24, 207
16721	Abbey Mead 1992	WAHS	Huggins, P.J., 1993, "Archaeology in Essex", <i>Essex Archaeol. Hist.</i> 24, 207
16730	Vicarage Garden 1992	WAHS	Huggins, P.J., 1993, "Archaeology in Essex", <i>Essex Archaeol. Hist.</i> 24, 207
16731	Vicarage Garden, Deans House 1994	WAHS	Huggins, P.J., 1995, "Archaeology in Essex", <i>Essex Archaeol. Hist.</i> 26, 252
1920	Abbey Farmhouse 1985-6	WAHS	Huggins, P.J., 1985, "Trial excavs. at Abbey Farmhouse, Waltham Abbey, Essex, 1985" WAHS Rep., ESMR; Huggins, P.J., 1986, "Excavs. in Essex", <i>Essex Archaeol. Hist.</i> 17, p.164
3668-9, 3943	Abbey Close and	Archive & finds:	Huggins, P.J., 1976, "The excavation of an 11th century Viking Hall and 14th century



	Vicarage Garden 1969-71	Epping Forest District Museum	rooms", <i>Medieval Archaeol.</i> 20, p.75-133
3672-3, 9146-8, 3674-7	Lawns Hotel, Church Street 1979	Archive & finds: Epping Forest District Museum	Clarke, C.P., Gardiner, M.F. & Huggins, P.J., 1993, "Excavations at Church St., Waltham Abbey 1976-87: urban development and prehistoric evidence" <i>Essex Archaeol. Hist.</i> 24, p.69
3678-80	Elim Chapel 1974	WAHS	Turner, T.J., 1974 "Elim Chapel, Waltham Abbey", ESMR; Huggins, P.J. 1988 "Excav. in the Market Place, Waltham Abbey" <i>Essex Archaeol. Hist.</i> 19, 205
3684	12, Sun Street 1972	Archive & finds: Epping Forest District Museum	Huggins, P.J., 1974, "Arch. in Essex, 1972-3", <i>Essex Arch. Soc. Newsletter</i> 48, p.15
3686	41, Sun Street 1980	Archive & finds: Epping Forest District Museum	Huggins, P.J., 1981, "Excav. in Essex, 1980" <i>Essex Archaeol. Hist.</i> 13, p.55
3687	43A, Sun Street	Archive & finds: Epping Forest District Museum	Huggins, R.M., 1976, "43A, Sun St.", ESMR
3688	N. side Sun Street 1974-5	Archive & finds: Epping Forest District Museum	Huggins, P.J., 1988, "Excav. on the north side of Sun St., Waltham Abbey, Essex, 1974-5" <i>Essex Archaeol. Hist.</i> 19, 117-53
3689-91	Essex House 1977	Archive & finds: Epping Forest District Museum	Huggins, P.J. 1988, "Excav. in the Market Place, Waltham Abbey", <i>Essex Archaeol. Hist.</i> 19, p.205; Huggins, P.J., 1979, "Excav. in Essex, 1978" <i>Essex Archaeol. Hist.</i> 11, 109
3692-3	Reformation House, Romeland 1974	WAHS	Huggins, P.J., 1976, "Romeland, Waltham Abbey", ESMR; Notes in <i>Medieval Archaeol.</i> 19, 1975, 254 and 18, 1974, 199.
3694-5	Greenyard 1972	Archive & finds: Epping Forest District Museum	Huggins, P.J., 1974, "Arch. in Essex, 1972-3" <i>Essex Arch. Soc. Newsletter</i> 48, p.15
3697, 3849	Vicarage Garden 1965	Archive & finds: Epping Forest District Museum	Huggins, P.J., 1970, "Waltham Abbey: Monastic site and prehistoric evidence; 1953-67", <i>Trans. Essex Archaeol. Soc.</i> , 3rd ser., vol. 2
3839-41	Market Square 1981	WAHS	Huggins, P.J. 1988, "Excav. in the Market Place, Waltham Abbey", <i>Essex Archaeol. Hist.</i> 19, p.205; Huggins, P.J. 1982, "Excav. in Essex, 1981" <i>Essex Archaeol. Hist.</i> 14, p.143
3842-5	Mill Site 1953	Not known	Huggins, P.J. 1970, "Excav. of a Med. Bridge at Waltham Abbey, Essex, in 1968" <i>Medieval Archaeol.</i> 14, p.126-47; Huggins, P.J., 1970, "Waltham Abbey: Monastic site and prehistoric evidence; 1953-67", <i>Trans. Essex Archaeol. Soc.</i> , 3rd ser., vol. 2
3847	46 Sun Street 1974-80	Archive & finds: Epping Forest District Museum	Huggins, P.J. 1981 "Excav. in Essex, 1980", <i>Essex Archaeol. Hist.</i> 13, p.55
3848	56 Sun Street 1980	Archive & finds: Epping Forest District Museum	Huggins, P.J. 1981 "Excav. in Essex 1980" <i>Essex Archaeol. Hist.</i> 13, p.55
3851-3	46 & 48 Sewardstone Street 1966	Epping Forest Museum	Huggins, P.J., 1970, "Waltham Abbey: Monastic site and prehistoric evidence; 1953-67" <i>TEAS</i> , 3rd ser., vol. 2; Huggins, P.J. 1969, "46-48 Sewardstone Street", <i>Post-Med. Archaeol.</i> 3, 47-99
45-51	Cloister Garth Site 1955-62, 1967	Archive & finds: Epping Forest District Museum	Huggins, P.J., 1970, "Waltham Abbey: Monastic site and prehistoric evidence; 1953-67" <i>Trans. Essex Archaeol. Soc.</i> , 3rd ser., vol. 2
60	Sun Street Car-park site 1974-7	Archive & finds: Epping Forest District Museum	Huggins, P.J., 1978, "Excav. in Essex" <i>Essex Archaeol. Hist.</i> 13, p.94
63-8	Abbey Forge Site in Grange Mead, 1972-3	Archive & finds: Epping Forest District Museum	Huggins, P.J. & Huggins, R.M. 1973, "Excav. of Monastic forge & Saxo-Norman enclosure, Waltham Abbey" <i>Essex Archaeol. Hist.</i> 5, 146; Huggins, P.J., 1972, "Monastic Grange & outer close excav., Waltham Abbey, Essex, 1970-2" <i>Essex Archaeol. Hist.</i> 4, 30-127
69, 71	Abbey Meads site 1978	Passmore Edwards Museum	Wilkinson, P.M., 1979, "Excav. in Essex" <i>Essex Archaeol. Hist.</i> 11, p.108-9 Unpublished
61-2, 70, 72-3	Abbey Meads site 1972		Musty, AES, 1978, "Exploratory excav. within the monastic precinct, Waltham Abbey, 1972" <i>Essex Archaeol. Hist.</i> 10, 127-73
7264-5	Garden of 41 Sun Street	Archive & finds: Epping Forest District Museum	Bascombe, K. 1987 "41, Sun Street" ESMR; Dickinson, H. 1982, <i>The History of a Tudor House</i> , 37-62
74-7, 3667	Church of Holy Cross & St Lawrence, 1938, 1953-67	WAHS	Huggins, P.J., 1970, "Waltham Abbey: Monastic site and prehistoric evidence; 1953-67" <i>Trans. Essex Archaeol. Soc.</i> , 3rd ser., vol. 2; Huggins, P.J., 1970, "Waltham Abbey: Monastic site and prehistoric evidence; 1953-67" <i>Trans. Essex Archaeol. Soc.</i> , 3rd ser., vol. 2; Charlton, J., 1939, "Excav. at Waltham Abbey, Essex", <i>Antiq. J.</i> 19, p.330
78	Chapter House site	DoE	Havercroft, A.B., 1978, "Excav. in Essex" <i>Essex Archaeol. Hist.</i> 10, 247 Unpublished
83	Denny Mansion site		Musty, AES, 1978, "Exploratory excav. within the monastic precinct, Waltham Abbey, 1972" <i>Essex Archaeol. Hist.</i> 10, 127-73
85, 86-7, 97	Pipe-trench from SE part of Abbey Mead to Gatchouse	WAHS	Huggins, R.M. in Musty, AES, 1978, "Exploratory excav. within the monastic precinct, Waltham Abbey, 1972" <i>Essex Archaeol. Hist.</i> 10, 127-73;
89-92	Grange Yard	Archive & finds: Epping Forest District Museum	Huggins, P.J., 1972, "Monastic Grange & Outer Close excav., Waltham Abbey, Essex, 1970-72" <i>Essex Archaeol. Hist.</i> 4, p.30-127

9143, 9146-8, 16701	6-7 Church St/Leverton Way (WA1)	Archive & finds: Epping Forest District Museum	Clarke, C.P, Gardiner, M.F. & Huggins, P.J., 1993, "Excavations at Church St., Waltham Abbey 1976-87: urban development and prehistoric evidence" <i>Essex Archaeol. Hist.</i> 24, p.69
9212, 9297	Cornmill Stream Footbridge, Abbey Gardens (WA2); Abbey Gardens improvements (WA3)	Archive & finds: Epping Forest District Museum	Wallis, S., 1992, "Medieval deposits on the banks of the Cornmill Stream, Waltham Abbey" <i>Essex Archaeol. Hist.</i> 23, p.142
93-4	Lower Mill Stream	Archive & finds: Epping Forest District Museum	Huggins, P.J., 1970, "Excav. of a Med. Bridge, Waltham Abbey, Essex, 1968" <i>Med. Arch.</i> 14, 139
9333	Service trench Sewardstone Street	Archive & finds: Epping Forest District Museum	Huggins, P.J. 1988, "Excav. in the Market Place, Waltham Abbey", <i>Essex Archaeol. Hist.</i> 19, p.205
9497, 16689-92	8, Market Place/ rear of 1-3 Sun St.	Archive & finds: Epping Forest District Museum	Huggins, P.J., 1988, "Excav. in the Market Place, Waltham Abbey", <i>Essex Archaeol. Hist.</i> 19, p.205-6
3437, 15129, 15096	Royal Gunpowder Works survey 1994	Archive: Lecture Theatre, Royal Gunpowder Works	RCHME (1994) <i>The Royal Gunpowder Factory, Waltham Abbey, Essex. An RCHME Survey, 1993</i>
3437	Royal Gunpowder Works North Site 1995	Archive: Lecture Theatre, Royal Gunpowder Works	Chaddock, S. (1995) <i>The Royal Gunpowder Factory, Waltham Abbey: Final Archaeological Report</i> (Typescript report for the Ministry of Defence); Ford, A. (1995) <i>The Royal Gunpowder Factory, Waltham Abbey (former RARDE site)</i> (Typescript reports for the Ministry of Defence)
15096	Royal Gunpowder Works South Site 1996	Archive: Lecture Theatre, Royal Gunpowder Works	Chaddock, S. (1996), <i>Archaeological Evaluation of South Site, Waltham Abbey, Essex. Interim Report</i> (British Aerospace Defence, Royal Ordnance)
-	Abbey Church 1991	WAHS	Huggins, P.J. 1992 "Arch. in Essex" <i>Essex Archaeol. Hist.</i> 23, p.108
-	Redholm 1995	WAHS	Huggins, forthcoming - 1995 trenches by WAHS
-	Long Pool 1996	WAHS	Huggins, forthcoming - 1996 trenches by WAHS
-	Geophysics survey, Abbey Hospital site	Peter Cott; report in ESMR	Cott, P. (1997) <i>Geophysics Survey Report: Waltham Abbey, Essex, ESMR</i>

### 4.2.3 Finds

#### Saxon finds

by Sue Tyler (Essex County Council Archaeological Advisory Group)

A small number of Early Saxon finds include a 5th-6th century brooch. There was certainly settlement here from the mid Saxon period onwards and assemblages of Late Saxon pottery of 9th to 11th century date come from various sites within the town concentrated around the church and market area. Of particular interest are excavations north of the church by P. Huggins (1976, 75-133 with the pottery report by R. Huggins) which produced a large assemblage of middle and late Saxon pottery associated with the construction of a Viking-style hall and from underlying features.

#### Medieval pottery

by Helen Walker (Essex County Council Field Archaeology Group)

Quantities of medieval and post-medieval pottery from many sites in the town have been published by R. Huggins, who has developed a fabric typology for wares found at Waltham Abbey. Most of these can be related to fabrics described in Cunningham's typology for post-Roman Essex, although Huggins' fabric type series needs to be fully correlated with Cunningham's typology and the fabric codes given their common names. As this is the most extensively published town in the county, a synthesis for the whole town could be written looking at spatial differences and changes through time (as for Chelmsford and Maldon). In addition the ceramics from religious sites could be compared with that from secular sites. Waltham Abbey has a high number of imported wares, perhaps because of its position on the River Lea or perhaps because of the presence of a high status religious site. It is unclear at present how much pottery comes from Hertfordshire and Middlesex and the evidence for a local production site needs to be further investigated.

