Metchley Roman Forts, Birmingham

Archaeological Excavations July-August 2004

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By Alex Jones

With contributions by C Jane Evans, Erica Macey-Bracken
Wendy Smith and Roger White

Illustrations by Nigel Dodds

For further information please contact:
Birmingham Archaeology
The University of Birmingham
Edgbaston
Birmingham B15 2TT
Tel: 0121 414 5513
Fax: 0121 414 5516
E-Mail: bham-arch@bham.ac.uk
Web Address: http://www barch.bham.ac.uk/bufau

METCHLEY ROMAN FORTS
ARCHAEOLOGICAL EXCAVATIONS JULY-AUGUST 2004

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1.0: SUMMARY

An area excavation was undertaken in July-August 2004 along and outside the western defences of Metchley Roman forts (centred on NGR SP 045836, Area 14) in advance of a roadscheme associated with a new hospital development. The fieldwork was undertaken by Birmingham Archaeology on instruction from University Hospital Birmingham NHS Trust. The excavation followed a desk-based assessment which highlighted the potential of the area to contain part of a *vicus* or civilian settlement, as well as a length of the western defences of Metchley Roman forts. Earlier excavation to the northwest of the area investigated in July-August 2004 identified defensive ditches cut outside the west gate of the fort, succeeded by a gravelled trackway aligned east-west. Later, a number of open-fronted timber structures, interpreted as shops, were laid out along the trackway. Following abandonment of these structures, a series of ditched animal pens were cut to the west of the fort, including 'funnel-shaped' entrances. Earlier excavation during 2004 (Area 13) identified a repeatedly re-cut ditch in an area to the west of the July-August 2004 excavation.

The earliest features identified in Area 14 comprised an interrupted small ditch, possibly marking out the western fort defences, or representing part of a construction camp (Phase 1A). The excavation sampled a length of the succeeding western Phase 1B fort defences, which comprised double ditches, and a turf rampart. A group of contemporary ovens backfilled with charcoal-rich soil were identified within the western *intervallum* area. A western annexe (Phase 1C) was also laid out to the west of the fort defences during this early military phase. The annexe was defined by a shallow palisade trench, interrupted by an entrance causeway. The entrance was crossed by a pebble trackway which turned to the northeast before following the line of the outer fort ditch. A later re-cut of the annexe palisade trench was cut across the entranceway, which went out of use. During the use of the fort interior as part of a military stores depot (Phase 2B) a number of irregularly laid-out palisade trenches were cut across the backfilled western annexe palisade trench. These Phase 2B features presumably defined animal pens, located just outside the fort perimiter. This feature group, the latest suite of Roman military activity identified, was misaligned with the preceding military features. The fort ditches were backfilled with silts, sealed by rampart destruction deposits at the end of Phase 2B, when the complex was first abandoned by the Roman military. In the post-medieval period the Phase 1 trackway which presumably had remained visible as an above-ground feature, was re-surfaced, and brought back into use. The main post-medieval feature was a concrete foundation, which may have been associated with the defence of the Queen Elizabeth Hospital during the Second World War.

This report describes the results of the July-August 2004 excavation and provides proposals to bring the results to publication.

2.0: INTRODUCTION

2.1: Background

The Roman fort complex at Metchley was first identified from cartographic sources and antiquarian descriptions, and more recently by extensive trial-trenching and excavation. The fort defences, still surviving as above-ground earthworks in the 18th century were mapped and described in detail at that time (Jones 2001a, 10-12). The Roman date of the earthworks was only confirmed in the 1930s when limited slit-trenches were cut in advance of an earlier hospital development (St Joseph and Shotton 1937).

Large-scale investigations were directed by Trevor Rowley within the fort interior during 1967-9 (Jones 2001a). Rowley's excavations identified timber-framed buildings including barrack-blocks, a granary, store building and a workshop associated with the earliest, Claudian fort (Phase 1). Excavations in the 1960s, and latterly in 1998-9 identified Neronian (Phase 2A) annexes added to the northern, eastern and southern sides of the Phase 1 fort (Jones forthcoming). Deliberate clearance of the Phase 1 buildings was followed as a single operation by the construction of temporary structures, and fenced compounds associated with a military stores depot (Jones 2001a, 43-54). Subsequently, after a period of abandonment, the fort was re-occupied, and a smaller fort of Flavian date (Phase 3) was laid out within the interior of the Phase 1-2 fort. After the abandonment of the Phase 3 fort later in the 1st century, continued, if not continuous Roman activity was recorded through the 2nd century, either small-scale military or civilian in nature. This latest suite of Roman activity (Phase 4) may be associated with a possible *mansio* or *mutatio* on or near the site, serving traffic on routes leading to Wall, Droitwich and Alcester, although occupation by a specialist military force is also a possibility. Metchley lay within an early post-medieval hunting park until piecemeal enclosure in the later 18th century. The fort defences continued to be visible as upstanding earthworks in places until the 1960s.

