

The west annexe at Newstead (Trimontium), Roxburghshire

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ABSTRACT

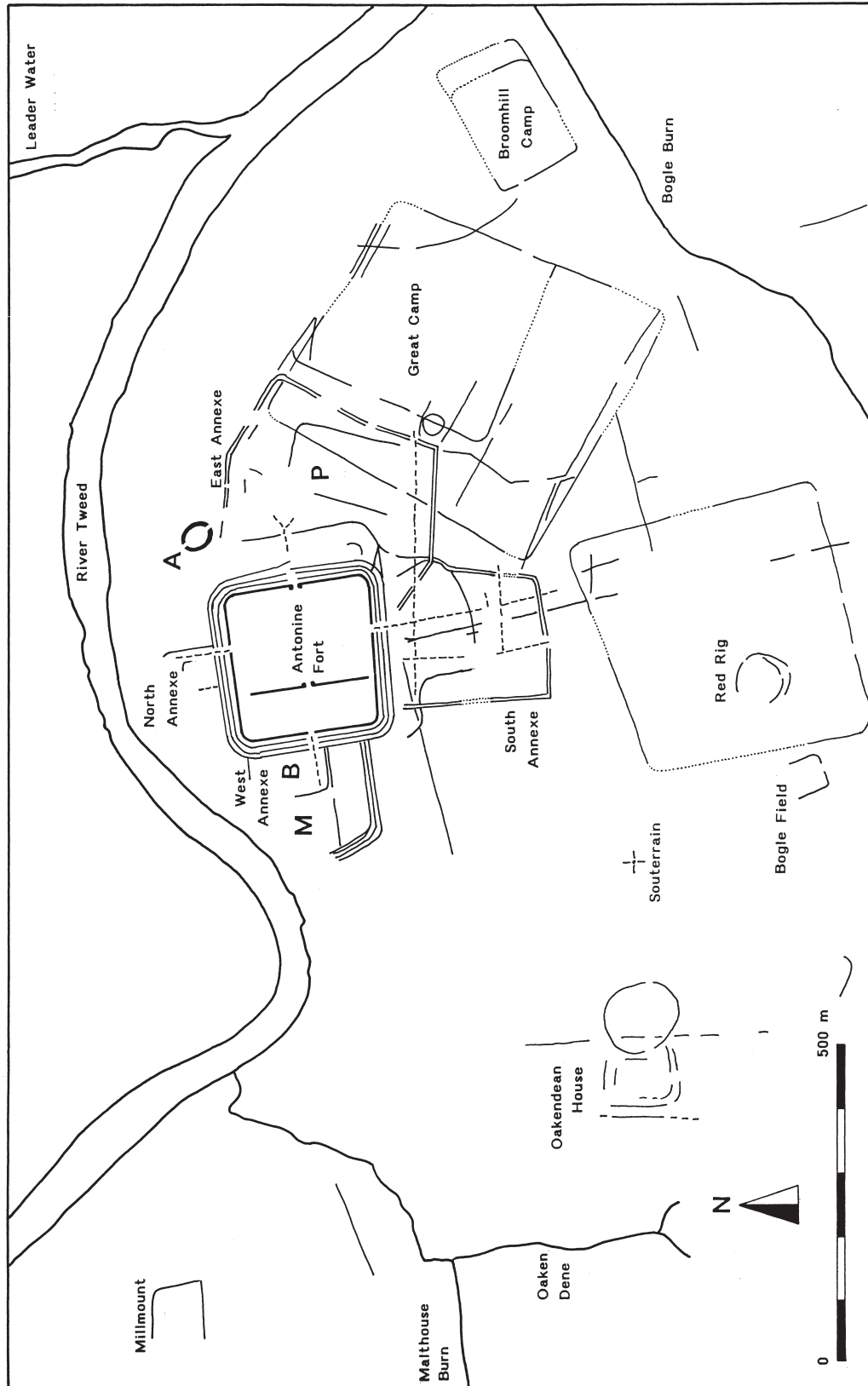
The west annexe of the Trimontium Roman fort complex (NGR: NT 567 344), near Newstead, has been examined using magnetometer and resistance meter. New details about the defences and annexe interior have been identified and a sequence of development in relation to the rest of the settlement is proposed.

