IV
The Roman Fort at Rudchester

An analytical field survey by M. C. B. Bowden and K. Blood

A SURVEY[1] of the Roman fort at Rudchester (*VINDOBALA*) and its environs (fig. 1) was undertaken in October 1990 by the Newcastle office of the Royal Commission on the Historical Monuments of England at the request of Northumberland County Council who own part of the site. The plan and the full descriptive account have been deposited in the National Archaeological Record (reference no. NZ 16 NW 11).

Rudchester (NZ 112 675) is the fourth fort from the E on Hadrian's Wall. It is situated on a summit at about 135 m above OD with good visibility on all sides, particularly to the S and E. To N and W the outlook, from ground level, is restricted by rising terrain at a distance of about 1 km. In the immediate vicinity of the fort the ground drops to the SE to the Rudchester Burn and to the W to the March Burn. The fort straddled the Wall and consequently is now cut by the eighteenth-century Military Road (B6318) which used the line of the Wall here as a foundation. To the SW of the fort are the remains of a *vicus*.

This fort seems to have had a history very similar to that of its neighbour, Haltonchesters. It is uncertain, however, whether Hadrian's Wall and Ditch were completed across the site before the fort was built (Haverfield 1902, 391–2; *pace* Richmond 1966, 63 and others[2]). Rudchester was built under Hadrian and suffered some damage by fire to the S gate (Brewis 1925, 96) and to the barracks (Gillam *et al.* 1973, 82), probably in the later second century. It is known that the W gate and the W portal of the S gate were blocked, probably at a similar date (Brewis 1925, 94–7, 104–7). Birley states (1961, 168) that Brewis based this dating only on the lack of wear on the sills of the W gate but Brewis's argument rests rather more heavily on stratified finds of samian at both gates and on differential damage to the *spina* of the S gate (Brewis 1925, 96, 104–5).[3] The barracks were rebuilt towards the end of the second century but were subsequently abandoned, possibly before the end of the third century. There was re-occupation within the fort late in the fourth century, including the construction of buildings on stone sill-beams similar to those found at Haltonchesters (Gillam *et al.* 1973, 84). Of the buildings outside the fort only the Mithraeum has been excavated; this was essentially a third-century building overlying an earlier structure (Gillam and MacIvor 1954, 217–18).

The ruins of Rudchester fort were very well preserved until the eighteenth century. Horsley described the remains as "very remarkable"; he could identify interval-towers and those at the gates and angles in the northern part of the fort, though those in the southern part were "not so distinct". Rudchester is the only fort on the Wall for which Horsley depicts towers on his inset plan (1732, 158 N3). The ramparts that he saw were well preserved but the ditch was already faint; buildings and gateways were visible within the fort. He could identify no sign of the *vicus* and assumed that it was under modern Rudchester (Horsley 1732, 139–40).

By the 1760s stone-robbing was in progress and by 1783 the site was under the plough (Birley 1961, 167). This phase of disturbance revealed a life-sized statue of Hercules and the cistern known as the "Giant's Grave", 90 m SW of the fort (Bosanquet 1926, 34–6; Bruce 1853, 119). The ridge-and-furrow now visible in the southern part of the fort probably dates to this period, though in 1801, when the site was under grass, Hutton saw "strong marks of former buildings" within the ramparts (Birley 1961, 167). Stone clearance seems to have