2.2: July-August 2004 fieldwork

This report describes the results of excavation along the western defences of Metchley Roman forts (Birmingham SMR no. 2005, Jones 2001a, centred on NGR SP 045836, designated Area 14 within the sequence of Metchley investigations, Figs. 1-2). It provides proposals to being the results to publication in accordance with the Management of Archaeology Projects 2 (English Heritage).

The area investigated formerly comprised an area of rough hardstanding used for the parking of ambulances, and the site of a temporary steel-framed building 'the Mock-Up Building'. The area excavated includes part of the western defences of the Phase 1-2 fort, and an adjoining area outside the western fort defences. An area to the west of the Area 14 excavation was excavated earlier in 2004 (Jones 2004, Area 13, Fig. 2). The Area 14 fieldwork was undertaken by Birmingham Archaeology on behalf of University Hospital Birmingham NHS Trust in advance of a roadscheme associated with a new hospital development.

The first stage of archaeological appraisal comprised a desk-based assessment (Jones 1999) which also included other areas within and adjoining the fort complex. Trial-trenching was not possible because the area remained in use for parking until immediately before the start of the excavation. The strategy for the Area 14 excavation was set down in a Written Scheme of Investigation (Birmingham Archaeology 2004), approved by Birmingham City Council. An area to the north of Area 14 lay within an ecological safeguarding zone, and could not be excavated. Here the archaeological remains will be preserved *in situ*.

2.3: Aims

The aims of the July-August 2004 excavation were to:

1) Further characterise the nature of the re-cut ditches located in the adjoining Area 13 excavation.
2) Provide details of the western fort defences, including environmental evidence from dry or waterlogged deposits.
3) Test the area immediately outside the western fort defences for evidence of outer defences and /or civilian settlement.
4) Contribute towards an understanding of the chronology of the complex.
5) Contribute towards an understanding of the pattern of Roman military supply.

2.4: Methodology

Archaeological monitoring was maintained during removal of the concrete floor slab from the demolished 'Mock-Up' building, to ensure that demolition clearance did not penetrate below-ground archaeological deposits. The area excavated was then stripped of topsoil and overburden by a 360 degree excavator working under archaeological supervision. The machined subsoil surface was hand-cleaned as necessary to define features, or possible features, of archaeological interest. Additional machining was undertaken with a mini-digger to remove post-medieval features and deposits, following their testing by selective hand-excavation. Ditches were sampled in total approximately 25% by length. Post-medieval features were tested sufficient to confirm their date, and to establish their character and extent.

Recording was by means of pre-printed pro-formas for contexts and features, plans (at 1:20) and sections (at 1:20) and monochrome and colour slide photography. Contexts (overall layers and feature fills) were numbered in a sequence of four digit numbers, beginning with 4000. Features ('negative' or cut features such as ditches, pits, post-holes and 'positive' features such as earth banks, ramparts and floors) were numbered in a sequence of three digit numbers, prefixed 'F', and beginning with 400. Where several cuttings were dug through a single feature, these were distinguished by the use of a decimal suffix, and, additionally, the fill sequences were separately numbered, even when apparently the same material was encountered. Some selective re-numbering of features has been necessary, for clarity.

Subject to permission from the landowner it is proposed to deposit the archive with Birmingham City Museum and Art Gallery.

3.0: RESULTS

3.1: Phasing

The results of the July-August 2004 excavation have been related to the scheme of phasing devised by earlier fieldwork (Jones 2001a; Jones forthcoming), with the additional sub-division of Phase 1, as follows:

TABLE 1: Metchley Roman forts, summary of phasing

Phase	*Fort (re-phased*	*Vicus (current phasing)*
1	First fort, enclosing 4 ha. Sub-divided into Phase 1A, Phase 1B, and Phase 1C	**Phase A**. *Titulum*, gravelled trackway. **Phase B**. Open-fronted timber-framed buildings
2A	Northern eastern and southern annexes	**Phase C**. Livestock enclosures with 'funnel-shaped' entrances leading into fort west gate. Rapidly backfilled, irregularly-shaped ditch (also in Area 13)
2B	Military stores depot	
3	Smaller fort; re-cutting of Phase 1 fort defences	No evidence
4	Re-use of fort site, possibly associated with *cursus publicus*	No evidence
5	Post-medieval? Ditched enclosure	Post-medieval, cutting of ditches, re-use of trackway

The features are described below in phase order. The military ditches are described from north to south.

