INTERIM REPORT ON WORK CARRIED OUT IN 1991 BY THE CANTERBURY ARCHAEOLOGICAL TRUST

I. EVALUATIONS

INTRODUCTION

In the past year evaluation excavations have been undertaken on five Canterbury sites and two others outside Canterbury district. Evaluations represent the opening of small 'windows' on the stratified sequence in order to obtain a quantitative and qualitative assessment of the archaeology of a site. These operations are undertaken before a planning application for development has been determined to ensure that the archaeology of a site is taken into account by the prospective developer.

Archaeological sites are by their nature a fragile, vulnerable and diminishing resource. It has long been recognised that redevelopment processes are harmful and often totally destructive to archaeological levels. As a consequence every effort is now made to mitigate the effects of new development on the resource. Mitigation can only be successfully attempted with foreknowledge of the nature of the archaeological deposits, their depth below the existing ground surface, the nature of their composition, the total depth of the sequence, the relative importance of the sequence and so on. Having obtained this information by desk study and field evaluation, negotiations can be entered into with the developer and his agents to determine the likely impact of proposed construction on the archaeological levels. The positioning of individual buildings can be adjusted to help preserve vitally important parts of a site. Foundation design for new buidings can be discussed as a means of assisting to reduce disruption to the archaeological levels. Those parts of the site considered to be of regional or national importance can be left undeveloped, perhaps to form public open space or gardens within a development. Parts of the site of lesser importance, but still materially affected by a

development and considered worthy of preservation by record, can be subjected to full archaeological excavation, the necessary work being time-tabled and costed into the redevelopment. All this forms part of the structured integration of archaeology into planning processes to ensure that preliminary archaeological enquiry shall be an essential component for redevelopment schemes in historic, rural or urban areas.

1. *No. 26A Hawks Lane, Canterbury*

For about a week in April 1991 small-scale excavations were carried out on a site due for redevelopment on the north frontage of Hawks Lane (at present a car park). The work was funded by the developer, Messrs. Sunley Holdings Plc.

The works were primarily designed to evaluate the archaeology of the site and to determine whether further, more extensive excavation was necessary or feasible, prior to development.

The main part of the area lies on the site of two early nineteenth-century cottages, demolished after the Second World War. Machine excavation of a small area to the west of the site immediately confirmed that the cottages were cellared. The complete removal of cellar backfill by machine and the hand excavation of a narrow trench (Trench A), through surviving archaeological levels beneath the brick floor of the cellar, were then carried out. In addition two small hand-excavated trenches (Trenches B and C), were cut to the east. Trench B confirmed the presence of two cellars on the site. Trench C, dug to the east of a standing brick building (no. 26A Hawks Lane), confirmed that no cellars existed here, but that the more recent archaeological levels were badly disturbed by modern services and features.

No traces of surviving medieval floor-levels or structures were observed in any of the trenches, although a shallow, linear gravel-filled feature, located at the base of the cellar (Trench A), on the road frontage and parallel to it, might indicate the remains of a foundation of a medieval structure pre-dating the cottages.

The site lies at the north-eastern corner of the Roman Temple Precinct, immediately over and adjacent to the portico or covered walkway around the precinct, which has been located on a number of previous excavations in the area (Fig. 1).[1] In Trench A, Roman levels

[1] *Arch. Cant.*, xvii (1976), 238–40; xciv (1978), 275–7; xcv (1979), 270–2; xcvi (1980), 406–10; xcvii (1981), 279–81; c (1984), 47–56; cvii (1989), 283–6; C.A.T. *Annual Report* 1984–5, 12; *Canterbury's Archaeology* 1988–89, p. 2; *The Archaeology of Canterbury*, vol. vi, forthcoming.

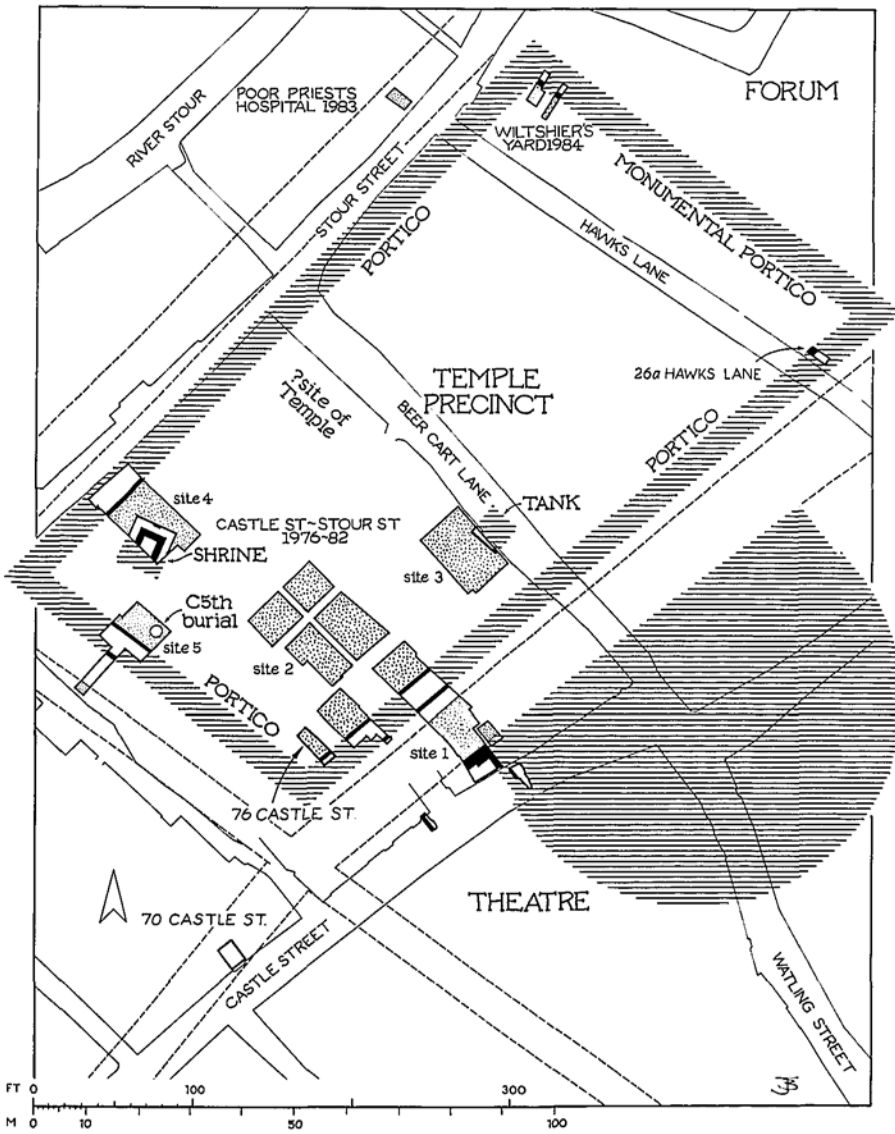


Fig. 1. No. 26A Hawks Lane, Canterbury: The Roman temple precinct showing the location of Trench A.

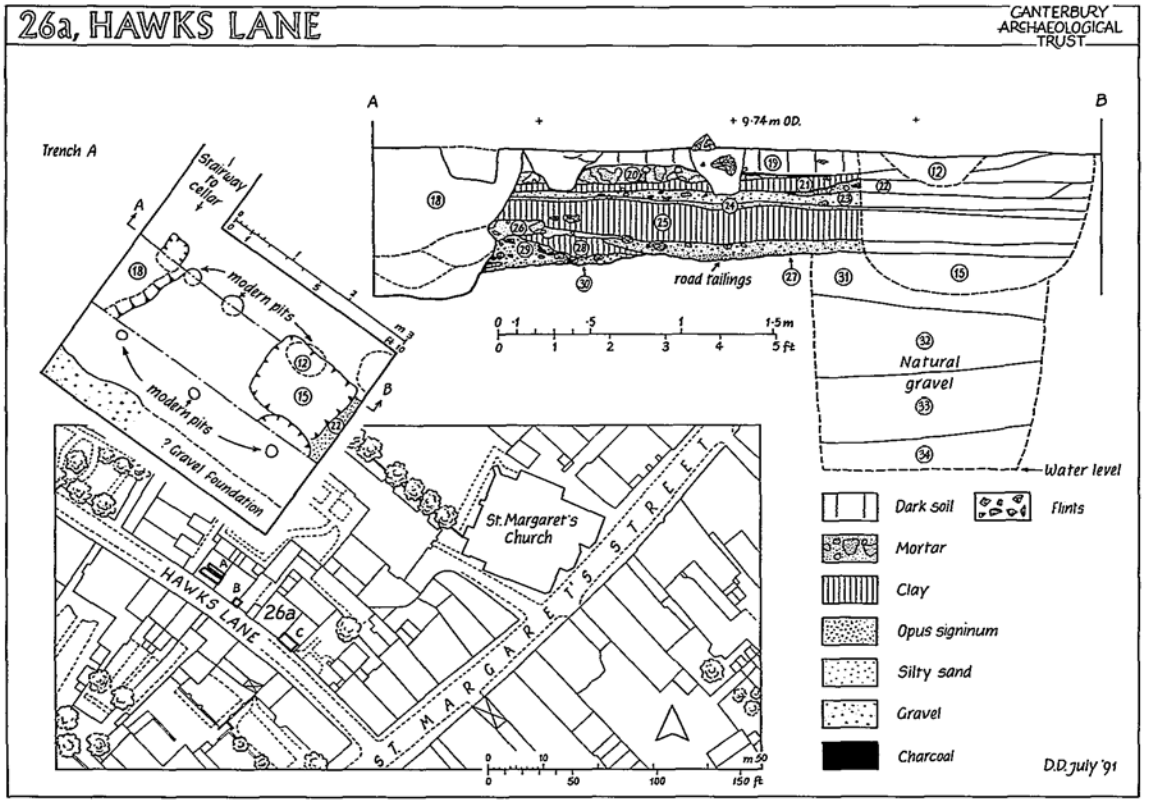


Fig. 2. No. 26A Hawks Lane, Canterbury: Trench A, section.

were encountered about 10 cm. beneath the cellar floor, at a depth of *c.* 1.80 m. below the existing ground surface (Fig. 2).

The Roman deposits were cut by a number of medieval pits. A longitudinal feature (18), at the extreme east end, was undoubtedly an early medieval robber trench and had removed the remains of the stylobate or inner wall of the portico. To the east of the robber trench various levels relating to the inside of the portico were examined. A layer of dark soil (19) probably dating from the immediate post-Roman period, capped a deposit of mortar rubble (20). Previous excavations to the south have demonstrated that the portico was demolished, possibly in *c.* A.D. 350–60, and its paving stripped prior to the laying of the latest courtyards within the Temple Precinct, which extended over the former portico. Layer 20 is either part of the latest courtyard surface, construction or bedding deposits for portico paving, or possibly demolition detritus from the portico superstructure. Layer 21, which immediately underlay 20, was probably a clay bedding for a late floor surface. This deposit sealed a substantial concrete floor of *opus signinum* (22) which has not been found within the portico on earlier excavations. Across most of the trench the floor was considerably eroded and only survived as a thin scatter of fragments, but at the eastern end, adjacent to the projected position of the outer portico wall, it remained virtually intact at its maximum thickness of 12 cm. Below the floor was a sequence of clay and sandy layers (23–25), which overlaid a lens of mortar, flint and stone (26). This level, which was considerably thicker adjacent to the position of the stylobate, may represent a construction deposit for the portico.

The mortar directly superseded various layers of gravel (27–30) which are probably tailings from a major Roman street which flanked the east side of the Temple Precinct.

The earliest exposed deposits (31–34) appeared to consist of natural gravel. The upper horizon of this deposit is at the level expected for subsoil in this area. Normally, one would expect the uppermost natural subsoil to consist of Head Brickearth, a fine yellowish loamy clay. Although a 1–2 m. thickness of brickearth usually overlies natural gravels of the river terrace, it is possible that this gravel represents a localized 'pipe' or outcrop of natural gravel. To test this hypothesis a 1.20 m. deep sondage was cut through the deposit to the level of the water table. This proved inconclusive since the lower level of the layer was not found, and no inclusions, such as pottery or Roman tile, were present to suggest redeposition. The layer may well be natural gravel, or, within the narrow confines of the investigation, was conceivably a very early Roman feature, presumably pre-dating the laying of the Temple Precinct in the late

first/early second century A.D., such as a wide wall foundation, or deliberate infilling of a large pit or clay quarry.

The identification of features and levels forming part of the north-east portico of the temple precinct is of particular importance. The location of *opus signinum* paving in the portico constitutes a significant addition to our knowledge of the complex history of this public building.

JONATHAN RADY

2. *Starr Place, St. Dunstan's, Canterbury*

During May evaluation trenching at Starr Place, St. Dunstan's Street, was undertaken in advance of the determination of planning consent for a small residential development. The excavation provided evidence for Roman industrial activity in a suburb west of the Roman town well-known for such discoveries (Fig. 3).

Starr Place, formerly the site of a small early nineteenth-century mews connected by a passage to St. Dunstan's Street, is now an overgrown area surrounded by ruinous garden walls and the foundations of cottages that once flanked the north-west and south-east sides of a small yard. The site lies some 40 m. (130 ft.) south-west of Roman St. Dunstan's Street and some 140 m. (460 ft.) west of Roman West Gate.

Two trenches were opened on the proposed site of new buildings in the former gardens of Starr Place. One trench (Trench A) aligned roughly north-west to south-east was positioned to locate a Roman street found in 1987 on an adjacent site to the north-west.[2] The second trench (Trench B) was aligned at right angles to the first and set to the south-west of it.

Roman street metallings were encountered 1.20 m. below the existing ground surface of Trench A and 1.50 m. below that of Trench B. Both edges of the street were exposed, indicating a total road width of approximately 5 m. Shallow scoops either side of the street, filled with deposits of road wash indicated the position of side drains of approximately 0.60 m. wide. Trench A was excavated to the level of natural brickearth north-east of the street, but metallings were not removed. One or possibly two remetallings of the street were in evidence in the sides of later features found cutting the alignment.

Trench B was not excavated to brickearth. Here weathered brickearth, interpreted as a deliberate dump, sealed earlier Roman

[2] *Arch. Cant.*, cvi (1988), 132–4.

deposits. This material capped the south-western road drain and overlaid road metallings, indicating that at the time of deposition the street had fallen out of use. Two late Roman pits yielding fourth-century pottery and a number of metal finds including a coin of Valentinian I (A.D. 367–375) cut this deposit. The earlier horizon was only exposed in limited areas of the trench, but a well-stratified sequence of layers, on average 0.40 m. thick was in evidence in the sides of deeply-cut later features. These layers of dark grey clay were interleaved with bands of carbon and burnt clay. The laminated deposits yielded a small number of 'waster' pottery sherds.

Remnants of a pottery kiln with two firing chambers separated by a central dividing wall were located at the south-western end of Trench B. The kiln had been largely removed by a late medieval pit but sufficient fabric survived to discern its plan. The stoke-hole was probably situated at its north-east side facing onto the street, entirely consistent with the deposits of carbon and burnt clay identified in the sides of deeper cuttings. The firing chambers of the kiln were approximately 0.40 m. wide and may have been in excess of 1 m. long from the projected mouth of the stoke. The central dividing wall was 0.35 m. wide. The internal dimensions of the structure measured some 1.05 m. north–south and in excess of 1.10 m. east–west. The internal fabric of the kiln survived to a maximum height of 0.25 m. with heavily-fired internal lining surrounded by a 'halo' of heat-penetrated bright orange natural brickearth on average 0.10 m. wide. A thin lens of carbon and burnt clay lining the base of both fire chambers was capped by a uniform demolition fill of kiln structure. The entire structure and its fills were in turn sealed by the dump deposit. Although the kiln was partly removed by a later cutting and its north-east end lay outside the excavated area, its general dimensions and internal plan bore marked similarity to a kiln located in 1978 at 26 North Lane.[3]

A surprisingly small corpus of pottery was found in association with the kiln and overall the size of the assemblage will not allow a full appreciation of the kiln's products. The pottery and finds recovered from the general horizon indicate the kiln was constructed in the early to mid second century with industrial occupation terminating late in that century.

The latest Roman horizon was capped by a 0.85–1.10 m. thick deposit of brown garden loam. The development of the loam may be partly attributable to agricultural activity in the post-Roman period,

[3] P. Bennett, 'Excavations at 16–21 North Lane, Canterbury', *Arch. Cant.*, xciv (1978), 165–94.

but is more likely to be a by-product of garden landscaping in the nineteenth century. Although slight differences in the colour and texture of the deposit were discerned during excavation no distinct sub-divisions were identified. Five pits, yielding late twelfth- to fourteenth-century pottery and a brick-lined cess tank of nineteenth-century date were excavated. Although the original cutting of the pits may have been from different levels within the lower matrix of the deposit this was not successfully proven during the excavation. The brick tank was cut from the uppermost levels of the garden loam.

Numerous sitings of Roman levels and features have been made in the western suburbs of present-day Canterbury.[4] Although many of the observations were for later Roman inhumation burials, some of the discoveries relate to earlier Roman metalled streets and industrial activity. In sum, the evidence suggests the presence of an early suburb to the Roman town, laid out with a regular pattern of gravel-paved streets facilitating access to industrial working areas, principally devoted to the manufacture of pottery, brick and tile, but also containing some evidence for metalworking. No evidence for domestic activity has yet been discovered.

The suburb may have been established in the early second century, or perhaps slightly earlier, and appears to have been in disuse by the time the town defences were constructed in A.D. 270–90, when an inhumation cemetery (or cemeteries) was established in the area. The north-eastern boundary of the suburb may have been defined by the line of St. Dunstan's Street; the south-western boundary by the line of Watling Street issuing from London Gate. The south-eastern boundary may have been formed by a north-west to south-east aligned street located in the Whitehall Gardens area in 1955.[5] Roman industrial activity has not been located south-east of this line, but it is just possible that the suburb may have extended to the line of the present extra-mural stream or even the eventual position of the town defences. Further extension south-eastwards seems unlikely since domestic settlement is almost certain at this point. The north-western boundary of the suburb is equally unclear although Roman cremation burials south of the London road would suggest that it did not extend that far north.

[4] New Street, St. Dunstan's area: *Arch. Cant.*, xciv (1978), 149–52; *Arch. Cant.*, cii (1985), 247–8; *Arch. Cant.*, ciii (1986), 222–3; *Arch. Cant.*, civ (1987), 313–4; P. Bennett in *The Archaeology of Canterbury*, vol. viii (1987), 54 and 56–73; Linden Grove: *Arch. Cant.*, cvi (1988), 132–4; for Whitehall Gardens area see note 5 below.

