

Excavation of Roman, medieval and later features at Carriden Roman fort annexe in 1994

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with contributions by Peter Webster and Robert Will

ABSTRACT

The two southern ditches of an annexe to the west of the Roman fort at Carriden were located by investigations by Falkirk Museum Services. Adjacent to the fort's south-west corner these gave way to an entrance causeway which had been closed off during the occupation of the annexe. Later features are attributed to medieval and post-medieval settlement.

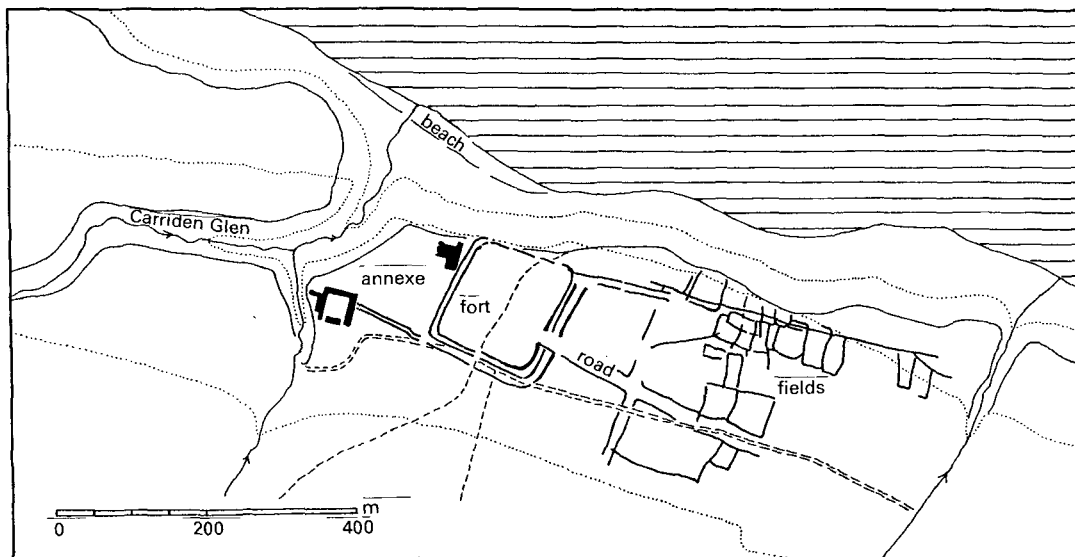
INTRODUCTION

In July 1994 Falkirk Museum Services undertook a two-week excavation to the west of the Roman fort at Carriden (NGR: NT 025 807). The work was in response to a consultation with the Central Scotland Woodlands Trust who were looking for potential areas for new tree planting. Although it was agreed to delete the site from their list it did highlight the incongruous situation whereby the Roman fort and the extensive field system to the east were scheduled ancient monuments, but the area to the west, where an annexe was suspected, was not. The excavation was therefore mounted in the first instance to provide definite evidence for the existence of an annexe and to assess the survival of the archaeological deposits. Thereafter, if successful, it was hoped to define the line of the annexe defences.

Little previous work has been done on the site of the fort itself. Although its existence had long been suspected by antiquarians following the discovery of Roman artefacts, it was only in 1945 that its location was confirmed by aerial photography; subsequently the three eastern ditches were sectioned and found to be a mere 1.37 m deep (St Joseph 1949, 167). The location of the entrance revealed from the cropmarks showed that the fort was orientated with its long axis from north to south, and that this dimension measured 134 m. An unbroken length of the south ditches suggested that the breadth of the fort was in the region of 122 m.

In 1956 an altar was discovered during ploughing in the field to the east. This was dedicated by the *vicani*, clearly demonstrating the presence of an extramural settlement (Richmond & Steer 1957, 1–6). That has since been linked with an early field system seen in this area on later aerial photographs taken by the Royal Commission on the Ancient and Historical Monuments of Scotland (Sommer 1984), although Maxwell (1989) has suggested that this might be part of an annexe. In 1991 part of the field system was sampled by the Centre for Field Archaeology during the replacement of a line of telegraph poles. At the same time the opportunity was taken to

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ILLUS 1 Location of the Roman fort at Carriden showing its relationship to topographical features. (Based on the Ordnance Survey map © Crown copyright)

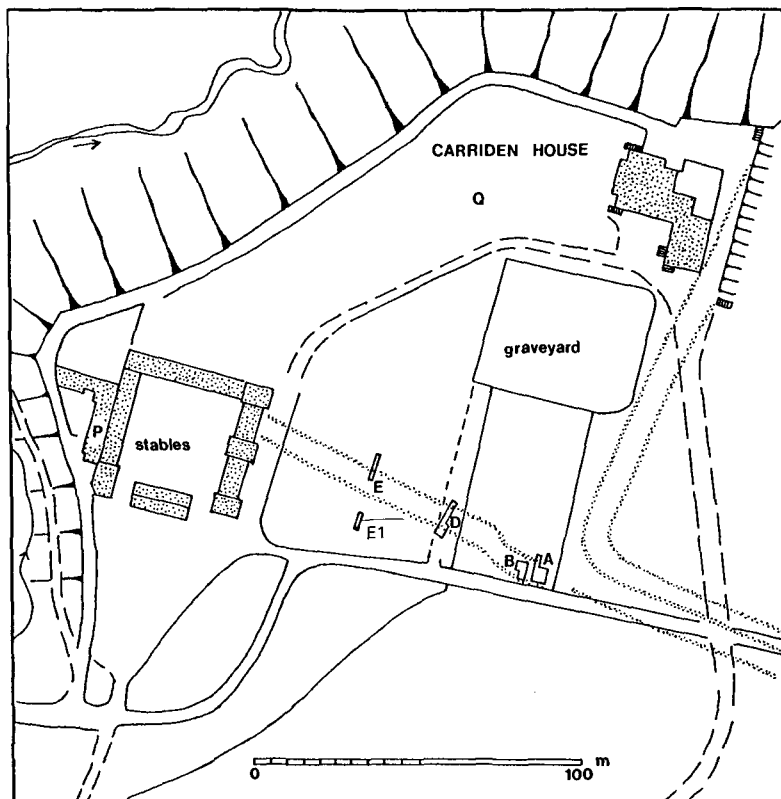
produce an accurate plot of all the cropmarks to the east of the fort (Bailey & Keppie 1995). From this it is clear that no annexe had lain in that area. Topographically the best location for the annexe was still claimed by the area of level ground west of the fort beside the Carriden Glen (illus 1).

