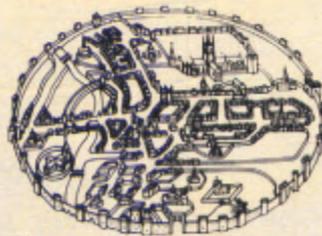


CANTERBURY'S



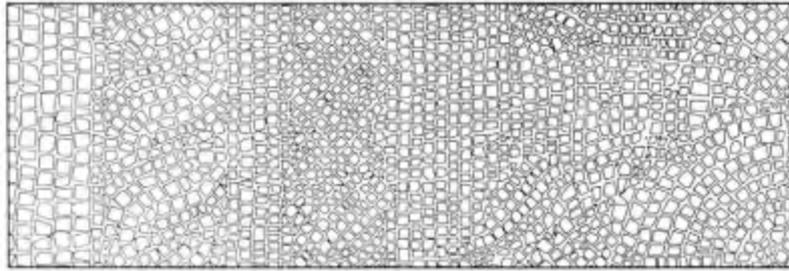
ARCHAEOLOGY



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ARCHAEOLOGY

14th ANNUAL REPORT

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The Canterbury Archaeological Trust is an independent charity formed in 1975 to undertake rescue excavation, research, publication and the presentation of the results of its work for the benefit of the public.

Grateful thanks are extended to all members of staff who have contributed to the production of this year's Annual Report.

Further copies of *Canterbury's Archaeology* can be obtained from our offices at 92A Broad Street, Canterbury, Kent CT1 2LU.

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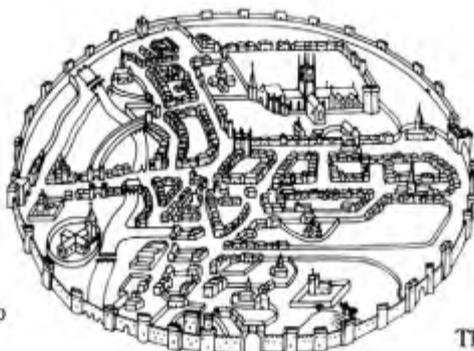
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FOREWORD



Patron of the Trust:
The Lord Archbishop
of Canterbury

Chairman of the Trust:
The Lord Mayor of Canterbury

CANTERBURY ARCHAEOLOGICAL TRUST LTD

Registered Office: 92a Broad Street, Canterbury, Kent CT1 2LU Telephone: Canterbury (0227) 462062

Those who can remember the state of the Trust in the early 1980s, when we were staving off bankruptcy and oblivion in a perpetual series of desperate stratagems, cannot but be delighted and perhaps somewhat amazed at the Trust's present position. The last five years have seen great and all round advancements of the Trust's activities, operations, publications, finances and standing in the academic world and in the community in general. As this report demonstrates, the year 1989-90 saw further advances in and consolidation of the Trust.

In particular, last year we undertook one of the biggest and most important of our excavations yet, the Longmarket site. Quite apart from the wealth of archaeology this has produced, the provision we made for schoolchildren and the public to visit this work right in the centre of Canterbury attracted great interest, and brought the work of the Trust into the consciousness of many who would otherwise never have heard of us. Also in the last year we have introduced new salary scales and terms of service which for the first time have put the Trust in a realistic and competitive position as an employer. We have completed the refurbishment of the main part of the Trust's offices in our own premises at 92A Broad Street, transforming the building into one of considerable attraction and utility. We have made great strides towards computerizing our operations as well as our administration. We have added substantially to our list of

publications, both specialist and popular, and we have begun a school education advisory service. Throughout the year we have managed to maintain a reasonable forward cash flow situation, without the agonizingly hand to mouth periods we have experienced in past years.

All these achievements are the result of a splendid team effort by the staff of the Canterbury Archaeological Trust, by the Friends and the Shop, with great support from the City Council and from other outside bodies such as the Kent Archaeological Society, English Heritage (H.B.M.C.), Kent County Council, and of course from developers and firms from whom we have obtained the majority of our income. To all of these the Management Committee is most grateful. But above all, the Trust owes much to the presight and imaginative leadership of our energetic and tireless Director, Paul Bennett, and I wish to place on record my own appreciation of and thanks for his magnificent and sustained work for the Trust.

For the future, the economic climate of the country as a whole may force us into a period of consolidation rather than further advancement. However, looking at the major developments and opportunities which are most likely to present themselves in Canterbury and in East Kent over the next few years, we may have some confidence that, with the continued support of all our friends and supporters, we shall at least maintain the advances we have made.

Dr F.H. Panton

Chairman of the Management Committee

INTRODUCTION

This report is a record of the activities of the Trust between July 1989 and July 1990. The report has been subdivided into several sections which deal with excavations in the City of Canterbury and the County of Kent, and buildings recorded in the last year. Separate sections compiled by members of the ceramics and small finds departments are accompanied by others on human bone and documentary studies, and recent work on computers. Reports on publications, education, the Friends of the Trust, the Trust shop and administrative matters, together with details of the Trust's financial status, complete the report.

As each year passes successive editions of '**Canterbury's Archaeology**' seem to grow larger. Although this is partly a consequence of an increasing workload, it is also a result of our desire to produce a readable, illustrated account of our yearly activities. There is now a marked increase in the public's awareness of archaeology and its place within the development sector. This fuller report goes some way to catering for the interested layman, who wishes to know more about our activities and particularly new discoveries illustrating aspects of the history of the City, District, and the County of Kent.

The Trust has expanded in the past year. We welcome the arrival of a new Finds Administrator, Julie Lovett and the return of an old stalwart, Simon Pratt, who has recently taken up the post of Site Director for the Longmarket excavation. Simon has been working in Rome for many years, but his association with the Trust extends back to 1975. We also welcome back from London, Mark Houlston (Site Supervisor) and Simon Nicholls (Site Assistant).

The Longmarket excavation, under the control of Field Officer Jonathan Rady, with the assistance of Simon Pratt and Steve Ouditt, has been the centre-piece of our excavation programme this year. A number of reports relating to that exciting operation can be found below. The excavation was truly European in character, being staffed by personnel from East and West Europe as well as from North America, Canada and Britain. It was also the first excavation conducted by the Trust on a high-profile site, and many tens of thousands of visitors have taken the opportunity to view the work in progress.

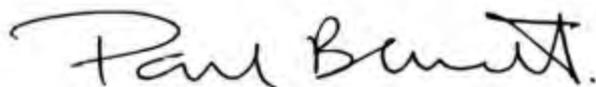
A number of other notable excavations were undertaken last year.

Although on a smaller scale than Longmarket they are of singular importance and range from watching brief works during development, evaluation operations in advance of proposed development, to excavations undertaken prior to the commencement of construction activity. These operations all represent a structured archaeological response to most forms of redevelopment; an archaeological response which would not be possible without the assistance of the planning department of Canterbury City Council, other district councils planning officials and in recent months the newly appointed County Archaeologist, Dr John Williams.

The Trust's Building Recording Officer Rupert Austin continues to work with the City Council's conservation staff, particularly Clive Bowley and the County Council's Conservation Officer Tony Wimble. The recording of 'standing archaeology', has always been a major component of our workload and we thank all those who have assisted us in the past year.

The Management Committee and the various sub-committees of the Trust have been very active since the publication of the last '**Canterbury's Archaeology**'. The officers of the Trust are all voluntary appointments and I would like to thank them for their sterling support during this busy year. They have been particularly helpful in establishing new rates of pay for Trust staff, to bring wage levels within the organisation on a par with similar archaeological bodies. The publication Sub-Committee under the chairmanship of Mrs Margaret Sparks, our Honorary Documentary Historian, continues to guide various on-going projects to a successful completion. I am pleased to record that the past year saw the publication of Volume IV in our monograph series. The progress of other volumes, together with other minor publications is reported below. The continuing support of the Kent Archaeological Society and particularly their Honorary Editor Dr Alec Detsicas is duly acknowledged here.

The Friends of the Trust have been particularly active on our behalf in the past year and a report from the Friends' Chairman Mr Lawrence Lyle appears below. The Friends, and Lawrence in particular, have given us tremendous support in the past and we hope the reading of this report will encourage others to join their number.



Paul Bennett

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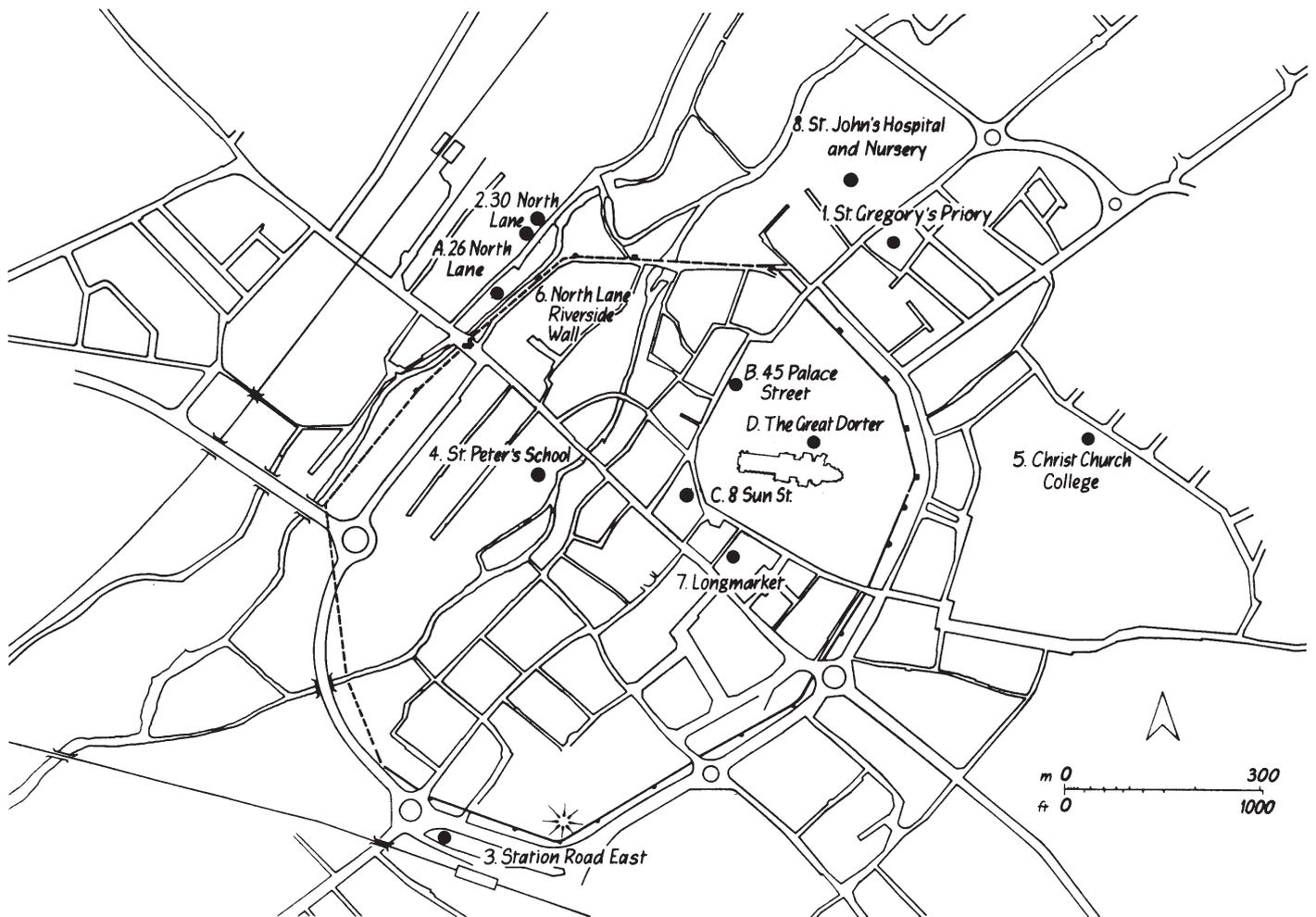
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I

EXCAVATIONS

CANTERBURY SITES



▲ Excavation and building recording sites discussed in this year's reports.

1 St Gregory's Priory

by Alison and Martin Hicks

A second phase of excavations at St Gregory's Priory (nos 90-91 Northgate) took place between July and December 1989. By December finance to continue the excavation was exhausted and since then work has been intermittent and mainly undertaken at weekends.

This second-phase operation, still in progress, has seen the exposure of archaeological levels preceding the construction of the twelfth-century aisled nave and claustral establishment for Augustinian canons regular described in last year's interim. Of particular importance was the exposure of a near-complete ground plan for the original Lanfranc foundation of c. 1085-7. A sampling of earlier stratified deposits, including some features of Anglo-Saxon and Roman date, has also been undertaken. Further work on the Lanfranc church and the earlier sequence of archaeological deposits on this site will continue until the postponed largescale development (including basement car park) commences in 1991.

The Lanfranc church was found to have survived at foundation level and a near-complete ground plan of this early structure was revealed. The church had apparently incorporated a number of additions in its short life before its destruction, perhaps by fire, in the first half of the twelfth century and subsequent rebuilding on a massive scale.

In its final form the Lanfranc church consisted of a single rectangular nave with central square tower and chancel. North and south transepts joined the nave west of the tower and each transept had a small eastward projecting two-cell chapel.

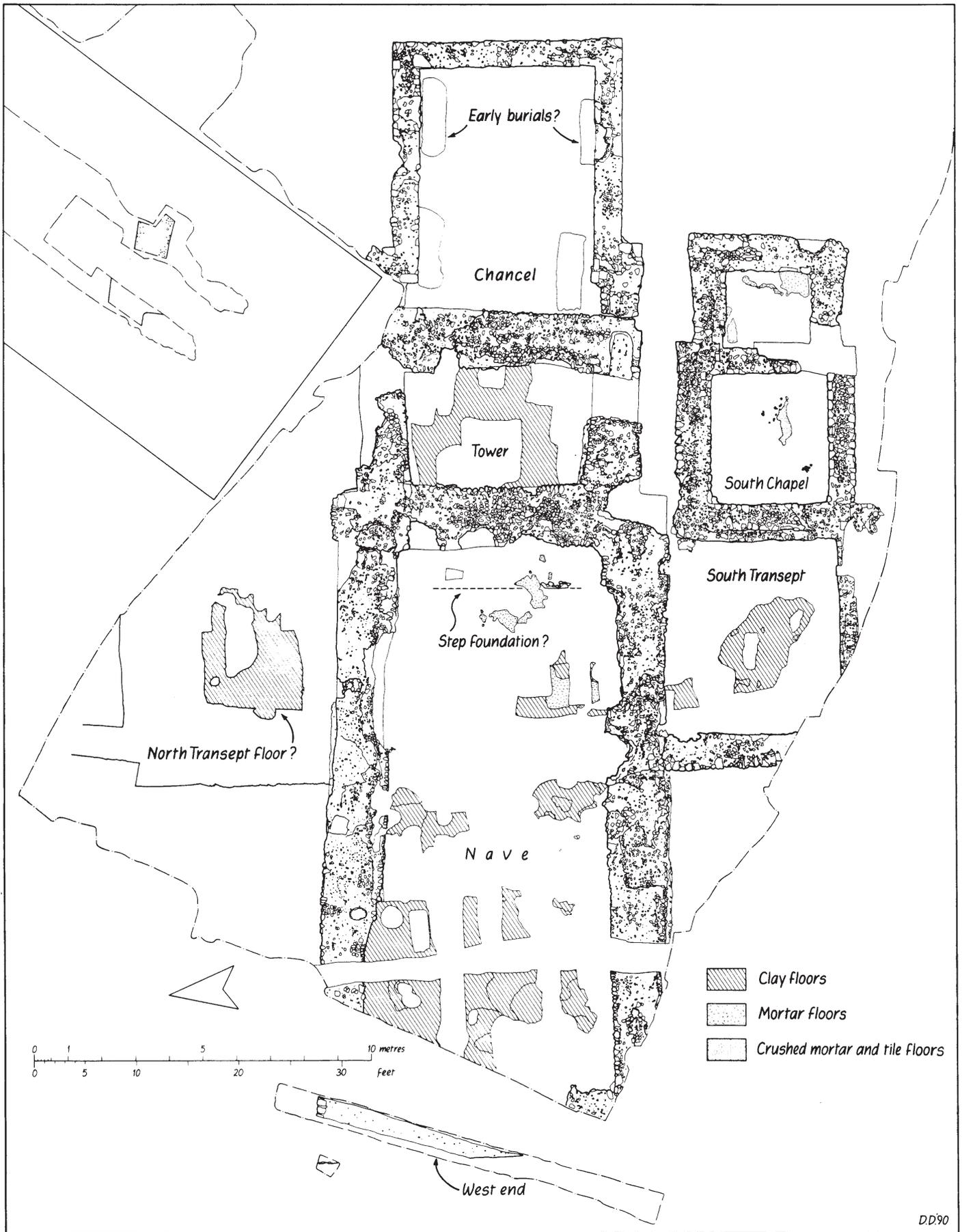
The nave and tower walls were constructed with massive foundations up to 1.60 m. thick, consisting of rammed gravel set in clay. Above subfoundation level the walls were taken up to offset level in water-

rounded flint cobbles and irregular-shaped flints, bonded with a pale buff mortar. Internal and external corners, where they survived, were provided with quoins of roughly-squared sandstone blocks. No wall superstructure survived above offset level.

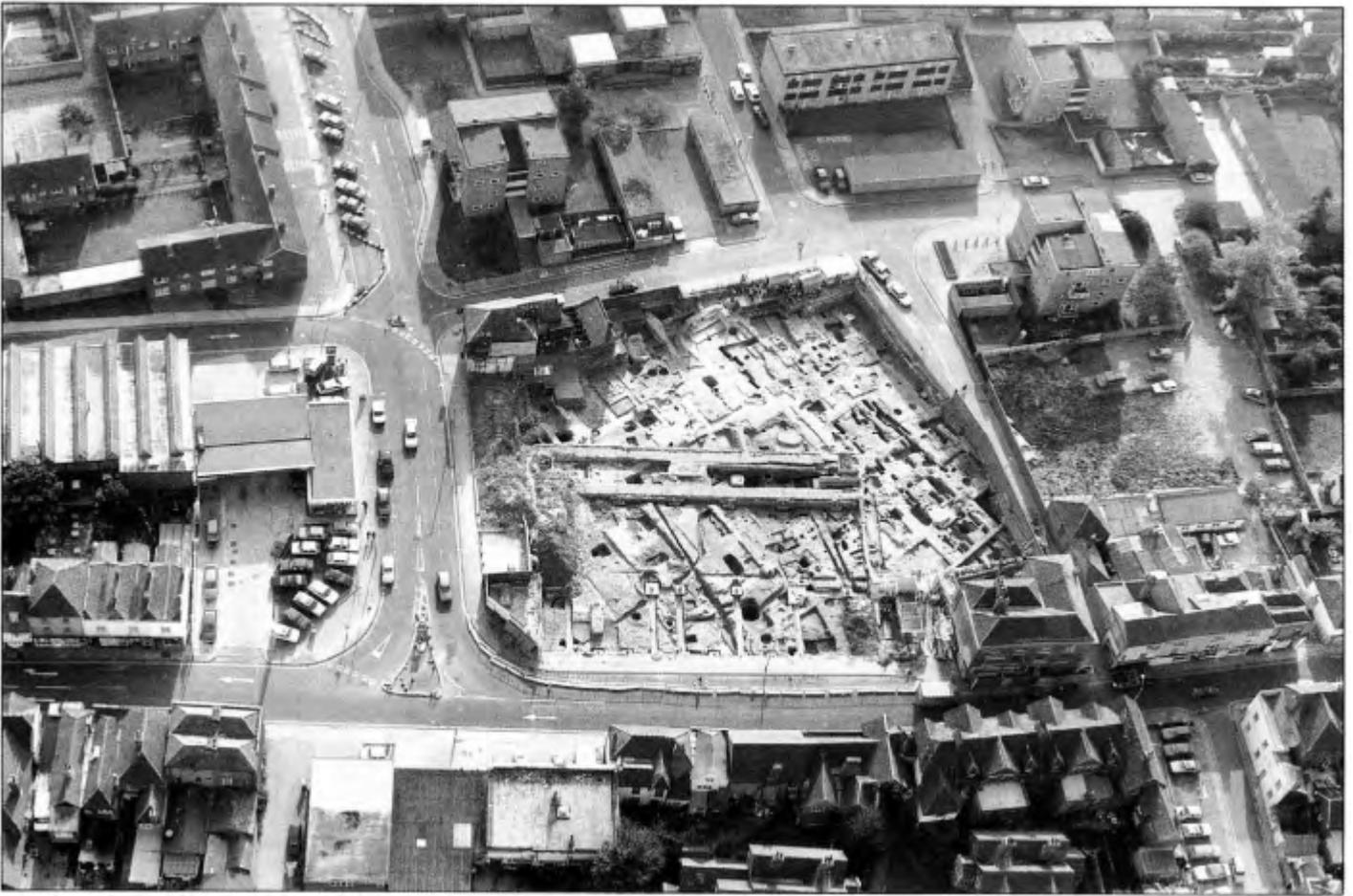
At a later stage a south transept was added. The foundations of the west wall could clearly be seen to abut the south wall of the nave foundation. The south and east walls foundations of the transept only survived to a minimal extent in its south-east corner, below later work (the north-east corner of the late fifteenth-century tower). The foundations of this structure were quite different from those of the nave and tower, being composed of rammed irregular lenses of small flints, crushed chalk with mortar and gravel set in orange mid brown clay.

Adjoining the south transept to the east was a small side chapel. Originally identified as a separate Anglo-Saxon church, this two-cell structure was of a completely different build being constructed of neatly-faced, squared Caen stone and sandstone blocks, roughly-faced flints and occasional blocks of Quarr stone set on a sub-foundation of rammed gravel. To the north of the church, a complementary transept and side chapel were uncovered although in a badly mutilated state. The northern chapel was unfortunately almost entirely destroyed in 1958 when the General Post Office buildings were constructed.

The chancel was of similar build to the east chapel being largely constructed of neatly-faced, squared Caen stone blocks (and some Quarr) with an irregular flint core, bonded with a pale buff mortar and resting on a rammed gravel and clay foundation. A doorway survived in the south wall of the chancel; this was partially robbed, presumably during the removal



▲ St Gregory's Priory: plan of the surviving remains of the Lanfranc church.



▲ Aerial view of the excavations from the north-west.

of a threshold stone. The remains of a thin mortar floor were found on either side of the threshold matching a more substantial mortar surface on a bed of gravel and mortar outside the church. The internal faces of the south and east chancel walls bore traces of original wall plaster and there was similar rendering on the external face of the wall close to the doorway. It is therefore possible that a separate (perhaps timber) structure, internally floored, was built against the south wall of the chancel.

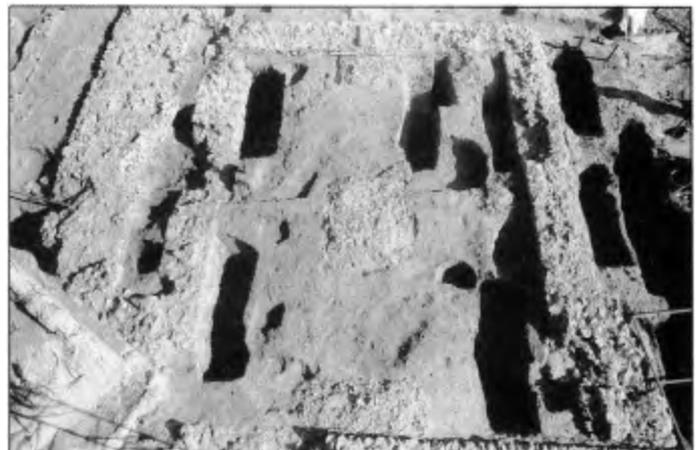
Fragmentary traces of flooring were found within the Lanfranc church. Two phases of flooring were excavated within the nave, the first consisting solely of a thin layer of mortar with a distinct 'polished' surface. An identical type of flooring was also uncovered within the nave of the south chapel. During this phase, there may have been a screen or step at the east end of the main nave. This was indicated by the remains of a narrow wall, constructed of sandstone and flint bonded by an off-white mortar. The supporting wall survived to the south but was apparently robbed to the north, the mortar floor passing in between and running up towards the east wall. Here, there would presumably have been a step up to pass into the tower, where further traces of clay flooring were uncovered, together with a robbed but contemporary foundation for an internal fixture located against the centre of the east wall. The nave had been subsequently refloored and the supporting wall covered over, first with a number of loose mortar, earth, clay and gravel bedding layers, and then with a capping of mortar floor with a crushed tile surface. This surface was found only in a very small area at the east end of the nave, but identical flooring was again uncovered in the south chapel. Here, the floor had subsided into an earlier pre-Norman feature and was capped by a sequence of gravel and clay patchings applied to level up the surface. The south transept also contained remnants of a single-phase clay floor.

Within the chancel no evidence of an original floor remained. Above a fairly compact mortar construction horizon there was an earth layer containing rubble and tile debris, perhaps indicating that a raised floor had been removed when the priory was rebuilt. However, the plaster on the internal walls suggests that the original floor level was at least 10 cm. lower than that in the nave and tower area.

The latest floor levels in the nave, south transept and south chapel all bore traces of fire, often in association with a sealing lens of carbon. In places the clay floors had been fired to a cherry-red colour and remnants of mortar floor had turned pink due to intense heat. As well as general spreads of charcoal covering the floor surfaces there were small areas of



▲ General view of the Lanfranc church from the west. Scale: 2 m.



▲ View of the chancel with burials from the west. Scale: 2 m.

EXCAVATIONS: CANTERBURY SITES

semi-vitrified glass and occasional pools of molten copper alloy and lead amongst concentrations of charcoal. A number of stones incorporated in the faces of the southern nave wall and the west wall of the south transept had also been fire-reddened.

A number of burials may have been associated with the early church. Two burials cut by the choir arcade foundations of the twelfth-century church possibly date from the earlier phase. A large number of burials were uncovered within the early church, but the majority of these probably relate to the later aisled nave. However, it seems quite possible that burials within Lanfranc's chancel belong to this phase. Of the other burials most of those within the western half of Lanfranc's nave had been cut through the burning deposits and therefore post-date this phase; the remaining burials cannot be dated with any certainty.

At the time of writing the development of the early church has yet to be resolved. The early levels have been badly mutilated by later work and many of the vital connecting links between phases of construction have been obliterated or removed by disturbances and later walls. Two interpretations for the development of the early church up to its destruction are considered possible at this time.

One interpretation is that the earliest building comprised nave and tower. Transepts were then added, with perhaps side chapels and chancel constructed at a slightly later date.

The second interpretation, suggested by Tim Tatton-Brown, is that the original arrangement established by Lanfranc may have taken the form of three individual and independent two-celled buildings. The central and largest building (the church) was perhaps flanked on either side by smaller contemporary chapels, with the west wall of all three structures terminating on the same north-south line. The second phase of construction saw the building of more massive nave and tower foundations, with the removal of the nave of the early church, west of the chancel arch. Transepts were then added linking the side chapels to the main body of the church.



▲ General view of the west end of the Lanfranc church with south chap, and transept in the foreground. Looking north-west. Scale: 2 m.

A documentary history of St Gregory's Priory appeared in last year interim z and further elaboration is not needed here. Two documentary aspects however, need further discussion. The 'Easter Table' Chronicle (a late addition to the Anglo-Saxon Chronicle) states that Archbishop.. Lanfranc had the body of St Eadburg (Ethelberga) translated from Lyminge to St Gregory's in 1085. Other sources, including the foundation: charter of c. 1087, say St Mildred's body was also translated here at' same time. The acquisition of Mildred's remains by the monks St Gregory's was disputed by the monks of St Augustine's Abbey .. believed that her remains resided in their church. An attractive interpretation is that the north and south side chapels, whether primary or secondary in the development sequence, may have been constructed: to house the remains of the saints. The main chancel presumably contained the altar dedicated to St Gregory. No contemporary burials were located in the south chapel or transept so if this was the case then the relics would have been housed in some form of funerary monument above

ground. It must also be stated that no masonry foundation, perhaps associated with such a monument, was located in the chapel. The evidence must therefore remain equivocal.

The deposits of ash, carbon and burnt residues associated with the ` floor levels of the church, south transept and chapel appear to indicate that the establishment was destroyed or badly damaged by fire shortly before it was taken down. Gervase, a Canterbury Cathedral monk, records that on the 2nd July, 1145 St Gregory's Church was burnt down. It is tempting to connect the archaeological evidence with this documentary reference and further to connect the rebuilding of the priory church and formation of a new claustral plan of buildings with the Archbishop of the time, Theobald (1139-61), who was considered to be a special patron of the priory. Equal weight however must be given to the argument that the claustral building and new church may have been constructed somewhat, earlier, perhaps in the mid 1120's, by which time St Gregory's Priory .. properly a house of Augustinian canons regular.

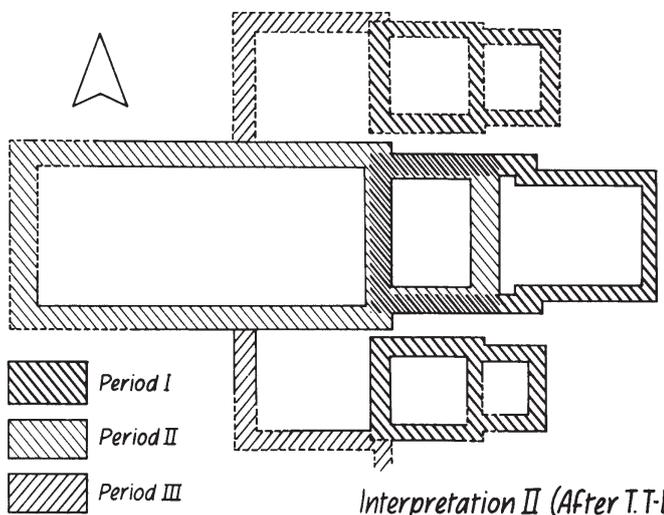
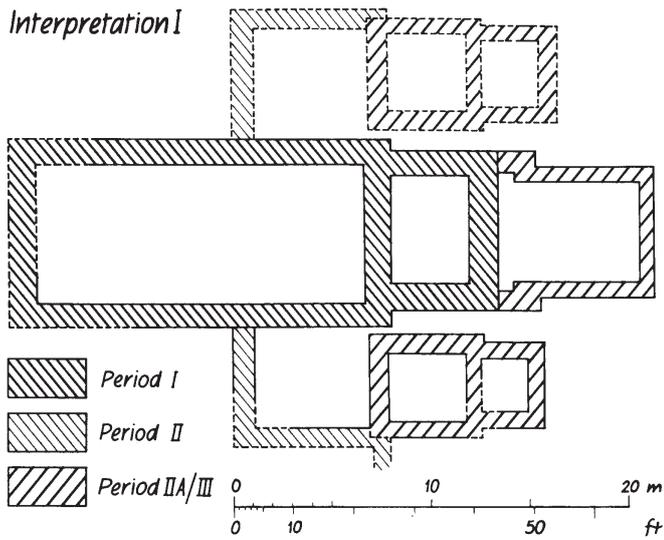
Intermittent work continues on these important early levels and hoped that sufficient details will be uncovered over the coming months to resolve some of the problems outlined above.

Further investigation of the pre-monastic story of the site has also occurred in recent months. A number of mid to late Anglo-Saxon feathave been excavated. These include three wells, all containing timber_ lining: one with two phases of wicker lining, a second with planked lining and the third with overlapping planks attached to substantial corner posts. Three large ditches, perhaps property boundaries, were excavated in the central area and the north-east corner of the site. All three ditches yielded pottery of Anglo-Saxon date.

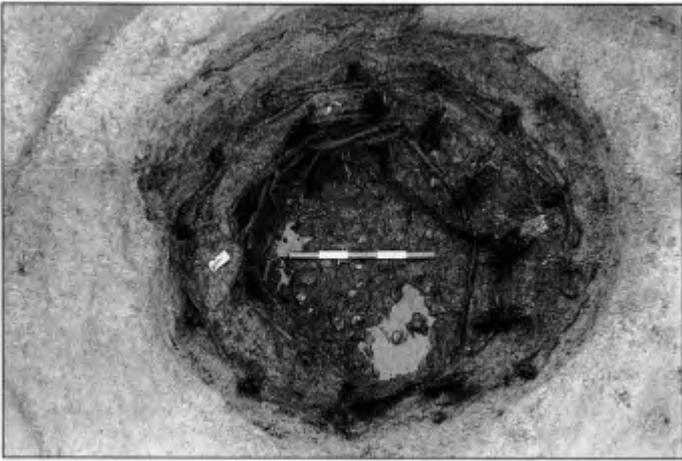
Of earlier activity, there is only limited information. A number of small gullies and pits cutting the natural brickearth in the extreme south-west. corner of the site, are probably of Roman date. Elsewhere quantities residual Roman pottery and finds may attest more widespread activity. Residual Late Iron Age ('Belgic') pottery is also present in some quantity and two scatters of prehistoric worked flints may indicate an even earlier phase of activity on the-St Gregory's site.

At the time of writing the site still remains undeveloped and the Trust is continuing in its attempts to find financial assistance to complete the excavations. Meanwhile, work continues with volunteers at weekends.

Interpretation I



▲ Interim phased interpretation plans for the development of Lanfranc's church.

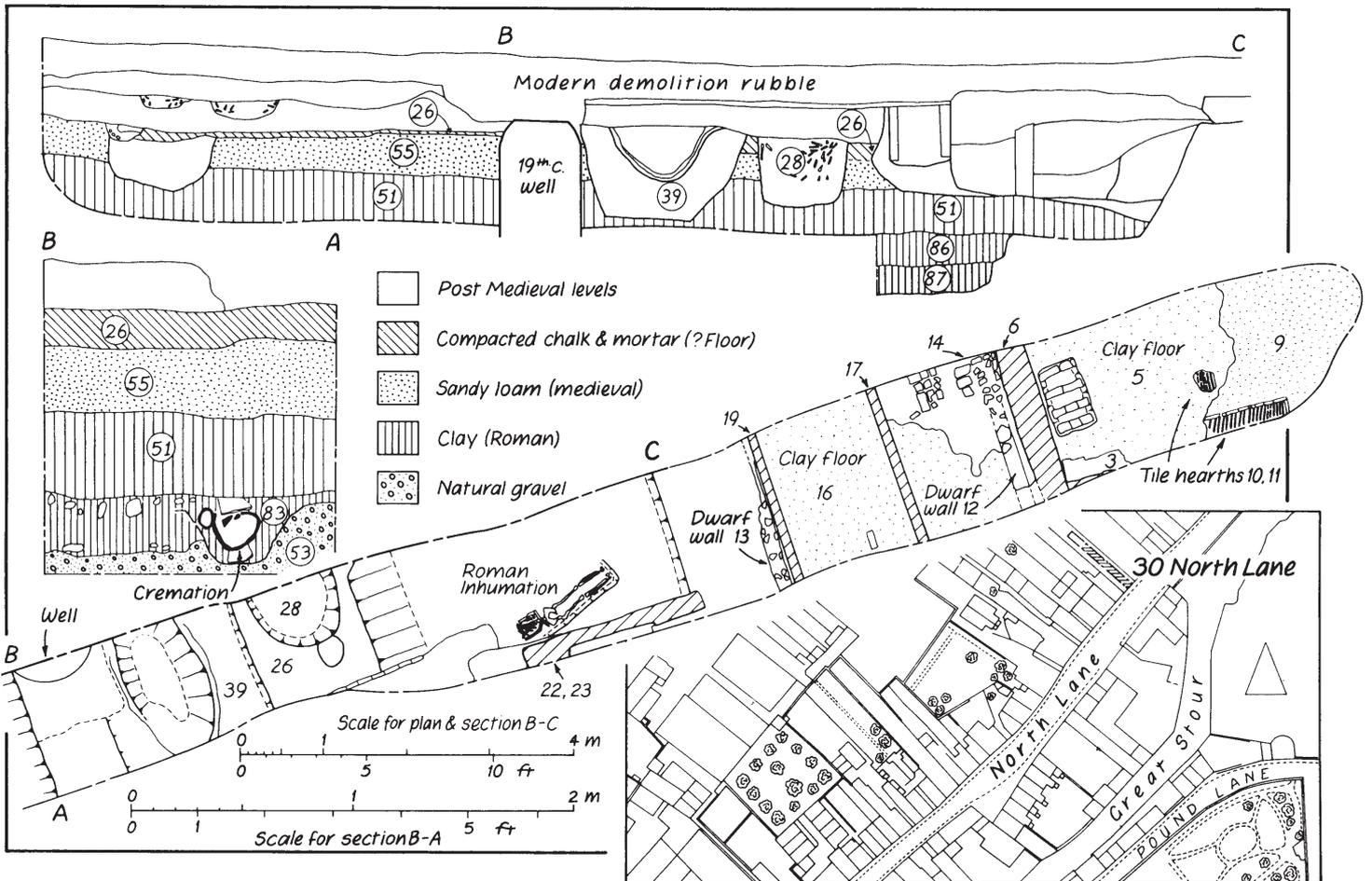


Following the completion of our main work in December 1989 an archive of the materials generated by the excavation has been in preparation, a task which will be completed by June 1991. The excavations at St Gregory's Priory were funded by the developers, Townscape Homes; English Heritage; the Kent Archaeological Society; the Friends of the Canterbury Archaeological Trust and by public appeal. We would like to take this opportunity to thank all those who gave so generously of their time and money to assist with the work.

◀ Anglo-Saxon wicker-lined well. Scale: 0.5 m.

2 No. 30 North Lane

by Glyn Leggatt



▲ Location plan and plan of evaluation trench with sections B-C, B-A and key to sections.

In August 1989 the Canterbury Archaeological Trust carried out evaluation work on the site of a cottage, no. 30 North Lane. This and two other cottages (nos 28-29) were demolished after the Second World War. The land was formerly owned by the East Kent Bus Company, and the greater part is now occupied by their disused workshops. A previous watching/recording brief was undertaken during an episode of redevelopment at nos 16-21 North Lane in 1977.³ At least two medieval properties fronting onto North Lane, inhumation burials of perhaps Roman date (under the buildings) and a Roman kiln in the rear site area were recorded at this time. The purpose of the 1989 evaluation at 30 North Lane was to ascertain the nature and extent of surviving archaeological deposits to determine an appropriate archaeological response in advance of redevelopment.

The evaluation operation took the form of a single machine-cut trench 2 x 23 m. which extended from the North Lane frontage into the rear site

area. Only overburden and late garden soils were removed mechanically. The remaining archaeological sequence was tested by hand.

Recent undergrowth, rubble and demolition debris sealed a relatively intact sequence of cottage foundations against the site frontage. These foundations were exposed and cleaned, but were not totally excavated. Our intention here was to prove the existence of a sequence of buildings in this position without disturbing the greater part of the surviving archaeology. The area at the rear of the building was excavated to a depth of approximately 2.5 m., in places to the level of natural gravel.

The earliest feature recorded during the evaluation was located at the level of natural gravel, 2.40 m. below the existing ground surface. This feature (87), possibly a pit, 0.42 m. deep, was cut below the level of the water table and contained a fill of glutinous grey silty clay with flint and gravel inclusions yielding sherds of 'Belgic' pottery. At the base of the pit was the articulated skeleton of an adult male aged approximately

30 years. On analysis the skeleton bore traces of osteo-arthritis in the shoulder region.

Sealing this early feature and capping natural deposits of gravel and sand was a 40-50 cm. thick deposit of clean orange brickearth (86). Cut from the surface of this deposit was a grave yielding third-century pottery and the remains of an adult male aged approximately 35 years. Also cut from the same horizon was a cremation burial (83), which comprised a late second-to third-century native coarseware jar containing ashes and a small 'Upchurch-type' poppy-head beaker. The cremation was capped by a fragment of tegula and a sherd of amphora. Associated with the cremation was a small fragment of burnt worked bone. Both burials were sealed by a deposit of mottled orange clay (51), 0.40 m. thick, which extended across the entire excavated area and appeared to have been deliberately laid to cap the earlier horizon. Few finds were recovered from the deposit, but a worn follis of Constantine I (330-31), found within the matrix of the layer, appears to date its deposition to the mid fourth century or later.



▲ Cremation burial looking north-west. Scale: 0.35 m.



▲ Inhumation burial, looking south-west. Scale: 0.6 m.

Overlying the Roman levels was a thick deposit of garden loam (55) yielding a mixture of thirteenth- to fifteenth-century pottery. Possibly associated with the formation of the early medieval 'garden' loams were traces of an early timber-framed road frontage building. The earliest structure may have been of single-bay depth with an outshot to the rear. The road frontage room was floored in clay of two phases (5, 9) with the remains of at least two phases of central hearth constructed of peg-tiles set on edge in a bed of clay (10, 11). The rear wall of the room (and possibly the building) was of chalk lumps and flint, bonded with a pale yellow sandy mortar (12). This insubstantial masonry foundation was probably for a dwarf wall supporting the timber frame of the building. A possible outshot was constructed at a later date to the rear of this wall. The outshot was also clay-floored (16) and a dwarf wall of mortared chalk (13) defined the new rear wall of the property. The road frontage room, with central hearth, may have been the hall of a small Wealden-type structure set long axis onto the street. Although little dating evidence was recovered from associated deposits the structure may date from the later fourteenth century. Later fifteenth-century pottery was recovered from loam deposits abutting the rear of the outshot and it is considered likely that the outshot was added in the fifteenth century.

Possibly associated with the road frontage building was a rammed chalk floor (26) located at the centre and rear of the evaluation trench. Vestigial traces of a possible dwarf wall survived at the western edge of the chalk expanse, aligned parallel to the frontage building. Traces of chalk floor extended almost to the line of the outshot rear wall, where later disturbances had cut away any possible link between the buildings. The chalk-floored structure may have been a service wing added to the complex after the construction of the outshot.

The early sequence of floors in the road frontage hall was sealed by a brick floor (3) possibly laid in the seventeenth century. The foundation of a contemporary fireplace base, located against the rear wall of the hall, suggests that reflooring and insertion of a new fireplace (with stack) relates to a flooring over of the hall at that time. The clay floor of the possible outshot was provided with a new sprung floor resting on brick walls (17, 19). This was eventually removed and replaced by a brick floor (18, 14) laid in the nineteenth century. The rammed chalk floor of the possible cross-wing to the rear of the property was cut by a considerable

number of rubbish pits and a nineteenth-century well. The earliest of the pits yielded pottery of the late seventeenth century and it seems likely that the cross-wing had been taken down before this date. Brick walls, 22,23) for a late extension to the property were exposed during the course of the evaluation. The extension together with the road frontage cottage are shown on the first edition Ordnance Survey for 1874 and subsequent surveys up to the Second World War.

The sequence of archaeological deposits revealed during the evaluation indicated that this road frontage site has considerable potential. If the earliest burial found cutting natural gravel and sand can be proved to be of Late Iron Age date, then continuity of the use of this area for burial from pre-conquest to Late Roman times may be indicated. Occupation of the road frontage by a medieval hall-house with outshot and early cross-wing also appears to be indicated. If redevelopment of this vacant plot is to take place in the future, more detailed and larger-scale excavations should take place.



▲ Tile-on-edge hearth looking south-west. Scale: 0.50 m.

3 Station Road East

by Paul Bennett



▲ General view of excavation looking east. Scale: 1.0 m.

A second developer-funded excavation was undertaken at Station Road East during December 1989 and January 1990. The first excavation⁴ yielded important information for a possible outer bailey to the Norman motte and bailey castle at Canterbury.

This second operation, funded by Sloggetts Builders, saw the clearance of a large area west of a putative outer bailey ditch between the present bridge linking Canterbury East station to the Dane John Gardens and the Wincheap roundabout. Evaluation trenching in this area in 1987⁵ indicated the presence of numerous features of Roman, medieval and postmedieval date and it was hoped that burials associated with a Roman cemetery flanking the southeast side of the Roman road outside Roman Worthgate might be located.

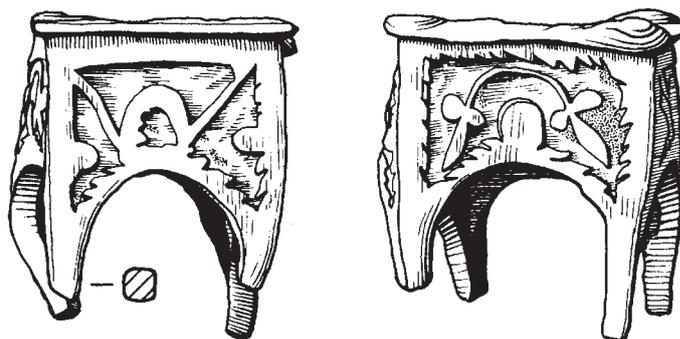
In the event, although no intact Roman inhumation or cremation burials were discovered, substantial quantities of residual human bone were recovered during the excavation of numerous medieval and post-medieval features. The residual human bones together with even larger quantities of Roman pottery and a small corpus of Roman metal finds, all from later features, strongly suggested that the eastern end of the Station Road East site once formed part of an extensive Roman inhumation cemetery.

A small number of pits, most infilled with discoloured natural brickearth, appeared to be of Roman date. Some of these yielded domestic debris (animal bones and oyster shells) in association with second-century pottery. It is tempting to propose that the area south-east of the Roman street may have been a focus of domestic occupation at a time when Canterbury was not provided with defences and settlement may have extended well beyond the civic centre.

The fragmentary nature of the Roman levels was as a result of sustained quarrying activity for brickearth spanning a considerable period. A large number of intercutting quarry-pits were emptied, sample-excavated, or defined as soilstains by surface cleaning. Much of the central area of the site (west of the road bridge) appeared to be disturbed by two or perhaps three very large quarries of late medieval and post-medieval date. An investigative trench cut on an east-west axis across the disturbed area indicated the presence of at least two quarries, the easternmost cutting the western. Excavation ceased for safety reasons at a depth of 2 m. below the existing surface without locating the base of either quarry.

To the south of these large quarries was an intercutting sequence of smaller quarry-pits dating from the twelfth century to the late fourteenth century. The earliest features were clustered against the western boundary of the site. The latest pits of the complex were largely sited against or cut by the large clay quarries. The pit distribution and the sequence of their cutting appeared to indicate that quarrying may have commenced in the twelfth century at the southern boundary of the site. A progressive movement of quarrying activity to the east over a substantial period of time seems to have then occurred.

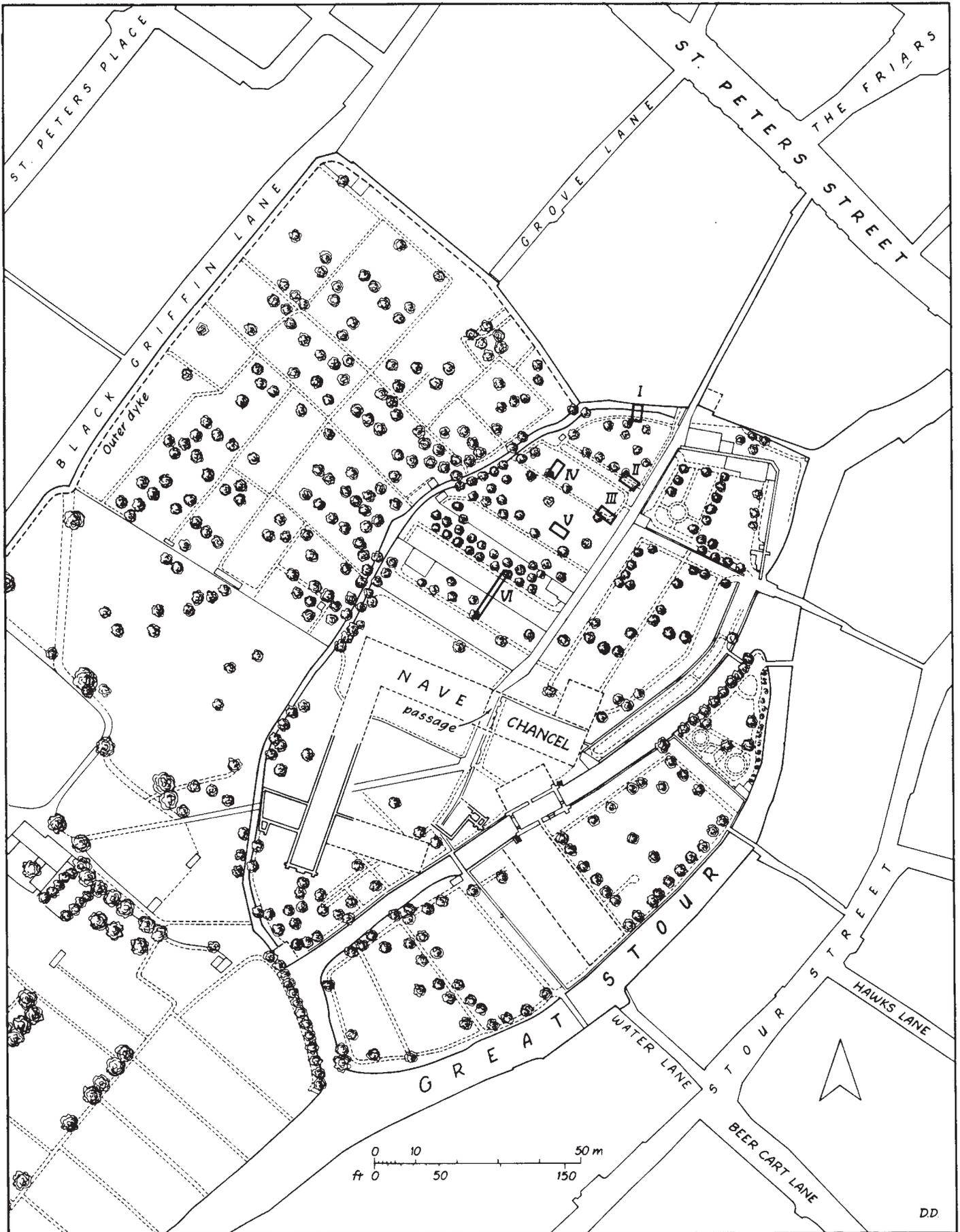
It can therefore be postulated that the construction of the outer ditch of the motte and bailey castle may have exposed deposits of good-quality brickearth. The earliest attempts to exploit this resource perhaps occurred soon after the defences had been established, with clay-digging occurring well to the south of the enceinte close to the line of the Wincheap road. When these areas were exhausted quarrying seems to have advanced eastward in stages to just short of the line of the defensive ditch. By the late medieval period the ditch had been mostly infilled and had become a 'hollow way' leading to the principal buildings of the Dane John Manor.



▲ A Copper alloy Roman votive altar recovered from a medieval quarry at Station Road East. Scale: 1:1.5.

4 St Peter's Methodist School

by Steve Ouditt and Paul Bennett



▲ A Plan locating evaluation trenches, based on first edition Ordnance Survey for 1874. Details of the known conventual building of Greyfriars are given together with the extent of surviving drain leets.

EXCAVATIONS: CANTERBURY SITES

An archaeological evaluation of the site of a proposed extension to the St Peter's Methodist School was carried out by the Trust during January and February 1990. This work was undertaken on behalf of and funded by Kent County Council.

The site, at present occupied by the school playing field and several mobile classrooms, originally formed part of the Greyfriars precinct, established in 1224 and surrendered to the Crown in 1538. The Great Stour formed the southeastern boundary of the precinct, with a tributary of the Stour separating the principal buildings of the establishment from open ground to the south-east, which possibly contains the Friar's cemetery. A north-western dyke separated the buildings of the Greyfriars from an area probably set aside for gardens and orchard. This was also surrounded by a leat whose north-eastern boundary is now defined by the line of Black Griffin Lane. The present school buildings and playing field lie at the northern end of the central enclosure (containing the conventual buildings), north-west of Greyfriars Passage and close to the intersecting leat for the north-western enclosure. In the mid seventeenth century the present school playing field formed part of a landscaped garden, shown on a coloured map of Canterbury dated c. 1640 (C.A.L.C. Map 123), at a time when some of the conventual buildings had been converted into a substantial dwelling. W. & H. Doidge's plan of the city of Canterbury for 1752 shows the area as garden and orchards at that time, as does the first edition Ordnance Survey for 1874. St Peter's Methodist Church was built east of Greyfriars Passage and immediately north of the intermediate enclosure in 1811. The school was established at the southern end of the church in the 1870s and subsequently expanded into the northern part of the central enclosure. The conventual buildings of Greyfriars now lie beneath waste ground at the southern boundary of school land and a garden in the ownership of Canterbury City Council to the south of that boundary.

Six trial-trenches were cut. Trenches W (each 4 x 2 m.) were positioned around the edges of the proposed building. Trench I was on its northern edge, straddling the dyke west of Greyfriars Passage. Trenches II and III were on the eastern edge of the proposed building. Trenches IV and V were cut close to the west and south edges of the proposed building. Trench VI (14 x 1 m.) was to the south of this area, positioned to evaluate a proposed tarmac area for car parking and playground. A final exploratory trench was opened in the north-eastern corner of the school grounds adjacent to Greyfriars Passage, to examine a bridge spanning the northern dyke under Greyfriars Passage.

Trench I was cut to a maximum depth of 2.5 m. below the present ground surface and situated immediately south of the boundary wall separating school land from the garden of Cogan House. It proved to be entirely within the fill of the northern dyke. No trace of the southern edge of the primary dyke was discerned. The northern edge of the dyke had been completely obscured by the footings of the boundary wall. The lowest deposits excavated comprised layers of dark grey silt with abundant organic inclusions yielding pottery dating from c. 1550 to 1700. Although excavation of these deposits ceased at water table level and a total depth for the leat was not determined, the sloping lower infill of the ditch strongly suggested that the southern edge of the leat lay just outside the excavated area. The lower deposits may have been deliberately dumped to infill and perhaps reduce the size of the leat during episodes of landscaping in the post-Dissolution period. Above these two layers all deposits dated to the nineteenth century. It is just possible that this final sequence of deposits represents the infilling of a late recut of the dyke whose size conforms closely to the width of the dyke shown on the 1874 survey. The layers capping dyke infill contained tile and brick debris and a few sandstone blocks consistent with an episode of ground clearance and perhaps landscaping. Towards the end of the nineteenth century or later, this deposit was cut by a construction-trench for a ceramic drainpipe, the wooden shuttering for which survived in situ. The sequence here was completed with a thick deposit of topsoil.