[5] Whitehall Gardens area: R.A.H. Farrar in *The Archaeological News Letter*, vi, no. 5 (1958), 126; F. Jenkins, *Arch. Cant.*, lxxiv (1960), 151–61; S.S. Frere in *The Archaeology of Canterbury*, vol. viii (1987), 45–53;

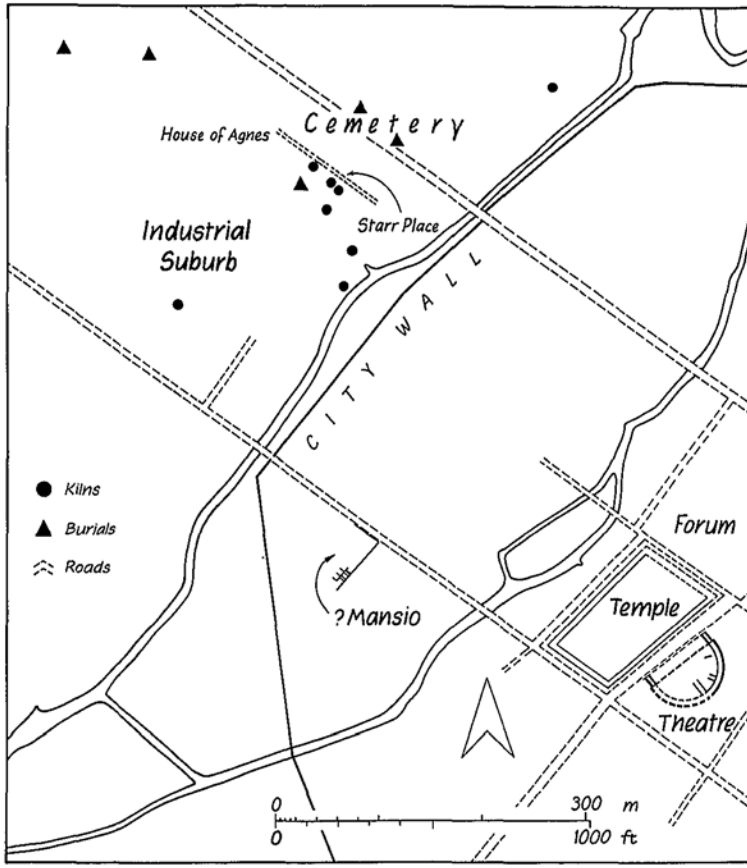


Fig. 3. Starr Place and the House of Agnes, St. Dunstan's, Canterbury; plan of the western suburbs of Roman Canterbury locating both sites and other discoveries in the area.

Although only two internal streets for the suburb have been located thus far a further subdivision of the area seems likely. Most likely is a north-west to south-east aligned street extending from the civic centre north-westwards to sub-divide the suburb into two equal halves. The present minor street, now located on three sites, tentatively suggests a division of the north-eastern half of the suburb into three roughly equal blocks each approximately 130–150 ft. wide. Traces of perhaps three or more pottery kilns are now known immediately south-west of the minor street, all within 90 ft. of each other. Although there is at present too little evidence to speculate upon, it is tempting to interpret this concentration of kilns as

perhaps part of a small potting factory located in one *insula* of the suburb.

Of the two late Roman pits located during the evaluation trenching at Starr Place more should be said, since they represent some of the first evidence for later Roman extra-mural activity other than burials that have been discovered in this area. Both pits appeared to have been used for the disposal of domestic rubbish and, therefore, might indicate the presence of dwellings outside the town wall in the fourth century.

PAUL BENNETT

3. *Land to the Rear of House of Agnes, St. Dunstan's, Canterbury* (Fig. 3)

A small evaluation pit cut by machine in open ground, formerly garden to the rear of the House of Agnes, revealed the presence of a deeply buried Roman street. The trench, opened by a 'mini' mechanical excavator in early July 1991 was monitored by the Trust and the sides of the cutting were recorded. Although the north–south aligned pit was only 0.50 m. wide and 1.25 m. long, the sectional view provided by the cutting was considered sufficient to evaluate the likely impact of proposed footings on surviving archaeological levels.

The sequence of levels observed comprised: rammed gravel metalling at a depth of 1.32 m. below existing; overlain by a 0.90 m. thick deposit of light brown sandy loam with few inclusions and a 0.40 m. layer of dark brown garden loam containing a lens of crushed brick rubble which outcropped at the present ground surface.

The lowest deposit of rammed gravel almost certainly represents the surface of a metalled Roman street. A single sherd of second-century coarse ware was recovered from deposits of 'pea-grit' which overlay the street surface. The compact metalled surface was relatively even and smooth, but cambered from south to north, indicating perhaps that the section of street exposed lay close to the northern verge. A section of the same street was located on an adjacent site off Linden Grove in 1987 and another section of the same street at Starr Place earlier this year (see above). Overall all three observations indicate the presence of a street parallel to the line of Roman St. Dunstan's Street set some 40 m. south-west of it.

Despite the size of the evaluation pit the discovery of a section of north-west to south-east aligned street is significant and proves without doubt that the site has a high archaeological potential.

The deposits sealing the Roman horizon appear to contain no evidence for later occupation. The layer of light brown sandy loam,

which constitutes the bulk of post-Roman overburden was homogeneous and appeared to contain no cultural materials. The texture of the soil was surprisingly soft, with very few inclusions, save for the occasional pebble. It was heavily root-infested and worm-casted, suggesting perhaps that it developed as a consequence of agricultural use over a considerable period. The depth of the deposit is surprising and although agricultural use may provide one explanation for its development, other factors may be involved which cannot be explained at the present time.

The capping layers of modern topsoil and brick rubble were recent formations associated with the use of the area as a well-managed garden.

PAUL BENNETT

4. *Station Road East (Palmer's), Canterbury*

During April 1991 test excavations prior to planned redevelopment were conducted in Palmer's warehouse at the extreme eastern end of Station Road East. The evaluation exercise was one of a number to have taken place in the area in recent years[6] all of which were conducted in the hope of widening our knowledge of the Roman cemetery known to have existed outside the town walls close to Roman Worthgate. In the event no burials were found. Excavations at the western end of Station Road East[7] provided evidence for a substantial ditch of early medieval origin, perhaps associated with an outer bailey for the Norman motte and bailey castle (Fig. 4). Although there were high expectations of additional evidence for the earthwork, no further related discoveries were made.

Three trenches were cut inside the building within a small 12 m. square area. Despite the restrictions of the limited excavation area, an early ground surface was uncovered. This consisted of a topsoil of grey clay loam and contained mainly Roman pottery, some Roman tile and a coin dated to *c.* A.D. 330–345. Beneath this topsoil was what appeared to be undisturbed natural brickearth; a test pit was dug a further 2 m. in Trench A and no evidence was found to dispute this. An extensive dump layer of stony brown loam was encountered in each of the trenches. This may have been imported to raise the area in the 1860s when the station approach road was constructed.

MARTIN HERDMAN

[6] *Arch. Cant.*, civ (1987), 317; *Arch. Cant.*, cvii (1989), 295–9; *Arch. Cant.*, cviii (1990), 205–6.
[7] *Ibid.*

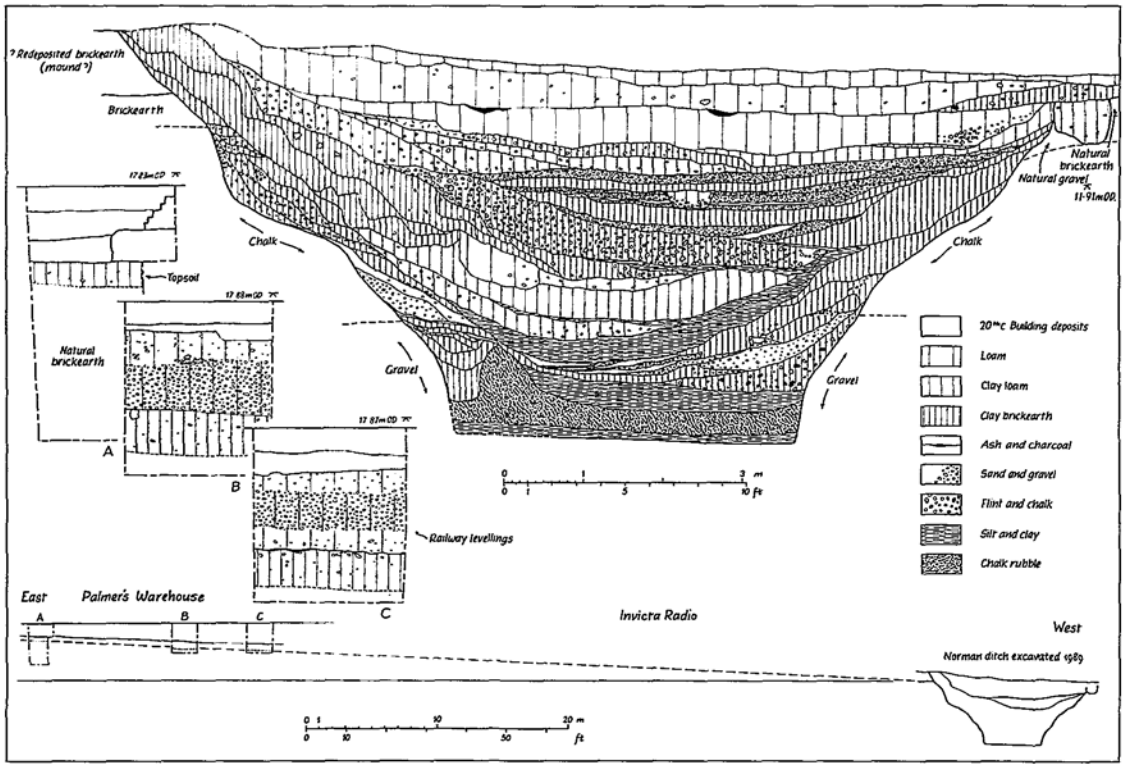


Fig. 4. Station Road East, Canterbury: Location section, sections through evaluation pits and section through the Norman outer bailey ditch.

5. *Christ Church College, Canterbury*

In July 1990 a trial trench was excavated by machine, south of the Student Facilities building of Christ Church College, to assess the archaeological deposits in that area in advance of the construction of a new teaching block. The area investigated lies just north of the site of the main complex of St. Augustine's Abbey and east of the Outer Court and monastic kitchens.

Earlier episodes of excavation and watching brief works,[8] all in advance of or during the construction of new college buildings, have provided a substantial corpus of information for mid to late Anglo-Saxon occupation, industrial activity of thirteenth- to fourteenth-century date and a number of buildings, yards and drains associated with the Outer Court of St. Augustine's Abbey. The evaluation trench was cut to ensure that similar features were not likely to be affected by the development.

Unfortunately, it was found that no intact archaeological stratigraphy survived due to extensive concrete foundations of a warehouse which had stood on the site until demolition in the 1960s. The foundations were found to cover the entire trench and further evaluation was not possible at that time. A watching brief currently in progress during construction has revealed a complex pattern of pits of Anglo-Saxon and medieval date, whose presence was not indicated during the evaluation. The salvage recording of these features will be reported on next year.

IAN ANDERSON

6. *St. Nicholas Church, Sevenoaks*

For a period of two weeks in October and November 1990 the Canterbury Archaeological Trust undertook the excavation of two evaluation trenches within the medieval church of St. Nicholas, Sevenoaks (Fig. 5). The purpose of these trenches was to gain an insight into the surviving archaeological strata within the body of the church prior to the possible construction of a basement. The archaeological evaluation was funded by the parish.

Sevenoaks church is first mentioned in the *Textus Roffensis* of 1122, the standing structure being mainly of thirteenth- to fifteenth-century date. This is not the place to undertake a documentary and architectural history of the church; the nineteenth- and twentieth-

[8] *Arch. Cant.*, xcix (1983), 247–51; *Arch. Cant.*, ci (1984), 294–5; *Arch. Cant.*, ciii (1986), 79–117; *Arch. Cant.*, cvi (1988), 135–6; *Arch. Cant.*, cviii (1990), 212–6.

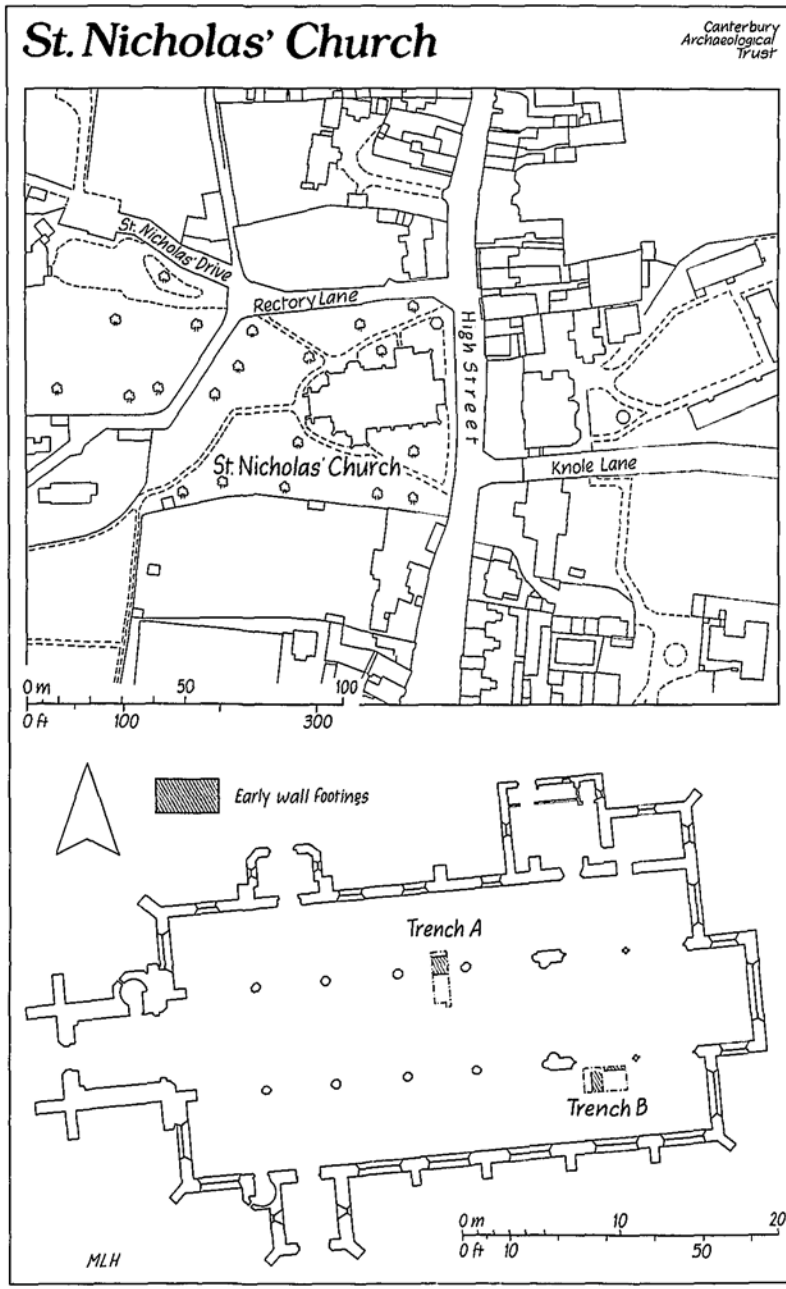


Fig. 5. St. Nicholas Church, Sevenoaks: Plan of the church showing the location of evaluation trenches.

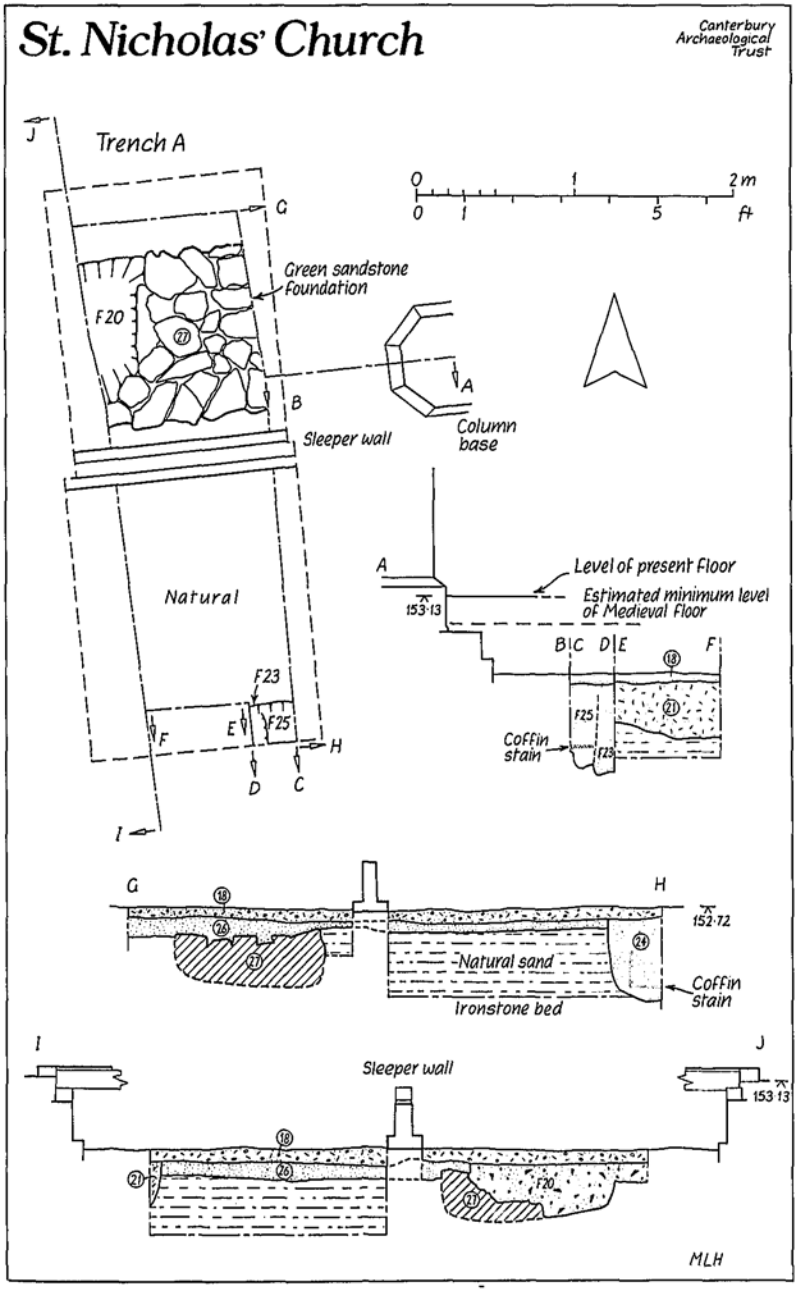


Fig. 6. St. Nicholas Church, Sevenoaks: Plan and sections, Trench A.

century restorations have been studied by Ann Stocker who includes a bibliography with her work.[9] It is sufficient to note here that documentary evidence suggests the existence of a church pre-dating the present one.

Trench A (Fig. 5) was cut across the line of the northern aisle arcade in the second bay west of the chancel area. The trench, of dimensions 3.40 × 1.00 m., was excavated to a maximum depth of 0.60 m. The archaeological deposits were far shallower than expected and few traces of early floors or intact early stratigraphy were located. However, a stone foundation (27), 0.95 m. wide, suriving to a depth of 0.30 m. was discovered (Fig. 6, plan and sections G–H, I–J), covered by a thin layer of disturbed sand (26). Although this unmortared foundation comprising two or three courses of irregularly-shaped greensand blocks may have served as a foundation for the northern aisle arcade, the existing columns are not central to the foundation and the probability is that this footing may have formed part of an earlier twelfth-century church. The construction trench for the foundation was cut into undisturbed deposits which comprised, natural sand overlying a thin layer of ironstone rubble (visible in the southern part of Trench A). Natural sand of unknown depth lay below the stone horizon.

