

## 2. Pre-Fort Agriculture and Ditches (Periods 1–4)

### INTRODUCTION

(FIGS. 2.1, 2.2 AND 2.4)

There were four periods of activity on the promontory prior to the construction of the Roman fort, the first two being agricultural. Evidence of ploughing in Period 1 was found in most of the excavation trenches, and consisted of ardmarks cutting natural subsoil (figs. 2.1 and 2.2). Period 2 was represented by a surviving patch of narrow rig and furrow (fig. 2.2); this evidence parallels the signs of agriculture found beneath many Roman sites in the region which have recently been summarised by Bidwell and Watson (1996, 14–17). There were no associated finds, so the agriculture cannot be closely dated.

Pre-fort Period 3 consisted of evidence for Roman construction work in the immediate vicinity. Debris of mortar and sandstone fragments filled the furrows of the second period, indicating that the construction had followed immediately after the cultivation or even interrupted it. This sequence has also been observed at other sites (Bidwell and Watson 1996, 14–17). There was also a possible pebble surface. The construction debris could have been derived from stone dressing and mortar mixing during the building of Hadrian's Wall, or of the bridge across the Tyne, or could derive from subsequent repair or modification of the Wall at some time after its construction. There was no dating evidence with the construction material. However, as described below, there was a delay between Periods 3 and 4, and Period 4 may have been lengthy. Therefore this construction work may have taken place a considerable time before the building of the fort in Period 5.

The evidence for the delay between Periods 3 and 4 lies the formation of layers of silt and iron pan above the construction debris and surface. In Period 4 several ditches and gullies were dug (fig. 2.4). Two of these cut the silt which overlay

the construction debris and the pebble surface of Period 3. The function of these features is unknown, but their alignment suggests they represent a clear change in the character of the activity on the promontory. Unlike the rig and furrow, which had run north-east/south-west, the ditches and gullies ran due east/west, the same as the assumed line of Hadrian's Wall, and the alignment later taken by the fort. The layout and close proximity of some of the ditches shown on fig. 2.4 indicate that these may represent a series of recuts which had been carried out over a long time.

Prior to the construction of the fort, the ditches and gullies were filled in, some datable Roman pottery being found in the fill. The site, which sloped to the south and the east, was levelled. The northern parts of the excavated areas were found to have been terraced, while areas to the south had been covered by levelling layers of clay. It is clear that the infilling of the ditches occurred immediately before the construction of the fort. The fort builders were aware of the presence of the ditches, because they ensured that buildings overlying ditch fill were provided with particularly firm foundations, as a precaution against subsidence.

### PERIOD 1

#### Ardmarks (figs. 2.1 and 2.2)

Ardmarks were found in a broad swathe across the northern part of the excavated fort, that is in Railway Arches 1, 2, 3 and 29, and in Areas C3 and C29. Their absence in Railway Arch 28 may be explained by the fact that this area was particularly heavily terraced before the construction of the Roman fort; all that survived here above subsoil were patches of disturbed subsoil (4090\*).

In C29, the boulder clay subsoil was overlain by weathered subsoil (3328\*). This was cut by a series of ardmarks (3428) running in three



*Fig. 2.1* Period 1 ploughing, shown by ardmarks in three directions cutting the subsoil beneath the loading bay area of the east granary.

directions. Ardmarks (uncontexted) also running in three directions were found to the west in C3.

In RA29 the ardmarks (uncontexted) also ran in three directions, cutting light brown or yellow clay subsoil. In RA3 the ardmarks were not planned, but were observed to run in two

directions, cutting yellow clay subsoil. More ardmarks were visible in at the southern end of RA2 and in RA1, where the subsoil had been exposed by the cut of a broad, shallow feature (194/179R1), described below.

Ardmarks have been found in the subsoil beneath many Roman sites in the North. The

examples closest to the fort at Newcastle are those found under the Westgate Road milecastle (Harbottle *et al.* 1988).

There were also patches of ash or charcoal and small areas of burning over subsoil in several excavation trenches which can be paralleled from excavations at Wallsend (Hodgson forthcoming), and along the line of the Wall at Denton (Bidwell and Watson 1996).