EXCAVATION RESULTS

TRENCHES A & B

It was realized that if an annexe did lie to the west then its ditch system would probably be tied into that on the south-west corner of the fort. Two trenches, A and B, were therefore opened up in the south-east corner of the adjacent field (NGR: NT 0246 8073; illus 2), well outside the scheduled area. The total depth of archaeological deposits was found to be 1.0 m with a complex sequence of occupation.

Phase 1a (illus 3) The earliest feature was the butt end of a ditch (F12) in the north-west corner of Trench A (illus 3 & 4). It was 2.2 m wide and 0.8 m deep with a flat bottom (illus 5). To its south was a small bank (F10), 0.35 m high, of the redeposited clay-loam subsoil presumably derived from the cutting of the ditch (illus 5, layer 26). Trapped between this upcast and the undisturbed subsoil was a thin band of pale bluish grey silt representing the original ground surface. The lowest fill of the ditch consisted of blue-grey silty-clay, above which was a brown-grey sandy loam. Soil samples taken from this horizon showed that the survival of pollen was poor. Only a short length of the ditch (1.5 m) occurred within the area being excavated, but this produced an alignment similar to those of the fort's own ditches. The upcast mound continued along the northern side of Trench B, though here it gradually diminished in height towards the west.

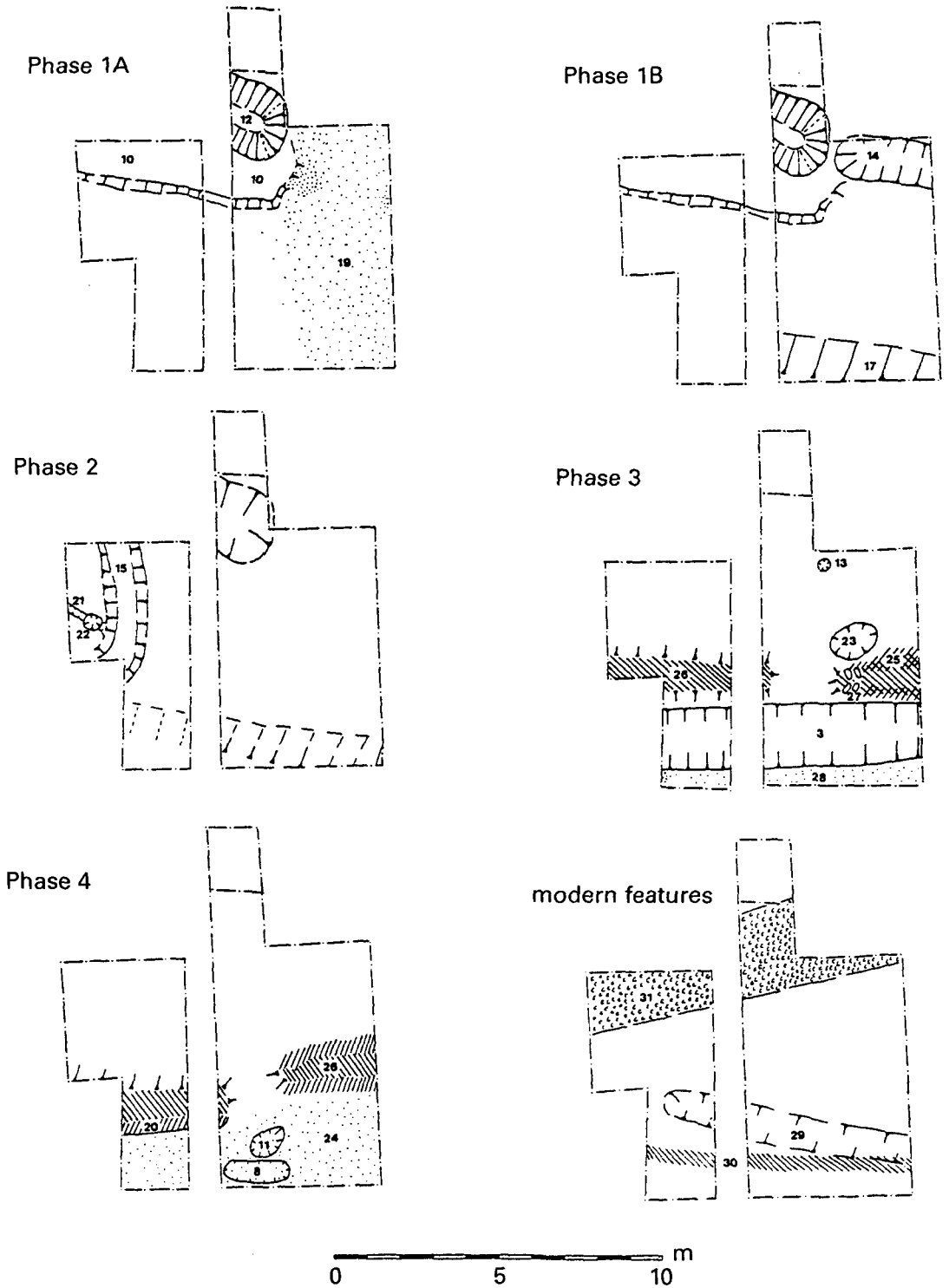


ILLUS 2 Plan showing the location of the excavation trenches. The lightly stippled lines represent the Roman defensive ditches. (Based on the Ordnance Survey map © Crown copyright)

Phase 1b (illus 3) East of this butt-ended ditch a smaller ditch (F14) lay on a slightly different alignment. Between the two there was a gap of only 0.3 m, just sufficient to suggest that they had been open at the same time. The smaller ditch measured 1.4 m wide and 0.35 m deep (illus 5, layer 12). Its southern side coincided with the northward limit of an extensive, though patchy, area of cobbling (F19) indicating that the ditch had cut through this metalling. The stones were noticeably larger along the western margin of their spread and survived best where they had been protected by the proximity of the upcast mound.

Over the cobbling and in the low-lying ground bounded by the upcast material was a layer of grey silty-clay loam (F16 & F7; illus 5, layer 11). This appeared to continue into the fill of the small ditch (F14). Throughout much of the site it was associated with a covering lens of brown-orange speckled clay loam (F5 & F6; illus 5, layer 10). Together these layers contained most of the Roman pottery found in the excavation, particularly where they overlay the cobbling. Along the southern edge of Trench A the upper of these deposits was replaced by an orange-brown clay loam (F17) which was similar in appearance to the upcast material (F10).