Below the level of the modern timber floor the nave arcade base east of the evaluation trench was obscured by a cladding of brickwork. Intact archaeological deposits were set well below the pier base, with brickwork appearing to face foundation masonry (Fig. 6, section A–F). The absence of an earlier sequence of floors, the apparent facing of exposed arcade pier-foundation masonry with brickwork and the discrepancy between the level of intact deposits and the top of the arcade foundation collectively suggest that earlier floors were removed during major episodes of refurbishment in the nineteenth century.

Two, or possibly three, graves were encountered in the sides of Trench A. Of the two certain graves, feature 23 was partially infilled by compacted plaster and mortar fragments (21) and seems to cut feature 25, in which the stain of a wooden coffin could be identified (Fig. 6, section A–F). The third possible grave (F20) was cut into the early wall foundation (Fig. 6, section I–J).

The early wall foundation and natural sand deposits were sealed by a thin layer of dirty disturbed sand (26). This layer, cut by all burials and later disturbances, may have been demolition or construction

[9] A. Stocker, *The Parish Church of St Nicholas, Sevenoaks – Nineteenth-century Restorations* (1980).

residue associated with the establishment of the fourteenth-century church. A similar but less extensive layer of dirty trampled sand was noted in Trench B (Layer 29, Fig. 7, section B–C) and overall this thin deposit, perhaps common to both trenches, may prove to be the only surviving archaeological layer pre-dating the present church. Capping layer 26 and all graves was a compacted levelling deposit of plaster and mortar (18), perhaps laid during the 1878 restoration. This levelling deposit forms a basis for the brick dividing walls supporting the joists for the modern sprung floor.

Trench B (Fig. 7) measured 2.70 × 1.50 m. The trench cut to a maximum depth of 1.20 m., was located within the boundary of a former Chantry Chapel at the east end of the south aisle. The major part of this trench lay beneath a black marble slab 2 × 1 × 0.10 m., which was removed with the assistance of Durtnells Ltd.

Extending under the northern side of Trench B were elements of what appeared to be two superimposed foundations. The uppermost of these, in mortared ragstone, may have been the edge of an extended foundation for the existing arcade base to the north-east. The south-east corner of an extended foundation for the chancel arch also in mortared ragstone was uncovered in the north-west corner of the trench (F17, Fig. 7, plan, sections C–D, B–C). Overlying the foundation in the north-east corner of the evaluation trench was a remnant of beaten earth, possibly a floor (31) (Fig. 7, plan and section C–D). A thin lens of dirty sand (30) underlay the later foundation and capped the earlier footing (15) which was set on the same line as the present arcade. This possible early wall foundation may prove to be associated with a second fragment of masonry found at the centre of the trench (12), bedded on natural sand. The masonry, which comprised several irregular-shaped unmortared greensand stones, may have formed part of a wall set at right-angles to the east–west footing. The evidence for the wall, however, is slight being based on an apparent stright edge to the masonry on its western-side.[10] The presence of other stones to the west of the postulated edge and the absence of a construction trench for the footing perhaps argue against this interpretation. Further excavation may clarify this. Both early footings were sealed by successive deposits of trampled dirty sand (30, 29).

Part of a burial (F14, SK1) (Fig. 7, plan and section D–A) survived cut into natural sand; the skeletal material was recorded but not removed. The burial had been cut by the construction trench (F9) of a brick barrel-vaulted tomb (F10). The eastern end of the vault may

[10] Thanks are due to Dr J. Williams for noting this point.

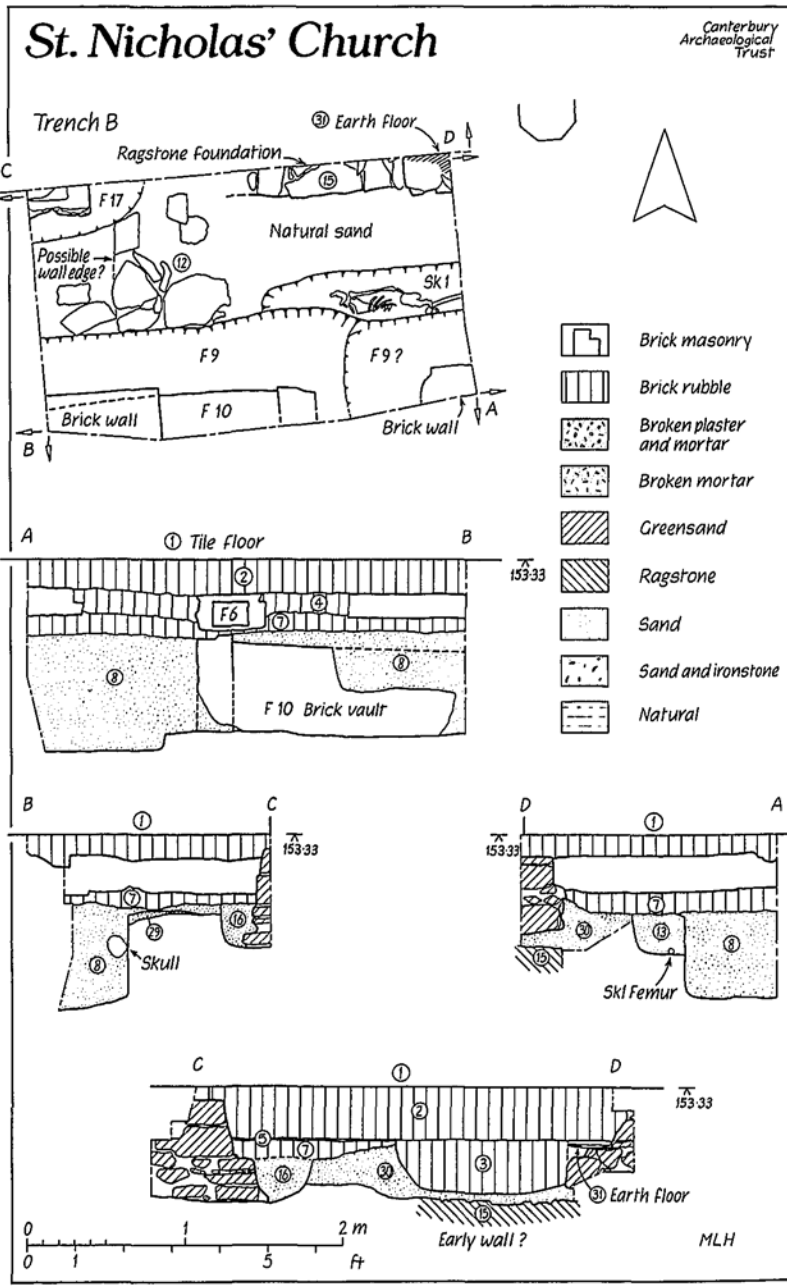


Fig. 7. St. Nicholas Church, Sevenoaks: Plan and sections, Trench B.

have been provided with an entrance to the tomb. A considerable number of disarticulated bones, including eight skulls, were recovered from the fill of the tomb construction trench (8). All the skeletal material has been reburied and will be recovered for analysis, if future excavations take place. The tomb may contain three burials, the ledger slab perhaps having been moved from above the vault when the modern heating ducts were constructed. An earlier underfloor heating duct (F6) lay immediately below the floor (Fig. 7, section A–B).

The loose sandy infill of the tomb construction trench was covered by loose rubble and sand (7), upon which a fragmented but compact mortar deposit had been lain. This levelling deposit was perhaps associated with the construction of brick dividing walls, the northernmost of which supports the timber floor of the chancel. The dividing walls were abutted by rubble infill (2) which provided a basis for the tile floor laid in 1878.[11]

Although it is difficult to make definitive conclusions for the whole of the church interior from the results of cutting two small evaluation trenches, a number of observations can be made. First, it seems likely that no medieval or post-medieval floor deposits have survived nineteenth-century episodes of refurbishment within the body of the church. Indeed, on the basis of observations made during the evaluation, it seems likely that the surviving surface of intact archaeological deposits may be some 0.40 m. below the postulated original floor level of the standing church.

Secondly, the survival of early masonry in both trenches suggests that the foundations or sub-foundations of an earlier twelfth-century church may exist within the body of the present church. These fragmentary traces of perhaps an earlier building are the most surprising and exciting results of the evaluation.

Thirdly, the density of burials within the body of the church would appear on the basis of the evaluation to be of some magnitude. In these relatively small cuttings at least four burials, the constituent parts of at least eight others and a burial vault were encountered. A prolific number of individual inhumations, many cutting one another, can therefore be assumed to exist in the entire area of the church. At the east end of the church several brick tombs will be encountered, the Thorpe's *Registrum Roffense* also suggests that vaults exist within the nave.[12]

ALISON HICKS and ALAN WARD

[11] A. Stocker, *op. cit.* note 17, 5.
[12] *Ibid.*, 7.

7. *Extension of the A20: Folkestone to Dover*

Towards the end of 1990 the Trust began an archaeological evaluation of the route of the first stage of the Department of Transport's new A20 road from Folkestone to Dover. The project, supervised by Steve Ouditt, was funded by English Heritage.

The route of the proposed dual carriageway, *c.* 8.2 km. long, extends from two tunnels being excavated under Round Hill at Folkestone (N.G.R. TR 217382), across the A260, and along the Alkham valley, adjacent to the present B road, to Cut Throat Lane (N.G.R. TR 236396). From here the route turns east and crosses the high ground of the Downs north of Capel, eventually descending to the present A20 at Court Wood (N.G.R. TR 270389).

The first phase of the evaluation consisted of field-walking as much of the route as was possible in order to identify possible areas of ancient occupation and locate potential archaeological features. This operation yielded a considerable quantity of artefacts, mainly worked flints, particularly from the fields on the higher ground north of Capel, but these finds usually represented general scatters from wide areas and were not indicative of any localised activity.

The second stage of works consisted of prospection of the route by trial trenching. This involved the excavation of trenches, cut by mechanical excavator down to the subsoil, along the centre line of the road to locate and identify archaeological sites.

As is often the case with projects of this kind, particularly where an archaeological input has not been considered in the overall construction programme, very little time was available for the archaeological fieldwork before construction processes commenced. By the time work started on 7th January, 1991, major earthworks by the contractors Messrs. Balfour Beatty had already disturbed much of the route along the Alkham valley. Prospection trenching was therefore limited to the section east of Cut Throat Lane *c.* 3.5 km. in length and was by necessity carried out with some rapidity.

Most of the corridor for the road was on average 30 m. wide and in these areas a single line of trenches cut along the axis of the road was considered sufficient to locate important or extensive archaeological remains. In places, however, due to proposed large cuttings, embankments or associated landscaping, the area under consideration was up to 270 m. across. In these positions supplementary lines of trenches were cut across the axis of the road.

In about one month 120 trenches, on average 10 m. long, were excavated and associated features recorded. Generally, the trenches were cut to the surface of the natural subsoil, usually a clayey brickearth, chalk or hill-wash; on occasions sondages through the

hill-wash, normally resident at the base of valleys, were excavated. All the trenches were backfilled on completion.

In the event only two areas of ancient occupation were located. The first at N.G.R. TR 239396 (*c.* 400 m. north-east of Havenfield Hall) was situated on the 100 m. contour on the lee side of a small hill. Here a small group of heavily-truncated pits, most only *c.* 20 cm. deep, was revealed. One of the features was, however *c.* 90 cm. deep and yielded sherds of Iron Age (*c.* 600–300 B.C.) and Belgic (A.D. 0–75) date. Although no evidence for structures was located, erosion and ploughing have probably removed much of the evidence, and it is likely that a small occupation site of the Iron Age and Belgic periods is represented, possibly situated on the higher ground to the south-west.

The other area of activity was located at N.G.R. TR 266390 (centred), on a high plateau (140 m. A.O.D.) *c.* 400 m. east of Abbots Land Farm. Here a system of ditches, generally aligned with the contours, approximately south-west to north-east, was located over a fairly wide area. Since this part of the route was at the tail end of the construction programme, a reasonable amount of work was possible. This involved cutting extra trenches to define the limits of activity and some small scale area excavation where archaeological features were concentrated.

Although one or two possible pits were excavated, little trace of direct habitation was discerned. Some of the ditches appeared to date to the Anglo-Saxon period, specifically to the sixth to seventh century. Later material from the tenth century was also recovered. A considerable quantity of residual artefacts, including worked flints of Late Neolithic to Early Bronze Age date and finds from the Iron Age, Belgic and early Roman periods were also represented.

The majority of examined features probably date from the Anglo-Saxon period, although some could well be prehistoric, and probably represent parts of an agricultural field system associated with a nearby settlement. The wide chronological range of material recovered from this area, although possibly derived from more than one ancient occupation focus, strongly suggests that an unknown multi-period occupation site exists in the vicinity. This is perhaps located in the area of Little Hougham Court (N.G.R. TR 274394, *c.* 750 m. to the north-east) or maybe around Abbots Land Farm itself.

JONATHAN RADY

II. EXCAVATIONS

8. *Longmarket, Canterbury*

The Anglo-Saxon and medieval deposits found during the 1990 excavations on the site of the new Longmarket development were described in last year's interim report.[13] This section describes the investigation of the Roman and earlier levels.

Apart from finding some rather poorly preserved 'Belgic' and early Roman structures, the remains of a second-century bath-house were discovered. This had formed the north-east range of a Roman courtyard building, parts of whose southern and western wings and northern corridor were excavated by Audrey Williams in the mid 1940s,[14] all but the southern range being incorporated into the Roman Pavement Museum in the mid 1950s. No additional evidence was discovered to support or refute either of the two possible interpretations – 'courtyard' house or *mansio* (inn) – which have been offered for this site. A second building complex, which Mrs. Williams had been unable to investigate to any great extent, was partially uncovered to the north of the former museum. This complex had undergone a particularly convoluted structural history, yet to be analysed in detail. Beyond lay a major east–west Roman road flanked by timber-lined drains. To the north of the road lay another property block, holding a series of buildings with clay floors timber and clay walls whose general plan could not be discerned in the limited area available for excavation.

The southern property (Fig. 8)

A line of substantial post-holes, probably dating to around the mid first century A.D., was found to the south-east of the former museum basement, flanking an east–west ditch of similar date. Each post had been dug out and replaced. The later set of posts had also been systematically removed, the ditch filled in and the ground made good before the first courtyard was laid over it in the third or fourth quarter of the first century.

On the extreme eastern edge of the excavated area, a clay-floored building with timber partition walls was erected some time in the first century. A one- or two-roomed structure was put up immediately

[13] *Arch. Cant.*, cvii (1990), 218–26.

[14] A. Williams and S. Frere, 'Canterbury Excavations, Christmas 1945 and Easter 1946', *Arch. Cant.*, lxi (1948), 1–45.

west of this, at the north-east corner of the courtyard, in the late first century. It had substantial gravel foundations and flint walls which were probably covered in polychrome painted plaster (see below, note 17). The northern boundary wall of the southern property is likely to date to the same period as also is a flint-lined drain or conduit about 1.50 m. south of it. The earliest phase of the northern corridor itself, one side of which was formed by the boundary wall, may perhaps be as early as this, though it is equally likely to belong to a mid second-century building phase. The earliest walls of the western wing, of brick-laced flintwork, were probably erected at the end of the first or the beginning of the second century.[15] This wing held a wide corridor, bounding the courtyard, with a range of rooms along its western side. At least one of these rooms was provided with under-floor heating and a box-flue lined duct in one wall.[16]

The building in the north-east corner of the courtyard was largely demolished around the middle of the second century in order to make way for a bath-house (Fig. 8).[17] The clay-floored building to the east was also pulled down: its western margin was totally removed by the bath-house whilst the rest was sealed beneath demolition debris and the area probably became a garden. The wide northern corridor, which may date to that or the preceding phase, connected the new wing to the western range. The eastern part of the bath-house incorporated two hot rooms with hypocausts. The northernmost of these was probably a *laconicum* (hot, dry room) and the southern most a *caldarium* (hot, moist room), probably with a hot plunge bath. South of the *caldarium* stood a sunken-floored room which was probably the *praefurnium* (stoke room and fuel store) and whose western end may have held a short, north–south flight of steps giving access from the courtyard. Beyond the steps lay the *frigidarium* (cold room). A doorway in the north wall of the *frigidarium* led to the *tepidarium* (warm room), west of which lay a small unheated chamber, perhaps a vestibule or *apodyterium* (changing-room). The unheated area between the northern boundary wall and the hypocaust of the *tepidarium* may have been part of the *tepidarium*, an

[15] *Ibid.*, 8, 18.

[16] Parts of this and another room were brought to light in a narrow trench cut along the Butchery Lane frontage of the Roman Pavement Museum in the final stages of the 1990 campaign.

[17] The north and west walls of the bath-house's *laconicum* were, at least in part, survivals from the earlier building and the wall separating the *laconicum* from the *caldarium* also stood on early foundations. Included in the lower floors of these hot rooms was a great quantity of polychrome painted plaster, presumably derived from the earlier building.

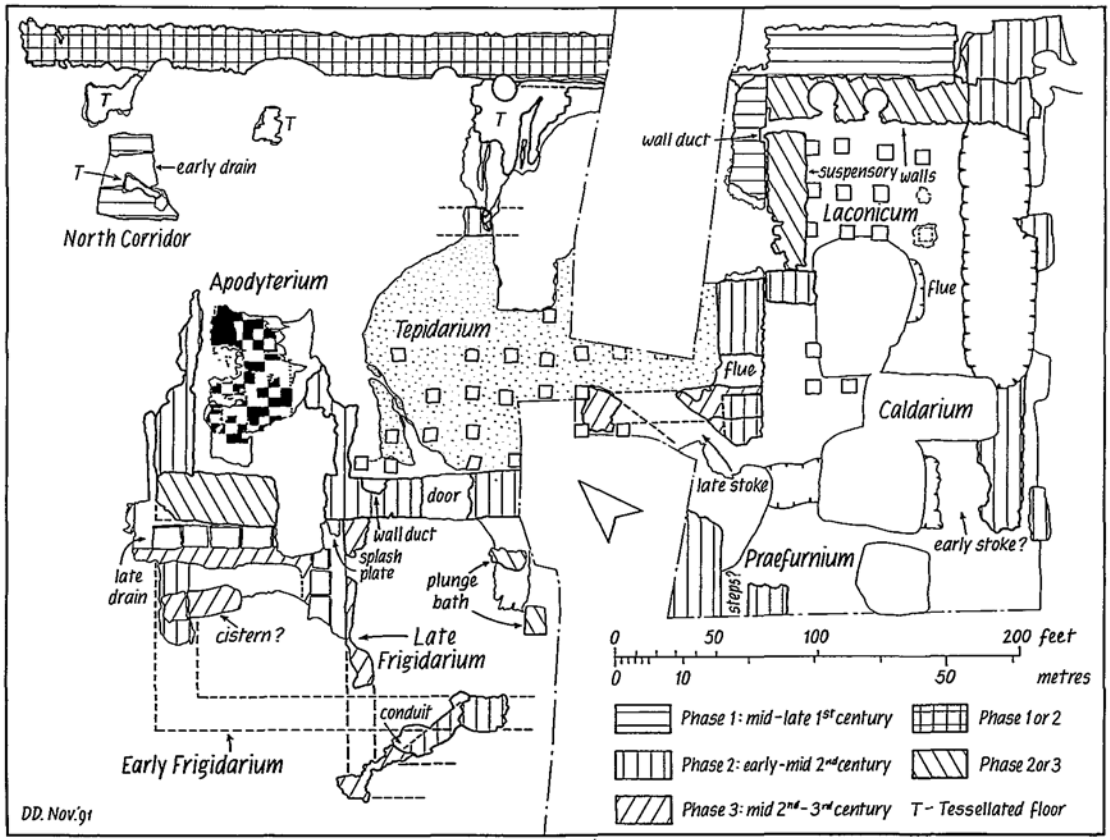


Fig. 8. Longmarket, Canterbury: Plan of the bath-house after removal of the tessellated floor of the *tepidarium* heating system.

apodyterium or simply the relatively narrow terminal of the main east–west corridor.