## PERIOD 2

### **Narrow rigg and furrow, possible north/south boundary (figs. 2.2 and 2.3)**

**Rigg and furrow:** Subsoil in the compound area (294C) was overlain by a layer of weathered subsoil or cultivated soil (431C). Section 1 (fig. 2.3) shows that the depth of this soil varied from 0.14m to 0.22m, the average depth being 0.20m. Narrow rigg and furrow, running north-east/south-west, and cutting the top of the cultivated soil (431C), was found beneath the *principia* at the southern end of the excavated area (fig. 2.2). The furrows were 0.50–0.60m wide and the distance between them (from centre to centre of the furrow) was 1.10m. This is less than the average for sites in Northumberland and the Borders (Topping 1989, 161), but the same as that pre-dating Hadrian's Wall at Denton (Bidwell and Watson 1996, 15). At Denton it was assumed that the narrowness of the riggs was dictated by drainage problems in particularly waterlogged soils.

In Area C29 a linear hollow (3369) also running north-east/south-west probably represents a surviving trace of the same rigg and furrow.

Elsewhere some traces of weathered subsoil were found. In RA1 there was brown clay (54R1\*), in the northern part of RA2 mixed clays (273R2\*), in the northern part of RA3 a weathered subsoil (187R3\*), and in RA29 there was a reddish brown sandy clay (2954\*). Weathered subsoil (618\*) was also found in Area D. There is no record of rigg and furrow from these areas. This may mean that they were not cultivated in this period or, alternatively, that levelling prior to the construction of the

Roman fort had removed the evidence of rigg and furrow along with the uppermost layers of the weathered subsoil.

**Feature 194/179R1** (fig. 2.2): Traces of a wide, shallow, flat-bottomed feature ran north/south in the north-western part of RA1. Archive notes state that the maximum surviving depth was 0.90m, but the levels taken for a survey of the ditches give a maximum depth of only 0.75m. To the west, a slight rise in the bottom of the feature suggested where a western side for this feature might have begun, but the area to the west was obliterated by a pier of the railway viaduct. This feature was interpreted as a shallow ditch, the original width of which was estimated to be between 3.50m and 6.50m. However, it is possible that no western 'side' forming a ditch existed and this feature was part of agricultural terracing, or marked a boundary in land use.

The feature clearly post-dated the first period of agriculture, as ardmarks were visible in subsoil at the bottom of the cut and further west. So, whatever its exact appearance, it could have formed a north/south boundary for the area cultivated by rigg and furrow.