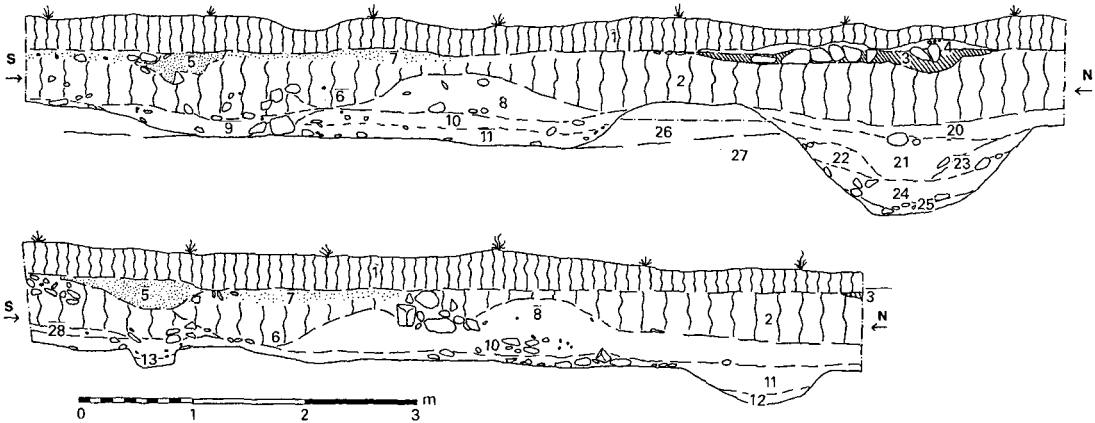
Phase 2 (illus 3) A north/south gully (F15) cut through the upcast bank (F10) in Trench B. Only the lower part of this survived, with a wide flat-bottomed base. This was 0.2 m deep, with a maximum width of 1.2 m (illus 6). The gully turned to the south-west just within the excavated area where it also appeared to cut layer F16. As it turned it was joined on the inner curve by a narrow slot (F21) which splayed out at the point of junction. The slot, only 50–100 mm deep and 200–400 mm wide, ran straight over a small pit (F22)



ILLUS 3 Phase plans showing the features in Trenches A and B



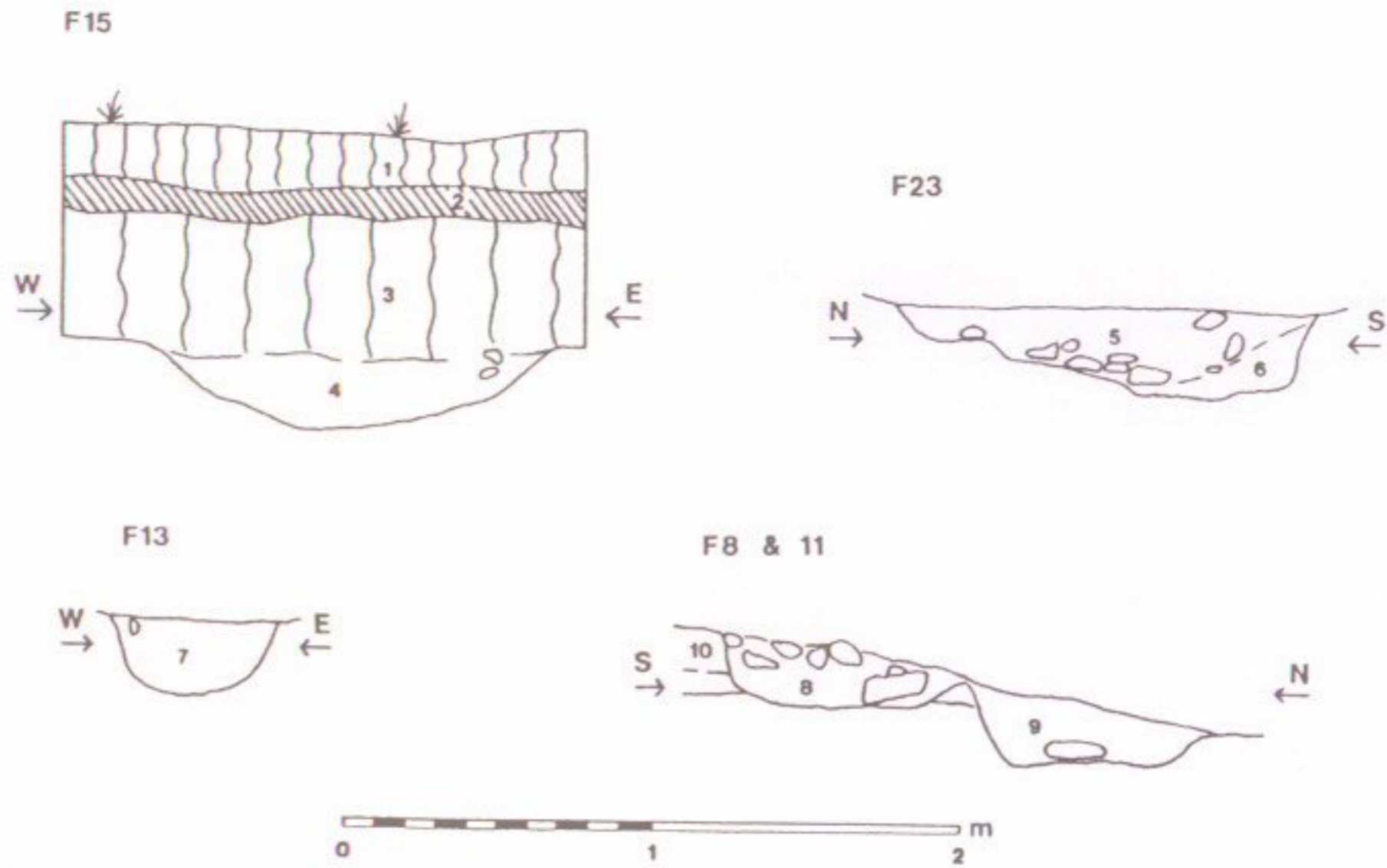
ILLUS 4 Trench A looking north-west



ILLUS 5 (Top) The western section of Trench A; (bottom) the eastern section of Trench A. (Descriptions of the numbered layers are given in the archive of the project records at Callendar House, Falkirk)

and contained the same brown-grey clay loam as the pitfill. F22 also had a number of large stones in its upper fill. The base of the narrow slot (F21) sloped down towards the gully (F15), but the gully itself was level.