For simplicity in the following account it is assumed that the fort is orientated north-south (Fig. 1), although the plans remain labelled with compass north.

The subsoil comprised an orange-brown clay-silt-sand (4019). The southwestern corner of the area excavated comprised a former palaeochannel, infilled with grey-white silt-clay (4018).

3.2: Phases 1A-1C

Summary

Three suites of Phase 1 activity were defined. The first (Phase 1A) comprised the earliest Roman features, two slightly irregular, north-south aligned small ditches (F478-F479), possibly marking-out the line of the western fort defences, and other, possibly

contemporary features. The later western fort defences, excavated to the south of the *porta principalis dextra* are attributed to Phase 1B. These defences comprised two north-south aligned ditches (F475-F476) and a turf rampart (F477). Along the western *intervallum* space were a group of ovens in use during Phases 1B-2. Also in this phase a shallow re-cut palisade trench (F481-F483, Phase 1C), defining a western annexe was dug outside the line of the outer western Phase 1B ditch, and following the same north-south alignment. While Phase 1A was succeeded by Phase 1B, the relationship of Phase 1C with the other sub-phases is not known.

Description of Phase 1A features

Possibly the earliest features identified were two irregular, mostly north-south aligned small ditches (F478-F479) cut into the subsoil. A gap measuring approximately 3m in width, possibly an entrance causeway, was recorded between the two small ditches. To the north of the 'entrance' the ditch (F478) measured 0.6m in width, and 0.4m in depth, while to the south the ditch (F479) was larger, measuring 1m in width, and 0.6m in depth. The 'entrance' was further defined by the cutting of the small ditch profiles adjoining the 'entrance' (F478.02, F479.01) to a V-shaped in profile, while the other excavated sections were cut to a U-shaped profile. The small ditches were backfilled with buff-brown silt-sand. To the east of the presumed northern terminus of gully F479 was a beam-slot (F433), L-shaped in plan, cut by a stake-hole (F434). Both features were backfilled with charcoal-stained dark grey-black sand-silt.

Dating evidence from Phase 1A features

Feature F479.01 contained pottery of pre-Flavian date.

Interpretation of Phase 1A features

Features F478 and F479 could have marked out the line of the western fort defences, as may be suggested by the positioning of the ditches along the centreline of the later rampart, although they were admittedly irregular in plan. Excavation elsewhere along the western Phase 1 defences (Jones 2001, 17-18) has indicated that the rampart was of turf construction, but no evidence of a slot cut for a possible horizontal timber beam has been found. The apparent gap measuring 3m in width between the two small ditches, as well as the change of profile close to the terminals, suggests that a causeway was retained between features F478 and F479. Such an 'entrance' could suggest that the small ditches formed a marching camp or construction camp, although this is only speculation from the present evidence. Features F433-4 may represent the angle of a temporary structure pre-dating the rampart, associated perhaps with the suggested construction camp. It is possible that beam-slot F433 could represent the deeper-cut corner segment of a much larger square or rectangular timber-framed structure which had been almost entirely obliterated by truncation (eg as found in the left *retentura* (Jones forthcoming, Part 2).

Description of Phase 1B western fort defences

The western fort defences were defined by two north-south aligned double ditches (F475, F476), cut into the subsoil at an average separation of 7m (measured centre-to-centre). The two ditches were separated by a berm measuring 2.1m in width. The innermost ditch (F475) was the smallest of the pair, measuring a maximum of 4m in width and an average of 1.3m in depth. The ditch was cut to a mainly V-shaped profile (F475.01, F475.02), although it developed a marked basal cleaning-slot in the south of the area excavated (F475.03). Ditches F475 and F476 were cut by a modern, concrete feature (F471, see below). The larger outermost ditch (F476) measured a maximum of 5m in width and 1.5m in depth, and was also mainly cut to a V-shaped profile (F476.01, F476.02), with traces of a basal cleaning slot again evident in the only complete ditch segment excavated (F476.03). These ditch profiles were probably the product of re-cutting over Phases 1-2, although no surviving traces of re-cutting were visible.