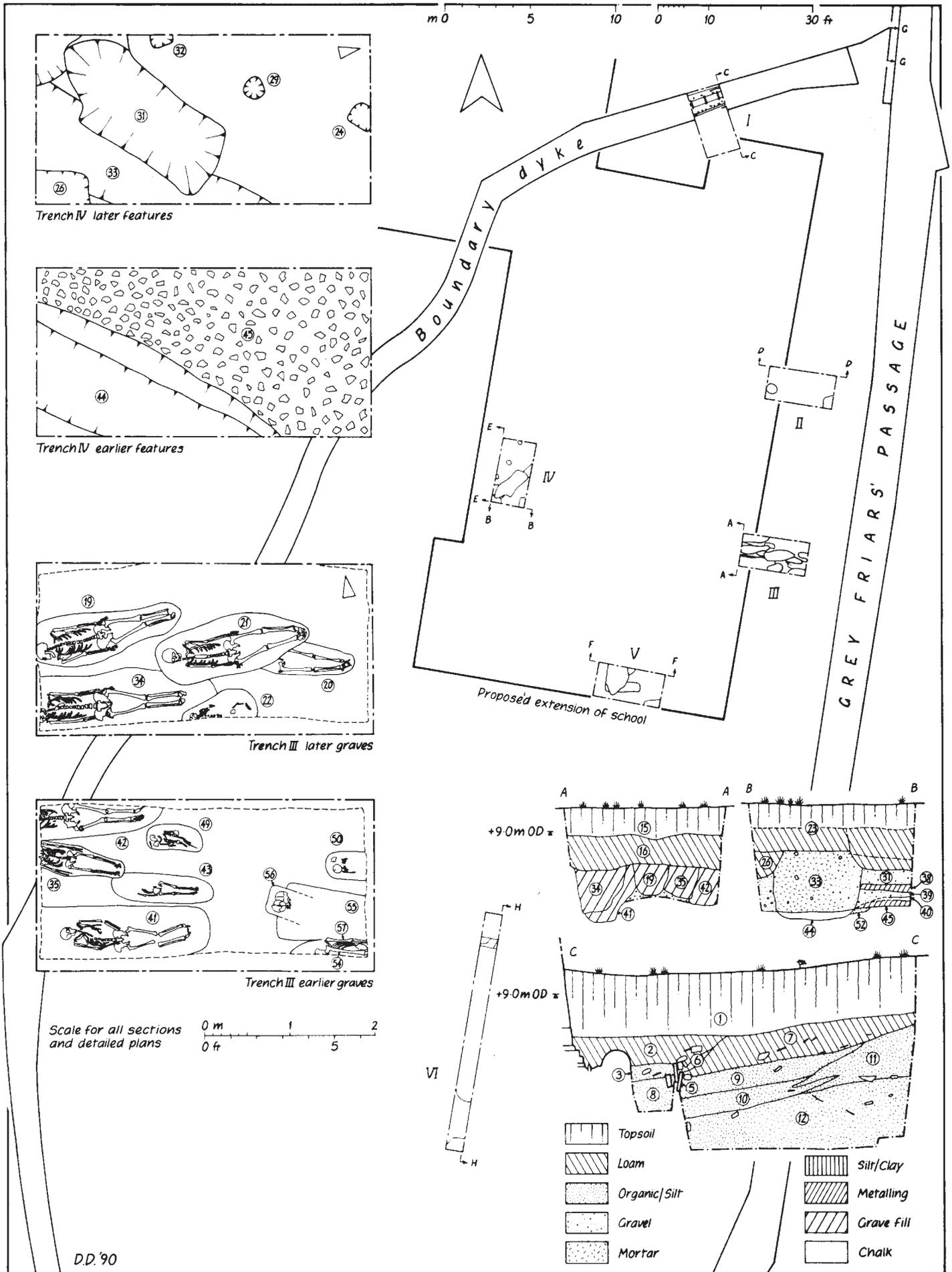
A 2 m. long section of boundary wall in the north-east corner of the school grounds, immediately east of Trench I was cleared of ivy, examined and recorded. The operation was undertaken to examine the remains of a possible bridge spanning Greyfriars Passage and a barrel-vaulted brickbuilt culvert built beneath it. A short section of the spring of the arch was exposed, constructed in small mortared blocks of ragstone. The arch spring was surmounted by a levelling course of mortared flints and four ashlar courses of ragstone blockwork. The present flint and brickwork boundary wall was raised off this fabric. Insufficient evidence was obtained to assign a date for the build of this structure, but its appearance suggests that it may be medieval. It is quite likely that this structure formed part of the bridge with gate above which gave access to the north-east corner of the garden and is shown on the 1640 map of Canterbury. The brick-built



▲ St Peter's Methodist School headmaster, Mr Peter Mayor-Smith, and pupils learn about the archaeological story of the site of the proposed extension from site director Steve Ouditt. Photograph: Kentish Gazette.



▲ View showing bridge fabric under Greyfriars Passage, looking east. Scale: 2 m.



▲ Plan locating evaluation trenches with detail plans of Trenches III and IV and sections A-A, B-B and C-C, with key.

culvert underlying masonry fabric was probably constructed in the late nineteenth century.

In Trench II removal of topsoil revealed very clean gravel only c. 0.45 M. below the existing surface. Two features were cut into this gravel. In the south-east corner of the trench was part of a shallow pit containing pottery dating to 1775-1825. In the south-west corner, a round pit or posthole 0.70 m. deep yielded pottery dating to 1450-75. At the time of excavation the uniform colour, consistency and thickness of the gravel led us to believe that it was a natural deposit and no further excavation was considered necessary. In retrospect the gravel, in excess of 0.70 m. thick, may have been the fill of a large post-Dissolution garden bedding-trench or more likely a dumped layer capping medieval cemetery deposits.

Trench III proved to be within a cemetery. Fifteen graves in all were identified, twelve of these being fully excavated. A mixture of males, females, adults and children were present, these located presumably in a hitherto unknown lay cemetery to Greyfriars.⁶ The uppermost burials, located at 0.60-0.70 m. below the existing ground surface, were uniformly sealed by brown sandy loam and topsoil. The excavation was carried down into deposits of mixed gravel and brickearth to a maximum depth of 1.50 m. Natural subsoils were not encountered.

Trench W was excavated to a depth of 1.4 m. The footing for a robbed wall running approximately north-west to southeast was discovered. Several layers of rammed gravel on the western side of this wall may prove to be the remains of an external courtyard or path. The pottery evidence, while not explicit, broadly supports a view that the wall and metallings were in use at the same time as the graveyard.

The lowest layer excavated in Trench IV, a very compact dark orangegrey silt, contained residual 'Belgic' pottery and a single sherd of late eleventh-century pottery. This layer capped a possible flood deposit of very soft light grey silty clay containing charcoal flakes. The high water table prevented further excavation. Above these layers and adjacent to the wall footing was a metalling, consisting of compact orange clay and gravel. Apart from residual Roman material, the few sherds from this

metalling dated no later than c. 1175-1225. Above this was a series of dumped layers and metallings. The robber-trench was cut through these deposits, but yielded only residual pottery. The south-eastern side of the robber-trench coincided with the edge of the excavation. Here only a brown loam was observed in the section. The complex sequence of deposits to the northwest of the robber-trench appeared to butt against it, perhaps suggesting that they had accumulated after the wall had been constructed. If this is the case, the wall must have been constructed on a very shallow foundation. Whatever the case, the different deposits either side of the wall do strongly suggest an ancient boundary in this position, perhaps the cemetery boundary. Both robber-trench and horizons either side of the wall were sealed by demolition debris and a thick deposit of topsoil.

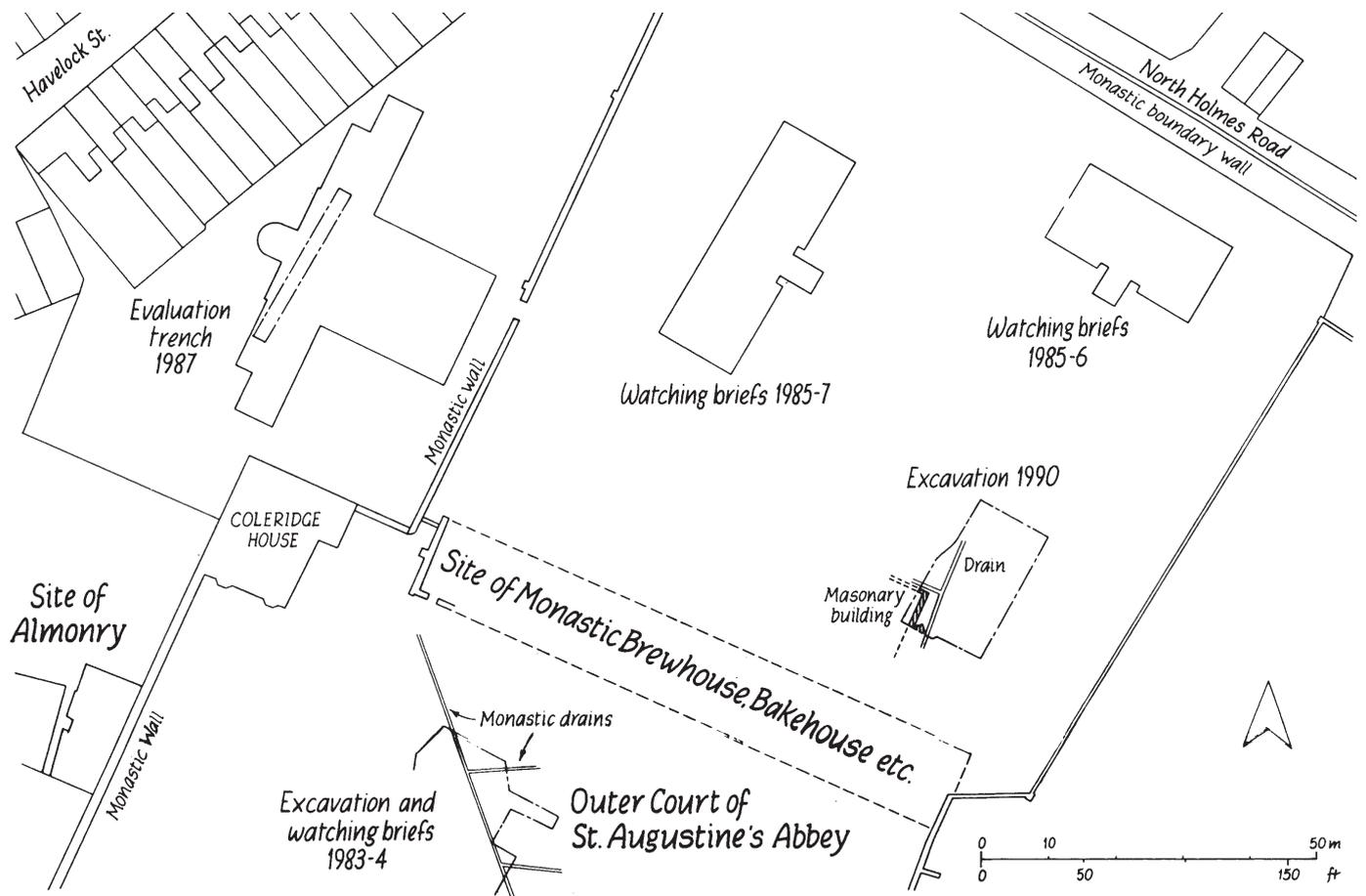
Trench V was also within the graveyard and the cuts for several graves were identified as soil stains at 0.80 m. below the existing ground surface. Only one grave was excavated, although the burial was left in situ. The horizon at which the grave cuts were located was very distinct and was sealed by a layer of clean orange sandy gravel 25 cm. thick. The gravel was sealed by successive deposits of brown loam and topsoil to a total depth of 0.70 m.

Trench VI was excavated to a depth of 50 cm. to determine the nature of upper archaeological deposits in an area proposed to be a tarmaccovered playground and car park. Two large modern features were located. A corner of one of these features was taken down to reveal intact post-Dissolution demolition deposits at 1.10 m. below the existing ground surface. No further excavation was considered necessary to evaluate this area.

The evaluation exercise proved the location of the dyke flanking the northern boundary of Greyfriars precinct and strongly indicated the existence of a major cemetery. A possible northern boundary wall to the cemetery with external metalled path or courtyard was also located. The skeletal assemblage comprising adults of both sexes and children indicates that this is the site of a hitherto unknown lay cemetery.

5 Christ Church College

by Paul Bennett



▲ A Location plan showing excavations at Christ Church College 1983-1990.

EXCAVATIONS: CANTERBURY SITES

An excavation in advance of a basemented extension to Christ Church College library was undertaken between November 1989 and February 1990. This work, funded by the college, was preceded by the cutting of an evaluation trench which provided evidence of mid Anglo-Saxon, medieval and post-medieval occupation.

The library basement excavation was the most recent of a series of excavations and watching briefs in advance of and during developments at the college for a new Students Union building,⁷ class rooms and a paramedical centre.⁸

These episodes of archaeological activity have provided remarkable evidence for occupation of the site of Christ Church College in the Late Bronze Age, and almost continuous settlement from the mid Anglo-Saxon period to the present.

This most recent excavation was located at the centre of the college on ground formerly outside and to the north of the Outer Court of St Augustine's Abbey. This area may have been open sward until the early fourteenth century when it was enclosed by the abbey possibly to form an orchard. After the dissolution of the abbey in 1538 the ground may have continued in use as an orchard or as open ground until college buildings were constructed here from 1970 onwards.

The earliest traces of habitation located in a small hollow at the level of natural brickearth comprised a collection of flint flakes. This residue from the manufacture of a flint tool or tools represents another indication of Late Bronze Age activity in the Christ Church College area. No pottery or features were located in association with this discovery.

Although a 'background scatter' of residual Roman pottery and two Roman coins were present in the corpus of material recovered during the excavation, this perhaps suggestive of peripheral Roman settlement, the next major phase of activity was of middle Anglo-Saxon date.

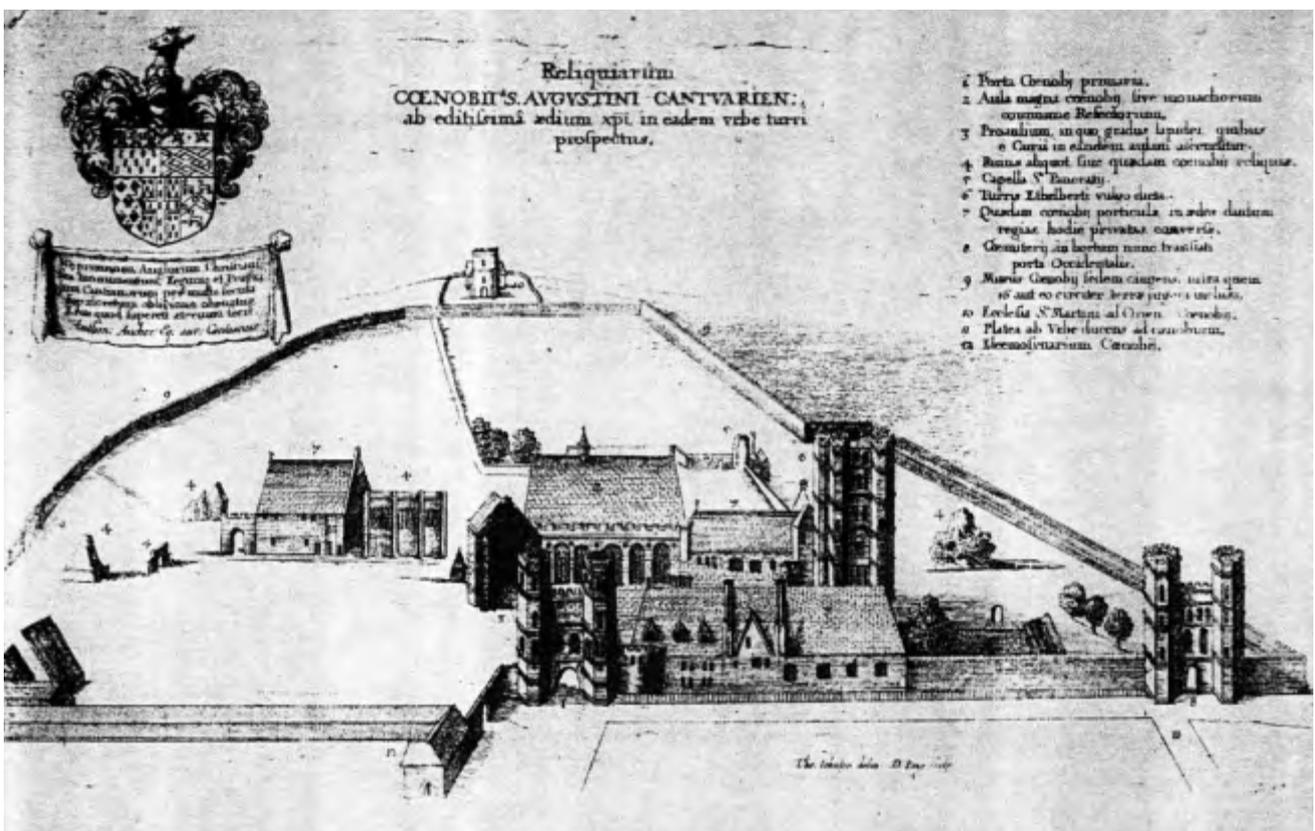
A number of pits, some containing metalworking debris were in evidence on the site. Included in the corpus of Anglo-Saxon pottery recovered from these pits were boss-decorated sherds of eighth- and ninth- century date and a significant number of imported 'Ipswich' type wares. A large number of residual Anglo-Saxon pot sherds were also recovered from later features. The discovery of these pits adds further weight to the argument that this area was a flourishing industrial centre during the middle Anglo-Saxon period; this phase of activity may have lasted from approximately A.D. 750-850. Evidence for eighth- and ninth-century occupation is rare within the town walls but at Christ Church College, in the area of the Outer Court of the abbey and at a further site near St Martin's Church⁹ evidence for middle Anglo-Saxon activity is relatively common. Few of the recent Anglo-Saxon pits contained animal

bones and oyster shells in their fills, detritus consistent with domestic waste, and it is significant that in all excavations at the college and near St Martin's Church no traces of domestic structures have yet been found. Equally significant is the paucity of Anglo-Saxon domestic small finds, particularly bone combs and loomweights - finds that one would normally expect in domestic contexts. Although it is possible that the now widespread excavations at the college have been outside or have missed a habitation area or areas, it is equally possible that this extra-mural land was solely dedicated to industrial activity and that domestic settlement is perhaps to be found elsewhere inside or outside the town walls.

The next major phase of activity, again relating to metalworking, dated from the mid to late twelfth century to the mid thirteenth century. A number of pits were excavated yielding metalworking waste and lenses and layers of burnt clay and carbon. Similar pit fills of twelfth- and thirteenth-century date were located in all the previous college excavations and this evidence for widespread industrial activity may be directly related to the growth of the abbey and of a service industry which provided the monks with ironwork and perhaps more exotic metals for their building projects.

Perhaps the most surprising evidence for occupation on the site, however, was the substantial remains of a large masonry building and a series of earth-fast and masonry-lined drains which accompanied it. The structure, located in the south-west corner of the excavation, was of identical build to the Cellarer's and service ranges forming the southern and northern sides of the Outer Court respectively. Only the north-east corner of the building, aligned northeast to south-west at right-angles to the service range, was contained within the excavation. The 0.60 m. wide walls of the structure, of flint and chalk bonded in a pale brown sandy mortar, rested, on a deep off-set foundation of laminated deposits of rammed chalk, mortar and gravel. Fragmentary traces of a clay floor overlying the internal offset were uncovered, together with the badly preserved remains of a peg-tile-on-edge hearth set close to the wall.

Almost abutting the eastern side of the building was a drain-slot extending from north to south parallel to the building. The ditch terminated at its western end some 4.0 m. beyond the structure in a wide and deep cutting, possibly a soakaway. The drain fill of silty discoloured brickearth yielded pottery dating up to c. 1425-50. Drain fall was set at a slight gradient from north to south and the soakaway was presumably incorporated and later enlarged (perhaps as a consequence of maintenance) to prevent flooding during occasional episodes of heavy rain. No connection between the drain and the masonry building was established and its function was perhaps to take rain water from the overhanging eaves of the adjacent roof.



▲ Engraving of St Augustine's Outer Court area by Daniel King, c. 1656 as seen from Bell Harry Tower, Canterbury Cathedral.



▲ A Masonry building and associated drains, from the south. Scale: 2 m.

The drain was superseded in the mid-fifteenth century by a masonry-lined version, established on the same line and with a similar fall, approximately 2 m. to the east of the building. This drain, with peg-tile base, had a lining of chalk blockwork, flint and re-used Caen and sandstone blocks bonded in a pale yellow sandy mortar. It was accompanied by a contemporary intersecting masonry-lined conduit of identical construction and size which flanked the northern wall of the building. The main drain lay just beyond the north wall of the structure where a second-phase extension to it was uncovered. This later 4.0 m. long extension was more solidly built with flint and chalk walls over a peg-tile base. A small section of vaulted chalk capping survived intact at the point of intersection of the two drains. The termination of the drain by an end wall indicated that this may have also been built to function as a soakaway for the prevention of flooding. The east-west conduit intersecting with the main drain may have been provided to take foul water from inside the building, perhaps from a basin or sink located against the north wall.

The presence of the building and associated drains can only be interpreted as a hitherto unsuspected addition to the service range closing the northern side of the Outer Court. Whether the building was connected to the service range or was perhaps a separate structure cannot at this time be established. The presence of a peg-tile hearth and perhaps a basin or sink does suggest that it had a service function, possibly a brewhouse.

An engraving of St Augustine's Abbey by Daniel King showing the remains of the abbey as seen from the 'Bell Harry' tower of the cathedral in c. 1656 depicts a number of buildings in the Outer Court area and beyond. These buildings were previously thought to represent the remains of the northern range closing the Outer Court, but on the basis of this recent evidence they may represent a building or buildings to the north of the range.

The drain was robbed of its covering and infilled some time after the dissolution of the abbey. Thick demolition deposits covered the remains of the building. No firm dating evidence was retrieved from these deposits.

A small number of post-medieval and modern features were located during the early course of the excavation. The archaeological sequence was completed by a thick deposit of topsoil which may in part have been formed by postmedieval agricultural processes.

6 North Lane: the riverside wall

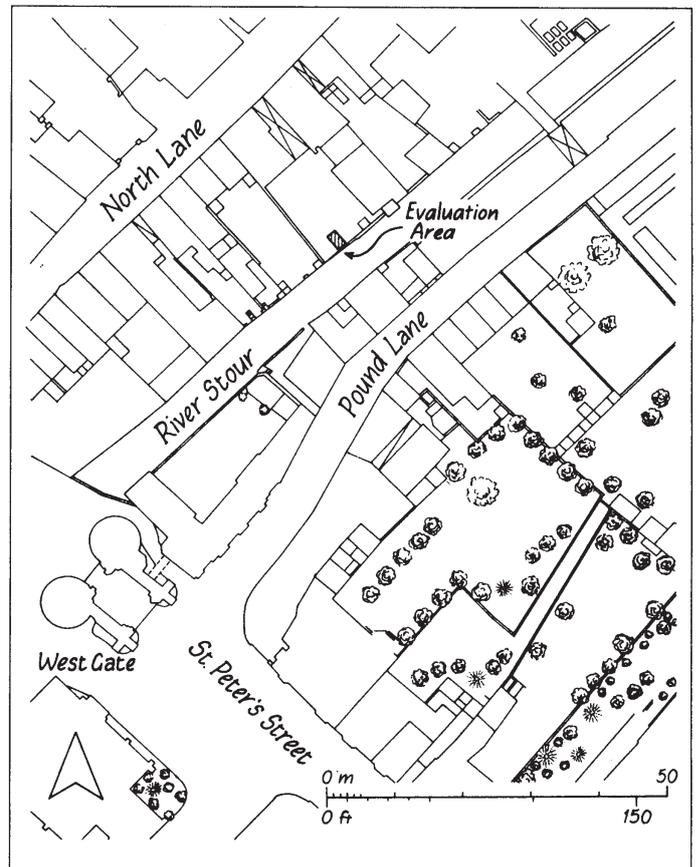
by Ian Anderson and Paul Bennett

From the 6th-8th June 1990, a trench 1.5 m. by 2.5 m. was excavated on the west bank of the River Stour, set back from North Lane against the river wall, about 52 m. north of the Westgate bridge. The purpose of the trench was to investigate a section of wall comprising courses of ashlar ragstone blockwork held by two iron ground anchors visible in the river bank, prior to reconstruction work by the City Council. The work was undertaken to ascertain whether this section of walling represented the remains of a building or boat dock or a remnant of an early riverside wall.

The trench was excavated by hand to an overall depth of a little over 1.90 m. to just above the water table. The upper 90 cm. consisted of layers of grey and brown loam, which sealed a thick rubble dump deposit and overlapped the ragstone blocks. A construction-trench for the riverside wall had been cut through the rubble up against the ragstone blockwork, and had been backfilled with grey-brown loam containing mortared chalk lumps, identical to those used in the city's medieval defensive wall constructed in the 1370s-90s. It would seem that this material was deposited during an episode of city wall demolition in the later eighteenth century or more likely in the 1830s, to raise the outer river bank above the water table.

Five courses of ragstone blocks were located within the construction-trench, with all excavated layers, including the rubble deposit, butting up to it. From the river side six courses were discernible above the river bed. The top course consisted of irregular-shaped blocks, while the lower courses consisted of regular ashlar blocks, and may represent two phases of building, although both used identical mortar. The ragstone courses were topped with a later phase brick wall of seven courses. At the west end of the trench a layer of grey-brown organic clay loam was located below the demolition rubble. It was not possible to ascertain its relationship with the ragstone wall due to the high water table, but it is probably an earlier buried ground surface.

During the excavation no traces of floors or occupation layers were located in association with the wall, and this, together with post-medieval mortar used to bond the ragstone blocks together, indicates that all materials were probably salvaged from the demolished city wall and reused as a river revetment and embankment.



▲ Location plan showing Pound Lane area in 1874. Based on first edition Ordnance Survey.

EXCAVATIONS: CANTERBURY SITES

A long history of occupation south of North Lane, backing onto the river, is known. North Lane is probably a late Anglo-Saxon or early medieval suburb of the city. The name North Lane was certainly in use by 1230 and the rentals for Christ Church Priory and the Cartulary of St Gregory's Priory indicate at least three holdings, by John Copelose, Ralph son of Eilnoth and Henry Scrip in c. 1200, together with a small alley that connects North Lane to the river, all in the vicinity of the evaluation trench.

Buildings fronting onto North Lane are clearly shown on successive plans of the city dating from the mid sixteenth century. Many of these show garden plots extending behind road frontages to the river bank. By the seventeenth century it is quite likely that individual property blocks along the south side of North Lane had effectively two frontages - one against the lane, the other against the river. Certainly by the later nineteenth century the area adjacent to the evaluation trench, now covered by a car park, was densely occupied by numerous property blocks some containing buildings against both frontages.

The riverside buildings were probably stores or warehouses, used in much the same way as the woolstore and associated buildings on the opposite side of the river. Photographs of the area in c. 1909 and the 1920s from the Westgate bridge, looking east, clearly show the section of wall to be shortly replaced, including the ashlar stonework, which can now be confidently associated with a riverside revetment of early to mid nineteenth-century date.

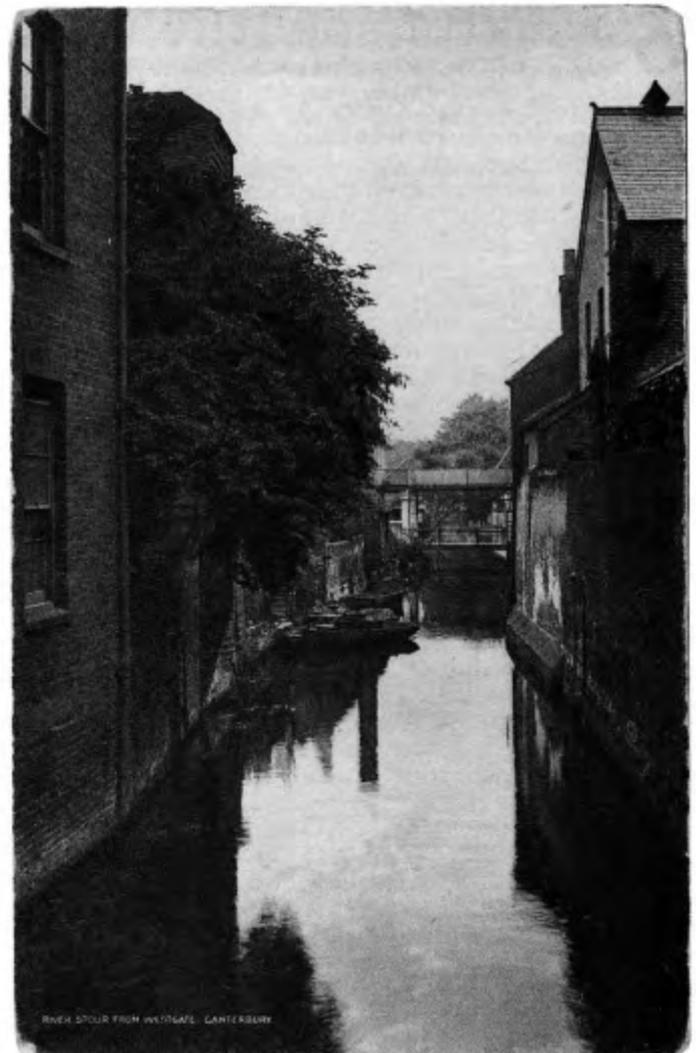
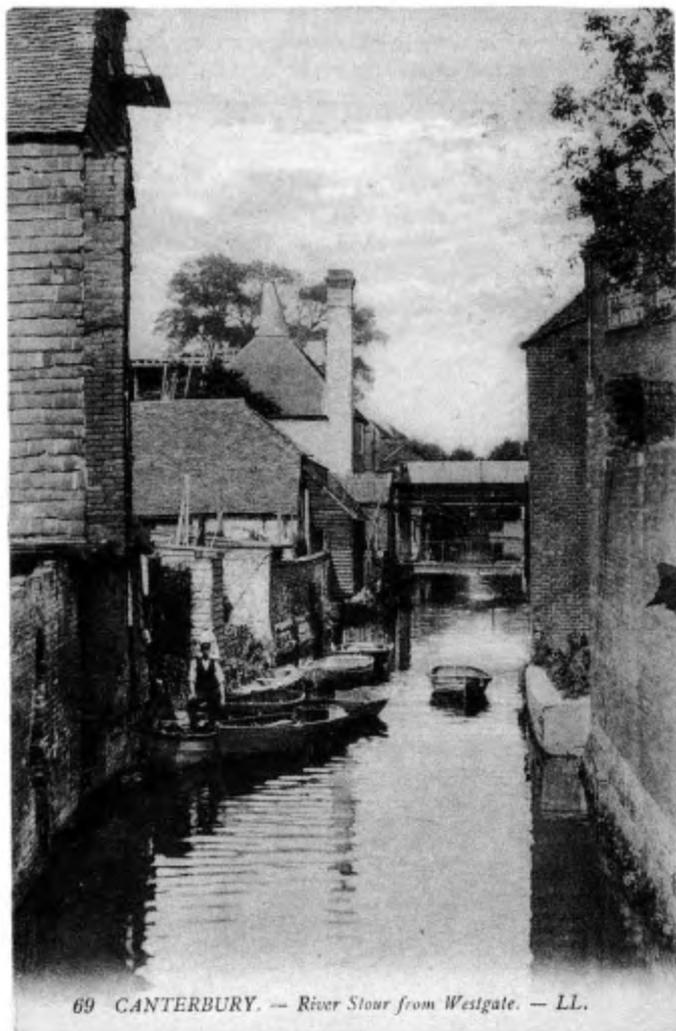


Top right: Detail of rear face of riverside wall with ashlar blockwork capped by brickwork, viewed from the north-west.

Scales: 1 m. and 0.05 m.

Bottom left: Postcard view of c. 1909 from the south-west.

Bottom right: Postcard view of c. 1920s from the south-west.



7 Longmarket

by Jonathan Rady -



▲ A

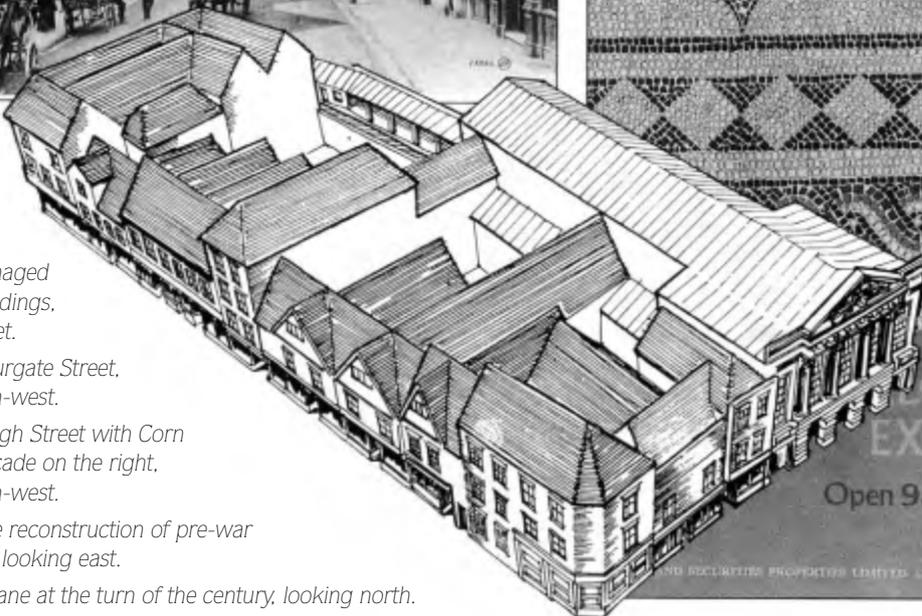


▲ B

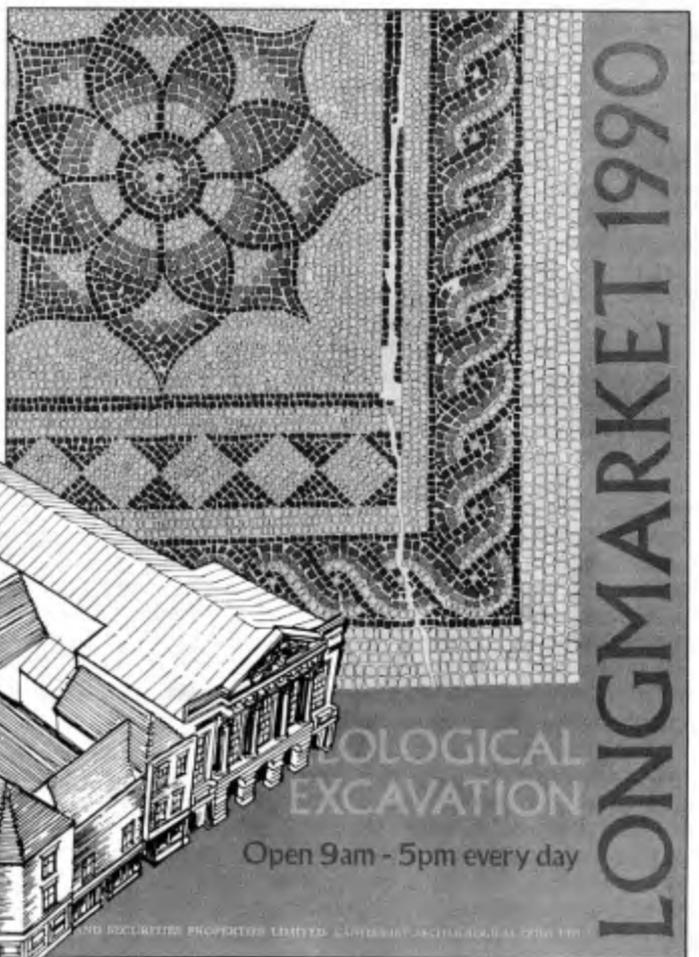


▲ C

D ▶



▲ E



A Bomb-damaged medieval buildings, Burgate Street.

B Pre-war Burgate Street, looking north-west.

C Pre-war High Street with Corn Exchange facade on the right, looking north-west.

D Perspective reconstruction of pre-war Longmarket, looking east.

E Butchery Lane at the turn of the century, looking north.

EXCAVATIONS: CANTERBURY SITES

On 5th April 1990 the excavation of a large site at the Long market in the centre of Canterbury commenced prior to a major redevelopment. The site of the Longmarket lies immediately south of the cathedral precincts and is bounded by three ancient road frontages - Burgate (to the north), Butchery Lane (to the west) and the Parade (to the south).

In 1942 the area was fire-bombed during an air-raid and virtually all the medieval and post-medieval properties on the Longmarket site were destroyed or damaged beyond repair. After the clearance of bomb damage (which included the emptying of the cellars on all three frontages) smallscale archaeological excavations were carried out between 1944 and 1948.¹⁰ These excavations, some of the first in Canterbury and the first post-war urban excavations in the country, were mainly concerned with the investigation of Roman levels. One of their more important findings was the location of parts of a large Roman masonry building containing rooms or corridors with tessellated pavements inset with mosaic panels.

In 1955 the site was redeveloped as shops and offices with the incorporation of some of the Roman remains in a basement museum. Upon the termination of the leases to these properties the site, in the ownership of Canterbury City Council, leased to Land Securities PLC, became available for redevelopment. Demolition commenced on 1st February. The demolition contract included measures to protect the Roman Pavement which is a Scheduled Ancient Monument. The protective works, supervised by the Trust, were designed to ensure that the pavement will survive redevelopment processes to become the centrepiece of an enlarged museum to be formed under the new buildings.

The excavation, of six months duration, was entirely funded by the developer, Land Securities PLC, and principally consisted of an area c. 40 x 30 m. situated at the southern end of the site. Most of the northern part of the site, an area known to contain a major Roman street and a number of large cellars, was not excavated. However, in addition to the main excavation area, the cellars along the entire length of Butchery Lane were emptied and excavated to natural brickearth to provide a full profile of the archaeological levels from Burgate to the Parade.

Site clearance with a machine continued until 27th April and entailed the removal of all the post-war cellar backfill and the stripping of all modern building foundations including the 'decapping' of 'frankie' piles which once supported the buildings.

At the time of writing, the Roman deposits are still under excavation. The earliest deposits so far excavated with any degree of completeness are of Anglo-Saxon date. Virtually no post-Roman 'dark earth' levels survived at Longmarket as a consequence of medieval disturbance, particularly pit digging. Although residual Anglo-Saxon pottery of the fifth to eleventh centuries has been recovered from later features, structural remains date from the mid to late Anglo-Saxon periods only, and consist of five sunken-featured timber buildings. Four of these were situated in the eastern part of the site and appear to have respected the position of Roman walls, which were almost certainly standing above ground when the Anglo-Saxon buildings were erected. In addition, it is quite likely that some of these Anglo-Saxon buildings may have re-used the Roman walls as structural elements of their design.

Of the two northernmost structures, only one was fully excavated. This roughly square building (c. 2.4 x 2.2 m.) was set between two parallel Roman walls and probably possessed two main structural posts positioned centrally at the north and south ends. The proximity of the Roman walls to each side of the building suggest that it may have used them as an integral part of the superstructure, a theory supported perhaps by the lack of any evidence for structural timbers on the west side. Three large post-settings and a row of stakes along the eastern side may indicate that the Roman wall here was less substantial or that collapse had taken place during the life of the building. After a period of backfilling, the structure was destroyed by fire. The upper fills contained large quantities of heavily burnt daub with wattle and timber impressions that had obviously collapsed from the superstructure; the edges of the 'cellar' were also scorched. Included within these deposits were a number of loomweights and pottery of ninth- or tenth-century date.

A few metres to the south, two much larger Anglo-Saxon structures survived although both were badly disturbed by later pit-digging and robber-trenching for Roman walls. These two cellared structures, each about 4.5 x 3.0 m., were aligned east-west, separated by and perhaps reusing a Roman wall. The buildings were almost certainly in use at the same time, although at present their dating remains unclear. However, it is probable that one of the structures was an extension to the other since good evidence existed for a connecting doorway. The southern structure, perhaps the earlier, was entirely post-built and similar to other late Anglo-Saxon cellared buildings found in Canterbury, most notably at Adelaide Place in 1980.¹¹ No structural post-settings were obvious in the northern



▲ *The Roman pavement discovered, 1946.*



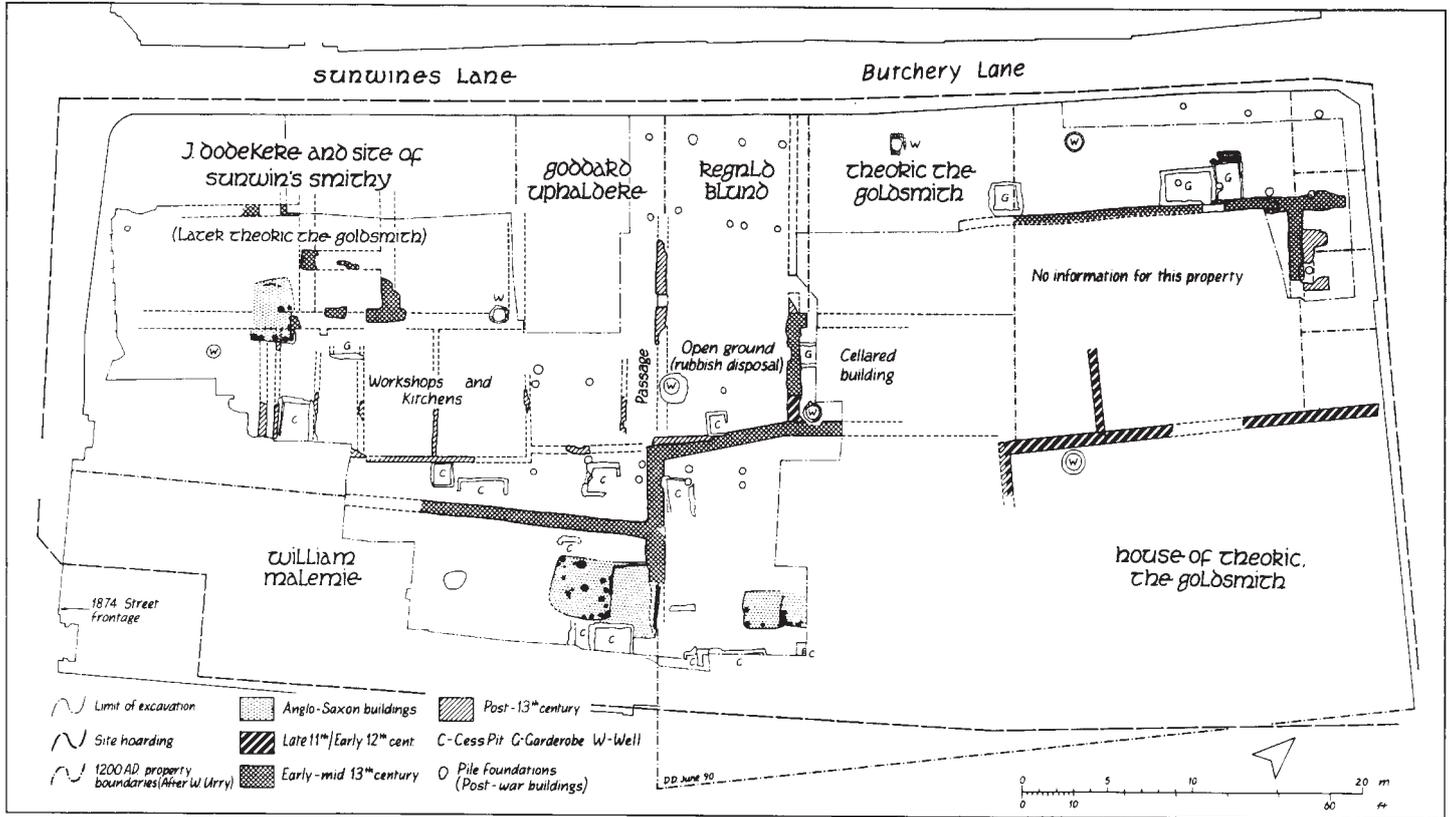
▲ *Longmarket: the post-war development, looking north.*



▲ *Demolition in progress.*



▲ *Excavation in progress.*



▲ Interim phase plan showing excavated medieval walls and Anglo-Saxon structures. Ownership details have been taken from Christ Church Priory rentals of c. 1200 (after Urry).



▲ Loomweights from the demolition backfill of a ninth-century Anglo-Saxon building.

building: its cellar however was well-defined by a continuous sequence of abutting planks set on end in a construction-slot. These had revetted each side of the cellar, and later had rotted in situ. Evidence for the connecting doorway between the two buildings was provided by a gap in the revetting on the south side and two structural post-holes, presumably representing doorjamb, at the terminal ends of the revetment.

One other sunken-featured building was located at the southern end of the site set within the courtyard of the earlier Roman masonry building. This structure (c. 3.6 x 2.6 m.), aligned east-west, was badly disturbed by medieval pits. Only two sides of the structure survived. At the base of these were well-defined post-pits, five at the southern end of the building alone. The western end of the cellared building also appeared to be revetted with planks. The cellar itself was floored in re-used trampled Roman mortar derived from the courtyard make-up of the Roman masonry building. At the time of writing the date of this feature is not known, but it is thought likely to be of ninth- or tenth-century construction.

Various other Anglo-Saxon features, generally of a later date, have also been located, particularly rubbish- or cesspits and wells. Most of these were probably associated with the occupation of the sunken-featured buildings and have yielded large numbers of loomweights (sixty-six from the entire site, twenty-nine of which are late Anglo-Saxon). Quantities of pottery, a ninth-century copper alloy strap-end, two fine late Anglo-Saxon bone combs and various other finds (including beads, keys and pins) have been recovered.

The early medieval phase of occupation on the site, perhaps dating to before c. 1150, is mainly represented by rubbish- and cess-pits. These relate to properties along Butchery Lane (originally Sunwin's Lane) which was probably densely occupied at this time. Traces of domestic structures are scarce, most of the remains having been destroyed by later medieval and post-medieval development, particularly the construction of cellars along the road frontages.

Some of the earliest documentary evidence for the site dates from just after the middle of the twelfth century and is provided by Christ Church Priory rentals. These documents comprise rent rolls and surveys of property held by Christ Church in the city. By the end of the twelfth century Christ Church held between one third and one half of all the domestic property in Canterbury. Using the detailed study of these documents, published by the late William Urry¹², it is possible to locate most of the property boundaries in the Longmarket area at c. 1200. Boundaries established at this time became almost permanent topographical features often defined by masonry walls (see below), many of which survived in this area until 1942.



▲ Ninth-century Anglo-Saxon sunken-featured building.



▲ *Medieval cellar wall, looking north-east.*

The documents also tell us about the sort of people who occupied the site at this time, mainly wealthy and influential citizens as might be expected for an important city centre site close to the cathedral. The most important resident was Theoric or Terric the Goldsmith, first mentioned in documents in about 1180, and according to Urry 'one of the great men of the city in the last years of the century'.¹³ He employed journeymen, set up a Royal Exchange and acted as an agent for King Richard and King John and was for a time Borough Reeve. By c. 1200 he and his family occupied a large stone house, traces of which were located in the northeast corner of the site in 1946.¹⁴ Theoric also occupied two other properties on the site, one against Butchery Lane and another extensive property in the southwest corner of the site once occupied by Sunwin's smithy. Much of the excavated area was covered with medieval and postmedieval buildings, some of the earliest dating from the early thirteenth century. At present the dating evidence has not been studied in sufficient detail to allow an attempt to correlate excavated buildings and documented property holders. After all the material evidence has been studied, dated and phased it may just be possible to tentatively draw links between the documents and the archaeology.

However, a large masonry celled building, partially excavated in the centre of the site, may have been of early thirteenth-century date. This structure, set to the rear of Theoric's property on Butchery Lane and connecting with the large holding behind his stone house, was very well constructed out of finely carved chalk blocks. Unfortunately no internal details of this building could be examined. The east wall had been totally rebuilt in the later thirteenth century and perhaps at the same time the entire south-western corner was reconstructed when part of the cellar was turned into a large cess-tank. The latter operation had removed all traces of the original floor levels.

One other structure, located on the site of Sunwin's smithy, may also be of early thirteenth-century date. This large (perhaps undercrofted) building, approximately c. 25 x 13 m., was almost totally destroyed by later cellars, but its position and some aspects of its layout can be deduced by the remains of its footings preserved under later cellar floors. No floor levels relating to the structure survived, and only one short section of original masonry of coursed flintwork remained, sandwiched between two later cellar walls. In the extreme south-east corner of the property block, a fragment of a doorjamb possibly belonging to this stone house was found fossilized within a modern cellar wall. The position of the jamb, at basement level, indicates that part of this building at least was celled. A number of equally spaced square footings in this area may represent the position of piers supporting the arched roof of the cellars. Similar pier base footings were located in the vicinity in 1946.¹⁵

A prolific number of twelfth- and thirteenth-century rubbish- and cesspits was dug to the rear of these early properties, a practice which continued right up to the seventeenth century. Whilst the principal use of most of the area to the rear of the road frontage properties seems to have been for rubbish disposal there was also good evidence to suggest the presence of outbuildings and workshops in these areas. Of particular importance were the badly disturbed remains of a building located to the rear of a property fronting onto Burgate occupied by Theoric the Goldsmith in c. 1200. An extensive deposit of burnt clay flooring, together with traces of ovens and furnaces as well as metalworking debris including many ceramic crucible fragments, strongly suggest the presence of a metalworking workshop. It is tempting to postulate that this may have belonged to Theoric himself.

At some time in the mid-thirteenth century large-scale redevelopment of the site took place. This involved a clearance and levelling of the area, with



▲ *Threshold and door-jamb of a medieval cellar, looking north.*



Top: General view of the medieval levels, looking north-west. Below left: Masonry-lined cess tank. Below right: Timber base of a medieval well. Scales: 1.00 m.

EXCAVATIONS: CANTERBURY SITES

the consequent loss of much of the earlier medieval and later AngloSaxon deposits, and the construction of a large number of substantial masonry walls, with deep gravel and chalk footings. Some of these were boundary walls following the line of earlier property divisions, which divided the site along its north/south axis.

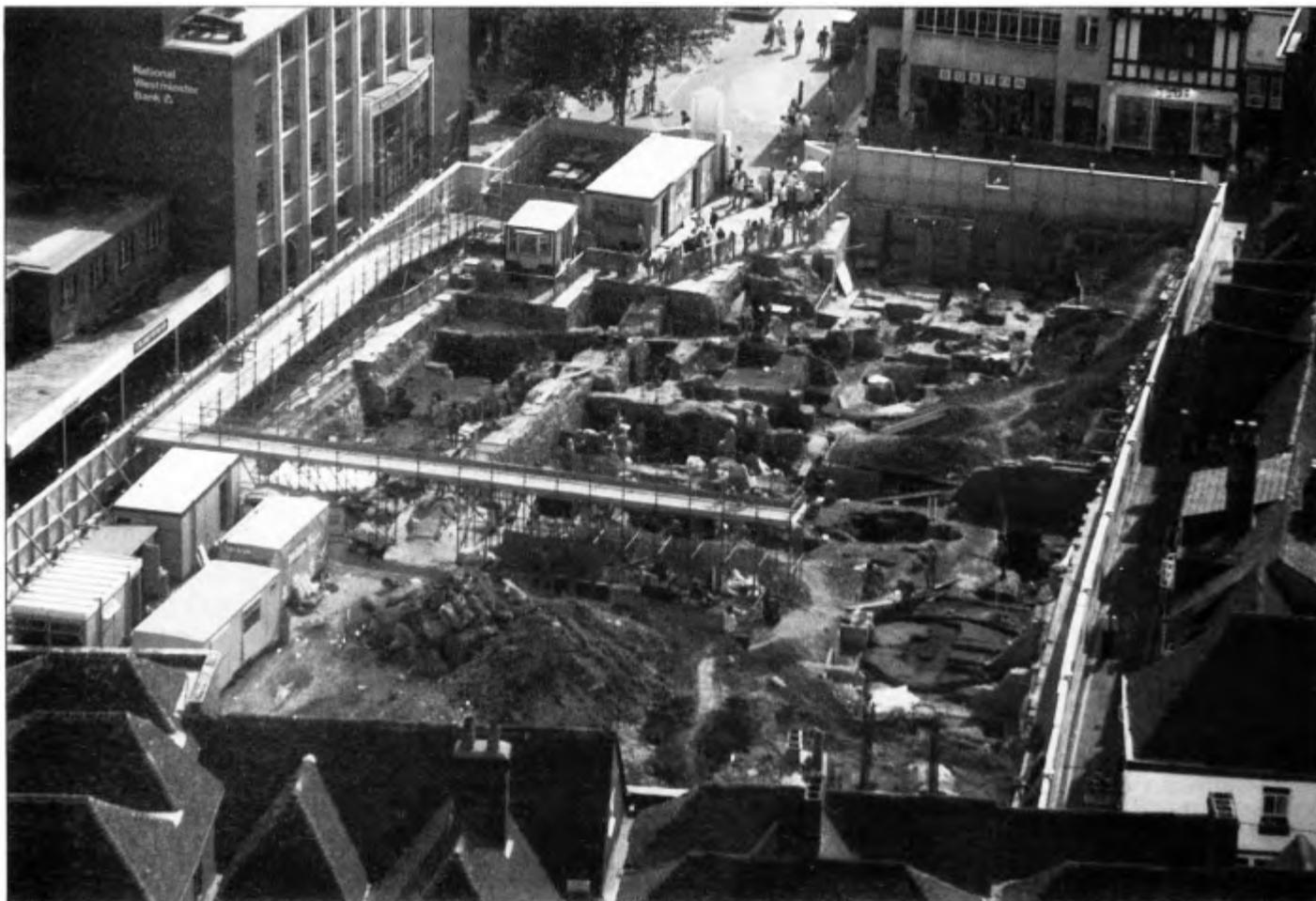
The properties along Butchery Lane and Burgate appear to have been rebuilt at this time, many of them with cellars. Although much of the superstructure of these buildings would have been of timber, the cellar walls were of masonry, mainly constructed in chalk and flint. Fragmentary traces of the rear walls were found re-used in post-medieval cellars and included such details as doors, windows and chimney-stack bases. The presence of these cellars or undercrofts imply well-constructed and substantial timber-framed buildings above. Prosperity is also reflected in the quality of the recovered finds particularly pottery from cess- and rubbish-pits to the rear of the properties. Thousands of sherds and many complete or restorable vessels have been recovered. More importantly these often represent quality tableware, including highly decorated jugs from London, the Rhineland, southern France, Spain, North Africa and the Middle East.