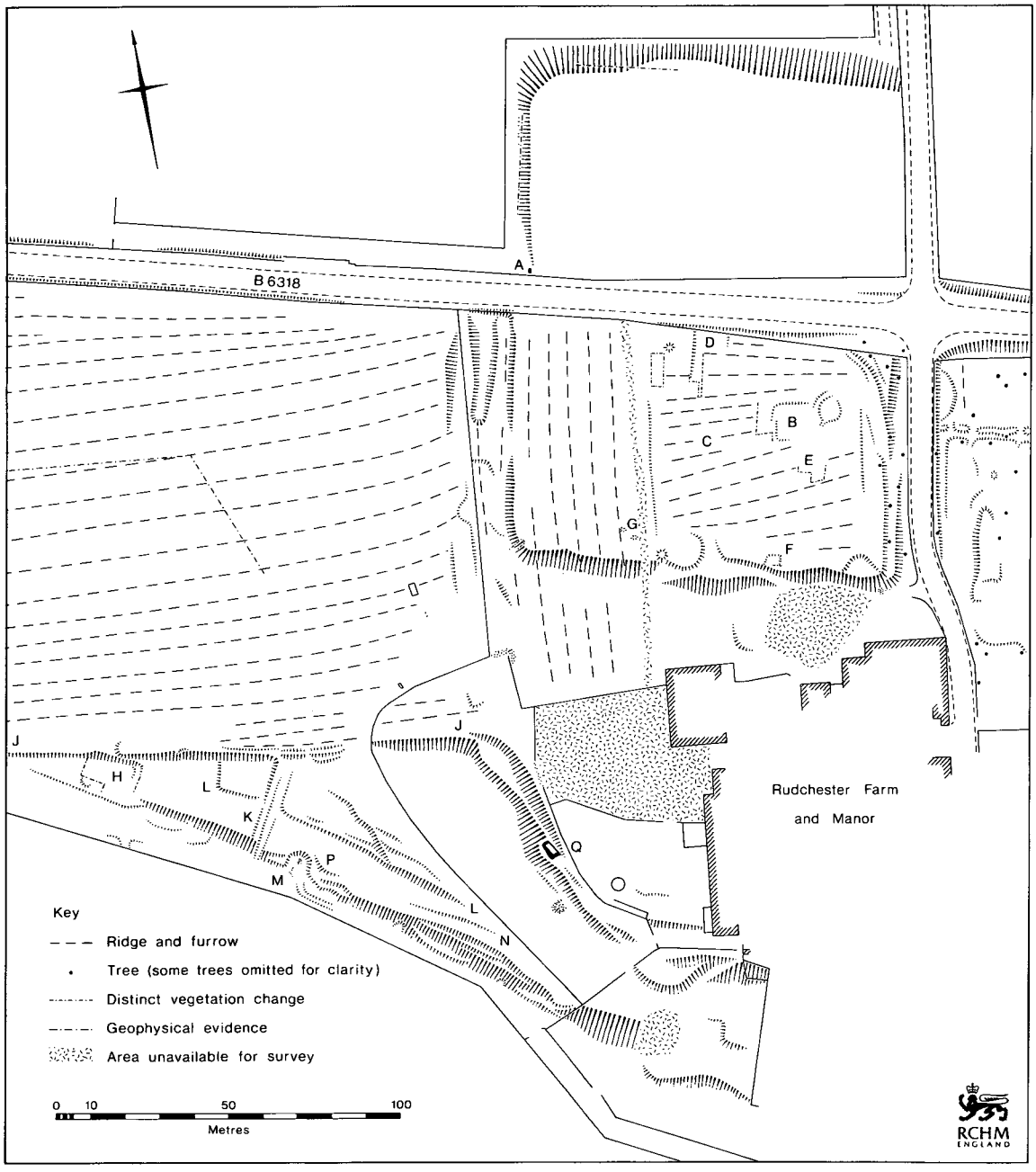

Fig. 1. Rudchester 1990. Scale 1:2000.

continued throughout the first half of the nineteenth century in and around the fort. In 1844 a group of altars and a statue were found at the site of the Mithraeum (Gillam and MacIvor 1954, 178–9, 203–8; Birley 1954; *RIB* nos. 1395–8). In the 1860s the northern part of the fort was under the plough but the southern part was still under grass (Birley 1961, 168).