Phase 3 (illus 3) All of these features were covered by a layer of red-brown loam which distinguishes them from the activities of subsequent phases. The most conspicuous feature of the next phase was a linear east/west ditch (F3) containing a black silty loam and a fine collection of 13th- to 14th-century pottery. It was



ILLUS 6 Sections of features in Trenches A and B. (Descriptions of numbered layers are given in the archive of the project records at Callendar House, Falkirk)



ILLUS 7 Trench A looking south; parallel with the baulk at the back is the medieval road

broad and shallow, being 1.8 m wide but only 0.2 m deep (illus 5, layer 9). To the south of this ditch an area of rough cobbling probably represents a road surface (F28). Along the northern edge, at the east side of Trench A, a line of large cobbles (F25 south) was clearly contemporary with the ditch. It was echoed by a second line to the north (F25 north) which included a number of flatter slabs at a higher level. Between these lines was a light brown-orange loam that also underlay the upper stones (illus 5, layer 8). This bank of earth was found to occur in Trench B, but without the associated stone 'cladding'. In the centre of Trench A the stone alignments (F25) stopped at the point where four stones (F27) were found embedded almost vertically into the layer below. These had evidently been deliberately placed with the two southern stones sloping northwards at their bases and the two northern ones in the opposite direction.

To the north of this cluster of stones, and partly covered by the upper slip of F26 was a large shallow pit (F23; illus 6). This was oval in shape, measuring 1.4 m by 1.1 m and 0.2 m deep, containing a black loamy fill with numerous flecks of charcoal. The centre of the base was lined with cobbles, some fire-reddened *in situ*. No finds were forthcoming from this feature. North of this again was a small pit (F13), 0.4 m in diameter and 0.15 m deep, which produced a few fragments of animal bone from its grey silty clay fill. It had been cut into the infilled western terminal of the small ditch (F14).

Phase 4 (illus 3) After the medieval ditch too had been filled, the layer of cobbling (F28) was extended over it (F24). Two pits here (F8 & F11) are probably slightly later in date, for the upper fills contained repairs to the cobbled surface. The southern of these pits (F8) was oval in shape, measuring 2.1 m long by 0.8 m wide and 0.15 m deep. It was cut through the upcast material (F17). The other (F11) was kidney shaped, 1.2 m by 0.7 m, and contained a large stone jammed against one edge (illus 6).

Over the cobbling F24 in Trench B was a wall (F20) constructed from a mixture of rounded stones and roughly squared slabs. It was crudely faced on the south side, but had clearly had an earth backing to the north. This earth was the same as that from which F26 was composed. A small part of the face had collapsed to the south and the earth taken away from this area contained 17th-century pottery. As the stratigraphical sequence in this area was likely to be the same as that in the southern part of Trench A it was decided to leave the wall in place for examination by other excavators at some future date.

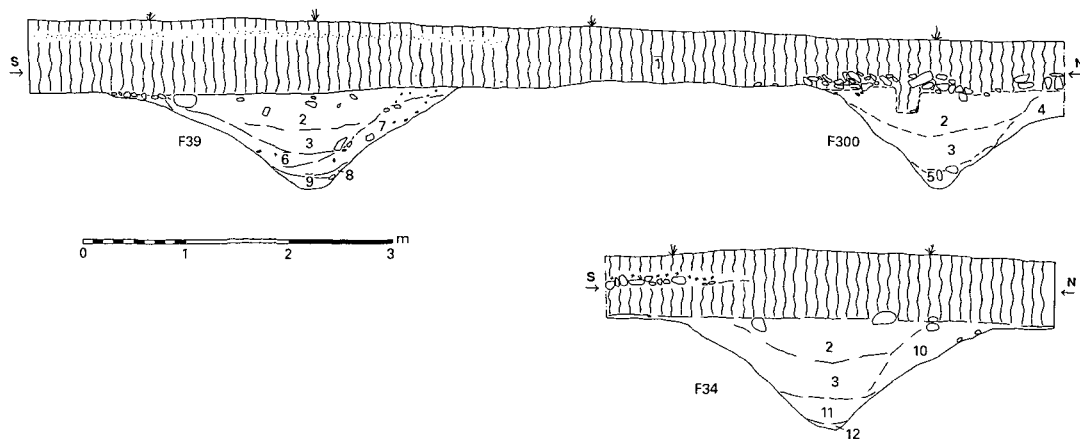
Modern features (illus 3) Another dump of soil covered these features, raising the ground level by about 0.6 m. This contained pottery from all the periods so far noted, from Roman up to the 18th century. Cut into this was a small ditch-like feature whose upper edges were lost in the modern topsoil (F29; illus 5, layer 6). Later still was a narrow trench with frequent lime mortar inclusions in the fill (F30). This was 0.3 m deep and 0.8–0.12 m wide, presumably representing a robbed-out wall (illus 5, layer 5). The latest conspicuous feature on the site was a spread of broken sandstone covered by a thin layer of red ashes and clinker (F31; illus 5, layers 3 & 4). This contained a penny of 1940.

TRENCH D

Having found the butt end of a ditch it was decided to determine its line to the west and then to search on its south side for a second ditch, whose existence had been hinted at by the upcast on the south side of Trench A (F17). Trench D was therefore opened up on the projected line immediately in the field to the west.

The first ditch was found in the north end of this new trench (F300), slightly to the north of the presumed location. It was V-shaped in profile, with a slightly rounded bottom. The surviving depth was 1.0 m with a width of c 2.6 m. At the base was a brown-grey silty-clay loam with gravel pockets and occasional cobbles. Above this a buff silty loam merged into a brown-orange clay loam (illus 8). A layer of cobbling extended over the top of the ditch.

Some 3.4 m to the south of this the second ditch was indeed found and examined (F39). Its dimensions were similar to the first at 1.0 m deep by 2.8 m wide. Its fills too were predominantly grey, starting at the



ILLUS 8 (Top) East section of Trench D; (bottom) east section of Trench E. (Descriptions of numbered layers are given in the archive of the project records at Callendar House, Falkirk)

base with a stiff blue-grey silty-clay, proceeding to a pale grey clay loam and finally merging into a pale brown-orange loam. Some of the earlier layers were interleaved with buff and brown-yellow clay loams lying along the ditch sides from which they had presumably weathered. On the south lip was a spread of small cobbles (F32). Stray stones were found in the upper fill of the ditch adjacent to the cobbling but they appeared to be merely displaced from the lip itself. Covering the cobbles was a thin layer of orange-brown silty loam and immediately above this was the black topsoil, some 0.7 m deep.