- *11th century Viking Hall and 14th century rooms* (Huggins R.M. 1976, 101-115). Several groups of late-Saxon pottery associated with the 'Viking' Hall and underlying features were found, comprising sherds of Badorf relief-band amphorae and Ipswich-type ware (although petrological analysis shows that the Ipswich-type ware probably does not originate from Ipswich, and could be later than mid-9th century). The relief-band amphorae have unrouletted bands and may also be later, perhaps late-9th to 10th century. Late Saxon St Neots ware is also present and forms comprise cooking pots, and bowls with inturned rims. It was found in association with locally-made early medieval shell-tempered wares. Later on, sand-and-shell tempered fabrics appear and there are also 12th to 13th century early medieval ware cooking pots with wide diameters, that perhaps originate from Hertfordshire or Middlesex. Traded wares also include a few sherds of post-conquest, yellow-glazed Stamford ware.

Quantities of 13th to 14th century pottery were found, including a high proportion of 14th century sandy orange ware jugs, used for serving wine, which may have been locally made. Well-fired sandy orange ware jugs are dated at Waltham Abbey to c.1250 to 1500, and as in central Essex, slip-painting, or slip-coating under a green glaze is common, but by the 15th century there is little glaze and the slip-painting is carelessly applied. Rim types change through time and rod handles are replaced by strap handles. There are very few imported wares until the arrival of German stonewares, but there is one possible 13th century Rouen ware fragment from northern France, and some possible late-13th to early-14th century Saintonge green glaze and Saintonge polychrome. Early German stonewares comprise Siegburg and Raeren stoneware.

- *Monastic forge and Saxo-Norman enclosure* (Huggins R.M. 1973, 155-66). There are sherds of a coarse gritty ware and a late Saxon fine sand-tempered fabric dating from the mid-9th century until the conquest. St Neots ware is also present, and found with the late Saxon wares are examples of locally made early medieval shell-tempered ware, constituting the largest groups and similar to that found at the 'Viking' Hall excavation. Production of shelly wares reached a peak in the late 12th century when St Neots ware disappears from the sequence. Over time an increasing amount of sand is added to the shell-tempered wares until shell appears only on the surface. Shell-and-sand-tempered ware is always less common than shell only ware. Sand-tempered coarse wares probably from Hertfordshire or Middlesex are also introduced. Of some interest are fragments from pitchers in Andennes ware, Pingsdorf red-painted ware, and yellow-glazed Stamford ware, with a couple of sherds of green-glazed Stamford ware pitcher. A few 13th century jugs were also found and include a possible London-type ware Rouen copy. Fourteenth century red wares are also present.
- *Monastic site and prehistoric evidence* (R.M. Huggins 1970, 244-56) Excavations here produced pottery very similar to that found elsewhere in the town. The largest group comprises St Neots-type ware and early medieval shell-tempered and shell-and-sand-tempered ware cooking pots, while late medieval pottery comprises unglazed slip-painted sandy orange ware, Raeren stoneware and a jug base in a buff coloured fabric.
- *A medieval bridge at Waltham Abbey* (Huggins (R.M. 1970, 141-3) Two local red ware jugs probably dating to the second half of the 14th century and showing slip-coating under a green glaze were found on the river bed, along with a semi-circular Surrey white ware dripping dish. Sherds of slip-painted red ware were also present.
- *Monastic Grange and outer close excavations* (Huggins R.M. 1972, 107-110) The earliest medieval group is similar to that from the cloister and comprises cooking pots with wide diameters tempered with coarse shell-and-sand dating to c.1150 to c.1250. A second group of sand-tempered

wares suggests a slightly later date. A late medieval group contains sherds of Waltham Fabric K, which has a pinkish well-fired fabric with smooth surfaces, often with a mottled or clear green glaze, and dated to 1450-1600. Late medieval pottery is also present and includes part of a Cambridge sgraffito ware jug with a suggested date here of the late 14th to early 15th century.

- *Sewardstone Street, 1966* (Huggins R.M. 1969, 68-87) This site investigates urban occupation at the southern edge of the medieval town. Most of the medieval pottery is of red iron-bearing clay and may have local origins. (There is documentary evidence of pottery production in 1312 and a later kiln near Potkiln Shaw (Renn 1964, 11).) Vessel types include cooking pots in shell and/or sand-tempered wares; some are local while others probably have Hertfordshire or Middlesex origins. Medieval jugs are mainly of the local red-iron-bearing clay and frequently show traces of white slip-coating underneath a plain lead or green glaze. Decoration is uncommon and mostly takes the form of slip-painted lines. Part of a medieval storage jar is decorated with vertical thumb-applied strips with a pale green glaze under the rim and on the shoulder, similar to storage jars found in London. Imports comprise a sherd of yellow glazed Stamford ware and part of a Saintonge green-glazed parrot-beak spout. Late medieval pottery is present and the pinkish ware, fabric K, makes up the largest component of these groups and would seem to represent the local version of 'Tudor Green' ware.
- *North side of Sun Street* (R.M. Huggins 1988a, 136-40) A small group of St Neots-type ware and local early medieval shell-tempered wares dates to the 11th century and is similar to 11th century groups found elsewhere in the town. Stratified 12th century pottery is dominated by early medieval shell-tempered ware with small amounts of coarse sand-tempered ware and a few sherds from a fine glazed red ware pitcher. A 13th century group contained a decreasing amount of shell-tempered ware and a higher proportion of coarse sand-tempered ware and sandy orange ware with a few fine glazed, red ware sherds from jugs dating to c.1220-40. Later 13th century groups contained possible Mill Green ware including part of a baluster jug dating to c.1300. 14th century groups comprise mainly sandy orange ware and possible Mill Green ware. A 15th century group produced mainly Waltham fabric K, and some unidentified imported jugs, all of high quality and one jug showing a religious motif.
- *The Market Place* (Huggins R.M., 1988b, 210-11) Only a few medieval sherds were found, comprising coarse sand-tempered ware, the base from an unidentified imported jug, a sandy orange ware jug handle and part of a fine red ware jug with painted vertical slip stripes, probably dating to the late 13th to early 14th century.
- *Church Street, Waltham Abbey 1976-87* (Huggins R.M. 1993, 95-104) The earliest pottery comprises sherds of St Neots-type ware, dated here to the 11/12th century. Groups datable to the 12th century comprise mainly early medieval shell-tempered ware and coarse sand-tempered ware, with a similar assemblage encountered in early 13th century groups. However, one group datable to the late 12th to early 13th century also produced possible London-type ware. A group dated to the first half of the 13th century produced a coarse ware jug probably made at Middlesex or Hertfordshire, and red fine ware jugs, at least one of which is most likely to be London-type ware. There are also shell-tempered bowl, dish and cooking pot rims and sherds of sandy orange ware. Statistical analysis of some of the pit groups shows sandy orange ware increasingly replacing shell-tempered ware and coarse sand-tempered ware during the first half of the 13th century. Later medieval groups produced Mill Green fine and coarse wares, along with ?locally made imitations. Late medieval groups are characterised by pinkish green-glazed ware (Waltham fabric K) and red/brown glazed wares.
- *1-5 Sun Street* (Huggins R.M. 1995, 113-117 WA4) The earliest pottery dates from the 11th century and includes sherds of St Neots-type ware and early medieval shell-tempered ware. The largest groups were deposited in the early 13th century and are characterised by the predominance

of coarse sand-tempered ware over shell-tempered ware. One early 13th century group produced part of a Rhenish blue-grey ware ladle (the first to be found at Waltham Abbey), along with large storage jars of coarse sandy grey ware, and jugs. A second feature produced similar storage jars and jugs, together with an unusual spout from a shallow vessel and a possible London-type ware jug with applied scale decoration. Later pottery was also found and one group produced ?14th century London-type ware jugs (which is unusual as most examples of his ware found in Essex belong to the 13th century) and a possible south Herts jug. Late medieval pottery from pre-Dissolution groups includes sherds from Raeren stoneware drinking jugs, examples of Waltham fabric K and local wares including a copy of a Raeren stoneware frilled base, part of a mug and a pipkin rim.

- *Other excavations* A number of small scale excavations carried out by Essex County Council have produced medieval pottery. An excavation at the *Countryside Centre (Austin and Havis, 1992, 229-30 WA6)* produced a few 11th to early 13th century sherds comprising shell- and shell-and-sand-tempered wares, an example of an early medieval glazed fabric, perhaps from a tripod pitcher and part of the shoulder of a medieval coarse ware storage jar or large cooking pot, showing a horizontal applied strip. A Mill Green fine ware pipkin handle showing patches of green glaze was found during excavations of the banks of the *Cornmill Stream (Walker 1992, 145)*. In addition, excavations at *Romeland (Lavender and Wade 1992)* produced a south Herts ware cooking pot rim datable to 1150-1300 and the base of a Hertfordshire glazed ware baluster jug datable from the mid 14th to 15th century and probably occurring at its easterly limit of distribution.

### **Post-medieval pottery**

by Helen Walker (Essex County Council Field Archaeology Group)

- *Viking Hall and 14th century rooms* (Huggins R.M. 1976, 101-115) Dissolution deposits dating to c.1540 produced a tin-glazed earthenware dish with the monogram IHS, slip-painted sandy orange wares, a post-medieval red earthenware chaffing dish, a bung-hole from a cistern, part of a dripping dish, a brown-glazed post-medieval red earthenware tyg, Raeren stoneware and early examples of Surrey-Hampshire white ware. A 17th century group included more post-medieval red earthenware chaffing dishes, black-glazed ware and Metropolitan slipware, which may have been made locally at kilns at Jacks Hatch on the Waltham boundary. From further afield are sherds of tin-glazed earthenware, and an increasing amount of Surrey-Hampshire white ware. Imports comprise Frechen stoneware jugs including one showing the coat of arms of Amsterdam, and type III Martincamp flasks.
- *Monastic site and prehistoric evidence* (Huggins R.M. 1970, 244-56) Post-medieval pottery includes a Metropolitan slipware dish, jug and a straight-sided horizontal-handled jar datable to c.1700. There are also examples of black-glazed wares and plain lead glazed post-medieval red earthenware. Other wares include a large yellow-glazed Surrey-Hampshire white ware tripod pipkin dated to the mid-17th century, quantities of Raeren, Frechen and English stonewares and some plain English tin-glazed earthenware.
- *Monastic Grange and outer close excavations* (Huggins R.M. 1972, 107-110) A good group of early to mid-16th century pottery, probably broken during the destruction of a building, was excavated. comprising large bowls, pans, pipkins and jugs in a fine unglazed, undecorated red ware (post-medieval red earthenware). Imported wares are also present and comprise Raeren stoneware mugs, Cistercian ware, and Netherlands tin-glazed earthenware including sherds from a Malling jug. Seventeenth century pottery is also present and includes a Merida ware bowl imported from southern Spain and characteristic of the first half of the 17th century.
- *Sewardstone Street, 1966* (Huggins R.M. 1969, 68-87) Pottery belonging to the 16th century is present and includes brown glazed and unglazed earthenwares including jugs with deeply thumbbed

handles, found in association with Raeren stoneware and Malling jugs. More common, is pottery from the 17th century including a pit group dated by documentary evidence to c.1669 which contained almost complete examples of a Turkish Iznik ware plate, a Metropolitan slipware dish, a plain white English tin-glazed earthenware dish, a black-glazed ware jug, a small brown-glazed pipkin, a sherd of Frankfurt faience and the base of a Frechen stoneware jug. Other 17th century groups consist almost entirely of local plain brown utilitarian wares. In addition, a group dated c. 1635-9 produced an early, imperfect example of Metropolitan slipware with a simple rim and flaked-off slip. Pottery belonging to the 18th century includes a sherd of Wan-Li Chinese porcelain indicating high status.

- *North side of Sun Street* (Huggins R.M. 1988a, 136-40) Small amounts of poorly stratified 16th century material were found, including a Netherlands Malling-type vase, the base of a Cistercian ware cup and two possible chafing dishes.
- *Market Place* (Huggins R.M. 1988b, 210-11) Several contexts produced 17th century pottery; the most important group is dated c.1670-80 and contained the remains of at least eleven post-medieval red earthenware unglazed vessels, two tin-glazed earthenware vessels, and three Frechen stoneware vessels. Sherds of English brown salt-glazed stoneware are also present which must be one the earliest occurrences of this ware.
- *Church Street, Waltham Abbey 1976-87* (Huggins R.M. 1993, 95-104) The usual 16th century wares are present and of interest is a large 2 gallon Frechen stoneware storage jug with a medallion showing the Royal coat of arms and dating to the early 17th century.

### 4.3 LISTED BUILDINGS

in consultation with Hilary Brightman and Dave Stenning (Listed Buildings)

The schedule of listed buildings provided in this report is derived from the List of Buildings of Special Architectural and Historical Interest. This List has been compiled over many years through the work of many inspectors and, as a result, the reliability of the List varies from District to District. Time was extremely limited and very few interiors were looked at, or even the rear wings of buildings. Where further research has been carried out on individual buildings, this has often shown the limitations of the List descriptions. The List for Waltham Abbey was originally compiled in 1974, and it can be considered to be of poor reliability.