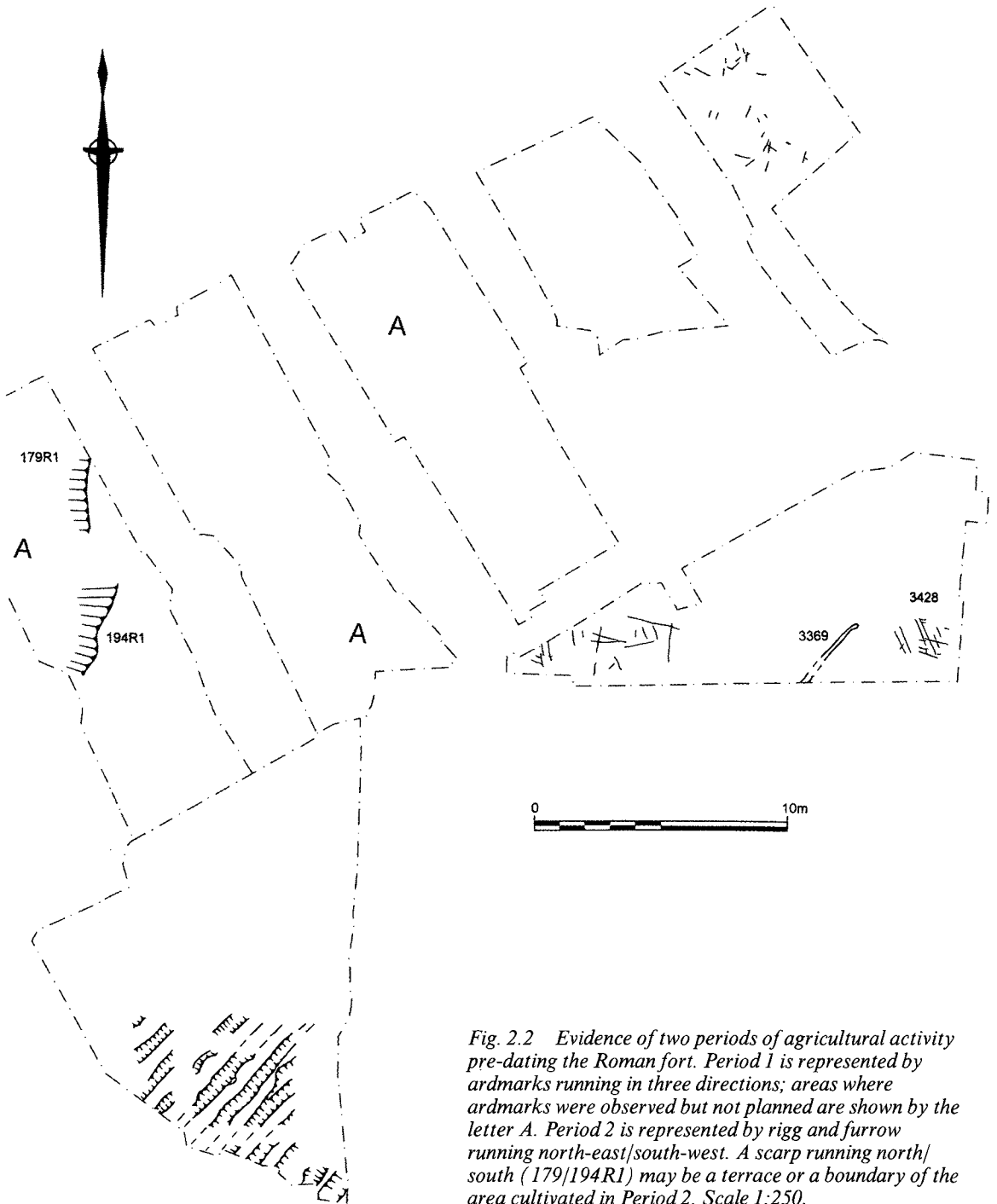
### **Finds**

The weathered subsoil in RA3 (187R3\*(80CX)) contained a few sherds of locally produced grey ware cooking pot, and a fragment of lead waste.

## PERIOD 3

### **Early Roman activity, pre-dating the fort: possible construction debris and pebble surface; infilling of scarp or terrace; period of inactivity (figs. 2.2 and 2.3)**

**Compound area:** Immediately overlying the cultivated soil (431C) in the compound and filling the furrows (fig. 2.2), was a layer of fine yellow sand, mortar and sandstone fragments (242C), identified in archive notes as construction debris or levelling (fig. 2.3). Further north, a layer of yellow mortar and stones (434C\*) was probably equivalent to 242C, and was overlain by a pebble surface (433C\*). To the



*Fig. 2.2 Evidence of two periods of agricultural activity pre-dating the Roman fort. Period 1 is represented by ardmarks running in three directions; areas where ardmarks were observed but not planned are shown by the letter A. Period 2 is represented by rig and furrow running north-east/south-west. A scarp running north/south (179/194R1) may be a terrace or a boundary of the area cultivated in Period 2. Scale 1:250.*



### *Finds*

From the infilling of the scarp: jet bead fragment, 109R1\*, fig. 18.8, no. 122.

## PERIOD 4

### **Pre-stone fort gullies and ditches (figs. 2.3 and 2.4)**

#### *Introduction*

The ditches found in the compound and RA2 were overlain by Roman buildings which were left *in situ* during the excavation, meaning that only discontinuous small sectors of ditch could be investigated, making them difficult to interpret. Three ditch cuts were distinguishable. The southern edge of a broad and deep east/west ditch (447C) was excavated in the compound. To the north, just surviving in one corner of RA2, was part of the northern edge of a ditch cut (374R2), also running east/west. In RA1 there was a short length of north/south ditch (195R1), which existed only in the area between the line of Ditch 447C and the postulated line of Ditch 374R2. Unfortunately all of the possible junctions between these features had been destroyed by later intrusions, so there is no direct evidence for their relationships. The close proximity and differing alignments of Ditches 447C and 195R1 (and possibly also Ditch 374R2) suggests a series of recuts.

Several small features best interpreted as drainage gullies ran east/west. These were found running across the compound (gully 364C) and in RA3 (gully 166R3). The latter did not continue across RA28, but there was another length of gully (2941) on the line in the southern part of RA29. There was another gully (3115) in the northern part of RA29. Both of the gullies in RA29 widened at their eastern end and appeared to turn to run south.