INTRODUCTION

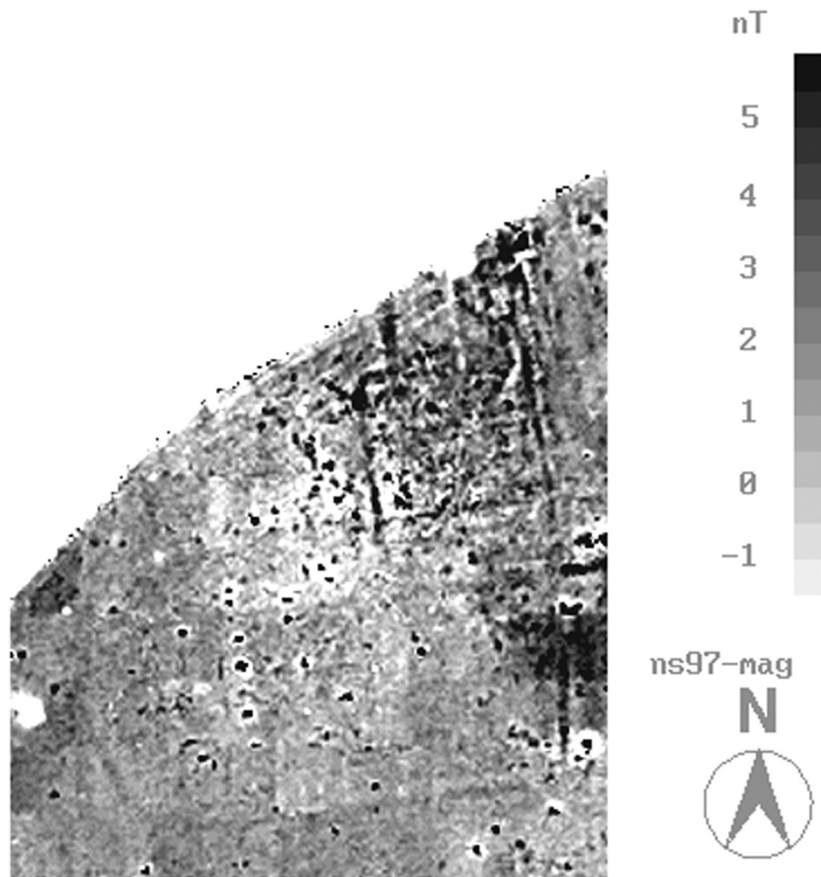
Newstead fort, at 5.6 ha, is one of the largest forts in Scotland. In addition it is surrounded by an extraordinarily extensive and complex system of annexes, marching camps, and field systems (illus 1). The west annexe was investigated by James Curle, along with the rest of the Newstead complex, at the beginning of the 20th century. As well as the basic outline of the defences, which were recognized as spanning the first and second centuries AD, he identified two major stone-founded buildings. The first of these was the so-called *mansio*, a large courtyard building with cobble foundations, probably supporting a timber-framed superstructure, built and occupied in the late first century. The second was a dressed masonry bathhouse in use during both the first and second centuries (Curle 1911, 86–7, 92–103, plan opposite p 14, figs 7 & 8). In spite of the importance of these discoveries and a recent attempt to reinterpret their phasing (Black 1991), very little attention has been given to gathering new data about this part of the site. Richmond's 1947 excavation, and subsequent four-period phasing of the site, focused firmly on the fort's defences (Richmond 1952). More recently excavation and geophysics has examined the interior of the fort, south, east, and north annexes (Jones & Gillings 1987; Jones 1989; Jones *et al* 1990–3; Clarke & Jones 1994; Clarke & Wise 1999), but left the west annexe untouched. Important new information has also become available about Newstead from aerial photographs (particularly those of the late J K St Joseph) and surface collection (in particular by Walter Elliot), but again its impact on our understanding of the west annexe has been negligible.