There are 68 buildings listed as being of special architectural or historical interest, of these 2 are Grade I Listed Buildings, 13 Grade II\* and 53 Grade II.

CENTURY	NUMBER
12	3
13	0
14	1
15	3
16	14
17	2
18	10
19	31
20	3

Table 2: Listed Buildings by century of origin

The Listed Buildings fall into three distinct groups; firstly those connected with the Abbey, secondly those within the town and thirdly the Royal Gunpowder Works. The Abbey buildings consist of the parish church of the Holy Cross and St Lawrence, the Gatehouse, Midnight Chapel, Vicarage, Stony (Harold's) Bridge and various walls. These are largely stone or rubble built, with the later portions in brick. The 46 town buildings consist of shops, inns and domestic dwellings, and they are mainly timber-framed and rendered in construction. The 18 buildings that belong to the Royal Gunpowder Works are brick built, including offices, magazines, the engine room and the boiler room.

There is an 19th century print in the Essex Record Office (Mint Binder) which depicts an open-fronted, timber-framed, ground-floor arcade on the frontage of at least two timber-framed and plastered buildings which faced on to the Mill Stream just to the south of the church. Parts of this building may be incorporated into the corner buildings of Church Street, but the arcade does not survive. It is thought that this structure represents a commercial premises, but its form is very unusual.

General comments concerning the Listed Buildings evidence have been incorporated in the period syntheses.

## 5. SYNTHESIS

### 5.1 PRE-URBAN SYNTHESIS

#### 5.1.1 Prehistoric

There appears to be a general scatter of prehistoric material across both the town and abbey area, and nearly every excavation has produced a few finds. These date from the Mesolithic to the Bronze Age. The most interesting feature is a ditch at 6-7 Church St., (Clarke *et al*, 1993), 2.7m wide by 1.2m deep. Waterlogged organic material from the basal fills of the ditch gave a radiocarbon date of 1420-1105 BC. It has been suggested that this feature formed part of the *Eldeworth* enclosure (see below).

#### 5.1.2 Roman

Roman material, the occasional feature and a buried land surface dating to that period have been found in the area of the medieval town. There certainly was a Roman settlement in the area, although it does not appear to be on a scale that would indicate anything of an urban density. A silted-up ditch containing Roman material was discovered during examination of a service trench on Sewardstone Street, and it has been suggested that this feature forms part of the *Eldeworth* enclosure also.

### 5.2 URBAN SYNTHESIS

#### 5.2.1 Saxon synthesis and components

Legend has it that a church was founded by Tovi in c. 1030 at the site of his hunting-lodge. However it appears that Waltham was already a royal estate or held by those associated with royalty (Bascombe, in Huggins, 1976), it was also the hundredal meeting-place. There is evidence that there was a church on the site by the 7th century (Huggins and Bascombe, 1992), long before its legendary foundation date. The East Saxons under King Sabert were converted by Bishop Mellitus in 604 and the earliest church identified (Church 1) may date to the conversion period. Its location on or adjacent to what is thought to be a royal site is certainly suggestive of royal patronage. It was this church which became the centre of the minster parish whose establishment was confirmed by 673 at the Synod of Hertford (Huggins, 1995b). Church 2 has been dated to the 8th century. It is to this church that Tovi would have brought the miraculous stone cross c.1030. Harold Godwinson (later King Harold) increased the original foundation by rebuilding and extending the church and creating a

college of secular canons in c.1060. Saxon burials have been found within the monastic precinct, and a late 10th to 11th century hall to the north of the church has been excavated.

Not much is known about the Saxon village, but the Domesday book shows it to have had a sizeable population in 1066. The 'Viking Hall' to the north of the church is thought to lie within the area of the royal enclosure. It is possible that it might be the hunting-lodge that Tovi was building when he moved the cross to Waltham. The minster church lay to the south of this enclosure, and to the south of the church was the Saxon village. It has been suggested that the Saxon settlement consisted of small nuclei sited in Town Mead, Cob Mead, Chingsford Mead, Holyfield Mead and Padipol Mead, close to the river. There has been very little Saxon pottery recovered from within the medieval town area, the majority having been recovered from within the royal enclosure or at 46/8 Sewardstone Street within the Town Mead area.

The Saxon urban components are:-

#### ***The Church*** (TL 3813 0064)

The foundations of three successive pre-Norman churches have been identified (Huggins and Bascombe, 1992), all of which are, at least partially, under the current parish church. These have numbered sequentially.

Church 1 is represented by a shallow trench filled with packed flints, 2.59m length of which had been found. This has been interpreted as the foundation for the sill-beam of a ground-standing timber building. Four burials are thought to be associated with this church, one of which has been dated by radio-carbon to 590-690 AD.

Church 2 is represented by deep mortared rubble foundations. These have been interpreted as forming a Brixworth-type building with side chambers or *porticus* and a rectangular chancel. It has been dated by the excavator to as early as c.790, and it is probable that Tovi housed the Holy Cross in this building.

Church 3 was also of stone, consisting of a continuous transept probably roofed as one space with a tiny eastern apse. A surviving portion of herring-bone rubble masonry on the west wall of the south transept (now the east wall of the Lady Chapel) is thought to belong to this building. It has been interpreted as the first collegiate church of the secular college built by Harold c. 1053-60. The tiny apse at the head of the transept may have been for the seat of the Dean.

#### ***The burials***

As mentioned above, four 7th century burials were found in association with the earliest timber church. Two Saxon child burials (TL 3809 0066) were found 7m to the north of the west end of the church (Huggins, 1995). A portion of a Middle Saxon cemetery (c.650-850) was excavated about 75m to the south-east of the earliest church (TL 3822 0060, Huggins, 1988). One of the graves at the eastern edge of this cemetery contained a copper-alloy plate in Ringerike style, dated to the late 10th or early 11th century.

#### ***Royal Enclosure*** (TL 3818 0074 centred)

The possible royal enclosure is sited to the north of the church and would have enclosed the Viking-style hall. Its possible line is marked by the curve of the causeway across Veresmead, a fence-line which was excavated on the monastic forge site (Huggins and Huggins, 1973) and the angle of the wall at the Abbey Gatehouse. Five pits, tentatively dated to the tenth to eleventh centuries, were excavated under the medieval forge.



### ***The Hall*** (TL 3811 0068)

Approximately 20 m to the north of the church was a building, interpreted as a late Viking-style hall of turf-walled construction (Huggins, 1976). It was about 7.5m wide and over 15m long, with an internal division and aisle posts, and with a doorway at the west end. The area to the immediate south of the hall had been stripped of its ancient turf and topsoil over an area of at least 15m by 4.7m (Huggins, 1993), presumably to build the walls. The hall has been dated to the late tenth or early eleventh centuries.

### ***The built-up area*** (TL 3795 0013 centred)

Not much is known about the Saxon town, but the Domesday book shows it had a sizeable population in 1066. Huggins, R.M. has suggested (1998) that the settlement was polyfocal in nature, with foci at Town Mead, Cob Mead, Chingford Mead, Holyfield Mead and Padipol Mead, all of which lay close to the river. Saxon pottery (of a 9th to 10th century date) has been found at 46/48 Sewardstone Street, within the Town Mead area.

### ***Mill***

The Domesday Book records that there was a mill in Waltham Abbey in 1066. It probably stood on the site of the later Abbey Mills which were run by the 'Stream of the Lower Mill'.

## **5.2.2 Medieval synthesis and components**

Between 1066 and 1086 there appears to have been little growth in the population of the town, but the taxable value had nearly doubled. There is documentary and excavation evidence for there having been a sub-rectangular enclosure (known as *Eldeworth* in the documentation) in the town. The medieval market-place was subsequently located roughly in its centre, but the enclosure appears to have been older than the medieval town.

In 1177 the secular canons were expelled and a house of Augustinian canons established in their place. At the same time a monastic precinct was laid out. The medieval town grew up immediately to the south of the monastic precinct, and it may have been deliberately laid out by the canons. Permission to hold a fair had been granted in the early twelfth century, and a market confirmed at the end of that century. Excavation in the centre of the Market Square found a building which has been interpreted as the Moot Hall (mentioned in 1456). It is thought to have been built after 1250 and to have remained in use until the post-medieval period. A rental of c.1235 mentions the presence of a number of shops and The Cage (the Abbot's prison) in the Market Square. Excavation on the ground adjacent to the Crown Inn on the east side of Romeland and at Reformation House on the west side showed that the area had been a swamp until the ground level was raised in the late 12th or early 13th century. Excavations in Sewardstone Street revealed medieval occupation beginning in the 11th century, with the town expanding southwards down Sewardstone Street in the 15th century.

The medieval urban components are:-

### ***The church*** (TL 3813 0064)

There were two re-builds of the church in the medieval period, these are numbered sequentially.

Church 4 was the second collegiate church built on the site, c.1090-1150, replacing the collegiate church built by Harold Godwinson. It was built of stone, and was of apse-and-ambulatory form. It appears that the chancel together with the apse and ambulatory was started at its eastern end and demolition followed by re-building progressed westwards as far as the crossing of the preceding collegiate church in the late 1080s or 1090s. The Romanesque crossing tower and nave were then built between 1120 and 1150. The nave survives as the current parish church.

Church 5 was built by the Augustinians following their take-over of the church in 1177. They first established a priory in 1177, which was upgraded to abbey in 1184. They demolished the apse of Church 4, converted the chancel into a central nave and added a cruciform extension to the eastern end creating an immense church approximately 130m long from western porch to eastern wall.

***The monastic precinct*** (TL 3817 0069 centred)

The monastic precinct, following its construction in 1177, was the dominant topographical feature in medieval Waltham Abbey, as it formed the northern limit to the town and prevented any further development in that direction. The precinct was defined by a stone wall, with a gateway on the western side dated to c.1369. Part of the wall and the gateway are still extant and further lengths of the wall have been observed during ground-works (Huggins, 1988). Within the precinct were the principal abbey buildings. In the south-east corner was the monastic church (see above, Church 5). The cloisters abutted the northern wall of the church and the chapter house was on the eastern side of the cloisters. There were also other buildings, including the deans house sited to the north of the church.

***The monastic grange*** (TL 3831 0095 centred)

The monastic grange was located to the north-east of the precinct. It has been partially excavated (with adjoining Veresmead) in advance of the construction of a relief-road and car-park (Huggins, 1972). Nine medieval buildings within Grange Yard were excavated. These consisted of a twelve-bay aisled timber-framed barn sited close to a wharf and dock on Cornmill Stream; a timber-framed hay barn with central posts to support a loft; a long brick building with stalls and a solar end; three successive farm entrance lodges and a flint-and-stone walled 3-bay aisled forge, with evidence of iron-smelting and lead and bronze working (Huggins, 1973).

***Veresmead*** (TL 3814 0093 centred)

To the west of the Grange Yard and immediately to the north of the monastic precinct was Veresmead (the name refers to William de Vere, Canon of St Pauls who was one of those who directed the Augustinian works). Veresmead is bordered by the Cornmill stream on the east and by the Lower Mill stream on the west. The medieval (possibly 14th century) Stony Bridge spans Cornmill Stream, linking Grange Yard with Veresmead. From Stony Bridge across Veresmead to a stone bridge spanning Lower Mill stream ran a causeway. The hospital (see below) was sited to the south of the causeway and the fish-ponds to the north. The bridge has been partially excavated (Huggins, 1970) and dated by dendrochronology to the mid-fourteenth century. Within Veresmead a two-bay timber-framed aisled hall with associated store and two successive dovecotes were excavated (Huggins 1972), also in response to the construction of the relief road.

***Hospital*** (TL 3816 0086)

The monastic hospital and accompanying chapel is thought to have stood in the southern half of Veresmead. A geophysical survey undertaken in 1997 (Cott, ESMR) has identified a large six-bay aisled building with an attached wing with a number of internal rooms.

***Fish-ponds*** (TL 3812 0103 centred)

There are four rectangular fish-ponds in the northern half of Veresmead. These were connected by a sluice-system from Cornmill Stream into Lower Mill Stream.

***Redholm meadow*** (TL 3800 0100 centred)

To the west of Veresmead, between Lower Mill stream and the River Lea was the meadow of Redholm, which lies on recent alluvial deposits of silt, peat and marsh clay. A roadway is presumed to have lead from the bridge along the western side of Redholm field to the mill. Excavation at the Long Pool on the Cornmill Stream has revealed a timber-plank structure (Huggins pers. comm.) that is interpreted as a dock with wharf for the unloading of stone for the building of the abbey.

### **Street plan**

Some of the current street-plan is that of the medieval town, although there have been some drastic alterations at the western and eastern ends of the town. The church and monastic precinct formed the northern limits of the town. Church Street lies directly to the south of the church, the northern side of which is bounded by the churchyard wall whilst the southern side consisted of medieval tenement blocks. The eastern end of Church Street leads into Market Square (see below), which is also bordered by medieval tenements. From Market Square and parallel to the monastic precinct wall runs Sun Street (originally East Street). Sewardstone Street (which leads from Sewardstone Hamlet) and Silver Street, which both lie on a north-south route converge at the southern end of Market Square. The western end of Church Street widens out in front of the church, before becoming Highbridge Street. Highbridge Street is named after the bridge crossing of the river Lea. On its northern side is the area known as Romeland.