#### *Ditches*

**Ditch 447C** (fig. 2.4): A broad V-shaped or U-shaped ditch ran east/west through the northern part of the compound, 2m north of gully 364C, but not exactly parallel to it. It cut

through the silt layers which overlay the cultivated soil. Only the southern side was located, but this was found at both the east and west sides of the excavation. A section was dug through the fill at the western end, and this located the centre of the ditch cut; assuming the profile to have been a symmetrical V-shape, the estimated width of the ditch would have been at least 3.40m. The maximum surviving depth was 1.24m, but as this side of the compound had been terraced, the original depth may have been greater.

**Ditch 374R2** (fig. 2.4): A U-shaped ditch, running east/west to the north of Ditch 447C, was represented by a very small sector of its northern side, surviving in the south-west corner of RA2. It cut through subsoil, the cultivated soil here having been truncated. A section was dug through the fill, but it was not known if the centre of the ditch was reached; the section was sketched in the context book. The maximum surviving depth was 0.75m, although the original depth would have been greater. The estimated width would be at least 2.24m.

**Ditch 195R1** (fig. 2.4): A short sector of V-shaped ditch, running from north to south, was excavated at the south-eastern limit of RA1. Again, no cultivated soil remained in this area. This ditch did not run south of the line of Ditch 447C or north of the postulated line of Ditch 374R1. The maximum surviving depth was 1.27m. The full width of the ditch was not excavated, but a section drawing (not illustrated here) indicates that the estimated width must have been at least 3.20m. As can be seen on fig. 2.4, it is highly unlikely that this sector of north/south ditch could have been contemporary with the east/west ditch (447C). The excavated features in this area could represent several different recuts.

**Interpretation of the ditches.** It is difficult to suggest what the ditches represent as such short sectors have been excavated, but the size of Ditch 447C suggests a boundary. It need not have been a defensive one. Possibly the promontory was divided into areas of different land use, which were further sub-divided into