The new walls of the bath-house were of coursed flint, with tile quoins and jambs, sometimes on rammed gravel, sometimes on coursed flint footings. The eastern perimeter was reinforced with at least four (probably five) external buttresses. The lower floor of the hypocaust of the *tepidarium* was of *opus signinum*, those of the hot rooms of crushed mortar and the *pila*-stacks which supported the upper floors of both were of clay-bonded tiles. Arched openings below floor level connected the hypocaust under the *caldarium* with those beneath the other heated rooms and, presumably, with the *praefurnium*. Tile-lined flues set into the walls of the *tepidarium* and of the *laconicum* provided the draughts necessary to draw air through the heating system.

A small hypocausted room and *praefurnium*(?) added on to the eastern side of the west wing[18] may have belonged to this or a later phase, as too may a pair of tile-and-ragstone suspensory walls which helped support the upper floor of the *laconicum*. A short wall dividing the western corridor into two and another closing it off from the northern passageway are of similarly uncertain date: the former was of a rather indeterminate nature whilst the latter may have replaced an earlier partition.[19]

The bath-house's original system of arched openings was subsequently rearranged so that the *tepidarium* could be fired directly, without needing to heat up the hot rooms at the same time. The *frigidarium* was also altered. Originally long and narrow, it was shortened and broadened to create an almost square chamber. It seems to have been equipped with a polygonal plunge bath associated with a flint-lined conduit feeding in from the south-west corner of the room.

A tile-floored drain or gutter, following the walls of the remodelled bath-house and west wing, was laid around the edge of the courtyard, perhaps replacing an earlier series of plank-lined drains which crossed it diagonally from south-east to north-west. Finally, a structure was built on the courtyard side of the gutter, in the angle between the vestibule and *frigidarium*. Only a trace of one wall survived, of tiles bonded with *opus signinum*, and it cannot be interpreted with any certainty. The structure was probably quite small: a bench, step, cistern or *aedicula* (shrine) are amongst the possible identifications.

[18] *Op. cit.*, note 14, 14, Fig. 2, Fig. 6. This room's construction appears to have necessitated the closure of a doorway from the corridor into the courtyard.

[19] *Op. cit.*, note 14, 9–10, Fig. 2. Of the southern wing, only a short stretch of the northern wall and robbed out gutter were uncovered in 1990: there was no sign of the dog-leg nor of the 'period 3' structure indicated in *ibid.*, 16–17, Fig. 2.

At some stage a channel had been cleared through the thick sooty deposits on the hot rooms' lower floors. This ran between the eastern wall and the easternmost line of *pilae* via the flue connecting the two rooms, then turned and followed the northern suspensory wall across and into a gap, between the north and west suspensors, which led to the wall duct. The material removed during this operation was thrown to one side, between the *pilae*. The aim of this work, conducted under very cramped conditions, was presumably to gain access to the wall duct in order to unblock it.

More or less well preserved areas of tessellated flooring were found in most of the rooms in the western wing and bath-house as well as in the corridor which connected them. It could not be proven that any given floor was necessarily contemporary with the walls of the room in which it was found, so that a partial or general re-flooring of the building at a later date cannot be excluded. Traces of wall-plaster were also present in some rooms.

The heated room west of the western corridor had a black or dark grey tessellated upper floor and red wall-plaster with a quarter-round moulding of *opus signinum* at the base. A red tessellated floor was found in an adjacent chamber and a grey one in the western end of the corridor itself. The upper floor of the hypocausted room projecting into the courtyard did not survive.

The floor of the northern corridor consisted of a grey tessellated field with regularly spaced geometric mosaic panels running along the centre (Pl. I). All that remained of this paving outside of the existing museum area, was, unfortunately, a few small scraps of the plain background (but see below): the rest had been destroyed by the large number of intercutting rubbish pits, cess tanks and wells dug in the back gardens of the medieval properties along Butchery Lane.

The hypocaust of the *tepidarium* was covered with a dark grey tessellated floor as also was the unheated area to its north. A trace of plaster rendering survived against the inner face of the northern boundary wall in this area and there was a scar from an *opus signinum* moulding at its base. A minute fragment of a geometric mosaic panel which survived over the northern revetting wall of the *tepidarium*'s hypocaust may have marked the position of a doorway betwen the two areas, if these were partitioned, or else it must have been a decorative feature near the centre of the chamber. Part of the border of another panel was found just in front of the door which gave onto the *frigidarium* from the *tepidarium*. The vestibule was paved with large red and dark grey *tesserae* laid in a simple geometric pattern. All the ground level floors lay on *opus signinum* bases.

Several patches in the tessellated floors bore witness to the degree

of wear and tear to which they had been subjected, especially around the doorway between the *tepidarium* and the *frigidarium*.

About a fifth of the estimated area of the central courtyard was excavated to the east of the former museum basement and a flint-lined Roman well discovered beneath the former museum. The courtyard consisted of three or four major phases of paving, each with occasional patches and separated from each other by levelling dumps of clay. The main metallings consisted of hard poured mortar levels liberally studded with gravel and pebbles. A faint east–west linear depression in the surface of the first phase surface, just south of the south-east angle of the late *frigidarium*, may have been a wheel rut.

The northern properties

A sequence of Late Iron Age and early Roman clay floors with associated hearths, post-holes, beam slots and ditches was found just north of the bath-house. Only a small area had survived and it was not possible to reconstruct the overall layout of the buildings which had stood there.

The earliest building, dating to the mid first century A.D., between the former museum and the Roman road was represented by an *opus signinum* floor surrounded by traces of beam slots for wooden-framed walls. This was superseded by a structure with ragstone dwarf walls on the exterior, flanked by a gravel-metalled courtyard to the east, by a (covered ?) walkway flanking the road ditch to the north and by an area given over to rubbish disposal to the south. The internal divisions, of timber or timber and clay, were frequently altered and many of the small rooms on the building's east side contained hearths. The majority of the floors were of clay but cobbles or *opus signinum* were occasionally used. The small rooms opened westwards onto a corridor, holding a shallow gully or gutter, which ran the full length of the building. There were probably further rooms beyond the corridor and there was a well on the gully's western margin. The building was later extended south and east, the new east wall being of flint, and the gravel courtyard was replaced by one of rammed chalk. A long lean-to was built on the south side of the courtyard, against the southern property.

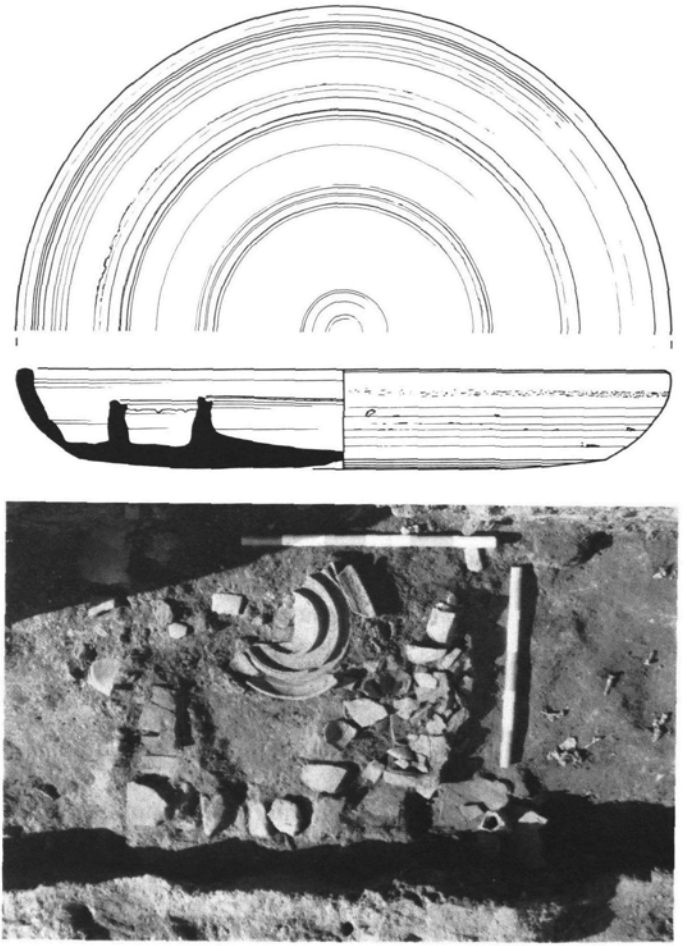
The main building and lean-to were destroyed by fire in the late second or early third century. The fire had probably spread from one of the hearths. One hearth yielded a curious circular dish-like vessel which was found still lying where it had been abandoned (Pl. II).[20]

[20] The function of this vessel has not yet been positively identified.

PLATE I

Longmarket, Canterbury: Detail of mosaic panel with geometric patterns. Looking north-east.

PLATE II



Longmarket, Canterbury: Above: Drawing of unusual Roman vessel from the Longmarket. Fine pink-buff ware. Late second to early third century. Scale: 1:4. Below: Vessel *in situ* with other pottery on a hearth of burnt Roman kitchen.

The heat generated here had caused the plaster rendering of the clay wall behind the hearth to buckle and fall away and had partially vitrified the clay's exposed surface.

The debris from the fire was then levelled off and a new building, with flint walls, erected. Very little of its plan survived, but it appears to have ignored the lines of the earlier buildings and may have been an extension of the southern complex. It was probably contemporary with a large rubble-lined well discovered to the west.

To the north of the bath-house, the middle and late Roman levels had been almost entirely destroyed by later disturbance, leaving only a pair of north–south gravel wall foundations and remnants of a series of clay and mortar floors subsiding into an earlier feature. Deep gravel foundations for an east–west wall, probably Roman, were briefly visible when the construction company extended the excavated area eastward by a couple of metres. Its precise position could not be plotted, but it was seen to approximately continue the line of the east–west corridor's north wall.

The end of the Roman structures (Fig. 9)

Generally, medieval and later disturbance had destroyed or obscured the evidence for the abandonment, demolition or robbing of the latest Roman buildings, but some points of interest did emerge from the excavation of the bath-house and of the area immediately north of it. A pair of adjacent sunken-featured buildings, backfilled in the ninth or tenth century, were constructed right up against the gravel foundations of the more easterly of the north–south mid-late Roman walls immediately north of the bath-house,[21] suggesting that it survived to some height well into the Anglo-Saxon period. The eastern wall (and probably also the internal partitions) of the hot rooms and *praefurnium* had been almost entirely robbed out to foundation level at a relatively early date, probably whilst the rest of the bath-house was still in use. By comparison, the wall separating the *laconicum* from the *tepidarium* remained standing well above floor level until the Anglo-Saxon or early medieval period and the north wall of the *laconicum*, which also functioned as a property boundary, stood long enough to serve as a wall of a ninth(?) century sunken-featured building until this was extended farther south.[22] A second phase of robbing, pre-dating the Anglo-Saxon extension and probably contemporary with the demolition of the *laconicum*

[21] *Arch. Cant.*, cvii (1990), 221.
[22] *Ibid.*

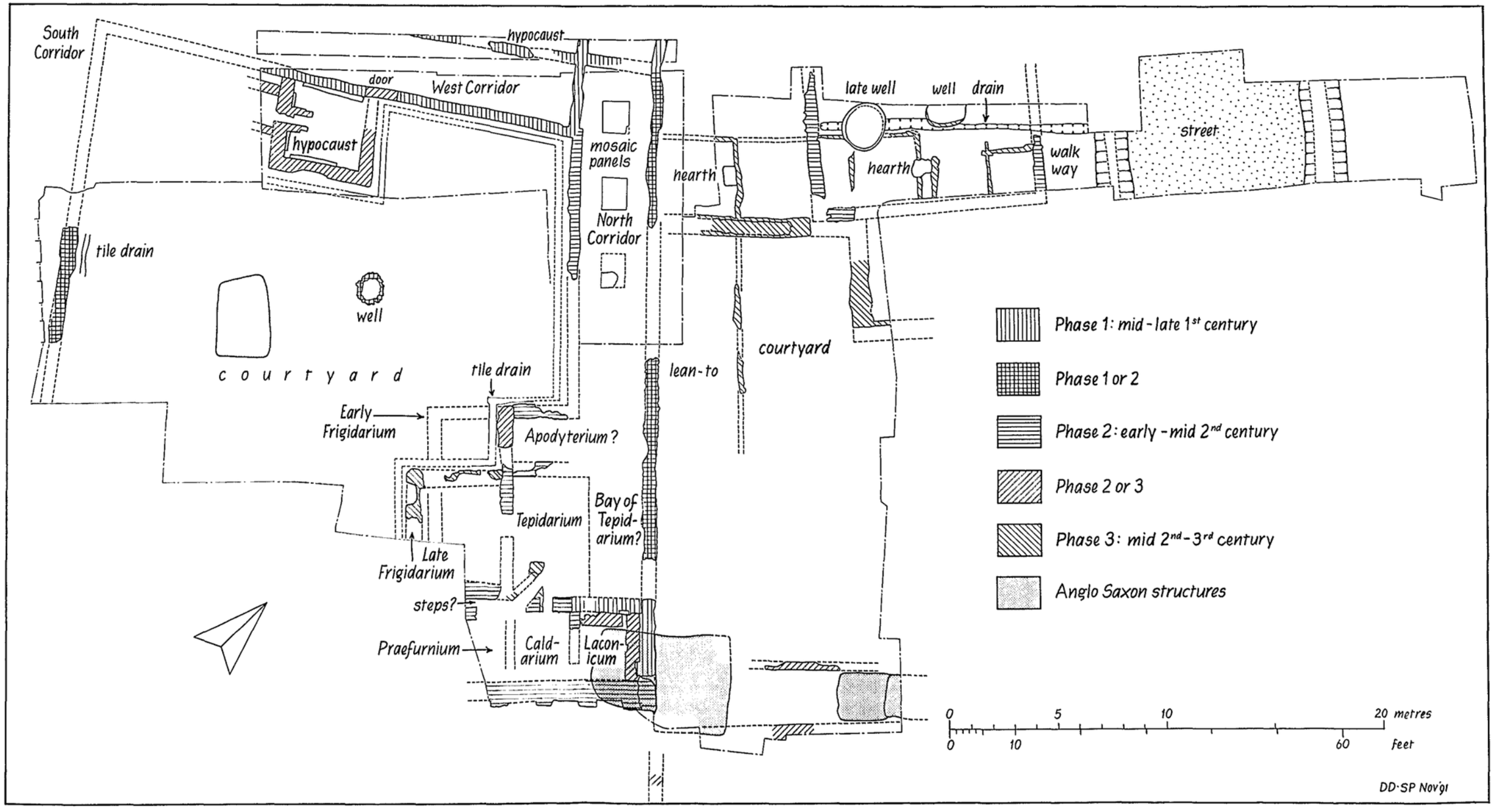


Fig. 9. Longmarket, Canterbury: Interim plan showing mid–late Roman structures and the positions of Anglo-Saxon sunken-featured buildings.

north wall, removed the east wall of the *caldarium* and of the *praefurnium*. This activity continued across the width of these rooms to dismantle most of such vestiges of the *pilae* and buttresses as the earlier robbing had spared. The hypocaust system of the *tepidarium* appeared to have been deliberately packed with soil some time before its western and northern walls were robbed out. The upcast from this robbing was thrown directly onto the remains of the tessellated paving, sealing a small post-hole (which contained a drop of quicksilver) cut through the floor.

Given the above factors, the following sequence for the late history of the bath-house's structure may thus be proposed, though only tentatively and not yet tied to an absolute chronology. The *laconicum* and *caldarium* went out of use sometime in the third or fourth century, their hypocausts having already been isolated from that of the *tepidarium*, and those walls which were no longer of service were subsequently robbed out. The *pilae* and upper floor may also have gone at this stage whilst the retention of the north wall of the *laconicum* demonstrates that the property boundary still persisted. The *tepidarium*, and presumably the rest of the wing, continued in use after the demolition of the eastern rooms but at some point, probably sooner rather than later, the hypocaust was put out of commission and the wing ceased to operate as a bath-block though it was still occupied, perhaps by 'squatters', in the late Roman or early Anglo-Saxon period. The site was then effectively abandoned, becoming an occasional quarry for building materials, until reoccupation began in the mid to late Anglo-Saxon period. The Anglo-Saxon structures took advantage of the existence of standing walls here and there, but the Roman property boundary had clearly ceased to matter by the time the old north wall of the *laconicum* was knocked down and built over.

SIMON PRATT

9. *Wingham Coin Hoard*

During 1990 three groups of late thirteenth-century silver pennies, totalling 484, were found at the same spot (N.G.R. TR 22755595) on agricultural land just west of the former site of Appleton Farm, now demolished, situated one mile south of Wingham.

The first discovery of 183 coins was made by two farm workers in March 1990. These have been identified and listed by Dr B.J. Cook of the British Museum. At a local inquest held at the coroner's court they were declared treasure trove and returned to the finders.

The second group was found on the 15th–16th September by Mr M. Presland with a metal detector and consisted of 204 coins. This discovery was brought to the attention of Canterbury Archaeological Trust and the coins were identified by the author before being handed in to the coroner. At the request of the Director of the Canterbury Archaeological Trust, the landowner Mr H. Maude and the tenant farmer Mr S. Twyman gave permission for the Trust to conduct an investigation of the area in an attempt to locate the seat of the hoard and perhaps recover information relating to its original deposition. This work took place on the 8th–10th October during which time a further 97 coins were found, but no trace of the seat of the hoard was discovered.

The coins of all three parts consist of pennies struck in silver of 92.5 per cent fineness and are mainly of Edward I from mints in England and Ireland with some of Alexander III of Scotland. A breakdown of each part can be summarised as follows:

	Hoard I	Hoard II	Hoard III
English	163 (89%)	175 (86%)	86 (89%)
Irish	4 (2%)	14 (7%)	3 (3%)
Scottish	16 (9%)	15 (7%)	8 (8%)

The table shows that the percentage breakdown of the English, Irish and Scottish series varies little from each discovery indicating that they are almost certainly parts of a common group or hoard. How much of the total hoard thse 484 coins represent cannot be absolutely certain, but it is felt likely that most of the hoard has probably been retrieved.

The Wingham II group of coins were recovered by Mr Presland during a systematic search of a well-defined area measuring approximately 7.5 m. east–west and 13.5 m. north–south. Nearly all the coins were found clustered along the east side of this search area with a particularly heavy concentration of finds, including a number of clusters comprising 20–30 coins, in a 3.30 × 6.70 m. sector. During this operation Mr Presland thoroughly turned over agricultural topsoil to the level of the brickearth subsoil.

The Wingham III group recovered during the Canterbury Archaeological Trust's investigation of the site effectively represented a continuation of the search pattern inaugurated by Mr Presland. A more systematic and archaeological approach was applied. This consisted of the careful removal of topsoil and cleaning of natural subsoil to reveal changes in colour, texture and content of the subsoil reflecting the presence of an archaeological feature. Excavated topsoil was checked by metal detector for stray finds. The area investigated by Mr Presland was sub-divided into a grid of 1 m.

squares and all finds were plotted. No archaeological features were found cutting subsoil. Plough furrows were present across the entire investigated area, and it became apparent that the original seat of the hoard must have been entirely removed by the plough. A number of test-squares were cut to the north, south and east of the main study area with limited success: only 9 coins were recovered from these satellite trenches. A final more widespread search of the area was undertaken with a metal detector. No further coins were recovered during this final operation.