### **Built-up area** (TL 3821 0056 centred)

The medieval built-up area is to the south of the monastic precinct. The oldest portion of it appears to be that closest to the church and market-place, although it expanded to the east, south and finally the west over the centuries.

- *Church Street:* The excavation at 6, 6A and 7 Church Street (Clarke *et al*, 1993) showed that the start of the medieval urban sequence in this area may date to the Saxo-Norman period. The earliest medieval features consisted of lines of post-holes at approximate right-angles to the road and three gullies. Later features included two deep pits of early-13th century date; a clay-floored building of mid-13th century date (this had an undercroft added in the mid-16th century); late medieval chalk foundations for a timber-framed building; and a group of five ovens, dated by the pottery from c.1300 to the early 17th century. The ovens probably derive from the town bakery, for which there is documentary evidence from c.1230-5. Nos. 1-4 date to the 15th century.
- *Sun Street:* Excavation at the rear of 1-5 Sun Street, adjacent to Market Square revealed part of an 11th century ditch, which was possibly part of the *Eldeworth* enclosure (see below). This was back-filled and the ground levelled by the deposition of dumped clay layers. These were cut through by a well and a cess-pit, probably belonging to adjoining properties. Both these features were back-filled in the late-12th or early-13th centuries. Over these were placed a number of dumped layers cut by pits and post-holes, culminating in the digging of a large pit in the 14th century. All the features are of a type that would be expected in the backyards of medieval tenements. Finds from a number of small-scale excavations at the east end of Sun Street suggest that occupation of that area began in the thirteenth century.
- *Romeland:* Excavation on the ground adjacent to the Crown Inn on the east side of Romeland and at Reformation House on the west side showed that the area had been a swamp until the ground level was raised in the late 12th or early 13th century. At Reformation House a layer of Reigate stone chippings may indicate a stone-masons yard linked to the building of the Augustinian abbey. In the late 15th century a screens passage house was built on the site.
- *Sewardstone Street:* Excavation at 46/48 Sewardstone Street revealed medieval occupation dated by the pottery to 1060-1350. The site to the south, at 58/60 Sewardstone Street, had 15th century features.

### **The Market Place** (TL 3815 0057)

The Market place is set at the junction of Church Street, Silver Street, Sun Street and Sewardstone Street, and is rectangular in plan. It is possible that it was originally larger, but that its west and south sides have been encroached upon. The original limits are marked by Green Dragon Lane (Huggins, 1988b). Permission to hold a fair was granted in the early twelfth century, and a market confirmed at the end of that century. A rental of c.1235 mentions the presence of a number of shops and The Cage (the Abbot's prison) in the Market Square, and excavation has identified the site of the Moot Hall which stood in the centre of the square.

### *The Moot Hall* (TL 3816 0055)

Excavation in the centre of the Market Square has found a flint-and-stone walled building with an undercroft under the site of the post-medieval Market House. This building has been interpreted as the Moot Hall (mentioned in 1456). It is thought to have been built after 1250 and to have remained in use until the post-medieval period.

### *The 'Eldeworth' enclosure* (TL 3813 0052 centred)

The *Eldeworth* enclosure is first mentioned c.1235. The name means 'old enclosure'. This has been identified as being the enclosure shown on a map of the town dated to about 1600, measuring approximately 152m north-south by 110m east-west. The medieval market-place is sited roughly in the centre of the enclosure. However the enclosure angle in relation to the medieval street-pattern suggests that it pre-dates the medieval town. There is however some dispute as to the foundation date of the enclosure. A number of sections have been dug across it; at the 1-5 Sun Street site (Brown, 1995) the excavator dated it to the later portion of the eleventh century on the basis of the pottery and the stratigraphy. The section at the Baptist Church site also contained early medieval pottery (Huggins, 1991), however the ditch containing Bronze Age material at 6-7 Church St and the ditch containing Roman pottery at Sewardstone Street also appear to have formed part of this enclosure. Peter Huggins (pers. comm.) has argued that the ditch was first dug in the Bronze Age and remained a major feature in the landscape during the following millenium. He interprets the segments containing later material as deriving from periods of cleaning-out and subsequent silting-up. Nigel Brown, who excavated the segment at 1-5 Sun Street however argues that that particular segment cut a buried soil containing Roman and Saxo-Norman material and therefore that part of the ditch cannot pre-date the late 11th-century. What is clear is that the enclosure was old by c.1235 but that it remained a major landscape feature, becoming fossilised in the medieval property boundaries. The Saxon hundredal moot may well have been held inside it. Certainly the medieval market-place and moot-hall were roughly centrally placed within it.

### *The mills and mill-streams* (TL 3806 0068)

As mentioned above, three water-courses run into Waltham Abbey, from east to west the Corn Mill Stream, the Lower Mill Stream and the River Lea. The first two of these are artificial watercourses. The Lower Mill stream is thought to have been constructed to serve the mill that had been present in 1066, whilst the Cornmill Stream was probably built after the monastic precinct was laid out (c.1200) to bring water to the monastery and flush the sewers. The two streams ran parallel from the south-west corner of Veresmead to the mill site, where in later times two mills were recorded as having stood under one roof.

## *5.2.3 Post-medieval and modern synthesis and components*

The first major change of the post-medieval period in Waltham Abbey was the dissolution of the abbey in 1540. By the 1550's the demolition of the main portion of the abbey buildings had taken place, with the exception of the western nave which served as the parish church. In the 1590's Abbey House was built immediately to the north-east of the church. However, some of the medieval farm buildings continued in use until the nineteenth century. These were supplemented by additional post-medieval structures. The medieval Moot Hall was replaced by the Market House in 1670/80. The livestock market and butchers' shambles were sited in the market place and the yards of the inns along Sun Street. This portion of the market was moved to the Romeland area in the 1850's, thus relieving the central area of the congestion and disturbance caused by the movement of livestock. The majority of the buildings on the western and northern sides of the Market Square date to the 16th century.

The post-medieval urban components are:-

***The Church*** (TL 3813 0064)

The abbey was dissolved in 1540, and in 1541 it was leased to Anthony Denny. By the 1550's the demolition of the main portion of the abbey buildings had taken place, with the exception of the nave of the monastic church which remained in use as the parish church.

***Abbey House and grounds*** (TL 3825 0080)

In the 1590's Abbey House was built immediately to the north-east of the church, and part of one wall of this building survives. Some of the medieval farm buildings continued in use until the nineteenth century. These were supplemented by additional post-medieval structures. The moated area in the south-east corner of the extended monastic precinct was built as a water-garden.

Within the area once enclosed by the precinct wall to the north of Sun Street (Huggins, 1988) was buried a mutilated medieval statue of the Madonna. The burial is interpreted as an act by the pious following the statue's desecration at the Reformation. This area was then walled off by the building of a second wall to become kitchen gardens, first for Abbey House, and later for the Sun Street properties.

***Built-up area*** (TL 3821 0056 centred)

The built-up area extended along the existing medieval street-pattern, westwards along Bridge Street, eastwards down Sun Street and southwards along Sewardstone Street. In the mid-nineteenth century the area to the south-west of the town was infilled with terraced housing.

- *Sun Street:* The excavation at 1-5 Sun Street (Brown, 1995) revealed a large pit containing a quantity of butchered bone, suggesting that in the early post-medieval period the yards off Sun Street were used as shambles as well as part of the livestock market. Nos. 1-5 are 16th century in origin as are nos. 39-41 and 44 at the other end. The remainder of the buildings are 18th or 19th century in date.
- *Church Street:* At 6, 6A and 7 Church Street (Clarke *et al*, 1993) a mid-16th century undercroft was inserted into the standing medieval building. The town bakery on this site also continued in use until the early 17th century.
- *Sewardstone Street:* Excavation of 46/48 Sewardstone Street revealed the plan of a 16th century town house. A late 17th century brick-built latrine contained what was interpreted as the remnants from a meal; the contents included tableware, cutlery, joints of meat and a dish of raspberries (Huggins, 1969).
- *Romeland:* The late 15th century screens passage house at the Reformation House site has been interpreted as a house known to have been owned by Henry VIII. This was replaced by 17th-century and later timber-framed cottages, which were in turn succeeded by an early 18th century brick building. The Crown Hotel is 17th century in date.
- *Greenfield Street, Sewardstone Street, Victoria Road and Woollard Street:* The terraced housing here may have been purpose-built housing. These two-up two-down brick buildings form a discrete group with extensive gardens to the rear.

***The Market-place*** (TL 3815 0057)

The medieval Moot Hall continued in use until 1670-80, when it was demolished, and was replaced by the Market House which stood until 1852. Until the 1850's the market-place and the yards of the inns along Sun Street were used as a livestock market and butchers' shambles. Following this date the livestock market was moved to the Romeland area and the market square was used for the sale of groceries and dry goods. The majority of the buildings on the western and northern sides of the Market Square date to the 16th century.

### ***Long Pool*** (TL 3798 0079)

By c.1581, and possibly by 1528, part of the Lower Mill Stream was filled in and only the Cornmill Stream supplied the water to run the double mill at the Abbey gates. This it continued to do until the demolition of the mill in 1906.

In c.1581 the through route for navigation was diverted from the River Lea. The new route was probably down the Cornmill stream to the south-west corner of Veresmead and then possibly through a flash lock (later a pound lock) into Long Pool and back into the River Lea. This new route only lasted until c.1590, when Sir Edward Denny recut the passage of the River Lea.

### ***Industrial Archaeology***

(S. Gould, Essex County Council Archaeological Advisory Group)

Post-medieval Waltham Abbey had the usual collection of small-scale manufacturing sites; these included flour mills (powered by both steam and water), an iron smithy and several breweries; the latter being located beside public houses. In the 18th and early 19th century there was a calico and silk-printing works sited to the west of the abbey. By 1935 a substantial chemical factory, the 'Britannica Works' had been established on the eastern side of the town producing fertilisers and insecticides in a series of red-brick buildings. Power requirements were provided by a generator house placed centrally within the complex.

Waltham Abbey Royal Gunpowder Factory (RGPF) lies on the west side of the medieval town beside the River Lea. There is documentary evidence that by the mid-1660s gunpowder was being produced in various water-driven mills on North Site. The mills were purchased by the Government in 1787 and a complex network of canals were used to transport materials. Between 1801 and 1806 the factory expanded southwards with the creation of the Lower Island Works, and by 1870 there were 32 pairs of incorporating mills within the complex powered by water and steam. With the shift to chemically-based products in the 1880s the factory was to expand again with the creation on South Site of a purpose-built guncotton works; this was quickly followed by a nitro-glycerine and guncotton factory. Many technological innovations and developments in working practises took place on the Waltham Abbey site and when explosive manufacture ended in 1945 it became the most important non-nuclear research centre in Britain. The re-named Royal Armaments Research and Development Establishment finally closed in 1991 (RCHME, 1994).

The industrial archaeology components are:-

#### ***Eagle Brewery***

The Eagle Brewery is depicted on OS 1st Edn map (1873, sheet 57.2, TL 3763 0050) as an 'L' shaped building to the rear of the Eagle public house (formerly the Kings Arms Inn). It has been destroyed and the site is currently being built-over.

#### ***Steam Mills south of High Bridge St.***

The steam mills to the south of High Bridge Street (TL 3782 0052) were initially water-powered flour mills, with the addition of steam engines probably during the first half of the nineteenth century. The site has been destroyed and built over.

#### ***Flour Mill beside Cornmill Stream***

The present mill site (TL 3865 0066) may be that of the original corn mill mentioned in the Domesday Survey of 1086 (ESMR Nos. 3842, 3843, 3844). There were two mill streams serving two mills, side by side in the medieval period (ESMR No. 3843). The two mills were later combined under one roof probably by 1528 with power being supplied solely by the Cornmill Stream. The structure was rebuilt c.1735 (ESMR No 3844), and they are recorded as silk and corn mills on the Chapman and André map of 1777. Excavations by the Waltham Abbey Historical Society in 1953 revealed two floor

levels, the mills being demolished in 1907 (ESMR No. 3844). The area has recently been landscaped and both wheelpits have been retained as landscape features; these are built of brick and stone, and evidence of the mounting axle and sluice arrangements survive. The wheels were breast shot and the outflow is now culverted beneath Highbridge Street.

#### *Steam Mills beside Abbey Gardens*

These are marked as flour mills (TL 3830 0060) on the OS 1st Edn. map (1873, sheet 57.2) but the buildings had been converted to a smithy by 1897 (Ordnance Survey Second Edition). They have been demolished and built over.

#### *Britannica Works*

The Britannica Works chemical factory was established in the early decades of the twentieth century. Two existing domestic dwellings (Joyce House and Thrift Hall) were incorporated within the grounds of the chemical factory (TL 3870 0040). Much of the works has been destroyed and the surviving buildings have been extensively altered.