In the fourteenth or early fifteenth century a range of timber buildings was constructed against the east wall of the masonry house. On the site of Sunwin's smithy, in an area previously gardens to the rear of the road frontage properties. These structures extended north into the rear of the adjacent property and covered an area of c. 35 x c. 8 m. of which a 24 m. length was examined. The buildings were erected off masonry dwarf walls, and were undoubtedly kitchens or workshops. An extremely complex sequence of clay floors and dump levels c. 1.5 m. thick in places survived to within 30 cm. of modern ground surface in this area, although heavily disturbed by later intrusions. The excavated stratigraphy revealed a constantly shifting pattern of occupation, which continued uninterrupted until the early seventeenth century. Four rooms were examined, as well as a passage at the north end of the range. The earliest floor levels had slumped sometimes by as much as 1 m. into underlying cess-pits. The presence of such soft ground required constant re-levelling, generally by the deposition of thick dumps of clay, and to the south the possible rebuilding of the superstructure. Virtually all of the rooms possessed tile-on-edge hearths, or ovens, which were replaced quite frequently, usually in different positions, as new floors were laid. In the southern room a fragment of a large stone fireplace, erected against the masonry building to the west, was located.

Cess- and rubbish-pits and at least three stonelined cess tanks were located in the small strip of gardens remaining to the rear of these properties. A large number of other pits, cess-tanks and wells of the later medieval period were also excavated across the site.

Apart from evidence for the deepening of extant cellars along Butchery Lane in the mid fifteenth century, the next major phase of development probably occurred from the mid seventeenth century. Most of the cellar walls, and probably much of the above-ground superstructure of the Butchery Lane properties, were rebuilt in brick during the post-medieval period. Occasionally fragments of earlier medieval cellar walls were reused. Numerous features relating to these cellars, such as dividing walls, post-holes for internal structures and stone garderobes, were recorded. To the south, the post-war museum basement and related groundworks had totally removed all evidence for the earlier cellars and their associated range of road frontage buildings. Parts of the timber range to the rear undoubtedly survived however, although all levels post-dating c. 1650 have been lost to modern disturbance. Some of the structures shown in this position on the 1874 Ordnance Survey map of Canterbury may well have retained elements of the medieval properties. In c. 1825, these were abutted by the new Corn Exchange and Longmarket building which extended from the Parade to Burgate on the east side of the site. No levels relating to this building survived, but its massive brick and rubble concrete footings were located, and remained a visible feature throughout the excavation.

The full importance of the Longmarket excavation will only be apparent after many months of post-excavation work has taken place. However even at this early stage, it is clear that apart from the Roman levels the site has yielded a long and intense occupation sequence, dating from the mid to late Anglo-Saxon period to the middle of the seventeenth century. The many thousands of excavated contexts have yielded a large corpus of finds, including some exceptional groups of pottery representing perhaps the most important early medieval and medieval ceramic assemblages yet excavated in Canterbury. The quantity of potential environmental evidence recovered from the hundreds of cess-pits, cess-tanks and rubbish-pits, spanning many centuries, will hopefully provide data for diet, butchery and livestock practices, and eventually illustrate the lifestyle and health of the former occupants of the site. This information, allied with documentary evidence, should present us with a comprehensive picture of life on this important city centre site.



▲ General view of the Longmarket excavation from Bell Harry Tower, Canterbury Cathedral, looking south-west.

8 St John's Hospital and St John's Nursery

by Paul Bennett



▲ Aerial view showing the St Gregory's Priory excavation and St John's Hospital on the opposite side of Northgate street, looking north-east.

Shortly after his arrival in this country from Bec in Normandy, the first Norman archbishop, Lanfranc, inaugurated a massive building campaign at Canterbury. Besides the rebuilding of the Anglo-Saxon cathedral, destroyed by fire in 1067, and the construction of a palace for archbishops north-west of the cathedral, Lanfranc founded two important institutions outside the north gate of the city. The first of these, St Gregory's Priory, is the subject of a separate section in this report. The second, situated on the opposite side of Northgate street, was the Hospital of St John the Baptist, constructed in 1084-5 to house thirty men and thirty women.

Unlike St Gregory's Priory, which was dissolved by Henry VIII in 1537 and subsequently largely taken down, St John's Hospital survived the conflicts of church and state in the mid sixteenth century to be rebuilt in 1684 and again in the nineteenth century. The hospital survives today, still in the patronage of the Archbishop. With a continuous history of occupation extending back to its original foundation, it is one of the oldest institutions of its kind in the country.

Passing through the sixteenth-century timber-framed gateway of the hospital from the noise of Northgate street, visitors enter a relative haven of peace. To the right of the gateway are small jettied timber-framed buildings, surviving cottages from the first phase of hospital reconstruction in the seventeenth century. The inner courtyard, with beautifully maintained gardens, is flanked to the south by nineteenth-century cottages and to the north by a small chapel which once formed part (probably part of only one aisle) of a much larger and grander double chapel built by Lanfranc. The south-west corner of the courtyard contains a remnant of the southern part of the Great Dormitory (west wall), with original door, incorporated into the hall of the present hospital. The rear western wall of this structure also contains part of the east wall of a necessarium, a separate building once located to the rear of the dormitory. To the rear of the hospital, hidden behind the chapel and other cottages, is a substantial part of the northern end of the dormitory (when built it was over 200 ft long), with intact door (still with its 900 year old timber lintel) and spiral stair and behind it a second necessarium. This structure, which continued in use as a privy until 1948 stands to eaves height, with half the original building still retaining a (later) roof.

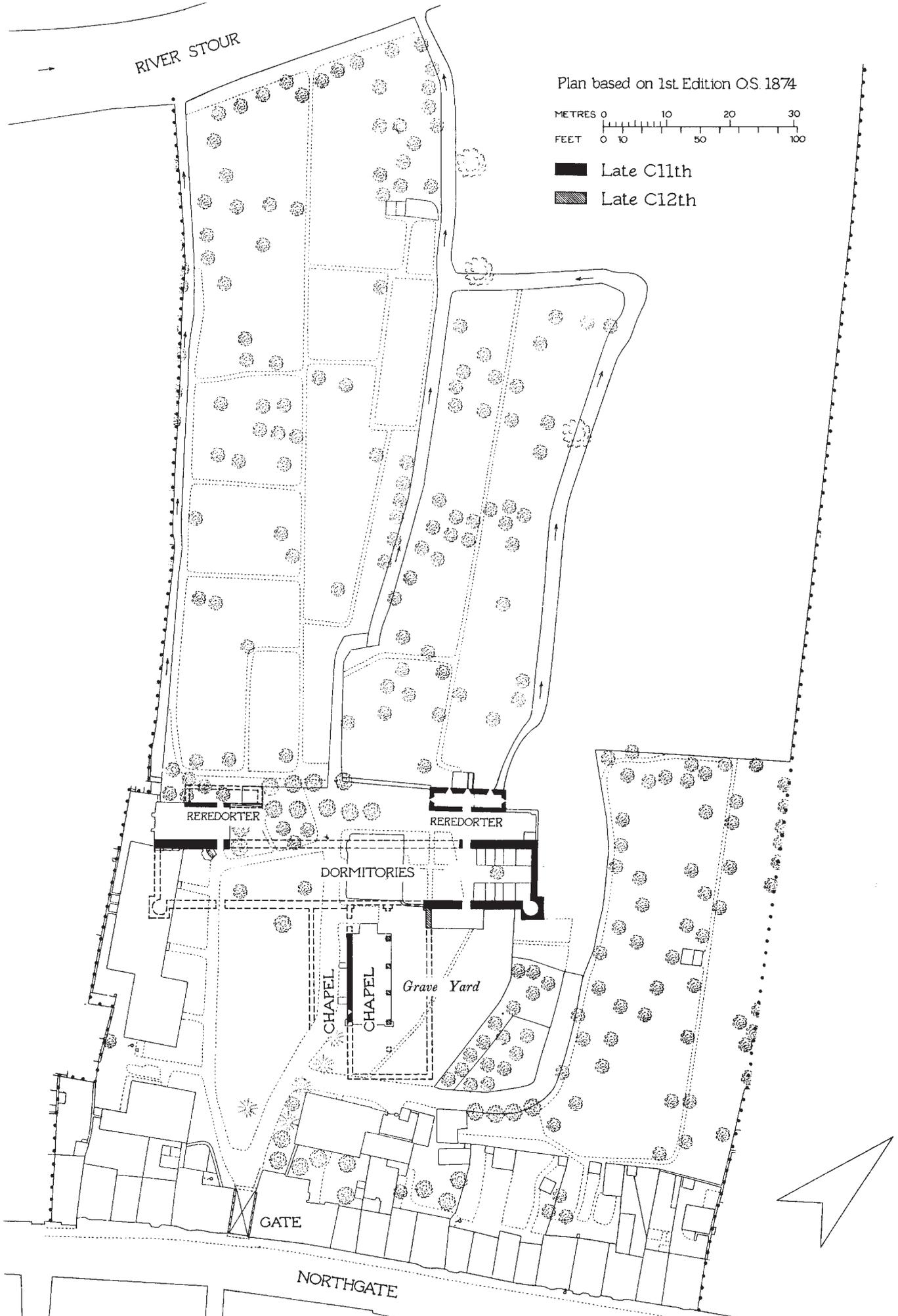
This unique collection of early Norman buildings has for many years been largely neglected. Lean-to sheds were built up against them and in more recent years they have been hidden beneath a thick mantle of ivy. When an investigation of the ruins was first made in 1983 they were found to be in a parlous condition and heavily overgrown with vegetation. Unsightly sheds and garages encumbered them on the outside as well as rubbish and compost heaps and an Anderson shelter. The northern privy, completely obscured by ivy, then housed two garden sheds; its uncovered northern end was a bottle and rubbish dump. Clearance work undertaken by the Trust at that time¹⁶ and a brief survey carried out early in the following year¹⁷ showed that the privy still had elements of its medieval roof as well as its late eleventh-century windows with wooden lintels and parts of the seating for the floor above the original drain. This drain, which still has its four original round-headed arches on the north-west, ran into the river Stour, and was perhaps originally flushed by rainwater from the dormitory roof. Channels for both privy buildings and a centrally-located channel (perhaps indicating the presence of a 'lost' building, set between and to the rear of the privy buildings), survived until the late nineteenth century and are shown on the 1874 Ordnance Survey 1:500 map of Canterbury.

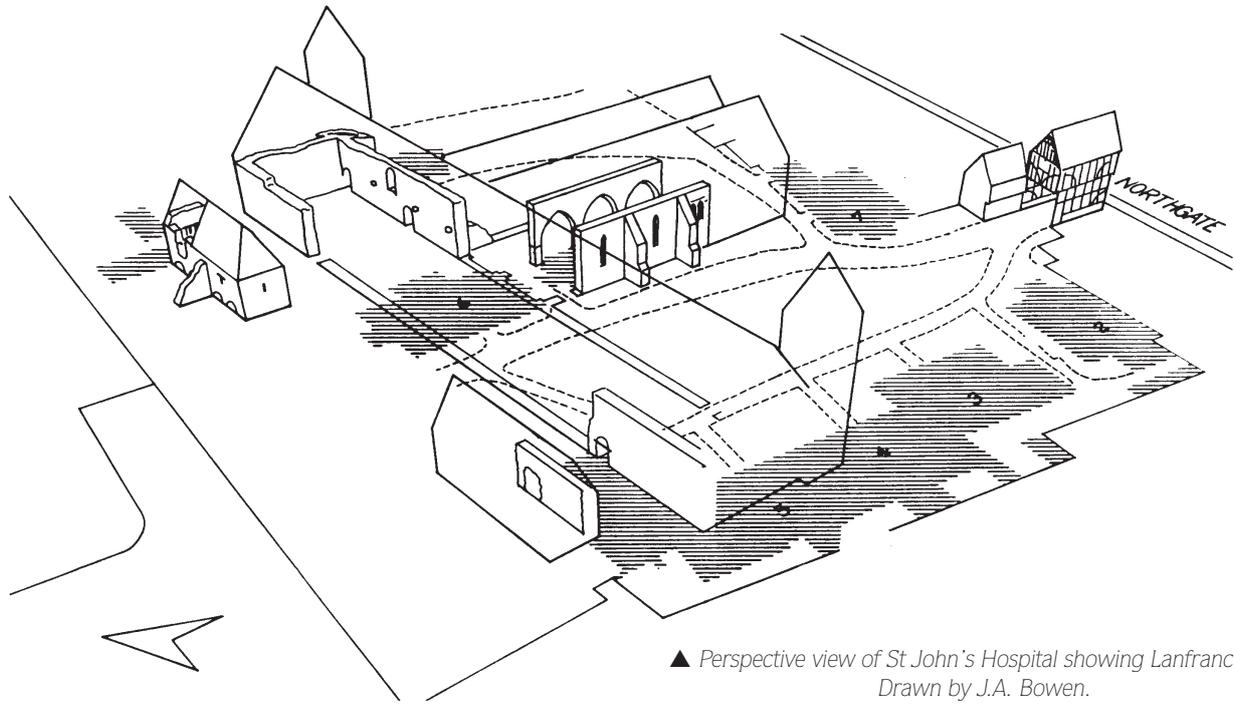
Since 1984 schemes to undertake consolidation and repair to these very special buildings have been discussed, but no action taken. The storms of October 1987 and January 1990 have considerably damaged the roof of the existing northern privy and many flints and sandstone boulders have fallen from the dormitory ruins; ivy is beginning to sprout and cover the buildings once more.

At the time of writing, discussions between the Trustees of the hospital, English Heritage, Canterbury City Council and Kent County Council over recent months have proved fruitful. A campaign for repair has now been commissioned to start in 1991 and in preparation for this, detailed drawings of surviving fabric are currently being made by the Trust.

Tempering this note of euphoria however is the sad news of the sale of land in the ownership of the hospital, to the west of the privy buildings. This tract of ground, formerly St John's Nursery and part of the original foundation which until early 1990 retained its original north

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▲ Perspective view of St John's Hospital showing Lanfranc fabric.
 Drawn by J.A. Bowen.

and south boundaries, with the river Stour on its western side, was sold to Canterbury City Council for use as a new car park. For the first time in the long 900 year history of the hospital the integrity of the Lanfranc foundation has finally been lost.

The northern third of the precinct was built over to extend the existing Sainsbury's car park southwards in January this year. Land purchase, the granting of planning permission and the commencement of car park construction occurred rapidly and it was not possible to precede the development with any form of archaeological investigation. A watching brief was maintained during the removal of topsoil and a well-defined medieval horizon was identified together with the fragmentary traces of a masonry wall of medieval build in the north-west corner of the precinct.

Canterbury City Council agreed to fund an episode of archaeological prospection across the remaining site area, in order to determine a nondestructive formation horizon for car park construction. Monitoring of test pits cut by the City Council was undertaken by the Trust in March this year. The pits revealed stratified deposits extending below recent topsoil for a depth of approximately 1.2 m. to the level of natural gravel. The lowest deposits encountered in a number of these pits comprised distinct layers of water-borne silt containing peat and other organic residues, including grasses and preserved brushwood. The lowest horizon, over gravel, yielded sherds of Roman and Late Iron Age pottery indicating a long period of occupation close to the flood plain. The uppermost deposits, of loam mixed with occupation debris (much of this matrix was perhaps dumped to counteract a rising water table) related to the use of the area probably as gardens and orchard during the life of the hospital.

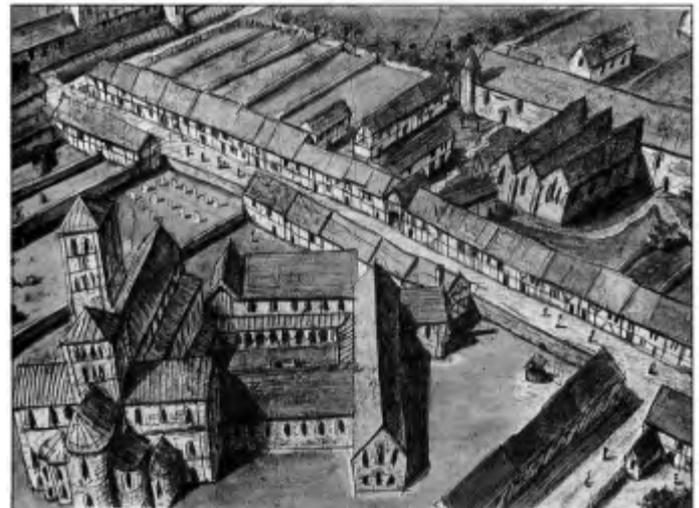
In April this year a number of evaluation trenches were cut across the blighted area to examine these deposits in a more systematic manner and provide sufficient data for City Council engineers to construct the car park without materially damaging intact archaeological deposits. Many of the trenches were fixed and aligned to cut across drain [eats shown on the 1874 Ordnance Survey. Others were located between the leats, in areas where buildings may have existed. In the event no buildings were discovered in the precinct area.

All three drain [eats were located and cross-sectioned. In most cases these were found to be relatively shallow, but bore traces of a number of phases of construction. Only one trench was cut outside the line of deviation for car park construction, this located immediately west of the hospital, close to the proposed boundary of the car park, a boundary which will be marked by a high brick wall in the completed scheme. Here only topsoil was removed to reveal the uppermost archaeological levels. The trench yielded clear evidence for a masonry building, perhaps a kitchen of Lanfranc date or later, in association with rubbish-pits and at least two wells, one of masonry build and one of timber.

At the time of writing car park construction has begun and new discoveries are being made on a daily basis. A fuller interim report on our activities at St John's Hospital Nursery is therefore planned to appear in next year's Annual Report when the results of the total operation, including the building survey, can be discussed in one integrated paper.



▲ Evaluation trenching in progress, looking north.

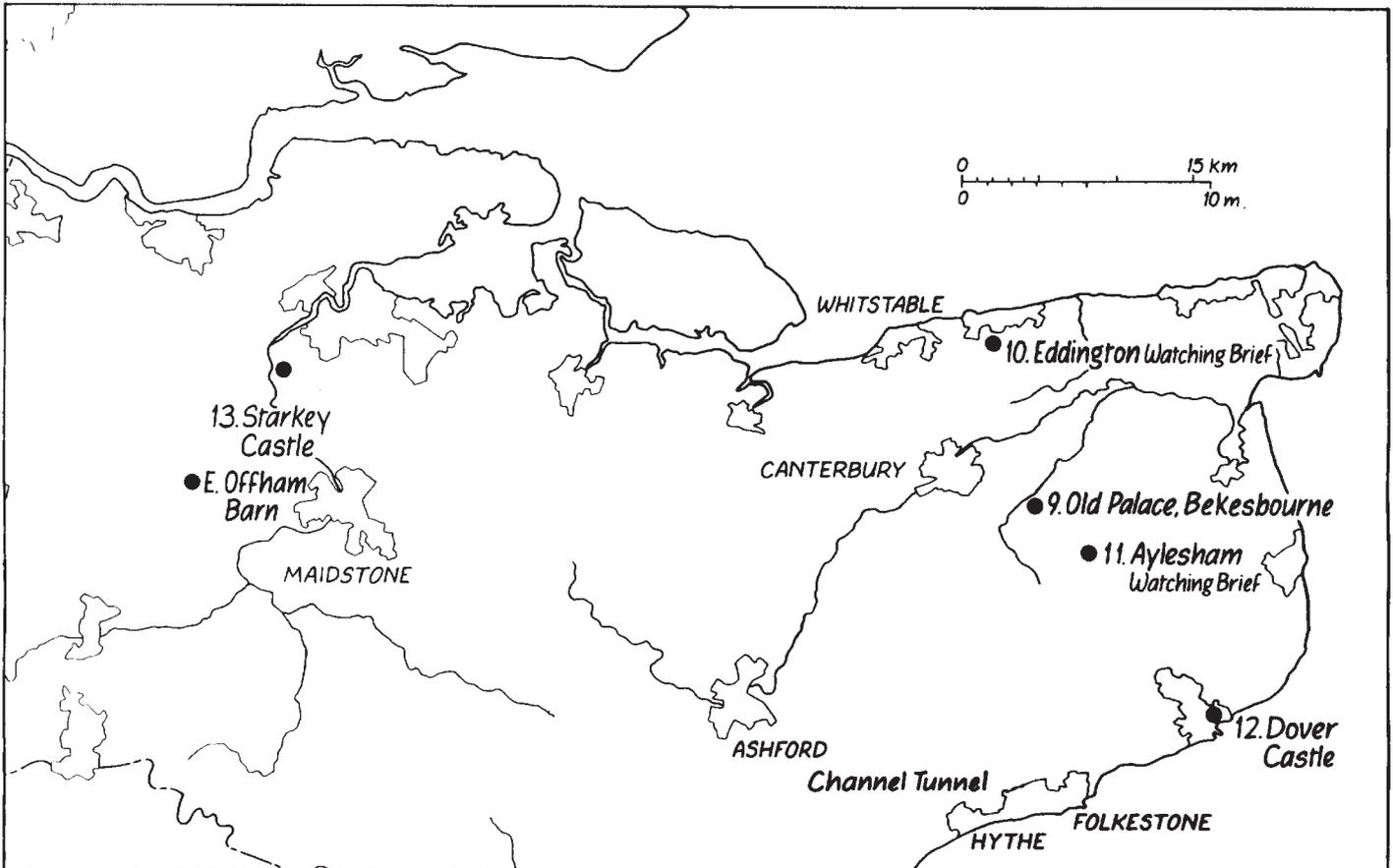


▲ Interim reconstruction drawing showing St Gregory's Priory and St John's Hospital in the early sixteenth century from the east.
 Drawn by J.A. Bowen.

II

EXCAVATIONS

KENT SITES



▲ Excavation and building recording sites discussed in this year's report.

1 The Old Palace, Bekesbourne

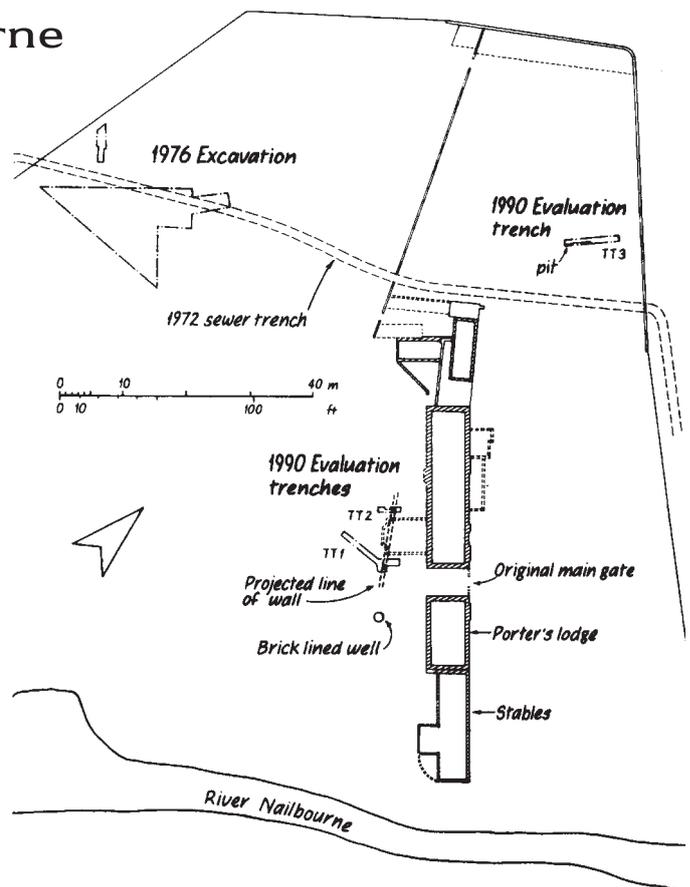
by Tim Allen

Evaluation trenching in advance of the construction of a proposed extension to the rear of the Old Palace, Bekesbourne and a garage at the front and to the north of the building was undertaken by the Trust between 21st March and 5th April 1990.

The excavation took the form of three evaluation-trenches, placed strictly within the areas delineated by plans for new building work. All three evaluation-trenches were taken down to the level of natural subsoil (approximately 1 m. below the existing ground surface). This consisted of gravel underlying a thin covering of nodular frost-fractured chalk. Two of the trenches were situated on either side of and projecting out from the Victorian rear extension of the house. They were so placed in order to glean the maximum amount of archaeological information from the area to be disturbed by construction activity, whilst minimising disturbance to the shallow foundations of the existing building. A third evaluation-trench was cut across the area to be disturbed by footings for the proposed garage.

The building at present called the Old Palace was probably the gatehouse of the palace, built by Archbishop Cranmer some time after 1540. This building, together with the adjacent Porter's Lodge and stable to the south-east and a flintfaced cottage to the north-west, is all that remains of the Tudor palace. The cottage and part of the stable appear to contain some medieval fabric perhaps predating the palace. Excavations undertaken by the Trust in 1976¹⁶ exposed medieval foundations indicating that the palace had been built on the site of a substantial medieval building and may well have incorporated parts of it. Late Iron Age and Roman pottery recovered during this work also indicated the presence of earlier settlement in the vicinity.

The first evaluation-trench (TT1) revealed a large amount of disturbance post-dating the demolition of the main part of the palace in c.



1647. Dating evidence from pot sherds and other material suggested that this occurred as late as the mid nineteenth century. The narrowness of the trench precluded any conclusive interpretation as to the exact nature of this disturbance, but its cutting and subsequent infilling predated the construction of the adjacent rear extension to the palace. The lowest fills of the disturbance yielded a small assemblage of mid to late Iron Age pottery indicating the possibility of pre-'Belgic' Iron Age activity in the vicinity.

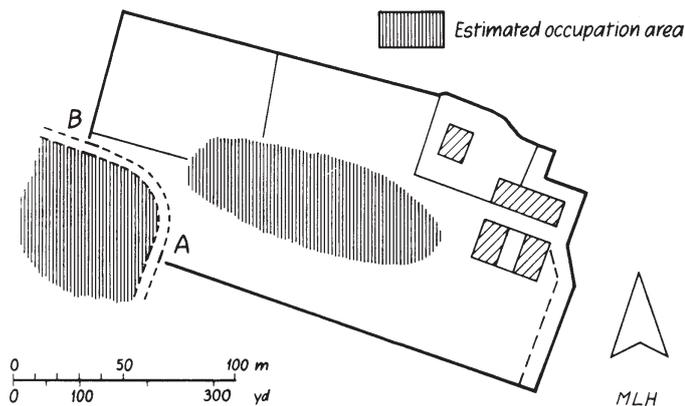
The north-eastern part of TT1 had also been subject to disturbance from a number of drainage pipes and an associated inspection pit. These are still in use, but were presumably laid during the construction of the Victorian extension. Surviving this disturbance, however, was a fragmentary wall of flints bonded with a pale brown powdery mortar. Several of the flints appeared to be facing flints, being aligned and abutted by poured mortar on the south side, whilst to the north and immediately adjacent was a

light orange clay layer, consistent with medieval flooring. Although no associated dating evidence was found, the discovery of another virtually identical flint and mortar wall fragment with accompanying clay floor in the second evaluation trench constitutes evidence for a structure pre-dating the Tudor gate house. If this interpretation is correct then a building or range of buildings may exist roughly at right-angles to those found in 1976, suggesting a much larger predecessor to the palace than was previously considered possible. It must be stressed however, that the restricted size of the evaluation trenches and the very disturbed nature of the archaeological deposits mar a definitive interpretation of the discoveries. Further excavation would be necessary to conclusively prove the existence of a building or range of buildings in this position.

The third evaluation-trench (TT3) revealed only the edge of what appeared to be a post-Tudor rubbish pit at the depth of approximately 1 m. All the layers above this were of modern date.

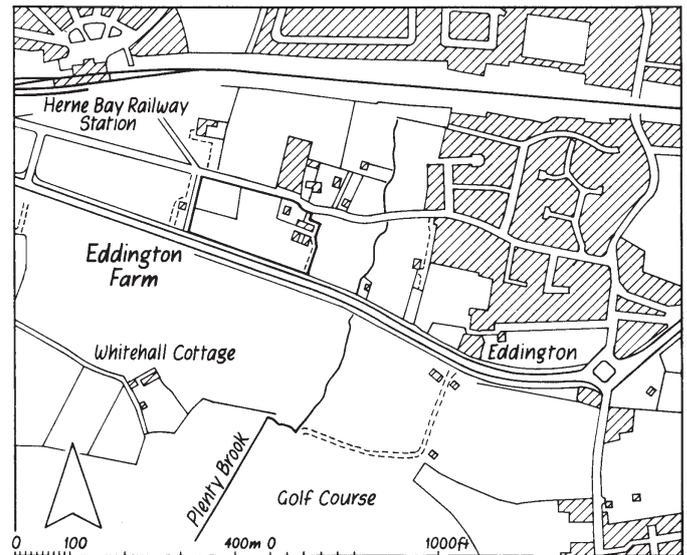
2 Eddington Farm

by Nigel Macpherson-Grant



▲ Detail plan showing postulated habitation areas.

Site location plan. ►



An intermittent watching-brief was maintained in June 1990 by Mr Wes McLachlan during construction of a new Texas Homecare store, on land adjacent to Eddington Farm, a short distance south-east of Herne Bay railway station. A few features were noted in construction-trenches towards the western end of the site (including a pit containing large quantities of burnt daub), but with no opportunity to examine closely. However, initial site levelling and clearance had created machine-cut faces along the southern and western limits of the construction area. Examination of these produced further features and pottery of transitional Late Bronze-Early Iron Age type.

The site lies on gently rising ground just west of Plenty Brook stream. Two main groups of features were noted at the base of the ploughsoil, cutting into underlying London Clay subsoil. Location A produced a c.

1 m. deep ditch running approximately north-south. A further section of ditch was exposed at Location B together with several indeterminate pits or hollows associated with a thin dark occupation horizon flecked with charcoal, burnt daub and pottery scraps. Another badly disturbed pit in the same area contained nearly 100 sherds from a probably in situ large storage jar. Pottery from all features was of the same type: flint-tempered coarse ware rim and body sherds of the period c. 800-600 B.C.

Assessment of these features suggests that the two probable ditch sections at A and B, together with a short slightly curving length noted during earlier machine-work, probably represent one corner of a farmstead enclosure-ditch, which ought to extend to the south (under the Thanet Way) and to the west, where groundwork has already commenced on a further development. This work is currently being monitored.

3 Aylesham Watching Brief

by Mark Davey

From October 1989 until February 1990 an intermittent archaeological watching recording brief was maintained during the laying of a pipeline by the Southern Water Authority in the vicinity of Aylesham and Snowdown. The brief, arranged by the County Archaeologist, was jointly funded by the Southern Water Authority, Kent County Council and Dover District Council.

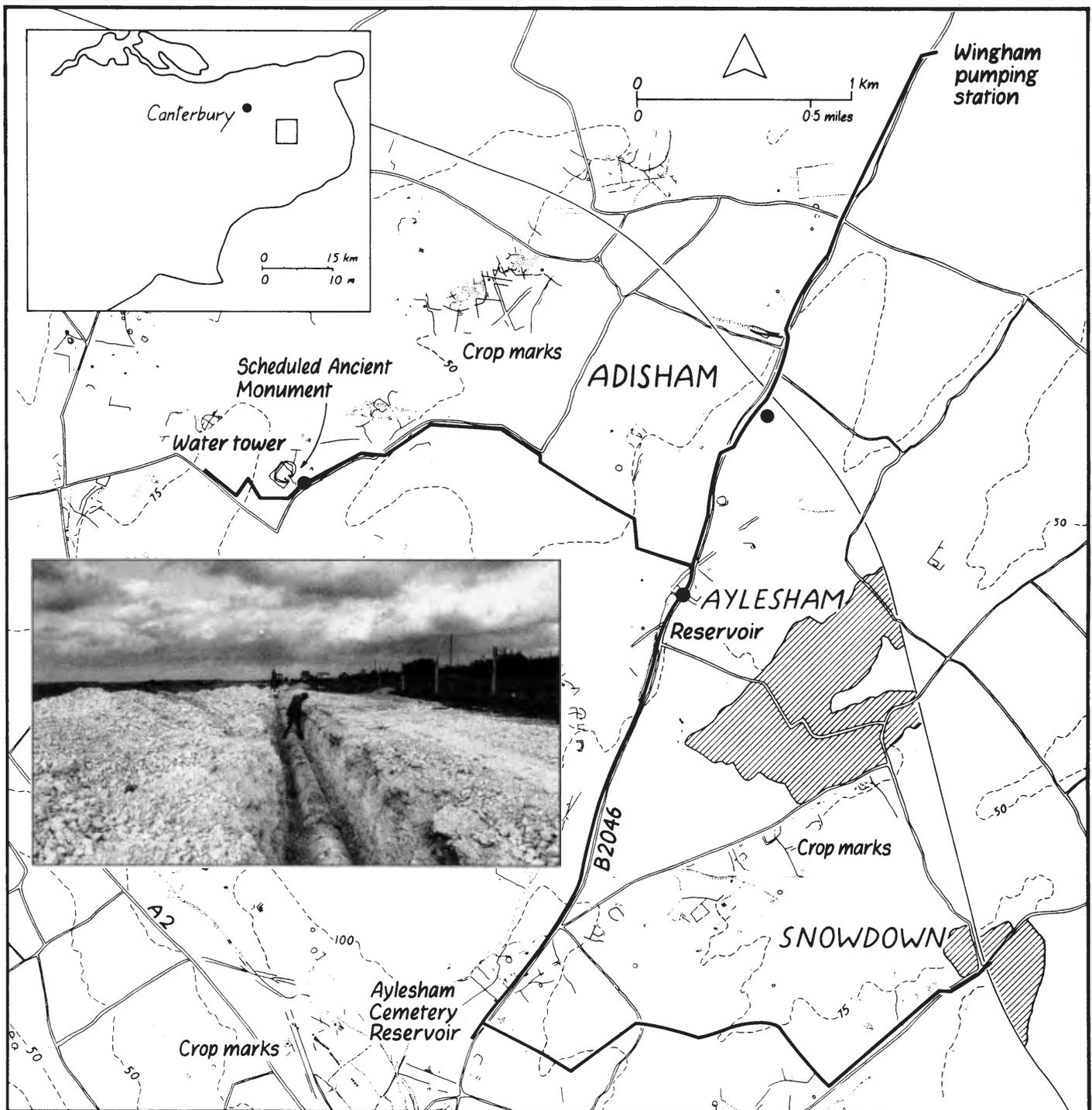
The upper chalk landscape surrounding Aylesham and Snowdown is well known for the prolific number of cropmarks indicating the presence of buried archaeological remains. The brief was organised late in the planning process for the pipeline to enable an evaluation of some of the cropmarks, together with areas devoid of such features. Provision for the archaeological brief post-dated topsoil stripping along most of the pipeline route. This stage of earthwork activity is critical for the identification of archaeological features by differential soil colour and texture and the presence of artefacts. As a consequence the brief was hampered by intractable machine compacted subsoils and previously stockpiled topsoil. Despite this, the entire pipeline route was systematically inspected and had any significant features been in the area of early topsoil strip, they are likely to have been detected. In the final analysis the brief was remarkable for the paucity of archaeological discoveries

despite the complex concentrations of cropmarks in the proximity of sections of the pipeline route.

The new installation, to facilitate an improvement to the pressure of the existing service, involved the laying of a system of pipes from a new reservoir north of Aylesham cemetery along the B2046 to a second new reservoir west of Aylesham at Dorman Avenue North. From this reservoir a trench was cut to connect a further pipeline via Adisham to an existing water tower in nearby woodland. A third pipe-trench was cut along the B2046 to connect the new Aylesham reservoir to an existing pumping station south of Wingham. Trenching for a fourth pipe-run was effected to connect the Aylesham cemetery reservoir to the village of Snowdown. The entire pipeline was approximately 10 km. long.

The geology of this area proved to be surprisingly mixed. The trench connecting Aylesham cemetery to the Wingham pumping station was cut through soft white cretaceous upper chalk, the dominant subsoil of this area. Solution hollows and bands of abundant flint were frequently encountered during trenching. Upper chalk head brickearth and isolated pockets of dry valley and Nailbourne deposits were encountered in the trench west of Aylesham, whilst head brickearth and clay with flints were the dominant subsoils along the greater part of the trench connecting

EXCAVATIONS: KENT SITES



▲ Plan showing the pipeline route with find-spots and cropmarks. Inset photo of watching brief in progress.

Aylesham cemetery reservoir with Snowdown. Isolated pockets of coombe deposits together with outcrops of upper chalk were also encountered. The trench immediately south-west of Snowdown exposed only upper chalk, this interrupted by frequent solution hollows.

A swathe 10 m. wide had been cut through topsoil to the level of subsoil for most of the pipeline from Aylesham cemetery to the Wingham pumping station and from Dorman Avenue North to Adisham, before the watching brief commenced. Approximately half of the length of the Aylesham cemetery to Snowdown route had also been relieved of topsoil at the time of commencement. The remaining topsoil-strip for this route was closely monitored.

Numerous modern features were located during the course of the brief including shallow ditches associated with current and recent hedgerows and field boundaries, particularly in the vicinity of extant farms. Pottery and glass fragments of seventeenth- to twentieth-century date were recovered from spoil heaps along the greater part of the pipe route. This material was undoubtedly introduced into the topsoil as a bi-product of muck spreading over a protracted period of cultivation.

Of more interest and significance was the discovery of a ditch northwest of Aylesham along the B2046. The find-spot coincides with cropmarks indicating a possible early course of the present road together with traces

of field boundary ditches to the east of the early road. Shovel scraping and cleaning of the subsoil and sample excavation of the feature proved it to be aligned north-west to south-east being 1.25 m. wide and 0.35 m. deep. The ditch fill of light brown loam, with quite large amounts of fire fractured flint, yielded pottery of mid thirteenth-century date.

The second significant discovery again alongside the B2046, south-east of Adisham Station, was a concentrated scatter of worked flints of Late Neolithic or Early Bronze Age date. The flints recovered from an area 20 m. square were badly fractured during the topsoil stripping process, and may have been dispersed by the mechanical excavator. No features were located in association with the flint scatter.

A cluster of cropmarks at the western end of the Aylesham reservoir to Adisham water tower pipe-run locates the position of a Scheduled Ancient Monument. A problem with the alignment of the trench at this point led to an encroachment onto land protected by Scheduled Ancient Monument designation. Surface finds of Roman date were recovered from the topsoil mound in this area by representatives of English Heritage, but no archaeological features were detected by them.

The watching brief proved to be remarkable for the paucity of discoveries, in an area well known for cropmarks perhaps indicating multiperiod settlement.

4 Dover Castle

by Paul Bennett, Tim Tatton-Brown and Steve Ouditt



▲ View of Napoleonic barrack block south of the Keep, looking south-west. Fossilized windows and a medieval door can be seen in the east gable.

During spring 1990 the Trust was appointed by English Heritage to monitor building operations in the inner bailey of Dover Castle. This work, undertaken on an intermittent basis over three months, involved a minor excavation below the floor of a Napoleonic barrack block (used as a shop and audio-visual display area) and periodic visits to monitor the cutting of shallow service-trenches across the inner court of the castle.

The first stage of the work was carried out between 12th and 16th March inside the eastern half of the Napoleonic barrack block. This building, located against the southern curtain wall of the inner bailey, just inside the Palace Gate, may occupy the site of an earlier medieval building (Arthur's Lesser Hall) known from documentary and cartographic evidence, including a late sixteenth-century 'bird's eye' view of the castle by John Bereblock.²⁰

At the time of excavation, the barrack block, constructed in c. 1745, was subdivided into two halves. The western half contained the castle's shop; the eastern half housed an audio-visual room. The works were undertaken to increase the size of the shop. The existing sprung ground floor in the audio-visual room was removed and excavation work was considered necessary to create a new floor in that part of the building to coincide with the level of the new shop floor. These alterations also involved the erection of a new partition wall for the shop.

In the event, little excavation proved necessary as in the eastern half of the building the void under the sprung floor provided more than adequate clearance for the construction of a new floor at the level of that in the shop. Removal of the sprung floor by contractors revealed supporting dwarf walls resting on a rough mortar construction surface of mid eighteenth-century date. A centrally-located east-west aligned wall, of rough flint and re-used Caen stone rubble construction, subdivided the eastern part of the barracks into equal halves. Additional supporting walls in brick abutted this foundation at right angles. Although a number of these walls were removed by contractors prior to the commencement of archaeological work, those brick walls adjacent to the external walls remained and their lower levels were examined. The walls were all of mid eighteenth-century date or later. A few finds were recovered from beneath the sprung floor including a number of uniform buttons of the Royal Artillery.

The digging of a construction-trench (0.5 m. wide and 0.5 m. deep) for the new north-south partition wall provided a limited opportunity for archaeological investigation. Beneath the mortar construction horizon

was a cobbled yard cambered from the north wall of the building to a centrally-located drain. The drain, of three courses of hand-made bricks laid on edge, sloped from east to west. The southern part of the cobbled floor had been robbed, leaving only a few isolated cobbles set in a dark brown silty loam which sloped upwards towards the curtain wall. Pottery recovered from this loam dated from 1725-50. Underlying the loam but only partially excavated was a layer of light brown clay loam containing patches of orange clay and flint, chalk, mortar and stone rubble. Pottery dating from 1650-1700 was recovered from this deposit. Traces of a shallow gully, aligned east-west were exposed below the robbing layer. This feature yielding several clay pipe fragments dating from 1640-80, may date the formation of the cobbled surface to the mid seventeenth century and perhaps the Civil War period.

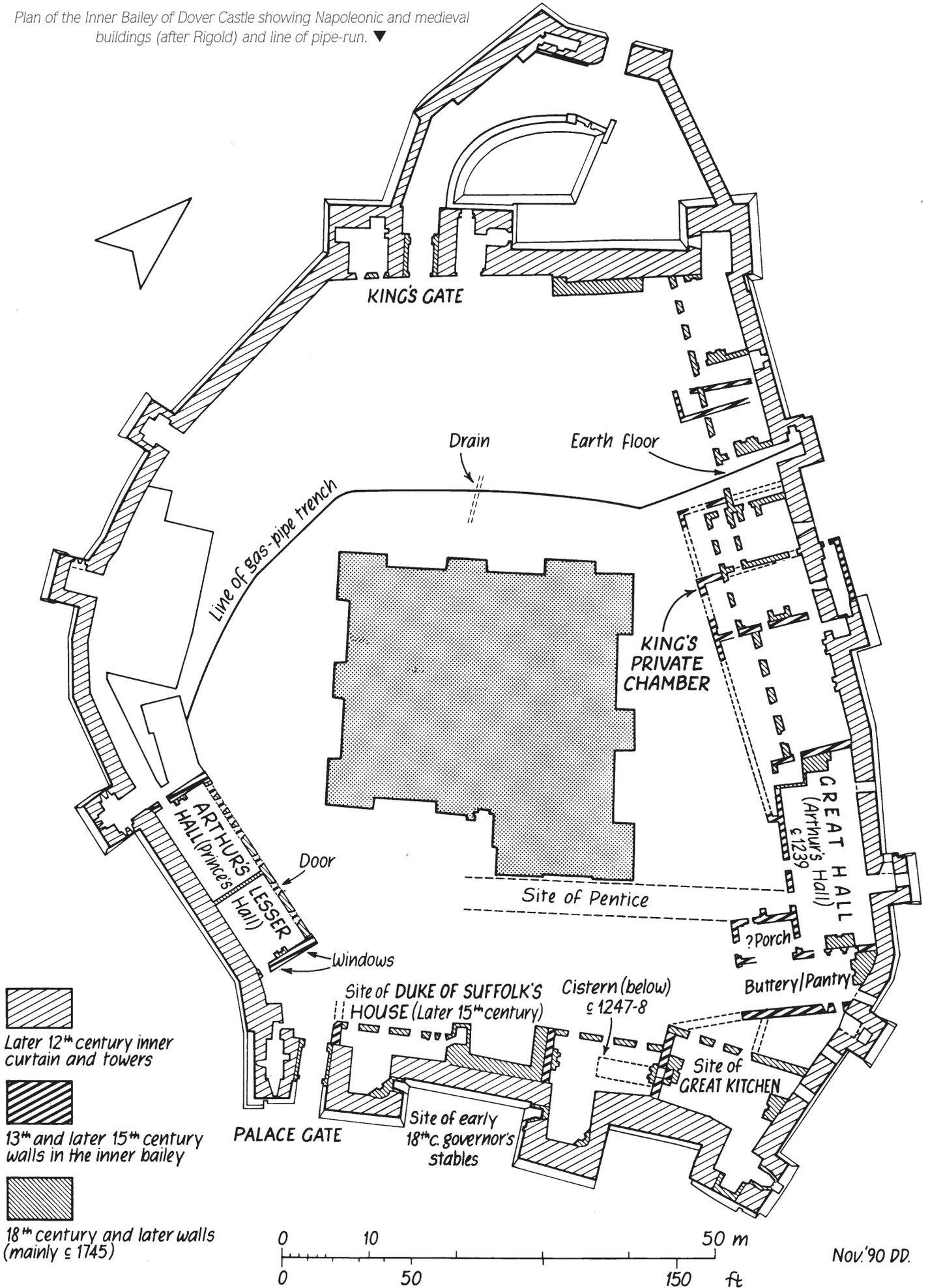
The cambered cobbled surface and centrally-located drain probably represents an earlier phase of building use perhaps as a stable or washhouse. Examination of the northern wall of the building revealed early fabric in Caen stone including a blocked doorway, approximately 5 ft wide, all under a well-defined change of mortar and fabric for barracks construction. The cobbled floor extended through this early doorway, set approximately 50 cm. lower than the current ground surface. Early fabric in Caen and flint was also in evidence at the base of the eastern (internal) wall of the barracks. Here despite the insertion of a large fireplace stack, other relatively recent disturbances and a thick layer of rendering, early masonry appeared to survive to a considerable height. An inspection of the external face indicated that this wall, faced in galleted flint, Caen and greensand blockwork, incorporated two fossilized windows and a door, all of medieval date, defined by Caen stone jambs, blocked during barrack construction. Eighteenth-century rebuilding was also apparent at the upper level of the gable and at the junction of the gable with curtain wall.

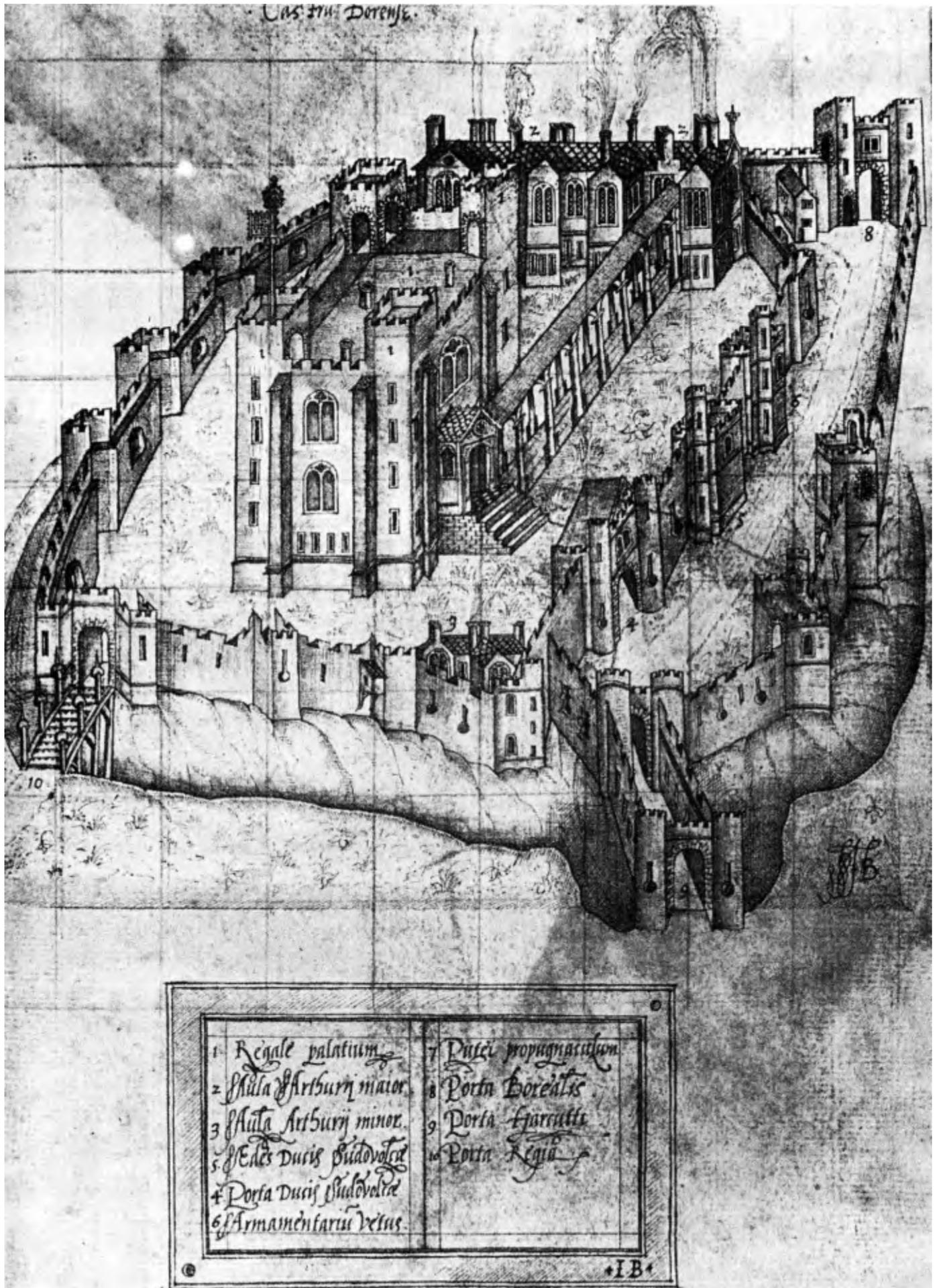
Unfortunately it was not possible to investigate levels below the yard surface or the jambs of the newly-discovered door in the north wall. The door had been infilled with brickwork, bonded in a tough lime mortar to the level of the yard surface, and further investigation was considered unnecessary at this time as early fabric and the lower sequence of archaeological deposits were in no way threatened by the refurbishment scheme.

Despite the minor scale of archaeological activity, the discoveries made as a consequence of the work are significant. There can now be no doubt

EXCAVATIONS: KENT SITES

Plan of the Inner Bailey of Dover Castle showing Napoleonic and medieval buildings (after Rigold) and line of pipe-run. ▼





▲ John Bereblock's view of the Keep and Inner Bailey of Dover Castle from the west (College of Arms. Philpot Collection. MS. P.b.47).

that the foundations of a pre-existing structure were re-used when the barrack block was constructed in the mid eighteenth century. A substantial fragment of this early structure can be seen to survive with fossilized windows and door in the east gable of the barracks. The barracks north wall re-uses, as a footing, a further substantial portion of the early building which includes a contemporary door with Caen stone jambs, located centrally in the eastern half of the building. No opportunity was afforded to examine the doorjamb for reveals or decorative chamfers. Of the western half of the building little can be said, but it appears likely that this too has been built on early work and overall the shape of the barracks may well perpetuate the plan of an earlier medieval building. Prior to barracks construction this building, or at least at the eastern part of it, was perhaps used as a stable block or wash-house, but its build and the presence of well-furbished doors and windows is suggestive of a more prestigious structure, perhaps the building mentioned in documents as *Aula Arturii Minor*.²¹

The presence of early fabric in the east and west walls of the barrack block was first noted in 1967. In 1964 various excavations were undertaken by the late Stuart Rigold and others for the Ministry of Public Buildings and Works, starting first outside the bailey on the south-east.²² During 1967-8 various small-scale trenches were excavated in the inner bailey and along the outer curtain to the west together with an analysis of the development of the inner bailey.²³ Work continued after this (including the stripping out of the lower part of the thirteenth-century Great Hall of the castle, called Arthur's Hall'), but no reports have subsequently been published.

It is clear from work done in the 1960s and the recent excavation and from John Bereblock's sixteenth-century bird's eye view from the southwest that many of the medieval buildings may have survived within the fabric of barracks and other buildings constructed in the Napoleonic period and later. On the basis of observations and excavations made by Rigold and others it is possible to formulate a plan for the inner bailey buildings. Starting on the north there were the king's private chambers (constructed for King John early in the thirteenth century, but rebuilt for Henry III from the 1230s). To the east of these was the Great Hall (called Arthur's Hall from an early date). The hall, completed in 1240, was built on a large scale; its internal dimensions are 73-77 ft long²⁴ by approximately 30 ft wide. At the 'lower' (south-east) end, three service doors have been exposed: these led into a buttery/pantry area, with beyond it in the south-east corner of the inner bailey, the Great Kitchen. Part of the porch of the hall (which probably had an oratory above it) survives just outside the lower end of the hall, and documentary evidence and Bereblock's drawing tell us that a timber pentice ran from beside this porch to the main entrance of the keep.²⁵ Next to the Great Kitchen on the south-west, a large underground cistern still exists (perhaps that newly-built in 1247) and beyond this was the 'Duke of Suffolk's' house and tower (above the Palace Gate), rebuilt in King Edward W's reign (in the 1470s).

Immediately to the west of and just inside the Palace Gate was the building later called 'Arthur's Lesser Hall'.²⁶ This may be the building also called the 'Prince's Hall' which is documented as having new shingles in 1365.²⁷ No other medieval buildings are yet known in the south-west area of the inner bailey.

The intermittent watching brief carried out during the cutting of service trenches across the courtyard north of the keep proved to be less informative although two interesting observations were made. The

trenches, carefully sited to minimise damage to known archaeological deposits, were relatively shallow, cut to a maximum depth of 80 cm. Soils encountered were in the main very disturbed as most of the trenches were cut within the backfills of earlier service runs. The first observation of note was of a stone-lined drain of indeterminate date that may have been associated with an outfall from a garderobe piercing the north-west wall of the keep. The second observation was of a rough earth floor located just within a building on the north-east side of the inner bailey presently housing a boiler room. This floor is likely to be of Napoleonic date.

The recent minor episodes of archaeological activity have proven the validity of incorporating an archaeological brief into even relatively low key new building activity at the castle. It is surprising that at Dover Castle, one of the best known archaeological sites in the country, so little of the development of this great fortress is known or has been published. When the account of Dover Castle in the History of the King's Works, and the fine coloured phased plan was published in 1963²⁸ almost nothing was known about the topography and buildings of the inner bailey of the castle. In that same year the army finally vacated the castle after almost nine centuries and various mid nineteenth century buildings immediately outside the inner bailey to the south-east were demolished the following year. Since the initial investigations of the 1960s, little has been published even though some important excavations have taken place. It is hoped that the recent work, commissioned and funded by English Heritage, will encourage others to publish the results of past excavations and will assist stimulate further episodes of recording and interpretation at the castle.