Part of the west annexe's defences, to the north of the modern road, were revealed during geophysical survey of the North Field in 1996 (Clarke & Wise 1999), but the bulk of the enclosure was examined in May 1997. Two geophysical survey techniques were undertaken, magnetometer survey with an FM36 gradiometer and resistivity survey using a RM15 with a twin-probe array and 0.5 m mobile probe spacing. Instrument sensitivity was set at 0.1 nT and 1 ohm respectively. Conditions were almost ideal, the field was under grass, there had recently been heavy rain, but

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ILLUS 1 The ancient landscape at Newstead



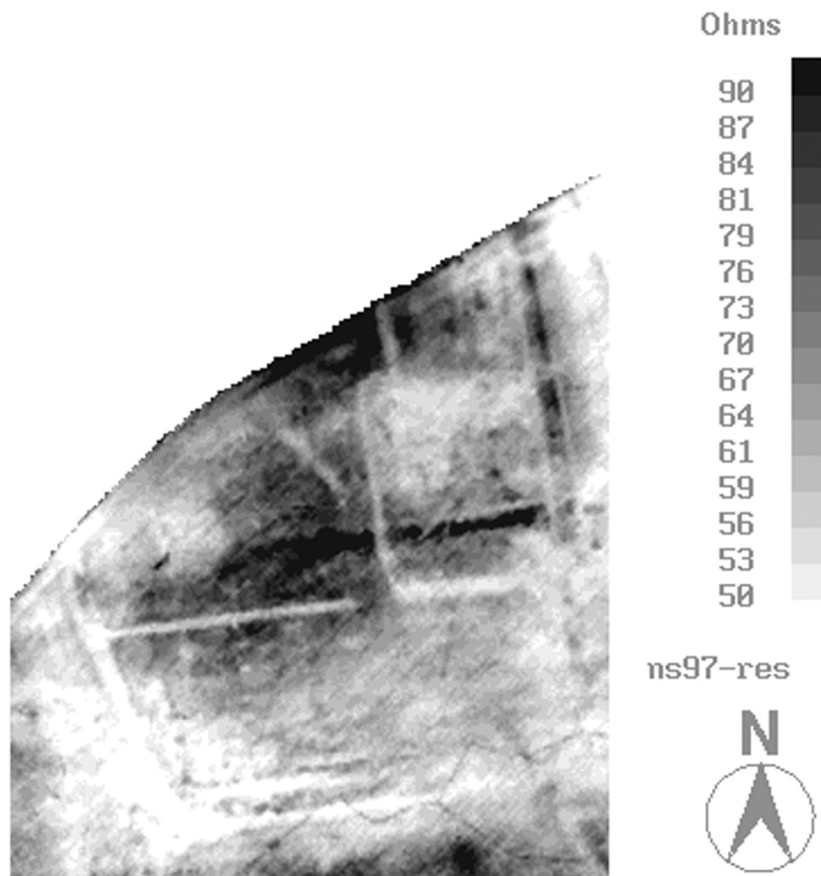
ILLUS 2 Magnetometer survey results

for the week of the survey itself the site experienced fine sunny conditions. The area was surveyed in 20 m grids laid out from a north/south base line. Magnetometer survey was carried out as a series of south to north parallel traverses, using the automatic trigger, except for partial grids at the field edges, where the manual trigger was used. A total of about 3 ha was examined with each technique, in both cases with a sample interval of 1 m. The resulting data was automatically logged, and manipulated using the Contors geophysics package (designed by John Haigh, University of Bradford). The plots provided are bicubic interpolation, with spike removal (illus 2 and 3).