#### *Waltham Abbey Royal Gunpowder Factory North Site*

The Waltham Abbey Gunpowder Factory was established by the mid-1660s, and an engraving of 1735 depicts a whole series of water and horse-driven mills beside Millhead Stream (TL 3770 0180 [ESMR No. 3437]). Acknowledged at the time as one of the most modern works in England the site was acquired by the Government in 1787, and this resulted in a major expansion programme with the addition of many new buildings. Following a period of retrenchment between 1820-1850, output increased dramatically throughout the second half of the nineteenth century with the erection of six steam-driven incorporating mills on Queens Mead. Improvements in the manufacture of gunpowder and the introduction of new varieties of powder led to a major refurbishment of North Site during the 1870s.

The introduction of chemically based explosives during the late nineteenth century eclipsed gunpowder production and following experiments in the old saltpetre refinery, a purpose-built guncotton works was erected on South Site (see below). The demand for these products and in particular cordite led to the conversion of many of the gunpowder buildings on North Site; a nitro-glycerine factory was built on Edmonsey Mead and groups of guncotton stoves were also constructed. By 1909 the RGPF was producing cordites MD, MDS, MDT and MK1, various gunpowders, fuse powders, picric powder and guncotton.

Expansion continued throughout both World Wars, and this included the creation of a nitro-glycerine factory on New Hill. Despite all the new construction, explosive production ceased in 1943 and manufacture was transferred to factories in the west of Britain. Waltham Abbey Royal Gunpowder Factory formally closed on 28 July 1945.

The site was re-opened only two days later as an experimental station of the Armament Research Department to investigate explosives and intermediaries, and improved methods of production. Many of the former process buildings were converted into laboratories and research was undertaken on liquid fuels for rockets and cast double base rocket motors.

By the 1960s Waltham Abbey was the most important government laboratory in Britain for the research and development of non-nuclear explosives of every kind. The main areas of work included the degradation of explosives, initiating substances, solid propellant charges and the use of polymers. The 1980s was a period of contraction, although research continued into the chemistry and physics of energetic materials and propellants, and into polymeric and composite materials for use in weapon systems. Waltham Abbey Royal Gunpowder Factory finally closed on 30 June 1991.

In 1993 an earthwork and architectural survey was undertaken by the Royal Commission on the Historical Monuments of England (RCHME 1994), funded by English Heritage to enable informed decisions to be taken on the preservation or otherwise of the physical remains. Individual features were identified by number as part of a 1:1000 scale topographical survey. All buildings, structures and selected earthworks were recorded at RCHME level 1 and more detailed reports were completed for some of the larger more complex buildings. The results were published by the RCHME in 1994 and the survey data deposited in the National Monuments Record Centre, Swindon. An intensive watching brief was also maintained by a professional archaeologist during groundworks associated with the remediation and decontamination of North Site (Chaddock 1995 and Ford 1995). Where appropriate, additional details were added to the RCHME component sheets and an extensive photographic record was maintained; the archive is currently housed in the lecture theatre on North Site.

#### ***Waltham Abbey Royal Gunpowder Factory Lower Island Works***

The Lower Island Works was developed in the early years of the nineteenth century on a small island to the south of North Site (TL 3763 0000 [ESMR 15129]). Originally there were three mills, but additional mills, magazines, a press house, and, a corning and granulating house were quickly added; materials were transported by water and on the internal tramway. Most of the buildings survived until the Second World War, although they were no longer used for gunpowder manufacture. The structures were fired in the 1950s and 1960s, and had mostly been demolished by 1970. Although there are no standing remains, survey by the RCHME (1994) has shown that the footings/foundations for many of the buildings survive beneath the ground.

#### ***Waltham Abbey Royal Gunpowder Factory South Site***

Land to the south of the Lower Island (TL 3800 9900 [ESMR No. 15096]) was acquired by the Government in 1888 and the erection of a guncotton factory was quickly followed by a nitro-glycerine and cordite plant. Improvements in the manufacture of cordite in the early twentieth century led to the construction of 40 tray and reel stoves to the south of Black Ditch, surrounded by blast mounds and served by canals. Various experimental production facilities were established on South Site during the inter-war period and many of these were then used as model plants that were replicated elsewhere in Britain and abroad. During the post-war research phase investigations were carried out on improved production methods for RDX explosive, plastic propellants for rockets and ballistic assessment.

Many of the buildings survive, but much of the nitro-glycerine factory has been demolished. Several structures retain important technological information including safety apparatus, cordite presses and wheeled carts. South Site also retains an extensive documentary archive.

## **6. SUMMARY OF GENERAL IMPORTANCE OF THE TOWN**

### **6.1 Historical and archaeological summary**

Waltham Abbey is a town of major importance archaeologically and historically and the abbey and the Gunpowder Works are of national importance. In the Saxon period it was a royal ecclesiastical centre, with the church serving as a Minster. It had become an urban centre by the end of the Saxon period, primarily because of its association with the church and royal enclosure, and also because of its position on the River Lea. In the medieval period the urban area developed as a small market town dominated physically and economically by the abbey. The post-medieval period saw the closure of the abbey and the development of Waltham Abbey not only as a market town but also as an industrial centre with the establishment of the Gunpowder Factory in the 1660's.

### **6.2 Survival**

Waltham Abbey is one of the most extensively investigated urban and ecclesiastical sites in Essex. Numerous excavations, structural surveys, evaluations and watching-briefs have taken place, the



majority of which have been published. The level of historical documentation is very good for the Abbey and the Royal Gunpowder Factory and quite good for the town. Moreover, the documentary analysis undertaken by K. Bascombe of the WAHS has proved to have been of considerable value in aiding the interpretation of sites.

Waltham Abbey can be divided into two areas in terms of survival of the archaeological evidence. The Abbey, monastic precinct and Veresmead are effectively a green field site, with some standing remains, and of course the church itself. The below ground archaeology is in a good state of preservation, assisted by the fact that much of the building material was stone and rubble. There is some sub-surface stratigraphy, particularly in and around the church, where there are at least five phases of church superimposed on one another. In the western half of the site the archaeological remains are interleaved by flood silts which both protect and mask them. The building of the relief road and the car-parks has probably totally destroyed the archaeology in those areas, although rescue excavation was undertaken by the WAHS (Huggins, 1972).

Within the town the archaeological record has been disturbed by generations of urban life, most recently by the building of Leverton Way and the car-parks on either side of Sun Street (although due to the depth of deposit on the northern side of Sun Street it is possible that the lower levels of stratigraphy still survive beneath the car-park). However excavation has shown that important sub-surface deposits remain. Some depth of stratigraphy survives dating from the prehistoric to the post-medieval period; in the western half of the town this is interleaved by layers of flood deposits. The post-medieval built environment, both Listed and unlisted, is still extant in the historic core area of Market Square, Sun Street and Church Street (that of Sewardstone Street has largely been destroyed), with a second discrete group on Greenfield Street and Victoria Road/Woolard Street.

Waterlogged deposits have been found both in the streams and in the flood silts beside them on the western and northern side of the town. They have also been found in some features, such as cess-pits, wells and other features in the main town area. The soil type is conducive to the survival of artefacts and faunal remains. The western side of the town, including the Gunpowder Factory, is an area at risk from fresh-water flooding.

The Abbey, monastic precinct and the area of the Market Square and Sun Street have an important amenity value in that they have a distinct 'historic' appearance with the magnificent church looming over the extant late medieval and post-medieval buildings. They retain the air of a small market town despite being located on the edge of Greater London. The area of the Abbey is incorporated into the Lee Valley Regional Park, and the Park Centre to the north-west of the church includes an information centre. The town lies close to Epping Forest, which was historically the Forest of Waltham. The Royal Gunpowder Works (North Site) is to be re-developed as a major heritage centre devoted to the history of explosives and propellants, and it is hoped this will be opened in 1999.

### **6.3 Current planning constraints**

The historic town and the Abbey is largely within a Conservation Area, with the exception of the east side of Sewardstone Street. The majority of the Abbey site is a Scheduled Ancient Monument (SAM 60), with the exception of the Parish Church of Holy Cross and St Lawrence, the graveyard, the Vicarage, Grange Yard, the moated enclosure and Redholm field. The Abbey (except for the church, graveyard and vicarage) is within the Lee Valley Regional Park. The Royal Gunpowder Factory (north site) is also a Scheduled Ancient Monument (SAM 21567). Redholm field and part of the Royal Gunpowder Factory are Sites of Special Scientific Interest. Two areas of the Gunpowder Factory are also of Special Interest for Nature Conservation. There are 68 buildings listed as being of special architectural or historical interest, sub-divided into two Grade I Listed Buildings, 13 Grade II\* and 53 Grade II, of which 21 are within the Royal Gunpowder Factory.

#### 6.4 Research priorities

The origins, development and inter-relationship between the royal/ecclesiastical centres and the proto-urban area is crucial to an understanding of the early medieval town (Rippon, in Bedwin, 1996; Brown and Glazebrook, 1997). With regard to this the archaeology of Waltham Abbey has a significance at a national and international level.

The research priorities for the Saxon period are:-

- The abbey building, the area of the proposed royal enclosure to the north of the abbey, the area around the market square and the *Eldeworth* enclosure are the sites most likely to aid our understanding of the development of Waltham Abbey in the late Saxon period.

The understanding of the development and function of the medieval small market town and the testing of theories on social action, economy, politics etc. have been highlighted as an important area of study at the national level (English Heritage, 1997). The extensive work undertaken on both the monastic complex and the urban centre with its full publication record could be used to address questions of demography, economy, social organisation and culture (Ayres in Brown and Glazebrook, 1997). The relationship both with the Abbey and with London is of importance in understanding patterns of trade, exchange and patronage.

The research priorities for the medieval period are:-

- Synthesis of the archaeological work undertaken in Waltham Abbey, both within the town and abbey precinct, is required in order that the wider issues of population, economy and social organisation can be addressed and comparisons be made with other towns.
- The records of the relatively few unpublished sites should be examined to assess their potential to further our understanding of this important town.
- Ceramic studies have considerable potential in addressing the problems of economy and social and cultural organisation. As the most extensively published town in the county, a ceramic synthesis for the whole town is possible looking at spatial differences and changes through time (as for Chelmsford and Maldon). The pottery from religious sites can be compared with that from secular sites and the study of the distribution of imported pottery may indicate whether its presence is as a consequence of trade and/or a reflection of the status of the sites on which it is found.
- The Market Square, Sun Street and Church Street are probably the most archaeologically informative areas within the area of the medieval town. The entirety of the area of the monastic precinct and grange is known to have great archaeological potential.
- The waterway system is of particular interest technologically: it is of very early construction and complex design. It served the power needs of the corn mills, fulling mill, calico printing works and in the post-medieval period the gunpowder mill, and was an important transport link between Waltham Abbey and London.

The process of change from medieval to post-medieval traditions has been highlighted as one meriting particular study (English Heritage, 1997). In Waltham Abbey the end of the medieval period and beginning of the post-medieval period is marked by the dissolution of the abbey and its replacement by Abbey House, and in the 1660's by the establishment of the Gunpowder Factory, making the town an important industrial centre.

The research priorities for the post-medieval and modern period are:-

- This period has been generally neglected within the region's archaeology (Glazebrook, 1997, 67). However there is considerable potential for research within Waltham Abbey as the excavations within the town area have established. Particular themes include the problems of supply and demand, the effect on the local economy of the Dissolution of the Abbey, the nature of housing and the growth of industrialisation within the town.

- There is little real understanding of the presence and nature of any surviving physical remains of Abbey House and grounds, and what they may contribute to our understanding of this monument and the role that it played within the urban context.
- The Gunpowder Works is currently being intensively studied and recorded. However the nature of its relationship with the wider urban area is not fully understood, particularly with respect to the provision of housing and other services and the effect on the local economy.

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## 8. ACKNOWLEDGEMENTS

I would like to thank Peter Huggins of the Waltham Abbey Historical Society for information and advice.