▲ Detail of the north end of the evaluation trench showing a Napoleonic wall foundation and earlier cobble paving. Looking north. Scale: 2 m.

5 Starkey Castle

by Alan Ward, Richard Cross and Paul Bennett

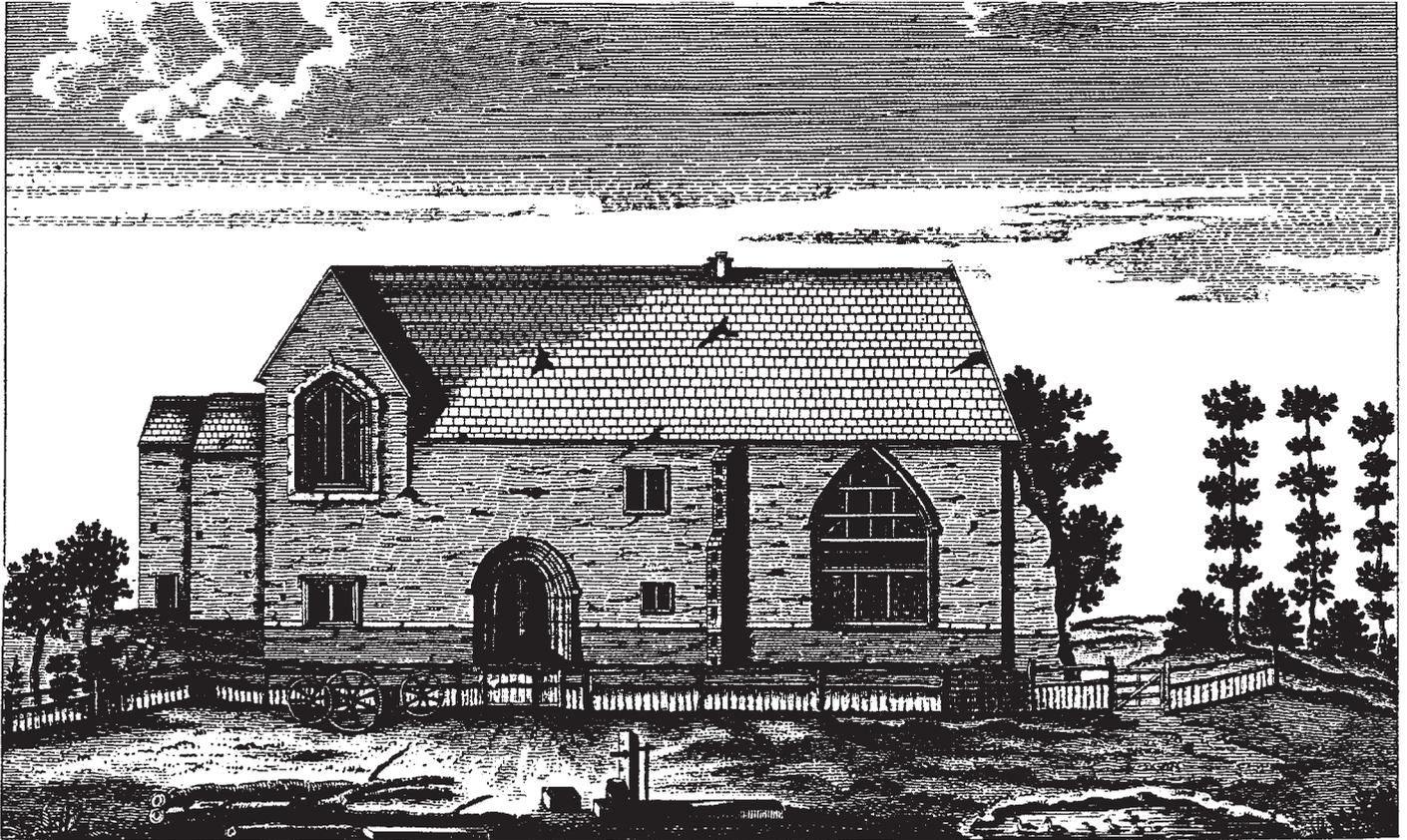
Starkey Castle lies in the parish of Wouldham, east of a wide bend of the river Medway, south-west of Rochester. In the last two weeks of February 1990, prior to a proposed extension to the stone-built manor house, the Trust undertook evaluation trenching at the request of the County Archaeologist Dr John Williams, and the owners of the property, Mr and Mrs Dan Sharpe, who funded the excavation.

The principal objective of this evaluation was to determine whether the proposed northern extension to Starkey could be constructed without materially damaging buried archaeological remains.

The two elements of the site's name combine a personal name undoubtedly derived from a former owner and the probable builder of the existing property, Sir Humphrey Starkey, who was appointed chief baron of the exchequer in 1484; and a descriptive name 'castle' which is a spurious and a relatively recent, probably later eighteenth-century appellation. Although documentary evidence strongly suggests that an earlier manor house dating from at least the early fourteenth century may have been sited here or nearby, there is no material evidence to

support the supposition. Edward Hasted, writing in the 1790s, noted that 'Starkeys' was a manorial holding earlier known as the manor of Lyttlyhall and Wouldham.²⁹ Possession of this estate and farm remained in Humphrey Starkey's hands until his death in the early sixteenth century. Thereafter the estate underwent numerous changes of ownership until its purchase in 1630 by Sir John Marsham. Starkey ('Starkies') Manor and Farm remained part of the Marsham (later Lord Romney of the Mote) estate until its eventual sale along with Rings Farm, in 1807-8.

The standing building comprises a great hall (with inserted first floor) with high end to the north and screens passage and services to the south. A door giving access to a newel stair for a principal first floor chamber over the services exists on the south side of the passage at its west end. A door at the south-west corner of the services gives onto a garderobe wing with privy tower to the south. Two stone corbels set into the exterior north wall of the hall indicate a contemporary building or buildings beyond the hall. A scar and projecting remnant of a wall also exists in the west front exterior of the hall. The presence of this wall



Thompson 1796.

▲ Engraving of 1796 showing the east front of Starkey, looking west.

fragment also supports the assumption that a substantial contemporary range existed to the north of the hall.

In an earlier survey of the building Mr E.R. Swain³⁰ put forward a case for an early manor house of fourteenth-century date existing at Starkey, which had been modified in the fifteenth century to provide accommodation for Humphrey Starkey. His analysis of the evolution of the building was partly based on documentary references and an assumption that many of the more prominent architectural features (windows, doors, corbels, etc) had been inserted into a preexisting structure. However, a superficial analysis of building fabric undertaken during the evaluation appears to show that Starkey was of one-period build and that many of the architectural features are contemporary with the main fabric. Furthermore, most of the distinctive architectural features at Starkey the heavily moulded arch-braced roof resting on decorated corbels; the door-jamb mouldings; the principal windows - all fit well in a later fifteenth-century context and are in accord with a prestigious manor house built from the ground up for a wealthy and important owner.

Previous unpublished excavations in 1983 on the site of the proposed extension revealed, in a series of small trenches, two phases of stone walls. The earliest phase formed a cellared structure over 2 m. deep situated north of the hall. A long narrow trench had been cut which followed the line of a second-phase wall forming the north side of a possible east-west range, but perhaps using an earlier wall as its foundation.

The recent evaluation-trenches concentrated on the area of the proposed extension, which was stripped of turf and topsoil. Two of the 1983 trenches revealed as a consequence of this operation were then reexcavated to expose early foundations.

The long length of wall to the north of the hall was also reexposed. The eastern edge of the evaluation-trench terminated on line with the west wall of the hall and was laid out at right-angles to the hall.

The earliest foundations exposed were for a 7.90 m. wide cellared or undercrofted structure which appeared to extend for the full extent of the trench. The north-west corner of the structure was exposed together with a short section of wall close to the north-east corner of the excavated area. The southern wall of the building was encountered close to its projected south-west corner and adjacent to the existing north-west corner of the hall. These substantial foundations, 1.10-1.40 m. wide, of ragstone and chalk block construction, bonded in a pale-brown sandy mortar, extended to a depth exceeding 3.00 m. below the existing ground surface. Safety precluded deeper excavation, and original floor level was not encountered. The top of the southern wall was located on average 0.25 m. below the existing ground surface. A rebate 0.25 m. wide was found on the inside edge of each of the exposed sections of wall, perhaps designed to support heavy timber joists for a planked floor. The north wall was less well preserved, having been truncated below the level of the postulated joist-supporting ledge, and re-used to raise a new wall on the same line.

Although no evidence was retrieved which would date the cellared structure, it appears likely that it formed part of an east-west range contemporary with the standing building and therefore perhaps built in the late fifteenth century. The cellar walls were at right angles to the existing range. The inside face of the south wall coincided precisely with the line of the hall north wall and the materials, mortar and construction of the cellar compared well with the standing fabric of hall, service and garderobe



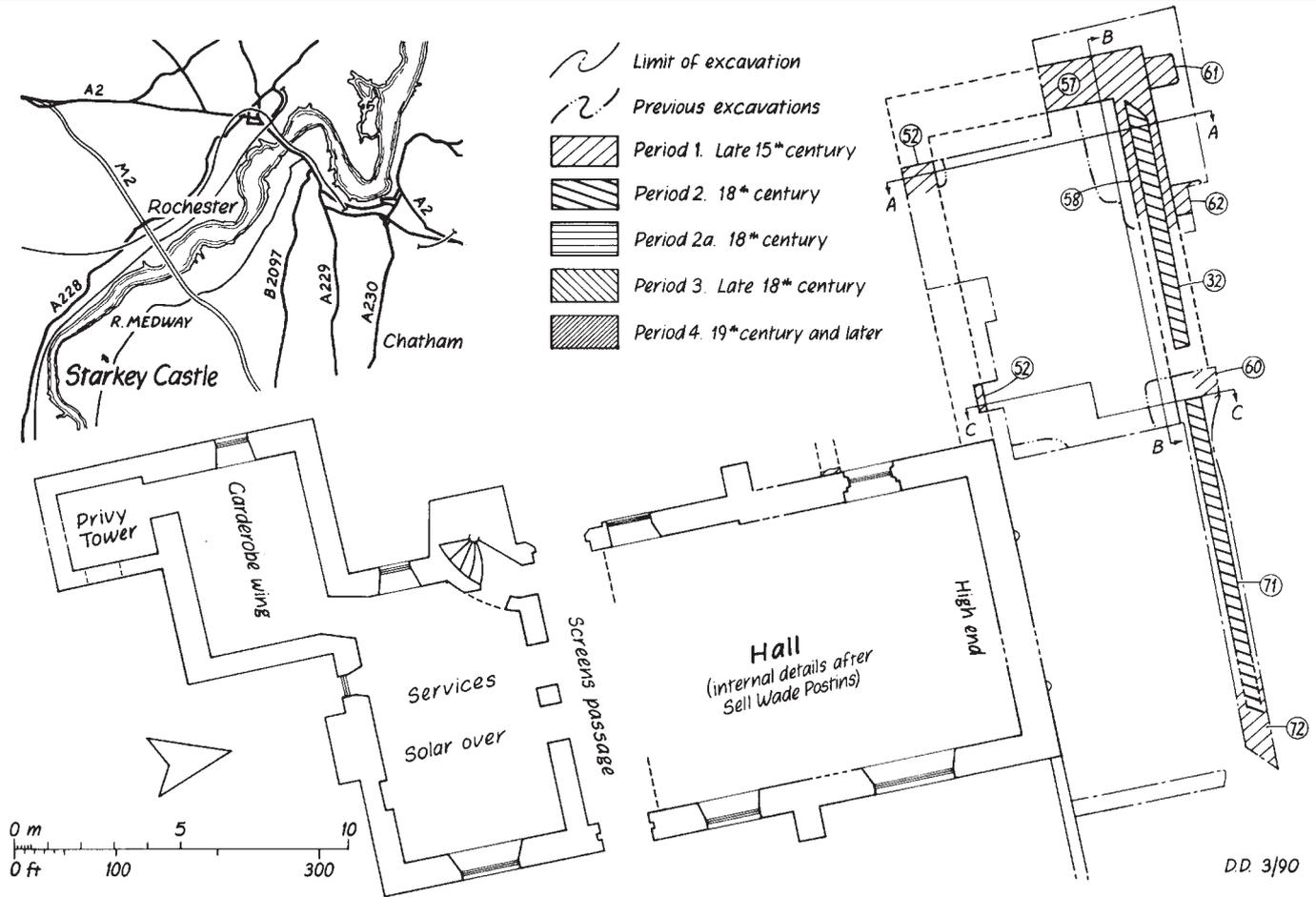
▲ East end of solar roof.



▲ Corbel detail.



▲ North end of the hall roof.



▲ Location plan, general plan showing trenches and exposed foundations with period key.

wing. If the eastern extent of the east-west range terminated just beyond the front of the hall, then the range may have been approximately twice the width of the hall, and overall the proportions of the range fit well with the standing building. Further still, but perhaps more tenuously, if the interpretation for the rebate on the inside face of the cellar wall is correct, then the hall floor and the putative floor over the cellar are likely to have been set at the same level.

No trace of a cross wall on line with the west wall of the hall was located in the excavated area. The lack of a cross wall in this position is curious since the stone corbels fossilised in the exterior of the hall north wall, the presence of a cellar and the proportions of the range all strongly suggest a bipartite division. Without further excavation however this curious anomaly must remain unexplained.

If the interpretation of cellar fabric is correct then an east-west range to Humphrey Starkey's manor house existed beyond the high end of the hall. Present evidence suggests that the range was entirely cellared. The corbels fossilised in the external face of the hall north wall indicate the position of the principal solar floor. The rebate on the inside face of the south wall suggests the presence of a timber 'sprung' floor at ground level covering the cellar. Despite the lack of evidence for a cross wall, it is suggested on the basis of proportions and the above evidence that the range was probably subdivided on line with the hall west wall or slightly to the east of this line. This northern range may have contained the principal ground and first floor apartments of Starkey, with a chapel at ground, or more likely first floor, level.³¹ A chapel occupying a ground floor position or perhaps the entire element, without floors, could indicate that the cellar fulfilled the function of a crypt below the chapel, but this is considered unlikely. Extending the hypothesis further, the curious scar and wall fragment projecting forward of the hall west wall may have formed part of a stair-tower giving separate access to the first floor of the east-west range and perhaps to the cellar.

Two chalk block and stone foundations outside and close to the north-west corner of the range appear to be for buttresses. These 1 m. wide foundations projecting approximately 0.90 m. beyond the north wall, may have been bonded with the north wall to form a primary construction detail. Others may exist to the east of these in a similar position and perhaps with the same spacing. They may indeed reflect bay divisions within the range.

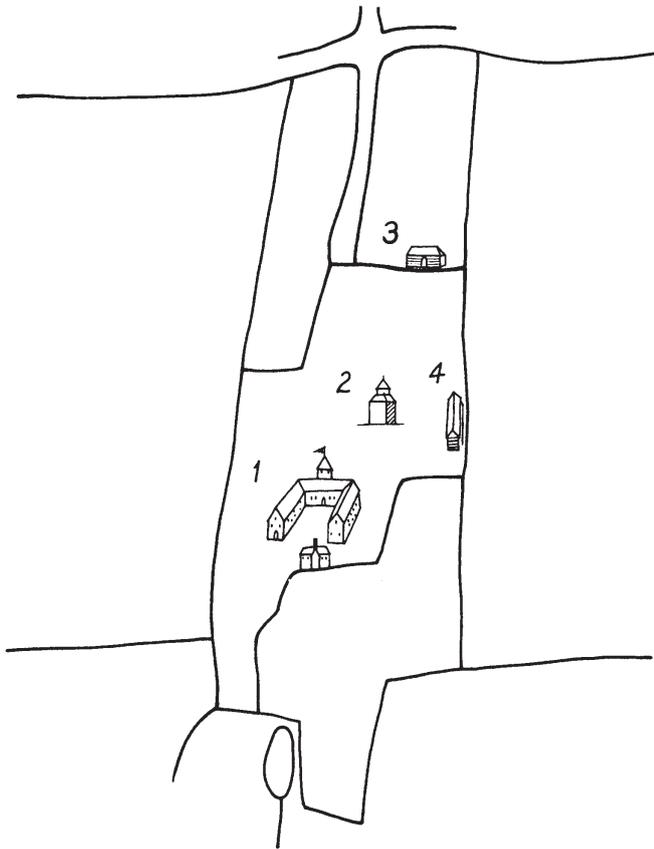
The presence of a chapel is attested by John Harris³² writing in the early eighteenth century and by Edward Hasted who describes Starkeys

as a 'good house ... being a large strong edifice of stone though much larger formerly than at present together with a handsome chapel.'³³ John Nichols, from personal observation in the 1750s, noted that a large portion of the chapel was extant at the east angle of the house with 'one of the side windows with its mitred or pointed arch.' This description is accompanied by an engraving dated 1769.³⁴ Another engraving by Stockdale³⁵ dated c. 1810, is less informative, as is a copy of a undated watercolour in the possession of the present owner of Starkey.³⁶

Two estate maps provide supportive evidence for the range, and chart substantial changes taking place in the eighteenth century. The first, dating to the late sixteenth century,³⁷ shows Starkey in crude perspective together with a number of outbuildings. Starkey (numbered 1 on the plan) is depicted with two large ranges flanking the main house on either side, this with a centrally-located turret. The size of the flanking ranges appears to be exaggerated and no structural evidence exists to support the depiction of a central turret. This may represent an elaborate stack over the hall, a louvre turret or, more likely, a cartographic motif indicating the building's status. A door is shown in a central position in the main range (the western door of the screens passage). A second door surmounted by a pair of windows, and above these a centrally-located third window, is shown in the west gable of the northern range. To the west of the main house is a separate building with a large stack. This may well be a detached kitchen. Three other outbuildings are shown; building 2 is probably a dovecote, perhaps of circular or polygonal plan, buildings 3 and 4 are perhaps weather-boarded barns. No trace of these subsidiary buildings now survive.³⁸

The second map of 1796 shows a new set of outbuildings and a rearrangement of the main house. The northern range appears to have been demolished and replaced by a new extension built against the west side of the hall.³⁹ An orchard (annotated A1 on the plan) shown to the west of Starkey, a hop-field (A6) to the south and a meadow (A3) to the north-west are all contained by large fields of arable (A5, A7, A2) and the 'marsh' (A4). The 'homestead' comprised the orchard and enclosed land immediately to the south and east of the main residence. Both maps show a large pond with a series of dykes. The pond still survives, albeit much reduced in size, and is quite probably that of a former tide mill.

This arrangement had again changed by the mid nineteenth century. A tithe map for 1842⁴⁰ shows the principal range of Starkey with its north-western extension, in association with new farm buildings located to the north. The area south of Starkey is now shown as a garden and

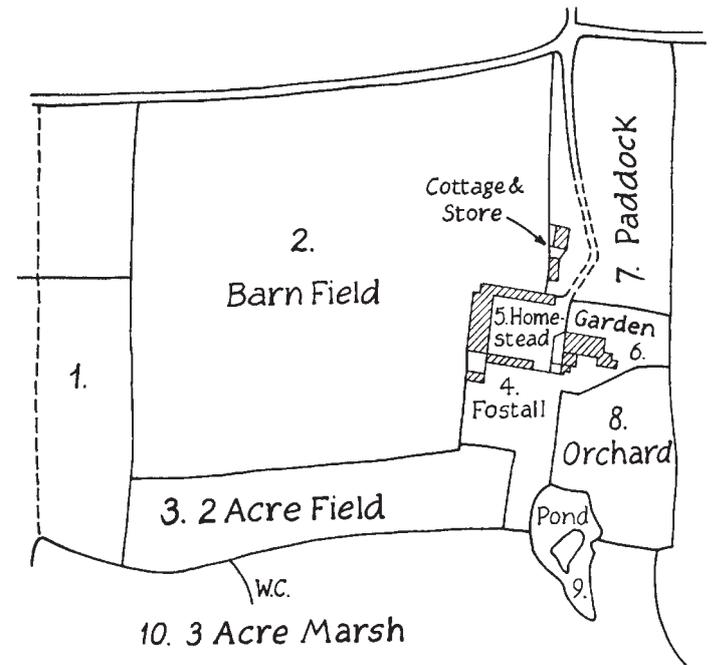


▲ Traced detail from a late sixteenth-century estate map.

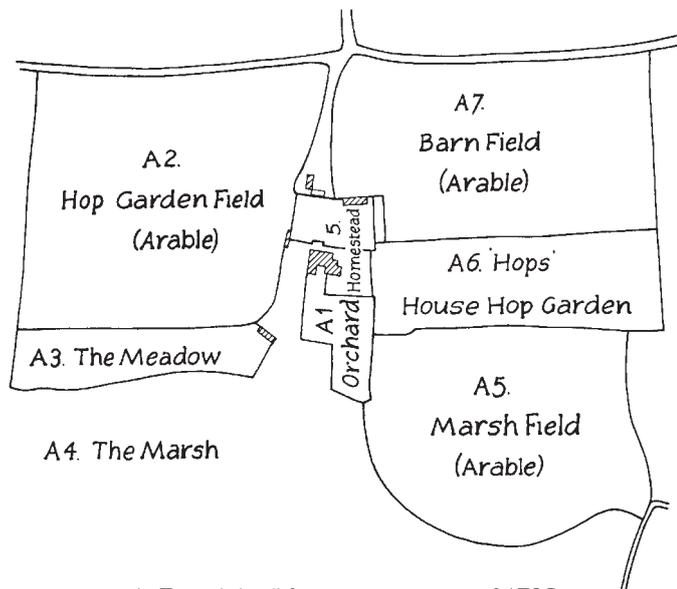
the entire arrangement takes the form of a 'model farm', with principal residence to the south of a large farmyard surrounded on all other sides by farm buildings. A paddock with cottage and store (these outbuildings survive) is shown to the east of Starkey, an orchard to the south-west and a large field with attached meadow to the north. In the south-west corner of the farmyard two small buildings about the western extension to Starkey and a freestanding wall is shown running parallel to the north end of the residence, this presumably enclosing a courtyard. The mid nineteenth century arrangement remained substantially unchanged until the early part of this century, being shown on successive editions of the Ordnance Survey for 1869 and 1909.

Exactly when the east-west range fell into decay cannot be ascertained, but an engraving of 1769 (cited above) shows a fragment of wall for the eastern gable purported to be part of a chapel. It seems probable that the western half of the range was also ruinous at this time.

Re-use of parts of the shell of the range was indicated by a 0.55 m. wide well-built masonry wall constructed over the truncated medieval



▲ Traced detail from a tithe map of 1842.



▲ Traced detail from an estate map of 1796.

north wall. This wall, surviving to a maximum height of 1.10 m., was constructed entirely of reused ragstone and chalk blocks bonded in a pale grey lime mortar containing charcoal flecks. Some of the ragstone blocks were ashlar. The lowest deposits of cellar infill exposed were consistent with medieval demolition material, but included in the general matrix was a surprising quantity of brick and tile. The presence of this material may indicate that at least partial infilling of the cellar took place perhaps when the brick extension to Starkey was built in the eighteenth century. At the eastern end of the replacement wall a brick-jamb opening with stone threshold had been constructed. The masonry wall to the east could be seen to be of one build with the easternmost jamb. The western brick jamb, although visible, lay under a later phase of construction, but was assumed to bond with the wall. This opening, 1.62 m. wide, had been cut into the fabric of the earlier north wall to a depth of 1.20 m. below the existing ground surface. The presence and nature of this opening strongly suggests that the cellar was re-used, perhaps as a half-celled outbuilding.

Final infilling of the cellar may have occurred shortly before the 'model farm' was laid out in the early nineteenth century. The rebuilt north wall appears to have been re-used as a courtyard boundary (shown on the 1842 tithe map), with the final cellar infill of brickearth butting the wall and infilling the brick-jamb doorway. Two brick-lined wells cutting the brickearth backfill were located within the possible courtyard. A third well exists adjacent to the present farmyard track. A rough gravel and crushed brick deposit found capping the brickearth fill may have been a disturbed remnant of courtyard metalling. It also seems probable that a concrete set post-hole and a brick base of unknown function, revealed during the course of the evaluation, were features associated with the use of the yard.

Numerous brick walls associated with eighteenth- and nineteenth-century outbuildings were exposed at the western end of the evaluation trench. These brick footings were laid over or cut into the brickearth infill of the cellar and were abutted by remnants of a gravel yard surface. The sequence of wells was probably contemporary with these brick outbuildings. An existing wall, abutting the north-west corner of the hall, formed the north wall of the eighteenth century brick extension. Associated with the extension was a remnant of large oven; its scorched northern brick wall and deposits of ash were uncovered at the southern limit of excavation. A further sequence of walls and a late threshold belonged to brick sheds of early nineteenth-century date. All these extensions were demolished in 1980 except for one portion of a wall of stone and brick construction extending westwards from the sheds and forming part of a garden boundary as shown on the 1909 Ordnance Survey map.

Planning consent for the extension to Starkey Castle was given shortly after the evaluation exercise had been concluded. At the time of writing an archaeological watching recording brief is in progress.

EXCAVATIONS: KENT SITES



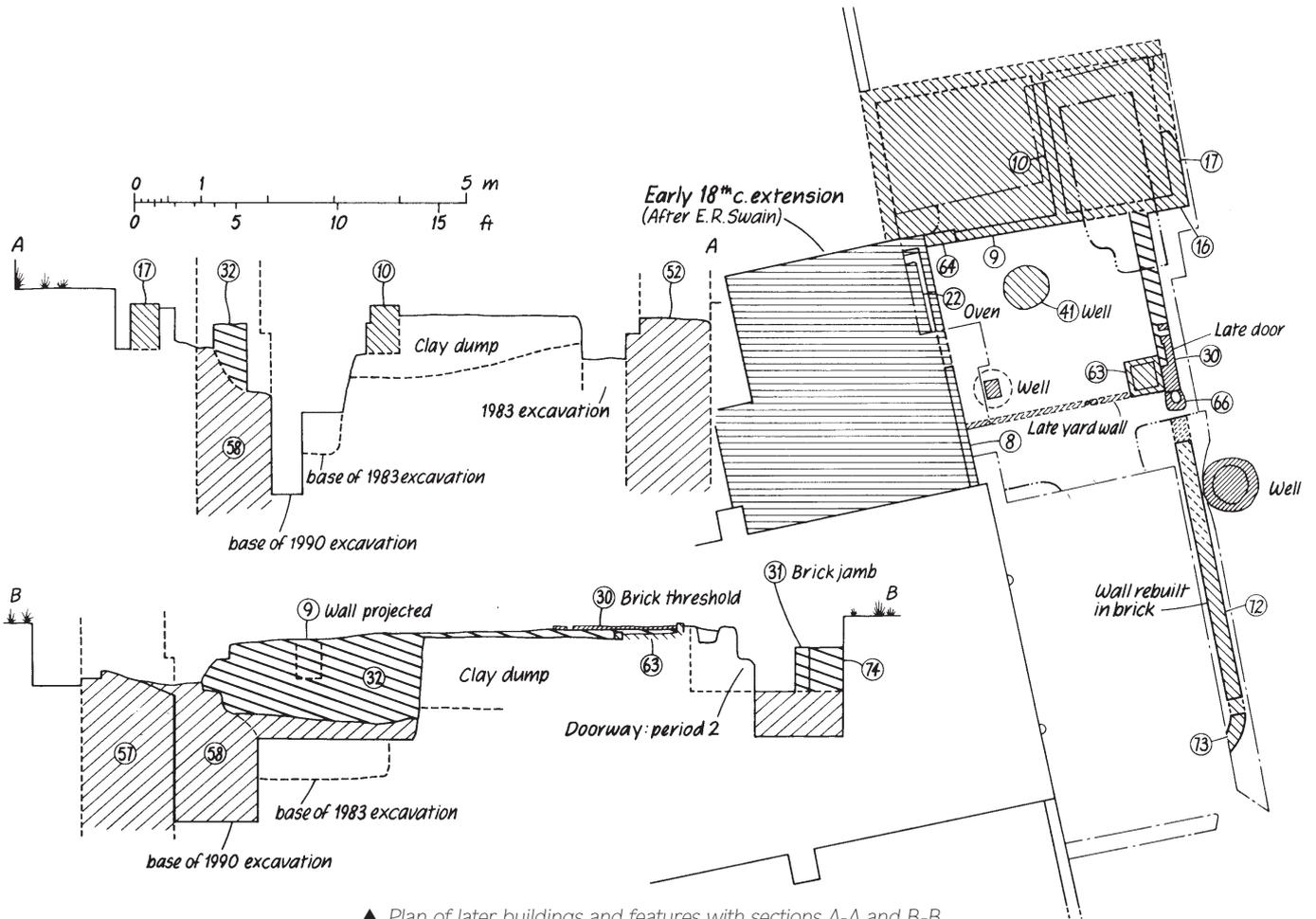
▲ View showing the internal north -west corner of the undercroft, looking north. Scales: 1 m.



▲ General view of evaluation area, looking east. Scales: 2 m.



▲ Work in progress. undercroft exterior (north) looking west.



▲ Plan of later buildings and features with sections A-A and B-B.

6 Rochester Cathedral

by Alan Ward

During April and May 1990 three small trenches were cut against the Chair Store of Rochester Cathedral, in advance of a scheme to underpin the store, built in 1970. The excavation commissioned by the cathedral architect, Mr Martin Caroe and the cathedral's archaeological advisor, Mr Tim Tatton Brown, was funded by the Dean and Chapter of Rochester Cathedral.

The Chair Store is situated in the cathedral's Lay Cemetery built against the north side of the cathedral in the western angle of the north transept. The trenches, excavated to natural head brickearth were cut below the concrete slab foundations of the Chair Store to enable contractors to drive headings under the slab and underpin and stabilise the structure.

Three trenches, each 3 m. by 1 m., were cut against the Chair Store walls to an average depth of approximately 4.5 m. below the existing subsoil of the Lay Cemetery. Despite the restricted size and exceptional depth of the cuttings (steel shoring was installed by the contractors, Tradpin Ltd) an interesting sequence of archaeological deposits was encountered.

At the level of natural brickearth deposits of Late Iron Age topsoil were exposed in association with a small number of pits and a ditch yielding pottery of the first half of the first century A.D.

The earliest occupation horizon was capped by further deposits of clay and loam indicative of upcast from the cutting of a number of nearby Roman features. The pits, three in number, yielded pottery of first- to third-century date. A fourth pit, cut late in the sequence, contained substantial quantities of daub from a burnt timber-framed mud-walled structure, indicating the presence of a nearby Late Roman building.

Very little archaeological evidence for the Anglo-Saxon period was recovered, this consisting of one residual sherd of seventh-century organictempered pottery found in a medieval grave.

Overlying the latest Roman horizon was a 4.00 m. thick deposit of disturbed dark loam, containing a substantial number of inhumation burials. Although slight colour and textural changes in the loam were in evidence, individual grave cuts were almost impossible to determine and

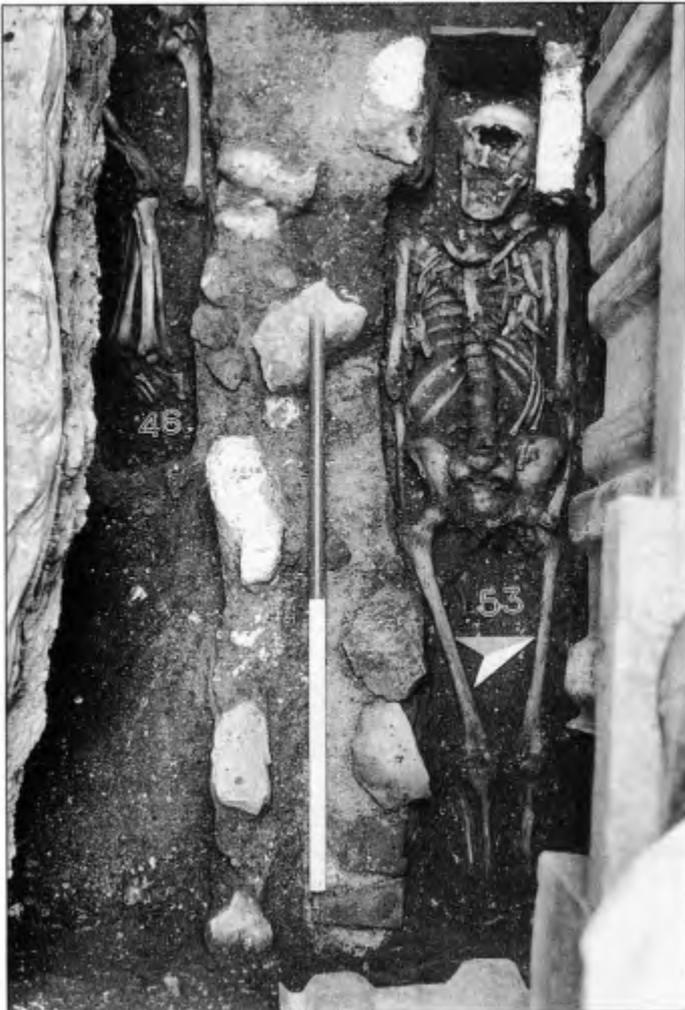


▲ Rochester Cathedral Lay Cemetery, looking south.

the phasing of the sixty-three or more human burials exposed during the work was established on the basis of intercutting or superimposed skeletal material.

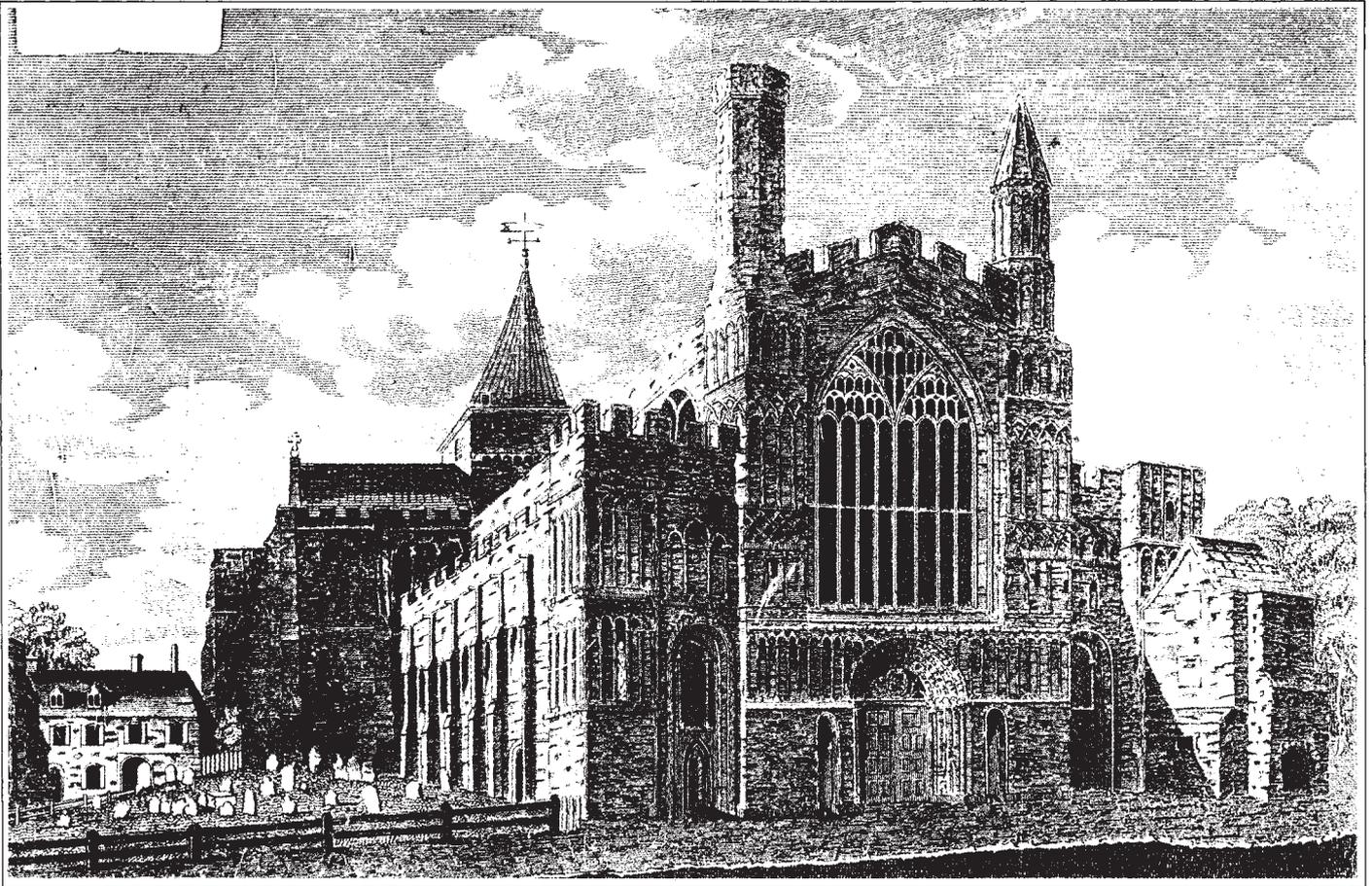
The earliest burials were contained within stone-lined cists, of mortared chalk block, tufa and ragstone construction. Some of this masonry may have been gleaned from a Roman source. One cist burial contained the fragmented remains of a pewter chalice, deliberately placed in the hands of the deceased at burial. A second phase of cist burials overlay or cut the first. These were in turn cut or sealed by a graves dating from the late medieval period to the nineteenth century.

Of the sixty-three burials uncovered, twenty-four were in Trench A, twenty in Trench B and nineteen in Trench C. If this volume of burials is considered likely for the walled cemetery area, then a conservative estimate for interment would be 3,500 individuals. The remaining parts of the cemetery to the west of the cathedral were filled to capacity in the nineteenth century and at least 500 victims of the plague of 1665⁴¹ may be buried beneath the Deanery Gate alleyway. After the raising of the walled area by about a metre in the early half of the nineteenth century, accumulated evidence suggests that the cemetery went out of general use by about 1875.

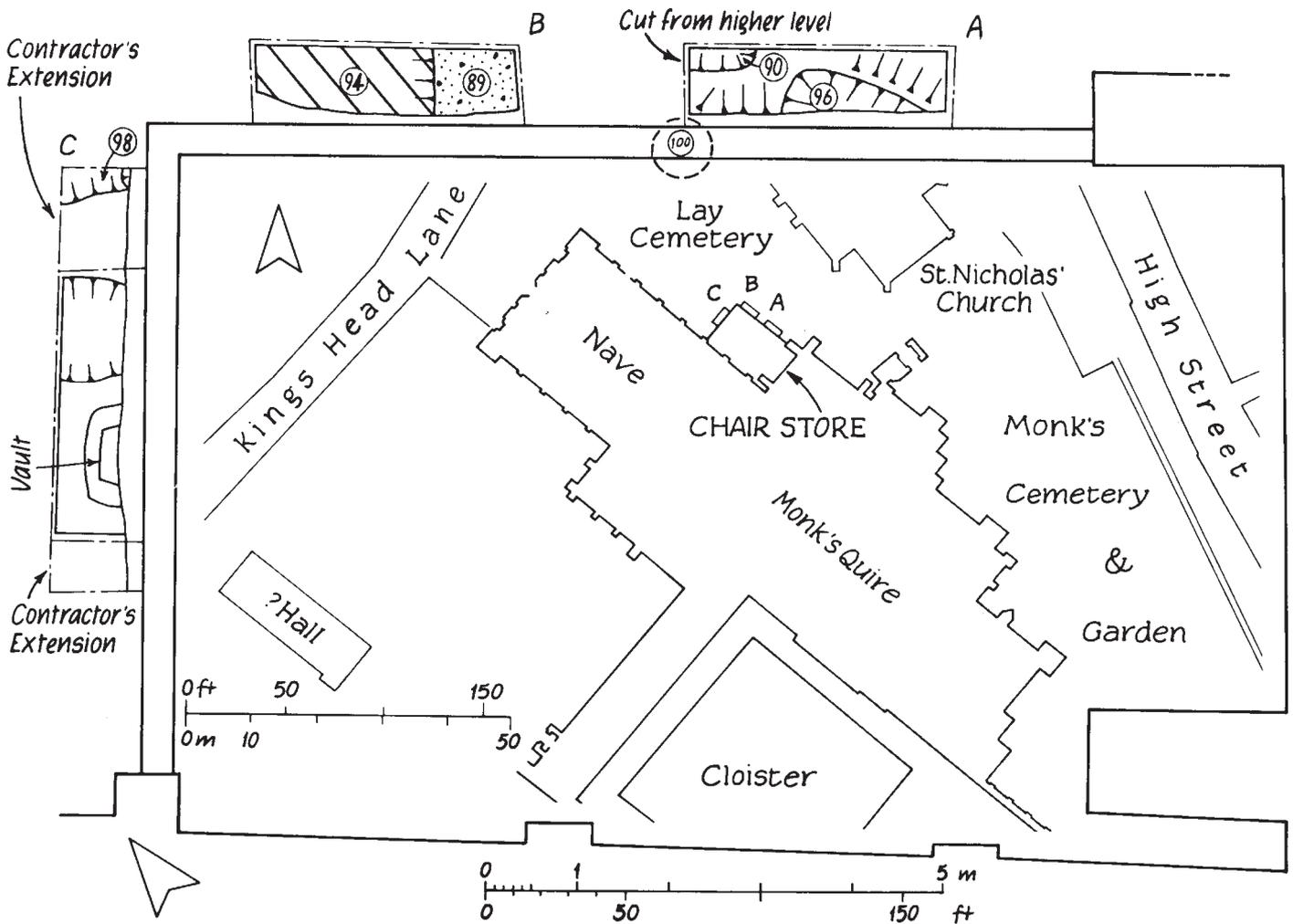


▲ Trench A. Cist burials 46 and 53, looking east. Trench B. Cist burials 30 and 31, cut by burials 32 and 29, looking east. ▲

EXCAVATIONS: KENT SITES



▲ Rochester Cathedral Lay Cemetery c. 1800, looking east.

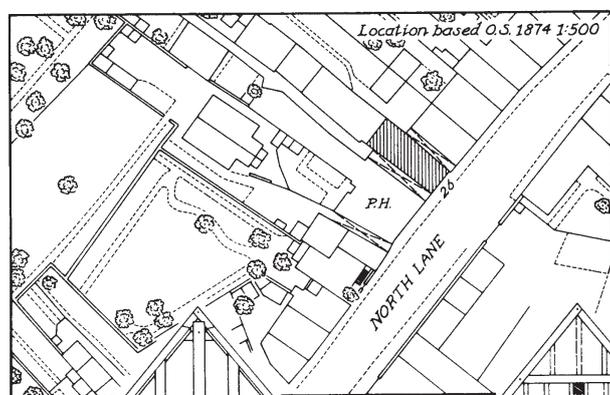


▲ Plan showing evaluation trenches, with inset location plan.

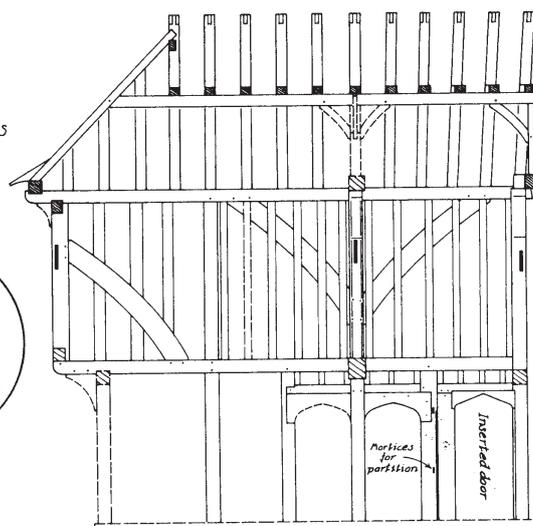
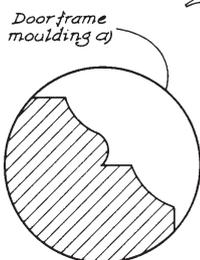
III

BUILDING RECORDING

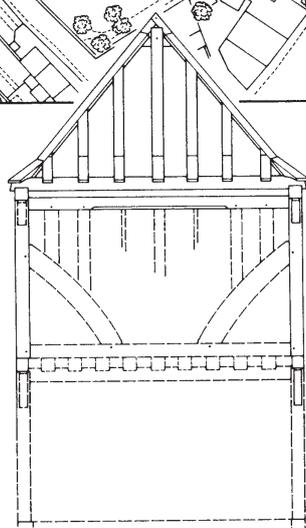
A No. 26 North Lane by Rupert Austin



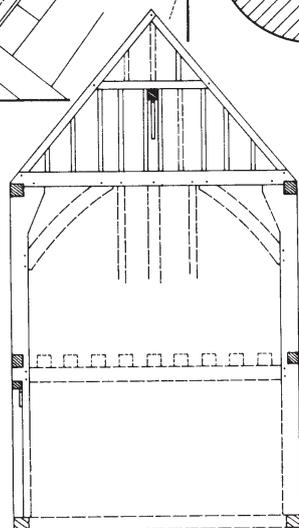
Plan & Elevations
Scale 1:50



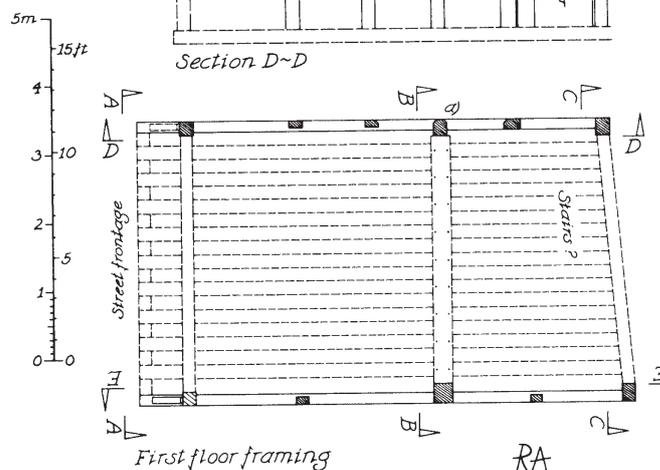
Section D-D



Elevation A-A



Section C-C



First floor framing

RA

▲ No. 26 North Lane: location plan, representative sections and reconstructed first-floor plan from the survey.

This property, formerly a garage for the East Kent Bus Company, has been derelict for some years. A full archaeological survey of the surviving medieval elements of the building was undertaken prior to an extensive campaign of restoration and refurbishment to form a new office.

The earliest elements of the building comprise a two-bay medieval structure, lying at right angles to North Lane, occupying the front of this property block. It seems likely that these two bays form a contemporary cross-wing to a larger building adjoining to the south-west, this now a much modified guest house. A cross-passage, which is still in use, is located at the junction of the two structures. A later seventeenth-century building adjoins the cross-wing to the north-east which has a late nineteenth-century extension to the rear.

In its original arrangement the cross-wing comprised a single first-floor chamber, jettied to the street frontage, with two service rooms below. Access to the upper chamber was provided from below, probably by a stair in the rear service room, whilst the ground floor was entered from the cross-passage.

The building is framed in the usual manner with jowled posts supporting a tie-beam and crown-post assembly. Intermediate posts and secondary studs are infilled with daub, much of which still survives. Archbraces from the central jowled posts run in three directions to support the eaves-plate and tie-beam, whilst tension-braces from the front corner posts run to the mid-rail at first-floor level. No bracing was evident at ground-floor level.

The crown-post roof survives, hipped to the front and gabled to the rear, incorporating a projecting double-eaves assembly over the street frontage. Sprockets with curved soffits oversail the outer of the two plates. A plain square-sectioned crown-post, braced on four sides, is located centrally over the principal tie-beam.

Unfortunately post-First World War conversion of the building to accommodate coaches saw the removal of the original facade and first

floor framing. Examination of the soffit of the inner eaves-plate and the internal faces of the corner posts indicates a typical 'Kentish' facade with central fenestration flanked by tension braces. No clues remain as to the arrangement at ground-floor level. Other than a small inserted window along the north-east elevation, no fenestration was incorporated along the side elevations or to the rear.

At ground-floor level two original doors have survived, flanking the central post along the south-west elevation. This suggests that a partition located under the central bridging beam, divided the ground floor into two rooms. It is possible that the front room was used for retail purposes whilst the rear room acted as a store or service room. Open stairs, from the rear, would have provided access to the chamber above. At some point the partition was removed and the door to the rear room, which was no longer needed, was blocked with lathe and daub. A new entrance with a crude door-head was inserted alongside the blocked one. Mortices on the internal face of the central door post indicate some form of partitioning, this probably for an enclosed stair-well with separate access from the cross-passage.

Both the original door-frames are moulded with an ogee and hollow chamfer, of which the hollow chamfer runs contiguously over the four-centred door-head.

The vertical rear frame of the cross-wing was clearly not intended to be an external elevation. It is lightly studded with no fenestration or tension braces and shows no signs of weathering. There are no mortices on the rear faces of the corner posts to indicate any further bays that have been lost. One can only presume that the structure butted against a pre-existing building.

A fragment of jowled post, almost certainly in situ, abuts the north post of the cross-wing. This is all that remains of perhaps an earlier building which, before its destruction, abutted the rear of the cross-wing. An absence of mortices on the front face of the post indicates that

no further bays of this structure extended towards the street frontage. Archbraces instead of tension-braces and a lack of weathering to the face of the post suggests that this end truss was never an external elevation. Both the eaves and mid-rail levels, indicated by mortices on the post, match closely with the respective levels on the adjoining building to the south-west. This adjoining structure, now 25 North Lane, was probably an open hall; a short section of the dias-beam, moulded and castellated, remains although the hall has subsequently been floored and re-roofed with the former screens passage converted into the extant crosspassage.

A relationship between the building associated with the remnant post and the present guest house is perhaps suggested, but insufficient details survive to conclusively prove this. The nature of the relationship between the road frontage cross-wing and the building to the rear is equally difficult to determine, and overall a developmental sequence cannot be established until a full survey of the guest house has been undertaken. One possible explanation, however, is that the extant cross-wing is a replacement for earlier service rooms, separated from the hall by the extant crosspassage. The building to the rear was possibly an extension to the earlier arrangement which was retained when the new cross-wing was built.

B Nos 45 and 46 Palace Street

by Rupert Austin

These two properties occupy the site of the former Great Kitchen, one of many buildings associated with the Archbishop's Palace Outer Court. Fragments of this thirteenth-century kitchen have survived, incorporated into the later structures now occupying the site. The Great Kitchen was constructed during a major programme of rebuilding and refurbishment, instigated by Archbishop Hubert Walter in the early thirteenth century. A Great Hall, which lay immediately to the south, formed the centre-piece of this period of rebuilding. It was constructed in the latest French Gothic style and was nearly 200 ft long, probably the largest building of its type in the country, after Westminster Hall. The Great Kitchen was presumably built shortly after to service the Hall.

Conversion of the existing properties on this site into offices provided an opportunity to record in detail the surviving elements of the Great Kitchen, and part of an adjoining building which occupies most of No. 45 Palace Street.

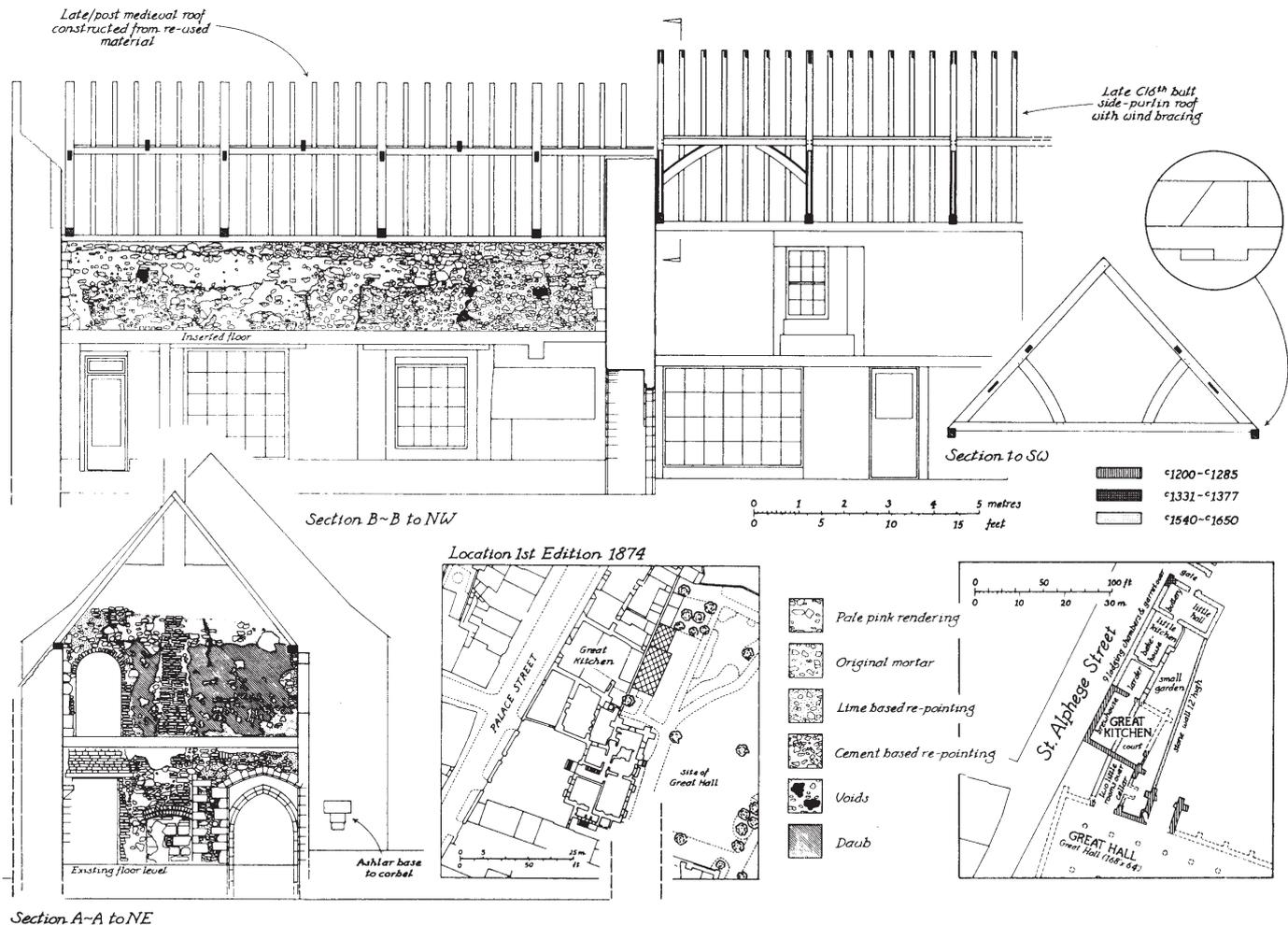
The kitchen, originally 40 ft square, was constructed from thick rubble walls comprising a mixture of chalk, flint and sandstone. The north and west elevations survive to a height of 17 ft, whilst those to the south and east are largely destroyed. Ashlar-work in sandstone and Caen was used only for quoins, jambs and corbels. Buttressing of the south-east corner still survives; presumably the other corners were treated in a similar

manner. Corbels, still extant in the north and west corners, with socket above, would perhaps have supported an elaborate timber-framed roof. Although the exact arrangement is uncertain, additional support may have been derived from corbels located centrally along each elevation. Three squared blocks let into the north wall appear to provide a base for one such corbel, set at a similar height to those in the corners.