THE DEFENCES

The plots reveal at least three distinct defensive lines. First, in the extreme east of the survey there are the defences of the fort. These are known to have included a massive first-century earthen rampart (which in spite of ploughing still survives as a broad ridge), onto the front of which a 2 m wide masonry wall was added in the second century. These are not clear from the 1997 survey, which instead detected up to four lines of ditches (features J, K, L, M, T, U, V, W, DD & EE). The innermost, widest ditch (features M & EE) has been dated by Richmond (1952) to the first century, the rest are probably second century in date.

The second system of defences are those of the outer west annexe, comprising up to four lines of ditches (features A, B, D, E, Q, R & S) fronting stone foundations for a turf rampart



ILLUS 3 Resistivity survey results

(features 1 & 8). These were recognized in Curle's (1911, 86) excavation and can be dated to the first century by the pottery types recovered. The west annexe does not seem to have been demarcated on its northern side at this time. The north and west annexes together probably effectively formed one defended space (Clarke & Wise 1999). These first-century defences probably spanned two phases of the fort's occupation. The two innermost annexe ditches excavated by Curle passed under the Domitianic fort defences, and appeared to have articulated with the strangely shaped Agricola fort, which preceded it. The outer ditch on the other hand joins the later fort's defences (Curle 1911, 86). Both phases of annexe appear to have been entered via a gateway on the annexe's western side (feature 21), which was not recognized by Curle.

The third set of defences were those of the inner west annexe. Ditches F, G, H and I and the rampart Y. These had already been identified by Curle, although the possible gateway at 18 is a new discovery. Ditches AA, BB, and CC, discovered in 1996 north of the modern road (Clarke & Wise 1999), were completely unrecognised by Curle. These appear to represent a massive reduction in the enclosed area, probably over two phases. The first of these saw the abandoning of the north annexe, and the southern half of the west annexe. A later phase saw the further reduction of the defended area by the cutting of ditch I, which bisected the now long-abandoned *mansio*. Curle's (1911, 87) excavation recovered only second-century pottery from the ditches of this system.

INTERIOR FEATURES

Of the two substantial stone founded buildings recorded by Curle only the *mansio* produced even faint geophysical anomalies (feature 8). However, geophysics was able to suggest other important activities in the enclosure's interior. One of the most notable features was the considerable magnetic noise around the bathhouse in the area enclosed by ditch I. This has probably resulted from the dumping of burnt material associated with the operation of the bathhouse. Strong magnetic signals from neighbouring ditches suggest they were clogged with similar material. The other three quarters of the west annexe enclosure are comparatively free from this kind of signal, suggesting a relatively clean environment in which debris was not allowed to accumulate to such a degree. This is not to say the area was empty. Several roads appear to have crossed the annexe interior. There was a main road, running west from the fort gate (features 11–15). At its western end this split into multiple branches before petering out, suggesting that the precise line of the road changed on several occasions. A north/south road skirted the fort defences (feature 16/17), possibly providing a direct communication between the North and South Annexe areas. Finally, there seems to have been a north/south road and large building or range of buildings in the south-west (features 2–6). The outline of the building(s), covering c 20 m by 50 m, is very faint, but within it lay a row of discrete anomalies, detected by both resistivity and magnetometer (feature 7). The low resistance signals suggest that these represent features cut into the ground. Magnetic anomalies in the order of 40 or 50 nT (well off the scale of the plot provided) could represent kilns or furnaces. No industrial waste products have been recovered from that part of the complex, but on the other hand no systematic surface collection has been attempted. The most likely interpretation is that the features represent industrial activity on a massive scale. The identification of the type of industry must await further investigation.