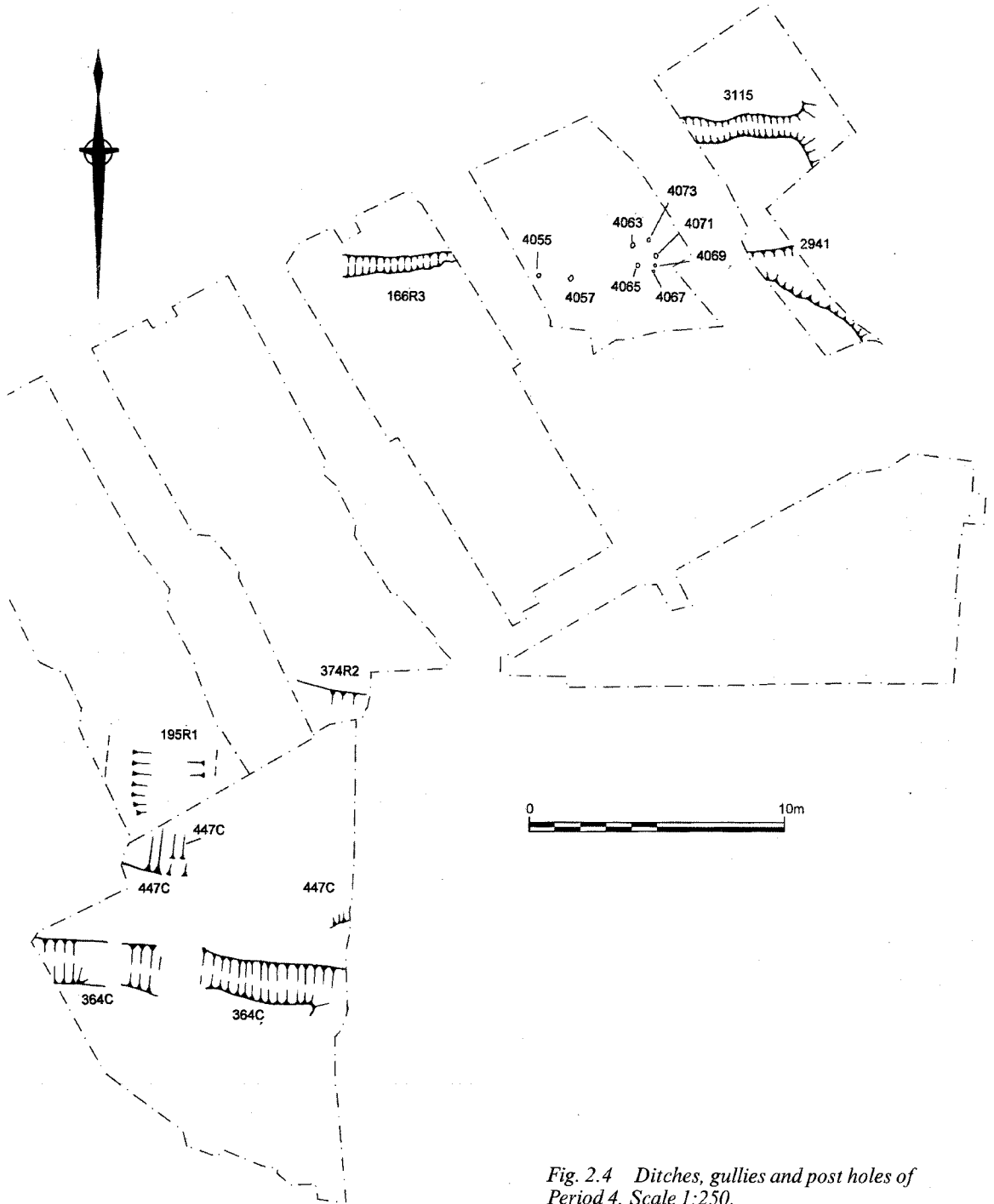


Fig. 2.4 Ditches, gullies and post holes of Period 4. Scale 1:250.

smaller agricultural plots, as indicated by the drainage gullies.

### *Gullies*

**Gully 364C (compound area) (figs 2.3 and 2.4):** A V-shaped gully ran east/west across the southern part of the compound, cutting the probable construction debris of Period 3 (242C) and silting layers above it. Its width varied from 1m to 1.40m and the maximum surviving depth was 0.75m.

**Gully 166R3 (Railway Arch 3) (fig. 2.4):** This U-shaped gully ran from west to east in the northern part of RA3, cutting through the cultivated soil and down into the subsoil. It was 0.55m in depth and a maximum of 0.80m wide.

**Gully 2941 (Railway Arch 29) (fig. 2.4):** At the southern end of the excavation trench was a shallow gully (2941), taking a curving course from west to south. On the surface of the natural to the south of the gully was a patch of sandstone slabs (2947\*). The average surviving depth of the gully was only 0.25m (but presumably it had been cut from the top of the cultivated soil, which had subsequently been terraced).

This gully was on roughly the same alignment as the gully (166R3) in RA3. It is possible that they were part of the same feature, the central sector in RA28 having been cut entirely in the cultivated soil which had subsequently been removed by terracing down to subsoil prior to the construction of the fort. The disturbed subsoil (4090\*) in RA28 was cut by a number of post holes and other features described below.

**Gully 3115 (Railway Arch 29) (fig. 2.4):** At the northern end of the excavation trench, this U-shaped gully sloped from west to east. Where the eastern end was truncated by the railway arch the gully broadened, possibly having been joined by a north/south gully; traces of a narrow north/south cut (3126\*) may be associated with this. Another branch of the main gully turned to run south. The average surviving width was 0.90m. The maximum depth was

0.22m, becoming much shallower towards the east (see comments on Gully 2941 above).

A westward projection of the gully (3115) would have extended into the extreme north-eastern corner of RA28; it is not surprising that no continuation of the gully was found there, since this area would have been disturbed by the cut for the pier of the railway arch.

It would be quite feasible that both these gullies draining west/east across the promontory should curve southwards and drain into the natural hollow postulated to underlie Castle Stairs (Harbottle 1971, 6–7). It should also be noted that, since the most north-easterly gullies had been reduced by terracing, they could originally have been much more substantial features, possibly ditches rather than small drainage gullies.

## END OF PERIOD 4

### **Infilling of ditches and other features and pre-fort levelling (figs. 2.3 and 6.2)**

**Ditch 447C (compound):** Primary silting consisted of yellow clay (442C\*, 445C\*) and dark brown clay (443C\*). Above this was the deliberate fill of greyish mauve silty clay (437C\*). The upper fills of the ditch were orange/brown clay (436C\*, 438C\*), a yellow or ginger stony layer (439C\*) and dark brown clay (441\*).

**Ditch 374R2 (Railway Arch 2):** A layer overlying subsoil (370R2\*) had slumped down into the ditch. The deliberate infill was described as ginger soil and stones (366R2\*), apparently similar to the upper fills of Ditch 447C; it lapped over the lip of the ditch.