In the final analysis, it would appear that the bulk of the hoard was concentrated in an area approximately 3 m. east–west by 9 m. north–south (most plough furrows were aligned north–south). A few stray coins lay up to 3 m. outside the main scatter on all sides except to the east: here virtually no coins were detected. It is unlikely that any of the clusters in Wingham II represented the remains of the hoard *in situ*, since they were recovered from within agricultural topsoil which has been repeatedly turned over by ploughing. These concentrations were situated roughly along the same north–south alignment, following the line of ploughing and they appear to represent the gradual dispersal of the hoard by this means.

No definite trace of a container for the hoard was found. Although approximately a dozen late thirteenth- to early fourteenth-century pottery sherds representing three or four vessels were recovered during Wingham II and III, it is unlikely that they are associated with the hoard. The absence of any tangible soil stains indicating the cutting of a pit or pottery indicative of a container suggests that the coins may have been deposited in a perishable receptacle such as a cloth or leather bag or a wooden box.

The latest coins of the Wingham hoard belong the Class VIa (*c.* 1292–96) of which there are 5. The more plentiful coins of this period (Class VII, *c.* 1294–99) are absent, indicating that the hoard was probably deposited before Class VII coins entered circulation, probably *c.* 1292–93. Also absent are Continental imitations, which had been entering the country for some years and began arriving in much greater numbers from the mid 1290s. However, their absence could be due to deliberate exclusion from the collection as they were of a lighter weight.

At an inquest held at the coroner's court in November 1990, the second and third groups were also declared treasure trove. After the British Museum declined to keep any of the coins, the second group was returned to the finder and the third donated to Dover Museum in whose district the hoard was discovered.

IAN ANDERSON

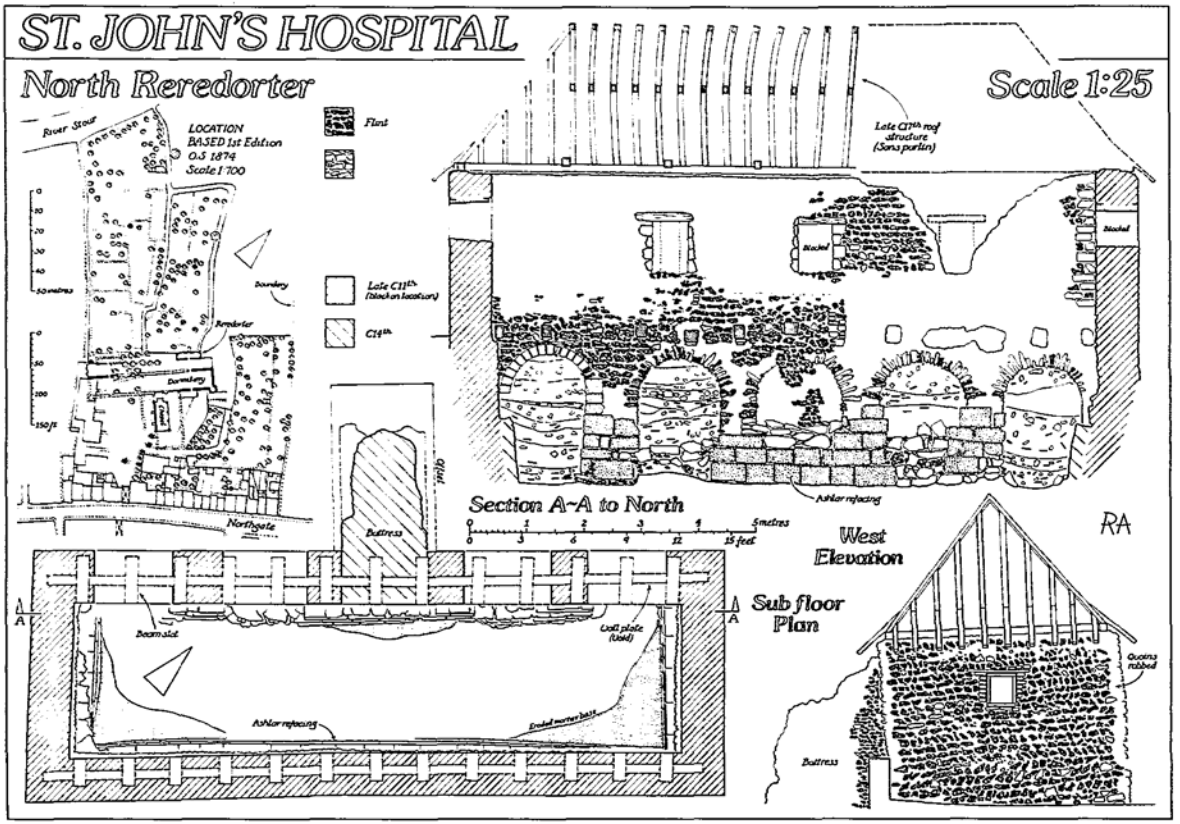


Fig. 10. St. John's Hospital, Reredorter, Canterbury: location, sub-floor plan and elevations.

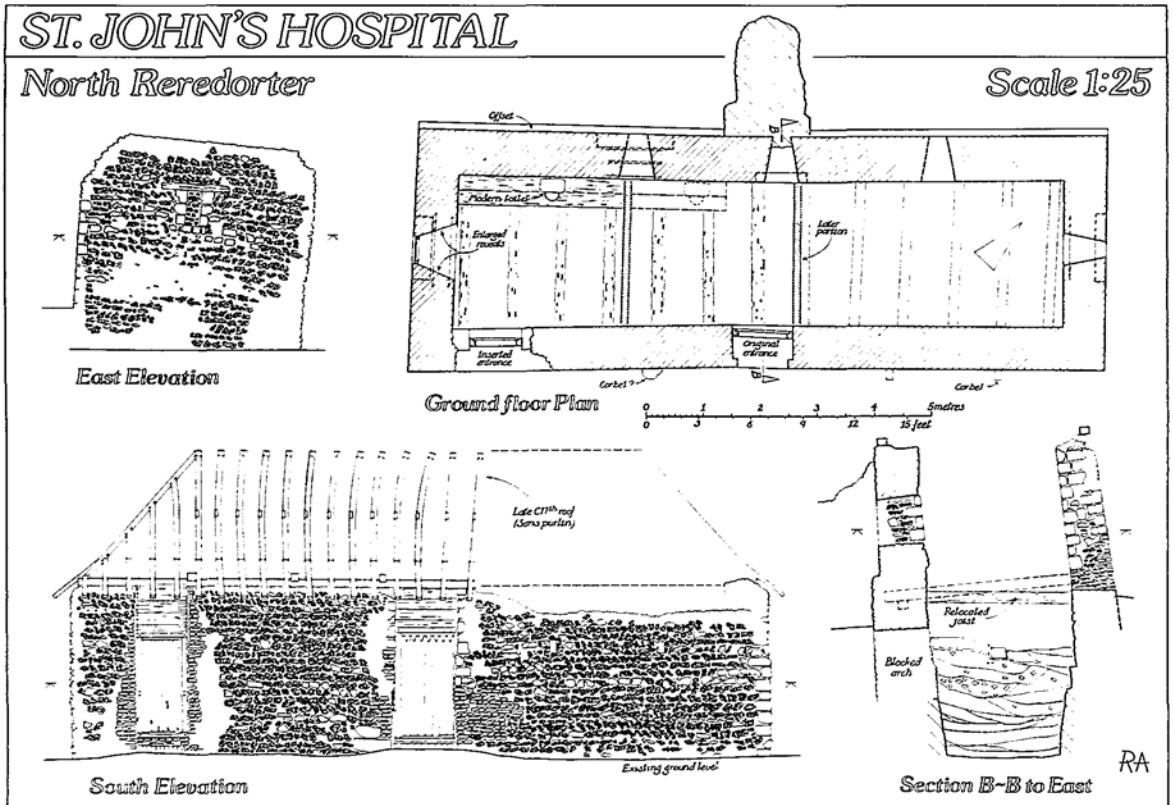


Fig. 11. St. John's Hospital, Reredorter, Canterbury: ground floor plan, elevation and cross section.

10. *St. John's Hospital Reredorter, Canterbury* (Figs. 10–11, Pl. III)

The site of St. John's Hospital lies on the north-west side of Northgate street, opposite St. Gregory's Priory. The land here slopes gently down towards the River Stour and stands at an elevation of between 8.75 m. and 7.25 m. A.O.D. The subsoil, at least on the lower part of the site, consists of river deposited gravels and mud silts.

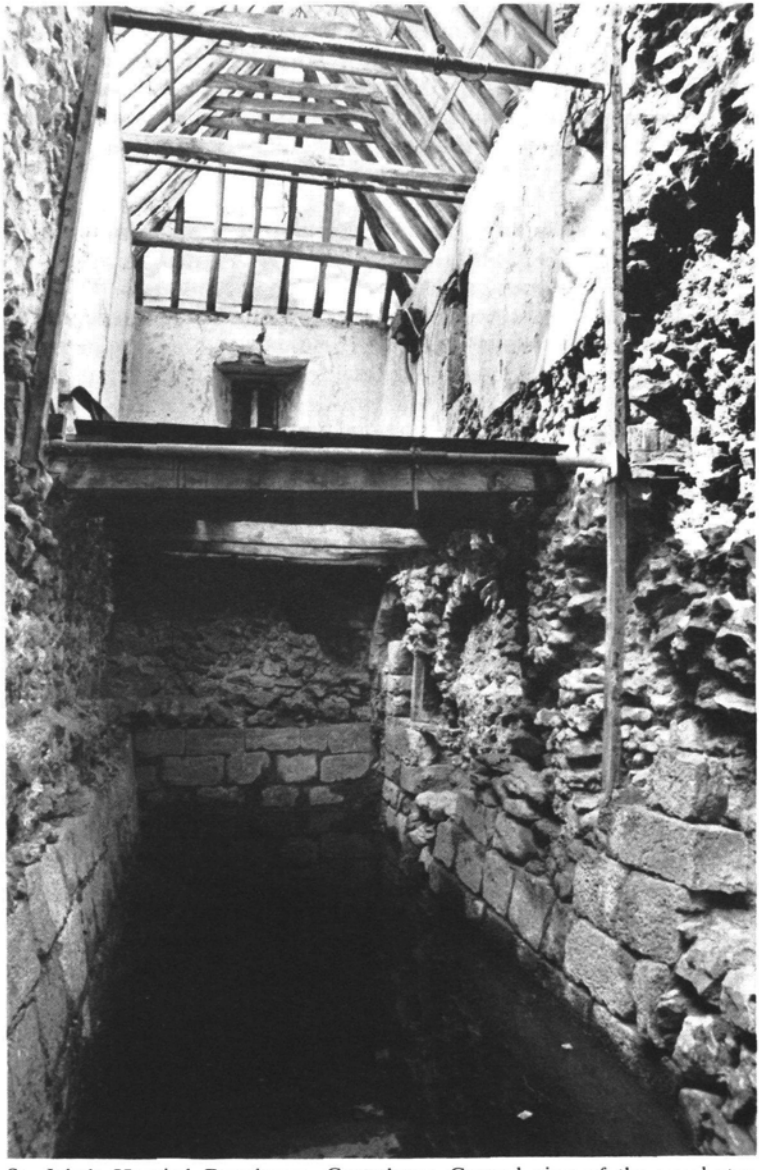
The overall plan of the original hospital complex is now tolerably clear. The medieval buildings were dominated by the vast dormitory (dorter) range, with overall internal dimensions of some 62 m. (north-east to south-west) by 8.45 m. (north-west to south-east), originally divided for men and women. Its long axis was parallel to Northgate and the river. Joining this dorter range centrally at a right angle on the southern side was the substantial double chapel, which still partially survives and is in everyday use. On the north-west side of the main dorter range were the two well-built masonry latrine blocks (reredorters), again, one for men and one for women. These were set some 5 m. back from the main dorter range. To the north-west of the southern latrine block lay another substantial masonry building, perhaps the kitchen. Above ground remains survive of all these buildings except for the possible kitchen block, which was first revealed by trial excavations in 1990.[23] The hospital precincts originally continued down to the River Stour and were long used as nursery gardens, but most of this area has now been converted into a car park. The positioning of the hospital, upon the River Stour's flood plain may perhaps be regarded as being a somewhat marginal location, possibly occasionally prone to flooding.

The hospital has continued in use until the present day. The survival above ground of substantial pieces of Norman walling, together with the continued occupation of the site has meant that there has been very little formal archaeological excavation on the site until that begun by the Canterbury Archaeological Trust in the 1980s.[24] The exceptionally well-preserved north reredorter block has now been the subject of a detailed study prior to its full restoration. The results of this work are briefly described below.

A full survey of the surviving medieval remains of the hospital complex was undertaken by the Canterbury Archaeological Trust in 1983–84. The significance of the present building was quickly identified and a partial excavation of the filling of the structure was conducted at this time. This revealed an interesting sequence of soil

[23] *Arch. Cant.*, cviii (1990), 226–31.
[24] *Arch. Cant.*, ci (1984), 300–1; *Arch. Cant.*, cii (1985), 248.

PLATE III



St. John's Hospital Reredorter, Canterbury: General view of the reredorter interior. Looking south-west.

deposits within the reredorter and further underlined the importance of the buildings.

After lengthy negotiation it was decided that the medieval ruins should be consolidated and that the well-preserved north reredorter block should be fully restored to serve as an interesting addition to remains available for public inspection. More detailed archaeological work on this building was then conducted between January and June 1991. This work took place in four phases:

(i) A complete survey of the existing structure, including a full rectified photographic survey;
(ii) Survey of the roof structure;
(iii) Excavation and recording of the deposits filling the reredorter below the floor level; and
(iv) Environmental sampling of the lower deposits.

This integrated approach has provided a remarkable story concerning the continuous evolution of a piece of sanitary engineering over some 800 years. Following the archaeological work, the structure is being re-roofed and fully restored.

In January 1991 the structure was in a sorry state. The roof had been severely damaged by recent gales. The vegetation, cleared in 1984 was beginning to re-establish itself, and the interior was filled with unwanted garden tools and old furniture, all thoroughly soaked by water leaking through the damaged roof. Clearance work soon revealed a complex structure of several phases.

The bulk of the building was clearly Norman and no doubt contemporary with the hospital's original foundation date of *c.* 1084–85, with windows and a central doorway edged in characteristic Caen stone. The peg-tile roof, although damaged, was supported by timber work still in a remarkably good state. From its construction this appeared to be of seventeenth-century date. An inserted doorway and alterations to some of the windows were of nineteenth-century date. Two internal wooden partitions, floor boards, a 'Vecta Straight Back' W.C., its associated 'Burlington' cistern and wooden seat were also of nineteenth- or early twentieth-century date.

From a careful study of the building the following sequence for the evolution of the structure may be advanced.

Period I (*c.* 1085)

The north reredorter (together with its southern counterpart) was constructed as an integral part of the hospital complex. Initially, a

large rectangular pit some 3 m. in depth was cut into the underlying river silts (to a depth of *c.* 5.40 m. A.O.D.) a little to the north-west of the main dormitory range. This was then lined with solid masonry on three sides. On the fourth, north-western side, a series of five round-headed arches, each some 2 m. in height and about 1.40 m. in width, were built (three subsequently blocked). The masonry piers between these arches ranged between just 0.65 m. and 0.92 m. across, effectively leaving this side open for the removal of effluent. Implicit in this arrangement is the existence of some sort of excavation of a similar depth outside this wall. The ground here has not been examined in any detail, but it must be significant that the north-west side of the reredorter block faces the river, situated some 100 m. distant. It seems fairly certain that some sort of water flushing arrangement connected to the river was tied in with this building. The precise nature of this is not yet clear but the 1874, first edition Ordnance Survey map for Canterbury shows a network of open ditches or leats running from the hospital complex to the Stour. One of these runs from the north corner of the north reredorter block. It seems quite possible that this represents a successor to the original Norman arrangements which were perhaps otherwise similar. Heavy erosion of the chamber floor suggests that a substantial flow of water, which entered the westernmost arch, flushed the contents of the cess chamber before discharging through the easternmost arch. If this was the case, the three remaining arches would have been for ventilation purposes only. Some limited excavation work in the old nursery grounds to the north-west of the hospital complex has revealed further evidence for open leats in this area, but precise details of the arrangement remain unclear.

Although the arrangements beyond the arches of the north-west wall remain uncertain, it is clear that the arch-tops lay just below floor level in the original building. The floor itself was supported upon thirteen substantial square-sectioned timber joists, some 0.20 m. across. These ran across the width of the building and were set in deep wall sockets. Continuous wall-plates, measuring some 0.12 m. high by 0.16 m. across were built into the thickness of the north-west and south-east walls. These plates took the weight of the joists which were spaced at intervals of about 0.80 m. In the south-western half of the building substantial timber joists remained *in situ*. It is not yet certain if these are of Norman origin. If this is the case, they have certainly been repositioned in later times.

Above ground level the Norman walls stood mostly to their original height of around 2.60 m. and created a long, rectangular building measuring internally some 10.55 m. by 2.65 m., its long axis being parallel to the main dormitory range (i.e. north-east by

south-west). Access was by means of a single, centrally placed doorway in the south-east wall, facing a ground floor entrance into the dormitory range. This doorway was 1.07 m. wide, and several of its Caen stone jambs, including the rebates for an earlier door, are still visible.

The building was lit by five small squinted windows, also originally edged with Caen stone. Three of these were set at intervals along the north-west wall, whilst there was one centrally placed in each end wall. Original oak lintels remained over three of the windows. Nothing of the original Norman roof had survived, however.

The walls of the north reredorter block were generally about 0.75 m. thick with an external offset of some 0.10–0.13 m. along the north-west wall, just above ground level. They were constructed of large flint nodules, ragstone lumps and some lumps of Thanet Beds sandstone, roughly coursed and set in a fairly soft cream lime mortar containing frequent small flints, pebbles, and chalk lumps. There was some evidence that both the external and internal wall faces of the building were originally rendered. Apart from the quoins and window jambs, which are all dressed in Caen stone, no other worked stone was used. Consequently, the building is plain and undecorated.

Although a substantially constructed building, there was a major failing in its original design. The great weight of the north-west wall was mostly taken by only four narrow piers, founded upon soft river mud. The result, predictably, was a slow subsidence of the north-western wall, which eventually caused the entire building to lean quite markedly. In its later stages the floor of the building would have had a very definite slope down to the north-west, especially at the north-east end.

Some time perhaps during the fourteenth century it appears likely that a fire devastated much of the Norman hospital complex. Archaeological evidence suggests something of the intensity of this fire. Many of the Caen stone edgings to doors and windows throughout the hospital complex show a characteristic pink tinge caused by severe heat. Such burnt Caen stone may be found on the remains of the main dormitory range. A charred wooden lintel still *in situ* over one of the doorways here provides further clear evidence of fire. The fire must have spread to other buildings in the hospital complex (origination in the dormitory seems most likely). The north reredorter appears to have been severely damaged as the fire spread.