Layers of later paint and rendering were removed from the internal faces of the west wall at first-floor level and the north wall from the ground floor to eaves level. Although considerable repair and re-facing of the original fabric was evident, no additional features were exposed. The arrangement of any ovens or hearths was not discovered during this work.

A plainly chamfered pointed door survives in the north wall. Immediately to the west of this are eleven Caen blocks, one reveal of a splayed opening that probably formed a window. A broad recess in the south end of the east wall is shown on the first edition Ordnance Survey map of 1874 together with a splayed recess on the south wall a few metres away. This recess may possibly be a blocked doorway giving access to an additional building connecting the kitchen with the Great Hall.

Much of the eastern half of the kitchen has been destroyed. However, the construction of a brick wall, aligned north-south down the centre of



▲ Nos 45 and 46 Palace Street: location plan, phased plan and sections to north-west and north-east.

the kitchen, has kept the western half of the building in occupation. A butt side-purlin roof constructed from almost entirely re-used material now covers this part of the structure. Most of these alterations were probably the work of Archbishop Parker in the early 1560s.

A six-bay building, also the work of Archbishop Parker, abuts the Great Kitchen to the north. Two bays of this structure are incorporated into the existing property at no. 45 Palace Street. The roof is of butt side-purlin construction with wind-braces between principal rafter and purlin. All secondary rafters are continuous and pass over the purlins and braces. Additional tension braces run transversely across the roof structure linking the principal rafter's with tie-beams. A bare-faced lap-dovetail secures the tie-beam to eaves-plate.

A thick masonry wall of similar size and construction to the adjoining kitchen, possibly part of an earlier precinct wall, is incorporated into the facade of the new building. Corbels let into the internal face of this wall support a plate aligned alongside the wall. This plate bears the ends of the floor joists, which run away from the street frontage to a bridging-beam midway across the building. All the original joists are rebated to take recessed floorboards aligned in the direction of the joists. Much of this floor framing has been rebuilt and underpinned with additional posts.

Information from the Parliamentary Survey of 1647 indicates that the south end of this building was used as a larder, the north end as a brewhouse and little kitchen, with nine lodging chambers and garret over.

C No. 8 Sun Street

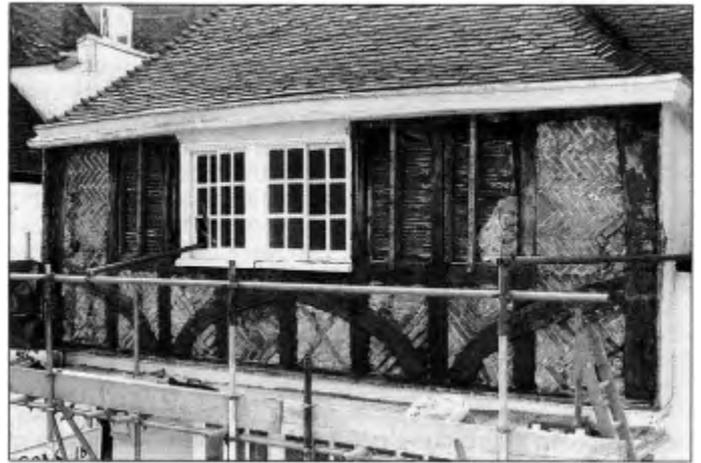
by Rupert Austin

Essential repairs to the second-floor exterior of this building commenced with the removal of external render along the north elevation. Intact timber framing, infilled with later herringbone brickwork, was revealed beneath the modern plaster.

Nos 7-9 Sun Street are all contained within a three-bay building of late medieval date. The building, which has a crownpost roof, is jettied at first and second-floor level to the north and east. A two storey range extends from the rear of the property. Among the many surviving details and features of the building is evidence for contemporary projecting windows at first-floor level.

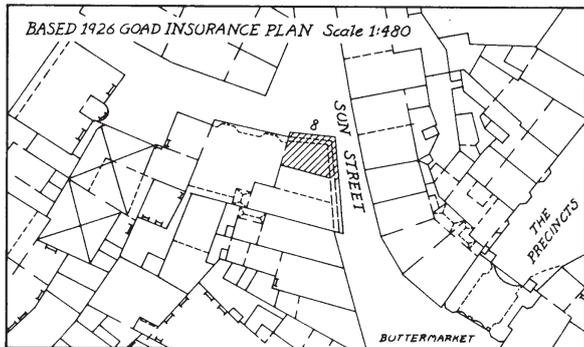
The framing exposed during the remedial work is of typical Kentish design. Jowled corner posts support the tie-beam and eaves-plate in the usual manner. A centrally-placed post divides the elevation into two identical halves. Each half comprises a pair of windows flanked on both sides by curved tension braces. The fenestration is embellished by carved, four-centred, window-heads with pierced spandrels. A cavetto moulding, running contiguously through the jambs and head, terminates in a plain stop.

Internal plaster was also removed from the Sun Street elevation of this bay, revealing a similar arrangement of bracing and fenestration. Original runners for the sliding shutters still survive, fastened to the internal faces of the window sills. All the panels were again infilled with later herringbone brickwork.

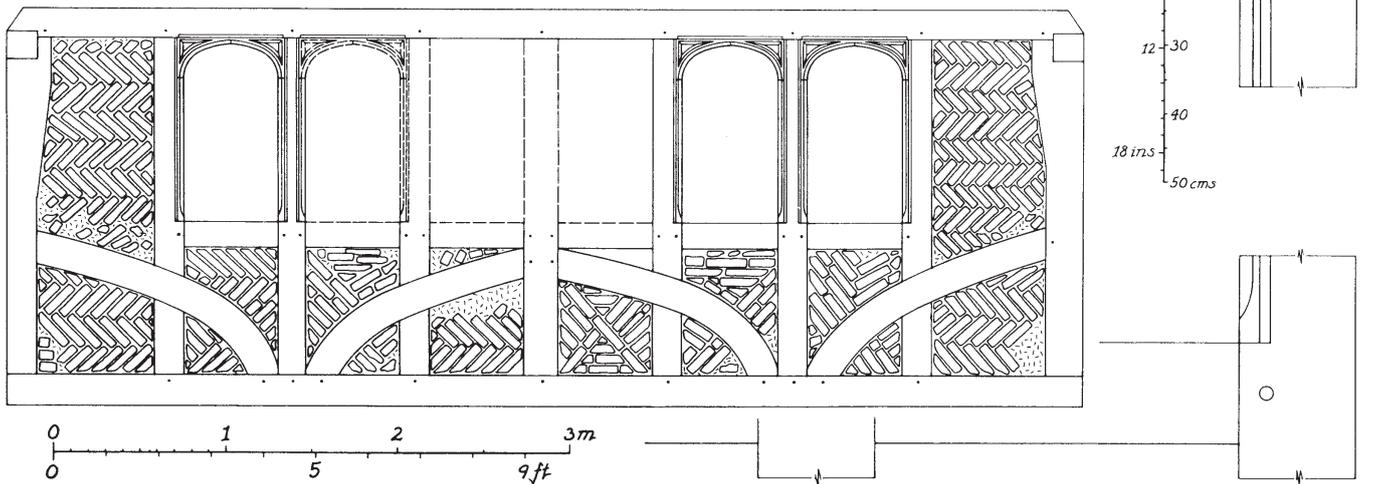


▲ No. 8 Sun Street: first-floor gable, looking south.

No. 8 Sun Street: location plan, north elevation second floor and fenestration detail. ▼



Second floor North elevation Scale 1:20 and 1:5



D The Great Dorter

by Rupert Austin

The first stage of a three-phase project to record the ruins of the Great Dorter was completed this year. Interim drawings showing the internal elevations of the surviving undercroft have been prepared at a scale of 1:50. The Dormitory is located to the north of the Cathedral between the modern library, which occupies three of its southernmost bays, and the Larder Gate which bounds the Green Court.

The Great Dorter was built by Archbishop Lanfranc in the last quarter of the eleventh century. It comprised a large firstfloor hall supported by a substructure of low vaults. The external walls, measuring 152 x 43 ft, are constructed from sandstone, flint, and Caen stone blockwork with occasional use of Quarr stone. A central north-south arcade divided the hall into two naves, each with its own separate lead roof. Large windows lit each bay of the Dormitory. Four windows survive incorporated into the new library where they overlook the cloister, and a fifth exists in the northeast corner of the Dormitory.

Groin vaults, constructed largely from tufa with no transverse ribs, support the hall above. The floor of the sub-vaults lies approximately 13 ft below the Dormitory floor at the same level as the cloisters. An oolitic limestone is used for the capitals and bases supporting the vaults.

Lanfranc's Dormitory, which survived largely intact for 500 years, was unroofed and partially demolished in 1548. Only the west elevation and the north-east corner survive to any height. Most of the undercroft has been destroyed although a small area still survives in the north-east corner. After the Dissolution two private houses were built over the vaults. The vaults were converted into cellars at this time and the columns strengthened with brick casings. A lodging for lay clerks was established at the south end of the Dormitory, on the site of the modern library.

Much of the fabric now visible has been substantially repaired and rebuilt. Many of the arcade bases now visible were rebuilt in recent times from materials recovered from demolition levels on the site in the post-war period.



▲ The Great Dorter: northern bay of the undercroft, looking east.



▲ The Great Dorter: general view of the northern end of the Dorter, looking north-east.

Church Farm Barn, Offham
by Rupert Austin



▲ Church Farm Barn. Offham: view from the church tower, looking south.



▲ Church Farm Barn. Offham: view of collapsed barn, looking north.

Church Farm Barn, was located approximately half a mile to the north of Offham village. The barn occupied the west side of the farmyard and abutted the boundary of Offham churchyard to the north. Following the January storms of 1990 the entire structure collapsed, blocking the Offham to Addington road. A hasty survey was undertaken to record and number the surviving timbers in order that the barn could be re-assembled on a new site and the road re-opened without delay.

Church Farm Barn comprised a six bay aisleless barn, with crown-post roof, set long axis to the road frontage. Each internal bay division was distinguished by principal jowled posts and tie-beams in the usual manner, with large curved arch-braces from post to tie-beam and centrally located crown-posts over each open truss.

The external framework of each bay incorporated a mid-rail, tenoned between principals, with secondary posts above and below. Short tension braces were included in the upper divisions of which some, surprisingly, curved downwards. Smaller studs completed the infill of each panel, morticed into the upper plate and wedged into a groove below. Timbers that were adzed on their internal faces remained pit-sawn on external faces, indicating that the barn was and remained weathe rboarded from the outset. Dwarf walls constructed from local stone provided a solid and level base for the timberwork, compensating for the slight gradient of the site.

A straight bridling of three-quarter depth with squinted abutments and over-lipped face is used to scarf the groundplates, whilst a doublebridled version is used for the eaves-plate. These scarfs are short but were used consistently throughout the structure. A lap-dovetail with entrant shoulders is used to secure tie-beams to eaves-plate.

The roof which is of crown-post construction was originally hipped at both ends and remained thatched throughout the life of the barn.

In its original arrangement there were two principal entrances to the barn. The second bay from the north provided access from the road frontage whilst the fifth bay afforded access to the farmyard. In each case a large secondary post reduced the full bay width to provide an entrance approximately 9 ft wide, whilst a plate below the eaves reduced the headroom to around 14 ft. The break in the ground-plate and dwarf-wall for each doorway was spanned by a timber threshold set into the floor. Short posts, tenoned into the soffit of the ground-plate beneath the door posts, completed the jambs.

It is probable that the two-leaf doors, incorporated into a later porch added to the farmyard entrance, were originally hung from gudgeon pins

let into the external faces of the original doorjambs. Each leaf comprised six tapered rails, tenoned from a large outer stile to a smaller inner stile, with a curved brace supporting the outer edge of each leaf.

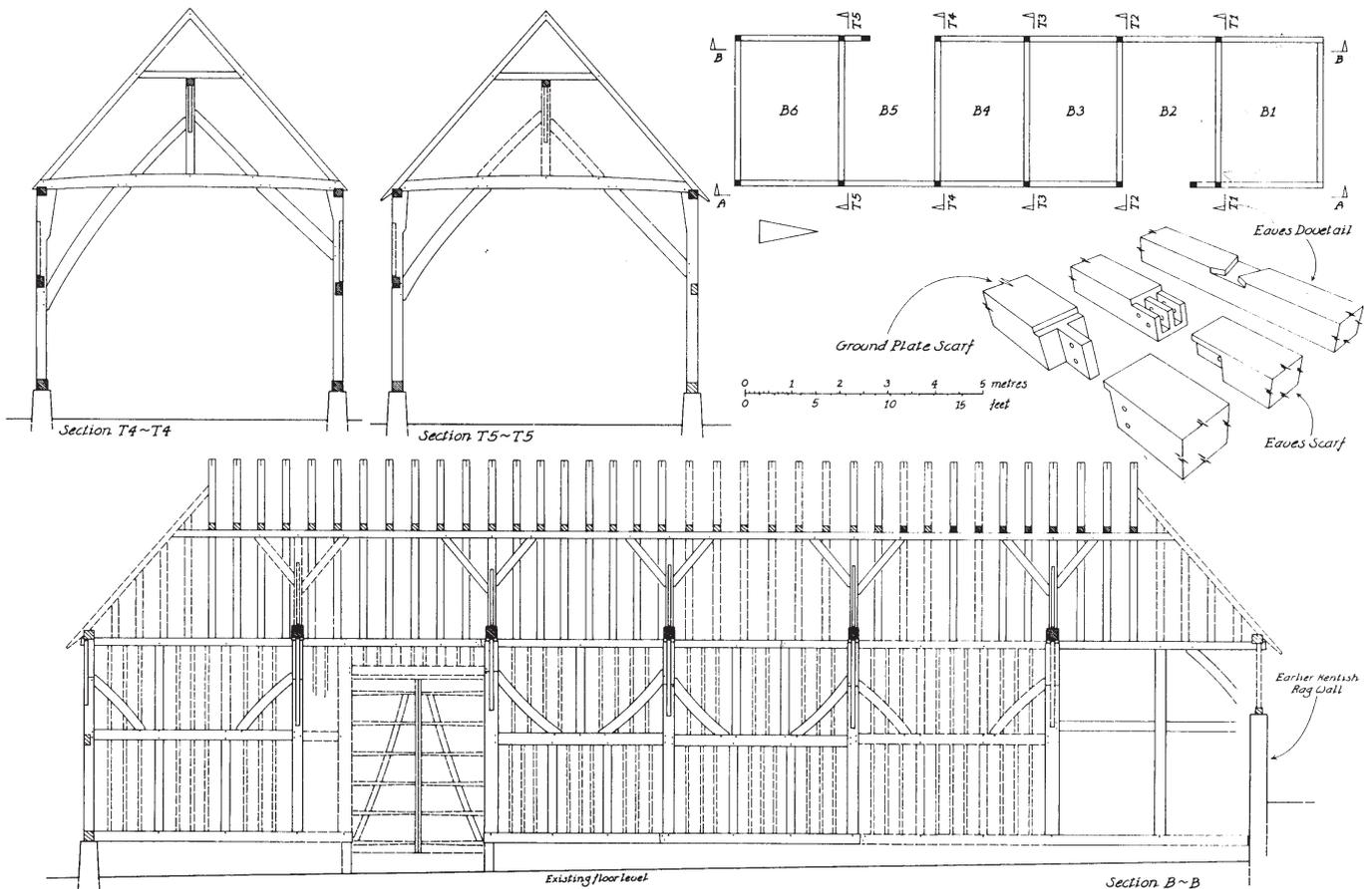
All six bays of the barn were contemporary, with no evidence to suggest any further lost bays. Several notable modifications to the original structure were evident including the addition of a porch to the farmyard entrance. A cross passage was subsequently formed at this point, following the insertion of an opposing entrance against the road frontage. Finally the north end of the roof, initially hipped, was rebuilt as a gable with side purlins running the length of one bay.

Church Farm Barn was originally considered to be of medieval origin, however closer examination suggests that a construction date no earlier than the late seventeenth century is more likely. Much of the original fabric was re-used. Numerous extraneous mortices, several styles of carpenter's marks, and the use of split and sawn rafters were all evident in the roof structure. Several of the posts and tie-beams were re-used, the earlier posts had long flared jowls whilst the latter had short shouldered jowls and were not adzed.

It seems likely that the re-use of several principal trusses and a salvaged crown-post roof, probably from an earlier barn, governed the pattern for the new building. The old posts were used unmodified and new ones cut to match, hence the mid-rail and brace arrangement. This wholesale reuse of earlier materials explains the construction of a 'medieval style' barn at such a late date. Many aspects of the barn's construction show that some time and effort was expended constructing a sound building, although in other parts of the structure the carpentry is surprisingly indifferent or poor.

A stable block, flanking the northern limit of the farmyard, abuts at right angles the northern-most bay of the barn. A brief inspection of this outbuilding reveals a clasped side-purlin roof with, possibly, an early example of a ridge-board. A face-halved and bladed scarf has been used to join the purlins throughout this structure. The south elevation, facing the farmyard, was initially timber-framed but has since been underpinned in stone and brick. The north elevation, which is terraced into the adjoining cemetery, was stone built.

Construction of the barn destroyed the eastern end of the stable block, which originally extended to the road frontage. The rear wall, however, was retained and incorporated into the north elevation of the new barn. Although no firm evidence survived, access was probably provided between the two structures.



▲ Church Farm Barn, Offham: representative sections, plan and carpentry details from the survey.

F Wingham Church Spire

by Rupert Austin

St Mary's Church is located alongside the A257, slightly to the west of Wingham High Street. Extensive refurbishment and repair of its spire provided the opportunity to record an unusual area of medieval carpentry. This work, which included detailed drawings at 1:50 and a photographic record, was undertaken during the early part of 1990. A substantial scaffold platform was erected around the tower and spire before the copper and timber cladding, which had deteriorated badly, was removed to leave the oak frame exposed.

The spire, which is octagonal in section, comprises eight principal uprights, one at each arris of the spire's exterior. A heavy chamfer down the outside edges of these timbers presents the required angle of 45° to each arris of the spire. Four further posts, which constitute the inner core, support the spire mast which is secured to the uppermost ties by an oak key. Horizontal trimmers support the secondary timbers that infill the outer elevations of the spire. All these 'vertical' elements taper and converge towards the apex of the spire, which is surmounted by the octagonal spire mast. Scissor braces and horizontal ties are tenoned between the outer principals and lapped across the inner core posts. These stabilising elements are aligned with the two principal axes of the spire, running north to south and east to west. Stop splayed scarfs with undersquinted and bridled abutments are used to join the inner posts, each with four face pegs.

This superstructure, which rises approximately 63 1/2 ft, is supported from below by a substantial 'floor' frame located at the base of the crenellated parapet. Pairs of transoms, set 4 ft apart, cross the tower from east to west and north to south, providing a base of cross-quadrate plan. Smaller joists, tenoned into these transoms, are aligned east to west and provide additional support for the secondary elements of the spire. The shape of the spire, by nature of its cross-quadrate base, is not a regular octagon.

The joists and transoms forming the base of the spire rest on double wall-plates which run contiguously around the tower. Stone corbels, set into the internal faces of the tower, are placed below the principal transoms. Short posts and arch-braces, set onto these corbels, provide additional support to the base of the spire. The inner wall-plates project slightly from the internal faces of the tower to accommodate the archbraces rising from below.

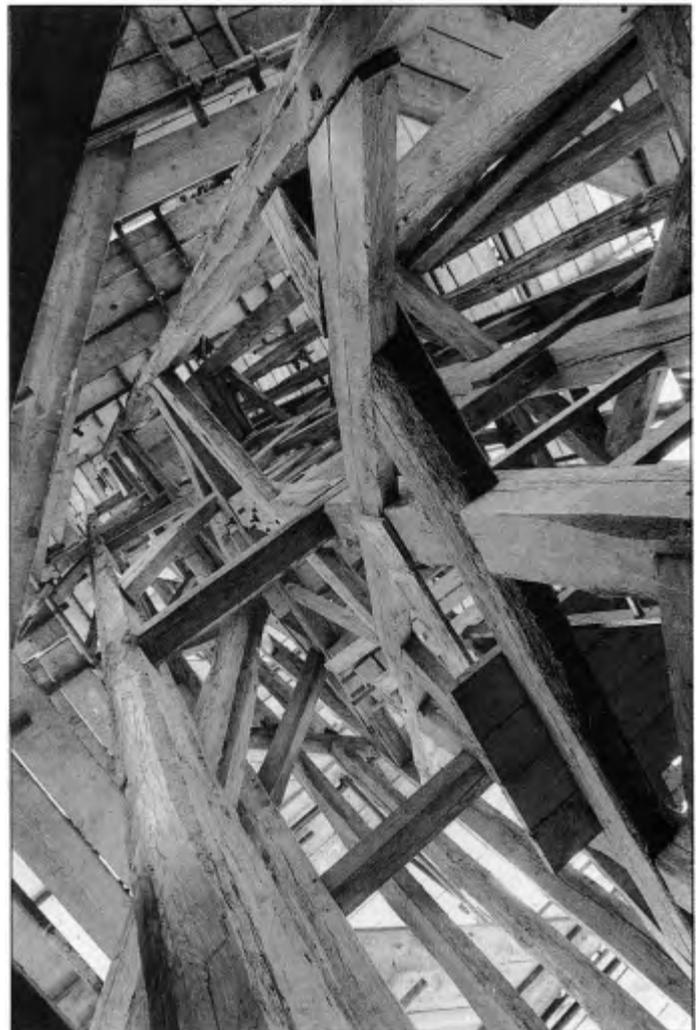
Extensive reconstruction of the splayed reveals of the tower fenestration has occurred during the nineteenth century. The insertion of brick relieving arches has reduced the internal height of this fenestration. It seems likely that the corbels, which are integral with the construction of the spire, have been inserted into the tower at a later date. If the alignment of the original fenestration is projected across the lowered face of the new brickwork it becomes apparent that the corbels, in their present positions, would have interrupted the earlier reveals. This can only suggest that the spire post-dates the tower.

Most of the fabric of the spire, which probably dates from the later fourteenth century, is original with relatively few alterations or additions. Some repair and replacement of the outer timbers is however evident. The use of face-halved and bladed scarfs in this work distinguishes it from the original fabric. All the intermediate outer members have been cut short at their bases, presumably because of decay, and supported by an additional trimmer. Several of the joists, together with a few posts and braces from the corbels below, have also been renewed.

The only notable alteration to the original arrangement of the spire is the addition of a 'skirt' to its base. This is constructed largely from softwood and is probably a post-medieval addition. The external stairtower, which originally only reached the bell chamber, has been extended to afford access to the spire at parapet level.

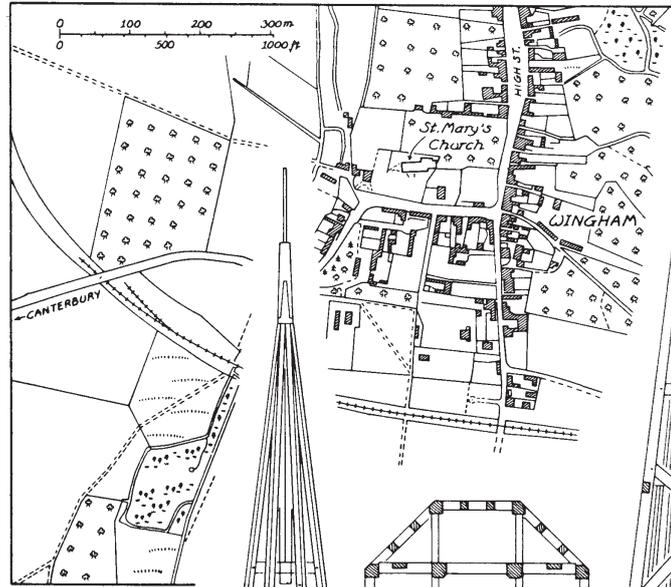


▲ Wingham Church Spire: view of the base of the spire from the south-west.

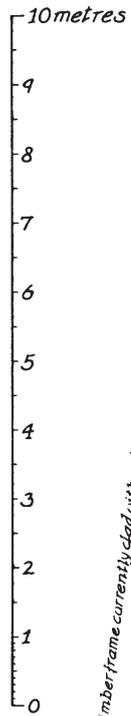


▲ Wingham Church Spire: general view of spire timberwork looking up.

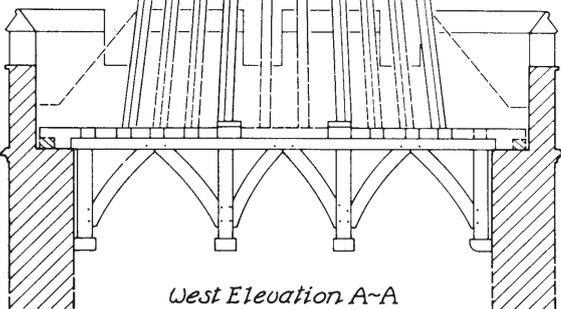
Wingham Church Spire



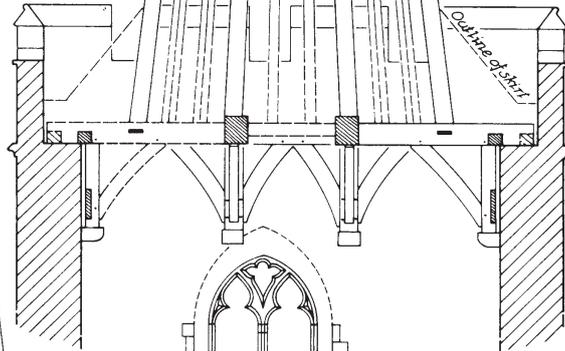
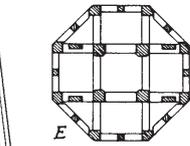
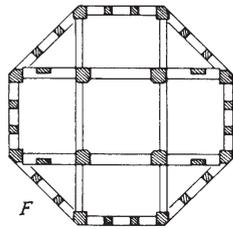
Location based 1906 O.S. 1:10560



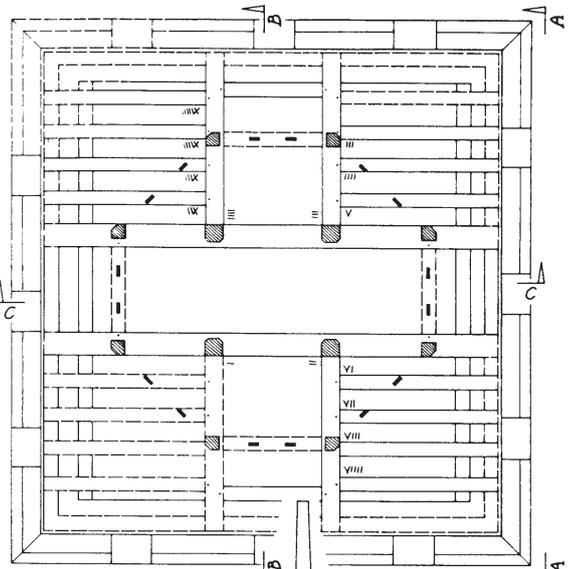
Timber frame currently clad with softwood board and copper sheet



West Elevation A-A

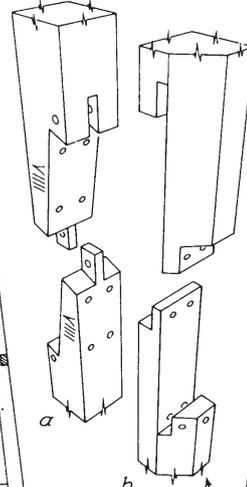


Section B-B to West

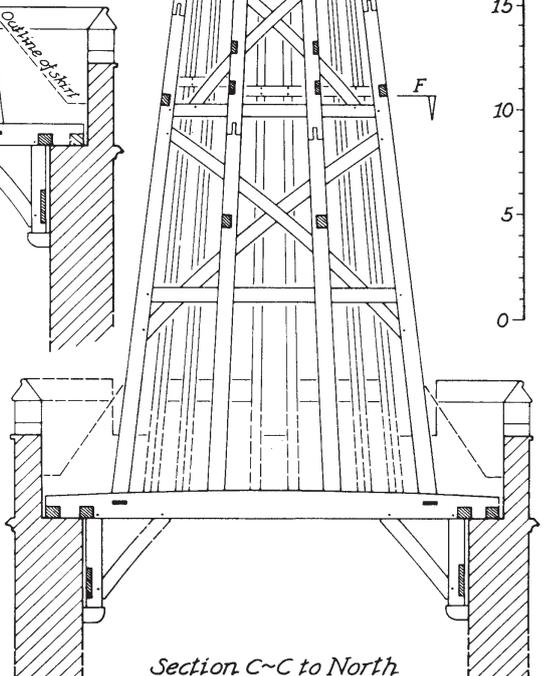


Plan of spire base

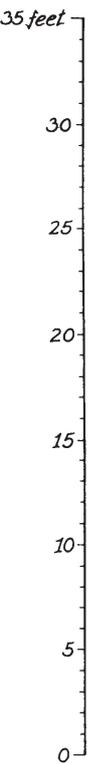
Stop-splayed scarf with under-squinted and bridled abutments



Face halved and bladed scarf



Section C-C to North



Plans and sections 1:50

IV POST EXCAVATION

1 Pottery Research

by Nigel Macpherson-Grant

The post-excavation section in last year's 'Canterbury's Archaeology' included notes on some aspects of the pottery from our recent Channel Tunnel excavations. These represented new and important finds from an area that until 1987 had only received modest specialist attention. It was stressed in last year's report that the analysis of the multi-period ceramics from Folkestone was intended to establish 'foundations for future study'. This work is continuing and one aspect of it is included below in the Channel Tunnel pottery section. A by-product of this analysis has been the necessity to place the various periods represented at Folkestone in their regional or inter-regional contexts. This has not only brought into sharp perspective the strong 'border-zone' nature apparent in much of the area's later ceramic history, but is also generating new and valuable regional research. This regional aspect of our work is discussed below.

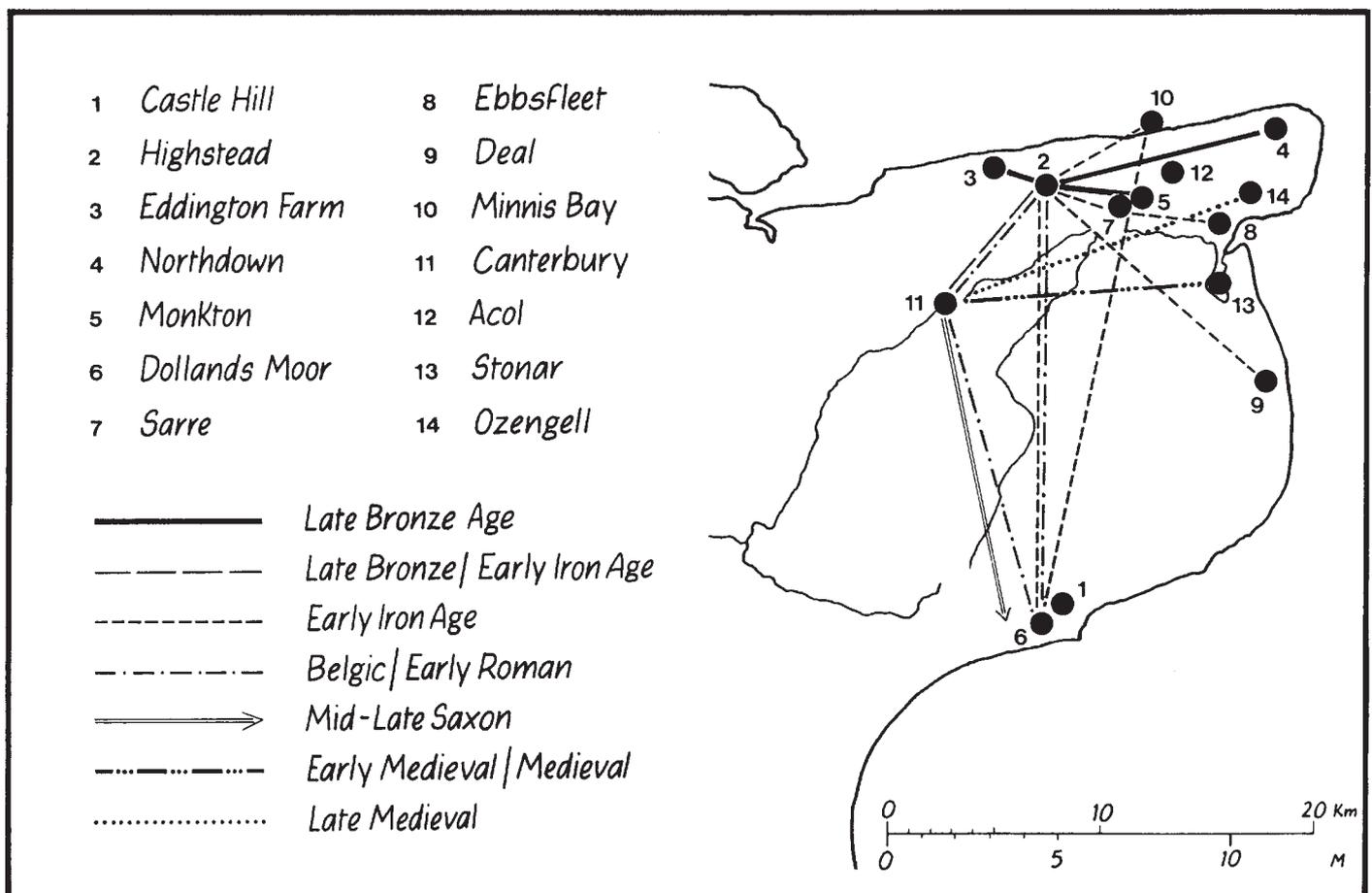
During the next few years five major foundation reports will hopefully have been published: Canterbury's Marlowe area and Longmarket site; Highstead (near Chislet); Stonar (near Sandwich) and the Folkestone Channel Tunnel sites. Most of these reports will contain multi-period sequences, most are mutually reinforcing, some have generated, or will ultimately generate, regional period-based overviews, and all have been influenced by, or will influence to varying degrees, research on the Continent. The main point here, though, is how the information from these and a variety of other East Kent sites is combining and contributing toward an overall regional picture of these ceramic sequences. The following notes and accompanying map go some way towards illustrating this point.

1. Late Neolithic and Beaker period pottery recovered from Castle Hill, Holywell Coombe and other Folkestone sites affected by the construction of the Channel Tunnel terminal have resulted in a near-total review of East Kent collections. With the exception of two collections, Alex Gibson has

now seen all existing relevant material. This forms the regional basis for his overview of the Folkestone pottery, which in turn has benefited, or will benefit, any re-assessment of previous finds. An additional by-product has been the production of archive data and notes for unpublished East Kent material.

2. Excavations at Highstead,⁴² near Chislet, produced three phases of Late Bronze - Early Iron Age occupation. One of these, Period 2 (c. 800-600 B.C.), was represented by an enclosure and unenclosed occupation clearly associated with bronze metalworking. Pottery of similar date has come from a probable enclosure at Eddington Farm, near Herne Bay (see above). Unpublished material from Northdown, Margate is similar, with both pottery and probable copper cross. Another site near Monkton, producing pottery and positive indications of bronze-working, is rather more interesting. The coarse and fine pottery from this site is identical to Highstead Period 2, so identical (in terms of appearance, surface wear trends, temper-size and even temper distribution within the fabric) that the pottery could be made by the same potter. If it is not, it reveals an unexpectedly uniform and competent potting tradition.

3. Period 3B at Highstead (Early Iron Age: c. 550-400 B.C.) is characterized by the presence of rusticated pottery, of continental derivation. A survey of Kentish material by Peter Couldrey indicated that the distribution of rusticated pottery was confined to east of the Medway river. Associated with it are red-finished (haematite-coated) fine ware bowls, some with deliberate zoned decoration including whitepainted designs. Red-finished pottery is not confined to this period or an eastern Kent distribution, but it is the particular combination of red-finished (sometimes painted) bowls and rusticated coarse wares that is rapidly revealing a very clear-



▲ Sites mentioned in the text and period inter-relationships.

cut ceramic tradition, with an apparently well-defined distribution. The (Channel Tunnel) Folkestone site, east of Dolland's Moor, produced a similar range of material. Two recent Thanet sites, at Sarre and Ebbsfleet, have also yielded similar material.⁴³ Pottery from a Deal site recorded by the Dover Archaeological Group is of the same period.⁴⁴ Here again the Channel Tunnel material has generated a review of similar East Kent discoveries. Andrew Middleton of the British Museum Research Laboratory has now seen all available red-finished or painted pottery. An analysis of the Dolland's Moor sherds is now complete and he is currently assessing material from Thanet. A review of pottery recovered from Minnis Bay, Birchington, revealed fine ware bowls similar to some from Dolland's Moor. Rustication was also present and this usefully extends the chronological range at this important site. The analysis of Highstead and Folkestone ceramic assemblages has also prompted a re-analysis of Canterbury's prehistoric pottery: There is a strong possibility that the Iron Age enclosure found against St John's Lane in 1986⁴⁵ is perhaps of seventh-sixth century B.C. date. Rather more significant perhaps is that the Period 3 sequence at Highstead may also be represented by similar material from Sarre. The potential implication is that the rusticated cultural province' may, in some way, be linked to earlier Late Bronze or transitional Late Bronze/Early Iron Age activity in the area.

4. Re-assessment of Canterbury's transitional 'Belgic'/Early Roman fine and coarse sandy wares has really only come into focus against the background of the large, more clearly defined rural assemblages from Highstead. This reassessment will, in turn, benefit our understanding of the similarly large rural assemblage from Dolland's Moor, and it will be interesting to see whether localised form differences between Canterbury and Folkestone, evident during the 'Belgic' period (see below), continue in these later wares.

5. Seventh-century Anglo-Saxon levels in Canterbury have produced a distinctive wheel-thrown Z-rouletted fine ware, and an equally distinctive wheel-thrown heavily flint-gritted coarse ware. The sources for both have not been found, though the former looks very continental. Reference to three East Kent Anglo-Saxon cemeteries has confirmed a mid seventh century date for the wares. In the Marlowe area of Canterbury these wares were associated with organic-tempered pottery, and thus provide a 'fixed point' for its local dating. Six Z-rouletted vessels/sherds have been recorded so far (the sixth comes from Longmarket).⁴⁶ A near complete example of the coarse ware came from Acol, Thanet, in an area recently producing sixth /seventh-century Anglo-Saxon pottery, though the association is indirect.

6. From Canterbury there is good evidence indicating that organised post-Roman pottery production began during the late eighth to mid ninth centuries, but the increased quantities that could be equated with a proper market-orientated industry do not appear until the late ninth or tenth century (specifically Late Saxon). A good assemblage from one Folkestone site belongs to the earlier Mid-Late Saxon range. This is

an unexpectedly early and distant find of Canterbury pottery, and may indicate much earlier market-based distribution. More confirmation is needed, though, before this can be seriously claimed.

7. Canterbury's late eleventh- and twelfth-century Early Medieval assemblages are occasionally accompanied by good documentary evidence, to the extent that pottery of this period can be dated with a degree of confidence. In turn, this has provided a secure late eleventh-century commencement-date for the material from the town site of Stonar, near Sandwich (see below). This means that Stonar's very compact archaeological sequence can be placed between c. 1075 and 1385 - the latter date being that of the town's recorded destruction during a French raid. This late fourteenth-century date at the end of a ceramically prolific sequence is of value for dating Canterbury's medieval levels, when an excavated sequence cannot confidently be dated by the study of city material alone. Combined, the good documented earlier Canterbury sequence and the ceramic groups associated with Stonar's end-date provide reliable parameters for the continuing study of Canterbury's ceramic 'problem area', c. 1250-1375. This linking of well-dated ceramic groups from different parts of East Kent represents an excellent start to the study of this difficult period. The new Longmarket excavation, with its unusually high quota of imports and excellent stratified sequence, will hopefully refine and improve our existing knowledge of the pottery of this period. Moreover the contents of the Longmarket and Stonar occupation levels should reinforce our knowledge of each assemblage, and this will provide a much more stable basis for understanding the region's medieval pottery trends.

8. Canterbury's long sandy ware tradition terminates during the Late Medieval period. By c.1500 this ware was being replaced by fine earthenwares continuing into the sixteenth century, but to date the evidence has been so poor that it would be impossible to assess how the transition was made or where these fine earthenwares were produced. Again, the Longmarket sequence may provide useful evidence to help resolve these problems. Despite this, only by reference to some minor rural sites (notably Ozengell, near Ramsgate) will that 'problem area' be understood. A number of local rural sites have produced early fine earthenwares identical in form and finishing traits to some terminal sandy ware examples. The changeover from coarse sandy to fine earthenware is a purely local technological switch (but in keeping with national trends) and it is likely that for a while the new tradition remained in the hands of Canterbury-area potters.

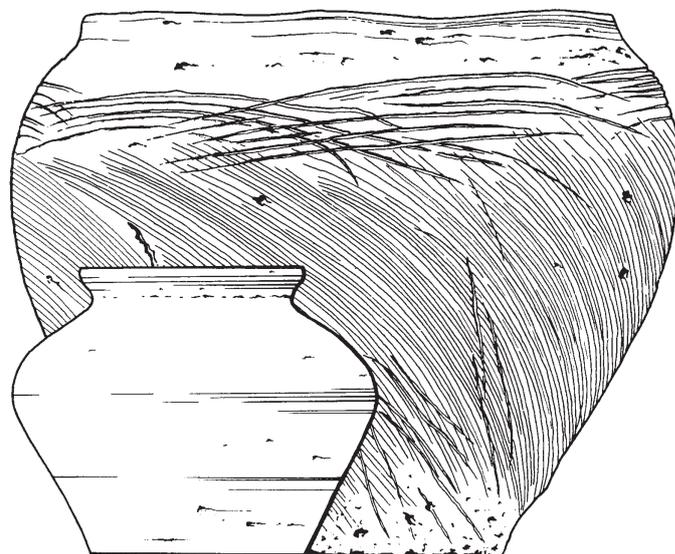
What the above and many other minor instances show is that isolated scraps of apparently unrelated information which have remained dormant or unpublished for years can suddenly acquire new significance. Superficially there is nothing very remarkable in this statement, but what it does underline is that without awareness of, access to, and regular assessment of, existing regional information, the constructive general growth of knowledge of East Kent ceramics (the principal source of dating evidence for most archaeological levels) could be seriously hindered.

2 Channel Tunnel Excavations: Late Iron Age Pottery

by Nigel Macpherson-Grant and Dr Isobel Thompson

A number of sites excavated during the construction of the Channel Tunnel terminal at Cheriton produced pottery of this period, most of it in the later 'Belgic' grog-tempered tradition. The best material came from the 'Belgic' - Early Roman settlement at Dolland's Moor, and Dr Isobel Thompson has kindly supplied the following assessment:

"The Late Iron Age pottery largely comprises the grog-tempered fabric that is characteristic of the period in southeastern England, with additional smaller quantities of more localized variations: grog with quartzsand, grog with chalk, and grog with organic inclusions. The analysis is at a fairly early stage but certain observations can be made. The bulk of the assemblage is hand-made, and of local manufacture. There are some vessels from further afield, wheelmade copies of Gallo-Belgic forms (largely the common butt-beaker and plates), and it is noticeable that the groups which appear to be later in date have more wheel-made vessels. Some groups are post-Conquest. There are also a few hand-made forms, presumably local attempts at copies of wheel-made versions, including a plate and a jug. Characteristic traits of pottery from within Canterbury's sphere of influence are strikingly scarce. The major centres of the period each have a hinterland within which the grogtempered wares share

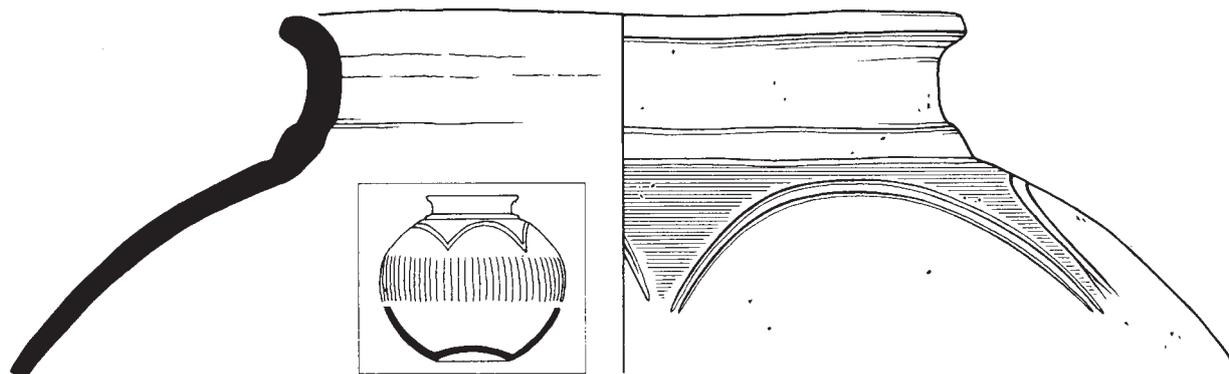


Late Iron Age 'Belgic' pottery from Dolland's Moor. Scale 2:5. ▶

individual formal traits, and Folkestone does not appear to be within that of Canterbury. For instance, the plate form G1-6, which is particularly common in East Kent, is entirely absent. An outstanding form that is present is the omphalos-based jar with standing arc decoration, a rare form that seems to have links with Conquest-period vessels in Sussex.⁴⁷ At least three of these have now been recorded from the Folkestone area, and it will be interesting to see what other connections with Sussex, or further afield, emerge. The material from Dolland's Moor is particularly valuable since it comes from a site on the very edge of the distribution of grog-tempered pottery, in an area which has badly needed new information*.

It is important to stress the presence of the decorated omphalos-based jar. In this instance the decoration is emphasized by careful burnishing. This type of decoration, employing contrasting zones of shiny (burnished) and matt (unburnished) surface treatment, together with omphalos bases and incised curvilinear decoration, belongs to a much older Mid-Late Iron

Age tradition of gritted wares in existence throughout eastern England. During the first century B.C. any earlier trends towards regional styles tended to crystallize, and in Sussex a particular variant employed was the standing arc pattern. However, this style was completely alien to the grogtempered tradition, which had arrived from the continent by the mid first century B.C., if not earlier. Sussex remained outside the distribution of grogged wares, but it is clear from the Folkestone evidence that at some point after c. 50 B.C. a degree of 'cross-border' cultural interaction took place, essentially between the eastern Atrebates of Sussex and the 'Belgae' of Cantium. What has previously been difficult to assess (for lack of evidence) is quite when, and to what extent, cultural exchange took place. An interesting point is that during both its 'Belgic' - Early Roman and much earlier sixth- to fifth-century B.C. phases, Dolland's Moor apparently lay within the interface between different ceramic traditions implying different social or 'tribal' groups. This does raise the question of how old, and how continuously maintained, was this social boundary.



▲ Late Iron Age 'Belgic' arcade-decorated jar from Dolland's Moor (scale 1:2) and parallel (scale 1:8).

3 Excavations at Stonar, near Sandwich

by Nigel Macpherson-Grant

Preparation for publication of the pre-1969 finds and the results from the author's H.B.M.C. funded 1969-72 excavations at this important late eleventh- to late fourteenth-century town site, is currently in progress.

The Stonar gravel bank is essentially a sea-formed extension of the Cottington/Ebbsfleet ridge that projects south from Thanet. When the latter was an island, this ridge was a peninsula of land jutting across the eastern end of the former Wantsum Channel. The nature of the underwater topography beyond the end of this peninsula encouraged the natural accumulation of sand and gravel (principally as a result of alongand on-shore sea currents), ultimately forming an elongated 'tear-drop' shaped bank, with its broadest part near to present-day Sandwich. This process took place during later prehistory, arguably between c. 3,000-100 B.C.⁴⁸

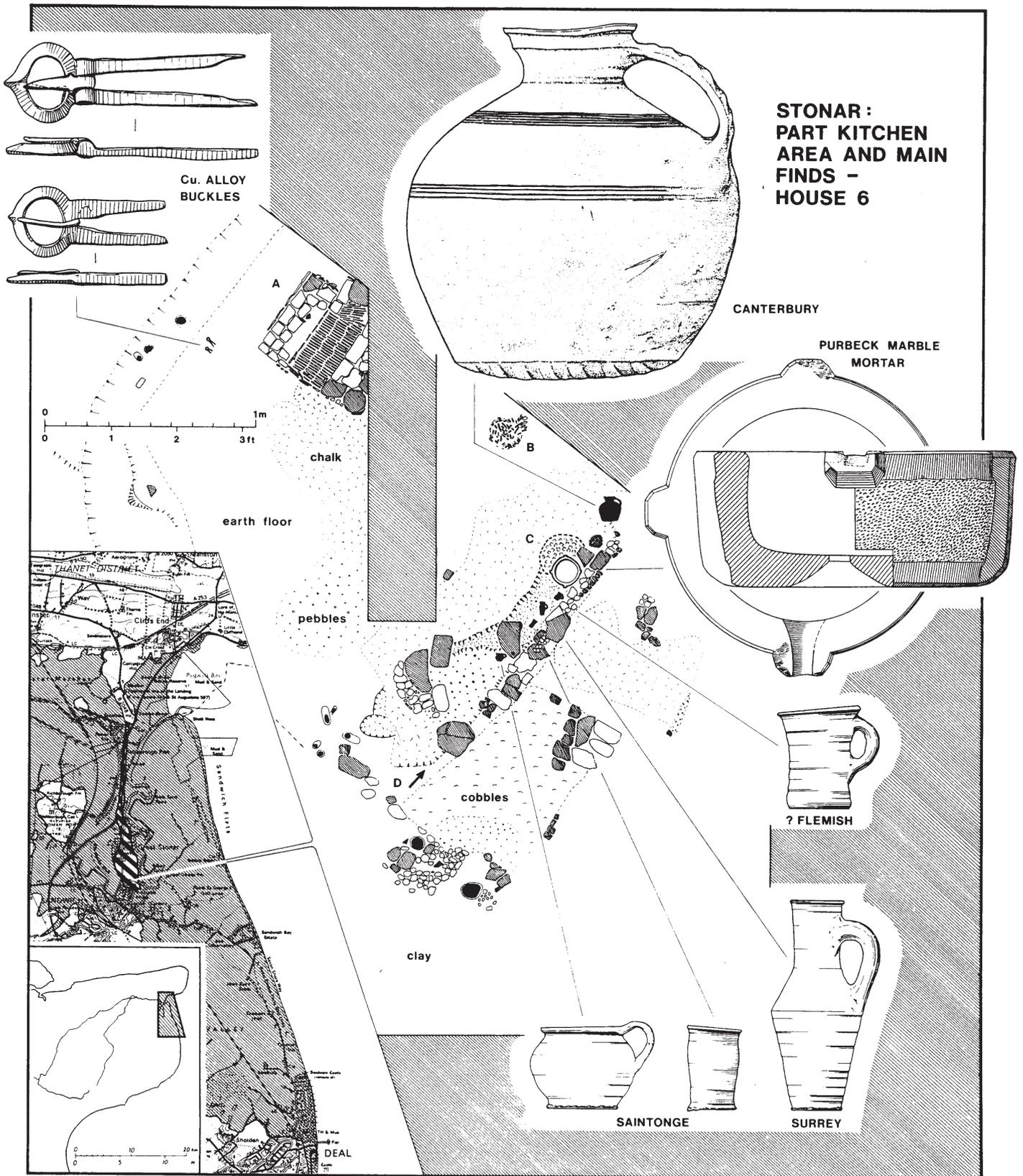
The bank was first used as a source of building material during the fourth-century construction of the Late Roman Saxon Shore fort, but intensive quarrying did not begin until the late nineteenth-century. From then on, extraction of sand, gravel, and, later, 'bluestone' flint for the Staffordshire Potteries,⁴⁹ was continuous until 1974. The first recorded archaeological work was a series of trenches across the foundations of the Church of St Nicholas by Henry Wood in 1821, but it was the subsequent quarrying that exposed the extensive seam of medieval occupation overlying the gravel bank. From the late 1930s sporadic excavation and artefact recovery yielded the rich range of imported pottery that caught the attention of the late Dr Gerald Dunning. Despite his own full realisation of the site's archaeological value, it remains a tragedy that no serious work was undertaken during the 1950s and 1960s. Only the very narrow zone of the 1969-72 rescue excavations across the broadest southern end of the town indicated its full original potential, and at the same time appeared an awareness that much good information had been needlessly lost. The extreme south-east corner of the town, together with possible quaysage, is all that remains, relatively undisturbed. An archaeological input should form an essential part of any further development in the area.

Apart from one minute scrap of samian and one coin, there was no evidence from the 1969-72 work, and very little that can be reliably used from previous collecting, to indicate Roman occupation. Despite wellembroided legends, there are no signs of Early-Late Saxon occupation either. The earliest firm archaeological evidence is a few sherds of late eleventh-century Canterbury pottery, and this accords

well with the first genuine documentary date of 1090, when Stonar was already considered to be a sea port. However, these few finds from the lowest occupation levels were not associated with any contemporary activity, and this strongly suggests that the early core of the settlement lies on the remnant south-east corner of the bank (the inference from documentary records indicated establishment during the earlier eleventh century). A few clay- or stone-packed post-holes associated with clay floors, occupation debris and pits, were the first recorded structural features, representing simple wooden buildings erected in slightly lower-lying sandfilled hollows (between shingle ridges), partly perhaps for ease of construction, but also to provide a degree of shelter from prevailing winds. Associated pottery dates these 'small houses' to the mid to later twelfth century. At some point between c. 1175-1200 Stonar expanded considerably (permission to hold a market was granted in 1193), and the first significant quantities of pottery date to this period, accompanied by a marked increase in occupation density. From this time, its position as a wealthy port-town was established, and maintained, until its dramatic demise in 1385.

