The Temple of Claudius at Colchester Reconsidered*

By P. J. DRURY

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THE recognition by R. E. M. Wheeler in 1920 that the massive Norman keep at Colchester encapsulated the podium of the Temple of Claudius stimulated Dr P. G. Laver, his collaborator in an earlier study of the *colonia*,[1] to excavate in and around the keep during the 1920's and 30's. Some of the results were published by the late Rex Hull in *Roman Colchester* (1958). At the time of Hull's death in 1976, the writer was preparing the drawings to accompany a paper[2] which included a summary report by Hull on the excavations undertaken within and south of the keep by Laver, assisted by E. J. Rudsdale, in 1931–3. Subsequently much additional information about these excavations came to light in Colchester Museum. This raised a number of important questions, which led in 1977 to one of Laver's trenches in the sub-crypt being re-opened and extended, and the cutting of a trench in front of the keep. Mrs B. R. K. Niblett (née Dunnett) also made available the results of her excavations on the west side of the Temple precinct in 1964 and 1969. The evidence from these sources relevant to the history of the site in the Roman period is presented here; and in conjunction with previously published material has been used as the basis of a re-appraisal of its development, summarized in TABLE 1. A similar study of the post-Roman history of the site has recently appeared.[3] Much of the discussion is necessarily speculative, being intended primarily to advance hypotheses which may be tested in future excavations and by further analysis of the surviving structures.

*My thanks are due to David Clarke, curator of Colchester and Essex Museum, and his staff, for their assistance in making available the records and finds in their charge, for arranging the excavations in 1977, and for their forebearance over the inconvenience which stemmed from them; to the Inspectorate of Ancient Monuments, Department of the Environment, for permission to excavate in the Castle Park, which is a scheduled Ancient Monument, and for their willingness to fund those parts of this report which relate to grant-aided rescue excavations; to Justine Bayley of the Ancient Monuments Laboratory and John Evans of the North-East London Polytechnic for their work on various aspects of ancient technology which arose from the project, and for their reports included here; to the other contributors of specific studies whose names appear at the head of this paper, and also to Dr R. M. Luff, R. Reece and H. Toller; Dr and Mrs W. J. Rodwell, for their help with the 1977 excavation and their comments on a draft of this paper; to John Callaghan, our draughtsman, then employed under a STEP scheme to assist in the publication of backlog excavations; and last but not least, to Philip Crummy, Director of the Colchester Archaeological Trust, for his assistance in making available his own observations on the temple and castle, and his help in general to one who is a mere interloper in the archaeology of Colchester.

[1] 'Roman Colchester', *JRS* ix (1919), 139–69.

[2] 'Colchester Castle: some unpublished notes and observations', Colchester Museum archives.

[3] P. J. Drury, 'Aspects of the Origins and Development of Colchester Castle', *Arch Journ.* cxxxix (1982), 302–419.

TABLE I: Summary of the Development of the Temple Site in the Roman Period

Period	*Inception Date* (A.D.)	*Phases: Temple*	*Phases: Precinct*	*Phases: Insula 30*
I Pre-*Colonia*, military	*c.* 43		Within fortress annexe	
II Pre-Boudican: The centre of the Imperial cult in Britain	*c.* 49	A Altar to Roma and Augustus (location uncertain)		A/B Substantial timber and clay buildings erected
	c. 54	B Addition of temple to *divus Claudius* (location uncertain)		
	c. 61	C Destruction of town by Boudica		C Buildings burnt
III Early Roman: The centre of the Imperial cult in Britain	*c.* 62	A Reconstruction of temple	A Timber structures on S. side	A Construction of masonry buildings, probably including a *basilica*
	c. 80–100		B Construction of masonry buildings around precinct	
	c. 200	C ?Repair of temple after fire damage	C Reconstruction after fire	C Reconstruction, probably with some changes in plan, after fire
IV Late/sub Roman: Function uncertain	*c.* 313?	A Reconstruction, with entrance hall on south terminating in E. apse	A Structural alterations	A Structural alterations, including the diversion of the road on the S. side of the insula southwards
	after *c.* 370	B ?State of main building	B Alterations and deposition of domestic refuse; occupation within defensible perimeter?	B ?State of buildings

The later development of the site is as follows: Period V, Early to Middle Saxon; VI, Late Saxon; VII, Norman; VIII, Later Medieval; IX Post-Medieval; X, Modern.

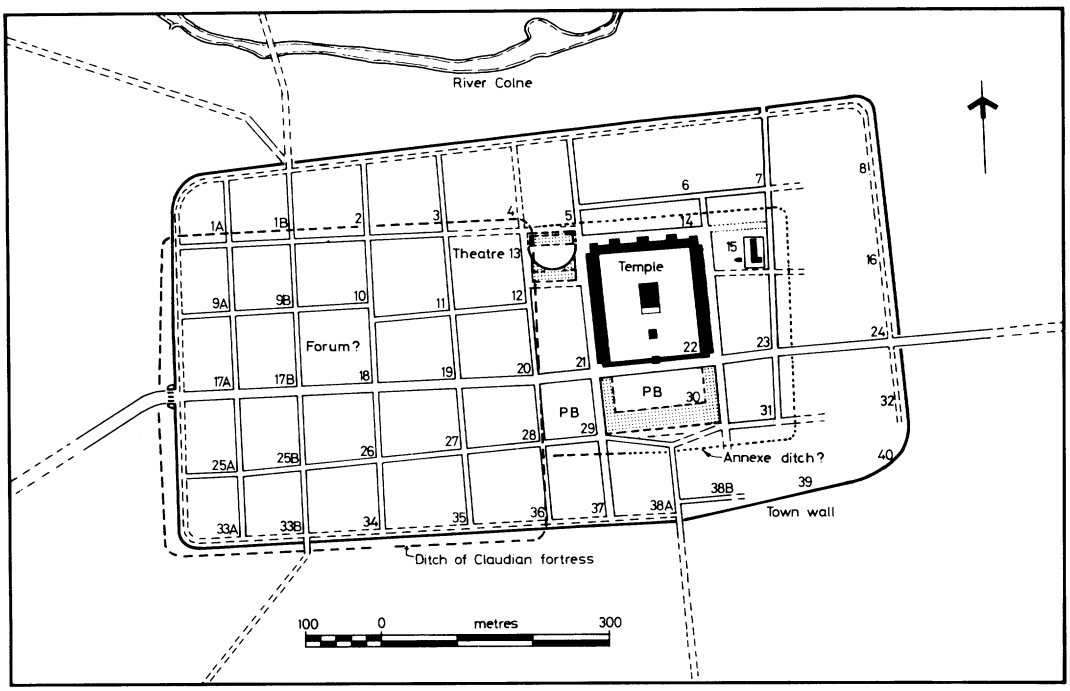


FIG. 1. Colchester: The Temple of Claudius in relation to the Claudian fortress and later city. The layout of the eastern part of the town is taken from FIG. 11, p. 23 below. The probable sites of public buildings are indicated by the letters 'PB'. The plan is aligned on national grid north; the arrow points to true north.

THE EVIDENCE FROM EXCAVATION[4]

Excavations in the Castle Vaults, 1933 and 1977

In March 1977, the reconstruction of the floor of the sub-crypt made it possible to empty a six-metre length of a trench cut by Dr Laver in 1933, and to excavate two adjacent areas within the apse (FIGS. 2, 5). The lowest level encountered was 15, a layer more than 0·45 m thick, of broken tiles laid in rough courses (FIG. 3, S2). They were mostly bonding tiles 45–50 mm thick (also a few 35 mm thick), some quadrant tiles (below, p. 41), a few *tegulae*, and occasional stone fragments. Most had traces of old mortar. The bedding mortar of the tile layer was distinctive—hard and grey, but with occasional brown, soft patches probably due to degeneration. Neither colour was due to burning, since mortar adhering to the tiles from their first use was not affected. The upper surface of the layer, at *c.* 27·2 m OD, was irregular and had been robbed, different courses being exposed in the east and west ends of the excavation (PLS. I A, I B; FIG. 5). The large amorphous hole, 16, also seemed to be due to robbing, and many tiles exposed in the top of the layer, especially near the edges, appeared to be weathered and in some instances frost-shattered. Three sharply-cut holes (12–14) seem from their positions to have held posts to support the centering of the Norman vault. At no point was anything approaching an original surface found intact. The yellowish-white mortar of the Norman wall (18) spilled out over the robbed and irregular upper surface of the tile layer (15) showing that the latter was in its present robbed and damaged state when the apse wall was built (FIG. 5;

[4] More details of the excavations, and full descriptions of the post-Roman features, are given in Drury, ibid.

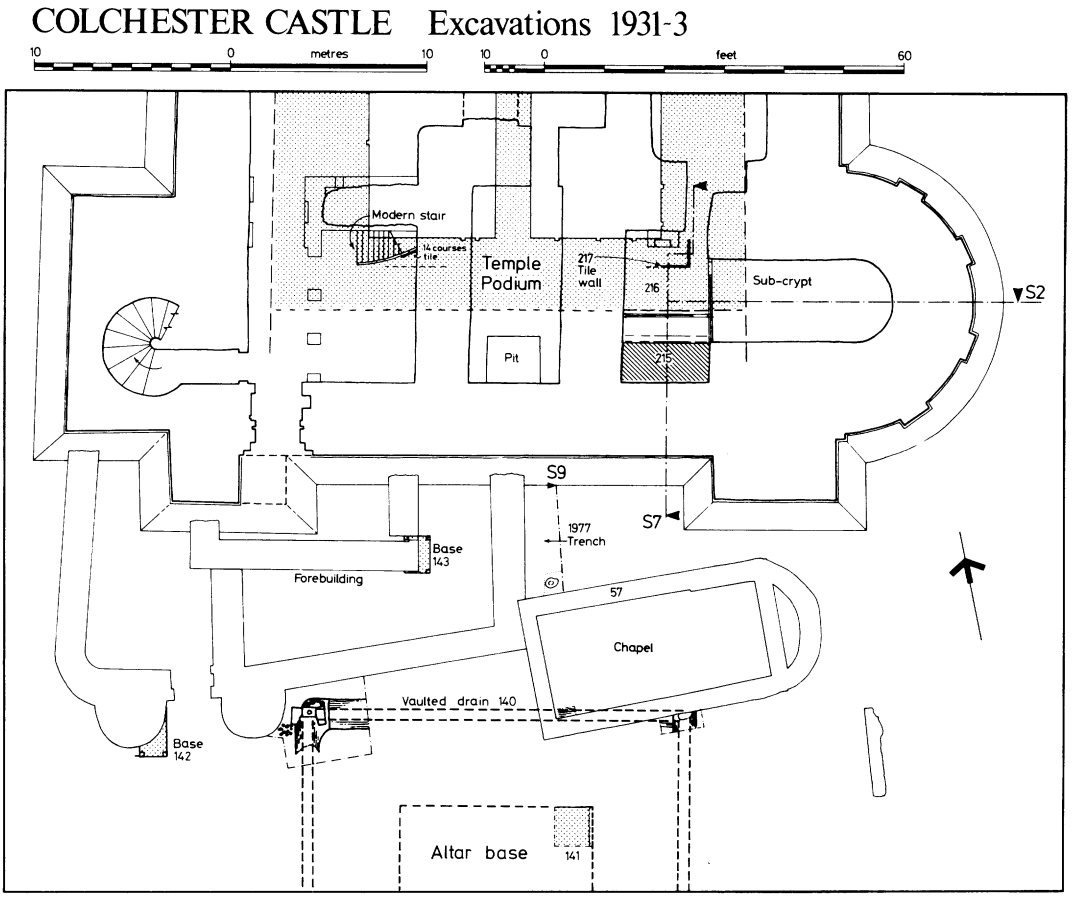


FIG. 2. Plan of the Roman features found in the excavations undertaken in and south of Colchester Castle keep in 1931–3 and 1977.

PL. I B). This relationship was confirmed in depth in a small hole cut (with difficulty) through the tile raft against the north wall of the apse. At *c.* 26·9 m OD, two courses of ragstone (17) were exposed. One was below the coursed septaria with which the interior walls of the apse are largely faced. The other was inside the wall and is perhaps an offset course (FIG. 5, S11; PL. II A). They were set in a buff-to-white mortar without chalk lumps, quite different either from the mortar of the wall above or from the raft. The edge of 15, as visible in section, was essentially intact; no tiles had been broken after laying, during, for example, cutting back the edge of the raft. It thus seems probable that it was originally laid against the wall now represented at a lower level by the ragstone (17) and that, after a period of neglect and robbing, this had been cut down to a sound course, to provide a secure foundation for the septaria wall (18).[5] Thus it appears that the tile raft (15) and a wall defining its edge were part of the legacy of masonry inherited by the Norman builders of the keep. The mortar analyses (pp. 42–4) support this interpretation.

[5] For possible signs of the use of an iron bar as a lever against the edge of the raft, see ibid, 310.

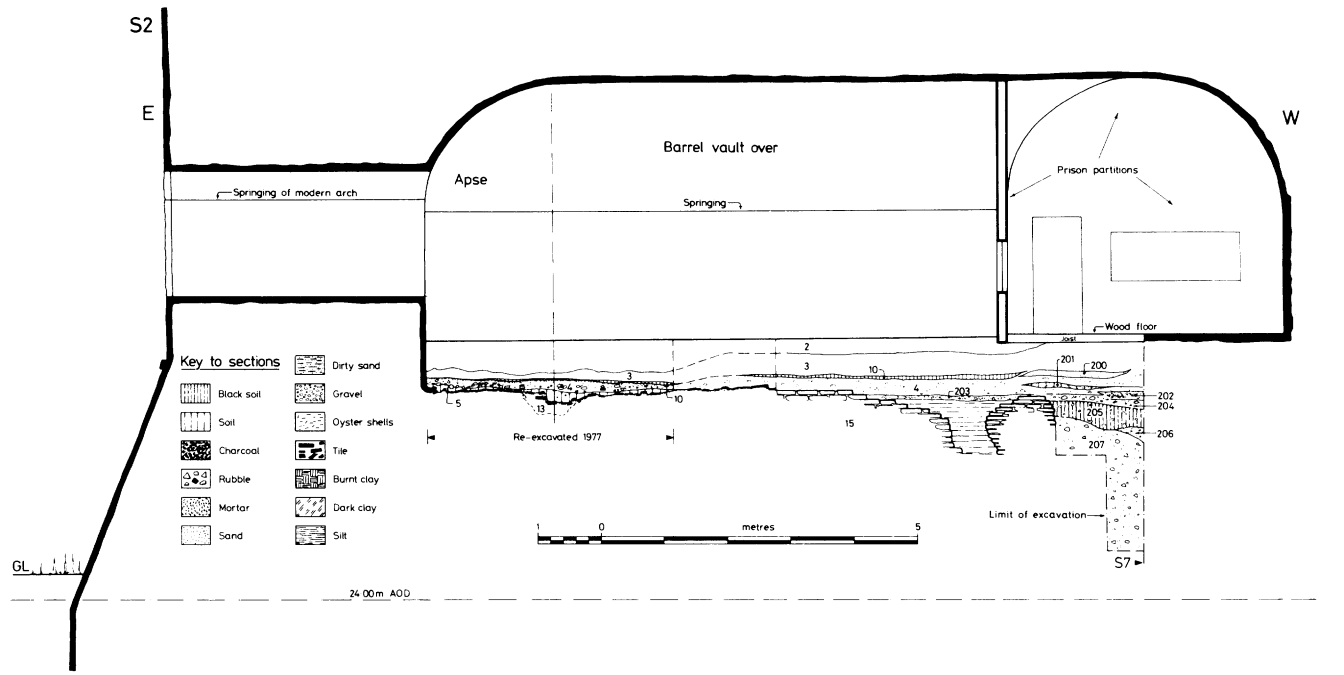


FIG. 3. Colchester castle: Section 2, after a drawing by K. C. Scarff dated May 1932, with the section obtained in the 1977 excavation superimposed. The key is applicable to all sections in this paper.

Sections S2 and S7 (FIGS. 3, 4) were originally drawn for Dr Laver by Mr K. C. Scarff in May 1932.[6] On the former has been superimposed the author's drawing of the re-excavated section of the eastern end of Laver's trench. It is evident from this that the upper levels at least were recorded in simplified form in 1932,[7] but it seems clear nonetheless that the tile raft (15) was *c.* 0·6 m thick. It was evidently anciently breached, sufficient to allow the sections to be cut.[8] It seems to have extended throughout the area of both vaults, including the passage through which these rooms were entered from the eastern compartment of the keep (FIG. 2). Its top was approximately level with what was then interpreted as a 1·8 m-wide offset in the south wall of the keep (215).

Despite the ambiguity of S7, S2 shows that 204 (small rubble and light mortar) was deposited after the damage to 15, as was 205, 'very black charcoal loam and small rubble', which lies against a broken end of 15 in S2, and is shown by S7 to fill a hollow in 207, 'small rubble and light mortar'. The remaining layers in S7, except for 209, 'dark soil and rubble', are all of rubble, mortar rubbish and gravel in various combinations, some with an admixture of soil (FIG. 4).

The masonry (216) exposed in S7 is said to have been 'similar to the vaults'.[9] As excavated, it seems to have been founded at least a metre above temple-court paving-level (established in 1977 – see below), since the excavators were certain that the base of the foundation had been

[6] A version of FIG. 4 was previously published by Hull as *Roman Colchester* (Soc. Antiq. Res. Rept. xx, 1958), fig. 85.

[7] Possibly because they were noted as containing 'fragments of late sherds': Drury, op. cit. (note 3), 313.

[8] Hull, op. cit. (note 6), 167.

[9] ibid.

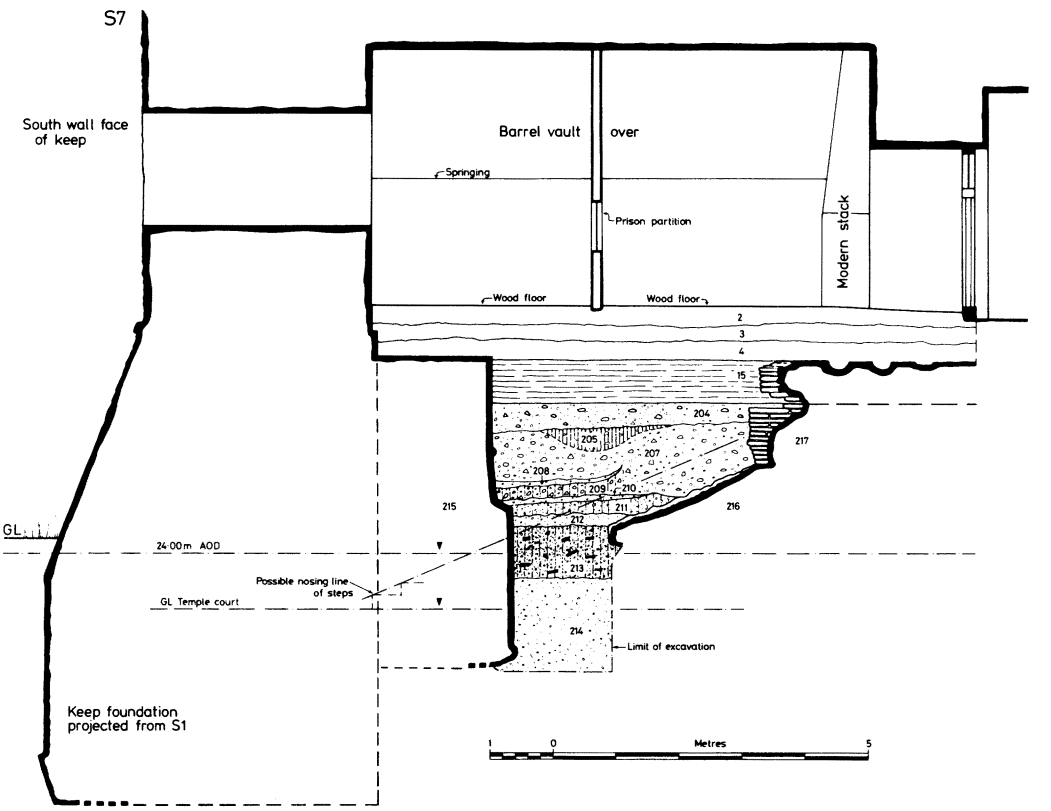


FIG. 4. Colchester castle: Section 7, after a drawing by K. C. Scarff dated May 1932. For key to sections, see FIG. 3, p. 11.

reached. The most likely explanation of it (and the commonly accepted one) is that it is the foundation for the flight of steps which would have extended across the south facade of the temple. If so, the western 'edge' of the foundation must be a broken edge, caused by the digging of a construction trench for Wall 215. The foundation for the steps would doubtless have been carried on sand make-up piled against the south wall of the vaults. The tile face (217) probably represents, approximately, the outer face of the south wall of the vaults, in which case the south wall is *c.* 1·7 m thick, i.e. the same as the crosswalls between the vaults.