**Ditch 195R1 (Railway Arch 1):** The fill was brown clay and stones (189R1\*), which contained Roman pottery (fig. 6.2).

**Gully 364C (compound):** Primary silting layers included a cream/grey silty clay (449C), brown/grey silt (448C and 425C\*), mixed silty clays (382C\*, 383C\*) and yellow clay (365C\*). Also some of the Period 3 layers (429C, 424C) had slumped into the gully. Above these primary layers was the deliberate infill of the gully,



a red/brown clay (430C) overlain by a further small patch of clay (400C) (fig. 2.3).

**Gully 166R3 (Railway Arch 3):** There was no sign of silting. The gully had been deliberately filled with redeposited subsoil mixed with sandy soil and a few stones (182R3\*).

**Gully 2941 (Railway Arch 29):** The fill (2933\*), a compact mixed clay with charcoal, extended beyond the southern lip of the gully, acting as a levelling layer over the area to the south.

**Gully 3115 (Railway Arch 29):** The northern gully (3115) was filled with a dense grey clay (3114\*); there were occasional inclusions of charcoal.

**Terracing, post holes:** There is evidence of terracing in RA1, RA2 and parts of the compound area. Terracing was most marked in RA28; if the sectors of gully found in RA3 and RA29 had originally been part of the same feature, its central sector would have been destroyed by this process. In the gap between the two sectors, the disturbed subsoil (4090\*) was cut by a line of small post holes or stake holes (4073, 4071, 4069, 4067, 4065, 4063, 4057 and 4055) running east/ west. There was also a pit (4038\*) and a linear feature (4093\*).

## Finds

### Dating evidence – pottery

The primary silting (383C\* (79LC)) of Gully 364C contained a base sherd from a BB2 bowl or dish. The fill (182R3\* (80CY)) of Gully 166R3 contained a cooking pot, Gillam 1970 type 115–7, dated 120–40 (fig. 15.4, no. 2). The fill (2933\*) of the gully in RA29 contained a large fragment of a BB2 dish with lattice decoration (fig. 15.4, no. 6), and a stamped samian base sherd of Antonine date (S23). In the primary silting of Ditch 447C (442C\* (79MM)) there was a single sherd of a flagon, probably of second-century date. In the fill of Ditch 447C there were three sherds, including a single BB2 cooking pot body sherd in context 437C\* (79MN).

### Other finds

From the fill of Gully 166R3:

Copper alloy: Not illustrated, no. 57, ring fragment, 166R3

Lead: Not illustrated, no. 70, strip, 182R3\*

## END OF PERIOD 4 OR PERIOD 5

### Pre-fort levelling

Extensive levelling layers were deposited over the ditch fills and spread beyond them across the site. The many context numbers given to these layers gives a possibly misleading impression of many different deposits. They actually reflect the fact that the stone fort buildings were not totally excavated, but left *in situ*, so differing context numbers were probably often given to the same layer which had been interrupted by walls. The levelling layers were probably fewer and very widespread.

**Compound area, levelling over Gully 364C:** The levelling layers over the gully fill consisted of brown clay (421C\*), redeposited yellow clay (409C\*), clay and stones (428C\*), brown/yellow clay (408C\*) and a yellow-orange clay (379C, equivalent to 391C). Other layers of clay (307C\*, 356C\*) overlay not only the gully but the area to the south, underlying the *principia* rear range.

**Railway Arch 28:** The post holes, stake holes and pit mentioned above (Period 3) were filled (fills listed in the archive), as was the pit (4038\*, fill 4037\*).

The surface in RA28, which sloped down to the south, had been levelled up with a layer of compact clay (4026\*); pressed into the upper surface were sand and small angular sandstone fragments. These overlay the post holes of Period 4, but apparently did not extend into the north-east corner of the site.

**Area D:** Layers of grey clay (676\*) and brown clay (598\*) were deposited.

## Finds

### Dating evidence – pottery

In the levelling over Gully 364C there was a sherd of second-century Colchester mortarium dating to c. 130–200 (context 421C\* (79LR)) and a few body sherds of BB2 with the oxidised surface (context 307C\* (79KH)). The fill (4037\*) of the pit in RA28 contained a BB2 cooking pot (fig. 15.4, no. 8). The levelling (676\* (82GT)) in Area D contained a

locally produced grey ware cooking pot, dated to the second century (fig. 15.4, no. 7).

*Other finds:*

From the levelling in Area D

Clay: Not illustrated, no. 165, spindlewhorl, 598\*