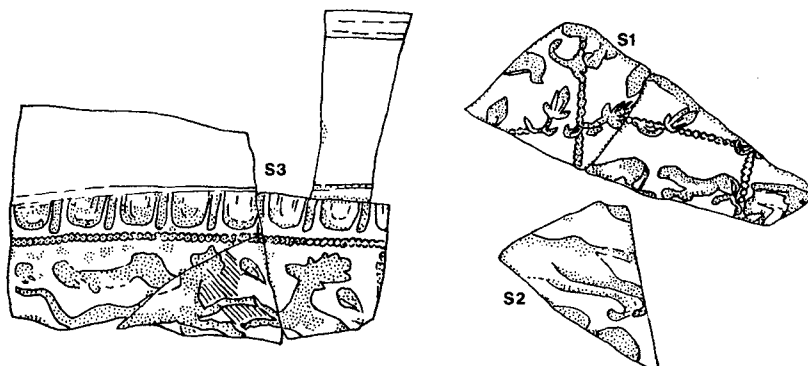
Set into the topsoil and only 0.10 m above the cobbling (F32) was a substantial lime-mortared stone wall (F33), 0.7 m wide, aligned north/south, parallel with the present hedge. The basal stones were quite large, up to 0.4 m high and over 0.5 m long. These were faced on the exposed sides and placed with their long axes parallel with the wall, bonded to the core by liberal quantities of mortar. In places two courses survived, and in one place a third course occurred immediately below the turf. Level with the top of the truncated wall, c. 0.1 m below the present lawn, a layer of speckled mortar provided a band across the topsoil indicating the ground level when the wall was demolished. In places this was accompanied by a layer of stone (F35) presenting a metalled surface.

TRENCH E

As the alignment of the north ditch in Trench D and that of the butt in Trench A did not exactly coincide a further check was made 26 m to the west. Trench E was cut in a clearing between the existing trees where there was also enough room to search for another ditch to the south of the two found in Trench D.

The northern ditch (F34) was located exactly on the line determined from the sides in Trench D (F300). Again it was V-shaped, 1.1 m deep and 2.9 m wide. At the base was a pale grey silty-clay loam, but above this the fill was relatively uniform consisting of a grey silty loam which gradually graded into a grey-brown silty loam. Medium-sized cobbles occurred sporadically in the bottom fill. At 2 m to the north of the ditch a thin layer of grey clay loam was found sitting directly upon the undisturbed subsoil. It was only 0.05 m thick and was overlain by topsoil.

No trace of a third ditch occurred in an outlying extension of Trench E to the south. Brick fragments of Roman type were found here just above the undisturbed subsoil showing that activity of that period was not confined to the north of the ditches.



ILLUS 9 The decorated Samian: scale 1:2; open stippling denotes worn areas

ROMAN POTTERY

Peter Webster

The yield of Roman pottery from the excavations was slight (only 60 equivalent sherds) and this will limit meaningful discussion. All sherds have been noted in a full report in the archive of the Project Records at Callendar House. Here it seems sufficient to offer a brief quantification, which of necessity has to be based on a sherd count, and also to make a few comments. Pottery will be discussed by source or class with illustrated vessels catalogued within each sub-section.

Samian

The Samian Ware may be summarized by form as follows:

Form	Sherds
18/31	6
18/31R	1
33	1
37	5
?42	1
Unidentified	2
Total	16

All sherds are Central Gaulish and are consistent with an early to mid Antonine date. The 16 sherds represent 26.7% of the Roman sherds recovered, a percentage which seems quite high. If this is not simply an effect of the small sample, then it may be that the material recovered comes from rubbish derived from a high-status building in or near the fort. The decorated material (illus 9) consists of the following:

S1 Form Dr 37 Two joining pieces with panels separated by bead rows and containing running animals, dog and hare. The stylized leaf, Rogers (1974) J144, is characteristic of Cettus, as is the small S — Rogers S72. These appear on both fragments. See Stanfield & Simpson 1958, pl 141, 7 and fig 42, 1 & 7. AD 135–160. From Context F7.

S2 Form Dr 37 Similar to Stanfield & Simpson 1958, pl 142, 33, and possibly part of the same bowl as S1 above. From Context F7.

S3 Form Dr 37 Four joining pieces, including the rim, showing a worn ovolo by Cinnamus (Rogers 1974: B182). The free-style pattern depicts stags and other animals, cf Stanfield & Simpson 1958, pl 163 no 66. c AD 130–170. From Context F7.

Other fineware

Other finewares are represented by only two sherds (3.4% of the total), likely to be from North Gaul and Cologne, respectively.

- 1 (not illustrated) Very abraded beaker in peach-buff fabric with a dark grey-brown coat. This is probably a product of North Gaul and originally roughcast. The fabric was isolated by Anderson (1981) but her discussion can now be supplemented by work, particularly on the Argonne fabrics, by Symonds (1990). Context F16.
- 2 (not illustrated). A sherd from a roughcast beaker in a fabric which is pale pink internally and off-white externally. The external surface was roughcast with a grey-brown slip. This sherd has been burnt but is probably a product of the Cologne industry (cf Anderson 1981). F310.

Black-Burnished Ware Category 1 (BB1)

BB1 was represented by only three sherds (5% of the total), a bowl base from Context F310 and a jar and bowl fragments from Context F7.

Black-Burnished Ware Category 2 (BB2)

BB2 was only slightly better represented than BB1 with five sherds (8.3% of the total). In addition to jar fragments from Contexts F17 and F16 were:

- 3 (illus 10) Rim of a small flanged dish. Context F6.
- 4 Jar rim. Context F16.

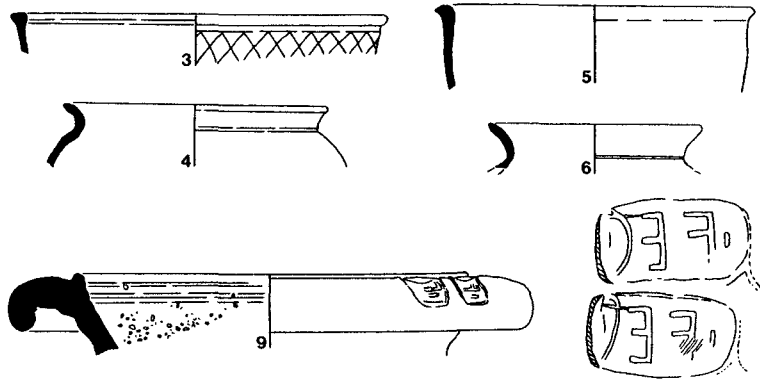
Oxidized fabrics

A total of nine oxidized sherds were noted (15% of the total). These include fragments of flagon from Contexts F2, F3, F7; jars from Contexts F5, F6, F7 and a bowl from Context F16.