The 1977 excavation indicated a pre-Norman date for the tile raft (15), which S7 shows oversailing the levelled top of the temple structure (217). It also shows that it abuts Wall 215, the latter surviving to a slightly higher level. This suggests that 215 is not an exceptionally wide offset to the Norman south wall, but an earlier wall, contemporary with or earlier than the tile raft. The suggestion is confirmed by the fact that the bottom of the foundation of 215 was reached (on 30 May 1932) at about 1 m below temple-court paving-level, that is about 2 m *above* the bottom of the keep foundations as examined slightly further west (and projected onto S7).[10] No builder would construct a wall with the sloping bottom to the foundation-trench

[10] For details see Drury, op. cit. (note 3), 315.

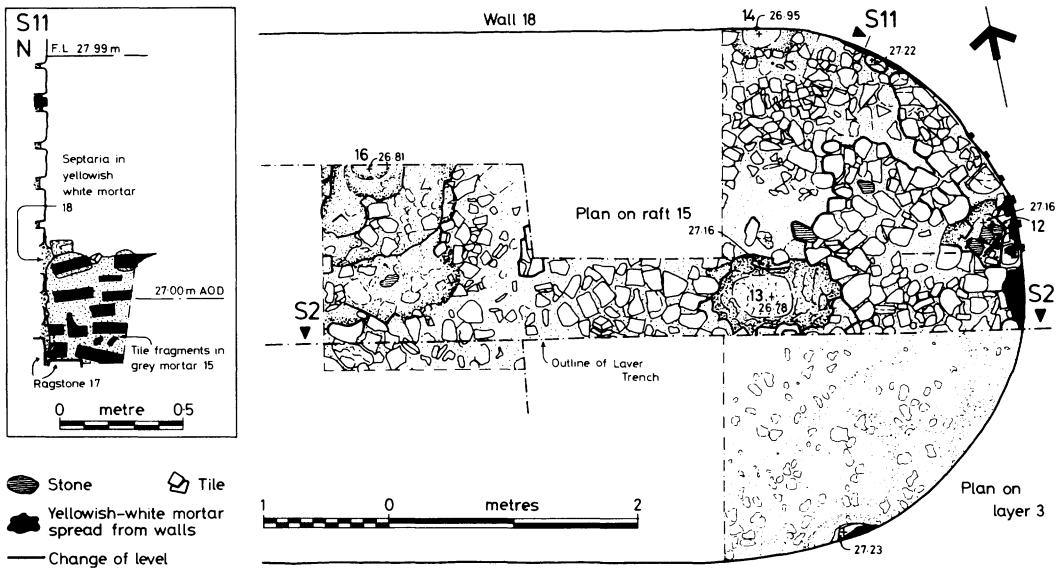


FIG. 5. Colchester castle: Details of the excavation in the sub-crypt of the keep, 1977; for S2 see FIG. 3, p. 11.

implied by the assumption that 215 is part of the keep foundation, and the evident stability of the south wall of the keep confirms that this was not done.

A note on the section drawing states that Wall 215 was founded on 'light gravel and sand containing some small fragments of Roman brick and tiles'; at this level one would expect natural sand, but the disturbance is presumably to be explained by the dismantling of the foundation of the toe of the steps, whose line must have been followed by 215.[11] From the section, it appears that 215 was built with a free internal face above a 'cement' foundation about 0·3 m deep. Layers 213 and 214 are presumably the backfilling of its construction-trench. There is one major offset of *c.* 0·25 m, and above this a slightly projecting course, which may mark some stage in the filling of the space between 215 and 216/7, which was doubtless undertaken as the work proceeded. Layers 206/12 should be part of this filling, which would have formed the base for the tile raft (15), but 205 seems likely to be the filling of a robbing-hole, and Layers 204 upwards should be Norman and later.

A detailed consideration of such records as survive of Laver's work in the keep as a whole would probably yield valuable results, but cannot be attempted here. However, it must be stated that the section of 'Norman floor' exposed in the keep in lowering the ground level in 1933 and now displayed *in situ* in the Museum is post-medieval, and bears no resemblance to the tile raft found in the vaults.[12]

The 1977 Excavation South of the Keep

A trench *c.* 2 m wide was dug to the south of the keep in October 1977 (FIG. 2). Most stratified levels had been destroyed by post-medieval disturbances, but a small area was found intact in the south-east corner of the cutting, adjacent to the chapel wall (FIG. 6). At about 23 m OD

[11] For some inexplicable reason, Hull (op. cit. (note 6), 167) suggests that the attempt to reach the bottom of the keep wall was abandoned at a depth of 20 ft. 6 in. (6·25 m).

[12] Its location is shown as 'N' in Hull, op. cit. (note 6), fig. 82.

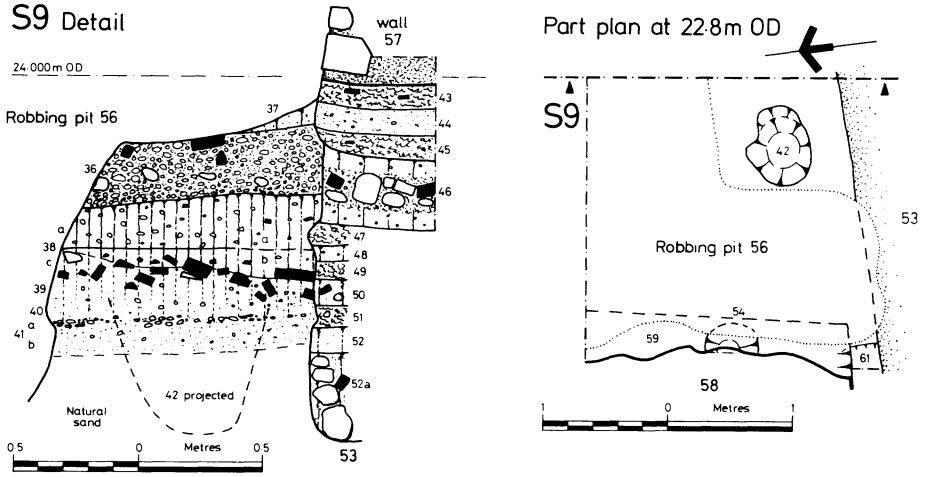


FIG. 6. Colchester castle: Details of the Roman and early medieval features located in the 1977 trench in the bailey. For key to sections, see FIG. 3, p. 11.

there was a scatter of *opus signinum* fragments (41a) which seems to represent the remains of the bedding of small paving bricks, three fragments of which were associated with it. A substantial fragment of this bedding from 39 was *c.* 27 mm thick, with sand adhering to the lower face and impressions of the bricks set on edge on the upper. Since the bricks are 65–70 mm thick (p. 41), the resultant paving would have had its upper surface at *c.* 23·1 m OD. The dirty sand layer (41b), below the remains of the bedding, probably represents the levelling of the top of the natural sand and the admixture of some topsoil in so-doing, although it could be a straightforward buried subsoil; below it the sand was undoubtedly natural. Similar paving has been observed elsewhere in the vicinity of the temple and there can be little doubt that it formed, at some stage, the paving of the temple courtyard.

Above this destruction level was a layer of light brown sandy soil; the upper level (39) tended towards a medium brown, probably because of contact with 38 above, and was slightly more pebbly than the lower level (40). This material also filled Postholes 42 and 54; and 61, probably another posthole. The association with these features suggests that it was a make-up layer connected with a structure rather than a post-robbing soil or deposit; certainty is impossible given the small area examined. Its deposit probably followed closely on the robbing of the courtyard paving, since it included several paving-bricks; also grey and white *tesserae*, fragments of roof tiles (buff and red), marble veneers, and worked stone; Posthole 42 also contained fused bronze lumps. The only dating evidence was a late Roman greyware body sherd from 40; but it seems probable that these levels are connected with a late Roman change in the use of the site.

The end of the phase is marked by a deposit of tile debris (38c) in a dark brown loam matrix. This consisted largely of roof-tiles: there were a few nails and many shells of the common snail, *helix aspera*. This seems to be debris from the decay of the roof of an adjacent structure, and if the slope of the level is reliable the structure should be the temple (in whatever amended state) to the north. Dark soil (38b) developed around and above the debris; this yielded no useful pottery, but two late Roman coins, of *c.* A.D. 330–45.[13]

[13] Kindly identified by Richard Reece as of Constantine II (copy of *LRBC* I 63) and an *Urbs Roma* (copy as *LRBC* I 51; mint mark illegible).

It would seem that soil continued to accumulate, but the upper level (38a) was distinguished from 38b both in section and by the inclusion of a few Saxo-Norman potsherds as well as 'late Roman' material. It may have been cultivated; its upper surface, at *c.* 23·5 m OD, was almost certainly the extant ground-level prior to the construction of the keep in the late eleventh century. It was sealed by a thick layer largely of *opus signinum* and cream mortar rubble (36), which should represent the destruction of unwanted, upstanding Roman masonry prior to the construction of the keep.

Roman Structures in the Temple Precinct

The Roman structural features located in the 1931–2 excavations were published by Hull.[14] To his description of the vaulted drain (140) and the corner of the presumed altar base (141), one can add little save for corrections to the dimensions (FIG. 2). The centre line of 140 is *c.* 13·25 m from the face of the keep, and *c.* 23 m from the presumed face of the temple. The altar base seems to have been symmetrically placed within the drains, its edge being *c.* 4·65 m from the centre of the latter.[15]

The Roman pedestal base (142) was described by Hull, but the remains of the 'concrete' floor found in the corresponding position are post-Roman, although it may well conceal a Roman structure at a lower level.[16] Part of another smaller base (143) was found incorporated into the foundation of the forebuilding (64). Despite its survival to a relatively high level, evidenced in PL. II B, it is hard to see it as a post-Roman feature. Its construction was similar to that of 142, with tile-built quoins, although it included rather more septaria in the faces and core. It seems to be aligned on the west edge of the altar foundation (FIG. 2).

The South Side of the Temple Court: 98–99 High Street, 1964

The excavation of this site by Max Hebditch in 1964[17] established the chronology of the monumental screen which defined the south side of the precinct of the Temple of Claudius (TABLE I, p. 8). After completion of the main work, a third trench was dug by P. R. Holbert. The late- to post-Roman accumulation of dark soil (L34) was found above a sandy layer with a definite surface (L35) (FIG. 12, inset).[18] A large fragment of masonry, mainly composed of Roman bricks, had evidently fallen from a considerable height on to the top of L34. It may have come from (a late reconstruction of ?) the upper part of the screen, or from another structure further to the north. The block evidently moved after the initial impact, leaving a gap between it and the edge of the hole made in L34, to the edge of which the remains of some of its plaster facing (F27) adhered. In the angle of the masonry block, two layers of plaster remained adhering to its face. The hole in L34 was soon filled with rubble, mortar and plaster debris (L33), which survived sporadically elsewhere in the vicinity and which seemed to form the lowest level of the Norman rampart. Layer 33 itself contained six sherds of Saxo-Norman pottery.[19]

Excavations on the West Side of the Temple Precinct, 1964 and 1969 by B. R. K. Niblett[20]

5, Maidenburgh Street, 1964 (FIGS. 8–9)

In September 1964, demolition of 5, Maidenburgh Street prior to the use of the site as a car

[14] op. cit. (note 6), fig. 82 and pp. 175–7.

[15] The slight asymmetry implied by Hull (op. cit. (note 6), 171) is erroneous.

[16] Hull, op. cit. (note 6), 176 and pl. xxvi, C; Drury, op. cit. (note 3), 330–1.

[17] 'Excavations on the south side of the temple precinct at Colchester, 1964', *Trans. Essex Arch. Soc*, ser 3, iii, 115–30.

[18] L34 is equivalent to Hebditch's Layers 4 and 5, and L35 seems similar to his L6 south of the arcade (ibid, fig. 4).

[19] For a full plan, and the post-Roman features generally, see Drury, op. cit. (note 3), 339–41 and fig. 16.

[20] For the post-Roman aspects of these sites see Niblett in Drury, op. cit. (note 3), 342–7.

COLCHESTER: West side of Temple court

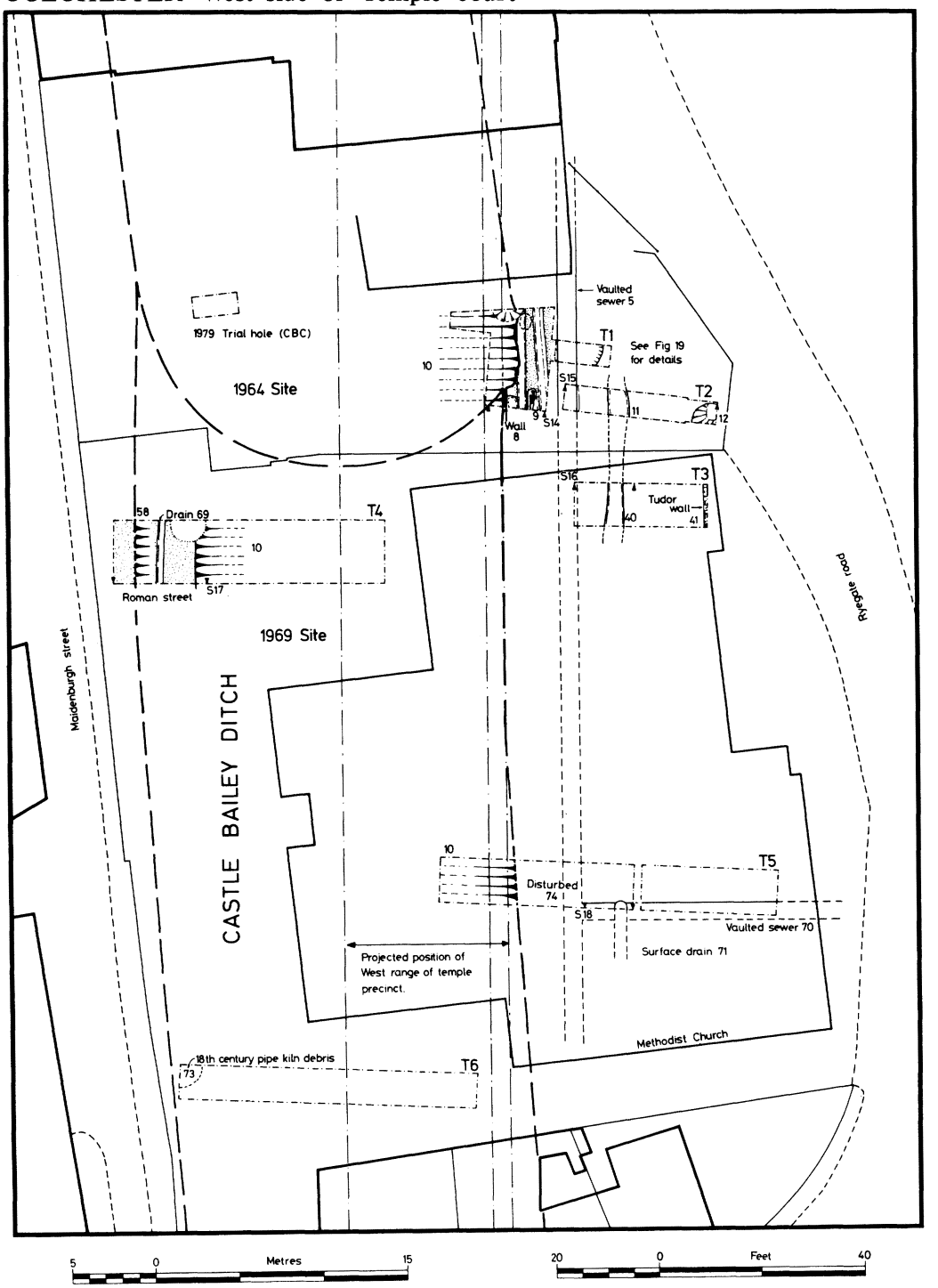


FIG. 7. Colchester: General plan of the excavations on the west side of the temple precinct, 1964 and 1969.

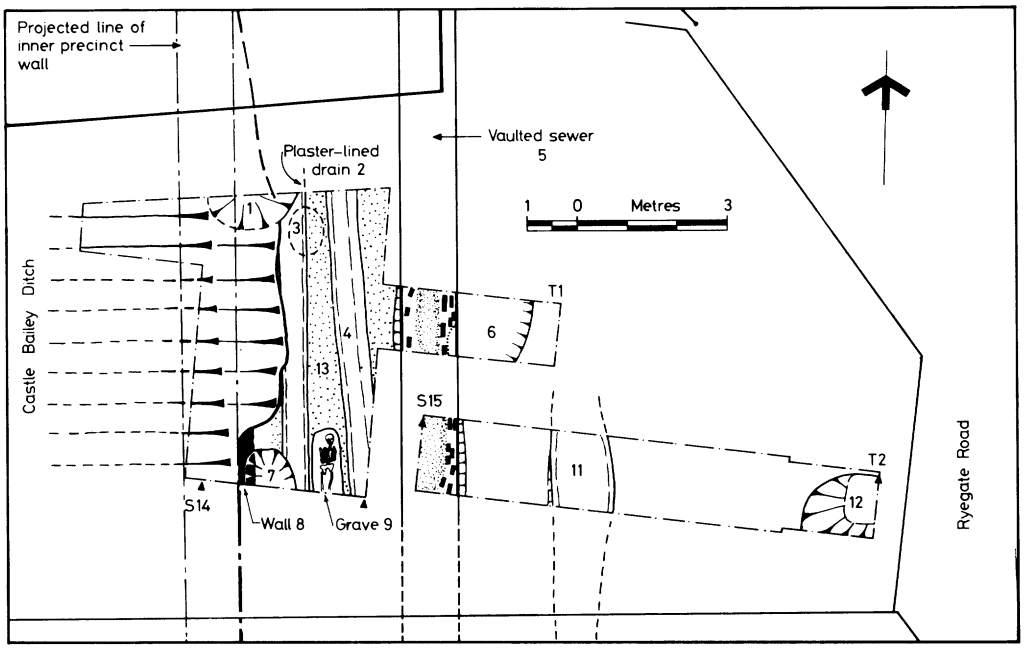


FIG. 8. Colchester: Plan of the excavations at 5, Maidenburgh Street, 1964.

park made an area of some 38 by 10 m available for excavation, which was undertaken during September and October by the writer for Colchester Excavation Committee.[21] Investigations by Henry Laver in 1892 on the north-west corner of the temple precinct located the inner wall of the court (discussed below, p. 26) which was traced for *c.* 48 m down its western side.[22] The projected line of this wall runs across the 1964 site, but since it coincides here with the Norman bailey-ditch, all trace of the Roman wall had been removed. In Trench 2 a shallow pit (11) was cut into L19 (see below) and sealed by L17. It was filled with sandy clay with occasional fragments of broken tile and small lumps of mortar. It is possible that the pit was the robbed base of a pier in an open colonnade, but the clean nature of the fill makes this unlikely.