Archaeological excavation at Rudchester began in 1897 with Haverfield's trenches across the Vallum ditch immediately to the E of the fort (Haverfield 1898, 174, 178–9) and his excavations within the fort four years later (Haverfield 1902, 391–2). In 1924 Brewis and Spain excavated extensively within the fort (Brewis 1925; Bosanquet 1926, 26–41). The Mithraeum was excavated in 1953 (Gillam and McIvor 1954) and a trench was cut in the south-eastern part of the fort in 1972 (Gillam *et al.* 1973). Geophysical surveys were undertaken in 1987 both within the fort and across the line of the Vallum to the W (Gibson 1988; Moore 1988; Goulty *et al.* 1990).

THE DEFENCES

The existing earthworks suggest that the fort was not a true rectangle, the S rampart being at an angle of approximately 93° to the W rampart. However, this may simply be the result of later disturbance, especially by ploughing; Brewis was convinced that the fort had been laid out with exact right angles (1925, 103) and this has been confirmed by geophysical survey (Moore 1988).

The best preserved scarps of the fort rampart are to the S of the Military Road. In the southern part of the E side the rampart has become two scarps divided by a terrace, perhaps caused by the robbing of the fort wall itself; each scarp stands to a maximum height of 1·3 m but the upper scarp is steeper and sharper than the lower one. Along the southern side, the fort platform is up to 1·4 m high and the scarp is relatively undisturbed. In the SE corner a slight hollow may mark the position of a robbed-out corner tower; similar features were noted at Haltonchesters (Blood and Bowden 1990, 56–7). In the centre of the southern rampart, the disturbances caused by Brewis's excavation of the S gate can be clearly seen and at the SW corner of the fort a slight vegetation-mark may indicate the position of part of a trench dug by Brewis (1925, 99, fig. 9). The W rampart of the fort survives only as a scarp, 0·6 m high. There is a break in this scarp at the point where Brewis excavated the minor W gate. In his account of the excavation of the main W gate Brewis relates how, in backfilling, he left exposed one pier of the central *spina* of the gate as a location point for future archaeologists (ibid. 104). The position of this stone was recorded during the present survey, adjacent to the field wall on the N side of the Military Road (A on plan). This northern field has suffered more from ploughing; as a result, the N rampart of the fort is represented by a broad, shallow scarp, although this still stands up to 1·6 m high. The northern part of the E rampart underlies the modern minor road to Stamfordham. Resistivity survey revealed the position of the fort wall on either side of the NW angle (Moore 1988).

The ditch of the fort cannot be seen anywhere on the surface except for a short stretch, 0·7 m deep, on the W side. This ditch is apparently broken by a causeway for the Military Way. The ditch on the E side of the fort had been partly covered by the existing lane before Horsley's time (Horsley 1732, 140).

THE INTERIOR OF THE FORT

To the N of the Military Road, the fort platform, which has been regularly ploughed, is a slightly dished plateau devoid of features. Resistivity survey revealed several anomalies, mainly in the western half of the area, suggesting the presence of buried walls (Moore 1988) but no clear plan was deduced. To the S, the fort interior is dominated by the slight but distinct ridge-and-furrow and its associated headlands created by the late eighteenth-century ploughing. A raised platform and a slight circular hollow (B) may overlie this ridge-and-furrow or may be a pre-existing fea-

ture which the plough avoided. The platform, which is 0·3 m high, does not relate to any recorded excavation, though Brewis dug a trench through this area (1925, 102); it may result from the robbing of buildings in the central range (cf. Blood and Bowden 1990, 59). Brewis found traces of a building with a hypocaust, presumably the Commanding Officer's house, immediately to the east of this (1925, 102–3, fig. 19) but no sign of his trench was visible at the time of survey.

A break in the ridge-and-furrow (C) is probably due, in part at least, to Brewis's excavation of the strong-room within the Headquarters Building. Some vegetation-marks in this part of the fort also probably show the positions of some of Brewis's trenches over the Headquarters Building and Granary. The majority of these excavations, however, were by means of small trenches which have left little or no trace.