The innermost ditch (F475) was separated from the associated turf rampart (F477) by a berm measuring 1m in width. The rampart (F477) sealed backfilled features F433-4, F478-F479, and the subsoil (4019). The rampart survived to a width of 5m and a depth of 0.1m-0.2m. It comprised yellow-orange silt-clay-sand, flecked with charcoal.

Interpretation of Phase 1B fort defences

The separation of 2m between the ditches was smaller than the figure of 3m recorded by Johnson (1983, 55) for double-ditched systems. In comparison to the size ranges of 2.4-6.1m in width and 1.2m-2.7m in depth suggested by Jones (M Jones 1975, 106) for double ditched systems, the excavated profiles lay closer to the smaller size ranges, possibly because of modern truncation. Excavation by Rowley (Jones 2001, 18, Area 3A) along the northern part of the western defences confirmed that the inner ditch was the larger (measuring 4m (wide) by 1.8m (deep); as against 3m by 1m for the outer ditch). The Area 14 excavation, close to the southern end of the western defences, identified the outer ditch as the larger of the pair. These size differences may have been caused by re-cutting, particularly if it was not continuous along the whole western side of the fort. The excavation revealed the base of the western turf rampart, also recorded elsewhere along this side of the defences (Jones 2001, 17-18). No details of the turf construction were provided by the 2004 excavation. It may be anticipated that the rampart had outer turf cheeks and a core of turf blocks mixed with soil, the most common form of rampart construction up to the Trajanic period (Jones 1975, 59).

Description and interpretation of Phase 1B-2 internal features

The excavation tested a short length of the western *intervallum*, immediately to the rear of the western rampart. The gully and ovens recorded here were probably in use during Phases 1-2.

A north-south aligned gully (F454) was recorded cut into the subsoil towards the innermost rampart tail. The gully was cut to a U-shaped profile, and measured 0.3m in

width and 0.12m in depth. It was backfilled with brown sand-silt (4113) containing large quantities of charcoal. An oval oven or hearth (F407) was cut into the southern terminal of the gully. Traces of its burnt orange-red clay lining (4029) were sealed by a layer of grey-black silt-clay (4028), flecked with charcoal. Two circular intercutting ovens (F411-F412) were recorded to the south. Further ovens were recorded to the west of gully F454. Northwest-southeast aligned oven F422 was backfilled with grey silt (4065), sealed by a lens of grey-black silt (4048), flecked with charcoal, overlain by brown-orange sand-silt (4066). It was cut by oven F423 to the north. This oven was roughly circular in plan, measuring an average of 0.5m in diameter. The oven backfills comprised mixed burnt orange-red clay oven lining and charcoal-stained clay-sand (4049). The southeastern edge of oven F422 was in turn cut by circular oven F447, which measured an average of 1m in diameter. Its backfill comprised brown silt-sand (4101) flecked with charcoal, containing a quantity of heat shattered stone fragments. The absence of ironworking residues such as slag suggests this feature group comprised ovens, possibly used for breadmaking, although the associated charred plant remains were not interpretable. Other ovens associated with breadmaking have been identifed in excavated *intervallum* areas at Metchley, most notably adjoining the southern Phase 3 rampart (Jones 2001, fig. 16).

Description of Phase 1C annexe defences

A north-south aligned palisade trench (F482-F483) and its re-cut (F481) was dug into the subsoil. The palisade trenches presumably formed the western side of an annexe on the western side of the fort. The palisade trench was cut following a similar north-south alignment to the western fort defences, although features F481 and F483 both broadened and slightly changed in alignment in the southern half of the area excavated, which was downslope. The ditches were cut 19m to the west of outer fort ditch F476 (measured centre-to-centre).

The primary palisade trench of the western annexe (F482, F483) was mostly dug away by its re-cut (F481, see below) and could only be recognised over part of its length within Area 14. For this reason it was difficult to establish the full size and profile of the primary feature (F482.02-F482.03, F481.05) to the north of the entranceway. In segment F482.03 the ditch was cut with a vertically-sided western edge, and a more gently-sloping eastern edge. It measured 2.2m in width and 0.7m in depth. Sufficient of the outer profile of this feature survived to indicate that it was almost vertical. This profile would be unexpected in a ditch, even one cut to a punic profile, as it would not have survived weathering. This steep-sided profile would be anticipated within a palisade trench, quickly backfilled with soil to support a fence. The southern terminal of the ditch (F482.05) was round-ended. It measured 2.1m in width and a maximum of 0.6m in depth. Palisade trench F482 was backfilled with orange silt-sand-clay flecked with charcoal.