Within the north reredorter burnt Caen stone blockwork occurs around the doorway and on three window surrounds, whilst a pinkish tinge to areas of original internal rendering is also likely to be due to the fire. Charred wooden lintels occur over two of the windows and five of the wooden floor joists showed areas of burning. From the

variable position of this burning (sometimes on top, sometimes on the side and sometimes underneath) it seems clear that these joists had been later repositioned; indeed, they could have been re-used here from elsewhere in the fire damaged hospital complex. It seems highly likely that the original Norman roof was completely destroyed during this fire. Certainly nothing of it has survived.

Period II (fourteenth century)

Suffering from subsidence and severely damaged by fire, the north reredorter seems to have undergone major renovation work in the later fourteenth century. To stop further subsidence of the building a large rectangular buttress was added externally upon the north-western side of the structure. This was centrally placed and completely blocked the middle arch in the north-west wall, together with the splayed window above it. At the same time, or a little later, the lower parts of the reredorter walls were relined internally, using massive blocks of squared ragstone. (Large quantities of very similar material were being used in the city walls at this time.) This relining no doubt helped to stop any further subsidence, but principally seems to have been designed to reface the original Norman masonry which by that time was presumably in a somewhat eroded state. The original Norman arch openings, with the exception of the now blocked central arch, were retained, although two more were partially blocked sometime later.

Period III (seventeenth century)

During the seventeenth century much of the old medieval hospital complex was demolished and was soon replaced by a series of new timber-framed cottages for the residents. It is probably to this seventeenth-century rebuilding phase that the existing roof of the north reredorter relates. Implicit in this is the fact that the reredorter continued in use. Also at some stage (probably in the seventeenth century), on the evidence of several inserted stone corbels on the outside of the south-east wall, it seems likely that the open yard between the then ruinous dorter and north reredorter contained at least two lean-to buildings, one built against each structure.

Period IV (nineteenth century)

Further large scale renovation work to the by then aged northern reredorter was undertaken during the nineteenth century when the existing flint-built almshouses were constructed. It would seem that

by this time the north-eastern third of the building had lost its roof and fallen into disuse. The roofed, south-western two thirds of the building were now divided into two roughly square rooms separated by a central wooden partition. A new access doorway with brick jambs was cut at the western end of the south-west wall. Each room thus had its own door set in the south-east wall. Also at this time the still sloping floor of the building seems to have been properly rectified (perhaps for the first time). This was achieved by cutting down the joist sockets in the south-east wall until they were at the same level as those in the lower north-west wall. (The original socket voids were then filled-in with a white mortar of a type very similar to that used for the new doorway.) Taken together, it seems clear that the two new rooms created within the north reredorter mark a major change to the toilet facilities on the site. From Norman times the double hospital had always had a male and female latrine block. It would now seem that the southern block was abandoned and both sexes were accommodated in the northern block.

As part of the process of refurbishment a large quantity of soil, domestic rubbish and building rubble was tipped into the void under the floor of the structure. This dumped material totalled some 1.10 m. to 1.70 m. in thickness. One of the lowest dump deposits consisted of a substantial layer of loose purple-grey coal ash and cinder. This layer produced several Keiller's marmalade jars whose labels refer to the International Exhibition of 1862. This indicates a mid to later nineteenth-century date for the deposition of this material. Large quantities of china, glass and clay pipe fragments were also recovered from the dump deposits. The reason for dumping this material below the floor of the building is not certain, but it seems probable that it was intended as an easy, straight-forward way to give further stability to the structure. Moreover, the nineteenth-century deposits continued into the arches, indicating that these had remained at least partially open until then. Thus, the unpleasant and primitive below-floor workings of the reredorter were finally sealed and shortly after two modern porcelain W.C. pans were inserted. These were set upon brick pedestals resting on the backfill deposits and were connected by ceramic pipes to the still extant sewerage system. Victorian sanitary engineering had thus been extended to yet another part of old Canterbury.

From accounts of older hospital residents it would seem that these Victorian facilities continued in use until *c.* 1948 when small brick-built bathrooms were added to the Victorian almshouses, thus making the outdoor privy finally redundant. From then on the north reredorter was reduced to the status of a general garden shed and rubbish store. Vegetation engulfed the structure and its true

nature remained largely unrecognised until work by the Trust in the 1980s.[25]

The filling of the north reredorter

Following the removal of the floor boards and most of the internal fittings it was possible to excavate archaeologically the filling of the north reredorter. The north-eastern (abandoned) third of the building had been excavated to base level in 1984, leaving the remaining deposits to be dug in 1991.

Upon removal of the existing nineteenth-century floor boards, a series of substantial wooden joists were revealed, totalling seven in number. Mortices, rebates, numerous dowel holes and areas of burning clearly indicated that these were re-used, and it seems fairly certain that they are of medieval origin.

Below the floor joists was a void between 0.60 m. and 0.80 m. in depth. Below this the first stratified soil deposits occurred. These consisted of the mid to late nineteenth-century dump layers noted above, totalling some 1.10–1.70 m. in thickness. These dump layers sealed a series of earlier deposits totalling some 0.60–0.70 m. in thickness. The lowest of these layers rested upon a dark grey mud silt, clearly representing a pre building river-laid deposit, probably disturbed by workmen's feet during the medieval construction work.

The deposits filling the lower part of the reredorter generally consisted of interleaved layers of organic, cess-like material, and demolition deposits containing much crushed mortar, broken roof-tile and flint lumps. These presumably relate to phases of minor repair work to the upper walls and roof. The organic deposits are clearly to be expected, given the nature of the building and over 2 tonnes of sample material were taken from the lower filling of the reredorter for study at the York Environmental Archaeology Unit. A thin cream mortar layer located upon the surface of the river mud at the foot of the north-east, south-east and south-west walls must represent the construction layer associated with the fourteenth-century relining of the structure.

A considerable quantity of pottery and other finds were recovered from the deposits filling the lower part of the reredorter. Unfortunately, no original Norman deposits had survived and those excavated relate to the later phases of the use of the building when the inferred Norman water-flushed system had ceased to be completely effective.

[25] *Op. cit.*, note 24.

The mortar construction layer at the base of the relined walls produced a few pot-sherds dated to the period 1375–1450, confirming a late fourteenth-century (or perhaps early fifteenth-century) date for the relining. The lowest of the fill deposits yielded pottery of the period 1475–1550. Above this, layers containing sixteenth- and seventeenth-century pottery gave way to a final deposit with material of the early nineteenth century. This was sealed by the later nineteenth-century dump deposits. Thus, a fairly long time span is contained within a fairly thin sequence. To what extent these deposits represent a continuous, unbroken sequence is not certain. It seems possible that other material may have been flushed away or dug out, leaving no trace. Nor it is clear to what extent the excavated deposits had been relaid by moving water. On balance, a fairly intact sequence seems to be represented.

The north reredorter block of St. John's Hospital constitutes an almost unique structure surviving largely intact from the early Norman period. The extent of the remaining Norman work would in itself be remarkable, but what makes this building even more interesting is the great length of time (well over 800 years) that this basic structure served its original purpose. There can be no doubt that this building is a strong contender for the title 'the world's oldest continuously used privy'.

Nor has the buiding's life come to an end, for with its restoration it begins a new career as an educational centre, illustrating the evolution of sanitary engineering – a vital component of urbanised life from earliest times.[26]

KEITH PARFITT

11. *St. Nicholas Church, Thanington*

In October 1990 damp-proofing works against the north wall of the northern tower of St. Nicholas Church, Thanington, exposed part of a medieval masonry coffin with decorated Purbeck marble cover. Workmen undertaking the reconstruction work accidentally broke the cover at its west end. Subsequent removal of the broken section indicated that skeletal remains of perhaps two individuals were

[26] The writer would like to thank English Heritage, Canterbury City Council and the Trustees of St. John's Hospital for financing the archaeological and restoration work. On site, the present day Sub-Prior of St. John's Hospital, Mr Charles, took a lively interest in the operation and gave every assistance to the excavation team. Ms M. O'Connor, site architect, and the building team from Messrs. Fullers of Faversham also took a keen interest in the work and gave considerable help in a variety of ways.

contained within. The discovery was reported to the Trust by the incumbent, the Rev. Len Cox, and permission was given for a more thorough inspection to take place.

The contractor's trench, located at the base of the tower's north internal wall, had exposed the north side of the coffin to its full depth. The burial which was hitherto unknown had been sealed beneath a Victorian glazed tile floor and a bedding of rammed chalk. Consent was given for the removal of additional floor-tiles to reveal the entire coffin structure.

The coffin, cut from a single block of Caen stone of trapezoidal shape with vertical sides 0.32 m. deep, measured externally 2.10 m. east–west, 0.74 m. at the west end and 0.34 m. at the east end. The coffin walls and base were uniformly 9 cm. thick. A raised step with head niche existed at the west end of the coffin. The step 0.28 m. east–west, with centrally located recess 0.23 m. wide, was cut to just above the level of the coffin floor. The leading edges of the step and recess bore a 45° chamfer. The internal top edge of the coffin walls was simple chamfered.

Two 1 cm. diameter drainage holes pierced the base of the stone coffin, these set centrally, located under the pelvis of the primary burial. The holes were joined by six roughly-cut shallow grooves or channels which extended north and south of the hole portions. The interior of the coffin was well-finished with fine tool marks in evidence on all faces. The exterior was equally well-executed, but here the toolmarks were at opposing angles and less fine, indicating that finishing was considered unnecessary.

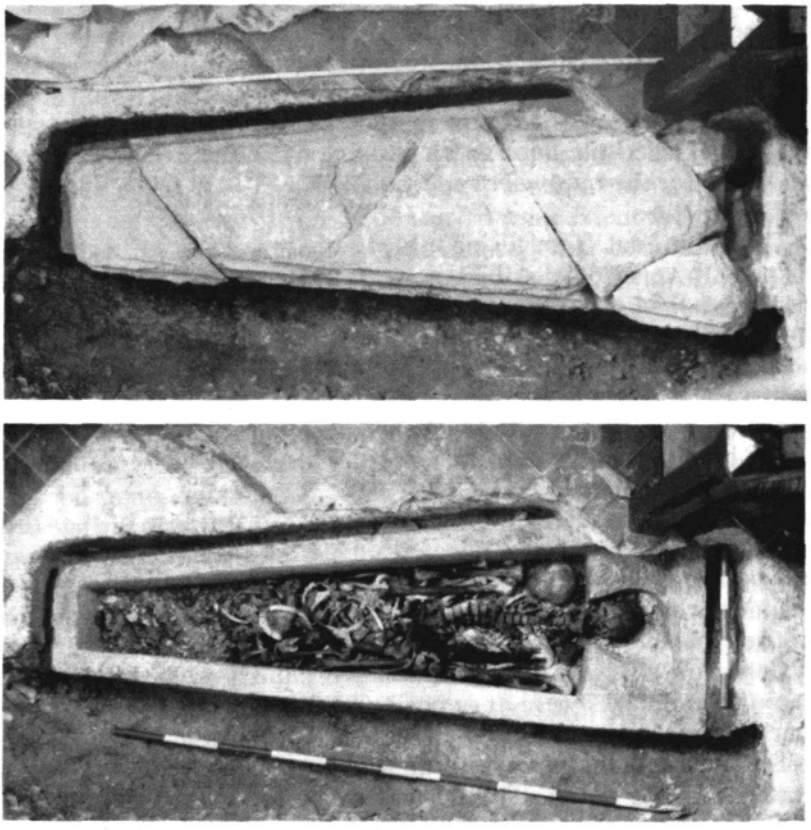
The Purbeck marble cover uniformly 14 cm. thick was cut to precisely fit the coffin. The lid was decorated with double cavetto mouldings 8 cm. wide and a high polish was evident on mouldings and parts of the lid surface. No evidence for further decoration or indentures for brasses or other metal fittings were discerned. Extensive scars in the surface of the lid were probably the product of general wear and tear. Although contemporary floor-level was not established, it appeared likely that the coffin lid was set slightly above floor-level, perhaps to almost the full thickness of the cover.

Besides the more recent break at its west end the lid had been deliberately cut. Diagonal and roughly parallel cuts executed with a fine-toothed saw subdivided the lid into three equal parts. This subdivision probably took place when the coffin was re-opened for the later interment.

The constructional details of the coffin and the decoration of the lid suggest that the primary burial may have been of fifteenth-century date. A date for the re-opening of the coffin was not established.

The two skeletons were practically complete although certain

PLATE IV



St. Nicholas Church, Thanington: General views of the stone coffin. Scales: 2 m. and 0.25 m.

bones were very fragmentary. SK 1 (male: 35–45 years) was supine (lying on its back), fully articulated with arms by its sides (Pl. IV). The right hand was positioned under the pelvis. Most of the foot bones were missing. SK 2 (male?: 30–40 yars) was represented by dis-articulated bones, the long bones had been carefully (but not anatomically) placed at the sides of SK 1. Large fragments of wooden coffin were also included with the bones. The skull was placed at the head end, next to the right shoulder of SK 1. SK 2 was perhaps originally buried elsewhere in a wooden coffin and reinterred inside the stone coffin after some considerable time had elapsed.

So far it has not been possible to locate any documentary evidence which would identify the burials. There is some evidence of a familial

relationship between SK1 and 2 from the dry bones themselves. Both skulls display persistence of a suture of the frontal bone. This condition, known as metopism, has an incidence of *c.* 9–11 per cent in British material and is considered to be a hereditary character.[27] Both skeletons display unilateral, right-sided, os acromiale. The tip of the acromial spine of the scapula has remained unfused. Inheritance of this trait is uncertain, possibly a genetic susceptibility, modified by environmental factors.[28]

There was no evidence to suggest cause of death on either skeleton. SK 1 was suffering from degenerative joint changes of the lower spine and right wrist. The medial aspect of the left lower leg displays localised bone swelling; evidence of previous minor trauma. The ossified thyroid and cricoid cartilages were recovered. The only pathology on SK 2 was a well-healed elliptical depression of the skull (right parietal). The lesion was *c.* 1 mm. deep and 17 × 9 mm. (a–p × m–l). It was sited *c.* 55 mm. from the parieto-temporal junction and *c.* 60 mm. from the occipital bone. The injury had healed with no evidence of infection and was probably inflicted several years before death.

PAUL BENNETT and TREVOR ANDERSON

12. *The Church of St. George-the-Martyr, Canterbury*

In the small hours of the morning of 1st June, 1942, the church of St. George-the-Martyr in the eastern part of the city of Canterbury was totally gutted by fire during an infamous 'Baedeker' raid on the city by German bombers.[29] At the same time, almost the whole of the surrounding area in the small, tightly-packed, urban parish was also destroyed. Many of the buildings were medieval (and later) timber frames that burnt easily, and in the space of only an hour or so they were all reduced to smouldering rubble.

The church and parish of St. George probably came into existence in the decade or so after the arrival in Canterbury in 1070 of the great Norman Archbishop Lanfranc. By the middle years of the twelfth century, when St. George is first documented in a cathedral rental,[30]

[27] G. Hauser and G. F. de Stefano, *Epigenetic variants of the Human Skull.*, Stuttgart: E. Schweizerbart'sche Verlagsbuchhandlung, (1989), 42.

[28] T. Anderson, *Post-Cranial Non-Metric Variation: The Examination of a Neglected Subject.*, M.A. Thesis, Sheffield University (1987), 10.

[29] William Urry, 'St. George's Church, Canterbury', *Canterbury Local History Pamphlet* no. 3, (K.C.C. undated, but reprint of an article written in 1950).

[30] William Urry, *Canterbury Under the Angevin Kings* (1967), Charter XIX of *c.* 1153–67.

the city contained twenty-one stone parish churches, most of which were newly built and consisted of just a nave and small chancel. St. George is no exception, and the earliest part of the church, the nave, lies just to the east of the surviving tower. To the east of the nave, the excavations have uncovered the curved rammed gravel foundation of the original apsidal east end. Part of the curved south wall of the original chancel has also survived, and it and the neighbouring south wall of the nave are made of large coursed whole flints with occasional pieces of tufa. This suggests an early Norman date (late eleventh century).

The surviving west tower was almost totally refaced after the war, so it is difficult to study the original masonry. However, the lower west face of the tower and the small restored doorway (made originally of Caen stone) both suggest an early to mid twelfth-century date, and it is probable that the western tower was built inside the nave (that had been extended in the twelfth century) in the fifteenth century. The tower is not quite as wide as the original nave. In the lower external west face of the tower, various re-used Roman bricks can be seen, as well as large lumps of the local Tertiary sandstone. This was almost certainly quarried on the foreshore in the Reculver area (there are many holes in the stone drilled by and filled with boring molluscs).

From the late twelfth to the early fourteenth century, the chancel was rebuilt in rectangular form in three separate stages.[31] Only the foundations for the first two stages survived, but part of the south wall of the final stage (early fourteenth century) of chalk blocks with a flint face was still *in situ*. The small vestry to its south-east must have been built at about the same time. It was demolished in the mid nineteenth century. The finest thirteenth-century feature in the church, which survived until the war, was the beautiful octagonal font. It stood on a central column, surrounded by seven smaller columns with moulded bell-shaped capitals and bases. On the west side there was a step and a wider space for the officiating priest. Sadly, no trace of this has survived. As is well known, Christopher Marlowe was baptised here on 26th February, 1564. His father John Marlowe lived a few doors down the road from the church.[32]

On the north side of the chancel a Lady Chapel was built, probably at the time of the second rectangular extension to the chancel in the thirteenth century, and to the west of it a north aisle had also been

[31] The foundations of the first two stages show a chancel that was less wide than the nave, unlike in the final stage.

[32] William Urry, *Christopher Marlowe and Canterbury* (1988).

constructed earlier. The excavations have also shown that there was an earlier tower above the west end of the Lady Chapel. Only the massive foundations (perhaps of the later thirteenth century) had survived. Once these additions had been made (certainly before the Black Death), the church had reached its full size until the 1871 enlargements. In the late eighteenth century the historian Hasted describes the church as 'a large handsome structure, consisting of two isles (*sic*) and two chancels, having a well-built tower steeple'.[33] Sir Stephen Glynne (brother-in-law to W.E. Gladstone) visited the church in the 1830s, and he noted that 'the nave is divided from the aisle by five pointed arches with some early piers one square and one circular, with a Norman capital . . . the eastern pier is lighter and octagonal'.[34] (These were demolished soon afterwards and replaced by a series of iron columns.) Glynne's notes perhaps tell us that the north aisle had already been added in the twelfth century, no doubt because of an increasing population in the parish, which included all the buildings in the Dover Street area outside the city walls. Glynne also tells us that some of the windows were curvilinear. These must have been in the vestry or on the north side because all the windows on the south side and at the east end were Perpendicular.

During the fifteenth century there was considerable remodelling at the church. All the windows on the south side, as just mentioned, were rebuilt in the Perpendicular style with square hood-moulds and a rood was inserted across the chancel and Lady Chapel arches.[35] The new west tower was built and a new stair-turret, with a spirelet for a roof, was added on the south-east. During pavement improvements this turret was pierced for a new pedestrian walk in 1788, and then demolished six years later after it became unstable. The small spire, with its 18½ pound weathercock was then transferred to the top of the main tower. The tower, which as we have seen was rebuilt in the fifteenth century, was given a crenellated parapet and new windows. Inside it were five bells, four of them made in the seventeenth century, but one, apparently an early fourteenth-century bell inscribed '*sate georgi ora pro nobis*' (St. George, pray for us). The tower was heavily refaced, and the upper part completely rebuilt in the 1950s.