Documentary evidence

Quite apart from references to its destruction (one dated, two undated), Stonar's documentary evidence (researched by Mrs Margaret Sparks),⁵⁰ though not as rich and detailed as Canterbury's, is a useful contribution to the tone of the region's history. In particular, the landlordship of St Augustine's Abbey over the Stonar shingle spit on the north shore of the Sandwich Haven, and that of Christ Church over Sandwich on the south shore (an arrangement established by Cnut in the early eleventh century), was the source of continuous rivalry and occasionally violent dispute until the end of the thirteenth century. Essentially, the development by St Augustine's of a port at Stonar in the late eleventh century, and its expansion in the twelfth, was part of a deliberate and precocious policy to take advantage of the extensive foreign trade to Sandwich, and indeed to 'secretly receive the toll and customs from foreigners who have come there which the ministers of Sandwich and the port of Sandwich ought to have received'⁵¹ At times these quarrels had to be settled by the reigning king - William 11 in 1090, Henry 1 in 1127 and finally Edward 1 in 1290. There are also a number of named Stonar inhabitants and other personages, events and affairs with which Stonar was directly or indirectly involved, all of which adds historical 'flesh' to the archaeology. Disputes or



**STONAR:
PART KITCHEN
AREA AND MAIN
FINDS -
HOUSE 6**

CANTERBURY

PURBECK MARBLE
MORTAR

? FLEMISH

SAINTONGE

SURREY

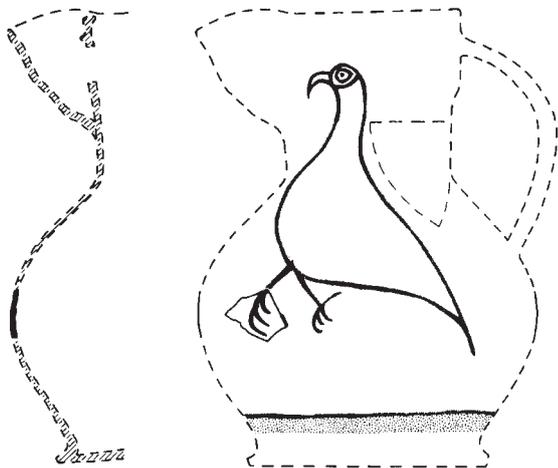
▲ Stonar: location and simplified plan of House 6 after removal of 1385 destruction debris.
A = hearth; B = pitched tile pot-stand; C = crushed brick mortar-stand; D = internal wall footings.

not, Stonar flourished as a trading port, with Flemish and other foreigners living there, and the pottery recovered during the excavation testifies to the inhabitants' wealth and their wide-ranging contacts.

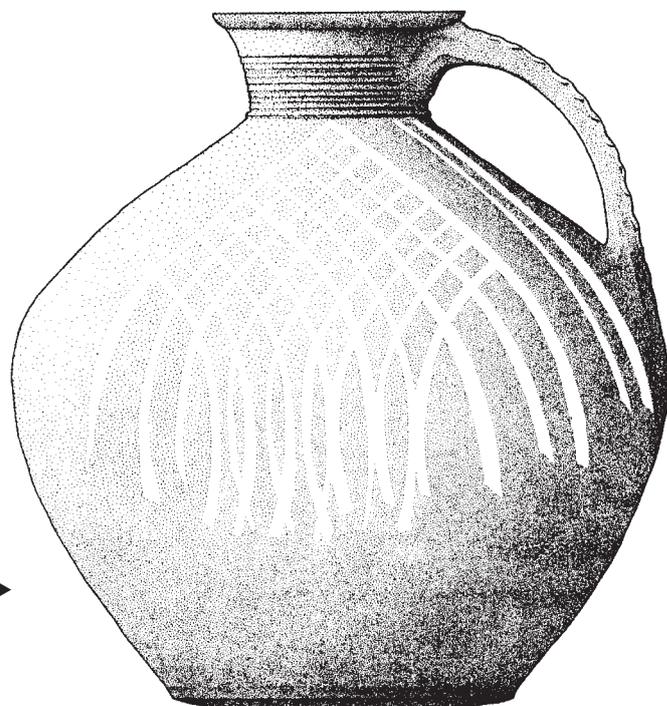
Ceramic evidence

Throughout this period most kitchen and coarser table wares came from the Canterbury potteries at Tyler Hill, though there are many instances of cooking-pots and other kitchen wares from continental and non-local English sources. Continental pitchers are present from the earliest twelfth-century levels, including a small number of various North French, Andenne-type or Normandy wares. Many of these may have been casual acquisitions, but from the later twelfth to thirteenth centuries the volume of

quality jugs indicates trading links with: London, Scarborough, North France (particularly Rouen), and Flanders. Some vessels, like highly decorated glossy dark-green glazed Scarborough knight jugs and aquamaniles, may have been specifically made to order. These contacts continued. London: decreasing by c. 1275 to be replaced by modest quantities from Surrey; Scarborough: decreasing by c. 1325-50; Flanders: the link was maintained throughout the fourteenth century For France there is, by c. 1250, a major shift from the north to the south-west, with increasingly large quantities of jugs (and some pottery mortars) from the Saintonge region of Gascony, near Bordeaux, by-products of the wine trade with this area. From specifically fourteenth-century levels there were Spanish vessels (a few exotic lustre-painted bowls from Andalusia, olive oil amphorae and



▲ Stonar: reconstruction of bird-decorated Saintonge polychrome jug. Scale: 1:4.



Stonar: white-painted Tyler Hill sandy ware jug, c. 1275-1325. Scale: 1:4. ►

a large bowl from an unknown Mediterranean source) and German stone wares from Siegburg and Langerwehe. Saintonge wares were dominant, not only in the later levels, but overall as the main import category. These included fragments from over thirty delicate polychrome jugs, painted with birds, shields or tendrils in bright green, yellow and brown on a fine white fabric. Even more are present in the British Museum's Reference Collection, and the original total is likely to have been much higher. General design similarities and the overall evidence have prompted the belief that these excellent vessels were produced by one family of potters, operating between c. 1275-1325 (at the very outside). Though their distribution is fairly widespread around British, North French and continental North Sea coasts, individual site quantities are not particularly large. The likely Stonar total appears to be unusually high. Visually prestigious, these jugs certainly had an heirloom value. It is therefore surprising that only one survived intact until the French raid.

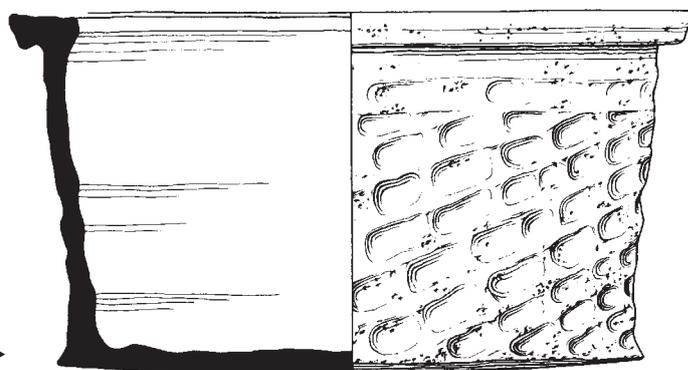
Destruction evidence

In 1385 Stonar was destroyed by fire. The archaeological evidence was only too apparent. There were iron arrowheads in the destruction debris. Burnt wattle and daub walls had caved in beneath the weight of tiled roofs, heavy structural and lighter lath nails were scorched and survived in pristine condition. Doors and frames had burnt in situ, decorative hinge-plates failing nearby. A pair of leather belts fell from a kitchen wall. Jugs, some still containing liquid, dropped from collapsing shelves or were crushed beneath burning partition walls. Of the ten final-phase structures excavated, seven had been fired. Broken tiles and burnt daub sealed gravel paths between houses, as well as house foundations, floors, hearths, door and furniture fittings and personal and domestic items. There was even a sense of how domestic discipline varied: a neat row of pots against the partition wall of one kitchen, a litter of oddments in another, a clean 'swept' kitchen floor devoid of items in another. After the raid, occupation ceased and there was only minimal disturbance thereafter (a sixteenth or seventeenth-century spade in a foundation robber-trench).

Beneath destruction-levels, in the excavated area houses were ranged along both sides of two streets, with alleyways separating properties. One building with a brick floor may have been a shop. One of two wells yielded jugs from Saintonge, Flanders and Rye. One of the streets led towards the church and enclosed cemetery, both of which had been heavily disturbed by twentieth-century extraction-plant foundations. One hundred and twenty-nine, mostly wellpreserved, burials were recovered from the cemetery, some showing signs of leprosy and tuberculosis. Where time allowed, deeper excavation revealed that at least two final-phase houses had replaced earlier thirteenth-century ones, on the same plot.

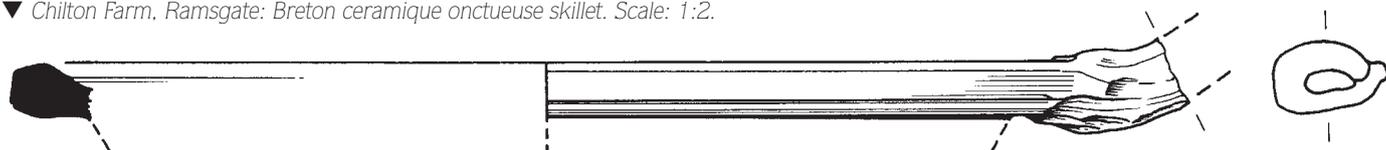
Ceramique onctueuse

One aspect of Stonar and recent research on local coastal sites is the awareness that this class of site tends to produce a much wider range of non-local wares than even major inland towns: the difference between Canterbury and Stonar is very marked. In itself this is not surprising, since a great deal of minor coastal trading would have gone unrecorded. It does, however, emphasise that even after twenty to thirty years of increasingly active research there are still a large number of unlocated English and continental pottery sources which remain as a stimulus for further work. One minority fabric class from Stonar are micaceous wares (not all from the same source). Amongst these is a complete mortar-shaped cooking pot (from a 1385 destruction context), in a soft, soapy, highly micaceous rich milk chocolate-brown fabric. A Brittany source was suspected, but until recently this remained unproved. A by-product of John Cotter's recent researches into the continental background to the 'French-style' Pound Lane kiln products (see last year's 'Canterbury's Archaeology') has been the location of exact published parallels for the Stonar pot from a twelfth-century site in Morbihan, Brittany. Though the date for the Stonar vessel may be later, the place of manufacture is now beyond doubt. The distinctive fabric texture (due to the presence of natural talc) has generated the unforgettable French label of *ceramique onctueuse*. The fabric is rare, with only one previous example from East Kent a dish from a fourteenth-century garderobe, Snargate Street, Dover. Another sherd from Brittany figured here (with a similar fabric, but different source) is a stray find from near Ramsgate, Thanet - in this instance a handled dish of skillet type.



Stonar: Breton *ceramique onctueuse* cooking-pot. Scale: 1:4. ►

▼ Chilton Farm, Ramsgate: Breton *ceramique onctueuse* skillet. Scale: 1:2.



4 Longmarket Pottery

by Nigel Macpherson-Grant

At the time of writing the Longmarket excavation is still in progress. However, during the course of the excavation excavated materials have been rapidly processed and the greater part of the post mid-twelfth century pottery corpus has been 'spot-dated'. The Longmarket excavation is proving to be exceptional, both archaeologically and ceramically, with many new and intriguing finds of all periods. The Canterbury Excavation Committee and Trust sites in the Marlowe area provided the city with excellent Early-Late Anglo-Saxon ceramic sequences: it is already clear that Longmarket will do much the same with its late twelfth- to early seventeenth-century levels. There are stratified sequences incorporating a remarkable quantity of ceramically rich garderobes, cess-tanks and rubbish pits. Moreover there are good indications that this sequence extends back to at least the ninth century. The features and finds from Longmarket's c. 1150-1650 levels are an unexpected and timely bonus. Canterbury is unusually well-provided with document-dated sites for the late eleventh and twelfth centuries. We also have a good grasp of ceramic trends in the fifteenth century and for much of the post-medieval period from c. 1650 onwards. A serious hindrance has been the inability to date confidently pottery of the period c. 1250-1400, not for the lack of pottery (there is plenty of it) but simply because of the absence of good document-dated contexts and reliable stratigraphic sequences. Canterbury is not alone in this; it is a problem that has tended to prevail nationally. Further, Canterbury's sixteenth-century levels have been very poorly represented both in terms of sequences and material. Material from the Longmarket excavation will hopefully provide sufficient information to rectify this problem.

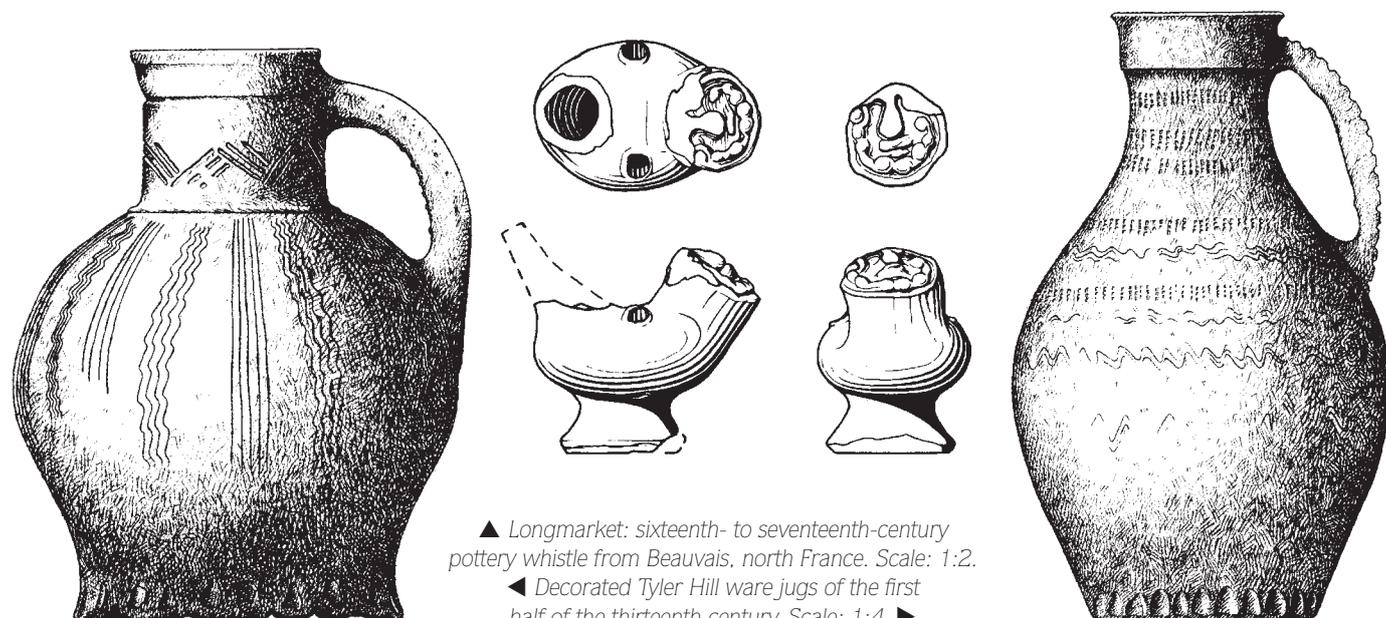
In addition, there is ample material to fill out and confirm our knowledge and dating of suspected trends. One of these is the conjunction between a particular ceramic type, documentary evidence for Theoric the Goldsmith,

and the possible recovery of his workshop area and parts of his property. Sherds from vessels identical to those illustrated here have come from various parts of the city, always from contexts suggesting a date between c. 1175-1225, but lacking absolute confirmation. Their original function was also a puzzle. For good reasons some experts preferred to call them lamps; there was very slight evidence that they might also be used as crucibles, but no proof. Now we have it: hundreds of sherds from Theoric's workshops, known to be operating between c. 1180-1204, many of them heavily encrusted from their use as metallurgical crucibles.

The above is only one small instance. In twelve years with the Trust I have not witnessed elsewhere the recovery of so many complete, or restorable, vessels, only exceeded by the remarkable cache of local medieval jugs from Professor Frere's Canterbury Lane well. What makes Longmarket different is that many of these vessels (and sherds) represent quality imported tableware and reflect long distance trading contacts and the wealth of those living in this 'high profile' city-centre area. Many are unusual, and a few exotic: highly decorated jugs from London, early German near-stonewares, elegant jugs from North France, a group of jugs from the Saintonge, vessels from Spain and North Africa or the Middle East. Many lesser known imports and even some unusual highly-decorated local jugs add to the sense of quality of the Longmarket assemblages. In the near future the task of studying, assessing and describing this material will go to John Cotter, who joined us last year from Colchester to share the load of processing and studying Canterbury's post-Roman pottery.

Longmarket: late twelfth-century crucible fragments with (inset) intact crucibles of a similar date from other Canterbury excavations. ▼





▲ Longmarket: sixteenth- to seventeenth-century pottery whistle from Beauvais, north France. Scale: 1:2.
 ◀ Decorated Tyler Hill ware jugs of the first half of the thirteenth century. Scale: 1:4. ▶

5 Islamic Pottery from the Longmarket excavation

by John Cotter

Amongst the thousands of mainly local medieval sherds from the Longmarket site is a small number of pieces that are quite out of the ordinary. While a medieval pot from France, Germany or the Low Countries is always an interesting find, the presence of such pots is never quite such a surprise as that of pots from the Islamic world, which had no direct contacts with Christian England.

Along with the Chinese, the potters of the Arab world produced some of the most sophisticated and beautiful pottery known to the medieval world. When these Arab wares managed to reach the Christian west, they were highly prized and regarded as luxury items. The surprising thing about the Longmarket site is the unusually high number of Islamic vessels present - at least six or seven vessels in all. This may not sound very many, but if one considers that probably more Islamic sherds have been found on the Longmarket site than in all the other Canterbury excavations put together, then it becomes clear that there is something special about the Longmarket.

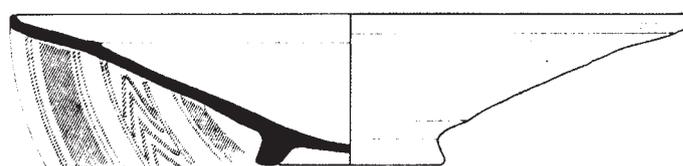
Pottery reflects the status of its owners and the discovery of so many luxury items at Longmarket accords well with what historical documents tell us of the sort of people who lived here. We know, for instance, that by the end of the twelfth century a number of leading Canterbury citizens had shops and houses here - influential people such as Theoric the Goldsmith, who helped finance the military campaigns of Richard I in Brittany and Wales. Theoric's sons may have continued his trade as goldsmith into the thirteenth century. Other leading citizens who had shops on the Longmarket site included Robert son of Richard who was affiliated to the Knights of the Hospital of St John of Jerusalem (and therefore could have had indirect contacts with the Near East). Because of its central location - a stone's throw from the cathedral - it is likely that Longmarket remained a high status site throughout the medieval period and beyond.

Detailed research into Longmarket's medieval pottery has not yet begun in earnest but it appears likely that the Islamic wares were imported between the thirteenth and early sixteenth centuries. There are two main types of Islamic pottery. Firstly there is a pink-buff fabric with a deep turquoise glaze and faint lines of overglazed painting possibly lustre painting; secondly, there are other pink-buff fabrics with an off-white glaze and overglaze lustre painting, sometimes with the addition of blue. This last type is a reasonably well-known class of ceramics produced in the areas of Spain that were under Arab control in the Middle Ages, and consequently are sometimes referred to as 'Hispano-Moresque' (Spanish Moorish) lustrewares.

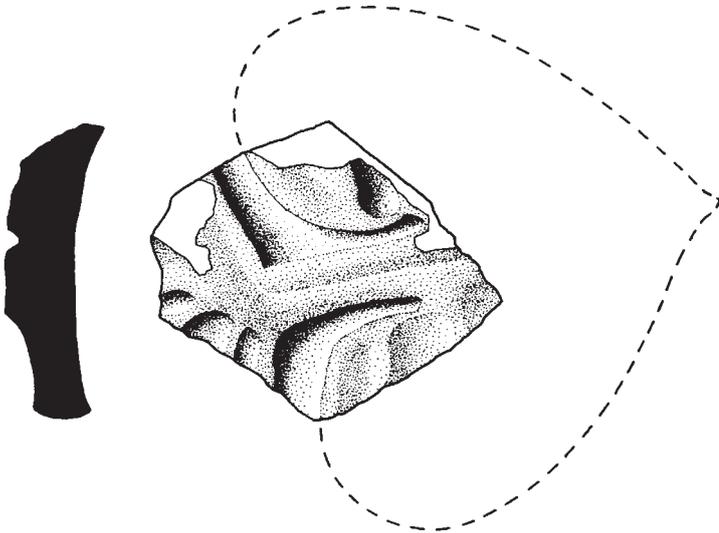
Spanish lustrewares combine two important innovations for which the potters of the Arab world were famous. As early as the ninth century the Arabs of Mesopotamia (Iraq/Iran) discovered that adding a tiny amount of tin to a transparent lead glaze would produce a perfect white background for painted decoration. Pottery specialists refer to this technique as tin-glazed pottery (also as majolica, maiolica, faience and delft). The other technique they invented was lustre painting. Decoration would be painted on, using a solution of copper sulphide. Firing this in an oxygen-free (reducing) atmosphere turned the sulphide back into metallic copper

giving the pots a wonderful shiny or golden appearance. Unfortunately time and acid soils are unkind to both tin-glazed and lustred pottery. The glaze often goes yellow or mushroom-coloured and in extreme cases the lustre may disappear entirely and can only be seen under infrared light. Some of the Longmarket sherds have become duller but it is still possible to make out their original lustre designs.

The earliest reference to lustreware manufacture in Spain is in 1154, but it may have been made even before this. Some authorities have suggested that emigrant potters from Egypt in the twelfth century may have contributed towards its development, perhaps joined by potters from the Middle East fleeing the Mongol invasions of the mid thirteenth century. Maghrebi potters from Morocco also seem to have contributed to the designs current on early Spanish lustrewares.



▲ (A) Andalusian lustreware dish from London c. 1375-1425. Scale: 1:4.

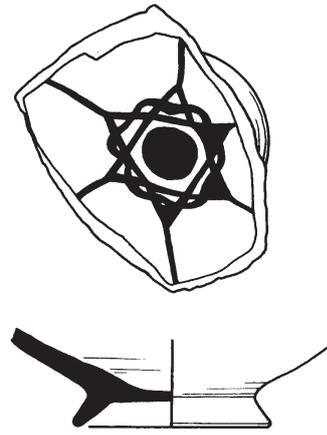


▲ (1) Andalusian lustreware with moulded decoration. Scale: 1:1.

From the thirteenth to the early fifteenth centuries Spanish Andalusia was the main centre for lustreware production and its products circulated throughout the Arab-Mediterranean world and filtered through to the Christian west. Andalusian lustrewares were decorated with typically Islamic designs based on interlacing geometrical forms, stylised scrolls of vegetation and Arabic lettering. Human representation was avoided.

(A) illustrates an almost complete Andalusian lustreware dish from London to give some idea of what a complete example would have looked like. Andalusian sherds from the Longmarket include the following.

(1) is a sherd from a large thick-walled vessel, possibly a vase, clear glazed on the inside with thick tin glaze on the outside. It is most unusual in that the outer surface is decorated, possibly moulded, with designs in high relief, perhaps representing foliage, although the sherd is too small



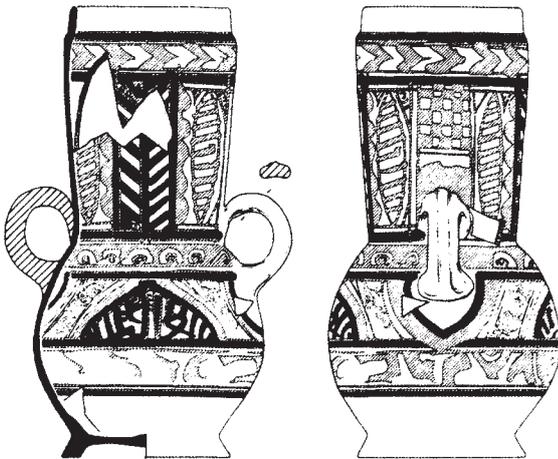
▲ (2) Andalusian lustreware. Pedestal-footed dish with geometric decoration. Scale: 1:2.

to be certain. Another Andalusian sherd (not illustrated) may also come from a vase.

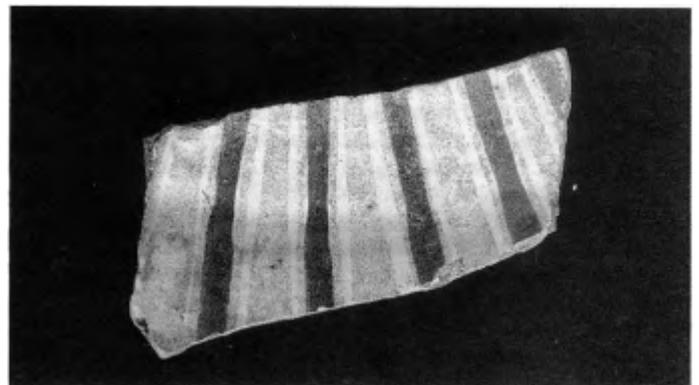
(2) is from the base of a pedestal-footed dish with typically Islamic lustre-painted geometric designs.

The growing power of the Christian kingdoms in Spain was a severe obstacle to the lustreware potters who sought an even greater market for their wares. By c. 1350, potters from Andalusia began to emigrate to Valencia on the east coast of Spain where they established a new potting community and allowed themselves to become absorbed by the Christian powers. Valencian lustrewares gradually toned down their more obvious Islamic influences and replaced them with Christian symbols and coats of arms to appeal to their new clientele. The 'heyday' of Valencian lustrewares was c. 1425-75 during which its products were sought after by the rich and famous from Cairo to London and Dublin, to Norway and the Baltic; by the end of the century, some Valencian lustrewares had even travelled as far as the Americas.

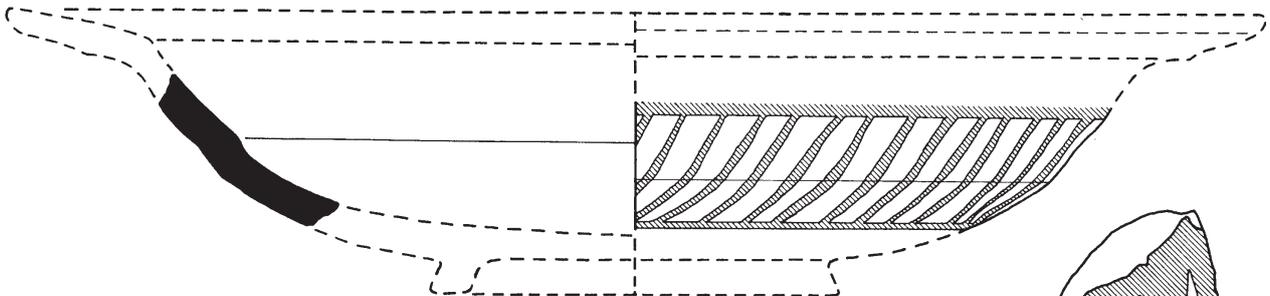
(B) from Stamford (Lincs) shows what a complete Valencian vase would have looked like. Valencian lustrewares from the Longmarket include the following:



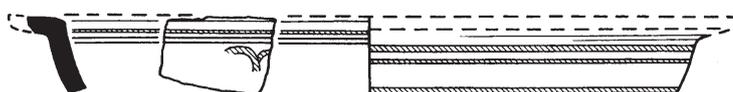
▲ (B) Valencian lustreware vase from Stamford, Lincs c. 1425-1475. Scale 1:4. (A and B reproduced by kind permission of the Society for Medieval Archaeology).



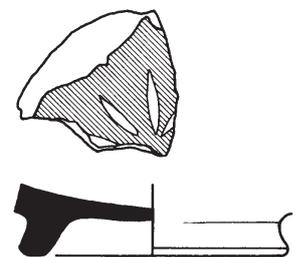
▲ Internal decoration of the Valencian lustreware dish below.



▲ (3) Valencian lustreware dish with blue and lustre decoration. Scale: 1:2.



▲ (4) Sherd from turquoise blue glazed bowl with lustre decoration. Scale: 1:2.



(5) Footring base from turquoise blue glazed bowl ▲ with lustre decoration. Scale: 1:2.

(3) is from a dish with an internal decoration of radiating lines of blue and lustre. This design is typical of early Valencian lustreware as is the external lustred band of oblique strokes.

The origin of the turquoise blue pottery from the Longmarket is much less certain as finds of this type of pottery are much rarer in this country than the Spanish lustrewares and consequently are less well researched. Again they have a tin glaze to which a small amount of copper has been added to give a typically Islamic turquoise blue-green. Pottery of this type is known to have been produced in the Arab kingdoms of North Africa and the Near East. Egypt and Syria in particular were renowned for their turquoise blue wares. At this stage we cannot say for certain where the Longmarket pots were produced, nor exactly when they were made, but as they come from fourteenth- and fifteenth-century contexts they cannot be later than this.

(4) shows a fragment from a turquoise blue glazed bowl with a flanged rim. On the inside and outside there are horizontal lines of lustre painting and on the inside there are traces of a running scroll decoration.

(5) is a footing base, possibly from the same vessel as (4). The floor of the bowl shows a very faint radial design in relief lustre painting.

Given that medieval England had no direct contacts with the Arab world how does one explain the presence of Islamic pottery at Longmarket? Some pots may have made their way back to England in the baggage of Crusaders returning from the Holy Land - this might explain the occasional discovery of twelfth- or thirteenth-century Syrian 'Rakka ware' on some English sites, but this type has not been identified from the Longmarket where a slightly later date seems probable. Another possibility is that medieval pilgrims either to the Holy Land or to the famous shrine of St James at Compostella in Spain might have brought back the occasional Islamic pot as a souvenir. On rare occasions the route was more direct. We know for instance that in 1289 Eleanor of Castile, the Spanish wife of Edward 1, ordered 4,000 pots of 'Malik' for the royal household. In this case 'Malik' almost certainly refers to Malaga - the main centre for Andalusian lustrewares. There are also records of imports of Andalusian (Malaga) lustreware into Sandwich, Kent in 1303.

Although in public the powers of the Christian west avoided direct contact with the infidel east, in practice the east had too many things that the west wanted - luxury items such as gemstones, precious minerals, silks, spices and exquisite glass, metalwork and pottery.

Throughout most of the Middle Ages Italian merchants acted as go-betweens between the Christian and Islamic worlds. By the fourteenth century powerful Italian merchant companies based in Genoa and Venice had a virtual control over the traffic in Arab commodities leaving the Mediterranean. Italian merchants would collect English cloth from London, Southampton and possibly other English ports and trade it throughout the Mediterranean, even as far as Damascus in Syria. On the return journey the holds of Italian ships would be filled with Arab luxuries including pottery. There would have been many ports of call on the return journey. A ship leaving Syria might call in at other Arab ports in other countries and take on more wares. Then perhaps it would return to Genoa before the outward journey to England. On the way out of the Mediterranean, Italian ships often called at the Balearic islands (under Arab rule until 1230) including Majorca, to collect more goods including the tin-glazed pottery which they called 'Majolica' or 'Maiolica' after that island. Finally, after several more ports of call their ships would dock again in London or Southampton from

where their cargo would enter the open market. Spanish and Portuguese ships were also responsible for conveying wares from the Arab south and east to the markets of north-west Europe. In addition to eastern goods, these would also be shipping wine, oil, soap, iron, bowstaves and dye stuffs from their own countries, but would include whatever Arab pottery they could get from southern Spain or North Africa.

It was more usual for Iberian merchants to off-load their wares at the great international port of Bruges in Belgium rather than to call directly at the English ports. The Italians would sometimes do likewise. Flemish and Dutch merchants were therefore largely responsible for conveying luxury items to the eastern ports of England, particularly in the fifteenth century. There is even a document of 1441 which allowed Valencian lustrewares to enter Bruges free of duty. Flemish and Dutch merchant ships were frequent callers at Kentish ports, and for this later period at least, we can be reasonably sure that this was the route by which exotic goods reached Canterbury.

Small and battered though they may be, the Islamic sherds from Longmarket provide important evidence for long distance trade as well as demonstrating the considerable wealth of the medieval occupants of this site. While their existence is in itself remarkable, they also hint at the now vanished presence of more perishable luxury items which may have reached Longmarket by the same long and difficult routes. These could have included wine, oil and soap from Spain and Portugal, spices and perhaps even silks from as far afield as China - it is known from documents that such luxuries were available in some medieval cities during the thirteenth and fourteenth centuries. A few drops of liquid mercury from the Longmarket provide some corroborative evidence that foreign luxuries other than pottery were reaching the site, for the only sources of mercury known to medieval Europe lay in Spain and the Near East - in just those areas where Islamic pottery could be easily acquired.

Acknowledgements

The above summarises Trust work in progress or completed by individuals and by other archaeological organisations within the region. The exchange of information represented is of mutual benefit, so we are collectively very grateful to: Justine Bayley, Ancient Monuments Laboratory (for analysis and discussion of the Longmarket crucibles); Peter Couldrey (for his continuing assistance with Iron Age pottery research); Nita Farmer (for her assistance with the analysis of some Stonar finds, including Scarborough Ware); Jack Finch finder of ceramic onctueuse, Ramsgate; Alex Gibson (for his excellent work on the Late Neolithic/ Beaker materials of the region); John Hurst (for his continuing encouragement, and assistance with the analysis of Canterbury and Stonar medieval imports); Andrew Middleton (for his report on the Dolland's Moor red-finished pottery, and his continuing assistance with similar finds from Thanet); Keith Parfitt, Director of the Dover Archaeological Group (for information on Iron Age pottery from Deal and Worth); David Perkins, Director of the Trust for Thanet Archaeology (for permission to view and discuss Thanet finds in advance of publication); Antoinette Powell-Cotton and Derek Howlett, curator Powell-Cotton Museum (for permission to analyse some of the Iron Age pottery from Birchington); Frans Verhaeghe, Brussels University (for his assistance with the analysis of Pound Lane and Stonar pottery). To all these specialists and many others who have assisted us in the past year, we extend our warmest thanks.

6 Finds Processing

by Julie Lovett

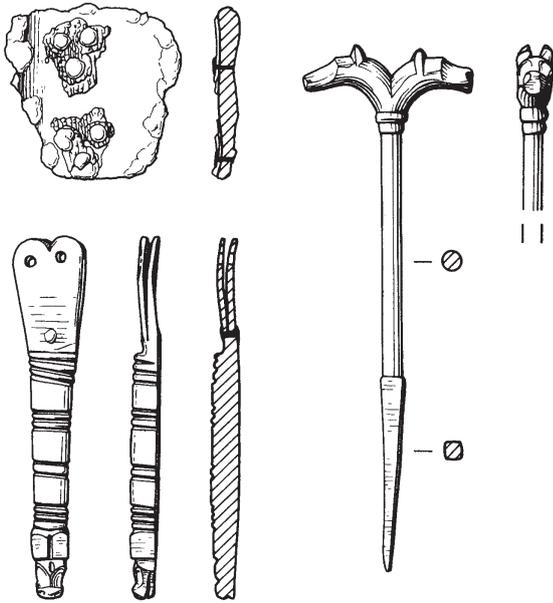
Having joined the Trust in February of this year as finds administrator, I have been fortunate enough to see a number of interesting projects at various stages of completion. This has culminated in the large-scale and fascinating Longmarket excavation, which at the time of writing, is still in progress.

An evaluation at the St John's Hospital (Nursery) site was underway when I arrived. This site produced a number of interesting finds including a corpus of leather shoe soles and straps or belts which survived in waterlogged, anaerobic conditions encountered in various parts of the area. These conditions may also be responsible for the survival of textile on one of the most interesting finds from the excavation (1). This is a small piece of iron sheet with two groups of three copper alloy studs through its thickness and with two types of textile adhering to one side. Ian Eaves of the Royal Armoury, London, has reported that it is a piece of Brigandine plate armour datable to 1480-90. He notes that the type is also known from sixteenth-century contexts, and parallels exist in Italy and Spain. The textile types are currently being identified at the Museum of London by Frances Pritchard.

None of the smaller-scale excavations undertaken by the Trust since February has produced outstanding finds. The slightly longer running Rochester Cathedral cemetery site produced in the main very corroded iron coffin furniture, i.e. handles and nails, with one exceptional find: one of the graves revealed a skeleton in whose left hand had been placed a pewter chalice. This find, in very fragmented and friable condition, presented a considerable task for both Pan Garrard who conserved it and for Sue Barnett who made a reconstruction drawing of the object (4). It is an intriguing and uncommon find and we are still attempting to unravel the possible history and date of this object. In this regard we are most grateful to John Cherry (British Museum) and to Marion Campbell (Victoria and Albert Museum) for their help and useful discussion.

(3) shows a double-headed copper alloy pin from the 1989 Christ Church College excavation. This pin was recovered in an excellent state of preservation and has been dated to the eighth century.

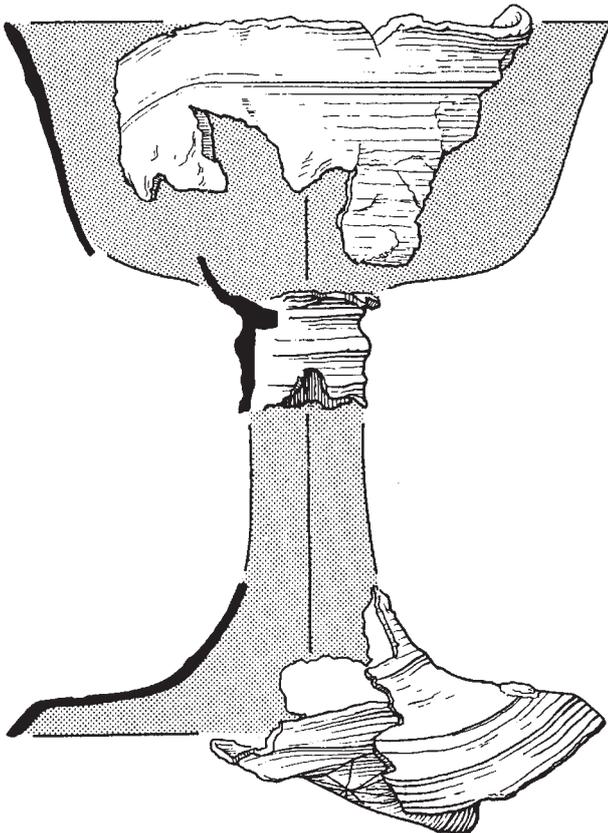
The Longmarket site with its numerous medieval and post-medieval rubbish-pits, cess-pits and cess-tanks has produced many thousands of finds. The Trust's Finds Processing Supervisor Maggy Taylor and her



▲ (1) Top left. Brigandine plate armour fragment. Scale: 1:2.
 (2) Left. Anglo-Saxon strap-end. Scale: 1:1.
 (3) Right. Eighth-century double-headed pin. Scale: 1:1.



▲ Animal paw prints on Roman tiles.



▲ (4) Tentative reconstruction drawing of the Rochester chalice. Scale: 2:3.

excellent team of workers (including a number of Eastern European students, volunteers and Friends of the Trust) have, so far, washed and processed vast quantities of tile, pottery, animal bone and slag. They have often had to work under extreme pressure of space as well as time, and have coped admirably

The Roman tiles recovered to date have been recorded and studied by Lisa Holness using a new form specially devised for Longmarket. This will enable us to set up a Type Series for future work. An interesting aspect of this work has been the isolation of features such as animal prints left on the tiles before they had dried.

Although the amount of dressed stone from the site has not matched that from Northgate (St Gregory's Priory excavations), experience gained from that site showed that a systematic method of recording architectural fragments was essential. A recording form was designed, and improved upon, until a useful, workable system was developed. We must thank the stonemasons of the cathedral for allowing us to spend a very informative hour in their workshops where we learnt that many of their tools and methods of working have remained unchanged since medieval times. The visit helped the finds assistants a great deal in identifying the various tool marks and stone types coming from Longmarket. For allowing this visit to take place we are very grateful to Mr Peter Long, Clerk of Works at Canterbury Cathedral.

Longmarket, with its tantalising glimpses of Roman building remaining in 'islands' over the site and visible at the time of writing in the sides of later disturbances, has presented its own unique problems with regard to recording and conservation. Fragile mosaics, for example, have been protected in situ during excavation processes. In this case, a day conference on painted wall plaster held at Leicester University and attended by Maggy Taylor and myself proved highly useful. Maggy applied a technique utilising plaster-of-Paris and bandages commonly used in connection with lifting wall plaster, to preserve the integrity of the patches of mosaic. These areas of floor are especially interesting because of their relationship with the previously discovered tessellated floor with panels (found in 1944) which will form part of the new museum to be incorporated under the new Longmarket development.

Among the most evocative finds from the Longmarket is possibly a group of loomweights uncovered in situ in one of the sunken-featured buildings so far uncovered on the site. I would also mention an attractive copper-alloy strap-end of ninth- to tenth-century date illustrated here (2): it was recovered in excellent condition- a fortunate and rather surprising discovery on a site where many of the copper-alloy objects have been coated in a considerable thickness of corrosion products.

Life in the small finds department has been made significantly easier with the advent of computerization. We may possibly have seen the end of long handwritten lists of data, exchanging them for instant information at the touch of a button. Rupert Austin converted our rough ideas for a small finds recording programme into a workable format and at the time of writing the small finds records are virtually up to date due to the greatly appreciated efforts of Wendy Murphy who has spent the majority of her Saturdays entering information onto the computer.

The growing quantity of finds which are retained by the Trust (both before and after study) requires storage and shelf space. This has pushed our stores at Broad Street and elsewhere to the very limit, and the advent of Longmarket brought the problem to crisis point. Similarly, the storage of the human skeletal material recovered from the Northgate excavations in a way which would make them accessible for study posed an enormous problem. I am pleased to be able to report that both problems have now been considerably eased (though not solved). Firstly, we were given a large quantity of shelving from the former Canterbury District Valuers Office, for which we are extremely grateful to Mr Peter Warr, the manager; secondly, Canterbury City Council agreed to allow us the use of a warehouse in their Works Services Department, and again thanks are due to them.

As always, we extend our thanks to a number of individuals for help and advice during the course of the year. Justine Bayley visited to examine the many twelfth- and thirteenth-century crucible sherds from the Longmarket. Ian Riddler has visited the office several times this year to help in the identification and dating of some of our recently recovered bone objects, especially the combs. He kindly agreed to write the accompanying piece about the Late Saxon bone combs from Longmarket.

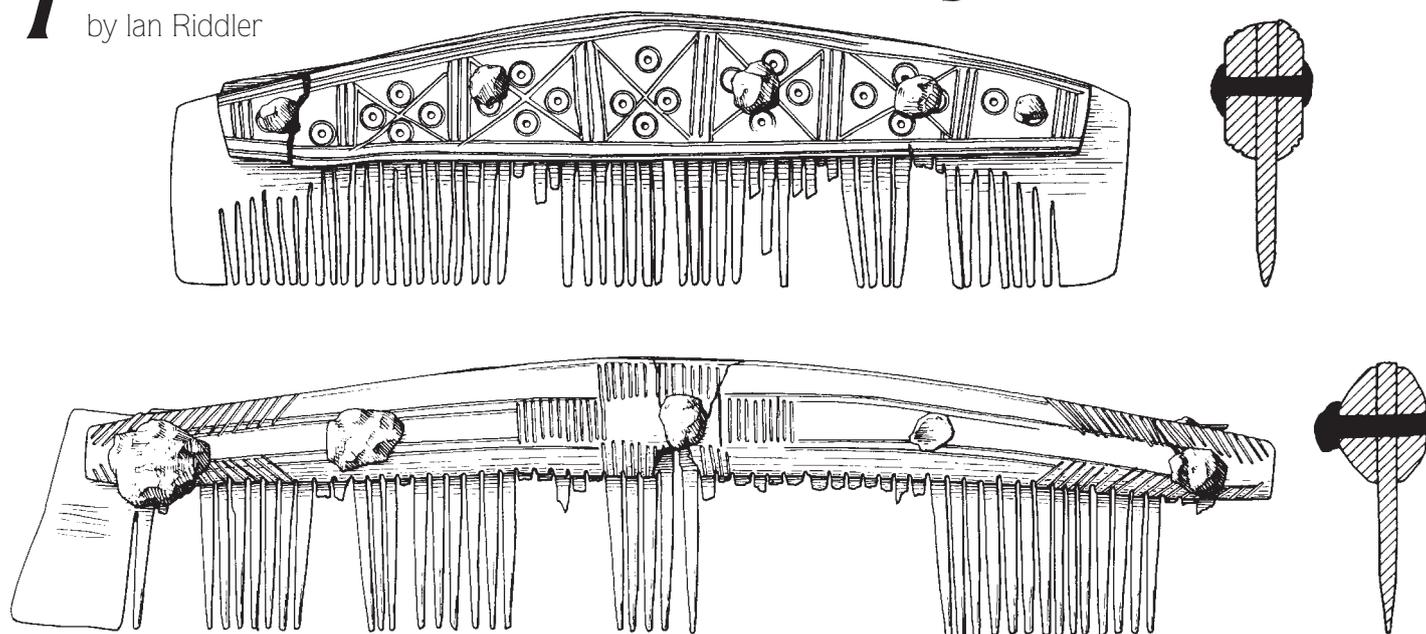
Other specialists who deserve a mention include Steve Allen (Museum of London) for confirming a medieval date for a timber-lined well which was discovered on Longmarket; he also identified a 'mystery' wooden object from the base of a large medieval ditch found at Station Road East as an early medieval silt shovel. Nigel Nailing (also Museum of London) undertook the identification of various wood samples from the Northgate site, for which we are most grateful.

As well as the conference on painted wall plaster mentioned earlier, members of the finds department have attended various lectures and seminars through the year. Topics covered have included glass and

metalworking, and a two day conference in York on a wide range of finds' issues. I would like to thank the Friends of the Trust for their continued assistance to finds staff attending such events.

7 Two Late Saxon Combs from the Longmarket Excavations

by Ian Riddler



▲ (top) Late Saxon comb. Scale: 1:1. (below) Late Saxon ('Anglo-Scandinavian') comb. Scale: 1:1.

Amongst many finds to have been recorded from the Longmarket excavations are several combs, a few of which are almost complete. Two combs in particular provide some indication of comb production in the Late Saxon period. They are beautiful objects in their own right, but they also reveal two different styles of comb manufacture practised at this time, and add significantly to our knowledge of combs at both a local and international level.

The first of the pair is a single-sided comb, consisting of three tooth segments and two end segments, fastened to two connecting-plates by five iron rivets. It is made of antler and is decorated on both sides by panels of ring-and-dot patterns, segregated by diagonal crossed lines. It is a wellmade comb but by Anglo-Saxon standards it is not a top quality product. The design is the same on both connecting-plates but included six panels on one side and only five on the other, and the comb is not quite symmetrical about its centre. Its rivetting is unevenly spaced and (even in its present corroded state) those rivets are intrusive to the comb decoration, passing indiscriminately through its uneven patterns. These might seem like the unnecessary criticisms of a modern specialist who is setting standards to which the Anglo-Saxons never really aspired; but Anglo-Saxons could (and frequently did) make better combs. This comb was made by a reasonably proficient local craftsman in accordance with a style of the Late Saxon period which is now becoming increasingly familiar.

Most Late Saxon combs are single-sided. A gradual evolution can be traced from triangular combs of the early AngloSaxon period (which have scarcely been seen at Canterbury, as yet) to an extended version of that type with rounded connecting-plates and 'winged' end segments reaching upwards beyond the line of the rounded back of the comb. This comb type, essentially a form of the seventh and early eighth centuries, was itself supplanted at some point by the simpler type of comb seen here, whose end segments merely continue the line of the comb back. It is not clear, at present, what provided the impetus for such changes in style, although fashions in England do generally reflect those seen earlier on the Continent. 'Winged' combs of the seventh century have been described as Frisian but they may well owe more to developments in comb design in the Merovingian kingdom further to the south. The impetus for this Canterbury comb may, on the other hand, actually be Frisian, where 'wingless' combs occur from the eighth century onwards.

Closer to home, the Canterbury comb is of a type familiar from other sites like Cambridge, York, Hereford and Norwich. It is not a common type of comb, however, and there are only a handful of examples known at present, few of which can be dated with any precision. It is not clear, therefore, whether this comb style was not particularly popular, or merely short-lived, or whether the paucity of examples simply reflects a lack of excavation of contexts of the appropriate period. Ninth-century AngloSaxon contexts are themselves a scarce commodity, for example,

and comparatively few items, outside of decorative metalwork, can be ascribed as yet to the reigns of either Offa or Alfred. We must be wary, therefore, of making too much out of a handful of combs. Nonetheless, differences in decoration between combs of the same general type may conceivably indicate different craftsmen and production centres and combs manufactured to a slightly indifferent standard are liable to be made locally, in emulation of contemporary designs.

With the second comb it is possible to further develop an image of the mechanisms of production and distribution. This comb is also single-sided but it is longer, with slender connecting-plates and end segments (one of which survives) which sweep up gently from the line of the comb back. Its decoration is the same on both sides and is simply but proficiently incised, with a cluster of vertical lines at the centre and diagonal lines at the comb ends. The comb teeth are longer and are cut and shaped a little more proficiently. The rivetting is evenly-spaced and is deliberately arranged so as to be less intrusive, being confined to spaces between the decoration. We are dealing here with a high quality production designed to increased standards of regularity and symmetry.

The comb type is characterised by the trapezoidal cross-section of its connecting-plates and by the central cluster of decoration, which consists of bands of vertical lines, alternating in their spacing across the three angled fields of the connecting-plate. The central part of a similar comb came from excavations at Mint Yard in 1979 and the type is also known from London, Northampton and York. In broader terms, however, the comb type is Scandinavian. It is seen in some numbers at the Viking period emporium of Haithabu, where evidence for its production has also been located. Further examples are known from other Baltic Sea sites, including Wolin, Zantoch and Gnesen. Indeed, it has been regarded as a comb type characteristic of the southern Baltic Sea coast in the early medieval period, its distribution devolving out from one or more southern Scandinavian production centres.

This presents a few problems. Are the Anglo-Saxon examples of this comb type actually Scandinavian combs, or are they imitations of the type, better described as Anglo-Scandinavian? The term Anglo-Scandinavian is frequently used for objects other than combs and particularly for sculpture, where it is clear that although Scandinavian influence is apparent, the objects themselves were made in England. James Graham-Campbell has published a knife from Canterbury which can also be regarded as Anglo-Scandinavian; it may have been produced in York. With these objects it is the presence of an Anglo-Saxon element of style, alongside Scandinavian taste, which allows them to be defined as Anglo-Scandinavian.

There is nothing obviously Anglo-Saxon about the Canterbury comb. It can happily be set alongside Continental examples of the type and regarded as a Scandinavian comb. Dating for the type is reasonably secure and extends from the second half of the ninth century to the end

of the eleventh; this particular comb type seems to have gone out of use by the beginning of the twelfth century. Both this comb and that from Mint Yard can in fact be regarded as Scandinavian.

This does not mean that Vikings were rampaging over the Longmarket in the tenth and eleventh centuries, dropping their combs into wells. Ceramic evidence from the context of the Longmarket comb provided a date of c. 1075-1100 for its deposition. Early medieval combs were sturdy artefacts designed to accompany an individual throughout their life: they may often have been kept in use for twenty to thirty years. The extent of their use can be determined from the degree of wear on their teeth. Following prolonged use the teeth are marked by horizontal striations which develop at the tooth ends into 'beads' which eventually drop away, shortening the teeth. The striations and 'beading' form a useful index of comb use and also help to indicate which parts of a comb incurred greatest use. This Scandinavian comb shows little sign of use. Its teeth are not beaded and those which survive are of similar lengths. It is likely, therefore that it was discarded (accidentally or deliberately) within a few years of its manufacture; and the date of that manufacture would have been just after the Norman Conquest. Its dating thus concurs well with that established at the Pommeranian site of Wolin, where this comb type first becomes common in the eleventh century, and continues into the early twelfth century. Similar dating has recently been established for combs of

this type recovered from excavations in Dublin, and it has been suggested that they were made there. One of the lesser known attributes of Viking civilisation was its proficiency in comb-making. Excavations at Haithabu, Oldenburg, Ribe, Lurid, Birka and Menzlin have revealed copious evidence of waste from comb production. Haithabu and Birka appear to have been major centres for comb-making in the ninth and tenth centuries. In the eleventh century the Scandinavian tradition in comb-making is continued at Lurid and Schleswig, as well as further to the east at Wolin. The products of these centres are widely dispersed across the Baltic and the North Sea littoral and are inevitably to be seen in England also. Scandinavian proficiency in comb-making undoubtedly had its uses:

'It is reported in the chronicle attributed to John of Wallingford that the Danes, thanks to their habit of combing their hair everyday, of bathing every Saturday and regularly changing their clothes, were able to undermine the virtue of married women and even seduce the daughters of nobles to be their mistresses'

The two Longmarket combs represent two aspects of comb production in the Late Saxon period. One comb is a native product, reasonably well-made to an established design of the ninth or tenth centuries. The other owes its greater proficiency both to the fact that it is not English at all, and to its post-Conquest date. It is an interesting testament to a lesser-known facet of late Viking civilisation.

8 Human Bone Studies

by Trevor Anderson

During the last year the study of human bones has progressed very successfully. The 'bone department' has been kept busy, not only examining the vast collection of skeletons from St Gregory's Priory, but also smaller samples, from various sites around Kent, ranging in date from Roman to post-medieval.

St Gregory's Priory

The final total of skeletons from St Gregory's was 1,339. This makes it one of the largest samples for study in the whole country. Clearly, such a large corpus of carefully excavated material is of national importance in the field of osteo-archaeological research. Almost 1,000 skeletons have been prepared for detailed analysis. These have been provisionally aged and sexed, with some 200 having been fully researched. Detailed demographic study will not be undertaken until all the skeletons have been examined in greater detail. A summary of the bone pathologies was included in last year's Annual Report; since then two discoveries of great importance deserve further mention.

SK 790 (Male: 35-45 years). Both elbow joints display gross deformities. The pathology is predominantly destructive, resulting in an overall loss of bone quantity and marked cavitation of the articular surfaces. A lower thoracic vertebra (number 11?) has collapsed, secondary to being weakened by a large pus-forming abscess in the body of the bone. The deformed vertebra has fused to its inferior neighbour.