PHASING

A broad division of the west annexe's occupation into first- and second-century features is possible on the evidence of Curle (1911) and Richmond (1952). However, the west annexe clearly experienced rather more than two phases. Black (1991) detected four phases in the construction of the *mansio* and bathhouse, though most of these could not be related to phases in the defences. Without further excavation to recover datable material and to examine the relationship between key features, a detailed phasing of the annexe will contain numerous uncertainties. However, a broad outline can be made on the basis of the geophysics, Curle's evidence and reasoned suppositions about how the site as a whole functioned. In particular, the present writer has related Sommer's (1984) observations on annexe and bathhouse location relative to the principal roads of standard fort layout to the reorganization of the *via praetoria*, *via principalis*, and *via decumana* known to have occurred at Newstead during its occupation.

Phase 1

The creation of the first double-ditched west annexe was probably contemporary or near contemporary with the earliest known fort, the so-called Agricolan base (Curle 1911, 86). The nature of interior occupation at this time is unknown. The *mansio* building excavated by Curle and early bathhouse identified by Black (1991, fig 3b) are perhaps not constructed until the next phase.



ILLUS 4 Interpretative plot of the area of the west annexe

TABLE 1
Key to illus 4

	Anomaly	Interpretation
A	Res	North/south ditch, terminus, 1st century west annexe defences
B	Res	North/south ditch, terminus, 1st century west annexe defences
C	Res	North/south ditch, probably joins ditch F, 2nd century
D	Res	North/south ditch, terminus, 1st century west annexe defences
E	Res and mag	North/south ditch, terminus, 1st century west annexe defences
F	Res	East/west ditch, terminus at east end, probably joins ditch C, 2nd century
G	Res and mag	East/west ditch, noted by Curle as separate from I, termini at both ends, 2nd-century west annexe defences
H	Mag	East/west ditch, terminus to west, 2nd-century west annexe defences
I	Res and mag	2nd-century ditch of the west annexe defences, continues north of the modern road as ditch AA, terminus at its south/eastern end
J	Res and mag	North/south ditch, outer-most fort defences, cuts road surface 12, 2nd century
K	Mag	North/south ditch, possibly underlies road surface 16
L	Res and mag	North/south ditch, fort defences, cuts road surface 11, 2nd century
M	Res and mag	Wide north/south ditch, 1st-century fort defences
N	Res and mag	East/west ditch / drain north of road 12
O	Res and mag	East/west ditch / drain north of road 12
P	Mag	East/west ditch / drain south of road 12
Q	Res	East/west ditch, inner most line of the west annexe, 1st century
R	Res and mag	East/west ditch, middle line of the west annexe, 1st century
S	Res	Fragment of east/west ditch, outer most line of the west annexe, 1st century, cut by 2nd century fort defences U and T
T	Res	South west corner of the fort defences, 2nd century ditch
U	Res	South west corner of the fort defences, 2nd century ditch
V	Res and mag	North/south ditch, outermost line of the 2nd century fort
W	Mag	North/south ditch, 2nd-century fort defences
X	Res	Possible ditch NW/SE
Y	Res	Edge of 2nd-century bathhouse rampart
Z	Res and mag	East/west ditch, roadside drain?
AA	Res	North/south ditch, continuation of ditch I
BB	Res	East/west ditch, northern limit of the 2nd-century west annexe
CC	Res and mag	North/south ditch?
DD	Res	North-west corner of the fort defences, continuation of ditch L, 2nd century
EE	Res	North-west corner of the fort defences, continuation of ditch M, 1st century
1	Res	Rampart foundations, 1st-century west annexe defences
2	Res	North/south road, 1st century
3	Mag	North/south wall, part of large strip building(s), 1st century
4	Res and mag	North/south wall, part of large building(s), 1st century
5	Mag	North/south and east/west walls, part of large building(s), 1st century
6	Mag	North/south wall, part of large building(s), 1st century
7	Res and mag	Line of furnaces, most arranged in a line running north/south for 50 m, 1st century
8	Res	Rampart foundations ?, 1st-century west annexe defences
9	Res	Traces of 1st-century <i>mansio</i>
10	Mag	Pit 57, 1st century
11	Res	East/west road, continues west of ditch J as road 12
12	Res	East/west road, continues west of I as road 13
13	Res	Continuation of the east/west road out of the fort, turns to the south-west, possibly making for a gateway at 20
14	Res	Continuation of road 13, aligned NW/SE, cut by ditch F
15	Res	Road surface
16	Res	North/south road, 1st and earlier 2nd century?
17	Res	North/south road, continuation of road 16, with possible east/west side road
18	Mag	Possible 2nd-century gateway between ditches I / G and H
19	Res	2nd-century gateway, between ditches F and G
20	Res	Possible 1st-century gateway, ditches very unclear
21	Res	1st-century gateway
22	Mag	Large buried metal object, probably dumped in Curle's (1911) section 2 trench
23	Res	Probable 19th-century fence/hedge line, now removed