Reduced fabrics

A total of eight sherds were noted (13.3% of the total). Along with fragments of jars from Contexts F2E, F16, F17 and F18 were:

- 5 (illus 10) Flanged bowl in light grey fabric with a darker surface. Possibly originally carinated. Context F2.
- 6 Jar rim in mid grey fabric. The form resembles Gillam 1970, no 139. This does not appear to be BB2 and a local imitation seems possible. Context F7.
- 7 (not illustrated) Bowl in light grey fabric with burnished surfaces partly surviving. A shape reminiscent of the samian form 37 was probably intended. Context F340.
- 8 (not illustrated) A jar with cordoned neck in a fabric which is brown internally and grey externally. The cordon is demarcated with rouletting. The vessel is very thin walled. Context F340.



ILLUS 10 The Roman pottery: scale 1:4 (mortarium stamp 1:2)

Mortaria

There were only four sherds of mortarium recovered (6.7% of the total). In addition to two adjoining sherds (counted as one), probably of Mancetter-Hartshill fabric, from Context F2 and a sherd of Verulamium fabric, from F300, there was the stamped mortarium reported upon by Mrs K F Hartley, below.

9 Rim of a stamped mortarium in brick red containing large white stone inclusions. From Context F14. On the rim are two retrograde stamps reading FEC for fecit. These are of the potter EMI[...]. His name was presumably a form of Emius or Emianus. Other mortaria of his are recorded from Ardoch (2–3); Balmuilty (3); Bothwellhaugh; Camelon (3–6); Castledykes (1–2); Cramond; Inveresk (3); Newstead (nine stamps from 7–8 vessels); Old Kilpatrick (2); and Rough Castle. All of his mortaria are from Scotland and none is from sites south of Newstead. The distribution of Romano-British mortaria, in northern England and the midlands, tends to the north of the production site. If this holds true in Scotland, then Newstead, with its already distinctly large total, is a likely source. His restriction to Scotland indicates activity entirely within the period of the Antonine occupation.

Amphorae

All Amphorae sherds were of Dressel 20 type, derived from the common globular containers for olive oil from southern Spain. Sherds came from Contexts F2, F4, F6, F7, F14 and F16.

TABLE 1
Functional classification of Roman pottery from Carriden

Class	Fineware		Coarseware		Total	
	sherds	%	sherds	%	sherds	%
Flagon	–	–	3	5	3	5
Beaker	2	3.3	–	–	2	3.3
Cup	2	3.3	–	–	2	3.3
Jar	–	–	15	25	15	25
Bowl	6	10	4	6.7	10	16.7
Dish	7	11.7	2	3.3	9	15
Mortarium	–	–	4	6.7	4	6.7
Amphora	–	–	12	20	12	20
TOTAL	17	28.3	40	66.7	57	95
Not assigned	–	–	–	–	3	5

DISCUSSION

The coarse pottery is consistent with an early to mid Antonine date with nothing which need be outside this range. The totals are so small that further comment would probably be unwise. It may, however, be of interest to note that the 60 sherds break down into the following functional categories shown on Table 1.

The small sample must again be emphasized, but it is interesting to note that this brief functional analysis bears out the conclusions already drawn from the samian. Items likely to be tableware are fairly well represented (all fineware along with the flagons and probably some of the bowls giving a total of around 35% of all vessels). This does not look like the contents just of a kitchen, a conclusion confirmed by the low overall percentage of *Black-Burnished Ware*.

MEDIEVAL AND POST-MEDIEVAL POTTERY

Robert Will

A total of 251 sherds was recovered, of which 11 were post-medieval, the rest being medieval, mainly Scottish with some Continental imports. Although there is a wide date range for all this material most of the medieval sherds date to the 14th century.

Medieval assemblage

Scottish East Coast White Gritty Wares 202 sherds were in fabrics similar to the general fabric type Scottish East Coast White Gritty Ware. The fabrics tend to be white, buff or even pinkish in colour with large quartz inclusions. These fabrics are found from the Borders to Fife and are thought to have been made at a number of different kiln sites. At the present time the only known and excavated kiln is at Coulston in East Lothian (Brooks 1980), although surface finds from field walking would suggest that there may have been other kilns at Balchristie and Tentsmuir in Fife (Wedderburn 1973). Scottish East Coast White Gritty Wares were produced over a long period of time and traded quite widely throughout Scotland. Material from Kelso Abbey has been dated to the later 12th century (Haggarty 1984) while material from Inverkeithing dates to the 15th century (MacAskill 1982). There are changes in form and style over time with cooking pots tending to be earlier. Most rim sherds in this assemblage are from cooking pots but occur alongside jugs and imported sherds which would suggest a later date in the 13th or early 14th century.

Scottish medieval Redwares This is another general fabric type that covers a wide range of similar orange and red fabrics often with sand inclusions that have no known production source. It is only in major urban centres where a large amount of excavation has been carried out (Aberdeen & Perth) that local fabrics and styles have been identified. These fabrics tend to date to the 14th and 15th centuries.

Yorkshire One rod handle in a Yorkshire type fabric possibly from a Scarborough-style Knight's jug was recovered and would date to the late 13th or early 14th century. These fabrics tend to be white or pinkish with few inclusions and a distinctive dark green shiny glaze. Material from several Yorkshire kilns operating in the late 13th and 14th centuries are found throughout Scotland, presumably being traded up the east coast.

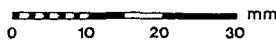
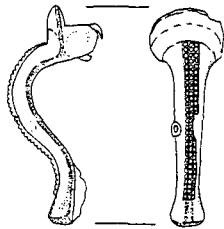
Low Countries Greyware A base sherd and three body sherds were recovered from a Low Countries Greyware cooking pot, the base sherd includes part of a foot from a tripod cooking pot. These vessels start to appear in the late 12th and 13th centuries and continue into the 15th century when they are largely

replaced by Low Countries Redwares (Verhaeghe 1983). They seem to have an east coast distribution and have been recovered from Edinburgh, Perth, Aberdeen and other sites.