The disturbance to the ridge-and-furrow close to the road (D) has the appearance of backfilled excavation trenches and may indicate that Brewis sought in vain for further remains of the Headquarters Building here. Coupled with Haverfield's failure to find anything immediately adjacent to the N side of the Military Road (1902, 392), and the negative anomalies noted by resistivity survey in the same area (Moore 1988), this may indicate that, in the centre of the fort, robbing of stone buildings has been particularly severe close to the eighteenth-century road.

No location plan of the 1972 excavation has been published and it was hoped that the present survey might reveal its position more securely than the description given (Gillam *et al.* 1973, 81). The vegetation mark (E) is in the approximate position but its shape and size do not match the published plan of the trench; the vegetation change may represent another of Brewis's trenches (1925, 99, fig. 11). Resistivity survey in the SE corner of the fort revealed some anomalies suggesting the presence of buildings aligned from E to W (Gibson 1988) which agrees with the discovery in 1972 of similarly aligned barracks (Gillam *et al.* 1973).

A slight sub-rectangular depression (F) is marked on Brewis's site plan as a modern silage pit. Two shallow holes (G) have the appearance of recent features.

THE *VICUS*

Horsley was almost undoubtedly right in his suggestion that the civilian settlement outside the fort lies under the buildings and yards of Rudchester, to the S of the Roman S gate. Gillam and MacIvor recorded that walls (albeit undated) have been uncovered in the garden of Rudchester and to the W of the farm (1954, 177–8). Some of the settlement may have been destroyed by the quarry to the SE as Bruce claimed (1853, 119). Buildings may also have stood alongside the Military Way to E and W of the fort, but nothing is now visible. Nevertheless, a series of terraces stretching westward from Rudchester to the site of the Mithraeum (H) probably represents elements of this Roman civil settlement, although there is no dating evidence for the surviving earthworks. These terraces are up to 3·2 m high, but most are between 0·3 m and 1·5 m high, and contain considerable quantities of stone. They are bounded to the N by a bank and lynchet (J–J), 1·0 m high, defining the limit of a large field of well developed broad ridge-and-furrow cultivation. This ridge-and-furrow is probably of medieval date but the bank was an extant field boundary as late as the mid-nineteenth century (MacLauchlan 1857). There are few evident relationships in the surface stratigraphy of the terraces themselves but the bank (K), 0·3 m high, which appears to be associated with the bank on the lynchet (J–J), seems to overlie the smaller lynchet (L–L), while its accompanying ditch, 0·2 m deep, cuts the southernmost lynchet just W of the spring (M). Some of the terraces, such as (N), appear to be trackways while others, such as (P), resemble building platforms.

The "Giant's Grave" (Q) is a unique survival in the northern frontier zone; a rock-cut cistern, it measures 3·9 m by 1·5 m internally and is at least 0·5 m deep. It has a drainage hole at the NW corner. About 75 m to the W, a

spring (M) lies in the bottom of a horseshoe-shaped depression, 1.6 m deep. It may once have supplied the *vicus* but it is now encased in masonry, probably of recent date, and a channel has been dug to carry water away to the SE.

No bath-house has ever been identified at Rudchester. It is possible that a bath-house might have been established beside the March Burn between the Wall and the Vallum, just over 300 m west of the fort. Cultivation in this area has caused a considerable build-up of soil along the side of the burn, sufficient to mask the ruinous walls of a building, as proved to be the case at Chesters.

THE MITHRAEUM

The Mithraeum (H) has been partly overlain and protected by the positive lynchet and bank (J–J). The 1953 excavation trench can be identified on the ground by slight scarps, by vegetation-marks and by the local modification of the lynchet.