The earliest dateable feature on the site was a fine masonry-vaulted sewer (5) running north-south 3.8 m east of the line of the inner wall. The sewer internally was 0·75 m high and 0·6 m wide at the base. Its walls were built of roughly-shaped blocks of septaria set in pink, slightly sandy mortar, and the vaulted roof of tile set in hard white mortar, probably due to construction in two stages during the same campaign. The vault of the sewer also contained several small fragments of Purbeck marble, presumably construction waste since none showed any sign of decoration or re-use. Laver found a very similar vaulted sewer 6 m within the inner wall on the north side of the precinct. As will be seen below, this sewer probably dates to *c.* A.D. 100, and the similarity in their plan and construction suggests that both formed part of the original plan of the temple court.

[21] Thanks are due to the owners of the site, the Colchester Borough Council, for permission to excavate, and to the then Ministry of Public Building and Works who financed the excavation. The administration of the excavation was shouldered by the officers of the Colchester Excavation Committee, to whom the writer extends her sincere thanks.

[22] This is marked on the 1878 1 : 500 OS plan in Colchester Museum, and was published by Laver in *Trans. Essex Arch. Soc.* NS ix (1905), 122–5.

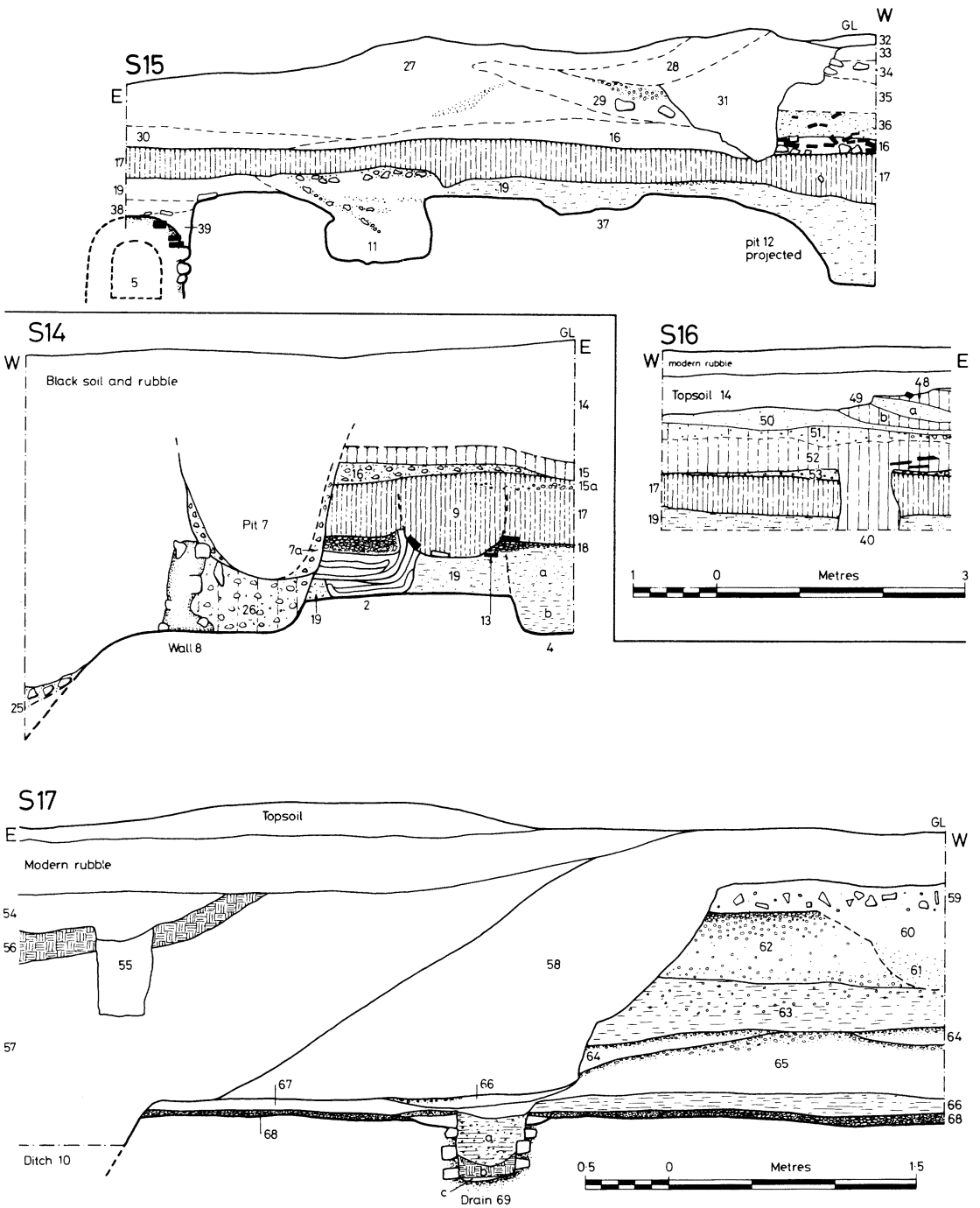


FIG. 9. Colchester: Sections 14–17, west side of temple precinct, 1964 and 1969. For key to sections, see FIG. 3, p. 11.

In Trench 1 a medieval pit (6) had been cut into the front of the rampart and the underlying L17 and L19. A large hole in the side of the vaulted sewer at this point was doubtless also the work of its digger. Elsewhere the sewer was remarkably well-preserved. Its tiled floor was almost entirely free of silt and it was open for a distance of 2 m to the south and 7·5 m to the north. The sewer had been cut *c.* 1·2 m into the natural sand. The resulting construction-trench had been filled with layers of dirty (re-deposited natural) sand (38–9) containing occasional flecks of charcoal, which continued as L19 over most of Trenches 1 and 2, and must represent the original levelling of the precinct.[23] It contained a small amount of late first- to early-second-century pottery (p. 46), which broadly supports a date of around A.D. 100 for the levelling of this part of the precinct. There was no sign of earlier activity.

The vault of the sewer projected through the top of L19 for several centimetres and its upper surface must have been exposed for part of its life at least, since it was worn by the feet of passers-by, and, in one case, a tile had been torn out of its mortar base.

In a few places L19 was sealed by a thin cap of clay, but generally this had been worn away. Some remains of a very worn mortar surface were found on the clay. It is possible that the small red bricks (*c.* 50 × 30 × 100 mm) that were frequently found loose in the course of the excavation were originally set in this mortar and formed a surface on L19, but were taken up for re-use when the tile surface mentioned below was laid. The bricks were markedly worn on one of the longer sides.

There is no evidence for any structural change on the site before the late second or early third century. At this stage a pit (3) was cut into the top of L19 and was filled with broken building-material, including several pieces of white stucco which formed the face of fluted columns,[24] and a fragment of a sandstone slab from a monumental inscription (FIG. 14.1; below, p. 38). Pit 3 also produced a small amount of pottery[25] which provided a *terminus post quem* in the late second century for the deposition of the building-material. The finds in this pit, particularly the inscription fragment, clearly indicate a major re-furbishing, confirming the evidence found by Mr Hebditch on the south side of the precinct and there dated to the late second century.

Cutting across 3 was a plaster-lined drain (2), 0·6 m wide and 0·08 m deep, and containing further building-debris. The builders evidently had some difficulty in correcting the slope of the drain so that water would flow northwards. The original base had been made completely level, so a layer of broken fragments of Purbeck marble had been added to make the necessary slope. Many of the fragments had decorative mouldings and were polished on one face, and some had the remains of iron cramps. The drain was then resurfaced with pink mortar, sloping gently down to the north.

The filling of Pit 3, the subsequent construction of the drain, and its resurfacing, probably all took place during a single period while the temple precinct was being refurbished. There was a small amount of silt in the original base of the drain, but this could have been the result of a single downpour which demonstrated the inadequacy of the drain and the need for resurfacing. Contemporary with the drain was a floor consisting of roofing-tiles set with their flanges downwards in yellow mortar to form a paved surface (13). There was some suggestion of a regular chequer-board pattern of red- and cream-coloured tiles, but not enough remained of the floor *in situ* to be certain. Considerable care had been taken by the builders to make this surface as level as possible, and wherever the underlying layers dipped down, extra broken tiles (including

[23] Hull, op. cit. (note 6), 180–4; Hebditch, op. cit. (note 17), 122. Both suggest a post-Boudican date for the construction of the precinct.

[24] cf. M. R. Hull, 'The St Nicholas Church Site, Colchester', *Trans. Essex Arch. Soc.* NS XXV (1960), 301–28, at pp. 323–4.

[25] Unfortunately now lost, but including a late *Cam* f218 with stabbed shoulder and false cordons, and *Cam* f266.

three broken antefixes of the type found by Mr Hebditch) were used as packing.[26] Against the drain itself the tiles had been laid with their flanges upwards, providing an extra kerb for it, and in some places the pink plaster lining the drain had splashed over onto the tiles. It is clear that the floor and the drain were contemporary. Unfortunately, the greater part of the surface had been robbed, in Norman times if not before.

A wall (8), built of roughly-dressed blocks of septaria set in sandy yellow mortar, probably dates from the same refurbishing. The wall, its outer face 0·4 m east of the line of the inner wall of the precinct, presumably ran parallel alongside it, but a length of only 1·2 m survived, the remainder being destroyed by the Norman ditch. The footings were cut 0·5 m into L19 (FIG. 9, S14) and the floor (13) sealed the construction trench for the wall (26).

At a later date a gully (4) was cut through the tiled floor, and later still gravel metalling (18) was laid over the floor, sealing both the drain (2) and the gully (4). This late floor appeared to have been extremely worn, but had been almost entirely removed by the later robbing of the tile floor, before being overlain by 17, the humus deposit beneath the Norman rampart. Later Roman stratification was not found, but there was a substantial amount of late Roman pottery on the site (p. 46).

The Methodist Church Site, 1969 (FIGS. 7, 9–10)

In 1969 the warehouse on the site immediately south of the 1964 excavations was demolished prior to the construction of the new Methodist church. Permission was obtained for four trenches to be excavated to a depth of 2 m, located so as not to affect the proposed foundations.[27]

Beneath the Norman rampart in Trench 3 was a layer of black humic soil 0·45 m thick, generally free of rubble and doubtless a continuation of L17 found in 1964. It was cut by a straight-sided feature (40), 0·6 m wide and at least 0·75 m deep, filled with black earth and rubble; it resembled a small robber-trench (FIG. 9, S16).

Beneath L17 in Trench 5 was a layer 0·35 m thick, consisting of dirty sand mixed with flecks of mortar and small fragments of Roman tile. This layer closely resembled the early Roman layer (19) encountered in 1964, and here again it overlay a fine vaulted sewer (70), closely similar in construction to 5, found in 1964. The sewer ran east-west, 36 m north of the south facade of the temple precinct (FIG. 10). Internally it was 0·75 m wide at the base and 0·75 m high, completely filled with sticky black soil. An interesting feature was the presence of a small surface drain (71), lined with tiles set in pink mortar and roofed with sandstone slabs laid flat across the top. It discharged into the main drain through a hole cut in its vault. No dateable material was found, but both drains were sealed by the dirty sand, L19. It is, therefore, likely that the sewer (70) was also part of the original late first-century layout of the temple court, and that the surface drain (71) was added soon afterwards.

Trench 4, on the west side of the site, located the eastern edge of the road bounding the west side of the temple court. Along its side was a small open drain (69), 0·35 m wide and 0·45 m deep, lined with squared blocks of septaria. The drain was filled with clean grey-green gravel (a), beneath which was a layer of burnt daub (b). The septaria lining itself had been reddened by heat. It is tempting to assign this evidence of burning to the Boudican revolt, but the possibility of destruction at some other time, particularly in the late second century when there is evidence of destruction by fire elsewhere, must also be kept in mind.[28] As on the 1964 site, there was a

[26] Hebditch, op. cit. (note 17), 127, fig. 5.10.

[27] Thanks are due to the associate architects, Messrs Stanley Bragg and Kenneth Cheeseman, for permission to excavate, and to the then Ministry of Public Building and Works who financed the excavations.

[28] Hull, op. cit. (note 6), 147; Hebditch, op. cit. (note 17), 123; B. R. K. Dunnett. 'Excavations in Colchester, 1964–8', *Trans. Essex Arch. Soc.*, ser 3, iii (1971), 100.

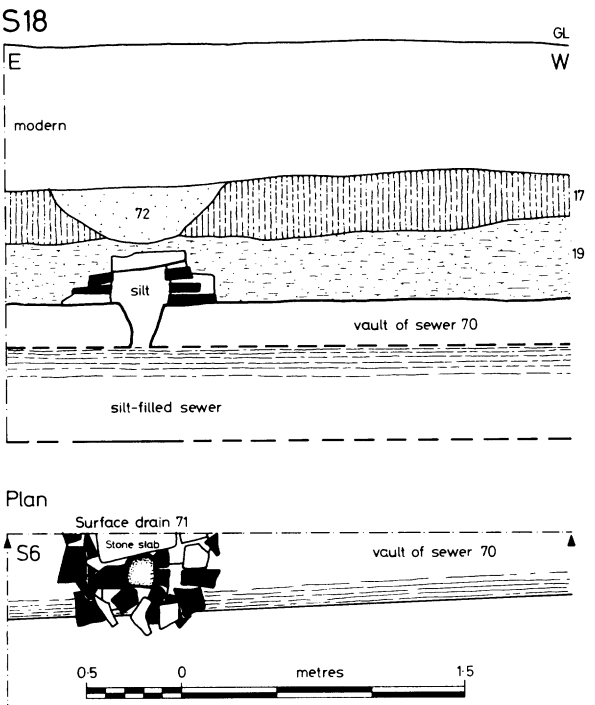


FIG. 10. Colchester: Details of Trench 5, west side of temple precinct, 1969. For key to sections, see FIG. 3, p. 11.

substantial amount of late Roman pottery; and two Constantinian coins were found in post-Roman contexts.[29]

SYNTHESIS: THE DEVELOPMENT OF THE TEMPLE SITE

Period I: Pre-Colonia Military Activity, A.D. 43–9

Recent work by Philip Crummy has shown that the Claudian legionary fortress underlies the western part of the later walled town (FIG. 1). Some of the fortress buildings were adapted by the veterans settled in the *colonia* which succeeded it in A.D. 49, although its defences were levelled. In excavations at Lion Walk in 1971, a ditch and rampart defining the south side of an eastern annexe to the fortress were discovered,[30] and in 1979 those defences were located further eastwards, in Long Wyre Street.[31] Their course is shown on FIG. 1 in relation to the fortress and the later Roman town plan. Neither the northern nor the eastern defences of the annexe have yet been located; but clues to their location seem to exist in the later Roman topography of the eastern end of the town.

The road leading southwards from the north-east gate has an alignment at variance with that of other streets in the eastern part of the town. It was traced as far as the so-called '*mithraeum*'

[29] Kindly identified by Richard Reece as of Constantine I, A.D. 310–15 (*RIC* 6 Lon 147), unstratified, and of the House of Constantine, A.D. 350–60 (*LRBC* II 25; fallen horseman) from T3, Norman rampart.

[30] P. Crummy, 'Colchester: The Roman Fortress and the Development of the Colonia', *Britannia* viii (1977), esp. 70–1.

[31] *Britannia* xi (1980), 378; N. Smith, 'New excavation under the Co-op', *Catalogue* (Newsletter of the Friends of the Colchester Archaeological Trust) v.

by Hull in the excavations of 1927–9,[32] and its continuation southwards to and beyond the present High Street, approximately the *decumanus maximus* of the *colonia*, is testified by its reflection in the boundaries of extant properties of at least late medieval origin (shown on FIG. 11). Only the northernmost excavated section, *c.* 37·5 m south of the north-east gate, yielded dateable material from beneath the metalling, suggesting a post-A.D. 61 origin for the street at that point, but the similarity of the grey clay bedding in all three excavated sections suggests that the entire length was constructed at the same time. The road cannot, therefore, be related directly to the annexe, but since its alignment is essentially that of the legionary fortress to the west, it seems probable that its course in some way reflects that of the eastern side of the annexe.

Reconsideration of the evidence for the north side of the *temenos* of the temple (see below) indicates that the building defining it, and thus the street to the north, is aligned differently from the other sides of the *temenos* and Insula 6 to the north. The most likely reason is that the line of the road between Insulae 14 and 22 was determined by some pre-existing feature. When examined at the north-east corner of Insula 22 in 1950, the street was found to lie directly on an old turf line, no dating evidence being found.[33] The presence of a tessellated pavement in Insula 15[34] (FIG. 11), on the projected line of this street, seems at first sight to preclude its eastward extension through that insula. Yet the so-called '*mithraeum*' in Insula 15 (but not its walled enclosure) follows precisely the alignment of the street between Insulae 14 and 22, suggesting that the structure might have been laid out in relation to an eastward extension of that street.[35]

Arguments based on the interpretation of apparently relict features in landscape or townscape are always speculative. But in taking the anomalously-aligned streets as a reflection of the annexe defences, a potentially credible plan emerges, the postulated line on the east following a course above the steep slope of the hill on that side (FIG. 1), and the road from the south entering through the middle of the southern defences. Furthermore, the idea of the annexe defences exerting a considerable influence on the layout of the eastern part of the *colonia* is supported by Mr Crummy's observation that, unlike the fortress defences, those of the annexe were 'not decisively levelled and must consequently have remained a somewhat derelict feature of the [pre-61] town'.[36]

Another topographic detail also seems to support the hypothesis. Replotting the evidence for the alignment of the *decumanus maximus* between Insulae 22 and 30 and Insulae 23 and 31 (FIG. 11) led the writer to conclude that the street follows three basic alignments through the town (FIG. 1): that of the fortress, as far as the east side of Insula 20; that fossilized in East Hill, eastwards from the east side of Insula 23; and a section linking these two, across Insulae 21–23, this being somewhat modified later (below, p. 26). The change of line at the east side of Insula 23 could well be due to the eastern approach road there passing through the entrance to the annexe.

The almost central position of the temple and its *temenos* in the putative annexe suggests the possibility that when the fortress was converted into the *colonia* in A.D. 49, the former annexe was set aside specifically for the Imperial cult. Was this, indeed, the reason why the annexe defences were 'not decisively levelled'? The site, on the edge of, if not actually outside,

[32] Hull, op. cit. (note 6), 74–5.
[33] Cotton in ibid., 180.
[34] ibid., 115 and fig. 37.
[35] The plan of the '*mithraeum*' is taken from P. Crummy, 'The temples of Roman Colchester' in W. J. Rodwell (ed.), *Temples Churches and Religion: Recent Research in Roman Britain* BAR 77 (1980), fig. 11.20.
[36] Crummy, op. cit. (note 30), 86.