Post-medieval assemblage

Scottish post-medieval reduced wares Three sherds of this fabric type were recovered and represent jugs. These fabrics first appear in the early 16th century and continue through the 17th and possibly into the 18th century (Haggarty 1980). They have a very wide distribution throughout Scotland but the only known kiln site is at Throsk on the upper Forth and this is the probable source of these sherds (Caldwell & Dean 1993). These fabrics tend to be heavily reduced to grey or black in colour and tend to be quite thick with a green glaze often with knife trimming round the base and incised wavy decoration.

Slipware Five sherds from the same slip-decorated bowl or dish were recovered including a hammer-head rim. Unfortunately the sherds are badly abraded and the decoration has worn off but seems to have been in three colours, brown, green and pale green/yellow. The main motif was in brown but there is not enough surviving to suggest what that was. The fabric is in a pale pink with a white slip on the inside which was then decorated and glazed. This type was made throughout Europe in the 17th and 18th centuries which makes it almost impossible to identify a single example, but it could be of French origin. Unfortunately there is not enough of the decoration surviving or enough sherds to determine the exact shape of the vessel.



ILLUS 11 Bronze knee brooch: scale 1:1

OTHER FINDS

Bronze knee brooch (illus 11)

A small knee brooch, 30 mm long, was found in the upcast material (F10). On the ridge is an applied layer of white metal which has been embossed to provide an indented decorative motif. The form is characteristic of Snape's type 5.1C (Snape 1993, 18) dating to the mid second to early third centuries AD. The decorative spinal strip is, however, unusual.

XRF analysis by Paul Wilthew of the Analytical Research Section of the National Museums of Scotland showed that the decorative ridge was composed of a thin layer of silver above tin rich material. This is seen as the decoration being applied to a strip of silver foil before it was attached to the copper alloy brooch using a tin-lead solder. A knee brooch from Newstead was found to have been tin plated (Curle 1911, pl 87 no 30) and it is probable that this example was also.

Glass

One piece of Roman window glass and a tiny fragment of vessel glass were recovered. The window glass fragment was 111 mm long, with a smooth straight edge containing a single pontile point. It came from Context F7, the vessel fragment came from a late context, Pit F8.

Flint

A large flint flake came from F7, possibly of Neolithic date.

INTERPRETATION

THE ROMAN PERIOD

There was no sign of the fort ditches in Trenches A and B, which, together with the existence of an entrance, indicates that the true east/west dimension of the fort was indeed 122 m. This allows us to be fairly certain that the area of the fort was 1.6 ha (4 acres), similar in size to Old Kilpatrick on the western terminus of the Antonine Wall at 1.7 ha (4.2 acres).

The butt-ended ditch (F12) can be seen as the annexe ditch which terminated here in order to leave a causeway between it and the fort's ditches. This passage was provided with a roughly metallised surface represented by the cobbling (F19); the upcast (F10) from the ditch was heaped up higher than usual at this point to prevent it from spreading over the entrance way. An annexe entrance in a similar location with respect to the fort was found at Rough Castle (Christison *et al* 1905), and the existence of a road over the infilled fort ditch at Castlecary suggests that one lies under the railway embankment there too (Christison & Buchanan 1903). In both of these cases the annexe was a later addition. Whether the annexe at Carriden was constructed after the fort or not, it is clear from the siting of the fort that a western annexe was planned from the start. The large area of level ground between the fort and the Muirhouses Burn provides a strong topographical location for a defended enclosure. The first priority in the building schedule would have been the fort and the annexe could have been enclosed at a later day (Bailey 1994).

The evidence from Trenches D and E confirms that the enclosure ditch extends along the south side of the annexe for a distance of at least 60 m. There is room for a total length in the region of 120 m here, though the northern side was presumably much shorter. Using the natural contours of the site to the best advantage would produce an annexe approximately 1.4 ha (3.5 acres) in area, one of the largest along the Wall (see Table 5.1 in Hanson & Maxwell 1983). Within this area the Ordnance Survey Name Book of 1856 recorded the following feature: 'The remains of an ancient pavement were dug up a few years ago when removing an old tree which stood here. It was composed of stones, sand, etc, forming a type of concrete . . . This was possibly part of a Roman road, or more probably, of the floor of a Roman house or other building.' (This is represented by Q on illus 2).

A second ditch (F39) lay beyond the first, but no third ditch was encountered, suggesting that the annexe defences were slighter than those of the fort. They were certainly smaller in size, the annexe ditches were 1.0 m deep, but those of the fort 1.4 m. That this was the original depth is shown by the levels of the contemporary road surfaces, the upcast mounds, and the cobbling (F32) consolidating the lip of the outer annexe ditch.

Just outside these ditches, at the presumed south-west corner, another find was noted by the Ordnance Survey: 'When sinking a shaft for a mill wheel a few years ago, at the depth of 10' or 12' from the surface the workmen found part of an ancient pavement, formed of a concrete

composed of stones, sea-sand containing shells etc. It was quite hard not unlike the asphalt pavements of some cities. The spot where it was found is now covered by one of the outhouses of Carriden House.' (P on illus 2.) This feature may have been a naturally deposited layer, though its location would have been appropriate for a road descending the hill from the west gate of the annexe into Carriden Glen and thence to a wharf on the Forth.

The entrance found during the recent excavations went out of use during the lifetime of the fort. The outer ditch appears to have been dug across the causeway and rubbish was dumped on the old road surface. The composition of this material is of interest. It contained a high proportion of finewares and a piece of window glass. These suggest that the source of the dumped matter was a building of higher than average status. While it is possible that this was a building within the fort itself, a source closer to hand would be more likely. Rubbish continued to accumulate even after a small blocking trench had been dug in the gap left by the inner ditch. This lends weight to it having been derived from a local source. It is tempting to speculate that the annexe entrance was found to be inconvenient and unnecessary, and that as space in the annexe was at a premium, it was closed off in order to build a *mansio* or similar structure just inside the defences at this point.

When the Roman army abandoned the fort they would have dismantled the installation. Some of the demolition material will have ended up in the annexe ditches, including part of the stone lining of a furnace. However, there was no evidence to indicate that the rampart material was thrown into any of the ditches. Stagnant water lay in and around them causing them to very slowly silt up.