The N and E parts of the Mithraeum were found to be well preserved but, as would be expected from its position on the hillside, the S and W portions were largely absent. The excavators published a site-plan (Gillam and MacIvor 1954, pl.XVIII) and an interpretative plan restoring the missing parts (ibid., fig. 5). Unfortunately the latter has been subsequently reproduced (e.g. Daniels 1978, 80) as though it were the site plan. The W angle of the building as depicted is extremely acute but there is no reason why the NW wall S of the apse should not have returned at such an angle as to make the W end of the building more nearly symmetrical (fig. 2). The equally acute NE angle of the narthex is similarly exaggerated and indeed the whole question of the N part of the narthex is problematical (Gillam and MacIvor 1954, 190–1). The excavators themselves noted that their Fig. 5 was conjectural: "That the west wall continued its line south of the apse to make an acute angle with the south wall, as appears on the reconstructed period plan, is of course uncertain, for it has gone" (ibid., 190).

THE VALLUM

The Vallum to the E of Rudchester is clearly visible as an earthwork to within 100 m of the

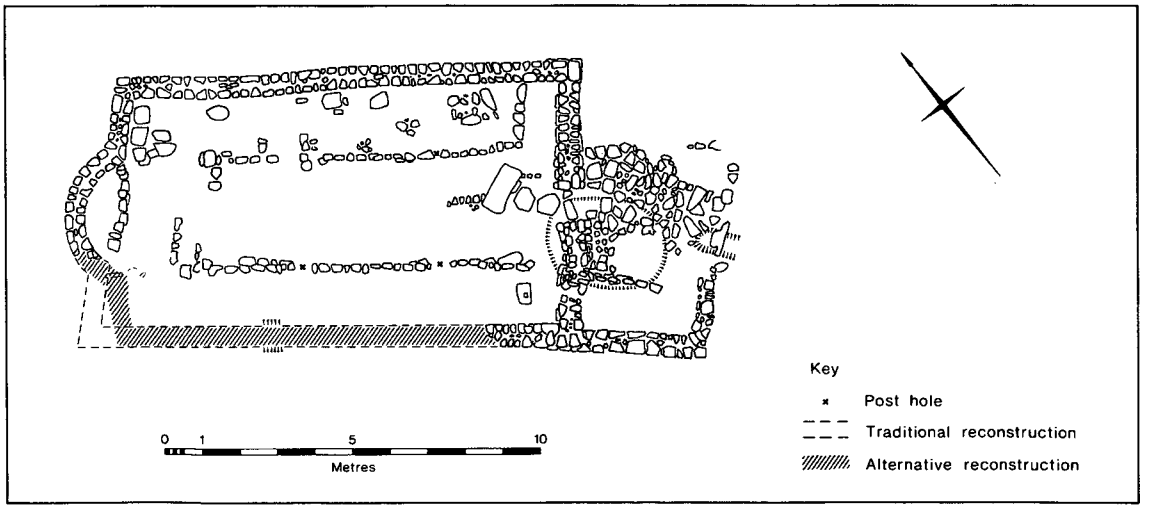

Fig. 2. The temple of Mithras, Rudchester (after Gillam and MacIvor 1954), with an alternative reconstruction of the W end.

fort. To the W its course has recently been established by seismic refraction survey (Gibson 1988; Moore 1988; Goulty *et al.* 1990). This survey has shown that the Vallum makes a sharp dog-leg to avoid the fort on this side. The interpretation of the seismic information was complicated by various factors[4] but the position and angle of this dog-leg has been plotted, within the accuracy of the scale, on Fig. 1 and on Fig. 3, which also shows the known course of the Vallum to the E. The unique asymmetry of the Vallum's course at Rudchester is crucial as it may give some indication of the chronological relationship between Vallum and fort. It is generally argued that the decision to build the Vallum was made at the same time or soon after the construction of the Wall forts (Breeze and Dobson 1978, 43; Todd 1981, 145). Johnson is more specific: that the Vallum "was added after the decision to place forts on the Wall is shown by the fact that its course deviates in places to avoid wall-forts" (1989, 57). However, the relationship of the Vallum to the forts may be more complex than this. For instance, a more logical argument would seem to be that the deviations of the Vallum at forts show that its course was determined and that parts of it were constructed before the forts were located or built. At Rudchester there is an additional subtlety. To the W the Vallum has to make a sharp dog-leg to avoid the fort while to the E it moves gradually and without a major change of direction from its line. The implication is that the decision to build the fort was taken while the Vallum was under construction; in this hypothesis, on the W the Vallum would have been completed nearly up to the site of the fort before the "fort decision" was taken, but on the E it would have been constructed afterwards in the knowledge that the fort was to be built.