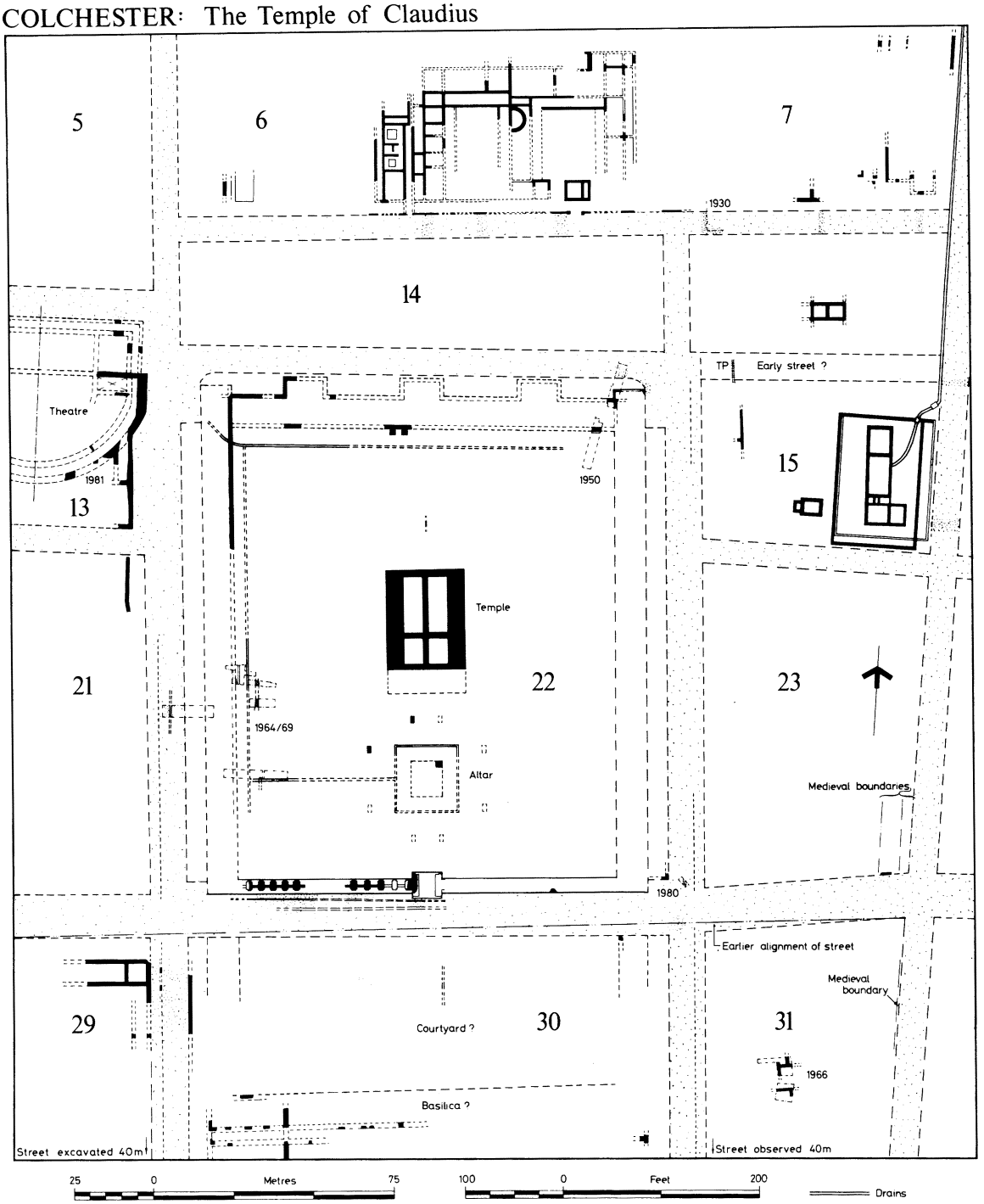


FIG. 11. Colchester: The temple precinct (Insula 22) and adjoining areas in Period III. Scale 1:2000.

the town is reminiscent of that of the altar (and later the temple) to Augustus at *Lugdunum*, 'In front of this town, at the place where the Saône joins the Rhône . . .'[37]

Period II: The Imperial Cult in the Pre-Boudican Colonia, A.D. 49–61

Dr Fishwick[38] has convincingly suggested that while Claudius was alive, the Imperial cult at Colchester would take the form of an altar to Roma and Augustus. Only after his death in A.D. 54 is a temple to *divus Claudius* likely to have been begun. The time taken to build comparable structures[39] suggests that such a temple may well have been unfinished, and undedicated, when the defenders of the *Colonia* made it their final refuge during the Boudican revolt of A.D. 61.[40]

It has been established beyond doubt that the structure beneath the Norman Castle keep is the podium of a large classical temple, and its position in an impressive *temenos* defined by masonry structures from the late first century onwards leaves no doubt that it is indeed the temple of the Imperial cult.[41] Conventional archaeological dating evidence for the building is lacking. However, if our plans are accurate, its alignment is not quite that of the *temenos*; it is that of the *decumanus maximus* between Insulae 21 and 23 before its line was adjusted, probably to accommodate the enclosing structures of the *temenos*. The surviving podium is thus likely to predate these enclosing structures, erected *c.* A.D. 80–100 (see below). Wheeler[42] stressed the fact that the podium contains no (evident) reused material in arguing its likely pre-Boudican date.[43]

Save for the temple itself, there is no early structural evidence or Boudican destruction debris from Insulae 13, 15 and 21–3, the entire area within the suggested confines of the fortress annexe north of the *decumanus maximus*. The only possible exception is on the western side of Insula 22, where Mrs Niblett (p. 20 above) located part of a gravel-metalled area (68) separated from the later street by a layer of silt (66). With the metalling was associated a stone-lined drain, its walls burnt, and containing some burnt clay, but this was not part of a general deposit (FIG. 9). The only dating evidence comes from the alignment of the drain, which seems to predate that of the *temenos* enclosure (see below, p. 25).

This is in sharp contrast to the southern part of Insula 30, where extensive remains of basically clay and timber buildings destroyed in the revolt have been found.[44] The situation in Insula 29, to the west, was apparently similar, and the street dividing them is of early date.[45] However, these early structures do not seem to extend eastwards into Insula 31, since no comparable remains were found in excavations there in 1966.[46] To the north of our putative fortress-annexe area, beneath the street separating Insulae 6 and 14, Wheeler found a layer of 'burnt material, principally wood', *c.* 75 mm thick. 'A similar deposit . . . was continually met with at a low level during the excavation [of the insula].'[47]

[37] Strabo, IV.3, 2; S. S. Frere, *Britannia* (1967), 323; A. Grenier, *Manuel d'archéologie Gallo-Romaine* iv (1960), 506.

[38] *Britannia* iii (1972), 164–81; iv (1973), 264–5.

[39] ibid., iii (1972), 166.

[40] Tacitus, *Annals*, XIV.31, 6.

[41] Hull, op. cit. (note 6), 162–8.

[42] R. E. M. Wheeler, 'The Vaults under Colchester Castle: A further note', *JRS* x (1920), 89.

[43] But note that Hebditch (op. cit. (note 17), esp. 122) has since shown that the primary phase of the architectural screen defining the *temenos* on the south is similarly free of reused material, although there is some in the north-east corner of the *temenos* buildings (Cotton in Hull, op. cit. (note 6), 181).

[44] B. R. K. Dunnett, op. cit. (note 28), 98; P. Crummy, 'Insula 30', *Trans. Essex Arch. Soc.*, ser 3, iii (1971), 107–11.

[45] Hull, op. cit. (note 23), 310.

[46] Dunnett, op. cit. (note 28), 87.

[47] R. E. M. Wheeler, 'An Insula of Roman Colchester', *Trans. Essex Arch. Soc. NS* xvi (1921), 7–41, esp. 10, 17 and fig. 3; see also Wheeler and Laver, op. cit. (note 1), 149.

The evidence seems to suggest that by A.D. 61 there was a large open area centred on the temple in Insula 22, defined by the former fortress-annexe defences on the north and possibly the east, and separated by the *decumanus maximus* from major, perhaps associated, buildings largely of clay-block and timber in Insulae 29 and 30 to the south (but still within the putative annexe). Beyond the annexe to the north, in Insulae 6/14, there were probably more contemporary buildings, but of a less substantial character. The absence of destruction debris in the immediate vicinity of the temple itself is explicable on two counts; firstly, the burning of its combustible elements would not produce a great volume of debris, unlike buildings of timber and clay; and secondly, a thorough ritual cleansing of the site is likely to have followed its desecration.

Periods IIIA and IIIB: the Reconstruction of the Temple, its temenos, *and Associated Structures, c. A.D. 62–100*

It is reasonable to assume that restitution of the site would begin with the reconstruction of the temple. Its alignment is shared by the walls of a massively-constructed masonry building observed at various times in the southern part of Insula 30. The clearest remains are those of three massive parallel walls and two cross-walls, *c.* 2 m thick, towards the west side of the insula.[48] To the north, there seems to have been a metalled courtyard; cobbles are recorded,[49] and a vaulted drain similar to those associated with the temple precinct is known.[50] This courtyard was apparently flanked by ranges of buildings on the east and west; the former is represented by casual observations,[51] and the latter was partially excavated by Hull, together with parts of another similarly-built structure in Insula 29 to the west. Hull thought that 'nothing important intervened' between the destruction of the pre-Boudican buildings and the erection of the masonry buildings on the west edge of Insula 30,[52] and the evidence from elsewhere in Insulae 29 and 30 is not at variance with that conclusion.

The development of the *temenos* around the temple and altar seems, however, to be rather more complex. Fragmentary traces of timber buildings were found by Hebditch to the south of the screen defining the south side of the *temenos*. These antedated the masonry screen, but were demolished before street metalling was laid, not burnt, and so should be post-Boudican, although there was no specific dating evidence associated with them. Their alignment, in so far as it can be deduced, was that of the original line of the *decumanus maximus* rather than that of the screen.[53] At the north-east corner of the *temenos*,[54] the street dividing Insulae 14 and 22 predates the masonry buildings defining the *temenos*.

Thus there is some evidence that the precinct was first defined in the post-Boudican period by metalled streets, timber structures or other more or less ephemeral features (Period IIIA); only after an interval in which, probably, the buildings in Insula 30 were constructed was the *temenos* enclosed by buildings on the north, east and west sides, and by a grand architectural screen on the south (Period IIIB). Such a conclusion is borne out by the pottery associated with the construction of the building on the west, which belongs to the late first century (p. 46). There is nothing to suggest that the enclosure of the precinct was other than a single operation, although the junctions between the screen and the east and west ranges have not been seen.

The form of the screen facing the *decumanus maximus* has been described most recently by

[48] Crummy, op. cit. (note 44), fig. 42:10, 21, 35.
[49] By Philip Laver; Colchester Museum archives.
[50] Crummy, op. cit. (note 44), fig. 42:5.
[51] ibid., 42:24, 41.
[52] Hull, op. cit. (note 23), 317.
[53] Hebditch, op. cit. (note 17), 117 and fig. 2.
[54] Cotton in Hull, op. cit. (note 6), 184.

Hebditch,[55] and all that is necessary here is to put the excavated western section of it into a wider context. On the assumption that the arch forming the entrance was aligned on the centre of the altar and temple to the north, it must have been *c.* 5 m wide. The foundation of the eastern section was located in 1921,[56] confirming its continuation eastwards, and it is evident that the street was separated from it only by a drain. An observation by Laver suggests the line of the street further east, at the south-east corner of Insula 23.[57] Thus the line of the *decumanus maximus* emerges as having been diverted to suit the line of the screen. Confirmation of the line of the street between Insulae 23 and 31 comes from the alignment of the (house-) walls excavated in 1966 in Insula 31, probably of second-century date (Fig. 11).[58]

The north-east corner of the building-ranges defining the *temenos* was excavated in 1950,[59] and the walls exposed near the north-west corner were resurveyed. The main north range at the north-east corner was *c.* 8 m wide internally. This is the same as the distance between two walls excavated by Laver[60] near the opposite corner, although displaced a little to the north, and it seems reasonable to assume that the same range is represented. This is confirmed by the location of a further point on the north wall in a shaft sunk in 1929.[61] There was a gap between the street found by Mrs Cotton to the north of Insula 22 and the building which fronted it; this is, not surprisingly, approximately equivalent to the projection of an adjunct to the main range found by Laver.

Laver[62] thought that he had located the north-west corner of the *temenos* buildings and their outer west wall, but did not locate an inner wall to accompany it. From the excavations of 1964–9 (p. 17), it is clear that he had, in fact, located the inner corner, and west inner wall, which, like the north inner wall, has a vaulted sewer running parallel to it. He appeared to have found the outer corner because of the severence of the masonry by the castle bailey ditch. The position of the north-east corner of the *temenos* building was fixed by Cotton, who also observed the metalling of the adjacent street to the east.[63]

During the digging of service-trenches in Cowdray Crescent in 1980, Philip Crummy[64] observed the inner angle of a Roman wall, and Roman street metalling to the east; its western edge was severed by later features. The line which this suggests for the street to the east is in agreement with that observed by Mrs Niblett further south,[65] but not with Hull's nearby observation of the same street in 1938, which is clearly misplotted.[66] Such a line for the north-south street east of Insulae 22 and 30 is not without problems. It passes over observed walls on the east frontage of Queen Street,[67] but their very position on the road-frontage suggests that they are medieval. It also means that the street cannot have extended in a continuous line northwards to divide Insulae 6 and 7, since Wheeler[68] found a wall on the northern frontage of

[55] op. cit. (note 17), drawing on earlier reports.
[56] In unpublished excavations for the Morant Club by Philip Laver, recorded in a manuscript report and Laver's diary (1 December 1921), both in Colchester Museum archives.
[57] Laver, diary (see note 56), 3 September 1930.
[58] Dunnett, op. cit. (note 28), 85–9.
[59] Cotton in Hull, op. cit. (note 6), 180–9.
[60] Laver, op. cit. (note 21).
[61] Hull, op. cit. (note 6), 179.
[62] See note 60.
[63] Cotton in Hull, op. cit. (note 6), 180–9 and fig. 81.
[64] Personal communication.
[65] Crummy, op. cit. (note 44), fig. 42, no. 2.
[66] On his map of Roman Colchester, Hull places it on the south side of the former St. James' parish hall (op. cit. (note 6), pl. xli:129), rather than on the south side of the rear entrance to the bus garage, as his text (ibid. 73) states; presumably the line was also misplaced in its east–west position. Crummy (op. cit. (note 44), fig. 42:18) follows Hull's map.
[67] Crummy, op. cit. (note 44), fig. 42:4.
[68] op. cit. (note 47), 17.

the east-west street which blocks its path. Wheeler's own tentative hypothesis of a road bounding his excavated houses on the east is also unlikely, since not only did he find no metalling, but the wall on the north side of the east-west street resumed after a gap (perhaps due to robbing) in the same form. Practical difficulties prevented the wall being traced further east, but there was no sign of a north-south road when the Park Cafe was rebuilt in 1930.[69] At present its location, if it exists, is quite unknown.

From this information a symmetrical north elevation to the *temenos* buildings can be postulated (FIG. 11) and thus the reconstruction in outline of the *temenos* as a whole, using the information from the 1964/69 excavations on the west, and the known position of the screen to the south. It is evident that the temple and altar lie axially within it.[70] The nature of the ranges enclosing the *temenos* is uncertain. They were probably largely open porticos, with some enclosed rooms and a solid spine wall. The north range proper was evidently floored with 'blue lias' slabs,[71] actually probably Purbeck marble,[72] and its internal walls were plastered and painted (p. 42). The fragment of a monumental inscription (p. 37) probably came from the *temenos* buildings or screen rather than the temple itself.

The temple court was evidently paved with small bricks laid herringbone-fashion; bricks and the broken cement-bedding for them have been found (e.g. in 1964/69 and 1977), but none *in situ*. Rainwater was carried off in fine vaulted sewers, located parallel to the north and south ranges, and discharging under the north-west corner of the *temenos* buildings. From here, the outfall probably ran along the east side of the adjacent street, out under the town wall, and hence to the river Colne. The sewers were fed by subsidiary drains; one was found in 1969 (p. 20), and another, triangular in section and perhaps rather later, was found to the north of the temple in 1940.[73] A sewer found in 1969 leading from the direction of the altar (p. 20 above), coupled with the discovery of what seems to have been part of the altar base and an associated drain in 1931–3,[74] enables the size of the base to be tentatively reconstructed, assuming symmetry along both axes (FIG. 11). It seems likely that the drain found in 1931 underlay gutters defining the edge of a specially-paved area around the altar. The positions of the two known bases for statues (p. 15 above) seem to agree with such an assumption, and seem likely to be part of a group of eight, those to the east and west being larger than those to the north and south.

The temple itself has been much discussed, most recently by Mr Crummy[75] who sees it as a Eustyle building. His interpretation, unlike earlier ones (summarized by him) is structurally in accord with the layout of the podium substructure and is generally convincing. His theoretical column diameter of *c.* 0·94 m accords with the diameter of approximately 1 m for columns formed of group R5 segmental tiles covered with fluted stucco (p. 41). The scale of these columns strongly suggests that they belong to the temple itself, despite the relatively inferior materials of which they were composed. Convex fluting of this type was particularly favoured in the late Neronian and Flavian periods (p. 42) to which the construction (or reconstruction) of the temple should belong. The marble sheathing from the columns of the Richborough monument, built *c.* 80–90, is slightly smaller in scale, but otherwise differs only in its material.[76] The only major amendment to Mr Crummy's reconstruction must be the provision of a longer flight

[69] Hull, op. cit. (note 6), 63.
[70] Not displaced to one side, as once appeared to be the case (Hull, op. cit. (note 6), 183).
[71] C. Roach Smith, 'On Roman Remains at Colchester', *Journ. British Arch. Assn.* ii (1847), 29–45.
[72] Cotton in Hull, op. cit. (note 6), 189.
[73] ibid., 179.
[74] ibid., 175–6; and p. 15 here.
[75] op. cit. (note 35), 243–8.
[76] D. E. Strong, 'The Monument' in B. W. Cunliffe, *Excavations at Richborough* v (Soc. Antiq. Res. Rept.23, 1968), 40–73, esp. 42, 67, and pl. xxva.

of steps, the need for which is apparent now that the level of the temple court can be related to that of the podium (FIG. 4). Their approximate extent in plan is shown in FIG. 11, in relation to the altar and adjacent structures. There is a hint of black and white tessellated pavements associated with the building (p. 40).

Our present knowledge of the temple and *temenos* confirms the validity of the parallel drawn by Wheeler and Laver[77] with the 'forum' at Aosta (*Augusta Praetoria*). The structures in Insula 30 are much less well understood, but clearly imply a courtyard with a massive range on the south and lesser ones on the east and west. What little is known of those ranges suggests that they answer the corresponding ranges of Insula 22 (FIG. 11), supporting the possibility that the temple precinct is in fact the northern compartment of a divided *basilica – forum –* temple complex like those at Paris, St. Bertrand and Augst.[78] In architectural terms, this explanation is almost certainly correct, although the relative sizes of the two elements at Colchester are the opposite of those at the comparable sites, where the forum-and-basilica element dominates. This alone suggests that the buildings in Insula 30 did not function as the *basilica* and *forum* of the *colonia*[79]; such a position on or beyond the fringe of the town would be quite unprecedented.

In Britain, at least, *fora* are always located approximately in the centre of the town as it was envisaged when they were built.[80] More specifically, it is clear that in the *coloniae* of Gloucester and Lincoln, and the cantonal capital of *Isca Dumnoniorum* (Exeter), all of which, like Colchester, developed from legionary fortresses, the *forum* and *basilica* of the later town was built approximately on the site of the *principia*, although not closely following its plan. At Gloucester[81] and Lincoln[82] the fortress street plan was retained, but at Exeter and Colchester the *via praetoria* and the *via decumana* appear to have been extended over the site of the *principia* to form the main axial street of the civilian towns.