New crown-post roofs seem also to have been constructed in the fifteenth century, as well as a new rood screen which ran right across both aisles. Various wills of between 1464 and 1522 mention 'the light

[33] E. Hasted, *A History and Topographical Survey of the County of Kent* (2nd ed. 1800) xi, 225–9.
[34] S.R. Glynne, *Notes on the Churches of Kent* (1879), 20–1.
[35] L.L. Duncan, *Testamenta Cantiana* (East Kent) (1907), 50.

of the Holy Cross in the high roodloft'. We also hear of 'the Beme light of the Holy Cross in the Chapel of Our Lady'.[36] Many other lights were added at this time. They include lights of St. Christopher, St. Erasmus, St. James, St. John, St. John-the Baptist, St. Loy, St. Katherine, St. Margaret, St. Mary Magdalene and St. Nicholas. There was also a light for the Brotherhood of St. George, with the main altars at the east end being dedicated to St. George and Our Lady. A *piscina* at the south-east corner of the nave indicates another altar here.

Richard Pargate's will of 1457 tells us that he was buried 'in the Chapel of the Blessed Virgin Mary, before the altar there'. He also paid for the 'paving of the aisle in the church where his father lies', and, in 1496, Edward Pargate asked to be buried 'in the Chancel of Our Lady next unto the grave of my father and mother'. These burials presumably lay in the area beneath the front of the Victorian choir stalls.

Until 1871, when it was moved to the area in front of the new chancel, a fine brass commemorating the former rector, John Lovelle (who died in 1438), was situated in an indent in front of the original high altar.[37] It showed a priest in processional vestments with an inscription underneath it. The brass is now kept in the Cathedral Library. A list of most of the later burials in the church (with the inscriptions) can be found in Z. Cozens' *A Tour through the Isle of Thanet and other parts of Kent* (1793). There is a summary in Hasted.[38] The church registers are almost complete from 1538 and were transcribed, indexed and printed by J. M. Cowper in 1891.

The patronage of the church was in the hands of Canterbury Cathedral Priory, and after the Dissolution it passed to the Dean and Chapter. The post of rector was fairly well endowed, and several important men are recorded in the list of rectors. After the Restoration, because of the decrease in value of church benefices in Canterbury, an Act of Parliament was passed in 1681, fully supported by the Archbishop, Dean and Chapter, Mayor, Recorder, parishioners, etc., to unite the parishes of St. Mary Magdalen and St. George; many other Canterbury parishes were united at the same time.[39] The parish of St. Michael Burgate had already, in 1516, been

[36] *Ibid.*

[37] C.F. Tonks, *The parish Church of St. George the Martyr, a brief historical guide for the use of Pilgrims* (no date, but *c.* 1930). The Purbeck marble leger for this brass has been rediscovered during the excavations.

[38] Hasted, *op. cit.*, note 33, 225–7.

[39] *Idem.*, 210–12.

united with St. George, and St. Michael's church had been pulled down.

North of the church a fine new rectory house was built in about 1700, and to the east of this was the churchyard which ran down to the Lady Chapel and behind the east end of the church.[40] A passageway ran down the west side of the church with the White Lion Inn on its west side. This connected the rectory with St. George's Street.

During the eighteenth century the church was full of large box pews and a double-decker pulpit. These were apparently replaced by new pews in 1848.[41] There was a gallery across the west end. During this period, the rector continued to carry out services in both St. Mary Magdalene and St. George's. Then, in 1866, St. Mary Magdalene was closed and five years later it was demolished, except for the tower. Its columns and arches were taken to St. George's and used for the new arcades. Several brass indents, from which the brasses had been stolen, were also taken to St. George's.

In 1871, the population of both parishes is recorded as 1,639 (1,239 in St. George's and 400 in St. Mary Magdalene), and it was decided that by building a new north aisle at St. George's about 500 people could be accommodated in the church.[42] This was thought sufficient, and by using the old materials, it would only cost about £800. Consequently, in 1872, the new north aisle was built, as well as a small extended chancel east of the old Lady Chapel. Two new arcades were constructed (in part using the old 'Transitional Norman' columns and arches from St. Mary Magdalene), and the old east window of the Lady Chapel was moved to the west end of the new north aisle.

One of the oddities that once existed in the church was a panel painting in a frame (hung at the east end) of Guy Fawkes entering the Houses of Parliament. It was dated 1632 and inscribed '*in perpetuam papistarum infamiam*'. Above it was a representation of the English and Spanish fleets (apparently at the time of the Armada in 1588). By the 1830s this painting was in the vestry.[43]

As we have seen, the church was gutted in 1942. The shell remained until the 1950s, but only a photographic record was made (by the National Buildings Record) before all the walls were pulled down. Only the tower was eventually saved and made good (with the

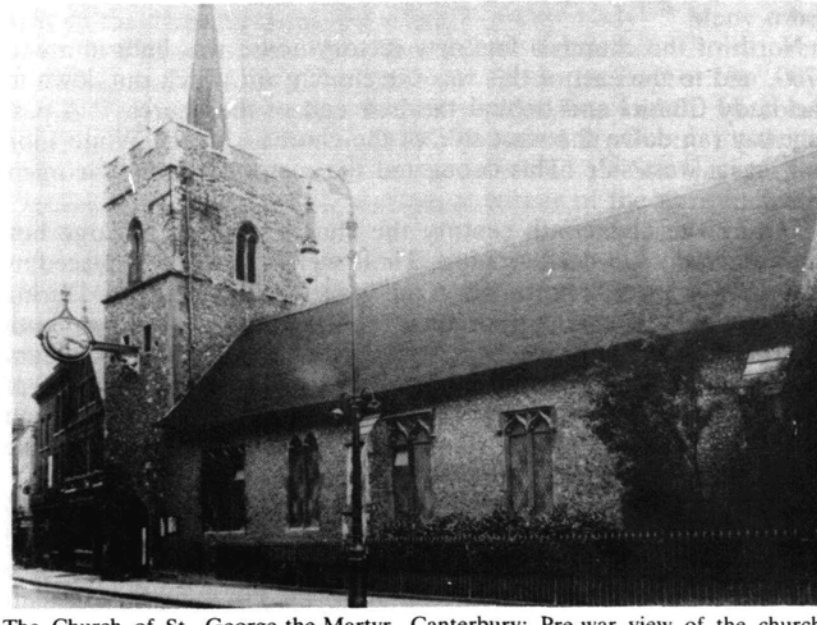
[40] This churchyard was perhaps only first created in the post-Reformation period. Earlier wills seem only to mention burial within the church.

[41] Tonks, *op. cit.*, note 37, 7.

[42] *Idem.*, 4.

[43] Glynne, *op. cit.*, note 34, 21.

PLATE V



The Church of St. George-the-Martyr, Canterbury: Pre-war view of the church. Looking north-west. (*Photograph courtesy of Mr Paul Crampton*)

The Church of St. George-the-Martyr, Canterbury: Pre-war view of the font. (*Photograph courtesy of Mr Paul Crampton*)

top completely rebuilt), and a new clock was installed in its south face in 1955 (replacing the Victorian clock destroyed in 1942). In 1950, Dr William Urry tells us that it was still possible to see the *piscina* and *sedilia* (with the blocked up door into the vestry) in the south-east corner of the ruined shell.[44]

Elsewhere, the excavation has to date revealed the remains of a bell casting furnace to the north of the church and the clay and beaten earth floors of medieval and post medieval domestic timber-framed buildings against Canterbury Lane. Numerous rubbish and latrine pits formerly sited in back garden areas and a sequence of late Anglo-Saxon or early medieval clay floors have also been excavated. Below these early traces of domestic and perhaps industrial occupation are gravels possibly associated with an early to mid Anglo-Saxon street or yard. A Roman street and traces of Roman buildings have also been uncovered. These discoveries will form the subject of an interim report on the St. George's excavation, next year.

TIM TATTON-BROWN

13. *Bench Street, Dover*

As this interim report is being prepared, so a major new excavation project has begun in Dover. The impressive extent and preservation of the buried archaeological remains within the heart of this highly important ancient town and Cinque Port has been amply demonstrated by the extensive work of the Kent Archaeological Rescue Unit through the 1970s and 1980s.

The new work, which is being entirely funded by English Heritage, has been occasioned by the need to replace Dover's sewage system along the seaward side of the town, in advance of the construction of the new A20 linking Dover's Eastern and Western docks. The new sewer trenches are to be cut through some potentially highly significant parts of old Dover and in places will be in excess of 4 m. deep. Where possible, formal archaeological excavations are taking place ahead of the contractors cutting the sewer trench. Work is already well-advanced on a site on the western side of Bench Street.

Here, work on the site of the old Crypt Restaurant (formerly the Shakespeare Hotel) destroyed by fire in 1977, has revealed an interesting sequence of medieval and post-medieval levels and structures, over a thick deposit of natural wind-blown and water-deposited

[44] Urry, *op. cit.*, note 29. A photograph of this and the blocked door into the vestry can be seen in the records of the Council for the Care of Churches.

sand which seems to have covered much of the seaward side of the town in post-Roman times. The principal structure so far located is part of a stone-built medieval undercroft with part of its original vaulted roof suriving. This may well be one of a number of medieval basemented structures known to exist nearer to the Bench Street road frontage.

The excavation work being undertaken in Dover forms part of a larger research programme, which is to include a detailed survey of historic documents relating to the town, and also an environmental project, which will be concerned with the examination of the evolution of the Dour estuary sediments. This latter part of the project, being undertaken by the Geo-archaeological Facility of the Institute of Archaeology, London, promises to be of special interest since the history of Dover is very much bound up with the gradual silting of the original harbour site (within the present day Market Square area) and its slow westward drift to the Western Docks area, about 1,000 m. away.

KEITH PARFITT

III. WATCHING RECORDING BRIEFS

A number of watching recording briefs have been maintained during the course of the year. One of the most notable has been at Starkey Castle, during the construction of an extension to the fifteenth-century residence, reported on last year.[45] Here, further elements of the basemented northern wing of the manor house were recorded together with the plotting of the eastern wall of the wing, found during the cutting of a new drain. The discovery of the east wall now completes the ground plan of the northern wing.

At Rochester small-scale redevelopment in the garden of 'South-gate' (formerly part of the Bishop's Palace) revealed a section of the Roman town wall. Only the core of the wall was exposed in a narrow construction trench for a new extension. Nearby, within Rochester Cathedral, the cleaning and recording of a new section of the thirteenth-century tile-floor within the chapel of St. John the Baptist, was undertaken shortly after its discovery by workmen during repairs to the post-medieval chapel floor. This floor was immediately north of the tomb of John de Sheppey (Bishop, 1353–60).[46] Further work

[45] *Arch. Cant.*, cviii (1990), 244–52.
[46] *Arch. Cant.*, xxiii (1898), 306.

on the chapel floor is anticipated to take place next year and it is hoped that further discoveries will be made.

PAUL BENNETT

IV. BUILDING RECORDING

A. *No. 3 The Parade, Canterbury* (Figs. 12–13)

This city centre property, which until recently was occupied by Messrs. Amos and Dawton estate agents, is currently undergoing an extensive period of refurbishment and renovation before opening as a new branch of the Leeds Permanent Building Society. Prior to this work, the Trust undertook a comprehensive survey of the building, including detailed drawings of the surviving medieval fabric.

In common with many of Canterbury's historic buildings, this property's attractive but relatively modern façade conceals a considerably older structure. Despite several centuries of additions and alterations, the principal elements of a substantial timber-framed building of the late sixteenth to early seventeenth century still survive largely intact.

In its original form the three-storey building, which was jettied towards the street on both floors, ran north-east from the Parade for five bays. A clasped side-purlin roof complete with wind braces extends for the whole length of the building. This roof, which appears to be contemporary with the framing below, has suffered only minor alterations. A decorative parapet, added to the front of the building in the nineteenth century, necessitated the rebuilding of the first bay gable to a hipped end. Each pair of principal rafters retains a carpenters' mark. These number one to six from front to rear. It seems likely that the roof space, which is floored, was used for storage or garret accommodation. A simple opening, embellished by carving the collar into a four-centred arch, is framed through the extant studding in the second truss.

As one would expect, the building is of typical box-frame construction. Jowled storey posts, which rise from ground to eaves-plate, support tie-beams at each bay division in the usual manner. There appear to be several differences in framing between the north-west and south-east elevations. A mid-rail interrupts the secondary posts and studding in most bays along the north-west elevation whereas the opposite elevation is framed without recourse to a mid-rail. Curved bracing is used throughout the south-east elevation whereas only one, rather crude, straight brace is observed in the opposite frame. A

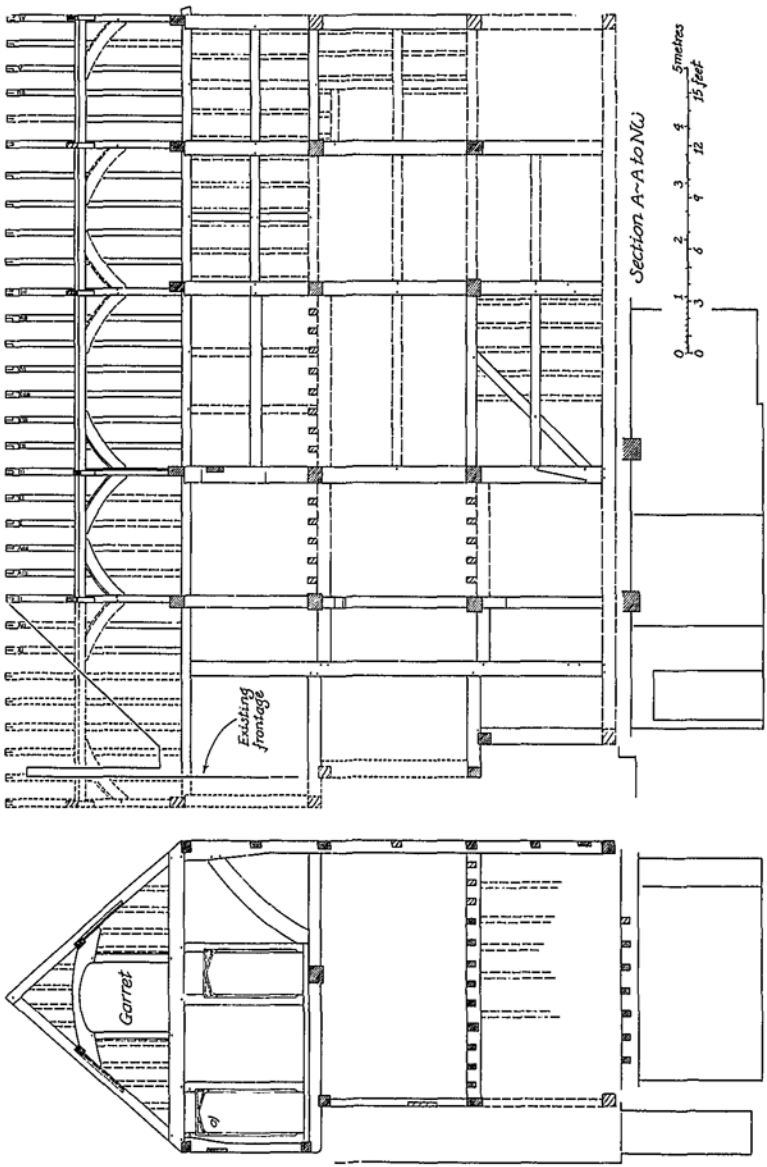


Fig. 12. No. 3 The Parade, Canterbury: Longitudinal and cross-sections through the building.

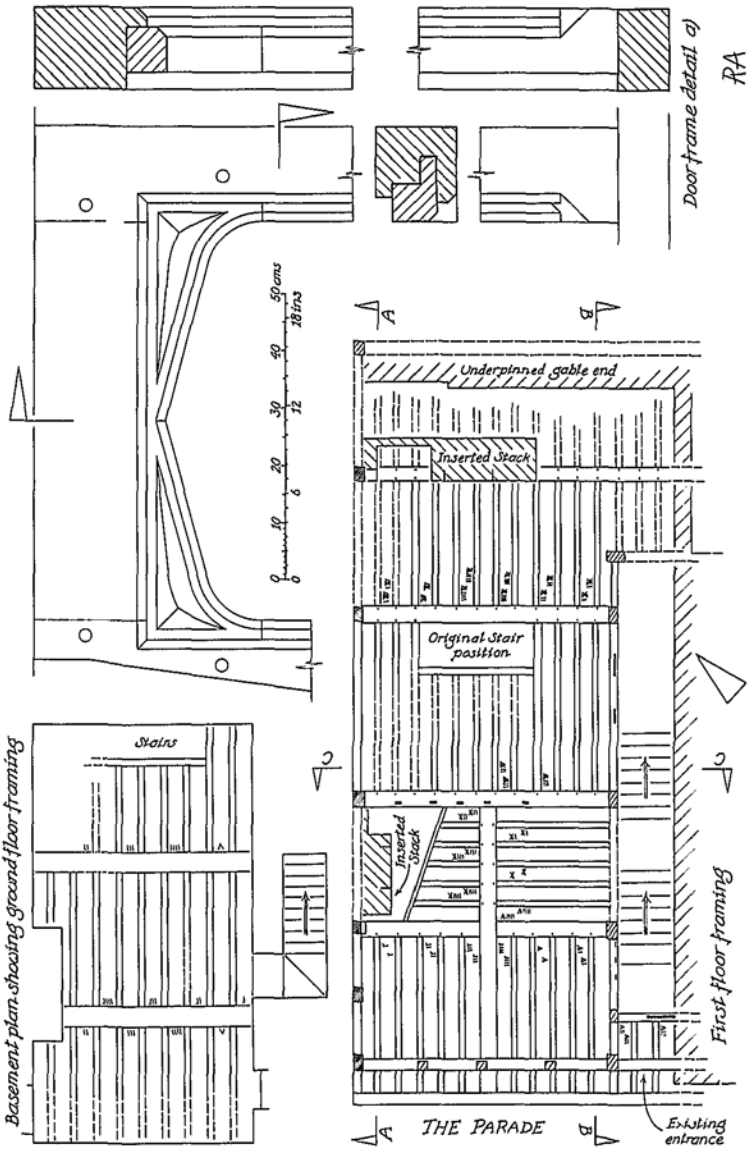


Fig. 13. No. 3 The Parade, Canterbury: First floor framing, cellar plan and door frame detail.

single-light window, flanked by two braces, still survives in the south-east elevation, in the third bay at second-floor level. The north-west elevation was obviously constructed against an existing building, whilst the opposite frame, now flanked by the Midland Bank, was an external elevation.

Two cross-ranges, the remnants of which still survive in the first-floor framing, extended from the front and rear bays into the space now occupied by the Midland Bank. There is insufficient evidence to conclude whether these ranges extended to a further building, contemporary or otherwise, fronting Butchery Lane. In either case, a partially or completely enclosed courtyard would have been created to the south-east of the main building. The extremely narrow depth of the front range suggests that it was intended to bridge the gap between the buildings, possibly forming a covered entrance to the courtyard, rather than provide any significant accommodation space.