The destructive nature of the elbow lesions suggest an infective, or secondary, joint degeneration, rather than primary DJD ('arthritis'). The bilateral involvement, combined with the vertebra pathology, is diagnostic of skeletal tuberculosis. Tuberculosis affecting the bones and joints is very likely to be of bovine origin - that is to say, it occurs due to drinking infected cows' milk. The bovine form often develops during childhood.

Based solely on the dry bone evidence it is quite clear that this individual suffered many years of pain and discomfort. The elbow joints were so grossly deformed that their movement was severely restricted. The lower bones could not be fully extended and the left side was probably reduced to only 10-20° of movement, practically fixed at right angles to the body. The collapsed and fused vertebra has resulted in a marked kyphosis (increased anterior curvature of the spine). This deformity, known as Pott's disease, is a well-known finding in advanced skeletal tuberculosis. It means that, in life, the individual would have been suffering from a marked hunch back deformity. It is possible that the infection may have begun in childhood and then flared up after a period of dormancy.

Skeletal tuberculosis has been recently discovered from a Roman⁵⁴ context. Apart from the latter, and our own example, skeletal tuberculosis has not been clearly demonstrated in British archaeological material.

SK 904 (Male: 45-60 years). Pleural calcification. Length 115 mm.; max. breadth 39 mm. Weight 15 gms. The calcification is slightly concave (due to collapse of the lung) and displays irregular bony outgrowths on its curved edge. The inner surface, nearer to the lung, is rather irregular and uneven, whilst the outer surface displays clear striations.

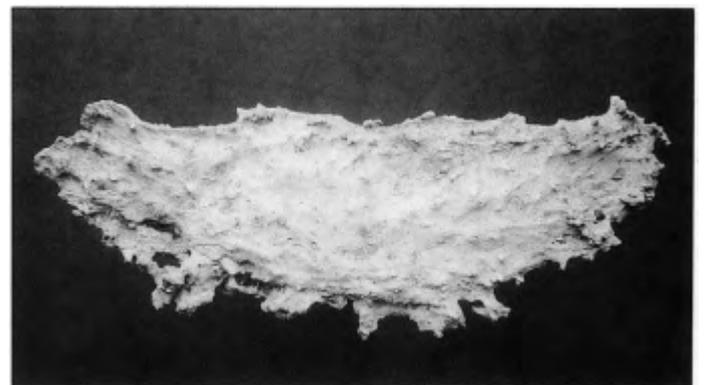
Calcification of the pleurae (the outer lining of the lungs) is diagnostic of healed pulmonary tuberculosis. In modern clinical practice a differential



▲ SK 790: Right elbow displaying gross deformity and destruction due to skeletal tuberculosis.



▲ SK 790. Left elbow displaying gross deformity and destruction due to skeletal tuberculosis.



▲ SK 904. Pleural calcification. The first archaeological case of healed pulmonary tuberculosis in Great Britain. (Approx. 3:4 actual size).

interpretation of asbestosis would need to be considered. A similar calcification has been found in a medieval Danish skeleton: a mature male, suffering from tuberculosis and leprosy, dated to c. 1400.⁵⁵

Pulmonary tuberculosis is almost certainly a result of infection from contact with an infected human, rather than a consequence of drinking infected milk. This is the first case of pulmonary tuberculosis known from a British archaeological site.

North Lane

Three Roman burials were recovered: two inhumations and a cremation. The latter consists of 450 minute fragments, weighing 200 gms. Fragments of long bones and of skull could be identified but it was not possible to age or sex the remains. No bone pathology was detected. The remains were very incomplete, from the available fragments, only one individual was represented.

The inhumations both appeared to be male. SK 1 was practically complete, except for the skull. It was buried with the head to the west. Age is uncertain, based solely on the sacro-iliac articulation, it is possibly under 35 years. Stature was calculated as 1.683 m. (5 ft 6 ins). There was no sign of pathology or cause of death.

SK 2: Male? Poorly preserved, consists of only skull, fragmentary scapulae, left arm and left pelvic fragments. The skull is clearly male, but the post-cranial bones are quite gracile. As the bones were found beneath the water table it is possible that some of the bones may not belong to the skeleton. As there is very little wear on the available teeth and the sutures of the skull are clearly open, the age is probably under 30 years. Stature was calculated, from metacarpal 1 length (thumb), as 1.715 m. (5 ft 7 1/2 in). The only pathology was arthritis (primary DJD) of both shoulders. The joint involved being the acromio-clavicular articulation.

St Peter's Methodist School

A small trial excavation at St Peter's Methodist School discovered a lay cemetery. Twelve medieval inhumations dating from the thirteenth century onwards were unearthed. There were six child burials, three being under one year. The skeletons were below water table and had to be excavated very rapidly since the water was flowing in as quickly as it could be baled out!

Apart from spinal joint degeneration and advanced tooth decay (caries) there was little evidence of bone disease. SK 5, a male aged c. 30 years, displayed a well-healed fracture of the lower shaft of the left ulna; the radius was not involved. This was probably the result of direct violence.

The sample is too small to draw any significant conclusions and does not warrant further detailed study.

Longmarket

An unexpected find on the Longmarket site was the discovery of an articulated burial in a layer provisionally dated to the early medieval period. The skeleton was represented by scapulae, spine, rib fragments, upper right arm and pelvic fragments. The rest of the skeleton had been cut away by later features. Twenty-four feet bones were found loose in the grave fill. The badly damaged skull and the upper two neck vertebrae were found disarticulated in the vicinity (but in a different soil layer). The reason for this occurrence is uncertain. The burial of a body outside a cemetery suggests foul play, possibly the disposal of a medieval murder victim.

The skeleton is male and is c. 18-23 years old. The age estimation is based on dental attrition and the incompletely fused humeral head. Stature estimation, based on the length of the humerus, is 1.85 m. (6 ft 0 1/2 ins). Despite the young age there are osteophytes on lumbar vertebrae 1 and *3. These bony outgrowths suggest that the disc space was under stress, possibly due to heavy usage and excessive strain. The skull was seriously distorted and broken due to post-mortem soil pressure. There was a shallow, roughly circular, concavity above the eye sockets. These depressions may represent a well-healed injury; they are certainly not the cause of death.

The dentition is of great interest. In the left upper jaw the milk canine (c) and the milk second molar (e) have been retained: they are normally both shed at c. 11 years. Although the frontal teeth have been lost after death the sockets are available for examination. From these it can be seen that the left permanent canine (3) and the lateral incisor (2) had been transposed, i.e. the socket for the long canine root was located where the shorter incisor should have been found. There are no carious cavities but the lower teeth are quite heavily encrusted with tartar, especially the lingual aspect of the incisors.

(There was no evidence of cause of death on the available bones. However, one cannot help but speculate that a brawl following comment on his unusual facial features may have been the cause of death. Perhaps the strange dental pattern marked him out as a figure of ill favour and a source of bad luck to his medieval neighbours...

Rochester Cathedral

Archaeological investigation, in advance of consolidation to the foundations at Rochester Cathedral, led to the discovery of sixty-three burials. The stratigraphic evidence and the datable finds suggest that



▲ The North Lane cremation: 450 bone fragments. (Approx. 1:5 actual size).

twenty-five graves are medieval (six of them possibly Anglo-Saxon); thirtyfive are post-medieval, and three could be either medieval or early postmedieval. The available bones are quite solid and are reasonably well preserved. However the sample, from three narrow trenches, was largely represented by incomplete limbs or by small miscellaneous bones. Only three skeletons, a juvenile and two children, are almost complete.

The burial ground contained men, women and children (14.8 per cent) and was clearly part of a lay cemetery. In both medieval and post-medieval periods male burials were found to predominate over female although not markedly so. The incomplete nature of the remains has meant that very few could be aged with any degree of accuracy. Only nine sub adult skeletons were recovered. They ranged from a few months old (SK 4) to juvenile (SK 27, 47). The greatest number of child deaths occurred between six and twelve years of age.

Stature was assessed from long bone lengths. It is interesting that the medieval skeletons, both male and female, are taller than those from postmedieval levels, the male figures being 1.73 m. and 1.69 m. and the female figures being 1.63 m. and 1.57 m. This might suggest that the standard of nutrition and health was better in the medieval period and that diet subsequently deteriorated. Unfortunately no valid conclusions can be drawn from such a small sample. It would be interesting to see whether a similar pattern would emerge if a larger part of the cemetery was available for excavation.

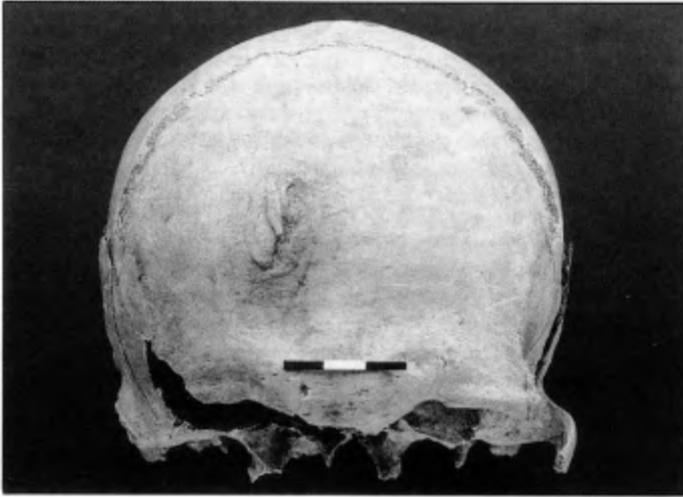
Examination of the pathological lesions suggests that joint degeneration was more common in the upper limbs and of earlier onset than in modern populations. It is interesting that the hip, a favoured site in modern practice, was spared. It is probable that certain 'arthritic' conditions such as the deformed feet (SK 1: Female, 35-40) are occupationally linked. In comparison with other archaeological populations, spinal degeneration was not too severe. There was little evidence for malnutrition or for vitamin deficiency. Infection was only visible in two skeletons (SK 1 and SK 53: Male 40-55) - an incidence of 7.5 per cent, which is not high by medieval standards.

The only evidence of accidental injuries, such as broken arms or legs due to a fall, was an un-united fracture of the left ulna (SK 54: Female 45-60). There were two examples of weapon injury, both involving the skull (SK 31: Male 30-40; SK 53: Male 40-55). In both cases healing has taken place without any sign of infection.

SK 31: The lesion is situated on the middle of the right frontal bone. It consists of a well-defined elliptical cut c. 23 mm. in length. The right side exhibits a smooth overgrowth of dense bone; the left edge is bounded by a narrow collar of porous bone. The appearance is typical of an old wellhealed weapon injury. The most likely interpretation is that it was caused by a cutting injury, from a heavy sword or perhaps an axe. The blow failed to penetrate perhaps due to the protection of a helmet.

SK 53: The lesion is situated in the centre of the left parietal bone. A circular lesion (c. 30 mm. in diameter), with exposure of the diploë, is clearly visible. This wound is typical of a glancing blow from a sharp edged weapon, quite possibly a sword. A similar example was found in the AngloSaxon cemetery at Eccles.

It is interesting that two cases of weapon injury should be found in such a small sample. Only thirteen skulls were available for examination; this means a 13.3 per cent incidence of adult cranial injury. This appears to be a high figure since no weapon injuries have as yet been found on the large series of skulls from St Gregory's Priory. Also, work on a large sample from Spitalfields suggests that head wounds were rare: eighteen examples from 986 crania, 1.8 per cent.



▲ SK31. Skull - healed weapon wound on the right frontal bone.
Scale: 3 cm.

There was only one example of a tumour-like condition. This involved the skull of SK 46 (Female: 35-50). The bony overgrowth is truly spectacular. The striking appearance is caused by a massive ovoid overgrowth (hyperostosis) of spongy bone, 70 mm. in circumference. The hyperostotic bone is regular and well-demarcated. Thickened spongy bone, with a clearly defined margin, has extended supero-medially and as involved the supra-orbital aspect of the frontal bone. The spongy hyperostosis has spread into the zygoma causing marked swelling and porosity. Comparison of the normal left orbit with the diseased right shows quite clearly bony overgrowth in all but the medial aspect of the eye socket. In the sphenoid, just inferior to the spongy hyperostosis, there is a ragged-edged circular defect (c. 10 mm. in diameter), penetrating to the inner table of the skull.

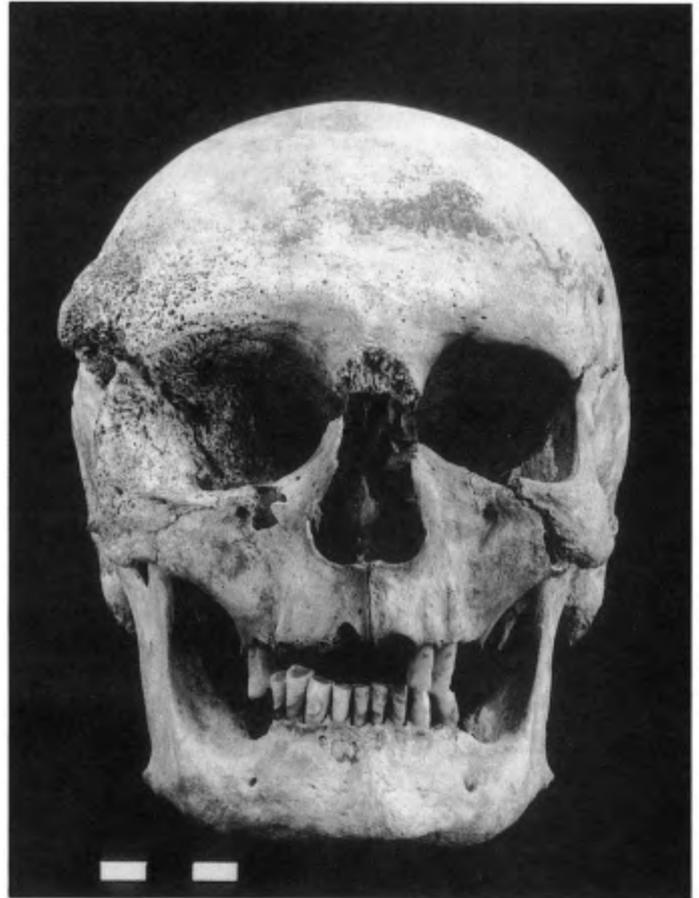
The massive hyperostosis would have been extremely disfiguring. The overgrowth would be visible as a massive hard tissue swelling on the side of the skull. The right cheek would be enlarged and irregular. The right eye would be bulging out of its socket. Probably vision was destroyed due to compression of the optic nerve.

Diagnosis most plausibly indicates either a meningiomatous hyperostosis, or possibly a haemangioma. The former originates on the outer surface of the brain (the meninges). The bony overgrowth is a pathological response to the initial soft tissue tumour. The chronicity of the hyperostosis, with its smooth, well-defined edges, rules out a primary malignancy. Also primary bone malignancies would be rare after the age of twenty-five. The X-ray evidence is suggestive of meningioma, since the peripheral lytic margin, common in haemangiomas, is absent. Recently obtained CT scans show definite destruction of the inner table of the skull, which is typical of a meningioma.

The preferred diagnosis is one of meningiomatous hyperostosis. This is an extremely rare finding, only twelve possible cases have been reported in the world palaeopathological literature. Only one example is known from Britain: this is from a Romano-British site at Radley.⁵⁶

The small sample of skulls with intact dentition suggests that oral health was no worse than from other medieval sites. Tartar was frequent, affecting about two thirds of available teeth, but in most cases (62 per cent) deposits were minimal. The caries experience is fairly low, certainly in comparison to post-medieval samples. This may be related to a high percentage of ante mortem tooth loss, many cases of which may have been the result of carious destruction. Abscess cavities are much less frequent than at most other sites. This, as well as the sex link (no females affected), may be an anomaly due to the sample size. The few sub-adults available display rather unhealthy dentition especially SK 56 (6-7 year old) with carious lesions of the upper milk molars and widespread calculus deposits.

The small sample of skeletons excavated at Rochester Cathedral suggest a community suffering from 'arthritis', trauma, infection, possible vitamin deficiency as well as neoplasm and various oral problems. Examination of SK 53: Male 40-55 would suggest an extremely unhappy existence: 'arthritis' of both shoulders and collar bones; spinal degeneration with vertebral collapse and subsequent scoliosis; chronic infection of the lower leg and also a sword cut to the skull. However, viewing the sample as a whole the standard of health appears no worse than that of other excavated samples. Indeed, spinal degeneration, chronic infection and dental problems are, in general, more serious in other British archaeological remains.



▲ SK46. Skull - meningiomatous hyperostosis (frontal view).
Scale: 3 cm.



▲ SK46. Skull - meningiomatous hyperostosis (detail).

Stonar

In 1972 over 120 burials were recovered from a medieval cemetery at Stonar, near Sandwich. A detailed catalogue, including metric and demographic analysis, was compiled by John Eley. In the light of recent advances in osteoarchaeology, I am preparing a detailed archive of this material. There is no funding available for this work and it has to be carried out in my own time. It is hoped that the completed archive will form the basis for a detailed report on this small, but interesting, sample of medieval bones.

Conclusion

I should like to thank Brian Smith for all his help over the last year, not only in overseeing the smooth running of the bone cleaning, but also for his hard work in fitting out our newly acquired bone store. A special word of thanks to Louise Jessup, my unpaid assistant, for all her help and her expertise in the bone department and on site during the last year. Research on the Rochester material was greatly helped by Barbara Bilyea's many hours of unpaid overtime. I am glad to report that my

band of loyal long-term volunteers are still enjoying the work and are visiting the bone department on a regular basis. A 'thank you' is due to Catherine; Diana; Lynne; Margaret; Mary; Pauline; Valerie; Virginia and Peter for the many hours of their own time, willingly given to help with the bone recording.

Progress is being made on other fronts. I am happy to say that members of the Department of Radiology at Christ Church College have very kindly and generously allowed us access to their X-ray facilities. Diana Claisse and her staff (Ruth, Keith, Peter and Stuart) have X-rayed almost 100 pathological bones for us. We are hoping to publish a joint article on our findings in the near future. We have also been fortunate enough to obtain CT scans of important bones, such as the skull of SK 46 from Rochester. This is due to the time and effort of Jon Billings, Superintendent CT Radiologist at Kent and Canterbury Hospital. The help of Dr A.R. Carter, Consultant Radiologist at Kent and Canterbury Hospital has been greatly appreciated.

On this note of fruitful co-operation, I am looking forward to another active and productive year in the bone department at Canterbury.

9 Documentary Research

by Richard Cross

The Channel Tunnel Project

The enormous task of bringing order to the amorphous mass of documentary evidence for the elucidation of the historical landscape within the Eurotunnel areas has continued during 1989-90 in tandem with the basic research programme of data collection. If the analogy may be permitted, pin-pricks of light are discernable at the end of a long tunnel, but so much remains to be done, if only in asking the right questions of the evidence, that it will be several years before tangible results will be set in print. In terms of personal effort perhaps a more fitting image is the often reluctant exertion of restraint on ever increasing circles of understanding. But putting these heady reflections aside, the benefits at the end of this long running trawl of history for the development of Kentish historiography lies in the opportunity to undertake and, more importantly to complete, an in-depth interdisciplinary study of a hitherto unappreciated part of the county; and by so doing, establish a model for similar future undertakings.

Last year's Annual Report outlined the major sources of documentary evidence. This year the aim has been to select and present a number of documents culled from several thousand which will hopefully give an indication of the range of the evidence and show at once both its discursive nature and its more intimate detail.

The first document comprises a terrier of 1636 covering the whole of the Folkestone estate, part of the surviving fragmentary series of estate papers of Sir Basil Dixwell.⁵⁷ The particular, in a paper-covered volume of nineteen folios, gives a complete survey of a 2500 acre estate which comprised the manors and farms of Folkestone Priory (largely woodland including 8 acres of priory land called Cheriton Wood), Tarlingam (including 73 acres encompassing 'Castle Hill', with 'Castle Hill and Baymanhill Downes' and also 27 acres of arable at the 'Old-well bottome'), Hawkins Mill, the farms of South Hawkins, Middle Standen and Combe (including 5.1 acres at 'Holewell Downes'), the seigniorial manor of Walton, the Parke (including 'Sugerlofe Hill and the great and little pond head adjoining to St Eanswith's water being priory land'), the farms of Foord, Hougham, Folkestone Common (Swingfield) and lastly, the Cistern House in Folkestone town. Other particulars and manorial extents also survive from the thirteenth through to the nineteenth centuries offering the opportunity for detailed mapping and comparative analysis of the many historical aspects of the area under review.

For the manors, courts were held at periodic intervals. Surviving rolls for the Court Leet of Folkestone of the early seventeenth century record presentments and fines of startling contrast.⁵⁸ In Newington, one Stephen Beane was presented 'for not scowringe of a water course ledinge from a place called Pine, unto Nuington Church, fined at ijd'; similarly, in Cheriton, one Henry Partridge 'for certaine hedges hanginge over a highwaye ledinge from a Pine, unto the hill foote, fined at ijd'; and in contrast, one Christopher Jenkin, 'for a breach of the peace upon the wife of Thomas Hammon xs'; lastly, one John ThomasTor makeinge an affraye upon Agnes Tomlin widowe, and for blood shedd xxjd'.

A similar series of personal records dating from the mid- eighteenth century, survive amongst the title deeds of the Brockman estate archive. Contained within a cancelled eleven year lease for Longport farm from William Brockman to Richard Waters is a group of testamentary papers being memoranda, an unexecuted will and related documents for



▲ Forstall Farm, Newington in c. 1930, looking west.
(Photo: Mr R. Kennelly).

opinion.⁵⁹ Their occurrence is entirely due to the intestate death of the lessee Richard Waters on 5 April 1742. Of these papers the memorandum by the Reverend Edward Parker, minister of Cheriton parish is perhaps the most illuminating giving a detailed word picture of the events in Longport farm and the last hours of Richard Waters on that fateful day. The testimony is reproduced here and the reader may see in it causes and events familiar at any date. More interesting perhaps is the question of what caused Waters illness and what became of his wife, Elizabeth.

The leases issued to the tenant farmers of the Brockman estate also provide valuable contemporary information for the agrarian history of the area. A series for Forstall farm, Newington between 1707-68, for example, contain numerous and carefully worded covenants governing closely the husbandry of the farmlands concerned.⁶⁰ Invariably, rights to trees and free liberty of ingress and egress to fell and carry away the same, (in this case specifically naming the Ozier Gardens, Asholt Wood and Wick Wood), remained with the lessor as did certain rights to dig chalk from the Downs. Other similar landlords rights may be familiar to present day tenant farmers: rights of entry for the bailiff or steward to assess reparations and free liberty to hawk, hunt, fowl or fish anywhere on the premises. Lastly there are the relict traces of feudal services due: two days work with a team and wagon yearly and, at every Christmas, two couple of fat capons or pullets. Nor was the tenant free of charges for the upkeep of the mixed farmlands, having to make repairs to all fences (but being allowed rough timber and cleft poles), maintain hedges and keep open and scour all ditches. In terms of farm management tenants incurred annual penalties of extra rent for breaking up and converting to tillage each acre of meadow and pasture; giving undertakings not to plough over a set number of acres and also to spread abroad all dung, compost and sillage 'in a good and husbandlike manner'. Specific covenants related to the penultimate and final years of tenancies to sow ten acres with podware gratten and leave another ten acres sumerland 'well and sufficiently ploughed in and stirred'. In the case of the Forstall farmlands, leases from 1739 and later refer to the new breaking up of downland, certain fields such as Hungerdown being closely controlled by covenants which allowed ploughing but specified that they were to be laid down again with trefoil or Saintfoyne seeds two years before the end of the lease.⁶¹ Otherwise the tenant was free to farm unhindered, and for his well-being use of a specified part of a barn and yard to thresh corn and to fodder and water his cattle was allowed until first of May following expiration of his lease.

Longport Farm: Memorandum dated 8 April 1742 by the Reverend Edward Parker, minister of Cheriton parish concerning the will of Richard Waters, tenant farmer (KAO/U1402/T12)

Memorandum

On Monday April 5th 1742 Mr Henry Brockman being desired to make the will of Richard Waters, who was thought by the family to be then of sound mind and memory capable of doing it and I Edward Parker being desired to assist Mr Brockman therein, went with him for that purpose to the house of Richard Waters. As soon as we came into the house Mrs Waters called me Edward Parker aside and told me her case would be very hard if her husband should die and that he had promised to make a will and give her fifty pounds more than she brought him when he married her. Which I told her I would mention to him. When Mr Brockman and I Edward Parker came into the room where Mr Waters lay his daughter Susan knowing what we came about gave him something to drink and said he would strive to drink something the more that he might be the better able to talk to us and afterwards went out of the room and left Mr Brockman and me with Mr Waters. When I went towards him as he lay in bed and told him Mr Brockman was come and asked him if he knew upon what account to which he answered, yes it was to make his will. I then knowing it was difficult for him to speak as his tongue was swelled and his breath very short, desired he would take his own time to speak and we would first know in what manner he intended the will should be made, which Mr Brockman would afterwards write down and when it was finished read the whole to him which he said was very well. I then told him the first person to be considered was his wife and asked him what he intended to leave her. After a little consideration he answered what she brought me in money and goods. I then told him that her case was something hard that she had put herself out of business upon marriage with him and would be at a loss what to do if he should die and further told him that I had heard he intended to leave her fifty pounds besides the money and goods she brought him. To which he immediately answered, no then there will be little or nothing for my daughters. I told him then as Mr Brockman and I were strangers to his circumstances as he in-

to give his wife the money and goods she brought him it would be proper to mention the sum of money, upon which he said, forty pounds. I then asked him what he intended to give his daughters and after considering a little he said both alike fifty pounds a piece. I asked him if he would give them no more, he said, no fifty pounds a piece. I then asked him if he had no poor relations or acquaintance to whom he would leave some small legacy of twenty or forty shillings or as he pleased, he said none. I then asked him who should have the remainder of what was left. He answered I give all to my son Richard. I then told him that as Richard his son was not of age and as Mr Pamflett and Mr Marshall were mentioned by the family to be executors in trust till he came of age, if he thought proper to appoint them as such it would be convenient to bequeath them five pounds a piece for the trouble they would be at. To which he answered no he was not willing. I then repeated it to him, that it would look well and friendly if he did and he answered he did not think either of them would refuse the trust or desire anything Or it. Having these instructions Mr Brockman sat down to make the will and when he was going to write down what was left to Mrs Waters he asked me if I knew her Christian name. I told him no but that I would ask Mr Waters and accordingly I went to his bed and asked him his wife's Christian name to which he readily answered Elizabeth. When Mr Brockman came to the name of the place where Mr Marshall lived he asked me if it was not Monks Horton. I told him I could not tell but would go and ask Mr Waters and according I went and asked him what was the name of the place where Mr Ingram Marshall lived, he said Horton. I asked him if it had no other name. Yes says he, Monks Horton. When Mr Brockman had finished the will he desired that I would see if any one was at the door before he read it which I did and saw no one. He then told Mr Waters he had made the will and would read it to him distinctly which he did and when the several legacies were read I repeated the sums to him and asked him if it was as he intended to which

he answered it is right. When Mr Brockman had finished reading the will he asked him whether that was not the will as he intended to which he answered yes. Mr Brockman then asked him whether he was then willing to sign it and if he was able. He answered, yes I can sign it now. I was then going down to look for some one to be witness of the signing and sealing of the will with Mr Brockman and myself. But before I could get out of the room in comes Mrs Waters in a furious passion with Susan Waters and in a loud and passionate manner said this cannot be Mr Waters own will and if we put words in his mouth he might indeed repeat them after us but that she was sure he intended to leave her more and his daughters more and then went in a fury to the bed and drew the curtains and said is this man fit to make a will and something further to the same purpose which I did not much remark as I was something displeas'd as was Mr Brockman to have such a reflection cast on us when we thought we had been doing a friendly office. I do believe upon her coming in in that manner he was incapable soon of signing the will and that he scarce knew who was in the room for I observed that she put him in a great Putter of spirits. So Mr Brockman and I left the room and I heard he died in about half an hour after I do really think Mr Waters was in his sound senses when he gave orders about the making his will and while it was reading to him and continued so till his wife came into the room in the manner above mentioned but that then his senses soon failed him and she herself I think to be the cause that prevented the signing of the will. The matters of fact above mentioned I will vouch all to be true allowing for some difference in the expression but the meaning I aver to be the same and hereunto set my hand this eighth day of April 1742

Ed: Parker

I do agree that the matter of fact above mentioned are actually true which I am willing to attest to witness my hand this 8th day of April 1742.

Hen: Brockman.

Such then is the stuff of agrarian history More detail remains to be collated particularly in the subject of stock rearing and the local changes from arable to pastoral farming. Detail comparative tabulation of the leases from the several farms on the Brockman estate added to the information gleaned from the layout of the farm buildings themselves should provide a comprehensive picture of the methods employed.

Desk-top Assessments

Beyond the confines of the terminal area at Folkestone, which forms the main study area, archaeological desk-top assessments have also been undertaken towards the end of the year at Ashford and Dover on Eurotunnel related developments. Last year's Annual Report noted assessments for proposed developments at Sevington and West Hawk Farm, Kingsnorth. Ashford, in the case of Sevington the assessment was followed by field evaluation using linear trenching conducted by K.A.R.U.

in two phases during November 1989 and in February 1990 revealing a number of hitherto unknown archaeological sites. From June 1990 a further assessment has been undertaken on an adjacent proposed development of 190 acres in Sevington, which also incorporates the Eurotunnel railhead, and on which the Trust first began its work for the Channel Tunnel project as long ago as July 1987. At Dover a detailed assessment has been made of a proposed redevelopment of a part of the Western Heights centred on the area of the now demolished Grand Shaft Barracks. Further information on all these assessments will appear in next year's Annual Report.

The 'Wightwick' Papers

During 1990 the Trust also became the recipient of a large collection of historical records, the residue of a Canterbury solicitor's papers which had become obsolete. The bulk of the documents comprised title deeds

to property with a quantity of relevant copy testamentary papers and two significant groups of manorial papers.

The archive arrived at 92A in twelve tin trunks, the documents within often still in their original brown paper packets grimy with years of dust. Some of the parchment deeds were water-damaged and a large number were also mouldy from damp. Three days of concerted effort enabled an initial sorting, cleaning and reboxing of the documents into more archivally stable conditions, with the careful preservation of the original bundles and sequences as received. A more detailed calendar is now in preparation but this will undoubtedly take a considerable time. Ultimately the documents will be preserved in the Canterbury Cathedral Archives, an arrangement made through consultation with the Cathedral archivist Charlotte Hodgson whose interest in and advice regarding the collection has been much appreciated.

The archive, as would be expected from its source, covers properties within Canterbury and East Kent with the emphasis on land and buildings relating to specific family or institutional ownership. The documents so far examined date from the mid- sixteenth century through to more recent times. A large number date from the mid- seventeenth to mid- nineteenth centuries although a number of the earlier deeds and papers carry titles to property back to the fifteenth century. Although uncounted, a rough approximation of the number of documents is somewhere in the region of 8,000+ contained within thirty boxes.

It is possible here to give only a brief overview of the places, names and dates covered by the archive taken from the contents of the first nine boxes.

Title deeds occur for a number of properties within Canterbury: at 16-17 Watling Street (title from 1653); at Ivy Lane (the 'Two Sawyers' public house, 1787-1800); and in St Mary, Northgate at Old Park Avenue. Deeds and papers relating to a number of institutions include: Cogan's Charity (London Road buildings) and Aucher's Charity (lands at Burmarsh and Worth).

A similar range of deeds occur for properties within East Kent: at Gushmore Farm, Selling and Herne Hill; at Cold Blows Farm, Hastingleigh (Brice family) and North Lyminge Farm; at Acrise (settlement of Papillon estate after 1820); at Shalmsford Street Farm, Chartham (Martin family); land (for acres of fresh marshland) at Archerslowe, St Clement, Sandwich (1592-1762 with testamentary papers for Nickalls family 1764-80).

A significant number of documents, mostly title deeds, also occur for the Plumtre family: for Walmstone and Warmston farms; for a farm at Woodnesborough, Barfrestone, Wood Copse park and at Sandwip; and also papers and deeds relating to the Nonnington estate (late Papillon) together with family papers which include a settlement of 1818.

Finally there is a comprehensive series of manorial papers comprising 260 documents for the Manor of Down, Staple near Canterbury, part of

the possession of St John's College, Cambridge. Presentments, warrants and rentals (with a copy rental of 1665) occur from 1717 through to 1930. A Book of Courts is also extant, although much mutilated, from 1574 reciting earlier fifteenth century entries. Other paper documents include terriers (one of 1793), a miscellaneous series of documents including notes on the quit rents of Adisham Manor and a long series of letters (1853-1920) again concerning quit rents due.

Although this listing covers only one-third of the archive it emphasises its diverse geographical spread within East Kent and the early dates in the fifteenth century for some of the material. In a city such as Canterbury, whose historic development lies almost wholly within the medieval and post-medieval periods, documentary sources such as have been outlined above offer one of the best primary resources for understanding its developing urban topography, a theme also important for a clearer appreciation of the city today. Elsewhere, large scale developments are necessitating wider multi-disciplinary approaches to studying the landscape history and archaeology of East Kent. Here again, documentary sources are an important body of evidence enabling archaeologist and historian alike to plan and understand the material remains of the past within their correct spatial and period contexts.



▲ Royal seal of George IV from a recovery of land in St Clements, Sandwich, c. 1830.

10 Computing the stratigraphic sequence

by Nick Ryan, Computing Laboratory, University of Kent

Computer programs for handling archaeological stratigraphy are not a new idea. The first example appeared soon after Harris's first published description of his method of producing a sequence diagram.⁶² Given a list of relationships between excavated contexts, the problems of sorting them into depositional order – the stratigraphic sequence – and of resolving logical errors such as loops are easily solved using established computing techniques. Essentially the method reduces to the manipulation of a mathematical structure known as a directed graph, well known to computer scientists in a wide variety of applications.

Why then are such programs not more widely used? In part, the answer lies in the speed of adoption of computer methods by archaeological units and the need to concentrate efforts on the more fundamental problems of providing efficient recording systems. However, although most programs have provided adequate solutions to the theoretical problems, few seem to have been designed to deal with the day to day practical problems of excavation. Rather than supporting the incremental construction of a sequence diagram as excavation proceeds, the typical computer based approach has been to provide a system that works only in 'batch' mode; that is to say, one that takes a large, perhaps even complete, list of relationships and generates an error report and in some cases a crude printed diagram with little if any interaction with the user.

Gnet is a program combining checking, diagram production and editing with information retrieval. It is an interactive graphical program in which a diagram is presented on the computer screen and manipulated directly using a mouse. All of the expected checking facilities are provided and the program automatically generates a basic layout for the sequence

diagram. Types of contexts such as cuts, walls and fills can be differentiated by symbol shape and colour, and relationships by the style and colour of lines. The diagram may be edited by moving, adding and deleting both contexts and relationships, and text labels can be positioned in a similar manner to a conventional drawing program. Once a satisfactory layout is achieved, the diagram can be saved for later use, or in the form of instructions for a graphics printer or plotter.

An early version of the program was described at the Computer Applications in Archaeology conference in 1988.⁶³ This prototype has since been adapted to run on IBM PCs and similar microcomputers and further developments have been made as a result of feedback from users in Britain, Holland and Denmark.⁶⁴ Much of this early testing had been restricted to relatively small sites and, in most cases, to post-excavation and subsequent research. Those who had used the program during excavation or on data from larger sites had reported some problems and suggested a number of possible enhancements but the best solutions were not always obvious. An opportunity was needed to test and develop the program in close association with a large scale excavation, but without the pressures that would result if the progress of the excavation was dependent on the performance of the software.

The adoption of computer recording by the Trust and the excavation of the Longmarket site has provided just such an opportunity. At the time of writing the Longmarket excavation has produced more than 5,000 contexts and, although computer recording of these lags behind excavation, more than half of this number have been subjected to automatic checking and diagram production. Using the Longmarket

data it has been possible to experience directly some of the problems that would be encountered if the program was used on site to deal with a continuously growing volume of data. The ability to compare the computer produced diagrams with those constructed manually on site has provided a continuous check on the program output. The result has been considerable progress towards the aim of producing a tool that fits the excavator's needs.

The upper limit of the size of the diagram that can be handled on the microcomputer was quickly discovered to be about 1,500 contexts. Even with large scale urban excavations this in itself is not a great problem, as it is usually possible, even desirable, to divide the site into smaller areas that can be handled independently. Experience suggests that the upper limit on diagram size depends more on the size of the computer screen and the ability of the human user to comprehend and effectively manipulate a complex diagram than on any limits imposed by the hardware. The program has no difficulties dealing with relationships to contexts outside of each area, as it automatically infers their existence from the relationship data. These inferred objects can be represented on the screen using a different symbol or colour.

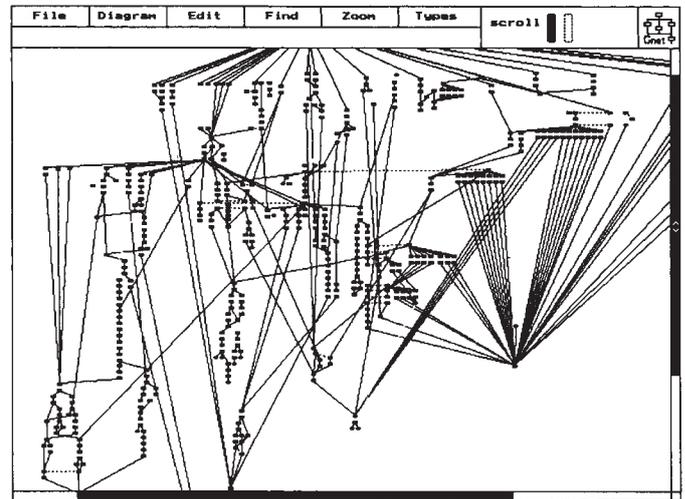
Perhaps the most significant development during the Longmarket excavation has been an improvement in interactive loop correction. Other programs either report the presence of a loop and then break it by arbitrarily removing one relationship, or stop and insist that the user corrects the error before continuing. The first method usually denies the user any chance to intervene, and the second can be very tedious because data files must be edited and the program restarted each time. Gnet can produce diagrams even if there are loops, but will only display the correct sequence once they have been removed. Previously, a list of all loops was printed and it was then up to the user to find and correct these on the diagram. Isolating a loop in a large and complex diagram could be a difficult task.

When a loop is detected during sequencing, the user has the opportunity to correct the errors as they are found. This is done by selectively displaying only those contexts that appear in the loop, without the extra complexity of perhaps hundreds of surrounding contexts. If necessary the diagram can be expanded to include other related contexts before deciding which relationship(s) need to be changed or deleted. This new feature has proved particularly useful during the Longmarket excavation. Whenever a loop was found the small diagram showing the problematic contexts and relationships was printed and shown to the site staff who, in most cases, were able to isolate the problem rapidly and note the necessary changes to the database.

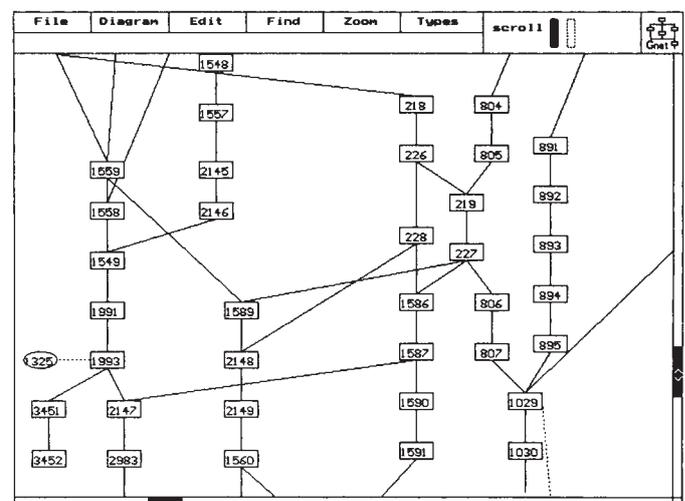
Errors in the data come from a number of sources. Most appear to arise from entering a relationship in the wrong box on the recording form or later, during transcription, into the wrong field on the computer screen. In this way, a single human error may result in a number of wrongly recorded relationships. Other errors are mostly due to mis-typing when the data is transferred from the site recording forms to the computer database. The program cannot of course detect errors that result in the recording of logically correct relationships, but then neither can a manual approach. With so many possible sources of errors, particularly in the additional step of transcribing from the site forms to the database, it has been encouraging to note that the overall error rate in recorded relationships has been less than 0.4 percent. This figure is low enough to give confidence in the care taken in recording whilst being high enough to provide sufficient material for testing the software.

At present the basic details of each context - context number, type and relationships to others - are extracted automatically from the main database using a purpose written program. Eventually it should be possible to provide a more direct link to the excavation database so that the sequence may be examined without the need for the intermediate step of data extraction. It will then be possible to make full use of the information retrieval aspects of the program. Using the mouse to select a context from the displayed diagram, further information such as the contents of a context or finds records, can be retrieved. This is then presented in a pop-up window on the screen. At present this can only be achieved by copying the context and finds data into special files. Used in this way the program goes beyond the basic features of diagram production and enables the sequence diagram to be used as an alternative means of accessing the main database.

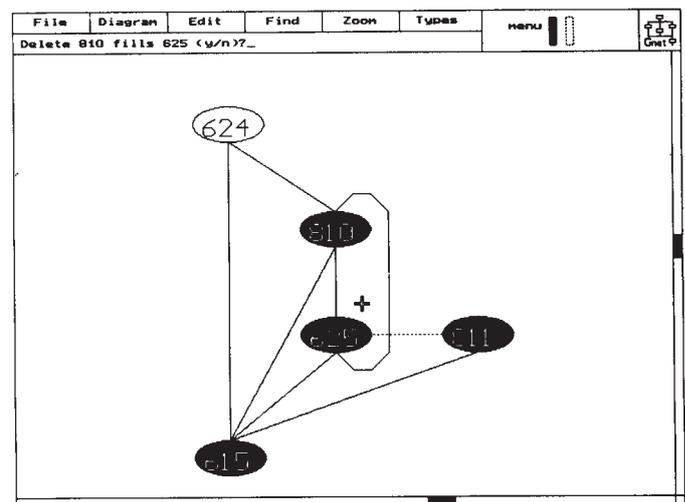
As the Longmarket excavation approaches completion there are a small number of improvements that have still to be implemented, but thoughts are now turning towards examining how the program can help to support post-excavation tasks. Some work has already been done on methods of simplifying diagrams. For example, it is often useful to be able to group related contexts into a single object such as a feature or larger



▲ Part of a preliminary sequence diagram for one area of the Longmarket site.



▲ Part of a preliminary sequence diagram from the Longmarket site.



▲ Resolving a loop: the user is asked which of the links between contexts 625 and 810 should be deleted.

structural component of the site. This line of development will be pursued in order to improve support for tasks such as phasing.

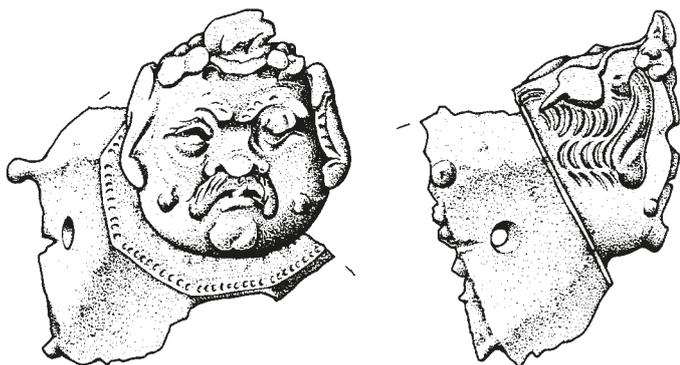
Collaboration with Trust staff has provided an excellent opportunity for the rapid development of the software. I am particularly grateful to Paul Bennett for his active encouragement, to Rupert Austin who developed the main database system and to the excavation staff, particularly Jonathan Rady and Simon Pratt who have reacted positively to an outsider telling them about the occasional errors in their data and have made use of the information to update and correct the database while the excavation of the problem area is still fresh in the memory.

1 Monographs

by Jane Elder

In May a party was held in the Deanery to launch Volume IV of the Archaeology of Canterbury series, *Excavations in the Cathedral Precincts, 2: Linacre Garden, 'Meister Omers' and St Gabriel's Chapel*. The progress of this monograph (and not least the determined efforts of Mrs Margaret Sparks and Mrs Elizabeth Edwards) have been described and acknowledged in past reports, but our thanks are repeated now that the volume is at last in print. The monograph is one of two volumes covering excavations undertaken by the Trust in the Precincts of Canterbury Cathedral between 1978 and 1982, together with a short report on excavations by the Canterbury Archaeological Society near the Cathedral Nave in 1973. This volume contains two major reports of contrasting sites. The first deals mainly with the medieval remains in the Linacre Garden area of the precincts including in-depth studies of the archaeological, documentary and architectural evidence of one of the principal buildings, 'Meister Omers'. The archaeology of this area is closely bound up with the Dissolution of the Priory and the establishment of the New Foundation in 1541. The other major report is on the excavations around St Gabriel's Chapel, an area which included both, a monastic and lay cemetery, yielding several intact skeletons. This report, together with the Cathedral Nave excavation and a further small report on excavations by the north-east transept of the Cathedral, plots the development of the Cathedral drainage system, including Prior Wibert's 'Great Drain'.

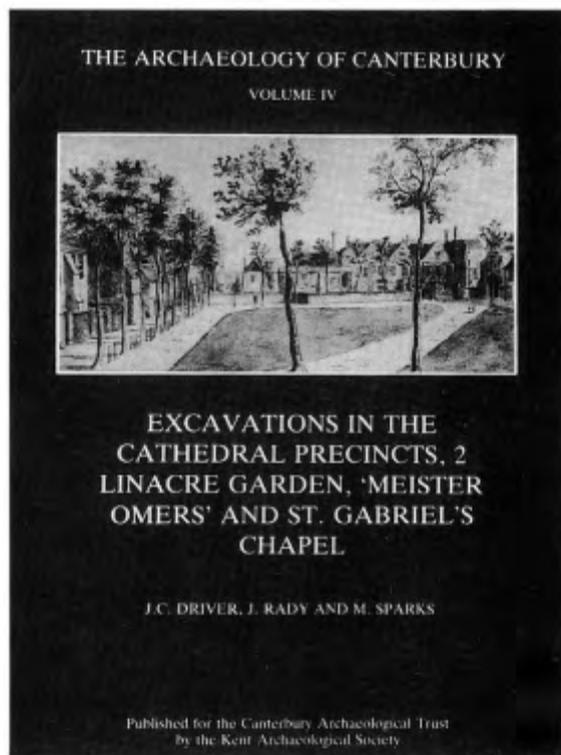
Copies of the volume are now available at most leading bookshops and at our offices (92A Broad Street, Canterbury, CT1 2LU), price £28.00 (£3.00 p&p).



▲ *Bronze head of Silenus. Published in Volume IV.
Drawn by Mark Duncan. Scale: 1: 1.*

The Marlowe volume spent most of the year in the hands of English Heritage being vetted for publication grants, but once their recommendations were known some small progress was made towards publication. Work on the Highstead volume, which it is hoped will be published as part of the Kent Archaeological Society monograph series, was halted this year, first pending H.B.M.C. comments and then through lack of funds.

As always, we would like to record our grateful thanks to Alec Detsicas, not only in his capacity as Honorary Editor of *Archaeologia Cantiana*, but also for the assistance given throughout the past year as General Editor of our monograph series.



2 Other reports and publications

by Jane Elder

The two reports mentioned last year 'Excavations at Bigberry near Canterbury, 1981' by Kevin and Paul Blockley and 'Excavations at Riding Gate, Canterbury' by Paul Blockley, were published in *Archaeologia Cantiana* cvi (1989). Delays by H.B.M.C. at the vetting stage of the St John's Lane 1986 report meant that it could not be submitted as planned for the 1990 volume of *Archaeologia Cantiana*. However, Rupert Austin's survey of the Roper Gate was incorporated into an article by T.P. Smith which was submitted for inclusion next year.

Tim Tatton-Brown, Paul Bennett and Mrs Margaret Sparks worked in collaboration with the R.C.H.M. towards the production of a Canterbury Historical Map. Ordnance Survey Historical Maps combine historical and tourist information on a colourful, large scale and have already been published for Bath and York.

Mark Duncan and Paul Bennett completed a colour leaflet on Medieval Inns with main text by Tim TattonBrown and reconstruction drawings by John Bowen. At the time of writing it has been despatched to the printer.

3 Reports in preparation

by Jane Elder

The large scale of recent excavations (first St Gregory's Priory and then Longmarket) has meant that most postexcavation staff were very much occupied with the immediate Level 1 and 11 work generated by those sites. Progress on report writing has been slow and intermittent; only two reports, funded by English Heritage, made significant progress this year. Nigel Macpherson-Grant continued to work on his report on the excavations at Stonar and the report on the Pound Lane kiln and its products (described by John Cotter in last year's report) will be submitted to a national journal later this year.

Other H.B.M.C. funded reports in progress include, Christ Church College excavations; Crundale Limeworks excavations; excavations at Tannery Allotments, and excavations in the basement of No 20 St Margaret's Street.

A major volume on the archaeology of the Channel Tunnel project is also in preparation. This project is being funded entirely by Eurotunnel.

VI

EDUCATION

1 Schools Education

by Marion Green

The Trust has long been aware of its education commitment to the public and to the community of East Kent in particular. Within its budget it has endeavoured to meet this by staging exhibitions, giving lectures and holding excavation Open Days. The sterling work over the years of Marjorie Lyle has generated among local schoolchildren a special interest in Canterbury's history, through its archaeology.

It is this element of the Trust's educational commitment which we are now beginning to develop; the aim is to increase awareness of local archaeology by enabling teachers and pupils alike to experience it at first hand.

Archaeology, History & the 'National Curriculum'

In order to make informed judgements about their past, children need to be made aware of the source material from which our historical knowledge is drawn. A substantial part of this is from archaeological evidence, the more so the further one goes back in time. Archaeology is ideally suited to an evidence-based approach to the teaching of history. Up to July 1990 there has been no final directive on the role of history in the National Curriculum. In the interim, Kent County Council Advisory Teachers for History are suggesting that primary and secondary school teachers should promote local site visits (to permanent historic structures and temporary sites, like archaeological excavations) and the study of historical (including archaeological) processes. With both of these elements particular emphasis should be placed on the active and practical participation of the children.

We are aware of schools' commitment to the National Curriculum and hope that Canterbury's archaeology can assist them in meeting their needs in a practical and stimulating way.

Recent work with Kent schools

We began to extend our service last summer (1989) by introducing school visits into our excavations at St Gregory's Priory, Northgate. Earlier this year, with the high-profile Longmarket excavations on the horizon, we planned an expansion of this in anticipation of a healthy schools response.

The time spent in planning for visits and producing the teachers guide has in fact proved well worthwhile and the response from local schools has been extremely gratifying. Feedback from teachers indicates that they appreciate the visit as a useful and exciting resource and one that suits a wide range of pupil age and ability. Judging by children's and teachers' 'thank you' letters, there can be little doubt that they have enjoyed themselves.

A summary is given here of the Trust's most recent work with schools, centred on the current Longmarket excavations.

The excavation visit

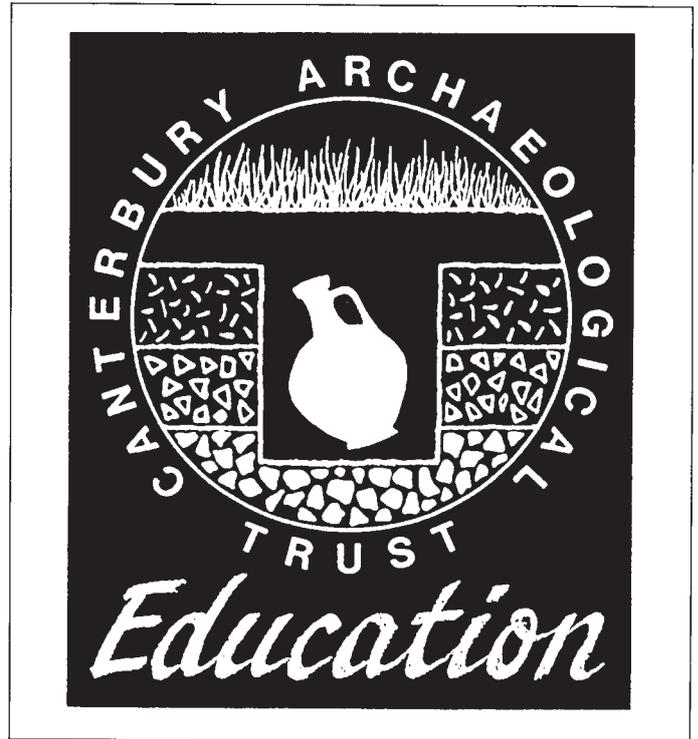
A typical visit lasts about an hour and includes:

- demonstrations of how archaeological layers build up through time using a model excavation (this has been very well received),
- site tour of about twenty minutes,
- 'hands-on' table of finds from various city excavations,
- viewing of finds washing and recording,
- visit to site exhibition and shop.

As well as relating the history of the immediate area the guide talks to the children at a suitable level about how a site is excavated and how evidence is recorded - i.e. about the processes of archaeology. An additional bonus for the children was the chance to wear a C.A.T. hard hat!

All East Kent schools are periodically circulated with details of visits and site updates; we have limited the circulation to East Kent for the present for administrative reasons, but may extend the service in the future. During the summer term (1990) we had thirty-seven school visits with a further six booked so far for September. Translated into numbers of children, this means that the Longmarket will have seen over 1,000 Kent school children.

The site visit is being used in a variety of ways as a resource in the curriculum. Topics that primary schools have been engaged in include 'Underground', 'Soils', 'Rubbish', 'The Romans', 'Buildings' and 'Conservation'. Much of the teaching in primary school is cross-curricular in nature: archaeology is a multi-disciplined subject and there are many



▲ Alan Pope explains the Longmarket excavation to primary school children.



▲ Children handling archaeological finds. .

examples of how it can be integrated into other areas, for example Maths, Science and English (National Curriculum 'core' subjects) as well aspects of Technology, Geography and Art. Juniors at Pilgrims Way Primary School combined the study of Roman mosaics with geometry and art lessons. Discussion about survivability of different materials at Beauherne Primary School led to an experiment resulting in some very rancid sandwiches and rotten apples! Secondary schools have integrated their site visit into Environmental Studies, Local Studies, Classics and Mixed History projects. The Abbey School at Faversham has been running an Archaeology module for 13 and 14 year-olds and the excavation allowed the pupils to see in practice the archaeological processes which they had read about in their studies.