Phase 2

Occupation in the west annexe continued after the rebuilding of the fort on a massive scale post AD 86, the so-called Domitianic base (Macdonald 1911, 405–6; Richmond 1952, 7). The double ditches were re-cut on a new line, but the annexe's basic shape and size was unchanged. The main road ran straight from the west gate of the fort to the entrance on the west side of the annexe. This was probably a continuation from the preceding phase. The area to the north of the road was occupied by the *mansio* and an early bathhouse, which were probably begun in this period (Black 1991, 217–18). The area to the south was probably occupied in this phase by a building, or range of buildings engaged in industrial activities. At 50 m in length, the scale of the building or range of buildings housing these industrial features was comparable to strip buildings inside the fort itself. This scale of organization contrasts very markedly with the evidence for small non-standardized buildings recovered from Newstead's other annexes, perhaps suggesting the direct involvement of the army in the activities within this phase of the west annexe.

Phase 3

Demolition of the first-century *mansio* and bathhouse occurred perhaps in association with ritual deposition in Curle's pit 57 (Curle 1911, 115, 128–9) and abandonment of the settlement. This had occurred by AD 100 (Richmond 1952, 26, 36) or AD 105 at the latest (Hartley 1972, 15).

Phase 4

Reoccupation occurs in the second quarter of the second century. Richmond (1952, 1) suggests the date of c 140, but a slightly earlier Hadrianic date is perhaps suggested by the coin evidence. This included an unusually large proportion of Trajanic and Hadrianic issues for reoccupation not to have occurred until the Antonine period. Second-century settlement in the east annexe area was probably initially without defences. This is suggested by the line of the main road, which appears to have changed on successive occasions as travellers cut the corner (at feature 13 and 14), to head south-west. This can have occurred only if they were no longer forced to enter through gateway, feature 21, and if the south-west of the old enclosure, interpreted as built up in phase 2, was relatively devoid of obstructions. Construction of the second-century bathhouse and rampart outside the fort's west gate suggests that this was still a major routeway into the fort. At this stage the *via praetoria* probably still exited from the fort's western gate.

Phase 5

Enclosure of the northern half of the west annexe by a single ditch (features C/F, G & BB). The area is entered via a gateway in the enclosure's southern side (feature 19). The relatively small area enclosed suggests that the west annexe had declined in importance, perhaps because the fort's west gate was no longer the main entrance. The re-enclosure of this area probably occurred after the fort's orientation had been reversed so that its *via praetoria* exited from the fort's east gate. Although Sommer's (1984) analysis of the fort annexes suggests the location of Newstead's bathhouse — on what was now an extension of the *via decumana* — was anomalous, inertia will have ensured its continued survival. Minor modifications from the original bathhouse construction (Black 1991, 221, fig 4b) probably occur in phase five or six.

Phase 6

Further reduction of the defended area was achieved by the excavation of a ditch (feature I) which enclosed little more than the bathhouse rampart. A new gateway was possibly created on the enclosure's southern side close to the fort defences (feature 18). The reduction in the bathhouse's capacity at the end of its life (Black 1991, 221–2, fig 4c), probably belongs to this or a subsequent phase, taking occupation up to the end of the second or even early third century.