THE POST-ROMAN PERIOD

Some considerable time after the Roman army had left and the area had silted over, a gully (F15) was dug between the inner and outer ditches. This may have been an attempt to alleviate the severe drainage problems that had occurred. It is possible that a structure was then erected to the west of this relief drain served by the smaller drain (F21). The splayed south-eastern end of the relief drain suggests that it carried some form of liquid from the west and emptied it into the larger gully. Pit F22 may have been a post-hole, replacing an earlier one or even extending our hypothetical structure. In any case, it was backfilled at the same time as the drain (F21) and stones were placed over it to consolidate the new surface. Beyond these features, there is insufficient evidence to give a definite account of this phase.

THE MEDIEVAL PERIOD

The existence of a medieval village in the vicinity of the old graveyard has been known for some time. Indeed, the juxtaposition of church, fortified house and settlement is typical of Stirlingshire in the medieval period. The subsequent removal of the dwellings can be closely paralleled at sites such as Kinneil, Dunipace and Airth. Part of Carriden House dates back to the 15th century, presumably on the site of a timber predecessor. Similarly, although the gravestones in the burial ground date only to the 17th century and later, a 12th-century church is known from work carried out here by the West Lothian History Society. Their excavation revealed a stone building comparable to that at Kinneil (pers comm). Salmon (1913, 168) places the old village to the west of the graveyard, although it is unlikely to have been confined to this space. Housing an agricultural community, with a high proportion of sailors and merchants involved in trade from the shores of the Forth, it is likely to have been a dispersed rather than a nucleated settlement. It

is, for example, notable that the old entrance to the churchyard lay at its south-east corner and not, as present, to the south-west (*ibid*, 183). The old shore road from Blackness also passed to the east of Carriden House before skirting round to the south of the church (*ibid*, 177). It might therefore have been expected that part of the putative settlement had lain to the south and south-east of the graveyard.

One of the main roads of this medieval settlement was located in the 1994 excavations. It had a poorly metalled surface (F28) with a shallow drainage ditch (F3) along its northern side. The northern edge of this road was 4.5 m to the north of the present lane, but its alignment was the same and it had evidently taken much the same line. It may have formed a section of the church road along the shore from Blackness by way of Carrispans to Muirhouses (*ibid*, 177) or a section of an even older road from Blackness along the ridge following the line of a Roman road and that of the present farm track to Stacks. In this last case it is interesting to see how the modern lane changes direction at the point where it clears the south-east corner of the ditch system of the Roman fort and then rejoins the line of the Roman road. This would then have been an important route joining the wealthy port of Blackness to the Duke of Hamilton's stronghold at Kinneil.

The road and ditch were bounded by an earth dyke (F26) revetted by stone (F25). There appears to have been an entrance through this dyke occupying the western half of Trench A. The eastern dyke terminated at the unusual stone setting (F27), whilst the terminal of its western partner was replaced at a later date (see below). The presence of the entrance would help to explain why the ditch was so shallow here and had become so clogged up with broken pottery. It may well have been the entrance to a dwelling as earth dykes were used in building construction. Although there was no clear evidence for an internal floor to the north, there was a large shallow pit (F23) which had been used as the seat of a fire. The base was lined with scorched stones suggesting repeated use. The lack of finds in the pit may indicate that it was not an internal cooking hearth, or simply that it was thoroughly cleaned out after each use.

The medieval layers survived well in Trenches A and B because they lay in a slight hollow. To the west in Trenches D and E all traces of this date had been removed by subsequent activity with the possible exception of a cobbled layer above the inner ditch F300 (see *illus* 8).

THE POST-MEDIEVAL PERIOD

The roadside ditch (F3) slowly filled with rubbish and by the 16th century had been levelled. The road metalling (F28) was then extended over it (as F24). The entrance to the north was retained but in a slightly different form. A stone-faced wall was built over the long redundant ditch and the later cobbling, to replace the western dyke. This wall (F20) was two or three courses high and curved in slightly at its eastern end. The old dyke was levelled behind it. Two pits (F8 & F11) may belong to this phase but cannot be assigned a function.

Intense occupation of the site came to an end in the middle of the 18th century, judging by the pottery found in the stratified levels. Thereafter, a large quantity of earth was imported and dumped over the site of the former village creating a new landscape. This clearly represents the emparkment of the area around Carriden House. New trees were also planted, including the sycamores which do so much to enhance the present scene. Avenues were created and lanes moved and enclosed with stone dykes. The main lane to Stacks farm was moved 4.5 m to the south. The shallow ditch (F29) seems to represent an intermediate step in this process and was soon replaced by a narrow wall now represented by the trench filled with soil speckled with lime mortar (F30). At a slightly later date a substantial wall was constructed as an extension to the

western wall of the graveyard. This wall (F33) was bordered on the east by a road (F40) leading from the main lane to a new entrance at the south-west corner of the graveyard. This entrance was established in c 1820, and this may be assumed to be the date of our wall and road. Presumably a second boundary wall lay on the eastern margin of the road and the two then acted to funnel the public, who still had a legal right of access, to the old burial ground. Until then they had shared the main drive to the house with access to the graveyard at the south-east corner. A gate was probably inserted at this time across the main lane just to the east of its junction with the new cemetery lane. The wooden post for this still survives *in situ* and the gate itself was removed only about five years ago. This now meant that the east end of the main lane and the drive to the house were kept private, and the public had no excuse for straying into the main pleasure grounds.

A new burial ground had been opened up in the 1760s at the foot of Carriden Brae for the villagers to use. However, many of them visited their family graves up by the old house for many years afterwards, and even as late as 1820 some still claimed to have burial rights there. With each succeeding generation the numbers of these declined as did the memories of those long departed. Before the end of the century the tall boundary walls were removed and some replaced by hedges. The demolition of the walls is clearly seen in the mortar spreads. The hedges that now line the fields immediately to the south of the graveyard are relatively recent in the history of the site, for they date to after the First World War. Since the 18th century the native trees have matured and indeed many have been lost. Exotic species were added at the end of the 19th century and together these elements now present a good example of what our 20th-century concepts perceive as a country park.

The field to the south of the graveyard was intensively cultivated in the middle decades of this century when it became the vegetable garden for the house. During the Second World War particularly the site was heavily used and a number of paths and areas of hard standing were created at this time. The path of broken sandstone surfaced with red ashes and clinker (F31) is the clearest example of this latter phenomenon with its coin of 1940. Other patches were found in Trench E, particularly against its southern end.

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