There is no doubt that the school visits to the Longmarket have been successful. Teachers and pupils alike have been stimulated by the experience and are keen to follow up with visits to future sites. The success is largely due to the energies and hard work of Alan Pope, my colleague, who has been the chief schools guide throughout the duration of the excavation. Often handling several visits a day, his exciting and knowledgeable delivery for young people scored a hit time and again. Alan has many years of teaching experience to his credit and is skilled in adapting the pitch of his presentation to suit varying ages. My thanks also go to Tim Allen and Liz Rothwell-Eyre who willingly assisted by taking groups on days when visits were practically continuous. Again Tim and Liz have experience with young people and both are enthusiastic performers. With more major sites planned for the future we think the school visit should continue to play a major role in our service to local schools.

'Archaeology in Education: a teacher guide'

Many teachers and pupils are unfamiliar with the archaeological excavation and its potential, and so an introductory pack, 'Archaeology in Education', was compiled as an accompaniment to the school visit. The pack includes sections on:

- Archaeology and its place in the school curriculum,
- the beginnings and development of Archaeology,
- excavation and post-excavation processes,
- preparation and follow-up suggestions,
- the current excavations,
- pupil work/activity sheets,
- useful addresses,
- suggested reading,
- places to visit locally,
- organisational points to consider when booking a visit.

▼ Extracts from the Trust's teaching pack.

The guide, which is aimed at the primary and lower secondary age range, is designed to be flexible and appropriate for any future visits to C.A.T. excavations and associated classroom work. Almost all schools involved in the Longmarket visits now have one of these packs which are sold at photocopy cost only.

Visits to schools

A few visits have been made to Canterbury schools as preparation and follow-up sessions to their site visits. They were well received and there is every indication that these are extremely useful to both teacher and pupil; however, the organisation of site visits, teacher pack production, Work Experience placements and meetings with interested educational bodies has left us at present without the time to advertise such school visits as a resource. This said, Trevor Anderson our osteo-archaeologist, has recently begun to make a valuable contribution in this area. Early this year he visited St Peter's Methodist primary school to talk to the children about the skeletons which were then being excavated on their school field (part of the medieval cemetery associated with Greyfriars monastery). Tim Allen and Alan Ward have also spoken to local sixth form groups about the broader subject of Archaeology and its processes.

Work Shadow, Work Experience and Community Work placements

School pupils and college students, by request, have joined the Trust team for short periods to experience in a very practical way the varied aspects of our work. Work Shadow placements are for two days only while Work Experience placements usually take the form of a one to three week period. Community placements are for four hours a week continuing over a much longer period, one or two terms perhaps.

Programmes are devised for the students so that they leave us with as comprehensive a picture as possible of the many facets of archaeology. They are involved in a 'hands-on' fashion wherever possible and can try their skills at excavation (for students aged 16 and over), human bone processing, finds sorting and washing, finds illustration, sorting and cataloguing historical documents and building recording; all depending of course on the nature of the work that the Trust staff are engaged in at the time of the placement.

Both students and their tutors have been surprised by the range of activities undertaken at the Trust, especially in post-excavation work. Again, we have received many letters of appreciation and apparently have inspired more than one budding Archaeologist.

naeology in Education

CANTERBURY ARCHAEOLOGICAL TRUST

Archaeology in Education

Longmarket Excavation
March-Sept. 1990 Broadchurch

Excavation: Tools of the Trade

What tasks are you likely to see on site?

trowelling: This is how many people picture the most significant archaeological tool and is used for scraping away the layers of soil, cleaning up and digging out features and anything else needing a delicate touch.

brushing: Hand and tooth brushes are often used to clean loose soil from, e.g. a pot or skeleton *in situ*.

cleaning up 'the loose': It is important to keep your work area free from loose soil so you can see what you do. A builder's bucket and hand shovel are used for this.

using a pick axe: Breaking through dense materials like a first wall to reveal a lower level; needs a tool to do the job.

shovelling and barrowing soil: Periodically the loose earth or soil is shovelled up to an over-top heap which is eventually taken away by truck to a nearby site.

lifting: Finds like Roman painted wall plaster or medieval tools are often quite fragile. Plaster of Paris can be used to set the plaster making it easier to remove or lift.

collecting finds: Finds from each context are placed in separate trays and given the context number.

drawing: Particularly plans and sections.

compiling the written record: Notice the ranging of scales; they come in all shapes and sizes! For measuring features against Ordnance Datum appearance.

Building Recording

This is something that you may not immediately associate with Archaeology. Sometimes the term 'above ground' Archaeology is used for the examination and recording of standing buildings.

A wealth of buildings survive in the city dating from the Early Medieval period through to the present day. Many styles of architecture are represented from vernacular timber framed dwellings to ecclesiastical structures including the City Council Conservation department with many buildings, usually during the process of refurbishment and repair.

In addition to providing a permanent record of the city's standing buildings, 'above ground' Archaeology provides an invaluable resource when investigating the buried remains and foundations of buildings during excavation. Knowledge of surviving parallels can be used to reconstruct, on paper, the original form of a building to its full height where excavation has perhaps revealed only scant remains of its foundations and floor plans.

The Bull Inn, Burgate. A reconstruction of its appearance in the mid fifteenth century (now Liberty's and Laura Ashley's).



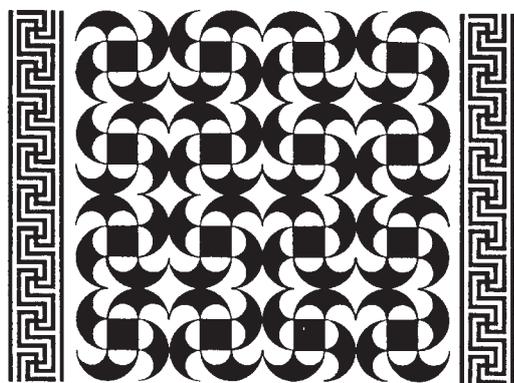
▲ Work placement student drawing archaeological small finds.

the Roman mosaic panels found at the Longmarket site at the end of the Second World War. Land Securities PLC, the owners of the Longmarket development, are generously donating prizes and if the overall winning entry is suitable, this is to be built into the new development. Many entries have now arrived at our Broad Street offices, some from entire classes. The competition closes at the end of August when sorting will begin.



▲ Kent school teachers visiting 92A Broad Street.

Land Securities PLC • Canterbury Archaeological Trust
LONGMARKET MOSAIC



A unique opportunity to make history!

COMPETITION

Design-a-Mosaic competition

A competition was set up for children between the ages of 8 and 16 to design a mosaic with a twentieth-century theme. The idea was inspired by

2 Lectures
by Marion Green

In addition to the Director, several of the Trust's staff are now called upon to give lectures to interested associations and institutions.

During the past year Tim Allen, Trevor Anderson, John Cotter, Richard Cross, Nigel Macpherson-Grant, Martin Hicks, Mark Houliston and Alan Ward have lectured on a variety of themes; principally 'Archaeology', 'Archaeology and the Channel Tunnel', '2,000 Years of Canterbury's History', 'Skeletons from St Gregory's Priory' and 'Roman Canterbury'. There have also been lectures of a more 'one-off' nature, for example Nigel Macpherson-Grant and John Cotter both spoke on post-Roman pottery from Kent at the Canterbury meeting of the London Regional Pottery Research Group. A series of guided tours of the city was also

Liaison with other educational bodies

We are currently liaising with the Kent History Centre at Maidstone, the local County Advisory Teacher for History, Christ Church College at Canterbury and a number of local schools regarding present and possible future resources. As a result various meetings have taken place and others are arranged for the near future, including presentations to undergraduate and postgraduate students at Christ Church College and a one-day conference of the Kent History Teachers Association to be hosted by the Trust.

An education service for the future?

I think there is little doubt that our recent endeavours with Kent Schools have resulted in considerable success and that we have a significant role to play in the future. Our achievements will depend in part upon time available for education projects, but principally upon available funding.

We have no secure Education budget at present. We hope that in the light of our recent work, Kent County Council will consider a contribution towards our current costs and we are also planning to seek long-term sponsorship. Meanwhile my thanks must go to Marjorie Lyle for her support; the Longmarket Education project has been largely financed by profits from the Trust shop in Northgate.

arranged, as part of the Canterbury Festival. A short series of lectures was also delivered to Trust field workers by core-unit members of staff as part of an on-going training program within the Trust.

Marjorie Lyle continues to lecture on behalf of the Trust as well as running her own very popular adult education classes. She has spoken to several groups on a number of themes, with a special interest in those illustrating Saxon and Medieval life in Canterbury. Marjorie is also currently engaged in a project to design a series of display boards to be housed in the Dominican Priory. The boards, depicting the Monastic Orders of Canterbury, are intended to form a permanent public display.

3 Publicity
by Paul Bennett

Since the compilation of the last 'Annual Report' numerous articles on Trust excavations have appeared in local and national newspapers. Radio and television crews have made occasional visits to a number of excavations and our offices to produce short articles on Trust work. Various members of staff have also been interviewed on radio and television on a

variety of archaeology-related topics. We have been very well served by local newspapers this year. In this regard I would especially like to extend thanks to Mr David Rose of the 'Kentish Gazette' and 'Extra' for his many excellent articles on Trust activities, and for his papers' continued support of archaeology in the City and district.

VII

THE TRUST

SHOPS

1 The 'Roundabout' Shop

by Margorie Lyle.

We were awaiting a structural engineer's opinion at the end of last year's report. His findings have dominated this year. After the students left in June 1990 the ground floor internal walls and floors behind the shop were stripped right back, fungicided, damp-proofed and replastered while external work to the back and side walls was completed including rebuilding the yard wall to match St Mary Northgate's stretch of Roman city wall in flints from Roman levels of recent excavations. All this work was undertaken by Coombs Ltd to whom we are grateful for completion on time. The consequent tiling, painting, carpet-laying and kitchen fitting was finished by the Trust's unflappable trio of John Boulden, Alan Pope and Sean Wilson, to whom we also give our thanks, just in time to admit the new season's students. Inevitably we lost a whole summer's rents and the total cost has eaten up all our 1989-90 profit and an extra £2,000.

We have been somewhat disheartened by this big bill in view of increasing our sales by £1,000 in 1989-90 and containing costs to return an improved profit, as the accounts show. After consulting our clients, they agreed from April 1990 to reduce their commission on sales to 50 per cent except for large equipment. This has naturally boosted our takings and has not diminished the flow of goods which still comes to us. In fact, as inflation hits the price of new goods, we have been frequented by more and more customers from further afield, for example, from Thanet, Ashford, Sittingbourne and Faversham, as well as the whole Canterbury district.

Our greatest good fortune, however, is the loyalty of the staff. Mrs Cheyney and Mrs Clifford have continued working for us with a rise well below inflation and are known and trusted by our clients. Their complimentary organisational and selling skills make them an ideal team. Our volunteers remained on duty with us despite the demands of the Longmarket excavation; the Saturday rota has provided valuable extra income. To all of these stalwarts I repeat my thanks and to Peggy Hayes, who continues to draw compliments for her window-dressing, and to Barbara Rogers, my never failing deputy.

The Longmarket shop, now transferred to 92A Broad Street, now attracts archaeological purchasers so this side of our shop activities has dwindled but my own lecture fees and post-lecture sales are still rising. We hope to finance a modest expansion of Marion Green's education work from this source.

The valued service we render the community combined with the continued depression in the property market mean that at least one more year's trading still lies ahead before future policy decisions become crucial.



▲ The 'Roundabout' Shop at 72 Northgate.

2 The Longmarket Shop

by Paul Bennett and Elizabeth Rothwell-Eyre

The Longmarket has been an important high-profile site for many centuries. As can be seen in John Rady's report on the on-going excavations (above), Longmarket was densely packed with buildings. By the late twelfth century houses occupied by some of the city's most influential personalities were mixed with retail premises, most evident at the Burgate corner with Butchery Lane. Others perhaps existed 'cheek-by-jowl' with domestic properties against the frontages of these streets or were incorporated into domestic units at ground floor level.

In the early thirteenth century at least thirty-seven shops, some of them in intermittent rows, are known along the northern side of Burgate Street⁶⁵ and a lawsuit between the citizens and the cathedral in 1307 mentions no less than eighty shops in the Burgate and perhaps Sun Street areas. A rental of Christ Church Priory indicates that a single holding in Mercery Lane held no fewer than eight retail premises (indicating an average street frontage width of no more than 7ft per unit). Another mid twelfth century Christ Church rental describes a row of three shops in a 'middle-row' along the Parade. A great stone house between Buttermarket and Butchery Lane is recorded to have been divided up into eight shops

by 1234 and another at the south east corner of Butchery Lane is divided up into shops by the same date. All these references and more in the Christ Church rentals tell us of shops occupying cathedral-owned land; many more were undoubtedly on ground in private hands. All this, together with documentary evidence for a prolific number of markets, mills, moneyers and a thriving Jewish quarter, indicate a vigorous retail trade at the heart of the medieval city, the principal business areas being along Burgate, the south side of the Parade, Mercery Lane and the High Street.

Some eight hundred years on, the situation is little different. The medieval streets, well known as the principal 'shopping-district' to personalities like Theoric the goldsmith and shop-owner Robert son of Richard, survive today as the most valuable high-profile retail areas of the city, attracting the highest rents for freehold owners. Conflicts between freeholders and lessees over ground-rents are probably no less frequent today than they were in medieval times.

The high-profile status of the Longmarket site is therefore not a recent phenomenon, and indeed it is one of the principal reasons why the site was one of the first to be redeveloped in the mid 1950's after the

THE TRUST SHOPS

devastating air-raids of 1942. Now, some thirty-five years on, the retail value of the site has by no means diminished. Indeed, Canterbury's reputation as a major regional retail centre has been enhanced by the arrival in the city of many chain-stores who have established themselves as mainstays of the economy and have, by market forces, increased the value of property.

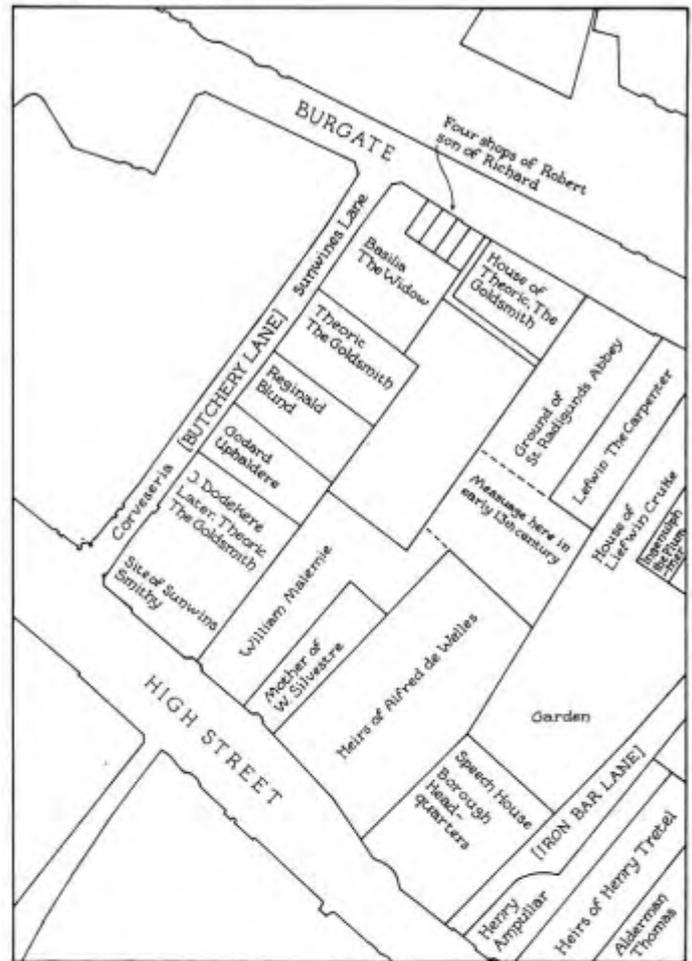
The impending redevelopment of the Longmarket site by leaseholders Land Securities PLC, due to commence in 1991, gave an opportunity not previously afforded to the Trust to explain the archaeology of a city-centre site to the general public. Negotiations for the archaeological excavation included licence for the Trust to take full advantage of the site's position, against the Parade frontage, for visitor access. Hoarding erected by the developers around the site incorporated doors and windows to allow the visitor or passer-by an opportunity to view the on-going excavation. From the outset we intended to make the excavation as attractive and accessible to the visitor as possible, without hampering the progress of our work. To this end, portacabins were hired to house site offices and an attractive combined exhibition and shop. An expensive, but very necessary, elevated visitor walkway was constructed in scaffolding around two sides of the excavation to function as a viewing platform. The platform was put to very good use for the delivery of guided tours by an enthusiastic band of volunteer 'Friends of the Canterbury Archaeological Trust' administered and organised by a stalwart member of the Friend's committee, Bridget Russell.

The exhibition and shop were master-minded, stocked and run by Robert Edwards and latterly by Elizabeth Rothwell-Eyre. The exhibition contains a short history of Canterbury from Roman times, illustrated with coloured reconstruction drawings of the city at various times in its long development, along with photographs of finds from previous excavations and explanations in both English and French. Three display cases donated by Canterbury Museums have been used to display a small number of recent finds from the excavation and other city-centre sites. The shop is provided with books on subjects ranging from general archaeology to local history, with children catered for; pottery reproduced by local potters to Trust specifications is on sale, as well as good quality reproduction jewellery and items ranging from Trust table mats and jigsaw puzzles to paperweights, key-rings and posters. The Trust's own range of postcards, including three recently produced for the Longmarket excavation, are particularly popular.

At the time of writing all this is proving to be very popular indeed. At this point, mid-way through the excavation, many thousands of visitors have viewed the excavation and we predict that by the close of our operation in early October some 400,000 people will have passed through the doors of the Longmarket site.

This undertaking would not have been possible without the assistance of Land Securities PLC who funded the excavation and allowed us to make

our work 'a public event'. Similarly, our attempts to 'retail' the site would not have been successful had it not been for the management skills and enthusiasm of Robert and Elizabeth who worked long, often taxing hours to make the operation work. Finally, to Bridget and the wonderful band of guides, who have volunteered their services to explain this large 'window' on the history of the city to a multi-national 'lay' audience, we offer our very grateful thanks.



▲ Documented properties in and around the Longmarket excavation in c. 1200 (after W. Urry).



VIII

FRIENDS

The Friends of the Canterbury Archaeological Trust by Lawrence Lyle

Undoubtedly the main event of the year was the help the Friends gave to the Longmarket excavation. Bridget Russell organised a rota of over forty members to help in the busy shop and to explain the dig to the thousands of visitors: the walkway proved to be a popular way to watch the progress of the excavation, whilst, on good days, donations alone amounted to nearly £80. Lessons had been learnt from the Information Centre on the St Gregory's Priory site and the Friends are now well-prepared to help on future sites which are to be excavated in the city centre. Our grateful thanks are due to Bridget and her band of helpers some of whom worked long hours in the heatwave.

In September the Ermine Street Guard, a band of volunteers who make their own military uniforms and equipment to a high standard, gave a display of drill and artillery firing at Kent College. They also had a static display which aroused great interest among the 450 visitors we had that day. Four cannonballs were recovered from the edge of his garden by the Headmaster to whom we are grateful for permission to hold this unusual event on his school field. The visit to the Museum of London on 1st November began with two lectures on the Rose Theatre and its excavation which were very much in the news at that time; after lunch the excavations of the Roman baths at Huggin Hill were described by the Project Supervisor giving us not only a fascinating account of the baths but also an insight into the problems of excavating in the City of London. The Christmas Party was much enjoyed; we are grateful to the Dean and Mrs Simpson for allowing us to use their drawing room for this function. Unfortunately, the launch of Volume IV of the *Archaeology of Canterbury* had to be postponed because of delays at the printers.

1990 began with Paul Bennett's mammoth lecture surveying the previous year's work. Over two hundred Friends and their guests filled the New Lecture Theatre at Christ Church College: much of what he described can be seen in earlier parts of this Report. In March Peggy Hayes, assisted by Paula Lansbury, organised another large auction in the Dominican Priory. With Mrs Collyer preparing the catalogue and Mr Linnington as auctioneer the evening raised nearly £1,700 for the Friends funds, even though donors were entitled to 50 per cent of the proceeds, an option which some generous people forewent. Paul Bennett's Mystery Tour in April took a minibus and the Landrover full of Friends first to the Conduit House for Christ Church Priory's twelfth-century water supply and to a mysterious medieval ruin overlooking Old Park. After a look at kiln sites and boundary ditches in Honey Wood the party drove to Sandwich via Ickham where Mr Bradshaw pointed out a Roman road and described the Roman watermill. The high point of the afternoon was a visit to Stonar and to the Sandown Gate of Sandwich. Tim Tatton-Brown was the guide to a large party who were shown five Romney Marsh churches on a cloudless summer day in June. Apart from explaining the evolution of the Marsh, Tim put each church into its context and pointed out the main architectural features. The final expedition of the summer was in July. Kit's Coty House, one of the group of Medway megaliths, provoked much speculation as to its use. At Chatham Dockyard there was a profusion of interesting buildings and displays to choose from before we were shown early eighteenth-century houses under reconstruction and especially their gardens by two garden archaeologists. All who went on these excursions are most grateful to the guides and particularly to Bridget Russell for her impeccable organisation.

The Canterbury Centre was the venue for two interesting lectures by members of the staff during the winter. Martin Hicks talked about archaeology in Italy and the pleasures of working at the British School in Rome. Trevor Anderson described his work on the skeletal material from St Gregory's and displayed a variety of diseased bones; he gave a vivid picture of the size of his task and of its importance.

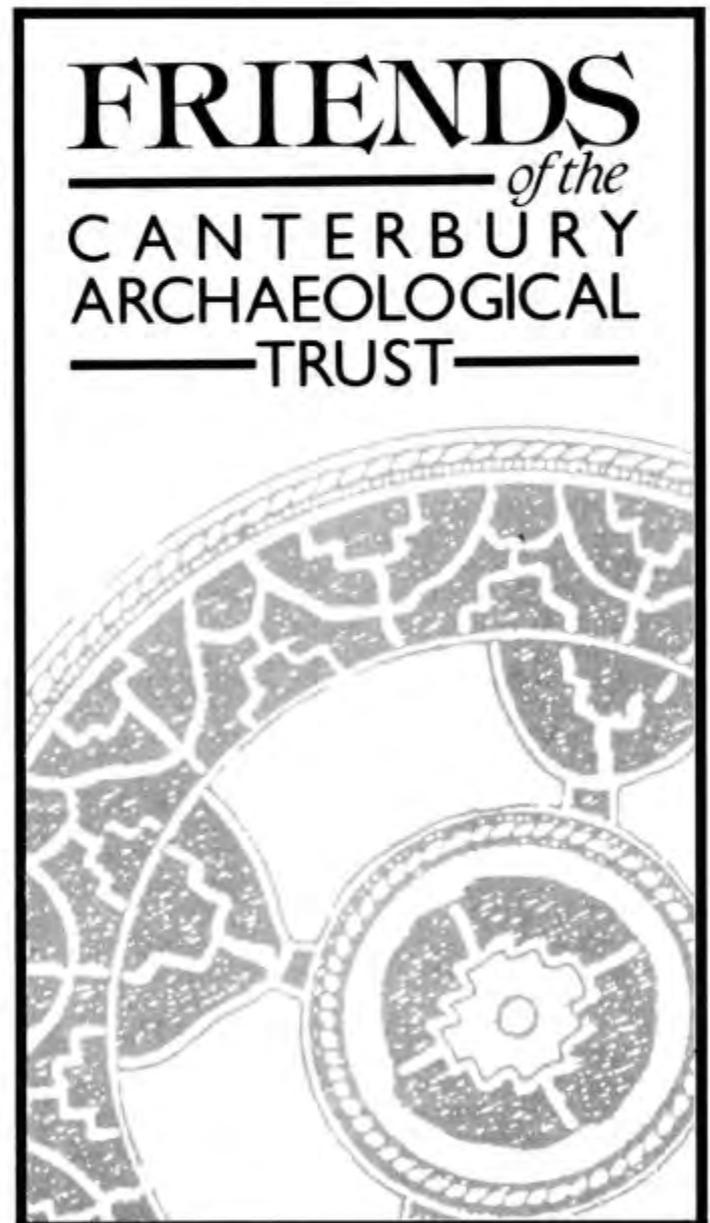
Grants to the Trust this year have been small. Three books have been bought for the Library and two members of staff helped with expenses of attending conferences. The Committee have decided that the next Donald Baron bursaries will be more substantial as interest has accrued to the fund. The project to launch desk-top publishing has been postponed but a grant of up to £7,000, the largest the Friends have made, has been promised to equip a darkroom and buying photographic equipment to enable the Trust to produce its own photographs and to enlarge them for

display and exhibition purposes. Before the grant is made second-hand equipment will be sought. £1,000 has been paid towards the cost of producing Volume IV of the *Archaeology of Canterbury*.

Income continues to be buoyant. The proportion of covenanted subscriptions has been most encouraging as we can recover income tax from such subscriptions at no cost to the covenantor, except for a little more paperwork. Thus if you covenant £15 we can claim £5 (at present rates of tax). We are most grateful to our covenantors, especially to those who have given more than the minimum. Festival Walks raised £700 for our funds and other events smaller amounts.

Some of Friends' subscriptions goes on the Annual Report and on the production of their Newsletters. Here we have been helped substantially by Gerald Colson who has produced our Newsletters on the Kent College Press for the cost of the paper alone. Our distributors have kept down postage costs, a consideration which will become more important as postal rates increase in the autumn.

The Committee have been joined by Bob Dunnett. To him and all other members and officials my grateful thanks. For those of us who can remember the early days of the Trust and the crisis of 1984-85 the present flourishing and expanding state of the Trust is a source of great satisfaction and encouragement for the tasks which lie ahead.



IX

ADMINISTRATION

1 92A Broad Street: Renovation Work by Paul Bennett

Renovation and rebuilding works at our offices have moved on a pace since the compilation of the last Annual Report. All this recent work has been done under the expert guidance of John Boulden with the able assistance of Sean Wilson, Alan Pope and Des Riddler. The building exterior, roof, rainwater goods and post-excavation offices, ceramics department and administrative offices have all now been completed.

The materials used during rebuilding works this year have derived from many sources, but a good proportion was salvaged from the now demolished shops and offices at Longmarket. John and his team have put these materials to very good use and we extend our thanks to developers Land Securities PLC and demolition contractors McWeeney Smallman for their permission to salvage.

In past months work has begun on the conversion of the ground floor of the building adjacent to the city wall. Here in the near future a new and hopefully attractive small finds office will be formed, together with new lavatories and a new darkroom. Once completed, staff currently housed in our rather basic finds processing area and ceramics department will be accommodated in the new office.

Plans are currently being drawn up for the conversion of the finds processing area into an archive store and a separate office. In order to achieve this, the existing large shed occupying much of the yard (currently filled to capacity with recently excavated finds) will be refurbished and renovated for a new finds processing department. This undertaking, possibly one of the most difficult conversions we have yet attempted, will commence in the spring of 1991.



▲ Renovation work in progress.

I would like to take this opportunity to thank the building team for all their hard work. Nothing is more gratifying than to see Trust staff working in a clean and pleasant environment, a fact often commented on by visitors. Hopefully the next Annual Report will record the completion of yet another phase of successful conversion and renovation which will then lead on to a celebration of the team's efforts by a formal opening of the premises.

2 Hostels, Campsite and Stores by Paul Bennett

The Trust currently leases a number of City Council owned properties for use as hostels. The buildings, 16 Pound Lane, 57 Pound Lane, 12-16 Dover Street and The Holt, Hardy Close, currently house some thirteen staff. Canterbury is a notoriously difficult place to find reasonably priced accommodation and we are as ever grateful to the City Council for their help.

From late spring to late summer the City Council again allowed the Trust use of the Bekesbourne Lane campsite for seasonal volunteers. This year besides many British workers very sizeable contingents of East Europeans from Poland, Romania, Czechoslovakia and East Germany were included in their number together with others from America, Canada, France, West Germany, Italy and Spain. This substantial body of volunteers was again warmly received and looked after by the manager and manageress of the campsite, Mr and Mrs Culver. For many years they have been incredibly patient and helpful and on behalf of the Trust and the many hundreds of volunteers who have found temporary 'canvas' lodging in their care I would like to extend our very special thanks.

Storage facilities for finds from Trust excavations have always been at a premium. With the commencement of the Longmarket excavation,

tremendous storage problems were anticipated. I am pleased to record that once again the City Council has come to our rescue. Two buildings, one at the City Council Kingsmead Depot and a second behind Dover Street, have been leased to us for use as stores. The first and largest of these was literally filled within weeks of its acquisition. At the time of writing the second has also been packed almost to bursting-point with excavated materials, principally from the Northgate excavation, and I am embarrassed to say that we are in need of storage space once again.

In recent months we have been the fortunate recipients of a mass of dexion shelving from the former District Valuers' Office, New Dover Road. The manager of that establishment, Mr Peter Warr, very kindly allowed Trust staff the opportunity to dismantle and remove the shelving which has now been reassembled in the Dover Street store by Brian Smith. Mr Warr has also donated a number of drawing boards, metal cabinets and office furniture which will shortly grace our offices at 92A Broad Street. These kinds of gift to the Trust are beyond price- the shelving in particular could not have come at a more opportune moment- and we are immensely grateful to Mr Warr and the District Valuers' Office for their most generous donations.

Acknowledgements

We gratefully acknowledge contributions and payments over the course of the past year from the following:

An Anonymous Donor of £500 for technical and office equipment,
Alleman Properties Limited for fees in respect of archaeological work at North Lane,
The British Museum for their annual grant to us of £1,200,
Canterbury City Council for their continuing support in the form of an annual grant and fees for various works including the St John's Hospital Nursery excavation,
Canterbury Cathedral Company Limited for work on Palace Street,
The Channel Tunnel Group for on-going post-excavation work,
Christ Church College for excavation fees,
Dover District Council for contributing to costs of a watching brief on the Aylesham pipe-line,

English Heritage for supporting various post-excavation and building recording projects,
H.S. Greenfield & Son for excavation fees for work on land adjoining their premises,
Kent Archaeological Society for a grant of £2,000, and their continuing support of the Trust,
Kent County Council for a grant of £2,000 plus excavation fees in respect of work at St Peter's Methodist School,
Land Securities Properties Limited for financing our work on the Longmarket excavation,
Sloggetts (Builders) Limited for financing an excavation on their land by the East Station,
Southern Water Services Limited who also contributed to the watching brief on the Aylesham pipe-line,
Townscape Homes Limited for work on St Gregory's Priory, in the Northgate area of Canterbury.

X ACCOUNTS

The following financial statements represent a summary of the audited accounts of the Canterbury Archaeological Trust Limited for the year ended 31st March 1990.

Report of the Directors

The Directors have pleasure in presenting their report for the year ended 31st March 1990.

Review of the Business

The company was incorporated on 2nd August 1979 and acquired all the assets and liabilities of the unincorporated association 'Canterbury Archaeological Trust'. The principal activities of the company remained unchanged from those of the unincorporated association, that is to advance the education of the public in Archaeology and to acquire and promote knowledge of the past of and in Canterbury and the surrounding area.

Results

The results of the Trust for the year ended 31st March 1990 are as follows:-

	1990	1989
	£	£
Main Account	259	25,130
Publications Account	380	748
Shop Account	13,134	11,857
Friends Account	5,830	3,116
Donald Baron Burseries Fund	788	636

Directors

The Directors during the year were:-

Dr Walter Frank Jenkins (Chairman)
Francis Harry Panton
Tempest Hay

Secretary

The Secretary during the year was Lawrence D. Lyle.

Registered Office

92A Broad Street, Canterbury, Kent.

Auditors

Chantrey Vellacott, Chartered Accountants, have indicated their willingness to continue as auditors of the Trust and a resolution to re-appoint them will be proposed at the Annual General Meeting.

BY ORDER OF THE BOARD

Lawrence D. Lyle

Secretary

4th September 1990

Report of the Auditors

To the Members of Canterbury Archaeological Trust Limited

We have examined the financial statements set out herein which have been prepared on the historical cost basis of accounting.

In our opinion, these financial statements give, on the historical cost basis of accounting, a true and fair view of the state of affairs of the Trust at 31st March 1990 and of the excess and the source and application of funds of the Trust for the year ended on that date, and the accounts comply with the Companies Act 1985.

CHANTRY VELLACOTT
Chartered Accountants

7 Dane John
Canterbury
Kent CT1 2QS.

4th September 1990.

Main Account

Balance Sheet 31st March 1990

Assets Employed

	1990	1989
	£	£
Fixed Assets		
Freehold property and improvements	135,000.00	119,280.12
Current Assets		
Bank Accounts, Float and Debtors	115,265.64	105,045.00
	<u>250,265.64</u>	<u>224,325.12</u>
Current Liabilities		
Overdraft, Loan, Creditors and Shop Reserve	72,347.59	46,666.08
	<u>£177,918.05</u>	<u>£177,659.04</u>

Financed by

Trust Capital Account	5,824.63	5,824.63
Income and Expenditure Account	172,093.42	171,834.41
	<u>£177,918.05</u>	<u>£177,659.04</u>

Income and Expenditure Account for the year ended 31st March 1990

	1990	1989
	£	£
Income		
I English Heritage (H.B.M.C.) projects	72,616.74	78,257.88
II Other Income, Fees, Grants, Donations and Projects	297,994.95	344,284.70
	<u>£370,611.69</u>	<u>£422,542.58</u>
Expenditure		
I English Heritage (H.B.M.C.) projects	97,019.37	93,456.17
II Non H.B.M.C. projects	262,754.74	302,358.51
III Other Expenditure: Loan Interest, Repairs, Publications	10,578.57	1,598.20
	<u>£370,352.68</u>	<u>£397,412.88</u>
Excess for year	<u>£259.01</u>	<u>£25,129.70</u>

Publications Account

The full set of financial statements are available on request.

Income and Expenditure Account for the year ended 31st March 1990

	1990	1989
	£	£
Income	379.56	777.07
Expenditure	-	29.09
	<u>379.56</u>	<u>747.98</u>
Balance brought forward	1,014.32	266.34
	<u>£1,393.88</u>	<u>£1,014.32</u>

Balance sheet

31st March 1990

Represented by:

Bank Accounts	<u>£1,393.88</u>	<u>£1,014.32</u>
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The Friends Account

<i>Balance Sheet</i>	<i>31st March 1990</i>	
	1990	1989
	£	£
Current Assets		
Bank Accounts	11,676.86	6,914.29
Sundry Debtors	2,817.21	1,800.28
	<u>14,494.07</u>	<u>8,714.57</u>
Less: Current Liabilities		
Sundry Creditors	-	-
	<u>£14,494.07</u>	<u>£8,714.57</u>
Financed by:		
Income and Expenditure Account	<u>£14,494.07</u>	<u>£8,714.57</u>

Income and Expenditure Account for the year ended 31st March 1990

	1990	1989
	£	£
Income		
Subscriptions	5,108.78	4,233.73
Other income:		
Donations, Events, Interest	4,135.47	676.76
	<u>9,244.25</u>	<u>4,910.49</u>
Expenditure		
Stationery, Postage, Printing, Advertising, Bank Charges, etc., Sundries	1,794.07	3,413.82
	<u>3,116.42</u>	<u>5,830.43</u>
Excess of Income over Expenditure for the year		
Payments on behalf of Canterbury Archaeological Trust Main Account	1,318.08	50.93
To Balance Sheet	<u>£1,798.34</u>	<u>£5,779.50</u>

Shop Account

<i>Balance Sheet</i>	<i>31st March 1990</i>	
	1990	1989
	£	£
Fixed Assets		
Freehold Property: 72 Northgate, Canterbury, Kent.	45,125.41	45,125.41
Current Assets	19,629.27	7,650.11
	<u>64,754.68</u>	<u>52,775.52</u>
Less: Current Liabilities		
Sundry Creditors	246.65	623.60
Net Assets	<u>£64,508.03</u>	<u>£52,151.92</u>

Financed by:

Profit and loss account	65,285.54	57,251.92
Contribution to Main Trust Account and to Appeal Fund Account	777.51	5,100.00
	<u>£64,508.03</u>	<u>£52,151.92</u>

Trading and Profit & Loss Account for the year ended 31st March 1990

Sales	13,786.08	12,750.01
Other Income:		
Rents, Fees, Interest	6,920.04	6,544.59
	<u>20,706.12</u>	<u>19,294.60</u>
Expenditure:		
Wages, Services, Repairs, etc.	7,572.50	7,437.11
Net profit for the Year	<u>£13,133.62</u>	<u>£11,857.49</u>

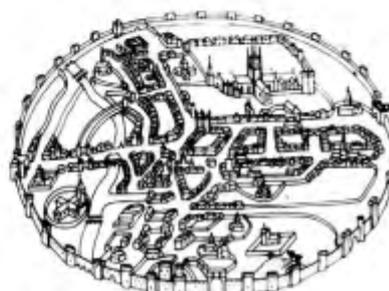
Donald Baron Bursaries Fund

Income and Expenditure Account for the year ended 31st March 1990

	1990	1989
	£	£
Donations received	600.00	500.00
Interest received	287.57	135.81
	<u>887.57</u>	<u>635.81</u>
Transfer to Main Account	100.00	-
	<u>787.57</u>	<u>635.81</u>
Balance brought forward	1,724.49	1,088.68
	<u>£2,512.06</u>	<u>£1,724.49</u>

Balance sheet *31st March 1990*

Represented by:		
The Charities Deposit Fund Account	<u>£2,512.06</u>	<u>£1,724.49</u>



**CANTERBURY
ARCHAEOLOGICAL
TRUST**

XI

MEMBERS OF THE TRUST COUNCIL AND STAFF

The Trust Council

Patron:

The Lord Archbishop of Canterbury

Vice-Presidents:

Cllr H.J. Alexander

Cllr B. Collins

Mrs M. Collins

*Dr F. Jenkins, M.A., Ph.D., F.S.A.

Mrs M. Scott-Knight, B.A.

Chairman:

The Mayor of Canterbury

Vice-Chairman:

*Dr F. Panton, M.B.E., B.Sc., Ph.D., C.Chem., F.R.S.C., F.R.Ae.S., F.R.S.A.

Honorary Secretary:

*Mr L. Lyle, M.A.

Honorary Treasurer:

*Capt. T. Hay R.N. (Retd.)

Canterbury Museums Officer:

*Mr K. Reedie, M.A., F.S.A. (Scot.), A.M.A.

County Museums Officer:

Miss L. Millard, M.A.

Mr D. Anning, F.C.A.

Mr C. Barker

Dr T. Blagg, M.A., Ph.D., F.S.A.

Dr H. Cleere, B.A., Ph.D., F.S.A., M.I.B.M., M.I.F.A.

Professor B. Cunliffe, M.A., Ph.D., Litt.D., F.B.A., F.S.A.

Professor S. S. Frere, C.B.A., M.A., Litt.D., F.B.A., F.S.A.

Mr M. Nightingale, O.B.E., B.Litt., F.S.A.

Mrs C. Simpson, B.A.

The Dean of Canterbury the Very Rev. J. Simpson M.A.

Dr A. Smyth, M.A., D.Phil., F.S.A., F.R.G.S.

*Mrs M. Sparks, M.A.

Professor J. Wachter, B.Sc., F.S.A., M.I.F.A.

Mr B. Webster, M.A., F.R. Hist.S., F.S.A.

One person appointed from each of the following bodies:

Dean & Chapter of Canterbury Cathedral:

Mr P. Marsh, A.R.I.B.A.

Council for British Archaeology:

Mr T. Hassall, M.A., F.S.A., M.I.F.A.

Rescue, the Trust for British Archaeology:

University of Kent at Canterbury:

*Mr A. Butcher, M.A.

Canterbury Archaeological Society:

Mrs P. Garrard

Kent County Council:

The British Museum:

Dr L. Webster, B.A., F.S.A.

Royal Archaeological Institute

Mr G. Beresford, F.S.A.

British Archaeological Association

Mr B. Davison, F.S.A.

Kent Archaeological Society:

Mr A. Harrison, B.A., F.S.A.

Heritage Projects Limited

Dr P. Addyman, M.A., F.S.A., M.I.F.A.

Association of Men of Kent and Kentish Men:

Mr J. Parsons

Three members of Canterbury City Council:

Cllr D. Pentin

Cllr Mrs H. McCabe

Cllr B. Collins

Non-voting members:

Mr C. Gay, L.L.B. (City Chief Executive)

Mr M. Bacon, M.A., M. Phil. (T.P.), M.R.T.P.I., (City Technical Director)

Ms A. Chadburn, B.A., (Historic Buildings and Monuments Commission (England))

Honorary Legal Advisors:

Furley Page Fielding & Barton (Mr N. Jones)

Honorary Auditors:

Hill Vellacott (Mr D. Anning)

**Indicates Member of Management Committee*

Members of the Management Committee who are not members of Council

Mr. M. Bridgeford, F.A.S.I., F.E.B. Mr. D. Rose Mr. N. Taylor

Trust Staff

DIRECTOR	Paul Bennett	SITE SUPERVISORS	Dennis Scott-Nebiker* Mark Houliston
FIELD OFFICER	Jonathan Rady	SITE ASSISTANTS	Tim Allen Kevin Appleton Robert Buckmaster Kirk McKenna Wendy Murphy Simon Nicholls Alan Pope Grant Shand
LANDSCAPE HISTORIAN	Richard Cross		
FINDS ADMINISTRATOR	Julie Lovett		
EDUCATION OFFICER	Marion Green		
CONSERVATOR	Pan Garrard		
EDITORIAL ASSISTANT	Jane Elder	EXPERIENCED SITE STAFF	David Adams* Mark Davey Wendy Edwards* Bruce Ferguson Martin Herdman Lisa Holness Andrew Jones Glynn Leggatt* Melanie Leggatt* Luc Lepers* Andy Linklater Julie Martin Philip Mayne Bridget McGill John Milne* Adrian Murphy Keith Parry Sarah Reed Anna Stanford Sue Warne John Wiles Tania Wilson Mark Bagwell
ADMINISTRATION/FINANCE	Rebecca Bennett		
BUILDING RECORDING OFFICER	Rupert Austin		
PALAEO-OSTEOLOGIST	Trevor Anderson		
Palaeo-Osteologist's Assistant	Brian Smith		
SENIOR ILLUSTRATOR	Mark Duncan		
Illustrators/Draughtsmen	Sue Barnett Ian Clark* David Dobson Nick Till		
CERAMICS SPECIALISTS	John Cotter Nigel Macpherson-Grant		
Ceramics Analyst/Photographer	Andrew Savage		
MARKETING/PUBLICITY	Robert Edwards* Liz Rothwell-Eyre Jon Billington		
BUILDING RENOVATION	John Boulden Mike McDonnell* Sean Wilson	SITE STAFF	Jonathan Canning* Sarah Clark* Philip Collins Angela Connel Stephanie Di-Duca Max Goodwin D'arcy Green* Astrid Hudson* Russell Heath* Robert Jones Conrad Krutnik* Carolyn Rigg Peter Rowstone Marcia Winterburn* Raisa Yates*
NUMISMATIST/SITE DIRECTOR	Ian Anderson		
FINDS PROCESSING SUPERVISOR	Maggy Taylor		
Finds Processors	Jill Butler Louise Harrison Denise Howgill Louise Howlett		
Pottery Restorer	Clive Barham		
SITE DIRECTORS	Alison Hicks Martin Hicks* Steven Ouditt Simon Pratt Alan Ward		

* indicates no longer employed by the Trust

ENDNOTES

1. *Arch. Cant.*, cvii (1989), 309-14; *Canterbury's Archaeology* 1988-89, 16-20.
2. *Arch. Cant.*, cvii (1989), 314-27; *Canterbury's Archaeology* 1988-89, 20-24.
3. P. Bennett, 'Excavations at 16-21 North Lane, Canterbury', *Arch. Cant.*, xciv (1978), 165-91; *Annual Report* 1977-78, 9.
4. *Arch. Cant.*, cvii (1989), 295-99; *Canterbury's Archaeology*, 1988-89, 8-9.
5. *Arch. Cant.*, civ (1987), 317; *Canterbury's Archaeology*, 1986-87, 20.
6. At least four lay persons are known from wills to have asked to be buried in the Churchyard of the Grey Friars of Canterbury, in 1503, 1514, 1531 and 1538 (March). See C. Cotton, *The Grey Friars of Canterbury* (1924), pp. 100-6.
7. *Arch. Cant.*, xcix (1983), 247-51; *Annual Report* 1983-84, 12; *Arch. Cant.*, ci (1984), 294-5; *Arch. Cant.*, ciii (1986), 79-117; *Annual Report* 1985-86, 8.
8. *Arch. Cant.*, m (1988), 135-6; *Canterbury's Archaeology* 1987-88, 7.
9. J. Rady, 'Excavations at St Martin's Hill, Canterbury', *Arch. Cant.*, civ (1987), 123-218.
10. A. Williams and S. Frere, 'Canterbury Excavations, Christmas 1945 and Easter, 1946', *Arch. Cant.*, lxi (1948), 1045; F. Jenkins, 'Excavations in Burgate Street, 1946-8', *Arch. Cant.*, lxiii (1950), 82-118.
11. P. Bennett, 68-69A Stour Street in 'Researches and Discoveries in Kent', *Arch. Cant.*, xcvi (1980), 409; *Annual Report* 1980-81, 8-10.
12. W. Urry, *Canterbury Under the Angevin Kings*, (London, 1967).
13. *Ibid.*, p. 174-5.
14. F. Jenkins, *op. cit.* note 10.
15. Williams and Frere, *op. cit.* note 10.
16. *Arch. Cant.*, ci (1984), 300-1; *Annual Report* 1983-4, 31.
17. *Arch. Cant.*, ci (1984), 301-3; see also *Arch. Cant.*, cii (1985), 248 and fig. 5 for a later episode of excavation at the dormitory.
18. *Arch. Cant.*, xcvi (1980), 27-57; *Annual Report* 1977-78, 7.
19. A.M. Cook, D.C. Mynard and S.E. Rigold, 'Excavations at Dover Castle, principally in the Inner Bailey', *J.B.A.A.*, xxxii (1969), 54-104.
20. John Bereblocks's view of Dover Castle, late sixteenth century: College of Arms, Philpott's Collection. MS Pb47.
21. *Op. cit.* note 19.
22. S.E. Rigold, 'Excavations at Dover Castle, 1964-66', *J.B.A.A.*, xxx (1967), 87-121.
23. A.M. Cook, *et. al.*, *op. cit.* note 19.
24. It is not perfectly rectangular.
25. For more details of these buildings, see Rigold, *op. cit.* note 19.
26. Bereblock distinguishes the two halls as *Aula Arturii Major* and *Aula Arturii Minor*. He also marks the *Edes Ducis Sudovolcae* and the *Porta Ducis Sudovolcae*. The latter is now called the Palace Gate.
27. L.F. Salzman, *Building in England down to 1540* (1952), 228.
28. Ed. H.M. Colvin, *The History of the King's Works II The Middle Ages* (1963), 629-41.
29. E. Hasted, *A History and Topographical Survey of the County of Kent, Canterbury*, W. Bristow, 2nd edition (1798), IV, 403.
30. E.R. Swain, 'Starkey Castle, Wouldham', *Arch. Cant.*, lxxxi (1966), 118-25.
31. The chapel would have occupied the eastern or western end of the range. Although reference is made below to the remains of a chapel being visible at the east angle of the house, in the final analysis the evidence is equivocal.
32. John Harris, *The History of Kent*, Vol. 1 (1719), 337.
33. Hasted, *op. cit.* note 29, 404.
34. J. Nichols, *Bibliotheca Topographica Britannica*, No. VI (1782), part I, pl. IV, pp. 21-22.
35. F.W.L. Stockdale, *Etchings from Original Drawings of Antiquities in the County of Kent*, (1870).
36. An undated watercolour by an unknown artist in the possession of Mr Sharpe. The original watercolour, now lost, may have formed part of the Sharpe family collection at one time in Maidstone Museum.
37. KAO/U1 823/PI tentatively attributed to Philip Symonson (d. 1598, sometime surveyor to the Rochester Bridge estate). The map covers the north-west part of Wouldham parish and the south-west part of St Margaret's, Rochester parish, from Wouldham Common to Borstal. Some field names are given together with the names of adjacent owners. A number of buildings, including Cuxton Church, Whornes Place, Rings Farm and Starkeys are drawn in crude perspective. Individual farms are distinguished in colour.
38. KAO/U1823/P44.
39. This was probably a brick extension demolished in 1980.
40. KAO/CTR/405B.
41. F.F. Smith, *History of Rochester*, (London, 1928), 165.
42. See *Canterbury's Archaeology* 1986-87, III.
43. For Ebbsfleet see D.R.J. Perkins, *Archaeological Remains at Ebbsfleet Farm, Ebbsfleet, Ramsgate* (1990), a Trust for Thanet Archaeology evaluation report.
44. N. Macpherson-Grant in K. Parfitt, 'Some Iron Age sites in the Deal Area', *Kent Archaeological Review*, No. 79 (1985), Fig. 7.
45. N. Macpherson-Grant in P. Blockley, 'Excavations at St John's Lane, 1986', *Arch. Cant.* (forthcoming).
46. One from Finglesharn Anglo-Saxon cemetery (unpublished); one from Dover: VI. Evison, *Buckland Anglo-Saxon Cemetery*, (1987), 328; one from Thanet: D.R.J. Perkins, 'The Jutish Cemetery at Half Mile Ride, Margate: a Reappraisal', *Arch. Cant.* civ (1987), 229; and two from Canterbury: S.S. Frere, S. Stow and N. Macpherson-Grant in *The Archaeology of Canterbury*, vol. V, forthcoming.
47. I. Thompson, Grog-tempered 'Belgic' Pottery of southeastern England, *British Archaeological Report* 108, (1982), 563.
48. See also A.H.W. Robinson and R.L. Cloet, 'Coastal Evolution in Sandwich Bay', *Proceedings of the Geologists Association*, volume 64 (1953), 69-82.
49. D.M. Chamberlain, *The Ancient Town and Port of Stonar*, booklet produced by East Kent Maritime Trust.
50. Mrs Sparks is Chairman of the Trust's Publications Committee and Honorary Documentary Historian.
51. D.M. Stenton, *English Justice between the Norman Conquest and the Great Charter*, 1066-1215, (1964), 117.
52. J. Graham-Campbell, 'An Anglo-Scandinavian Ornamented Knife from Canterbury', *Medieval Archaeology* xxii (1978), 130-2.
53. Kristina Ambrosiani, *Viking Age Combs, Comb Making and Comb Makers*, Stockholm (1981), 161.
54. A. Stirland and T. Waldron, 'The earliest cases of tuberculosis in Britain', *J. Arch. Sci.*, 17 (1990), 221-230.
55. D.L. Weiss and V. Moller-Christensen, 'An unusual case of tuberculosis in a medieval leper', *Dan. Med. Bull.*, 18 (1971), 11-14.
56. D.R. Brothwell, 'Evidence for neoplasms' in *Diseases in Antiquity*, (eds) D.R. Brothwell and A.T. Sandison (Springfield, 1967), 320-345.
57. KAO/U270/E37. Sir Basil Dixwell (d. 1641) inherited the Folkestone estate in 1615, along with considerable other lands in Kent, from his maternal uncle John Herdson. He served in the office of sheriff for the county in 1626 and was created a baronet in 1628. Dixwell resided first at Terlingham and in 1625 in 'my mansion and manor house of the priory' at Folkestone. In the decade 1625-35 he worked on creating a new estate based on the manor of Broome in Barham which he had purchased of Sir Dudley Digges by 1625. In April 1635 the foundations of a new mansion and seat were laid at Broome being finally completed in 1638. The Folkestone estate eventually passed by purchase in 1697 to Jacob Desbouverie. The terrier of 1636 may be compared with another, compiled in an estate book dating from 1734 when the estate was in the ownership of Jacob Bouverie: see Melling, E. (ed.) *Kentish Sources III. Aspects of Agriculture and Industry* (Maidstone, 1961) 60-76 from: (KAO/U270/E10).
58. KAO/U270/E42 documents 3 and 7-9.
59. KAO/U1402/T13 documents 3 and 3E.
60. KAO/U1402/T11 documents 1-7.
61. Podware: generally a term for field crops and as fodder for cattle. Gratten: the after-grass growing in the stubble field. In the eighteenth century podder or podware referred to beans, peas, tares or vetches, or such ware as had pods although originally the word predates the use of pod. John Boys, *General View of the Agriculture of the County of Kent*, 1796, 47, states that 'some farmers are bound to sow wheat after beans, on land not fit to produce beans; to leave a quantity of podware gratten, for a wheat tilth on farms where some sorts of podware is the worst tilth known to sow wheat upon'. Surrerland: land suitable for the pasturing of cattle. Trefoil: a plant of the genus trifolium. The name was commonly applied to species or smaller varieties other than those cultivated under the name of 'clover', often to the yellow-flowered trifolium minus, and also to the similar *Medicago Lupulina* but there is nothing mentioned in the leases defining a particular species of trifolium to be grown. Sainfoin: 'health-giving hay', a low growing perennial herb, *Onobrychis sativa* much grown as a forage plant. The identification with saint was common in southern England in the seventeenth century, hence 'holy hay', when it was considered a preferential crop to clover-grass for improving barren land. In the eighteenth century it was otherwise called Medick fodder, Spanish Trefoil, and Snail or Horned Clover-grass.
62. Probably the first such program was described by John Wilcock; J.D. Wilcock, 'Archaeological context sorting by computer' in *Computer Applications in Archaeology: Proceedings of the 1975 Conference, University of Birmingham*, (Birmingham, 1975), 93-7. For Harris' comments see E.C. Harris, 'Stratigraphic analysis and the computer', 33-40 in the same volume.
63. N. Ryan, 'Browsing through the stratigraphic record' in S.P.Q. Rahtz (ed.), *Computer and Quantitative Methods in Archaeology*, 1988, B.A.R. International Series, no. 446, (Oxford, 1988), 327-334.
64. I am particularly grateful to Jan Hartmann, Torsten Madsen and Jens Andersen for their comments and suggestions on earlier versions of the program.
65. The evidence below relating to shops is taken from W. Urry, *Canterbury Under the Angevin Kings*, (1967), 107-8.

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