To the south of the entrance the primary palisade trench had also only partly survived re-cutting. The northern ditch terminal (F483.01) was tapered in plan, and defined the southern side of an entranceway only 0.3m in width. It is likely that this entry-gap will have been reduced in size by repeated cleaning-out of the ditch terminals, as may be suggested by the fact that the ditch terminals were slightly mis-aligned and of different

shapes in plan. The possibility that this entrance was originally intended to be narrow should also be considered. The northern ditch terminal (F483.01) was cut by an oval post-hole (F442) possibly dug to contain a southern gate-post. One segment of the palisade trench (F483.02) to the south of the identified northern terminal was notably deeper than the adjoining segments. This deepening could indicate the position of a former terminal, later enlarged by re-cutting, in which case the entranceway would have measured 4.2m across in plan (assuming that ditch terminal F482.05 was contemporary). Palisade trench segment F483.02 was cut with a near vertically-sided outer edge and a more gently-sloping inner edge. It measured a maximum of 1.1m in width and 0.6m in depth. The palisade trench was backfilled with grey silt-clay to the south of the entrance (F483).

A narrow gully (F435) was recorded parallel to, and inside annexe palisade trench F483.02. This feature could have formed part of an entrance arrangement, although it could not be recorded as continuing adjoining the entranceway, possibly because of later disturbance. No other structural features associated with this entrance could be identified.

A curving pebble trackway (F480) recorded for a total distance of approximately 25m both within the annexe, and outside it, may have been contemporary. The trackway ran roughly parallel with the outer fort ditch (F476) before turning to the southwest, crossing the western annexe palisade trench adjoining the recorded entrance (terminals F482.05, F483.01). No relationship could be recorded between these terminals and the trackway because of the re-cutting of the palisade trench across the entrance (see below). It is notable that the southern edge of the road crossed the palisade trench flush with the northern side of a more deeply-cut segment of feature F483 (F483.02) which is suspected to indicate a (southern) abandoned terminal of the palisade trench.

The re-cut (F481) of palisade trenches F482 and F483 was dug along the line of the earlier palisade trenches, and across the entranceway, and trackway F480. No trace of an entry-gap could be recorded along the excavated part of re-cut F481. Feature F481 measured a minimum of 1.5m in width and 0.75m in depth. It was cut with a near-vertical outer edge, and a more gently-sloping inner edge, a similar profile to that of the primary palisade trench. Further to the south, the palisade trench broadened to a width of 2m (F481.06-F481.07). The re-cut palisade trench was backfilled with light brown silt-sand, sealed by brown silt-clay, in turn overlain by dark brown silt-clay infilling the remaining hollow within the feature; all were presumably packed against the fence to keep it upright. A very shallow, but broad gully (F453) with rounded ends, recorded within the annexe interior, and cut partly at a right angle to the annexe palisade trench was the only possible internal feature associated with it.

There was no trace of a rampart or bank on the inside of features F481, F482 or F483, despite careful hand-cleaning. The only possibly-associated feature was a gravel yard surface (F472). The relationship between this surface and the palisade trenches not clear; it could have been either contemporary with, or earlier than the palisade trenches.

Dating evidence from Phase 1C features

The pottery from Phase 1C features (F481.01, F481.01, F481.04, F481.05, F481.02, F482.07) was dated pre-Flavian. Feature F481.01 contained a samian sherd dated to the pre-Flavian period; feature F481.02 contained a samian sherd in a form rare after AD 60. Feature contained a sherd of samian dated in the 1st century. The latest sherd of samian was dated in the late 1st century (F481.04). Feature F481.07 contained amphora sherds dating to the mid 1st century/of pre-Flavian date. Feature F481.07 contained a mortarium sherd probably dated AD 45-65. Feature F481 also contained a quantity of fired clay, including two fragments of kiln furniture. Other finds comprised fragments of copper alloy and iron objects.