DISCUSSION

The development of the west annexe is best understood in the context of changes to the overall organization of the military complex.

TABLE 2

Annexe Enclosure Sizes at Newstead

Annexe	1st century	Mid 2nd century	Late 2nd century
North	1.5 ha	Open	Open
West	2.25 ha	1.25 ha	0.5 ha
South	2.25 ha	5 ha	Open
East	1.75 ha	6.5 ha	Open?
Total	7.75 ha	12.75 ha	0.5 ha

In the first century (phase 1 & 2) the main approach to the fort seems to have been from the west. Possibly the earliest ford or bridge over the River Tweed lay to that side of the complex. Consequently the west annexe area represented prime real estate and was the first and largest enclosure to be developed during the first century. In addition it contained the largest and most prestigious extramural buildings, the *mansio* and bathhouse. Geophysics now suggests that the southern half of the enclosure was also heavily built up.

After a hiatus in occupation in the early second century the fort was re-established on much the same lines as before, probably simply refurbishing the existing Domitianic earthen ramparts (*contra* Richmond 1952). The existence of this additional phase, preceding Richmond's Phase 3, stone-walled fort, is indicated by the course of roads through the South Annexe. That the second-century *via principalis* initially maintained its position to the west of the *principia* is proved by the earliest arrangement of the outer south annexe defences (now dated to the second century), with a gate for only the western north/south road (Curle 1911, plan opp p 14). The *via praetoria* must therefore have lain to the west and *via decumana* to the east. Under these circumstances the fort's west gate, officially its main entrance, represented a fairly conventional location for the construction of the second-century bathhouse (Sommer 1984, 43, fig 22). However, the main approaches to the settlement appear to have been radically altered from those of the first century. The River Tweed was now almost certainly bridged to the fort's east, close to the modern road and rail bridges. The two most important fort gates, from the traffic-flow point of view, would have been the east gate, leading directly to the bridge, and the south gate, leading to Dere Street. The importance of these two approaches is indicated by the construction (in phase 4) of two huge new annexes to the south and east. In addition the large building recently excavated in the east annexe, at the point where the road forks (Jones *et al* 1990), with its rich artefact collection (Clarke 1995, 79) may have been the second-century *mansio*. The west annexe area in contrast had become a backwater. The bathhouse alone was enclosed by its own private rampart, the rest of the area lay open and probably unused.

Later, in the early Antonine period (phase 5), the fort was rebuilt (enclosing a smaller area) with a stone curtain wall and a completely new street layout. The *via principalis* was moved 60 m east of its previous location, while the *via decumana* and *via praetoria* exchanged places, effectively reversing the orientation of the complex. The west annexe was now enclosed, but on a far smaller scale. Even this was to prove unnecessarily large, resulting in a further reduction in area, towards the end of Newstead's occupation (phase 6). The final reduction in the bathhouse's capacity, identified by Black (1991, 221–2, fig 4c), fits well with the general picture of the last years of Newstead's occupation. Rather than seeing a sudden withdrawal, Newstead seems to have been run down over an extended period. In the fort, accommodation was substantially reduced by the demolition of building ranges in the western third of the fort (Jones *et al* 1991). The once dense extramural occupation in the south annexe also seems to have been mostly abandoned before Newstead's final evacuation (Jones *et al* 1993).

CONCLUSION

Survey in the west annexe has shed considerable light on a complex and rapidly evolving part of the military base at *Trimontium*. A picture is now emerging of each of Newstead's annexes quite different in character and function from the others. The west annexe was set apart by features not encountered elsewhere outside the fort, in particular the large public buildings and what may have been highly regimented industrial activity. The picture of expansion and contraction in the west annexe is also an important strand in our struggle to understand the pattern of Newstead's temporal development as a whole.

ACKNOWLEDGEMENTS

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