## APPENDICES

### APPENDIX 1: Documentary sources

Archive	Classmark	Number	Date	Description
E.R.O.	T/A	100		Extract from cartulary of Waltham Abbey.
B.L.	La	xxii. 69		Waltham Abbey, list of records to identify lands belonging to.
B.L.	Add. MS.	3361		Heriots of Sewardstone manor.
E.R.O.	D/DJg		medieval	Useful collections of deeds.
B.L.	?	798, f. 45b.	temp. Hen. II - Ric. I	List of royal grants to Waltham Abbey. (17th cent. copy).
E.R.O.	T/P	145/3	1222, 1270-71	Translation of survey of Waltham Abbey estates (1222) and court roll (1270-71).
B.L.	various, esp. Harl.		late 13th cent. onwards	Very large number of grants, fines and misc. land transactions in Waltham Holy Cross and Sewardstone in various collections. See B.L. cumulative catalogue of manuscript sources for full list.
P.R.O.	SC6	1090/7	3-4 Edw. II	Account. (May be another Waltham?)
E.R.O.	D/DU	389/1-29	1321-1636	Deeds of properties belonging to Waltham Parish church.
P.R.O.	SC6	1093/14	28 Hen. VI	Account of arrears of lands of Margaret the Queen, incl. Waltham. (May be another Waltham?)
P.R.O.	SC6	1119/8	8-9 Hen. V	Account incl. Waltham.
E.R.O.	D/DP	M1154	1456	Court roll of Waltham Abbey.
B.L.	Harl.	111 C. 49-53	1480-1560	Extracts from court rolls of Waltham.
P.R.O.	SC2	174/2	3-17 Hen. VII, 3-7 Hen. VIII	Courts of Abbot of Waltham Holy Cross.
E.R.O.	D/DBa	Q2	1486, 1494	Charters from Westminster abbey.
B.L.	Harl.	111 C.45-48, 59	1527-1561	Extracts from court rolls of Sewardstone.
P.R.O.	SC 12	6/64	Hen. VIII	Valor of Waltham Abbey.
P.R.O.	SC 12	4/45	34 Hen. VIII	Detailed rental of Waltham (prob. Waltham H.C.).
P.R.O.	SC 12	7/61-2	37 Hen. VIII	Survey of Sir Hump. Browne's lands in Waltham Park.
E.R.O.	D/DCw	M16	c. 1539	Abbey cellarer's abstract of court rolls.
P.R.O.	SC 12	7/60	Edw. VI	Detailed rental of Waltham (prob. Waltham H.C.)
P.R.O.	SC 11	937	1 Edw. VI	Rental of lands lying outside the king's park.
B.L.	Add. Ch.	6013	1550	Lands late held in Waltham Holy Cross by the Guild of St. Mary.
P.R.O.	DL 44	82	5 Eliz.	Certificate as to spoil (?) of Copt Hall manor-house and park.
E.R.O.	T/M	125	c. 1590	Estate map of Waltham Holy Cross, although pictorial and inaccurate, showing Waltham town and buildings, water and fulling mills, waterways. No scale.
B.L.	Add. MS.	37665	16th cent.	Cartulary of Waltham Abbey.
E.R.O.	D/P	75/5	1624-70	Detailed churchwardens accounts.
E.R.O.	D/DJg	M1-42, 45-6	1633-1918	Court rolls, books, papers of manor of Waltham Holy Cross.
E.R.O.	T/A	6/2	1638-1722	Microfilm of court rolls of Waltham Holy Cross.
E.R.O.	T/A	499/1-4	1669-1925	Transcripts of court records of Waltham Holy Cross.
E.R.O.	T/A	6	1677-1889	Court rolls of manor of Waltham Holy Cross in Northants Record Office. See also T/A 395/2.
B.L.	?	752, f.29	1749	Account of Waltham Abbey by S. Lethieullier.
E.R.O.	D/DHt	P58	1776	Estate map of Waltham Holy Cross, excluding most of town area but showing market place,

				churchyard and other features. Scale: 20 in. to 1 m.
P.R.O.	MR	593, 595	1783	Map of the Royal Gunpowder works at Waltham Abbey and fishery on the river Lea. Scale: 3&1/2 chains to an inch.
E.R.O.	T/M	335	1783	Detailed estate map showing the Powder mills etc at Waltham Abbey, with function of each building. Scale: 22 in. to 1 m.
B.L.	Add. MS.	36362, 36404; 36426; 36979	1800-1848	Drawings of Waltham Abbey. See B.L. cumulative catalogue of manuscript sources for folio numbers.
P.R.O.	MR	577	1800; 1853	Plan of property of Board of Ordnance at Royal Gunpowder Works at Waltham Abbey. Church in perspective. See also: P.R.O. MR 580(2) of 1801. Scale: 90 yards to an inch.
P.R.O.	MR	580(3)	1806	Plan of the various buildings, showing the proposed improvements to the Royal Gunpowder Works. Acreages. Church in perspective. Scale: 2 chains to an inch.
P.R.O.	MR	580(1)	1806	Plans, sections and elevation of offices at the Royal Gunpowder Works Waltham Abbey. Scale: 8 ft to an inch.
P.R.O.	MPH	418	1811	Plans of Royal Gunpowder Works, Waltham Abbey. (1) Plan and elevation of first clerk's house. Reference table. (2) Plan and elevation of storekeeper's and clerk of the cheque's houses. reference table. Scales: 16ft to an inch.
E.R.O.	Q/RUm	1/22	1812	Lea Navigation Map showing a 1/2 mile stretch above Waltham Powder Mills with block plan of gunpowder mills. Scale: 16 in. to 1 m.
E.R.O.	D/DHf	P1	1820's	About 70 sketch maps for the 1824-5 parish map.
W.A.H.S.	-	-	1824-5	Parish map of Waltham Holy Cross on which the Tithe Map is based.
E.R.O.	T/M	273	1826	Detailed plan of town, showing streets, owners, houses and other buildings, government gunpowder mills, River Lea and waterways. Scale: 53.2 in. to 1 m.
P.R.O.	MPHH	271	c. 1827	Plan showing the sites of the various buildings of the Royal Gunpowder Manufactory. Reference tables. Scale: 200 feet to an inch.
E.R.O.	D/CT	381	1842	Tithe map, including the town. Scale: 20 in to 1 m.
B.L.	Add. MS.	42001, f. 22; 42042, ff. 158- 160.	19th cent.	Drawings of the Abbey church.

APPENDIX 2: Listed buildings

SERIAL NO.	DATE	STREET	NUMBER	NAME	BUILDING TYPE	GROUP VALUE	GRADE	MATERIAL
1/176		SUN STREET	18, 18A		SHOP	Y	II	PEBBLEDASH
1/1	12			CHURCH OF HOLY CROSS & ST LAWRENCE, RUINS TO E. OF CHURCH		Y	A	
1/1B	12/13			MIDNIGHT CHAPEL		Y	II*	RUBBLE, ASHLAR
1/1E	12/13			WALTHAM ABBEY WALLS, INCL. CHAPTER HOUSE WALL	WALLS	Y	II	RUBBLE, FLINT, BRICK
1/1A	14			ABBAY GATEWAY	GATEHOUSE	Y	II*	ASHLARED, BRICK
1/14	15/16			WALTHAM ABBEY GARDEN WALL	WALL	Y	II	BRICK
1/197	15/16	CHURCH STREET	3, 4		SHOP	Y	II	STUCCOED
1/47	15/16	CHURCH STREET	2		SHOP	Y	II	ROUGHCAST, WEATHERBOARDED
1/57	16	MARKET SQUARE	25		SHOP	Y	II	TIMBER FRAMED,
1/28	16	MARKET SQUARE	21		PUBLIC HOUSE	Y	II	ROUGHCAST
1/29	16	MARKET SQUARE	20	THE GREEN DRAGON PUBLIC HOUSE	PUBLIC HOUSE	Y	II	TIMBER FRAMED
1/27	16	SUN STREET	1		SHOP	Y	II	TIMBER FRAMED
1/168	16	SUN STREET	39		SHOP	Y	II*	TIMBER FRAMED, PLASTERED
1/169	16	SUN STREET	41		HOUSE	N	II	TIMBER FRAMED, STUCCOED
					HOUSE	N	II*	TIMBER PEBBLEDASHED, WEATHERBOARDED, FRAMED,
1/104	16/17	CHURCH STREET		LYCHGATE HOUSE	HOUSE	N	II	WEATHERBOARDED, STUCCOED
1/1D	16/17	HIGHBRIDGE STREET		WALTHAM ABBEY VICARAGE	HOUSE	Y	II*	
3/208	16/17	HIGHBRIDGE STREET	36		HOUSE	Y	II*	
1/48	16/17	MARKET SQUARE	13	THE QUEEN'S ARMS PUBLIC HOUSE	PUBLIC HOUSE	Y	II	BRICK
1/163	16/17	SOUTH PLACE	1-4		HOUSE	Y	II	TIMBER ROUGHCAST
1/184	16/17	SUN STREET	44, 44A		HOUSE	N	II	BRICK
1/224	16/17	SUN STREET	5		SHOP	N	II	TIMBER FRAMED, STUCCOED
					BUILDING	Y	II	TIMBER FRAMED, STUCCOED
1/49	16/17	SUN STREET	3, 3A, 3B		BUILDING	Y	II	ROUGHCAST, WEATHERBOARDED
1/46	17	ROMELAND	4	THE CROWN PUBLIC HOUSE	PUBLIC HOUSE	N	II	TIMBER FRAMED, PLASTERED, BRICK
2/158	17/18	SEWARDSTONE ROAD		THRIFT COTTAGE	PUBLIC HOUSE	N	II	TIMBER FRAMED, FRAMED,
3/21	18	HIGHBRIDGE STREET	31		HOUSE	N	II	ROUGHCAST
3/209	18	HIGHBRIDGE STREET	38		HOUSE	N	II*	PEBBLEDASHED
3/10013	18	ROYAL GUNPOWER FACTORY		MOD BUILDING No A200 [WALTON HOUSE]	OFFICE	Y	II	BRICK
2/35	18	SEWARDSTONE ROAD	20	ESSEX HOUSE	OFFICE	Y	II	STUCCOED FLEMISH BOND BRICK
2/156	18	SEWARDSTONE ROAD	16		HOUSE	N	II*	CHEQUER BOND STRETCHER BRICK
					HOUSE	Y	II	BRICK



2/155	18	SEWARDSTONE ROAD	15					HOUSE			II	BRICK
1/51	18	SUN STREET	24					SHOP			II	STUCCOED, BRICK, TIMBER FRAMED, FLEMISH BOND BRICK
3/10014	18/19	ROYAL GUNPOWER FACTORY					MOD BUILDING No A201 & A202	GUNPOWDER WORKS			II*	
1/182	18/19	SUN STREET	38					SHOP			II	STUCCOED
1/50	18/19	SUN STREET	21				THE SUN INN	INN			II	STUCCOED, WEATHERBOARDED
3/45	19	HIGHBRIDGE STREET	23					SHOP			II	STOCK BRICK
1/134	19	HIGHBRIDGE STREET	14					SHOP			II	WEATHERBOARDED
1/135	19	HIGHBRIDGE STREET	16					SHOP			II	WEATHERBOARDED, STUCCOED
3/210	19	HIGHBRIDGE STREET	40.42					SHOP			II	STUCCOED
3/211	19	HIGHBRIDGE STREET	44					SHOP			II	STUCCOED
1/143	19	MONKSWOOD AVENUE					THE ROMAN CATHOLIC CHURCH OF ST. THOMAS MORE AND ST. EDWARD	CHURCH			II	BRICK, STONE
3/220	19	POWDERMILL LANE	9				MOD BUILDING No L141	OFFICE			II	BRICK
3/10024	19	ROYAL GUNPOWER FACTORY									II	ENGLISH BOND BRICK
3/10017	19	ROYAL GUNPOWER FACTORY					MOD BUILDING No L176 [BOILER HOUSE] & L177	BOILER HOUSE			II*	ENGLISH BOND BRICK
3/10023	19	ROYAL GUNPOWER FACTORY					MOD BUILDING No L154 [EXPENSE MAGAZINE]	MAGAZINE			II	ENGLISH BOND BRICK
3/10022	19	ROYAL GUNPOWER FACTORY					MOD BUILDING No L157 [GROUP C INCORPORATING MILLS]				I	ENGLISH BOND BRICK
3/10021	19	ROYAL GUNPOWER FACTORY					MOD BUILDING No L153 [GROUP D INCORPORATING MILLS]				II*	ENGLISH BOND BRICK
3/10019	19	ROYAL GUNPOWER FACTORY					MOD BUILDING No L148 [GROUP G INCORPORATING MILLS]				II*	ENGLISH BOND BRICK
3/10016	19	ROYAL GUNPOWER FACTORY					MOD BUILDING No L168 [ENGINE HOUSE & MECHANICS' SHOP]	ENGINE HOUSE			II*	FLEMISH BOND BRICK
3/10018	19	ROYAL GUNPOWER FACTORY					MOD BUILDING No L145 [GROUP F INCORPORATING MILLS]				II	ENGLISH BOND BRICK
3/10020	19	ROYAL GUNPOWER FACTORY					MOD BUILDING No L149 [GROUP E INCORPORATING MILLS]				II*	ENGLISH BOND BRICK
3/10009	19	ROYAL GUNPOWER FACTORY					THE LODGE, MOD BUILDING A221	HOUSE			II	FLEMISH BOND BRICK
3/10015	19	ROYAL GUNPOWER FACTORY					MOD BUILDING No L170A	MAGAZINE			II	ENGLISH BOND BRICK
3/10003	19	ROYAL GUNPOWER FACTORY,					MOD BUILDING L133	GUNPOWDER WORKS			II	ENGLISH BOND BRICK
3/10005	19	ROYAL GUNPOWER FACTORY,					MOD BUILDING L136	GUNPOWDER WORKS			II	ENGLISH BOND BRICK
3/10004	19	ROYAL GUNPOWER FACTORY,					MOD BUILDING L135	GUNPOWDER WORKS			II	ENGLISH BOND BRICK
3/10008	19	ROYAL GUNPOWER FACTORY,					MOD BUILDING L167	GUNPOWDER WORKS			II	FLEMISH BOND BRICK
2/157	19	SEWARDSTONE ROAD					THRIFT HALL	HOUSE			II	PEBBLEDASHED
1/167	19	SUN STREET	33								II	STUCCOED
1/183	19	SUN STREET	40								II	BRICK
1/181	19	SUN STREET	36					SHOP			II	BRICK