The central bays of the south-east elevation are quite deeply jettied over the courtyard at second-floor level, but rather surprisingly there is no jetty to these bays at first-floor level. The second-floor joists in these central bays are aligned across the building to accommodate the jetty, whilst the remainder run with the axis of the building. This pattern is partially reflected in the arrangement of the first-floor joists, although no jetty is formed at this level. Construction of the Midland Bank has subsequently enclosed the space under the jetty, which now forms a stairwell to first-floor level. A window opening, flanked by two tension braces, survives in the third bay at second-floor level along the courtyard elevations.

Most of the first-floor framing is still intact, and mortices indicate that a stud partition separated the first two bays from the rear of the building at ground-floor level. This could indicate that the front of the premises was used for retail purposes. A break in the secondary joists in the third bay locates the original stair position which has since been relocated on several occasions. Carpenters' marks, clearly visible on the floor joists, are numbered in pairs from the front of the building.

Very little of the building's original detail can be found. However, two door-frames, of which one is completely intact, are still visible at second-floor level. These provide access to the rooms occupying the first two bays of the building. One doorway still retains an attractive carved door-head with sunken spandrels in its two-centred Tudor arch.

The appearance of this property has been substantially altered, both internally and externally, by many years of modification and reconstruction. A nineteenth-century rebuild of the building's façade, complete with decorative parapet, has removed virtually all

traces of the original jettied frontage. A substantial rough stone wall now underpins the entire rear elevation, although elements of the rear framing are still visible, fossilised in the masonry. Rather surprisingly the last bay of the building has fallen into complete disuse. Both side elevations have lost all their secondary studding, rendering this bay open to the elements, with only the later stone wall remaining to support the roof above. This abandonment is probably due to severe failure in the frame at ground level, causing subsidence of over a foot in the last two bays. This failure can be attributed to the use of scarfs, splayed with under-squinted abutments, at the base of the main storey posts along the north-west elevation. These scarfs, which seem an unnecessary inclusion, must have failed at quite an early date. Two brick stacks have also been inserted through the original timber frame.

Despite many alterations this building provides an interesting example of a late sixteenth- to early seventeenth-century timber-framed town-house. It is not certain whether the existing structure formed part of a larger building or was simply squeezed into the available plot between other properties. In either case some enclosed courtyard space seems likely to the south-east of main range.

B. NO. 28 PALACE STREET, CANTERBURY (Figs. 14–15)

This building, until recently the King's School shop, has been the subject of recording work by the Trust on several occasions in past years. A structural survey detailing the failures and movements in the frame was prepared several years ago by John Bowen, prior to restoration work. Further recording of the original chimney-stack was undertaken at a later date in anticipation of urgent remedial repairs to its failing brickwork. Unfortunately, the stack collapsed leaving only our hastily gathered notes and a pile of rubble. Towards the end of 1991, once full restoration was underway and the building completely stripped out, a more detailed archaeological survey became possible.

No. 28 Palace Street is a fine seventeenth-century timber-framed building of three storeys, double-jettied towards Palace Street and King Street. With scaffolding in place it was possible to examine the street frontages in more detail. Both elevations, at first- and second-floor levels, were originally lit by large bay windows. Angled mortices for cills and transoms, still visible on the external faces of the window jambs, clearly indicate the shape and dimensions of each bay window. Decorative brackets located below each opening provided extra support to the projecting windows. Additional fenestration

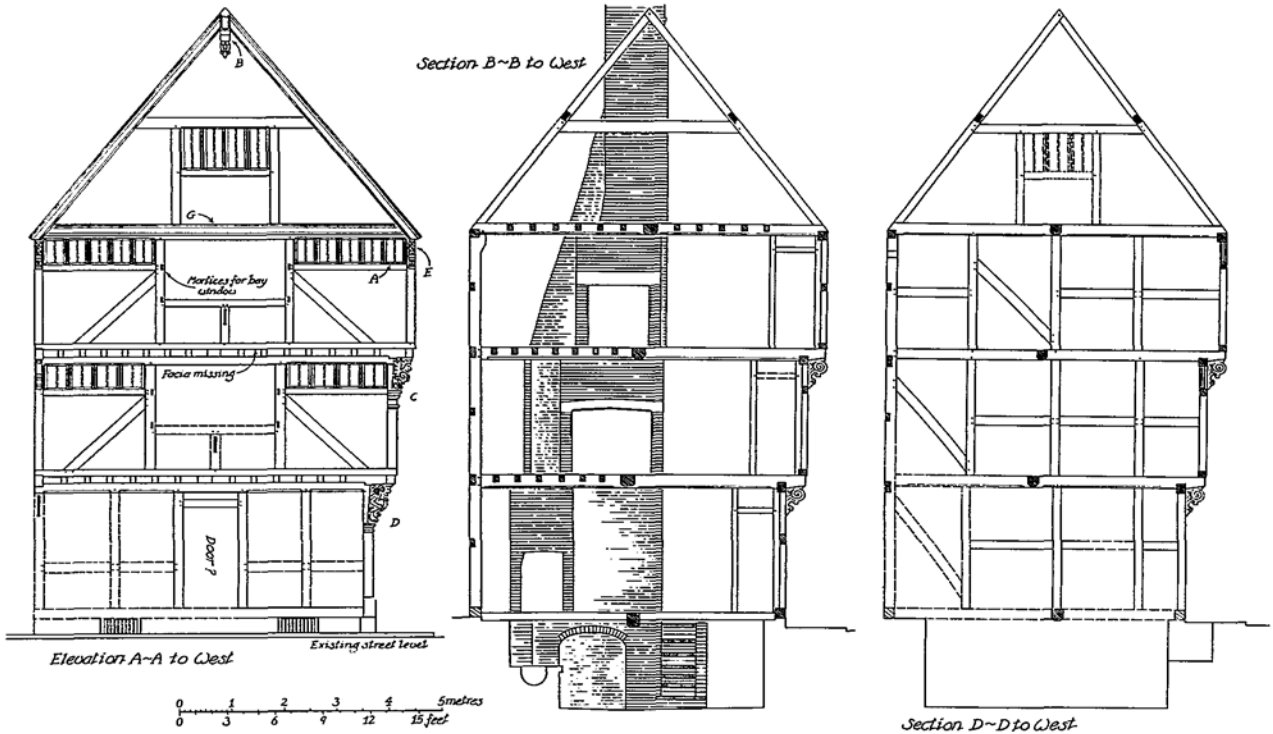


Fig. 14. No. 28 Palace Street, Canterbury: Front elevation, cross-section and rear elevation.

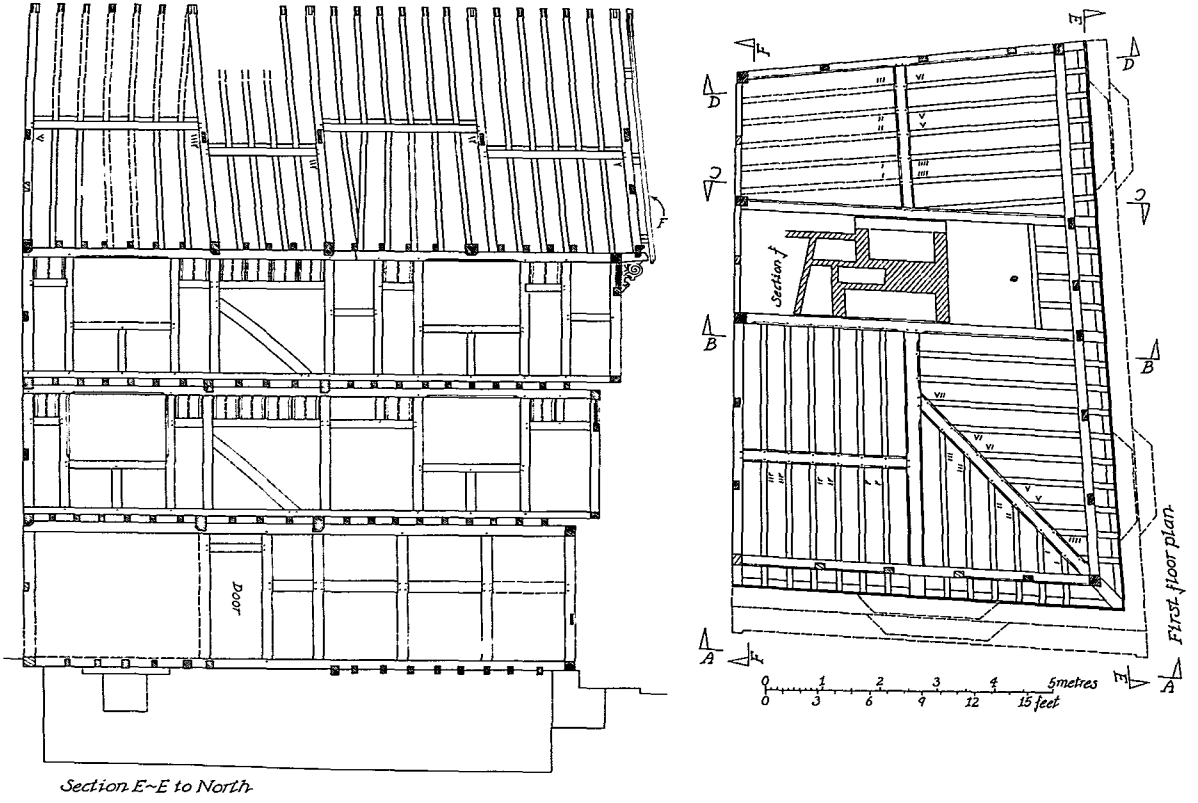


Fig. 15. No. 28 Palace Street, Canterbury: First-floor frame and longitudinal section.

flanks the upper lights of each principal opening, running almost continuously around each elevation. All mullions, cills, and jambs are ovolo-moulded to facilitate glazing, which at this date was probably fabricated using square quarries.

Numerous decorative devices are used to enhance the external appearance of the building. Carved brackets are used below the jettied floors and gable, in particular two finely executed figures which adorn the dragon posts on the ground and first floors. Moulded facia boards, once rebated into the underside of the jetties, were used to conceal the ends of the common joists. The gable is finished with moulded barge boards and a carved finial, which on close examination appears to be dated 1647. All the exterior panels were infilled with relief plasterwork, formed into imitation stone blocks. Lead-lined wooden guttering would have been essential to prevent rainwater ruining the surface of this ornamental plasterwork.

Although the original shop-front has been replaced, examination of the underside of the jetty-plate indicates a central door flanked by two openings on either side. It is not clear whether these openings were glazed or shuttered; however, rebates on the jetty-plate above each window could be evidence for planted frames.

The rear and party elevations, which are plain and unjettied, do not incorporate any of the fenestration or detailing that decorates the street frontages. Exploration of the void that now exists between this building and the adjoining property revealed several areas of tile cladding, still in evidence on the outside face of the party wall. This was obviously an exposed external elevation at some point, with perhaps a passage between no. 28 and an earlier adjacent property.

From a construction point of view the building is a typical example of a box-framed seventeenth-century town-house. The timber-framing is built above a brick cellar with a substantial contemporary brick chimney-stack located on the third bay. The roof is of staggered butt side-purlin type with collars between the principal rafters. Jowled posts support the roof tie-beams in the usual manner, and divide the building into four bays. Mid-rails and secondary posts infill most of the panels without fenestration; however, a few contain curved tension braces. None of the bracing is exposed externally as this would disrupt the appearance of the decorative plasterwork.

Dragon beams at first- and second-floor level support jetties over Palace Street and King Street. Only the principal floor joists, hollow chamfered with plain run-out stops, are exposed with all secondary joists ceiled by lathe and plaster. All the joists, except those forming the attic floor, are numbered in adjacent pairs, presumably to avoid excessively large Roman numerals.

Access to the domestic parts of the building is through a lobby

entrance from King Street. This is situated in the third bay and leads immediately to a staircase which rises against the chimney-stack. All the upper floors are reached from this staircase, whilst doors from the lobby afford entry to the ground-floor rooms and cellar. The floored roof-space, which is reached at the head of the stairs, provided garret-style accommodation and is lit by four-light fenestration in both gables. Independent access to the shop area is provided by a door opening against Palace Street.

A hearth was provided in each of the domestic rooms, with a large inglenook fire-place at ground level. No heating was provided in the retail area; however, an additional hearth and flue have been incorporated into the existing stack at a later date. A later doorway was cut through the centre of the ground-floor inglenook to provide direct access to the rear room. This later insertion destabilized the stack causing many of the structural problems evident in the building today.

Despite many alterations to the historic fabric of the building, no. 28 Palace Street still retains its original form and character, providing one of the best examples of its type in Canterbury.

C. *The Bull Inn, Canterbury*

No. 4 Butchery Lane, presently the Canterbury Model Shop, was severely damaged by fire earlier in the year. Although this property did not merit an archaeological survey, removal of fire-damaged fabric along its north-east elevation revealed framing belonging to 'The Bull', which adjoins the Model Shop to the north-east. 'The Bull', which is now occupied by several properties at the corner of Butchery Lane and Burgate Street, is a substantial timber-framed building constructed during the mid fifteenth century by Christ Church Priory. A large proportion of the property seems to have been divided into separate lodging chambers, possibly up to thirty-eight, with shops along the street frontages at ground-floor level. Although much of the building is cellared, these are in fact the remains of a considerably earlier stone building built by the priory on this site in the late twelfth century.

Most of this structure has already been surveyed and drawn by the Trust in previous years.[47] Although only a small fraction of the inn was recently uncovered, further details always provide useful additions to our knowledge of the building. The exposed fabric forms the end-frame to the Butchery Lane range of 'The Bull', which at this

[47] *Arch. Cant.*, cvi (1988), 185–7; *Arch. Cant.*, cvii (1989), 366–7.

point is of two storeys and jettied towards the street. The building clearly terminates in a gable end at this point, with no continuous return range into a courtyard space to the rear. No fenestration is incorporated into the elevation at gable or first-floor level, only studds and bracing were revealed. Unfortunately, a modern brick wall, which underpinned this elevation, obscured any details of the framing at ground-floor level. A crown-post with two tension braces was uncovered in the roof-space. The end bay associated with this elevation appears to have been largely removed and replaced with a completely new roof and floor structure. Considerable weathering on the outside face of the timbers suggests that this end elevation was not concealed until the construction of no. 4 Butchery Lane.

D. *St. Dunstan's House, St. Dunstan's Street, Canterbury*

St. Dunstan's House is located on the west side of St. Dunstan's Street approximately 60 m. south of St. Dunstan's Church. The earliest elements of the building are medieval in date although numerous alterations and additions have virtually transformed the appearance of the building. All the external elevations are now clad in brickwork which probably dates from the late sixteenth to early seventeenth century. There is a large enclosed garden to the rear.

An early wall-painting has been in evidence in one of the first-floor bedrooms for many years. During recent decorative repairs to the first-floor rooms, several more areas of painting were discovered beneath later wall-paper and cladding. The Trust was commissioned by the Canterbury City Council to produce a photographic record of the paintings before any conservation work was undertaken.

Although the condition of most of the paintings is extremely poor, the detail, colour, and patterns can still be discerned in many places. A well-preserved hunting scene and frieze measuring approximately 230 × 110 cm. has been exposed in one of the rear bedrooms for many years. This was probably executed in the early sixteenth century and gives the impression of a tapestry hanging. The adjoining rear bedroom has recently been stripped out revealing large areas decorated by a red foliate pattern with black outlines and green leaves and stems. This is applied to a lime plaster which overlies early brick infill. A third room at the front of the building is decorated along one wall with a repetitive floral pattern. This wall is timber-framed with lathe and daub infill. The painting has been applied to a thin layer of lime and horsehair plaster which overlays the lathe and daub. Exposed timbers which fall into this area are simply painted over and included in the design. Finally, a small area of exposed

plasterwork beneath an early blocked window in the adjoining room has been painted to give the impression of wooden panelling.

It is rare to find wall paintings such as these in a building of this type, particularly in Canterbury. Despite their poor condition, these paintings represent an unusual discovery. Hopefully, their conservation should preserve them for many years to come.

E. *St. John's Hospital Reredorter, Canterbury*

A detailed drawn and photographic survey of this structure was undertaken. A summary of the results of this survey has been incorporated in the excavation report (pp. 300–8).

F. *Cooling Castle*

Following a disastrous raid by a force of French and Spanish troops in 1379, who sailed up the Thames burning and looting unprotected villages, John de Cobham, then Warden of the Cinque Ports, was prompted to obtain a licence to crenellate and fortify his manor house at Cooling. Permission was granted by King Richard II who sent his own architect, Henry de Yvele, to superintend. Yvele was responsible, amongst many other works, for much of the nave of Canterbury Cathedral and the construction of Canterbury's West Gate.

Cooling Castle, which was started in 1381 and finished in 1385, was probably the last genuine castle ever built in England. The machicolated outer gate still retains its original enamelled copper inscription declaring that the castle was built 'in defence of the Country'.

The castle comprised two adjoining enclosures, surrounded by a figure-of-eight shaped moat. Both enclosures, or wards, had defensive round towers at each corner. The outer ward, which was the larger of the two, provided a safe enclosure for cattle in times of trouble, and contained the cow-sheds and dairy. This was entered through the outer machicolated gateway which stands at the south-west corner of the ward. Access to the inner ward was through a second gateway via a drawbridge and portcullis from the outer ward. The inner ward contained the earl's stone house, of which only the undercroft remains, together with his retainers' lean-to wooden houses around the rest of the walls.

Unfortunately, the castle fell into disuse at the beginning of the seventeenth century and is now in a ruinous state. Consolidation and repair of the crumbling walls have been undertaken on numerous occasions in recent years. Plans to repair elements of the north wall, inner face, inner ward have been preceded, on this occasion, by an archaeological survey. Rectified photographs of the elevation were

taken using the Trust's large format camera and enlarged to a scale of 1:20. A stone for stone drawing of all the surviving facework was prepared using the photographs as a base. Additional hand survey of the north-east tower is still to be undertaken.

The north elevation, which survives to a height of about 20 ft., is approximately 157 ft. in length from tower to tower. It is constructed with a chalk rubble core and faced almost exclusively in ragstone and flint. A great chamber, of which only the undercroft survives, adjoined the eastern limit of the wall. The north-east tower, which communicates with the undercroft, has virtually disappeared although the remaining fragment indicates that its base had a hexagonal internal plan. This tower was completely enclosed in masonry whereas the north-west tower incorporated a timber brattice at the rear.

It is generally accepted that the east wall of the inner ward, including the gatehouse and chamber, was constructed shortly after the other elevations. The junction of this phase with the earlier fabric of the north wall occurs some 35 ft. from the north-east tower where a slight change in alignment can be discerned.

Only the earlier phase of the north wall was recorded in detail. Four rows of putlog holes, which penetrate the full thickness of the wall, are still visible in both core and facework. Two construction horizons can be discerned, dividing the wall into three lifts. Only the lower horizon coincides with a row of putlogs. A row of corbels, of which two survive, is positioned approximately 8 ft. above the existing ground level. These would have supported the principal floor joists of several timber-framed buildings, constructed in a lean-to manner against the existing walls. Further evidence for these structures is provided by a rectangular drain shaft which descends through the core of the wall before emptying into the moat. A flue has also been cut into the surface of the wall at a later date to provide a small hearth at first-floor level. Presumably these buildings provided some form of domestic accommodation. A large opening some 32 ft. from the north-west tower, possibly an original feature, has been blocked in the last forty years by repair works.

It is hoped that future repairs to this historic monument, which has never been surveyed in detail, will see further recording work by the Trust.

RUPERT AUSTIN