Interpretation of the Phase 1C defences

Features F482 and F483 and re-cut F481 were first recognised during the Area 9 excavation (Jones 2001b). In this excavation, the northward continuation of these palisade trenches was represented by features F254, F271, and possibly by adjoining features F253/F235 (Jones 2001b, fig. 2). This ditch group was cut approximately 19m outside the outermost Phase 1B defences (not tested in 1999-2001). These Area 9 palisade trenches contained pottery, including samian ware dating AD 40-70, and were interpreted as part of the earliest, Phase A suite of activity at the *vicus*, contemporary with the Phase 1B garrison fort. It is possible that these palisade trenches defined an early annexe on the western side of the fort where livestock were corralled, or used for waggons and storage, particularly since no trace of any contemporary internal structures could be found.

The line of this western annexe may have been continued by a post-medieval field boundary, visible to the present, along the northern part of this side of the fort defences. This would imply that the enclosure or annexe ditch could have run the whole length of the western side of the Phase 1B fort. The northward continuation of this ditch was not recorded within recent limited trial-trenching to the north of Vincent Drive (Jones forthcoming, Part 2), or in earlier, admittedly small-scale excavation (Jones 1988; 1989). The outer annexe defences may however identified by Rowley (Jones 2001b, Trench 3A), although their dating and significance was not properly understood at that time. Sommer (1984) interpreted Group 1 annexes which extended along the whole length of one side of a fort as being used for livestock, baggage trains, as well as for civilians. The western annexe may form part of this group. The western annexe may be distinguished from the other annexes at Metchley by its comparatively early date (Phase 1A) as well as by the small size, and distinctive profile of its defining palisade trench. Webster (2001) identified a group of copper alloy objects derived from the area adjoining the northern end of the western defences as possibly being associated with a civilian settlement. These finds may have derived from occupation within the western annexe, or other activity outside it.

Trackway F480 probably formed part of the earliest use of the western annexe, whose palisade trench incorporated an entry-gap. The alignment of this trackway in relation to

the entrance to the western annexe, and the quantity of amphora fragments found within the make-up of the northward continuation of this feature (Trench A3, F306, Jones forthcoming) both indicate a Roman military context for the origin of the trackway. The trackway was brought back into use in the post-medieval period, and was mapped by the Ordnance Survey (1890 edition, Jones 1999, fig. 6) between Metchley Park Farm in the north, and a streamcourse to the west of the forts. The east-west aligned post-medieval field boundary to the west of the streamcourse, continuing the line of this feature suggests that the trackway may have been a longstanding landscape feature.

3.3: Phase 2

Description, interpretation, and dating evidence from the Phase 2B backfilling of the Phase 1 defences

The Phase 1-2 ditches were backfilled at the end of Phase 2B, including material from the slighting of the rampart. The primary fills of the innermost ditch (F475) comprised silts derived from weathering of the ditch sides, backfilled by collapsed rampart material. Similarly, the primary fills of outermost ditch F476 also comprised silts derived from weathering of the ditch sides, overlain by dumped deposits, tipping into the ditch, and also comprising demolished rampart material. This process of backfilling entirely obliterated the line of the innermost ditch, although a slight hollow will have remained visible in the top of outermost ditch F476.

The pottery from the Phase 2B backfills of the Phase 1B fort ditches (F475.01, F475.02, F475.03, F476.03) was pre-Flavian in date. The pottery from the backfills of Phase 1-2 feature F407 and layer 4059 was also pre-Flavian in date.

Description and interpretation of Phase 2B features

A number of features were cut across the backfilled annexe palisade trenches (F481-F483) in Phase 2B. Possibly the earliest of this feature group was a roughly southwest-northeast aligned slot (F459, F484.01-F484.02), recorded both to the east and west of the backfilled annexe ditch, although not as a single, continuous feature. The slot was irregular in plan and profile, and was recorded for a total length of 7m. It was backfilled with white-buff sand-silt.

Backfilled feature F459 was cut by slot F485. This latter joined a further slot (F431), together forming an L-shape in plan. These slots were cut on northeast-southwest and northwest-southeast alignments, and were misaligned with the Phase 1 fort defences and western annexe palisade trench. The latter slots could be traced across and outside the annexe palisade trench, but not within the former annexe interior, possibly because of truncation. The slots were U-shaped in profile, and were backfilled with dark grey-brown silt.