At Exeter, the *basilica* and *forum* were built partly on the site of the *principia*, to one side of the new axial street,[83] and it seems probable that the pattern of development at Colchester was similar. Crummy[84] has argued convincingly that the *principia* of the fortress lay within the area later occupied by Insulae 17B, 18, 25B and 26 (FIG. 1). One of these, 18, lies in the angle between the *cardo maximus* and the *decumanus maximus* of the *colonia*, and has produced fragments of structures which by their size[85] and standard of decoration[86] can only be part of a public building. The size of the insula,[87] *c.* 97 × 99 m or *c.* 9,600 m², is larger than that of the *forum* and *basilica* at Exeter (*c.* 7,150 m²),[88] Lincoln (*c.* 7,550 m²)[89] and Gloucester (*c.* 6,800 m²)[90] and is closely comparable with those of Silchester (*c.* 8,450 m²)[91] and Wroxeter (*c.* 9,900 m²).[92]

[77] op. cit. (note 1), 147–8, with plan.
[78] Hull, op. cit. (note 6), fig. 96.
[79] Crummy, op. cit. (note 30), 85 and fig. 1.
[80] See, e.g., the town plans in J. Wacher, *The Towns of Roman Britain* (1974).
[81] H. Hurst, 'Excavations at Gloucester, 1968–71: First Interim Report', *Ant. Journ.* lii (1972), 24–69, esp. figs. 5–6; C. Heighway and P. Garrod, 'Excavations at nos. 1 and 30 Westgate Street, Gloucester: The Roman Levels', *Britannia* xi (1980), 73–114, esp. fig. 1.
[82] M. J. Jones and B. J. J. Gilmour, 'Lincoln, Principia and Forum: A Preliminary Report', *Britannia* xi (1980), 61–72, esp. fig. 1.
[83] P. T. Bidwell, *Roman Exeter, Fortress and Town* (1980), figs. 7, 27.
[84] op. cit. (note 30), 82–5.
[85] B. R. K. Dunnett, 'Excavations on North Hill, Colchester', *Arch. Journ.* cxxiii (1967), 27–61, at pp. 39–40.
[86] Hull, op. cit. (note 6), 150.
[87] Crummy, op. cit. (note 30), fig. 1.
[88] Bidwell, op. cit. (note 83), fig. 28.
[89] Jones and Gilmour, op. cit. (note 82), fig. 5.
[90] Hurst, op. cit. (note 81), fig. 6.
[91] G. C. Boon *Silchester: The Roman Town of Calleva* (1974), fig. 13.
[92] D. Atkinson, *Report on Excavations at Wroxeter, 1923–7* (1942), pl. 73.

Thus there is adequate space in Insula 18 for a *forum* and a *basilica* on a scale appropriate to the *colonia* and every reason to believe that it was in fact sited there. The argument presented is, in effect, that of Richmond[93] and Wacher[94] brought up to date. If it is correct, the putative *basilica* in Insula 30 is likely to be directly connected with the provincial cult; indeed it should be the meeting-place of the *concilium provinciae*, the provincial council. That it was apparently much larger than any *basilica* which could have been erected in Insula 18 would hardly be surprising. Finally, it is worth noting the proximity of the theatre[95] to the temple complex, presumably because of the annual festival organized by the council.[96]

Period IIIC: The Antonine Fire and Subsequent Reconstruction

There is now considerable evidence for extensive fire damage to the buildings of the temple precinct, and those of Insula 30 to the south, at the end of the second century; both were rebuilt soon afterwards. Dr Rodwell[97] has assembled evidence for serious fires at several small towns and rural settlements in southern and eastern Essex, and has suggested that, because of their contemporaineity (so far as this can be assessed), they may be the result of a single political event rather than accident. The evidence from Colchester is not as widespread as that from some of the small towns, but this may be due to the less combustible materials of many of its buildings. Signs of intense burning, which affected the structure of the architectural screen itself, were found by Hebditch on the frontage of the *decumanus maximus*. The destruction debris included a human femur shaft,[98] and it is perhaps significant that Antonine fire deposits at the small town of Wickford, Essex also include human skeletal fragments.[99]

Destruction was followed by reconstruction, indicated in the surviving remains primarily by the construction (using much second-hand material) of panel walls in the hitherto open arches of the screen. Although stratigraphically slightly later, the construction of a drain in front of the screen was probably part of the same constructional phase, since the drain walls too contained reused, burnt, building material. Mortar analysis also suggests a link between the drain and the blocking walls.[100] Elsewhere around the *temenos*, burning is not evident, but reconstruction is. Mrs Niblett found a pit (1964/69, 3) cut into the precinct make-up, filled with fragments of stucco from large columns and part of a monumental inscription (pp. 19, 37–9, 41). This was sealed by a plaster-lined drain, associated with tile paving, both of which were approximately contemporary with a reconstruction (8) of the destroyed east wall of the buildings surrounding the *temenos* on the west. Because of the fragmentary nature of the surviving evidence, the relationship of the fragment (8) to the original wall is unclear, but the shape of the west side of its foundation suggests that it was constructed against the trench-built foundation of the original east wall of the range. Mrs Cotton[101] similarly found that the south wall of the north range had been rebuilt, but was unable to date the reconstruction. Bases built in front of the same wall further west, 1·8 m square, may also belong to this reconstruction, since they were clearly not part of the wall which they abutted, and may have been statue bases. Their position is only known approximately ('opposite the entrance on the north of the castle').[102]

[93] I. A. Richmond, 'Roman Essex' in VCH *Essex* iii (1963), 9.

[94] Wacher, op. cit. (note 80), 105–8.

[95] P. Crummy, 'The Roman Theatre at Colchester', *Britannia* xiii (1982), 299–303. My interpretation of Hull's notes in Colchester Museum concerning earlier discoveries on this site, incorporated in FIG. 11, differs slightly from Mr Crummy's.

[96] Frere, op. cit. (note 37), 208–9.

[97] W. J. Rodwell, 'Trinovantian Towns and their Setting' in W. J. Rodwell and R. T. Rowley (eds.), *The Small Towns of Roman Britain* BAR 15 (1975), 85–102, esp. 93–4.

[98] Identified by Dr R. M. Luff among bones of *Lepus*, *Sus*, *Ovis/Capra* and *Bos* from Hebditch's L19.

[99] Dr W. J. Rodwell, personal comment.

[100] Hebditch, op. cit. (note 17), Periods 3–4, pp. 118–20, 122–3.

[101] In Hull, op. cit. (note 6).

[102] Smith, op. cit. (note 77), 37; the woodcut shows that they are secondary.

There is evidence for a late second-century fire affecting the buildings in Insulae 29 and 30. Hull[103] found in his Trench 3, above burnt clay debris, and also mixed with it, fragments of fluted stucco columns 'exactly similar to a large piece found reused in the smaller drain on the Kent Blaxill site in 1954' (i.e. in the later second-century reconstruction). More were found in Trench 5,[104] and in rubble overlying the street separating Insulae 29 and 30, but here the burnt clay was absent; the only burnt debris was tile fragments 'cracked by heat'. This suggests that where the underlying Boudican fire deposits existed (i.e. other than in the area of the street), the later debris had become mixed into the top of them in the course of the reconstruction (which must have included reflooring) of the masonry buildings whose walls cut down through the early deposits. The pottery confirms this. In addition to the usual assemblage of Boudican material, fragments of samian, Drag. ff. 33, 43, and 37 (the latter dated *c.* A.D. 150–80), were found 'on top of the red layer in Trench 2'. A f33 in Colchester ware came from a similar position and a f45 stamped [GE]MINI.M came from 'the top of the burnt layer'.[105]

Further east in Insula 30, there is burnt debris and stucco from the road junction at its north-east corner.[106] Mrs Niblett was able to distinguish (on the Sainsbury's site) a lower burnt level, by inference Boudican, and an upper one associated with the destruction of, or extensive damage to, the massive masonry buildings erected here probably late in the first century.[107] Evidence for the fate of these buildings after the fire is, however, contradictory. Mrs Niblett's observations suggested that the debris sealed the walls of the building, implying that it was not reconstructed; whilst Mr Crummy's observation of what must be part of the same building in the north-west corner of the insula suggests no second burnt level.[108] Moreover, his observations also suggest that the massive masonry building was reconstructed once, continued in use until the end of the Roman period, and then gradually decayed.[109]

In fact, the conflict is probably more apparent than real. The burning of a largely masonry building would not produce vast quantities of burnt debris (cf. the evidence from the south side of the *temenos*), nor need this be distributed evenly across the site. Its absence from the area examined by Mr Crummy is, therefore, not conclusive evidence of the masonry building *not* being burnt. Secondly, the building was not necessarily reconstructed exactly as it was formerly laid out, hence the observation of walls demolished to ground level and then sealed with (spread) debris is also not surprising. It seems reasonable to accept that the buildings in Insula 30 (and probably also those in Insula 29) were damaged by fire late in the second century and were rebuilt, with amendments to their plan, soon afterwards. The only evidence in favour of their functional separation from the temple to the north at the time of this reconstruction is, as Hebditch suggests,[110] the infilling of the screen, but this could as easily have been done for aesthetic reasons.

In passing, we may note that the residential buildings in Insula 39, to the south of Insula 30, were also burnt late in the second century;[111] and that substantial alterations to the structure of the theatre have been dated to *c* A.D. 150–250.[112]

[103] op. cit. (note 23), 313–4.
[104] ibid., 314.
[105] ibid., 325–6.
[106] Dunnett, op. cit. (note 28), 98.
[107] ibid., 100.
[108] But what is likely to be the same level has been observed a little further north, under Culver Street: Crummy, op. cit. (note 44), 107.
[109] ibid., 110.
[110] op. cit. (note 17), 123.
[111] Dunnett, op. cit. (note 28), 103; Hull, op. cit. (note 6), 214.
[112] *Britannia* xiii (1982), 302.

Period IVA: Reconstruction in the Fourth Century

There is evidence for a drastic change in the form of the building on the podium at some time in the later Roman period. The detailed structural evidence from the 1933 and 1977 work in the sub-crypt has been described above (p. 9). A wall (215), some 2 m thick, was built across the front of the temple, approximately on the line of the base of the steps (FIG. 4). A large pit in the central Norman vault of the castle, on the north-south axis of the podium (FIG. 2), interrupts the projected line of this wall and may indicate the site of an original entrance.[113] North of the wall lies a massive raft of tile fragments in grey mortar, including some quadrant tiles from columns *c.* 1 m in diameter, in all probability the columns of the demolished temple facade itself. The raft follows the shape of the apse, but predates the Norman walls. That on the north is built directly off an earlier, probably late Roman, wall, and this is probably true of the eastern part of the sub-crypt in general. The relationship of the Norman plan to the Roman one at the south-east corner of the keep suggests that the south-western tower of the keep may also reflect the plan of a late Roman structure beneath. The great bulk of this tower has no evident (Norman) justification, and is not reflected in the north-east or north-west towers of the castle, nor indeed in any other contemporary English keep.[114]

The implications of this evidence are assembled in FIG. 12: a long, narrow rectangular space with an eastern apse, lying athwart the podium of the temple. Previous work has shown that on the north, east and south sides the Norman walls directly abut the podium structure.[115] If the podium supported the main structure of the new building, its enclosing walls are likely to have been founded on the edges of the podium, which had previously supported the colonades and walls of the temple. Indeed, the solid north wall of the temple[116] was probably retained. A central entrance between the two spaces thus defined has been assumed, and a 'tile wall' shown on the Scarff/Laver plans further east (FIG. 2) may be the jamb of another door in the dividing wall, but no further details are provided. Dr Laver noticed, in the side of the cut through the west vault for the modern staircase, two successive sub-floor levels.[117] The upper may belong to this later phase of alteration. In February 1922, Laver uncovered the remains of the tile-built west face of the podium. The tiles were laid in white mortar, but there was a 'grey pointing mortar, forced in about one inch'.[118] The 'grey mortar' seems to be reminiscent of that of the tile raft in the sub-crypt, and presumably represents the remains of some late Roman alteration to the wall. Finally, there is fragmentary evidence of late alterations to the top of the podium near the north wall,[119] which may be connected with the erection of some internal structure.

The 1977 excavation produced evidence of change in the temple courtyard immediately south of the reconstructed building (FIG. 6). After removal of the brick paving, a layer probably of make-up[120] was deposited, which also filled three postholes probably connected with temporary works associated with the rebuilding. This layer may well have carried a new paving level, later robbed; but ultimately it formed the base of a soil sloping to the south, away from the building on the podium. This was capped by a fall of tiles (FIG. 6, 38C), which indicates the direction of at least one pitch of the roof of the apsidal entrance-hall.

The precinct was evidently maintained during the late Roman period. The tile-built drain in front of the screen on the south side, tentatively associated with a third replastering of the

[113] Hull, op. cit. (note 6), 168.
[114] For which see D. F. Renn, *Norman Castles in Britain* (1968).
[115] Hull, op. cit. (note 6), figs. 83–4.
[116] Crummy, op. cit. (note 35), 243–50.
[117] These were superimposed by Scarff on a south elevation of the keep; Drury, op. cit. (note 3), fig. 8.
[118] Diary (see note 56), 18 February 1922.
[119] Hull, op. cit. (note 6), 167 and pl. xxxi.
[120] L40, perhaps upcast from foundations.

COLCHESTER: The Temple / Castle site in the late Roman and Saxon periods

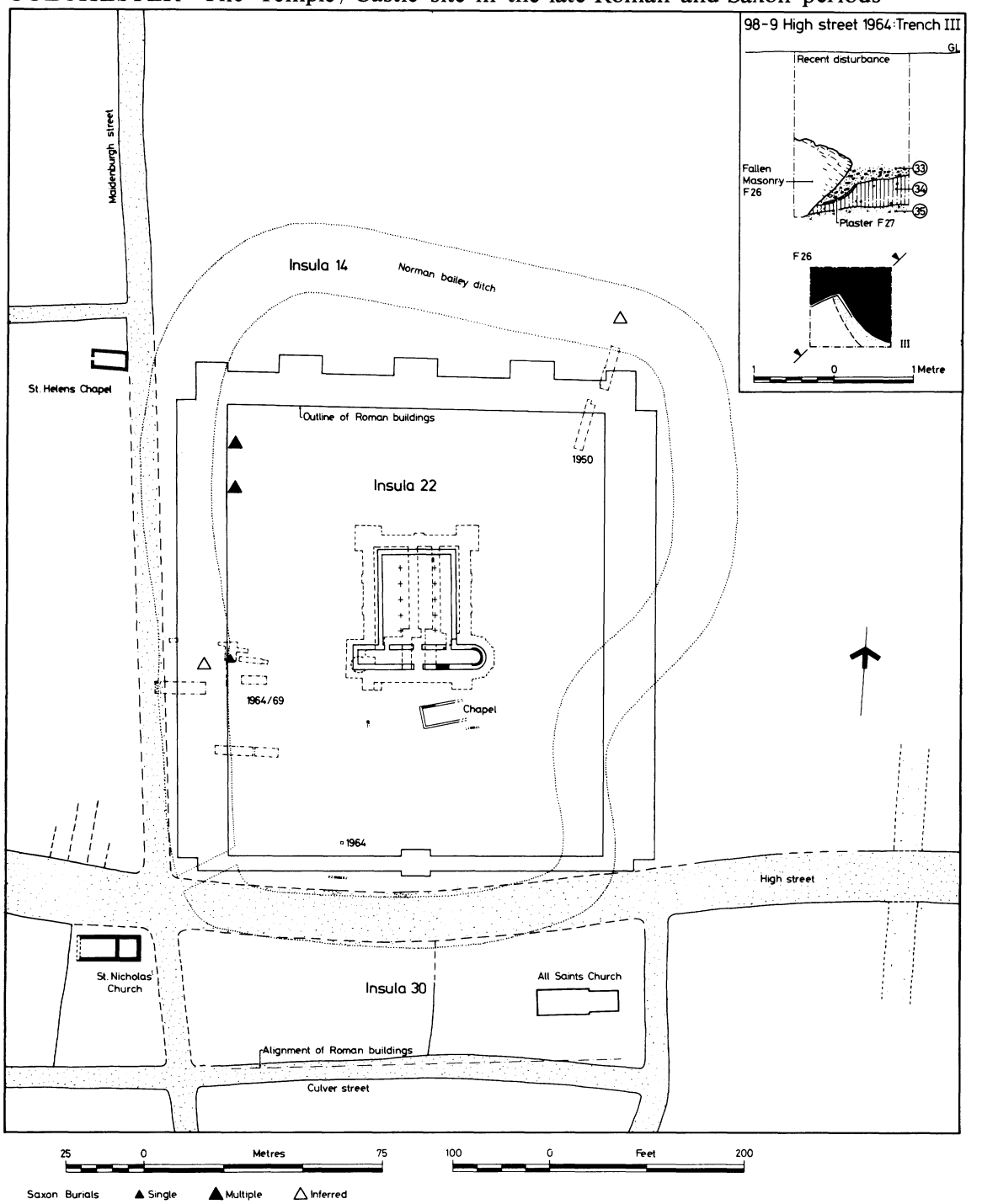


FIG. 12. Colchester: The temple/castle site in the late Roman and Saxon periods, in relation to the Period III structures and the Period VII (Norman) castle bailey ditch. Scale 1:2000. Inset are details of 98–9 High Street, 1964, Trench III, after drawings by P. R. Holbert in Colchester Museum archives.

blocking walls between the piers of the screen, should belong to this period; it was silted probably by the mid-fourth century.[121] The major buildings in Insula 30, to the south of the *decumanus maximus* were, we have noted, probably maintained throughout the Roman period. But at some date after the reign of Carausius (287–93), the road bounding Insula 30 on the south was diverted southwards, over the sites of houses, presumably to permit an addition to the south side of the public building to the north.[122]

In summary, the archaeological evidence implies major changes in the uses to which the complex was put, and it is easier to propose a likely context for such change than to suggest its subsequent function. It seems unlikely that a temple of the Imperial Cult, within a *colonia*, would survive as such after the edict of Milan in 313, notwithstanding Constantine's view of himself, in the pagan tradition, as an aspect of the Divinity incarnate.[123] There were exceptions, for example in Umbria,[124] but the scale and prominence of the establishment at Colchester suggests that changes were inherently likely.

The ground plan of the reconstructed temple suggests a large hall or basilica, either roofed in a single clear span or with two arcades on the north-south axis, and entered via a long, narrow vestibule one end of which terminates in an apse. The architectural form suggests a reception- or audience-hall, and in FIG. 13 it is compared with two successive buildings in Trier. FIG. 13.1 dates from the first century A.D., and has been interpreted as the audience-chamber of the procurator of Belgica and the two Germanies.[125] FIG. 13.3, the surviving 'Basilika', was constructed almost concentrically around it early in the fourth century, probably as an imperial council-chamber or *consistarium* for Constantine himself.[126] The Colchester building lies midway between the two in size, but shares with the 'Basilika' a long narrow entrance-hall, extending considerably beyond the facade of the main chamber, and terminating at one end in an apse. It is, of course, unknown whether the Colchester building had further subsidiary structures attached to it. Such a functional parallel, however, avoids the fundamental problem of who was intended to use such a hall.

Superficially, at least, the basilical form could as easily imply that the building was a church. If the main space were divided by arcades into a nave and two aisles, the basic layout would not differ fundamentally from that of the small church at Silchester[127] (FIG. 13.5). The cathedral at Orléansville (El Asnam) in North Africa, dedicated in 324, is more closely comparable in size, and has an internal eastern apse[128] (FIG. 13.4), but lacks a narthex or entrance-hall. The resemblances, however, are probably superficial. The early church, to distance itself from paganism, generally did not occupy pagan temples or their sites before the late fourth century in the east or the sixth century in the west,[129] although in (rural) Britain there was apparently some latitude. There are suggestions of pagan features beneath the late-fourth-century Christian levels at Icklingham,[130] and at Uley, at some time during the fifth century, a church seems

[121] Hebditch, op. cit. (note 17), 120, Period 5A.

[122] Crummy, op. cit. (note 44), 107; Hull, op. cit. (note 6), 70, 213.

[123] R. Krautheimer, *Early Christian and Byzantine Architecture* (1965), 17; A. H. M. Jones, *The Later Roman Empire, 284–602* (1964), 81.

[124] Jones, ibid., 93.

[125] E. M. Wightman, *Roman Trier and the Treviri* (1970), 75.

[126] ibid., 108–9; also H. Eiden, 'Ausgrabungen im spätantiken Trier', in W. Krämer (ed.), *Neue Ausgrabungen in Deutschland* (1958), 340–67, on whose fig. 6 our FIG. 13.1, 3 are based.

[127] S. S. Frere, 'The Silchester Church: The Excavations by Sir Ian Richmond in 1961', *Archaeologia* cv (1976), 277–302.

[128] Krautheimer, op. cit. (note 123), 23–4 and fig. 7.

[129] ibid., 19.