1/180	19	SUN STREET	34			SHOP	Y	II	BRICK
1/178	19	SUN STREET	28				Y	II	BRICK
1/175	19	SUN STREET	16			SHOP	Y	II	BRICK
1/166	19	SUN STREET	19			SHOP	N	II	WEATHERBOARDED
1/52	19	SUN STREET	24A, 26			SHOP	Y	II	BRICK, TIMBER FRAMED,
1/186	20	HIGHBRIDGE STREET			K6 TELEPHONE KIOSK	TELEPHONE BOX	Y	II	CAST IRON
3/10012	20	ROYAL GUNPOWER FACTORY			MOD BUILDING H7	GUNPOWDER WORKS	N	II	ENGLISH BOND BRICK
3/10007	20	ROYAL GUNPOWER FACTORY,			MOD BUILDING L165	GUNPOWDER WORKS	Y	II	BRICK

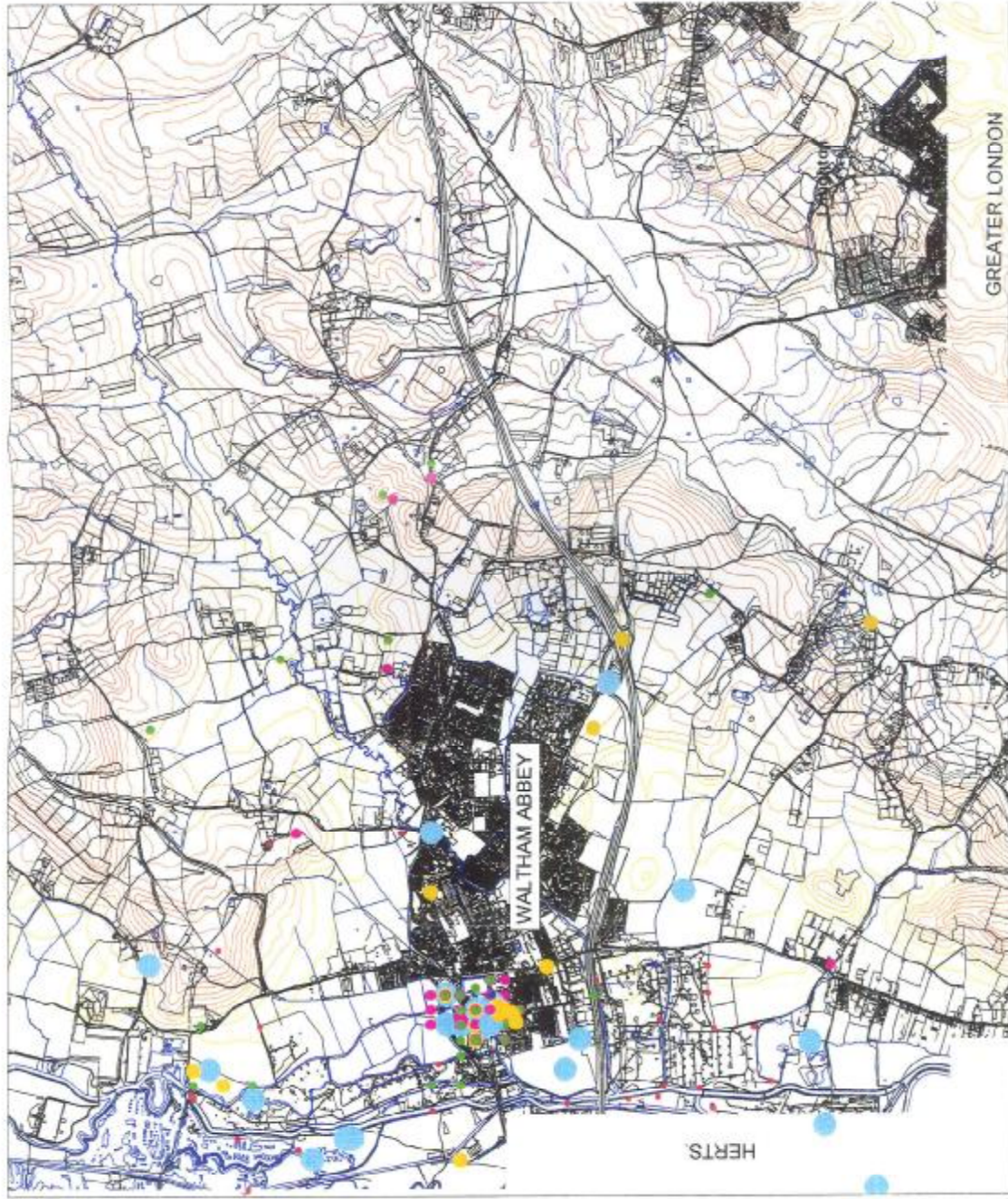
APPENDIX 3: Urban components list

ID	DESCRIPTION
SAXON	
152	CHURCH
153	BURIALS
154	HALL
155	BUILT-UP AREA
272	MILL
392	ROYAL ENCLOSURE
MEDIEVAL	
156	CHURCH
157	MONASTIC PRECINCT
158	MONASTIC GRANGE
159	VERESMEAD
160	HOSPITAL
279	FISH-PONDS
161	REDHOLM
162	STREET-PLAN
163	BUILT-UP AREA
164	MARKET-PLACE
165	MOOT HALL
166	ELDEWORTH ENCLOSURE
167	MILL AND MILL-STREAMS
393	INFILLED MARKET-PLACE
POST-MEDIEVAL	
168	CHURCH
169	ABBAY HOUSE AND GROUNDS
170	BUILT-UP AREA
171	MARKET-PLACE
182	MARKET HOUSE
172	LONG POOL
173	EAGLE BREWERY
174	STEAM MILLS SOUTH OF HIGHBRIDGE ST.
175	FLOUR MILL BESIDE CORNMILL STREAM
176	STEAM MILLS BESIDE ABBAY GARDENS
177	BRITTANNICA WORKS
178	WORKERS' HOUSING
179	ROYAL GUNPOWDER FACTORY NORTH SITE
180	ROYAL GUNPOWDER FACTORY LOWER ISLAND WORKS
181	ROYAL GUNPOWDER FACTORY SOUTH SITE

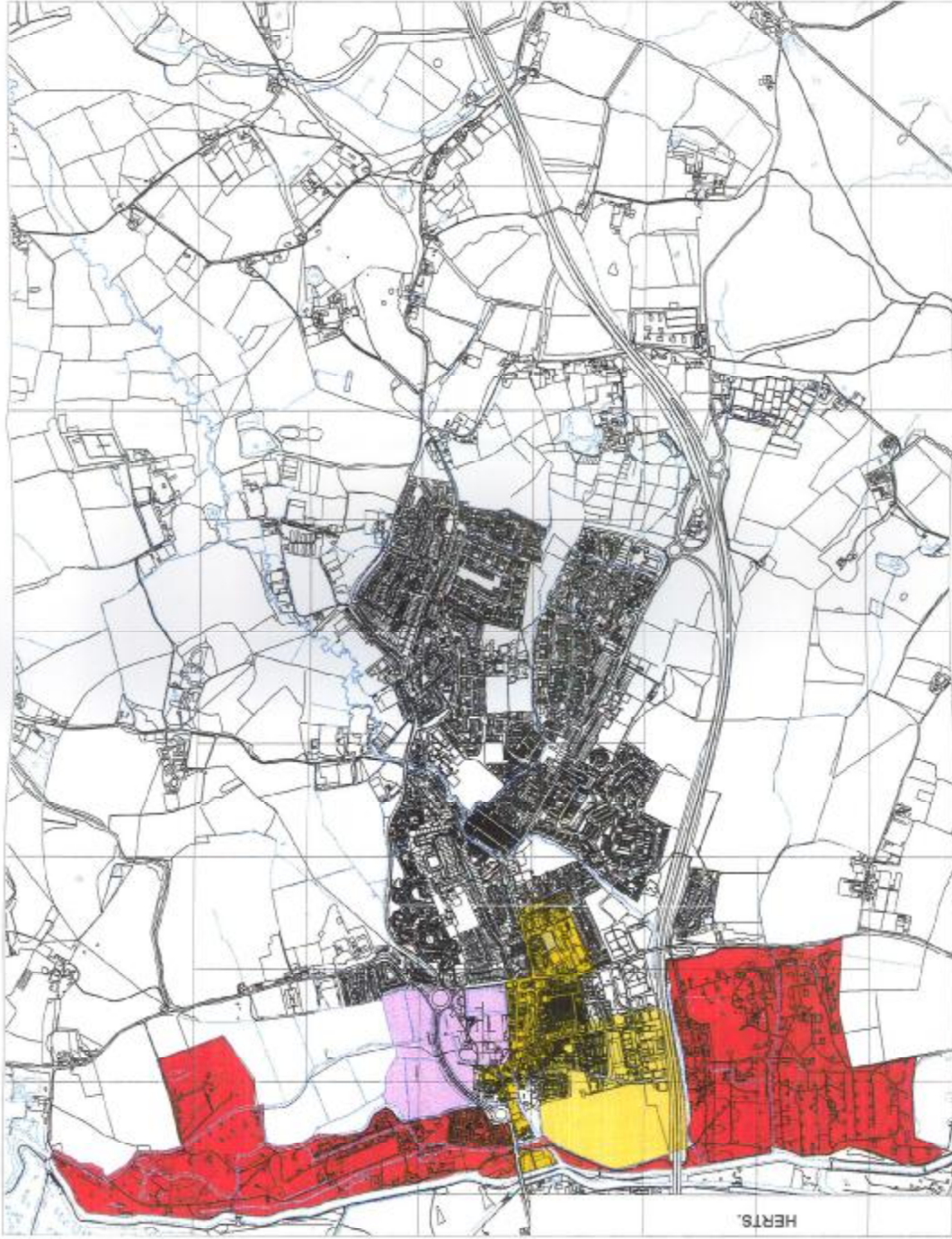
# WALTHAM ABBEY Environs



- SMR SITES
- Prehistoric
  - Roman
  - Medieval
  - Post-medieval
  - Modern
  - Uncertain