Slot F431 was in turn cut by a north-south aligned slot (F486.02) cut off-centre of the line of the backfilled annexe palisade trench, although following its alignment. This slot was

continued to the northwest by a further slot (F486.03-F486.04). Slot segment F486.03 was broader than the remainder of the feature, suggesting re-cutting. This latter feature was aligned northwest-southeast.

No coherent ground-plans of the slots could be identified. From the relationships observed at least three separate sub-phases of activity were represented. Similar slots, interpreted as the remains of fences possibly defining animal compounds, were recorded to the northwest, outside the western fort defences (Area 9, Jones 2001b), as well as within the interior of the military stores depot. In Area 9 these slots were interpreted as being associated with the more deeply-cut 'banjo-shaped' entrance to the fort, forming part of the Phase 2B military stores depot.

The southeastern terminal of a ditch (F456) was recorded to the west of the palisade trench. The ditch terminal was irregular in plan, suggesting re-cutting, although no clear re-cuts could be discerned in section. A gap of 1.8m between the palisade trench ditch and ditch F456 may have formed an entranceway. Both the relatively unweathered profile of ditch F456, and its clean backfills, comprising layers of sand and clay, suggest the ditch was backfilled very soon after it was cut. It may have formed part of a practice camp (Jones 2004).

The pottery from Phase 2B features (F431, F484, F442, F455, F462, F483.01) was pre-Flavian in date.

No Phase 3-4 features could be identified.

Phase 5 (Not illustrated)

Summary description and interpretation of Phase 5 features.

The main Phase 5 feature was a curvilinear trackway (F487). It represented the re-surfacing of Phase 1 trackway F480, using post-medieval brick and tile fragments and pebbles. Some patching and infilling of cart ruts (F427, F428) was apparent. The northward continuation of this trackway has been recorded by trial-trenching to the north of Vincent Drive (Jones forthcoming, Part 2).

The significance of the northern excavated alignment of trackway, respecting Phase 1-2 ditch F476 is less certain, since this feature would have remained partly open into the 19th century. Moreover, it is not presently possible to trace the mapped alignment of the trackway beyond Metchley Park Farm. However, the results of excavation elsewhere within the fort interior, as well as the historic mapping, together indicate post-medieval re-use of many of the Roman military road lines within the interior of the military complex (Jones in preparation b).

The other main Phase 5 feature comprised a substantial concrete foundation (F471, not illustrated), recorded for a distance of approximately 21m, cutting diagonally across backfilled Phase 1-2 ditches F475-F476. This concrete foundation comprised a long

rectangular-shaped slab of concrete, approximately 1m wide, to which were added three roughly square concrete 'pads' measuring 3m square. Towards the northern limit of excavation the concrete foundation turned to the northeast. The concrete slab incorporated brick rubble. The concrete slab and pads were contemporary. One square socket, measuring 0.05m square, presumably for a fixing, was recorded in the surface of the concrete. The purpose of this structure is not immediately obvious, although association with the defence of the Queen Elizabeth Hospital site during the Second World War is a possibility, particularly given its location, overlooking the valley to the southwest of the medical complex.

During Phase 5 the remaining hollow in the top of Phase 1-2 outer ditch F476 was backfilled with brown clay-soil.

Modern disturbances are not described or illustrated.

4.0: ASSESSMENTS

For the purposes of assessment the finds or environmental samples have not been sub-divided into sub-Phases (1A, 1B, 1C).

4.1: Quantifications

Tables 1-2 present quantifications of the paper records and finds archive.

TABLE 2: Quantification of paper archive

Record type	*Quantity*
Contexts	150
Features	90
Drawings (plans and sections)	65
Photographs (monochrome print and colour slide)	10 films
Administration	1 file
Environmental	1 file (and flots)
Survey data	1 file

TABLE 3: Quantification of finds archive

Finds category	*Quantity*
Coins	2
Copper alloy objects	12
Iron objects	29 (and unidentifiable frags)
Stone objects	3
Glass objects	23 (Roman/possibly Roman)
Fired clay	201
Coarse Roman pottery	478
Mortaria	4
Samian	23
Amphora	116
Graffiti	1

4.2: Stratigraphic data

The preservation of archaeological features and deposits was good. Terracing of the natural slope during the mid 20th century had mostly involved building-up of the natural west-facing gradient, providing good protection to the below-ground archaeology from later disturbance. Very good survival was recorded in the west of the area excavated, where the modern terrace was the deepest. Roman features, including positive features (the rampart) also survived well in the east of the area investigated, where the modern built-up was relatively shallow. The survival of archaeological features and deposits in Area 14 was much better than that recorded in the adjoining Area 13, beyond the terrace (Fig. 2). Relatively few archaeological features were recorded in Area 13 because of disturbance caused by the movement of heavy plant and machinery, probably during the 1960s. A length of the outer fort ditches was truncated by the cutting of a trench, later filled with concrete, and suspected to form part of a defence of Second World War date.