NOTES

[1] The survey method employed at Rudchester was the same as that used at Haltonchesters (Blood and Bowden 1990, 61, note 1). The original survey scale was 1:1000.

[2] Richmond's statement that "Haverfield's excavation of 1902 (*sic*) made contact with the massive foundations laid to carry the main west gate across its (the Wall ditch's) line" has been

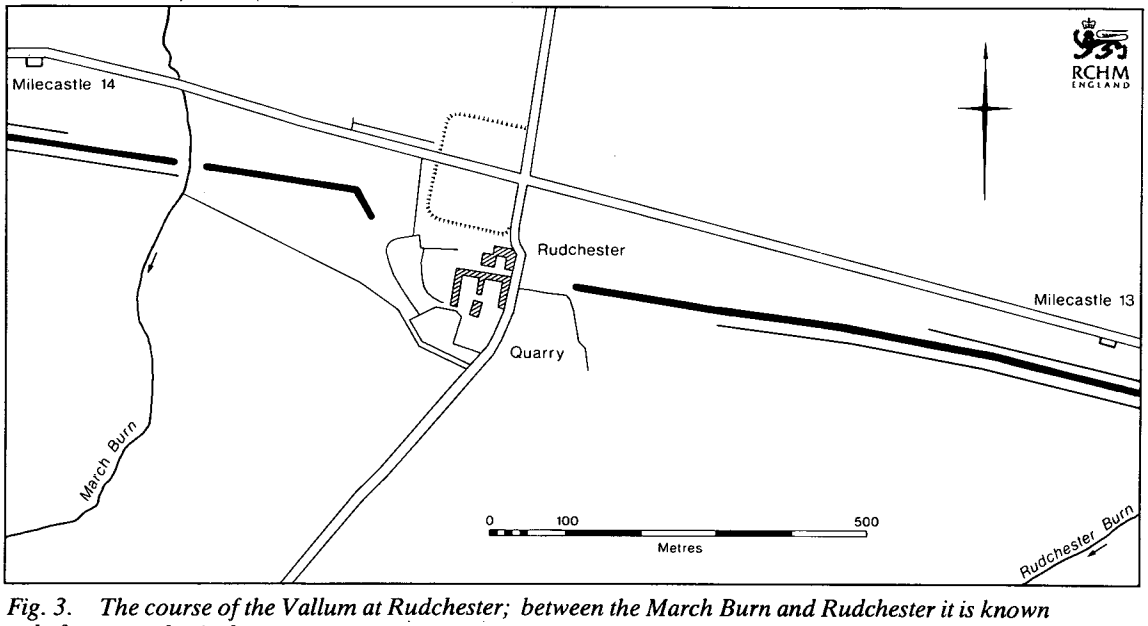

Fig. 3. The course of the Vallum at Rudchester; between the March Burn and Rudchester it is known only from geophysical survey.

repeated in the thirteenth edition of the *Handbook* (Daniels 1978, 78) and elsewhere. The statement has no known provenance and is at variance with Haverfield's own report.

[3]Birley preferred a later date, claiming that "Clayton's careful account of his findings in the main east gateway at Chesters shows that it was certainly not walled up until the beginning of Wall-period III" (1961, 169). Re-examination of Clayton's published account (1876, 173–4) reveals little support for Birley's conclusion.

[4]First, as the Vallum turns from its E-W course the survey transects cross it at an oblique angle, spreading the image of the ditch. Secondly, due to adverse climatic conditions when the transects defining the dog-leg were surveyed, there is considerable "ambient noise" in the data. A third complication is the presence in the most easterly transect of a double undulation in the rock head (Dr. Neil Goulty, pers. comm.).

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