[130] S. E. West and J. Plouviez, 'The Romano-British site at Icklingham' *East Anglian Arch.* iii (1976), 63–125. esp. 120–1. The shrine at Witham, Essex, seems to show a similar sequence: *Britannia* xi (1980), 378–9 and fig. 14; xii (1981), 350.

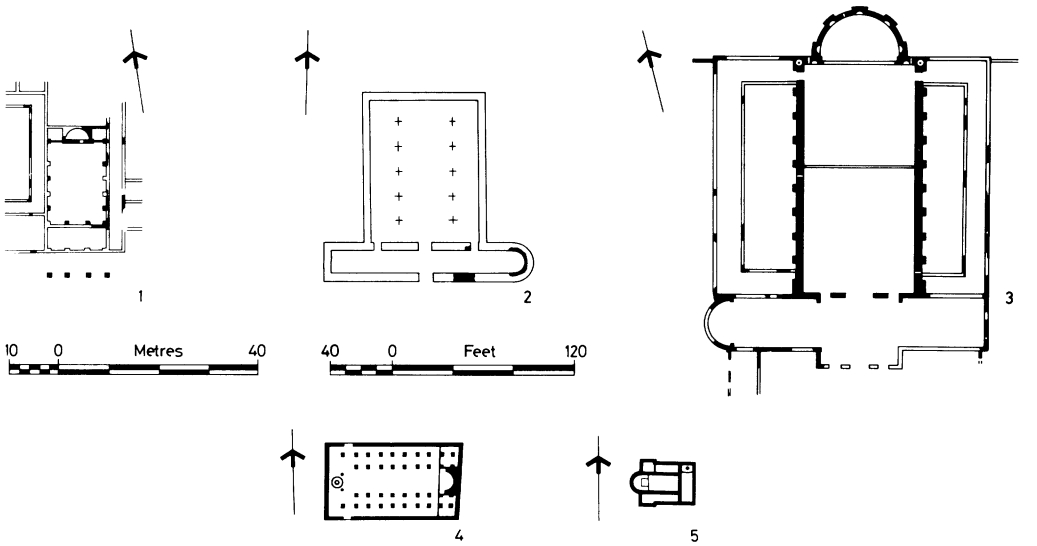


FIG. 13. Colchester: The probable form of the fourth-century building on the temple podium (2) and buildings of comparable plan: 1, the procuratorial audience-hall at Trier; 3, the imperial audience-hall at Trier; 4, the Constantinian church at Orléansville; 5, the fourth-century church at Silchester. Scale 1:1500.

to have succeeded the pagan shrine.[131] Another problem is that the hall is aligned north-south, not east-west. All the early Christian churches are oriented or occidented, as (approximately) are most of the pagan temples later used as Christian churches, for example the Maison Carrée at Nîmes.[132] The lack of orientation might be acceptable if an earlier building had simply been *used* as a church; but, given the scale of reconstruction implied by the evidence available, it is almost inconceivable that the result would not be oriented if its use as a church were envisaged. Finally, what is almost certainly a large congregational church has recently been found in Insula 35,[133] and the likelihood of two in the same city seems extremely remote. Yet some connection of the complex as a whole with the new Imperial religion seems possible, although the only overt evidence for christianity is provided by the Chi-Rho incised on the rim of a storage-jar (p. 48).

The amount of exotic marble recovered from the site[134] has attracted considerable attention. If it formed a significant element in the decoration of the first-century temple and its associated buildings, as is generally assumed, one would expect to find offcuts of it in Period IIIB features, like the vaulted sewers, and particularly in Period IIIC contexts relating to the reconstruction of the buildings after the late-second-century fire. Yet what occurs in these contexts is limestone, Purbeck marble, brick, stucco, and remains of black and white tessellated pavements. The scale of the brick and stucco columns represented by fragments found in 1964/69 (p. 27) makes their attribution to the actual temple highly likely, if not certain. The screen on the south of the

[131] A. Ellison, 'Natives, Romans and Christians on West Hill, Uley: An Interim Report on the Excavation of a Ritual Complex of the first Millenium A.D.' in Rodwell (ed.), op. cit. (note 35), 305–29.

[132] R. Amy and P. Gros, *La Maison Carrée de Nîmes* (38th supplement to Gallia), Centre National de la Recherche Scientifique, Paris (1979).

[133] *Britannia* xiii (1982), 371.

[134] Especially by Cotton (Hull, op. cit. (note 6), 188–9) and Hull, 'The Southern Wing of the Roman Forum at Colchester: Recent Discoveries', *Trans. Essex Arch. Soc.* NS xxv, (1955), 24–61.

precinct, even the entrance arch,[135] was similarly built of limestone and plastered brick or mixed media. Hull[136] seems to associate some marble other than Purbeck with the Period IIIC drain, yet elsewhere refers to its lying in robbing-levels above the drain. Given the difficult circumstances of his observations, reflected in, for example, the amount of intrusive pottery ascribed to Norman contexts,[137] it seems best to associate the exotic marbles only with the destruction levels. The earliest stratified context clearly to produce marble fragments is thus 1977, 40, the make-up associated with the Period IVA, arguably Constantinian, reconstruction. Most comes from Norman and later destruction levels and earthworks,[138] that is to say those associated with the ultimate destruction of the Period IVA buildings.

The absence of true marble from early construction and reconstruction levels argues at least for its sparing use on the site before the early fourth century, and the positive evidence for the use of other materials for floors, column casings and friezes supports this inference. Thus we must conclude that much of this material was introduced to the site in the early fourth century. In a Constantinian context decoration would be concentrated on the interiors, and the fragility of some of the material, from sheets only *c.* 7 mm thick[139] confirms this. At such a late date, the marble may well have been removed from other buildings rather than specially imported. Even the nave arcades of St Peter's in Rome, probably begun *c.* 333, were formed of reused columns and capitals varying in material, colour and details.[140] The quality and cost of the decoration of the building is unquestionable.

Period IVB: Latest Roman/Sub-Roman Occupation

The temple/castle site itself has produced what is locally recognisable as a typical very late Roman pottery assemblage: that is to say the latest material is post *c.* A.D. 360–70 (p. 46). The latest coins from the site are of Valentinian II (382–92)[141] and Theodosius I (379–95).[142] Beyond that, neither the ceramic nor the coin evidence will take us, but the structural evidence is a little more helpful. Domestic pottery of post *c.* A.D. 360–70 (see p. 46) occurs in occupation levels adjacent to the arcade facing the *decumanus maximus*, and subsequently the blocking walls were replastered.[143] We can safely postulate the continuing maintenance of the structures into the early- to mid-fifth century at least,[144] and then a natural deterioration for want of maintenance, evidenced by lenses of mortar rubble in Hebditch's Period 6[145] and probably the tile fall from the roof of the building on the podium (p. 31). The buildings in Insula 30 also seem to have fallen into gentle natural decay (above, p. 33). The absence of early Saxon pottery from the site need not imply that its use ceased in the first decade or two of the fifth century; during this period of transition Romano-Briton and Saxon might well have maintained separate cultural identities even if co-existing in the same city.

The quantity of late Roman pottery associated with the peripheral buildings around the former temple court implies some change of use at the end of the fourth, or more probably early

[135] Hull, op. cit. (note 6), 171.
[136] Hull, op. cit. (note 134), 40, 44 respectively.
[137] C. M. Cunningham in Drury, op. cit. (note 3), 378–9.
[138] Cotton in Hull, op. cit. (note 6), 188–9.
[139] Hull, op. cit. (note 139), 48–9.
[140] Krautheimer, op. cit. (note 123), 36.
[141] From 98–9 High Street: D. T. D. Clarke in Hebditch, op. cit. (note 17), 124–5, from the late (pre-Norman) occupation level (L2).
[142] From the 1950 excavation: B. W. Pearce in Hull, op. cit. (note 6), 188, from the late (pre-Norman) occupation level.
[143] Hebditch, op. cit. (note 17), 120, 126.
[144] Following, in general, W. H. C. Frend, 'The Christianization of Roman Britain' in M. W. Barley and R. P. C. Hanson (eds.) *Christianity in Britain, 300–700*, (1968), 37–49, esp. 45.
[145] Hebditch, op. cit. (note 17), 120.

in the fifth century. Unless the site was merely a rubbish dump, which seems to be refuted by the replastering of the screen walls *after* the deposition adjacent to it of levels containing such pottery, we must infer a substantial element of domestic occupation in and around the courtyard.

If some of the buildings surrounding the court were adapted for domestic use, enclosure of the presumed colonnades would be essential. On the west side, adjacent to the east wall of the enclosing building, a late Roman gulley (4) succeeded the earlier tile paving, and was itself sealed by gravel metalling, extremely worn. The top of the vaulted drain (5) was also probably exposed at this period, the crown of its vault becoming worn. The metalling lay to the west of a trench (40) (in 1964/69, T3), filled with the dark soil L17 (FIGS. 7, 9). Section 16 shows that this once contained a wall, because the upper part of 17 and the rubble layer (53) built up against its east and west sides respectively, the latter during the initial stages of the construction of the Norman rampart. In Trench 2 to the north, the line of the wall is represented by a dissimilar robbing trench (11), over which the dark soil has evidently reformed or been replaced, but it too contained Saxo-Norman pottery. The wall was probably robbed in stages, at different times in the Saxo-Norman period. The gravel metalling may well have formed the floor of a room defined by Wall 40/11 and the east wall of the west range. There is no absolute dating evidence, but its position in the stratigraphic sequence is at least consistent with its being associated with this latest phase of Roman occupation. Further north, Laver found (Saxon) burials within the inner wall placed on 'floors of red Roman concrete' continuous with red plaster on the adjacent wall.[146] The floors and plaster seem likely to have been parts of other later extensions added to the inside of the west range.

The crown of the vault of the drain on the north side of the altar, like that found in 1964, had been exposed and worn, and the *temenos* paving in the area robbed.[147] Over the whole of Insula 22, and the street bounding it on the north side,[148] a layer of dark soil containing late Roman pottery began to build up. The evidence taken together seems superficially to imply squalid decline; but the error of this conclusion is belied by the high proportion of non-local fine pottery from the Nene Valley and Oxfordshire, and coarse wares from Mayen.

A reason for this late intensification of domestic occupation in and around the courtyard may lie in its security. As far as we know, it was surrounded by substantial walls within the enclosing ranges on the north, east and west, and the screen with its blind arcade on the south, pierced by a single arched gate. In the difficult conditions of the early fifth century, its potential as a defensible residence is clear. Such use may have involved changes to the outer walls, about which little can be deduced at foundation level, but some clues exist. What was the function of the fragment of fallen masonry – almost certainly from the top of the screen on the south of the courtyard – found in 1964 (p. 15 above)? At the north-east corner of the precinct, the inner wall of the north range was demolished to floor level (? stylobate bedding level), and the dark soil built up uninterruptedly over it, whilst the outer wall was left standing.[149] Indications of similar 'late Roman' demolition of the inner wall and associated structures further west were perceived by Hull[150] from the account of Round's excavations in 1845. Are these demolitions the source of materials for the west range extensions?

Despite its location within the town walls, perhaps by the early- to mid-fifth century not defensible for want of manpower, the analogies for such a use of the precinct come from villas in the fourth century and beyond. The literary and architectural evidence has been ably summarized by Percival. Some were evidently enclosed by defensive walls. The mid-fourth century,

[146] Laver, op. cit. (note 21), 123.
[147] Hull, op. cit. (note 6), 175.
[148] Cotton in ibid., fig. 91.
[149] ibid., 183; fig. 91.
[150] Hull, op. cit. (note 6), 177–8.

probably Imperial, villa of Pfalzel, on the Rhine, was built around a courtyard, with no windows in its lowest storey. It had only one main door, and two small posterns.[151] A functional parallel is provided by the conversion of the *forum* at Bavai in Belgica Secunda into a small *castellum* in the late third century.[152]

Finally, it may be worth mentioning that the *Colchester Chronicle* states that the Norman keep was built '*in fundo palacii Coelis quodam regis*' – on the foundations of the palace of Coel, formerly king.[153] This may well mean no more than that it was built on the site of a major Roman building, but it is interesting nonetheless that the site was identified as that of a great residence.

THE EXCAVATED MATERIAL

Sites are referred to by the year of their excavation:

1931–3 Castle Park
1950 North-east corner of bailey rampart
1953 Kent Blaxhill's premises, High Street
1964 98–99 High Street
1964/69 West side of temple precinct
1977 Castle sub-crypt and trench between keep and chapel

Periods are summarized in TABLE 1, p. 8.

BUILDING MATERIALS

No attempt is made here to describe the entire range of building materials used in the Roman structures. So far as possible, all significant material from the excavations reported is mentioned, and some categories of particular interest are considered more fully.

STONE

By P. J. Drury, with contributions by T. F. C. Blagg and M. W. C. Hassall; identifications by Martyn Owen.

Marble

Fragment of veneer, 10 mm thick, with one polished face, possibly Pavonazetto from Phrygia, and another unidentifiable fragment, 17 mm thick, from 1977, 40; Fragment of sheet, 40 mm thick, one polished face, probably Africano, from 1964/9, Norman rampart. For the probable use of shale in an analogous manner see p. 46.

Limestone

Compact and crystalline, whitish, granular, probably foreign, perhaps from the Caen region of Normandy.

FIG. 14.1: A fragment of a monumental inscription, 0·255 × 0·32 × up to 0·07 m. The letters, of which part of only one survives, the lower half of an A, were set between marking-out lines. Traces of the red paint with which the letters were picked out survive. In size, the letters, at *c.* 0·255 m, slightly surpass those on a monumental inscription found re-used in the lower *Colonia* wall at Lincoln,[154] *c.* 0·25 m, but are themselves surpassed by those on one from

[151] J. Percival, *The Roman Villa* (1976), 174–7; F. Kutzbach, 'Das ältere Hochschloss in Pfalzel bei Trier', *Germania* xix (1935), 40–53, esp. his reconstructions (figs. 1–2).
[152] S. Johnson, *Late Roman Fortifications* (1983), 96–9.
[153] D. Stephenson in Drury, op. cit. (note 3), 409–13.
[154] *Britannia* vi (1975), 284–5, no. 2.

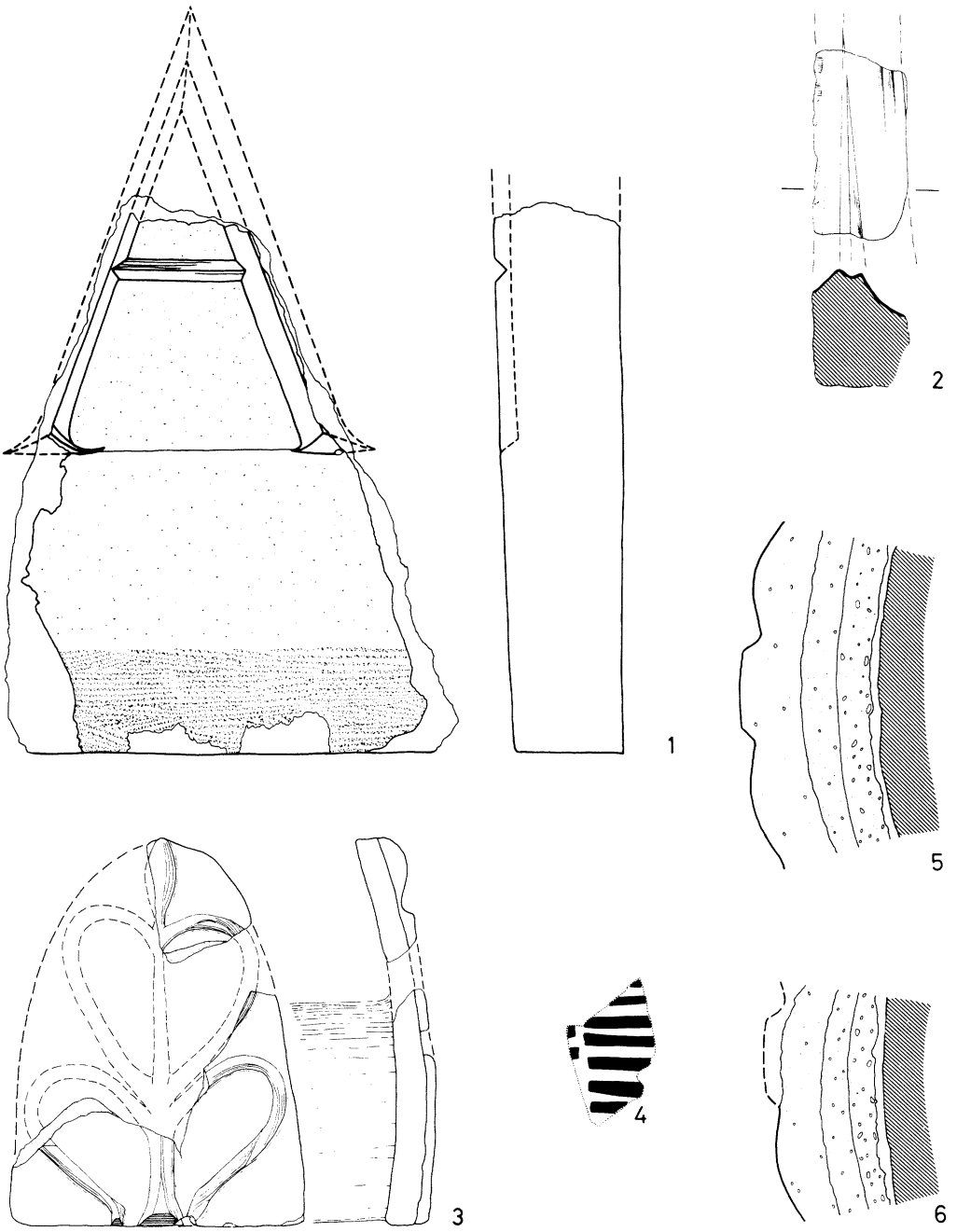


FIG. 14. Colchester: Various building materials, 1–6. Scale 1:4.

Winchester,[155] 0·292 m or one Roman foot in height. Between the lower (and only surviving) guide line and the bottom edge of the stone is a blank space, 0·175 m, inclusive of a strip left slightly roughened, running along the lower edge of the fragment, 0·06 m in width. The thickness of the slab suggests that it was a veneer, the roughened bottom edge probably slotting behind a separate moulding.

If the blank areas above and below the inscription were of equal size, and the inscription occupied but a single line, the total height will have been 0·6 m, or slightly over two Roman feet (0·591 m), while the height of the stone between the roughened borders will have been 0·48 m, corresponding presumably to the height of the frieze of the building on which the inscription was set. In thickness, the fragment tapers from 0·07 m at the broken (top) edge, to 0·06 m at the bottom. If the top of the sloping front and back faces of the stone are projected to the estimated height, the stone will have been 0·09 m thick at the top, reduced by 0·02 m at the bottom. The slope on the front face was presumably a deliberate device to enable the inscription to be seen more effectively from below.

In principle it should be possible to deduce the approximate diameter of the columns which supported this frieze, but comparative evidence from the western provinces is scarce. In the Quadrant Monument at Bath the frieze was 0·43 m high, and the diameter of the column, if the same as the depth (front to back) of the architrave, was 0·44 m.[156] The frieze of the Maison Carrée at Nîmes averages 0·57 m and the bottom diameter of the columns 0·89 m.[157] An arcaded monument at Escolives (Yonne) had a frieze an average of 0·445 m high and columns 0·414–0·43 m in diameter.[158] Thus if the Colchester fragment was only 0·48 m high, columns *c.* 0·5–0·75 m in diameter might be expected. This seems to be too small for the temple itself, where in any case one might expect the frieze to be of imported marble. However, the engaged columns flanking the entrance through the screen on the south side of Insula 22 were *c.* 0·87 m in diameter including stucco.[159] The screen itself, and the east and west ranges around the temple courtyard, would probably have been slightly smaller in scale, and it is from one of these that this fragment probably derives. Its excavated context (1964/69, 3; early IIIC) relates it to the west range.[160]

FIG. 14.2 Stone moulding, broken both ends: maximum length 106 mm, maximum dimensions in section 71 × 56 mm. The back (as drawn) has been dressed to an even surface with a claw chisel. The right-hand side contains pitting from the rough preliminary dressing with a mason's point, but any excrescences have been dressed flat. The moulded surface with its tapered incision has been carefully smoothed.