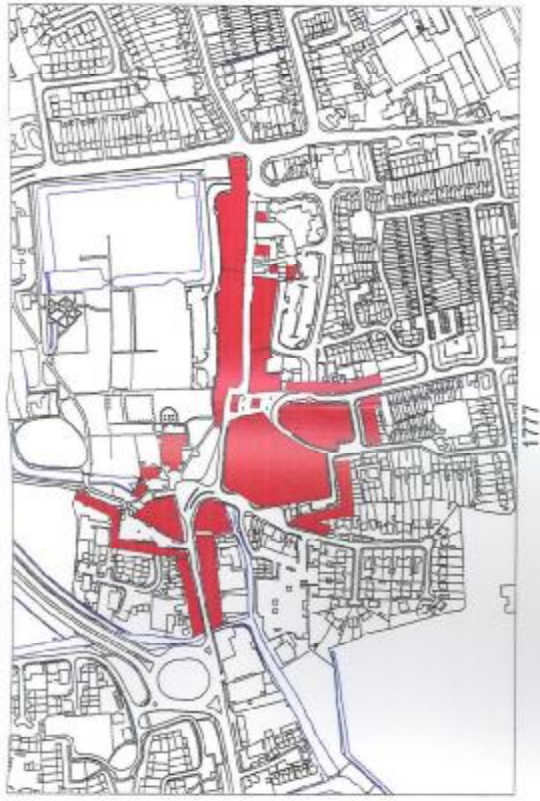
# WALTHAM ABBEY HISTORIC TOWN EXTENT



- KEY
- THE ABBEY
  - HISTORIC URBAN AREA
  - ROYAL GUNPOWDER FACTORY



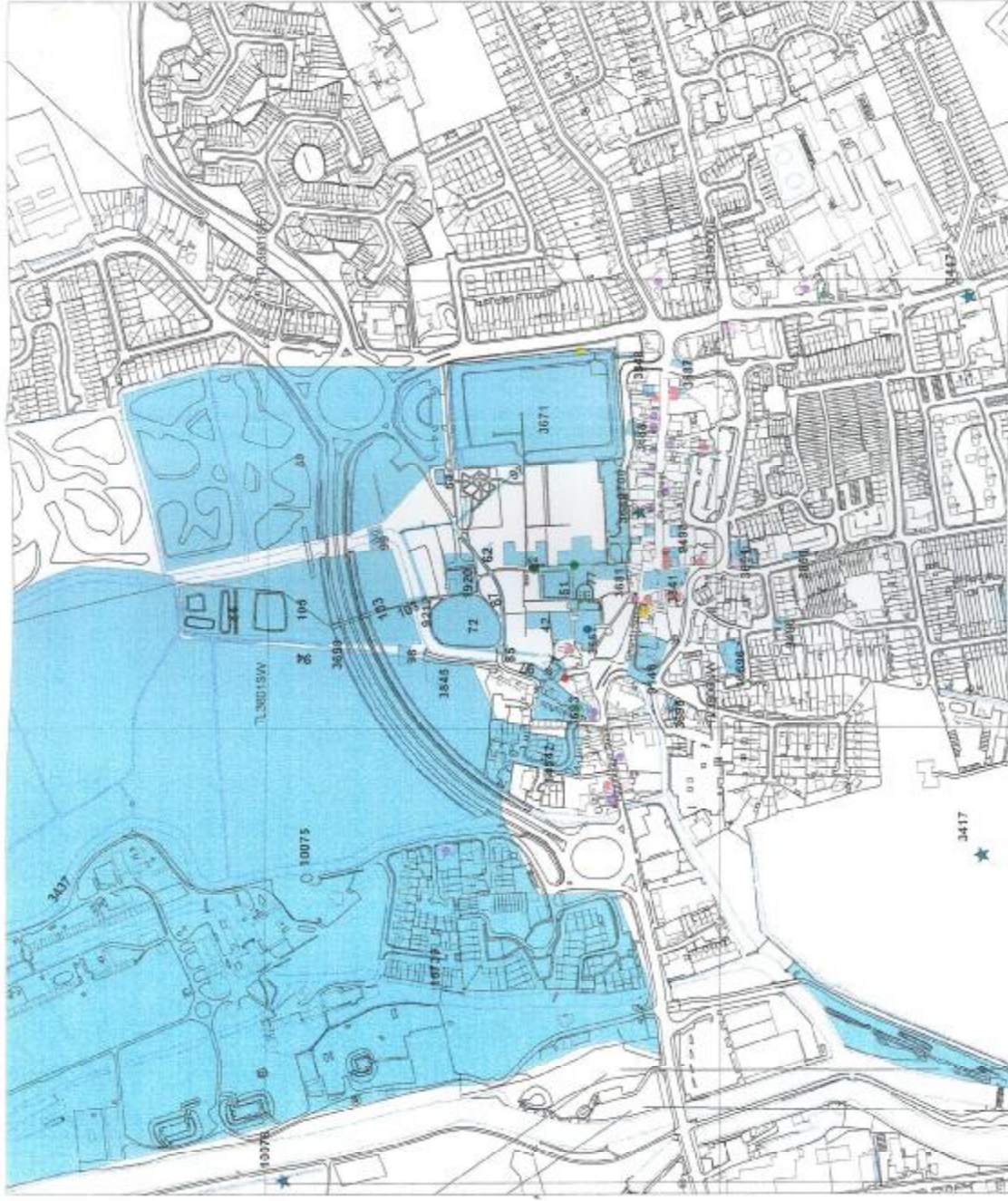
The Development of Waltham Abbey from the Cartographic Evidence



# WALTHAM ABBEY SMR and Listed Buildings



- Listed buildings by century
- 12
  - 14
  - 15
  - 16
  - MED
  - 17
  - 18
  - 19
  - 20
- SMR sites



# WALTHAM ABBEY Fieldwork



-  Excavations and watching briefs
-  Geophysics

1:2500





# WALTHAM ABBEY SAXON INTERPRETATION

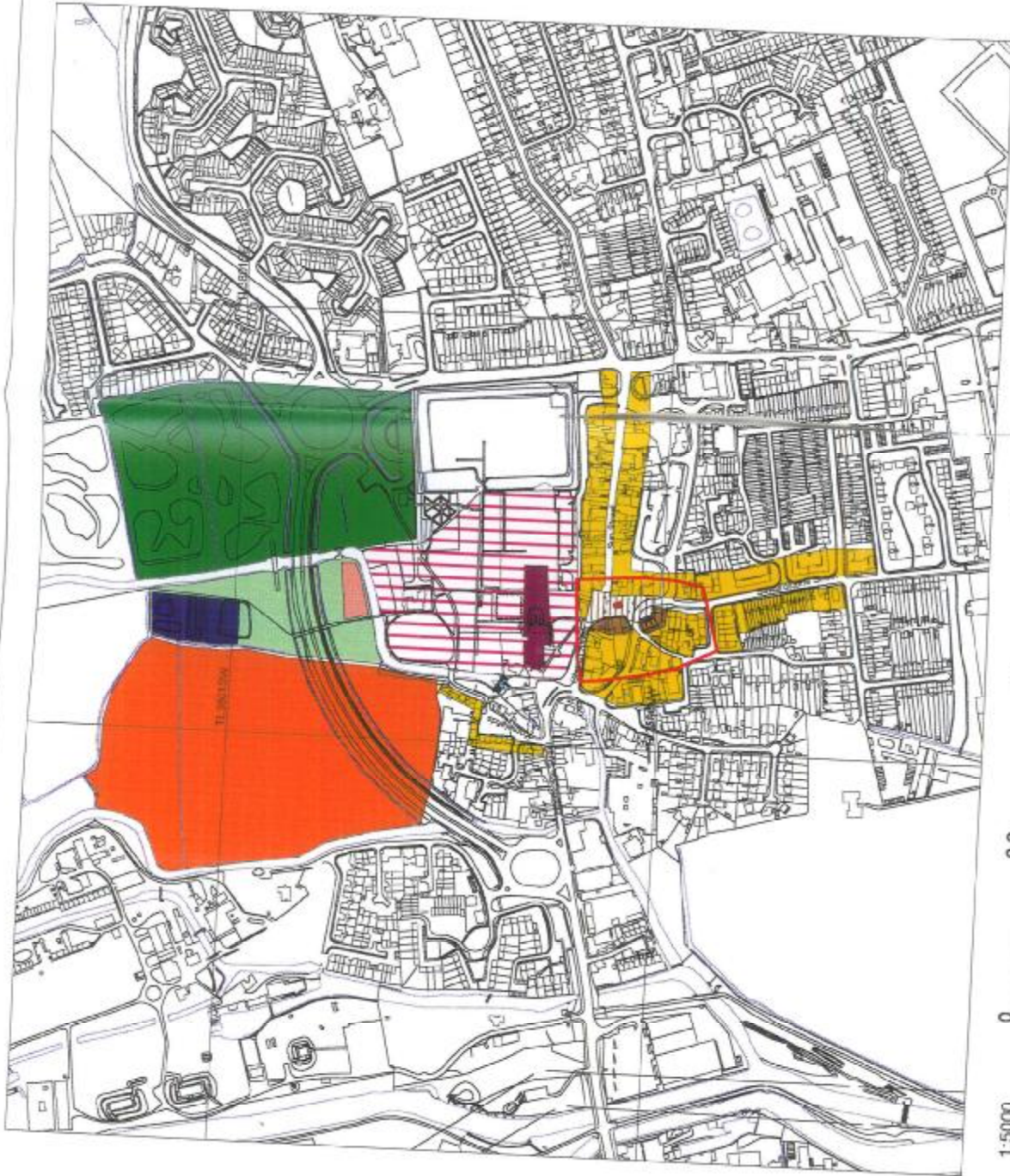


- KEY
- BUILT-UP AREA
  - BURIALS
  - CHURCH
  - HALL
  - MILL
  - ROYAL ENCLOSURE
  - ELDEWORTH ENCLOSURE



# WALTHAM ABBEY

## Medieval interpretation

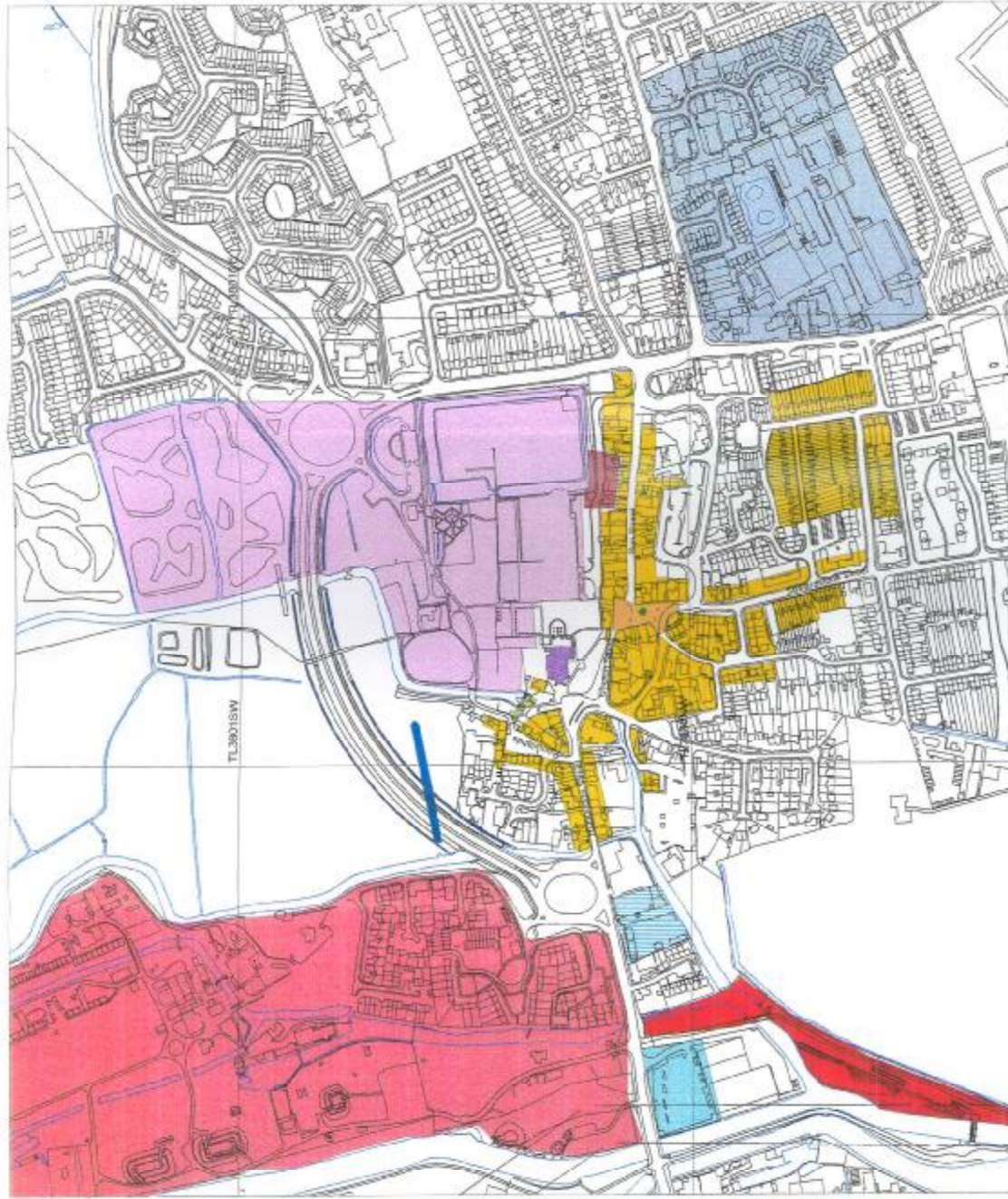


- KEY
- BUILT-UP AREA
  - CHURCH
  - FISH-PONDS
  - HOSPITAL
  - INFILLED MARKET-PLACE
  - MARKET-PLACE
  - MILL AND MILL-STREAMS
  - MONASTIC GRANGE
  - MONASTIC PRECINCT
  - MOOT HALL
  - REDHOLM
  - VERESMEAD
  - ELDEWORTH ENCLOSURE

1:5000



# WALTHAM ABBEY POST-MEDIEVAL INTERPRETATION



- KEY
- ABBEY HOUSE AND GROUNDS
  - BRITANNICA WORKS
  - BUILT-UP AREA
  - CHURCH
  - EAGLE BREWERY
  - FLOUR MILL BESIDE CORNMILL STREAM
  - LONG POOL
  - MARKET HOUSE
  - MARKET-PLACE
  - ROYAL GUNPOWDER FACTORY LOWER ISLAND WORKS
  - ROYAL GUNPOWDER FACTORY NORTH SITE
  - STEAM MILLS BESIDE ABBEY GARDENS
  - STEAM MILLS SOUTH OF HIGHERIDGE ST.

1:5000  
0 100 200 300 400 500 Meters

# WALTHAM ABBEY Constraints



-  Conservation Area
-  Site of Special Scientific Interest
-  Scheduled Ancient Monument
-  Site of Importance for Nature Conservation
-  Lee Valley Regional Park
-  Special Landscape Area
-  Metropolitan Green Belt
-  Listed Buildings

1:15000

0 0.5 1 Kilometers