The size is comparable to that of Purbeck marble moulded veneers used in interior decoration, but it is unusual to find limestone used for that purpose. Indeed, the fragment is not immediately recognisable as a piece of architectural decoration. It seems unlikely that it formed the springing of an arch (placed vertically), since none of the edges of the tapered incision is curved. The taper is also at too shallow an angle for the piece to have formed part of a small pediment, placed horizontally. It could have been part of some item of ornamental furniture. From 1964/69, adjacent to Wall 8.

Purbeck Marble

Fragments of 20, 30 and 50 mm slabs from 1964/9 and 1977; 120 mm length of sawn block,

[155] *JRS* xlviii (1958), 150, no. 2.

[156] B. W. Cunliffe, *Roman Bath* (Soc. Antiq. Res. Rept. 24, 1969), 193–4.

[157] Amy and Gros, op. cit. (note 132), 92, 94.

[158] R. Kapps, *Escolives Sainte Camille Gallo-Romain* (1st supplement to *Revue Archéologique de l'est et du centre-est*, 1974), 35–7.

[159] Hull, op. cit. (note 6), 169.

[160] For a preliminary appraisal of this fragment see *Britannia* xi (1980), 403, no. 1.

45 × 30 mm in section, from 1931–3; very abraded corner of 35 mm slab, with splayed edges and remains of iron cramps adhering, from 1964/9 (VB, in grave 9); fragment of 18 mm slab with hollow-chamfered edge from 1964, L3 (IVB). Much was found in 1964/69, but subsequently lost (p. 19).

Purbeck Stone
Various varieties, mostly cream, from the lower beds of the succession, beneath the marble. Fragments of slabs, 35 mm thick, came from 1964/9, bailey rampart (VII; greyish, fine-grained) and 1977, 41; and of a slab 60 mm thick from a 1977 IX context. Odd fragments came from 1977, 15, 42, 38 and later contexts.

Reigate stone (upper greensand), Kentish ragstone, lower greensand, possibly Hythe or Folkstone Beds, and a fine-grained, unprovenanced limestone were found only in post-Roman contexts, but some may derive from Roman structures. Marbles and building stones from 1950 are described by Cotton,[161] and those from 1953 by Hull.[162] A great range of marbles and other decorative stones were found; the building stones from 1953 included Ham Hill and ? Taynton, as well as those represented here.

TESSELLATED PAVEMENTS
Tesserae in creamy white Purbeck stone, up to *c.* 15 × 10 mm, came from 1977, 41; 40; 36 (VII); others in a hard grey to greyish-brown crystalline limestone (no provenance), up to *c.* 17 × 20 mm, came from 1977, 41; 39; 54; 38; 36; 46 (VII). Both types were also found in 1950. These tesserae should derive from 'black and white' geometric pavements laid in the temple in Period III. The dark limestone is frequently found on Roman sites of this period in south-east England, for example the *mansio* at Chelmsford.[163]

BRICK AND TILE
Most fragments from 1977 bear traces of Norman mortar, indicating reuse in the castle.

Rectangular Bonding-Tiles
R1 30–35 mm thick, greatest dimension more than 220 mm, all made in the usual way, in the usual range of fabric, except a fragment from 1977, 5 (VIII) which has an ill-mixed low density fabric reminiscent of a post-medieval brick, but whose Roman date is indicated by patches of pink mortar beneath the buff medieval mortar which coats it. Examples from 1964/69, 11 (overfired); bailey rampart (overfired, ash glaze on bottom); 1977, 15; 5, 14 (VIII) and later.

R2 40–45 mm thick, greatest dimension more than 150 mm (possibly fragments of R6, below): 1977 (X).

R3 50 mm thick, buff fabric: 1977 (IXD).

Hull[164] notes a complete tile from 1953, *c.* 400 × 270 × 50 mm, with one end chamfered before firing, and Cotton[165] one *c.* 360 × 330 × 75 mm.

Voussoir-Tiles
R4 Two fragments, thickening by *c.* 10 mm in 100 mm, in different fabrics, one normal red, the other streaked red and buff: 1977, 14 (VIII), 7 (IX). Hull reports complete examples from the

[161] In Hull, op. cit. (note 6), 188–9.
[162] Op. cit. (note 134), 46–50.
[163] P. J. Drury, *The Mansio and Other Sites in the South-eastern sector of Caesaromagus*, Chelmsford Archaeological Trust Report 3.1, forthcoming in CBA Res. Rep. Series.
[164] op. cit. (note 134), 47.
[165] In Hull, op. cit. (note 6), 189.

debris of the architectural screen excavated in 1953, *c.* 380 or 480 × 250 × 50–100 mm thick.[166]

Segmental-Tiles

R5 60–70 mm thick, fragments either of half or quarter sections of columns *c.* 0·9 m in diameter; all edges are moulded. Many fragments are built into the raft, 1977, 15, two being visible in the side of Posthole 13. Fragments also from 1977, IX+ and 1964/9, VIII contexts. See also FIG. 14.5, 6, and p. 42 below for stucco facing.

R6 40 mm thick, fragment of a half or quarter section of a column 230 mm in diameter: 1977, IX.

Fragments of segmental tiles were noted by Hull from 1953.[167]

Paving-Bricks

Most show wear on one long side only, indicating the manner of setting. There are many variations in size, but two broad groups emerge, and one variant fabric.

R7 *c.* 120–30 × 65 × 25–35 mm, all edges as moulded. Prolific in all excavations in temple precinct area from 1932 onwards, including 1977, 41; 39, 54.

R8 *c.* 100 × 70 × 25 mm, otherwise as R7 but less common. One stratified example from 1950, sand make-up (IIIB); another 1964/69, unstrat.

R9 *c.* 150 × 45 × 30 mm, buff fabric; a single example, from 1950, 'late occupation level'.

Tegulae and Imbrices

R10–11 Standard *tegulae* and *imbrices* were rare in comparison with structural tiles. Buff roof-tile fragments occurred in several contexts: 1964, L19 (start IIIC), L35 (IVA), L3 (IVB); 1964/9, Pit 1 (VIII); 1977, 41; 39, 42, 54; and 46 (VII).

Antefixes

R12 Fragments of antefixes were found in 1964[168] and 1964/9. All are in a red sandy fabric. They were made by pressing clay into a damped and sanded mould, and striking the surplus from the top. After removal from the mould, the edges were partially finished with a knife. In some cases, the clay seems to have been too stiff to fill the hollows of the mould, resulting in an incompletely-formed pattern. The moulded antefix was luted onto the end of an *imbrex*, projecting considerably above its ridge, as marks on the backs of the fragments show (reconstructed in FIG. 14.3). A similar technique was used at Gloucester and York.[169] This form of fixing was evidently not very successful, since all surviving fragments have failed at the joints, probably because of frost action.

Three variations of essentially the same pattern seem to have been used in the temple precinct. One is represented by FIG. 14.3 here (1964/9, unstrat., 3 frags.); examples were also found in 1964 in contexts dated to the end of Period IIIB.[170] The second[171] and third[172] were also found by Hebditch in similar contexts. All are probably contemporary, and associated with the Period IIIB building phase. Fragments were also found in 1950.[173]

[166] op. cit. (note 134), 47.
[167] ibid.
[168] Hebditch, op. cit. (note 17), fig. 5.8–10.
[169] T. F. C. Blagg, 'The use of Terra-Cotta for Architectural Ornament in Italy and the Western Provinces' in A. McWhirr (ed.), *Roman Brick and Tile* BAR S68 (1979), 279.
[170] op. cit. (note 17); Feature 12, Layer 19; illustrated in fig. 5.10.
[171] ibid., Layer 19 (end IIIB), L6 (IVB); fig. 5.8.
[172] ibid., L19; fig. 5.9.
[173] Cotton in Hull, op. cit. (note 6), 184.

Box Flue-Tiles

R13 A single fragment of a roller-stamped box flue-tile, 22 mm thick, in the locally-usual fine hard red fabric.[174] Parts of two applications of the roller are evident (FIG. 14.4) but the fragment is not large enough for the die to be assigned to one of Lowther's types.[175] Both surfaces and three edges of the tile bear traces of *opus signinum*, indicating incidental use in rubble work. 1964/9, unstrat.

R14 Combed fragments, from 1964, F20 (VII).

STUCCO

By T. F. C. Blagg and P. J. Drury

Two fragments (FIG. 14.5, 6) of the stucco facing of fluted columns were found in 1964/69, 3, deposited at the start of Period IIIC. They clearly derive from columns built from group R5 segmental tiles (shown hatched on the drawings), with an unplastered diameter of *c.* 0·9 m. The fragments show that the stucco was built up in three layers, although varying from 60–80 mm in thickness in total. The entasis was probably produced by varying the thickness of the stucco; since the fluting is convex these fragments must derive from the lower parts of the columns. The first, rendering coat was of coarse, slightly pinkish, sandy plaster, the floating coat of coarse buff sandy material, and the setting coat of light sandy plaster. The surface was finished with a very thin hard white layer. Fragments of the backing layers for stucco also came from 1964, L19 (start IIIC), L6 (IVB) and F4 (VII). Hull reports fragments of a heavy convex moulding built into the Period IIIC drain, and, therefore, contemporary with the fragments from 1964/69.[176]

Convex fluting was particularly favoured in Flavian building: in Britain, for example, on the monument at Richborough.[177] It also occurs on the temple of Sulis Minerva at Bath[178] for the ornament of which a Neronian or early Flavian date has been argued.[179]

WALL PLASTER

All excavations in the temple precinct have produced fragments of painted wall plaster, but not in sufficient quantity to indicate the scheme of decoration of any of the buildings. Fragments of elaborately-decorated plaster, on backing layers up to 70 mm thick, were found in 1950 and 1964/69 (bailey rampart, VII); the remaining material is mostly from panelling. None is of sufficient size to justify extensive description.

ANALYSES OF CONCRETES *By* J. Evans

Samples from the following 1977 contexts were examined:

13 Mortar adhering to broken tile reused in the Period IVA raft 15, and thus probably of Period III.

15 The concrete matrix of the Period IVA raft: four samples were taken from various locations, 15/3 being from 0·2 m below the raft surface.

12 Mortar adhering to stones within the Norman posthole (VIIA) cut into raft 15.

57 The mortar matrix of the early thirteenth-century (VIIIA) chapel wall; 57/1 is from low down in the surviving wall, 57/2 from higher up.

58 The mortar matrix of the barbican wall, mid-thirteenth century (VIIIB).

[174] D. Johnston and D. Williams, 'Relief-Patterned Tiles: A Reappraisal' in McWhirr (ed.), op. cit. (note 169), 375–93; Drury, op. cit. (note 163).

[175] *A Study of the Patterns on Roman Flue Tiles and their Distribution* (Res. Papers Surrey Arch. Soc. 1, 1948).

[176] op. cit. (note 134), 46–7.

[177] D. E. Strong in Cunliffe, op. cit. (note 76), 40–73.

[178] Cunliffe, op. cit. (note 156), 10–16, esp. fig. 3.

[179] T. F. C. Blagg, 'The Date of the Temple of *Sulis Minerva* at Bath', *Britannia* x (1979), 101–7.

Visual examination showed that with the exception of 15/4 (completely degenerate), all were in a good state of preservation, with little sign of leaching.

The samples were dried (at 110°C) to constant weight and 100 g of each then treated with dilute hydrochloric acid to remove acid-soluble material (mainly calcium salts) and thus reduce the sample to its aggregate. The aggregate was filtered, thoroughly washed, and dried to a constant weight. It was then passed through a series of sieves and the quantities retained noted. In order to enable comparison of the aggregate distributions to be made, the weights retained were converted into percentages of the total aggregate weight and plotted against sieve mesh size. All analyses were carried out in duplicate and the mean values plotted.

Examination of the insoluble material showed that the larger aggregate (that retained by a 2·00 mm mesh sieve) in samples 15/1–4, 12 and 57/1–2 consisted of well-rounded flints, pebbles and brick/tile fragments. In addition, 12 contained fragments of fuel ash slag and 57/1–2 coal fragments. The coarse aggregate in Samples 13 and 58 contained only flints and pebbles. The finer aggregates were composed of sand consisting of rounded quartz with some iron staining. In 13 and 58 the sands were pale brown in colour whilst those in the remaining samples were dark brown. In Samples 15/1–4 the finest material, 0·07 m or less, had a distinct grey colour. Differential thermal analysis indicated that this was a natural colouration and not produced by burning of the clay.

The absence of any brick/tile material in the fines of Samples 15/1–4, 57/1–2 and 12 suggests that the brick/tile inclusion had been sieved prior to usage in the concrete. Consequently it would seem that a pozzolanic concrete was not being made.

Results

The samples all gave similar aggregate distribution diagrams but their acid-soluble fractions resolved them into two distinct groups. Group I contained 15/1–3 (15/4 being too degenerate for satisfactory analysis) and Group II the remaining samples.

Discussion

Group I

All the samples in this group had very similar distribution diagrams. In no sieve was the spread more then 3% (excluding the coarsest sieves which are often atypical). The acid soluble fractions were all between 12 and 15%. Such consistency is to be expected in samples from the same feature. The high degree of similarity argues in favour of the aggregate being sieved prior to usage.

Group II

Although all samples gave similar shaped distribution diagrams their consistency was by no means as good as Group I, the spread often being as much as 17%. The acid-soluble fractions, however, were all between 21 and 31%. Examination of the aggregate suggested that 57/1–2 are contemporary. No certain correlation of the remaining samples could be made.

There are several possible explanations for the marked similarity between Groups I and II, but the most likely seems to be the use of similar local aggregates, especially in view of the location of the site on sand. The presence of coal and slag in some samples may indicate changes in the process of lime manufacture. The two basic means of lime production were the *flare kiln* and the *running kiln*. Only the former was used in the Roman period.[180] It was charged in batches and the fuel and limestone were kept separate. The lime produced was thus generally free from impurities. In the running kiln, limestone and fuel were regularly added at the top whilst lime was removed from the base. In this way continuous production was maintained, but

[180] B. Dix, 'Roman Lime-Burning', *Britannia* x (1979), 261–2.

the lime was generally contaminated with fuel fragments and slag. Calcining was not as efficient as in the flare kiln. The absence of impurities in 13, 15/1–4, and 58 indicates the use of lime from a flare kiln, whilst the fuel ash slag in 12 and the coal in 57/1–2 indicate the use of a running kiln. The samples, therefore, could be divided into at least three groups, as follows:

Group	*Sample Number*	*Period*	*Lime Manufacturing Process*	*Aggregate*	*Impurities*
I	15/1–4	IVA (late Roman)	Flare kiln	Flints, pebbles, brick/tile	None
IIA	12	VIIA (Norman)	Running kiln	Flint pebbles, brick/tile	Slag
	57/1–2	VIIIA (early 13th century)			Coal
IIB	13	Prob. III (early Roman)	Flare kiln	Flint pebbles	None
	58	VIIIB (mid-13th century)			

The high degree of consistency of the Roman (15/1–4) concrete is of the same order as that observed in samples removed from the Roman Wall of London.[181] Furthermore, it is interesting to note that the aggregate-size distribution pattern is very similar though the actual percentages are different. As both structures are late Roman, it seems reasonable to assume a standard technique involving sieving and mixing. It is possible that in late Roman military and public building in Britain a standard mix was used.

LOOSE FINDS

SMALL ARTEFACTS *By* N. P. Wickenden

Copper Alloy (FIG. 15)

1. Handle (incomplete) and part of the bowl of a spoon. This type, with the characteristic dropped bowl and the nick in its angle, is commonly found in late third- to fourth-century contexts.[182] 1964/9, T3, Period VII rampart.
2. Fragment of a bracelet of unusual hollow form. It is decorated with a crude frieze consisting of crosses alternating with three grooves. The bracelet tapers significantly towards the terminal. There is a close parallel from Braintree, from a context dated *c.* A.D. 330–370.[183] Another similar but plain example, found at Ospringe,[184] was made by beating sheet-bronze over a twisted wire bracelet, forming a casing for the latter and creating a single item of jewellery. It is probable that the Colchester and Braintree objects were also casings for plain bracelets. This example has small triangular indentations on its inner face – possibly an impression of a bracelet underneath. 1964/69, T1, topsoil.

[181] J. Evans, 'Mortar Sample Analysis' in C. Hill *et al.*, *The Roman Riverside Wall and Monumental Arch in London* (London Middlesex Arch. Soc. Special Paper 3, 1980) 116–20.

[182] cf. D. S. Neal, *The Excavation of the Roman Villa in Gadebridge Park, Hemel Hempstead, 1963–8* (Soc. Antiq. Res. Rept. 31, 1974), 133, fig. 58.81; B. W. Cunliffe, *Excavations at Portchester Castle, I: Roman* (Soc. Antiq. Res. Rept. 32, 1975), 211, fig. 113.57–60.

[183] P. J. Drury (ed.), 'Braintree: Excavations and Research, 1971–6', *Essex Arch. Hist.* viii (1976), 1–143, esp. 17 and fig. 11.2.

[184] W. Whiting *et al.*, *Report on the Excavations of the Roman Cemetery at Ospringe, Kent*, (Soc. Antiq. Res. Rept. 8, 1931), 47 (Grave DX) and pl. lviii.

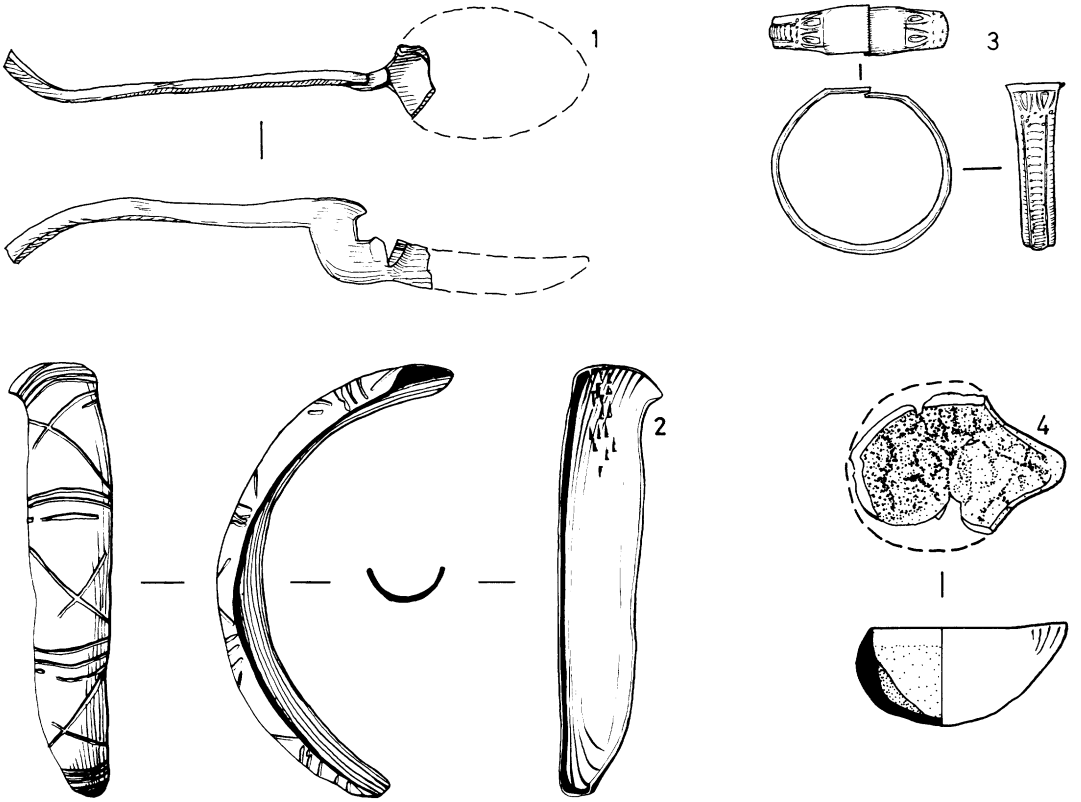


FIG. 15. Colchester: Objects of copper alloy (1–3, scale 1:1) and crucible (4, scale 1:2).

3. Expanding finger-ring with overlapping splayed terminals. The ring is decorated with bead-and-drag ornament, ending in egg-and-dart ornament at the base of each splay. 1964/69, T1–2, unstrat.

A bronze pennanular brooch[185] was found unstratified in 1950.[186] It is of interest for its date: late Iron Age to early Roman.

Iron

Fragments of a wooden water-pipe connector, 40 mm wide, with a raised central rib, came from 1964, L19 (end IIIB). Two T-staples were found in 1950.[187]

Jet and Shale

A substantial but shapeless fragment of jet, *c.* 30 × 30 × 10 mm, came from 1964, L3 (IVB).

A plain fragment of a 13 mm thick shale slab came from 1977, 42 (IVA). It may be part of a tray or trencher, or (less likely since it is relatively thin) a table top.[188] However, a similar frag-

[185] cf. C. F. C. Hawkes and M. R. Hull, *Camulodunum* (Soc. Antiq. Res. Rept. 14, 1947), 326, Class A.

[186] Cotton in Hull, op. cit. (note 6), 184.

[187] cf. W. H. Manning, *Catalogue of Romano-British Ironwork in the Museum of Antiquities, Newcastle-on-Tyne* (1976), figs. 158–60 (COLEM 1950: 166–7).

[188] cf. M. Biddle 'Two Flavian Burials from Winchester', *Antiq. Journ.* xlvii (1967), 248–50; A. J. Lawson, 'Shale and Jet objects from Silchester', *Archaeologia* cv (1976), 241–75, esp. 263–9.

ment was found in 1950, in the Period VII pit C1 (CM), whilst two large fragments were found in 1953.[189] One was *c.* 115 mm square × 12 mm thick, the other a slab *c.* 430 × 300 × 50 mm thick. These latter fragments in particular suggest that shale was used in a manner comparable to marble veneers.

GLASS VESSELS

The only significant item is a late fourth-century beaker of Isings form 106b, from 1964, L3 (IVB).[190]

POTTERY *By* C. J. Going

The Roman pottery from the 1950, 1953 and 1964 sites has been adequately published.[191] The dating evidence provided by the small amount of pottery from 1964/69 and 1977 has been noted in the main text, and only one surviving group from the former is significant enough to justify fuller description here. Otherwise, attention is confined to a general appraisal of all the extant late Roman pottery recovered from levels which began to develop late in the Roman period and which were exposed until the building of the keep in the eleventh century, or is derived from later disturbance of them. It, therefore, probably includes the latest Roman material in use in Colchester.[192]

Material from the temple precinct make-up, 1964/69

A small group of coarse sandy grey ware vessels was found in 1964/69, T2, L19 (FIG. 16):

1. *Cam* f218, probably Flavian.
2. *Cam* f266B, a variant felt by Hull[193] to be more characteristic of the early second century.
3. Probably *Cam* f221, but the form is not closely datable.

Parallels can be found in the pit group from Colchester Insula 7, dated by Hull to *c.* A.D. 100[194] and this group may be assigned a date of *c.* 75–115/30 A.D.

The Late Roman Pottery from the temple precinct

Catalogue of the Illustrated Material (FIG. 16)

4. Large three-handled bowl (one surviving), decorated with curvilinear designs in white paint. Nene valley white ware with a dark grey slip. Very similar to Oxfordshire red colour-coat form C85.[195] Its context and the Oxfordshire parallel suggest a late fourth-century date. 1953, black soil layer D (KB 38).
5. Bowl similar to 4, but smaller. There are no surviving handles. Decorated with curvilinear patterns in white paint. Nene Valley white ware. Late fourth century. 1953, black soil layer D (KB 6).
6. Hadham ware 'steamer' with pre-firing perforations and a post-firing graffito, reading SAL (see below). Overall horizontal burnish. Probably late fourth century. 1964, F4 (Period VII).
7. Burnt Hadham ware dish rim. Probably mid-late fourth century. 1964, L34.
8. Flanged mortarium rim in oxidized Hadham ware. Trituration grits of pink and white translucent quartz; fourth century. 1964, L34.

[189] Hull, op. cit. (note 134), 46.
[190] cf. Hebditch, op. cit. (note 17), fig. 5.11; C. Isings, *Roman Glass from Dated Deposits* (1957).
[191] 1950: Cotton in Hull, op. cit. (note 6), 184–8; 1953: Hull, op. cit. (note 134), 51–8; 1964: Hebditch, op. cit. (note 17), 126–7.
[192] A more detailed study of the late Roman pottery is lodged at the Castle Museum, Colchester.
[193] op. cit. (note 6), 283.
[194] Hull, op. cit. (note 6), figs. 53–6.
[195] C. J. Young, *Oxfordshire Roman Pottery* BAR 43 (1977), 170, fig. 65.

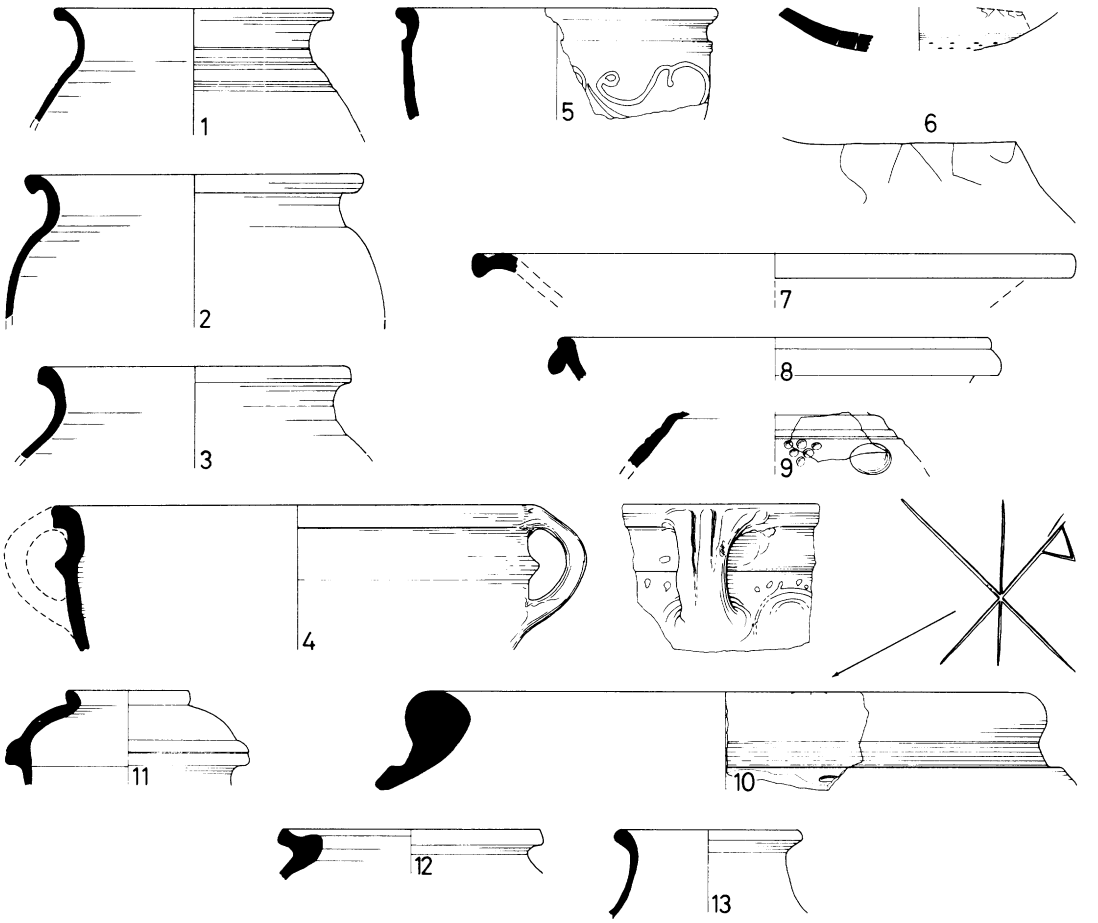


FIG. 16. Colchester: Roman pottery, 1–13. Scale 1:4 except graffiti, 1:1.

9. Sherd of a jar of *Cam* f339 in reduced Hadham ware. The surface is horizontally burnished overall. Decorated with a pushed-out boss and pendant triangles formed of circular dimples. Probably fourth century. 1953, black soil layer D (KB 26).
10. Rim sherd of a sandy grey ware storage-jar of *Cam* f273, with a Chi-Rho graffito cut on the rim after firing (see below). Examples of this form have been found in the Verulamium theatre deposit dated to post A.D. 379.[196] Probably late fourth century. 'Late occupation level', 1950.
11. Vessel in grey ware, of a form made in Colchester kiln 25;[197] third to fourth century. 1953, unstrat.
12. Mayen ware ledged-rim jar. 1964/9, 6 (Period VIII).
13. Mayen ware jug neck and rim. Gose type 532,[198] or with a handle, 549–50. Probably fourth century. 1953, unstrat.

[196] S. Geddes, *The Late Roman Pottery from the Verulamium Theatre*, M. A. Thesis, University of London, 1977, fig. 18, type 27.
[197] M. R. Hull, *The Roman Potters' Kilns of Colchester* (Soc. Antiq. Res. Rep. 21, 1963), fig. 89.8.
[198] E. Gose, *Gefässtypen der römischen Keramik im Rheinland* (Beiheft der Bonner Jahrbücher, 1950).

THE GRAFFITI *By* M. W. C. Hassall

1. SAL, on FIG. 16.6. A reference to *sal*, salt, is not likely and the graffito presumably represents either a common *nomen* such as Salvius or Sallustius or a *cognomen* such as Salutaris or Salvianus.[199]
2. A Chi-Rho, on FIG. 16.10. The angles of the arms in relation to each other suggest that the symbol may originally have taken the form of a simple cross with a loop at the end of one of the arms ('monogrammatic cross'), a third straight stroke being subsequently added to make a Chi-Rho of conventional form.[200] The 'monogrammatic cross' has been found as a graffito on a red colour-coated bowl from Richborough, Kent, and seems to be not earlier than the second half of the fourth century.[201] There is a further example, from Gatcombe, also cut in graffito on a potsherd, from a context dated *c.* 370–80.[202]

DISCUSSION

Despite the number of excavations carried out in the *colonia*, particularly in the last decade, little late Roman pottery has yet been published from Colchester. Ironically, perhaps the largest group hitherto found, the so-called '*mithraeum*' assemblage, while deposited post *c.* A.D. 337,[203] comprises mostly third-century or earlier material.[204] Unfortunately, but understandably, Hull used this material to date many forms in his Camulodunum type-series,[205] and thus unduly prolonged their life-span. Hull himself found that this created problems on the 1953 ('Kent Blaxhill') site, where *Cam* F268, for example, well evident in the *Mithraeum*, was unexpectedly absent from the late Roman levels.[206]

In the discussion which follows, the fabric percentages are derived from a sherd count of material only from stratified (pre-Norman) contexts, *c.* 800 sherds, but in other respects residual material is also considered.

TABLE 2 THE LATE ROMAN ASSEMBLAGE FROM THE TEMPLE PRECINCT

	%
Sandy grey wares:	78·0
Mayen ware:	0·5
Late shell-tempered wares:	6·0
Nene Valley colour-coated wares:	0·7
Hadham wares:	3·8
Oxfordshire oxidized wares:	3·0
Miscellaneous wares:	8·5
	100·0

Colour-coated fabrics comprise *c.* 8% of the assemblage, considerably less than the 20% which appears to be the approximate average for late Roman assemblages in walled towns.[207] Of perhaps wider importance is the confirmation that Oxfordshire red colour-coat first occurs,

[199] First noted in *Britannia* xi (1980), 410–11, no. 29.
[200] First noted in ibid., 411, no. 33.
[201] K. Greene, 'A Christian Monogram from Richborough, Kent', *Britannia* v (1974), 393–4.
[202] *Britannia* viii (1977), 444, no. 100.
[203] C. J. Going, *The Mansio and Other Sites in the south-eastern sector of Caesaromagus: The Roman Pottery*, Chelmsford Archaeological Trust Report 3.2, CBA Research Report, forthcoming.
[204] C. B. Harden and C. Green, 'A Late Roman Grave Group from the Minories, Aldgate', *Collectanea Londiniensia* (studies presented to Ralph Merrifield, 1978), 163–176.
[205] op. cit. (note 197), 178–191.
[206] op. cit. (note 134), 57.
[207] M. Fulford and I. Hodder, 'A Regression Analysis of some late Romano-British Pottery: a case study', *Oxoniensia* xxxix (1974), 28–35.

in Essex at any rate, *c.* A.D. 360–70. It is present in 1964, L34, which has a *terminus post quem* of A.D. 364,[208] and in the corresponding 'black soil' layers of the 1953 site,[209] but absent from the earliest of the 'late occupation layers' – the 'footings level' – on the north side of the Insula excavated in 1950,[210] although it was present later and residually on that site. Oxfordshire white-slipped red wares had a similar date-range. The very small percentage of Nene Valley colour-coat is surprising; in Essex it is usually more common than Oxfordshire fabrics. However, the fabric includes two unusual bowls (FIG. 16.4–5), resembling the Oxfordshire form C85; they should represent one of the latest elements of the Nene Valley repertoire.[211]

The most common fine ware came from Hadham. Forms included a dish (FIG. 16.7), a mortarium (FIG. 16.8), and a 'steamer' (FIG. 16.6). Reduced sherds were less common, but the only 'Romano-Saxon' sherd (FIG. 16.9) from any of the sites is probably a Hadham product.

Fabrics of Colchester origin were remarkably rare. On the evidence of *Cam* F395 the collapse of the industry must post-date *c.* A.D. 250,[212] but how much later it lasted is unclear. Kiln 25 produced two sherds of Oxfordshire red colour-coat,[213] suggesting activity in the vicinity of that kiln as late as *c.* A.D. 360–70, and interestingly, a vessel from the same excavation, for which Hull could find no parallel,[214] is matched by a vessel from the 1950 site (FIG. 16.11). While unstratified, it is probably late. The general dearth of Colchester fabrics from the assemblage, however, suggests that the industry did not survive long after the beginning of the fourth century.

Of the coarse wares, the most common fabric was sandy grey ware (78%). Perhaps the commonest greyware form was *Cam* f305B, increasingly in evidence after *c.* A.D. 250, and medium-necked jars resembling *Cam* f221. After sandy grey wares the commonest coarse fabric is wheel-thrown late shell-tempered ware (6%). It first occurs in Hebditch's Period 5 on the 1964 site[215] and in 1950 overlying a street in levels probably dated, at the earliest, to *c.* A.D. 350.[216] On the 1953 site the fabric occurs in Layer D, which is equivalent to the 1964 Valentinianic accumulation level. The source of the fabric may be the unpublished kiln site at Lakenheath, Suffolk,[217] rather than Harrold (Beds), or the Nene Valley. Late Roman imports comprised four sherds of Mayen ware, of which two forms were noted (FIG. 16.12–13).

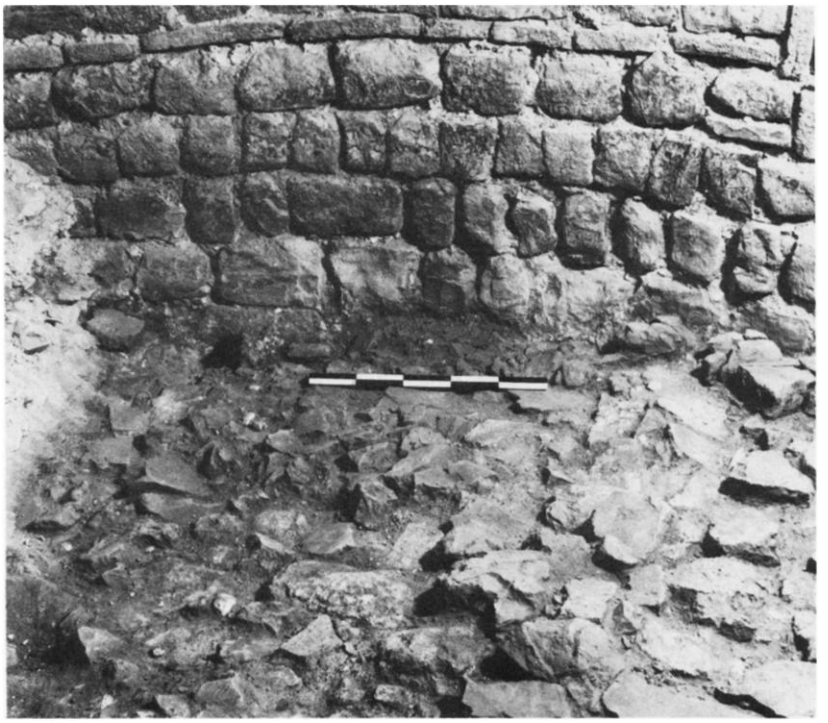
METALWORKING RESIDUES *By* Justine Bayley (Ancient Monuments Laboratory, Department of the Environment)

An Early Roman Crucible from 5 Maidenburgh Street (1964/69)

The crucible[218] (FIG. 15.4) came from the Norman bailey rampart (1964/69), formed from the upcast from the ditch, which cut through Roman levels. It comprises a small hemispherical bowl (diameter 60–70 mm) with pinched pouring-spout. The exterior surface is covered with a thin buff to brown coloured vitreous layer with a few red patches. In some areas this coating has been lost. The inner surface is also covered by a thicker (up to 2 mm) vitreous layer which appeared red and black in patches. Stuck in and on this were two pieces of charcoal and many small blobs of copper alloy (up to 2 mm in diameter) which had corroded, covering much of the

[208] Hebditch, op. cit. (note 17), 120–2.
[209] Hull, op. cit. (note 130), 44.
[210] Hull, op. cit. (note 6), 183.
[211] M. D. Howe *et al.*, *Roman Pottery from the Nene Valley: A Guide* (Peterborough City Museum Occasional Paper 2, 1981), fig. 7.78.
[212] H. Toller, personal comment.
[213] Hull, op. cit. (note 197), 157, fig. 89.6–7.
[214] ibid., fig. 89.8.
[215] Hebditch, op. cit. (note 17), 124–5.
[216] Cotton in Hull, op. cit. (note 6), 183.
[217] V. Swan and J. Plouviez, personal comment.
[218] AM 792925.

PLATE I



(*Photo: Colchester and Essex Museum*)

A. Colchester Castle Keep: View looking north, of part of the weathered and irregular surface of the tile and concrete raft, 15, exposed in the sub-crypt, 1977. Compare with the detailed plan, FIG. 5 (p. 9).

(*Photo: Colchester and Essex Museum*)

B. Colchester Castle Keep: The tile and concrete raft, 15, at the eastern extremity of the apse of the sub-crypt, showing how the mortar of the Norman wall seals the raft. The line of Section 2 is on the right of the picture. Compare with FIG. 5 (p. 9).

(*Photo: Colchester and Essex Museum*)

A. Colchester Castle Keep: Sondage cut through the tile and concrete raft against the north wall of the sub-crypt; Section 11, with which the photograph should be compared, is on the right of the picture (p. 10).

(*Photo: T. C. Gall, April 1932*)

B. Colchester Castle: The Roman base, 143, partly covered by the wall of the Norman (Period VIIB) forebuilding (p. 15).