Most of the features recorded within Area 14 were cut into the subsoil. An exception was the western fort rampart, which survived to a depth of 0.2m. A group of ovens were recorded in the western *intervallum*, probably protected from disturbance by collapsed rampart material. A particularly complex sequence of intercutting Phase 2B features was recorded along the line of the re-cut palisade trench of the western annexe. In the south of the excavated length of the palisade trench were recorded a number of intercutting narrow slots, probably forming part of a system of fences around livestock compounds.

4.3: Assessments

4.3.1: Coins by Dr Roger White

Two coins were recovered, as follows:

1 F451 4108 SF9a
REPUBLIC denom: denarius (serratus) date: 79BC mint: Rome
Obv: H. of Venus, behind [SC], before [control mark]
Rev: Victory in triga, holding reins. In exurgue: [C. NÆ . BAB]
cat: C382/1a diam: 18mm wt. 3g die axis: 6 wear: W/W

2 F451 4108 SF9b
REPUBLIC denom: denarius date: 68BC mint: Rome
Obv: Bust Diana, dr. with bow. Before: [GETA], behind [III . VIR]
Rev: Boar wounded by spear and attacked by hound. In exurgue: [C. HOSIDI.C.F]
cat: C407/2 diam: 17mm wt. 3g die axis: 6 wear: W/W

A catalogue of the coins will be published in the final report.

4.3.2: Copper alloy objects by Erica Macey-Bracken

Range and variety

A total of eight excavated deposits yielded copper alloy fragments (F476.03/4005, F475.02/4007, F481.01/4010, F476.03/4021, F481.01/4033, F481.02/4052, F481.04/4073, F486.03/4106), and a further four pieces came from a metal detector survey of the site (MD 2a/b and MD 13a/b). Most of the copper alloy objects were in very poor condition, and only unidentifiable fragments were recovered from features F475.02/4005, F475.02/4007, F481.01/4010 and F476.03/4021.

Three unidentifiable small fragments of copper strip (MD 13a-c) were recovered. A small teardrop-shaped apron fitting (Dr. R. White, pers. comm) was recovered from the topsoil (4002), and a second was recovered from feature F481.04/4073. Other copper alloy objects comprised a triangular-shaped fragment from feature F486.03/4106. The same feature also produced a fragment of lead strip.

Three incomplete bow brooches were also recovered from the site (F481.01/4033; F481.01/4073).

Statement of potential

The excavation has provided a significant group of copper alloy objects, which can be usefully compared to other excavated assemblages from the site, and from other military contexts. A full catalogue, citing published parallels will be prepared. None are worthy of illustration.

4.3.3: Iron objects by Erica Macey-Bracken

Range and variety

The iron assemblage consisted of two knives, a possible axehead, 26 nails, or fragments of nails, and several unidentifiable iron pieces. The assemblage was quite fragmentary, and assessment of some of the pieces was hampered by the amount of corrosion products present. The best-preserved pieces in the assemblage were a knife (F481.01/4010) and cleaver (F481.01/4010) and a possible axe /adze head (F481.03/4108).

The cleaver was from the same feature (F403), and appears to be incomplete, having also been broken into two. The axehead was also well-preserved, and seems to be complete, but is covered in corrosion products, and the full shape will only be revealed by x-ray.

Statement of potential

No further work is recommended on the nails. The remainder of the assemblage will be x-rayed, and a short catalogue prepared.

4.3.4: Stone objects by Erica Macey-Bracken

A total of three stone fragments showed possible signs of having been worked. One derived from the topsoil (4002). Its shape suggests that it may have been a whetstone. Two other possible whetstone fragments were recovered (F483.01/4134 and F481.01/4010).

A brief catalogue of these three items should be prepared; none are suitable for illustration.

4.3.5: Glass objects by Erica Macey-Bracken

Range and variety

A total of 23 fragments of Roman, or possibly Roman glass were recovered from the site. The assemblage was fragmentary. Other glass fragments were modern, and are not assessed.

The Roman glass included two small fragments of strongly-coloured, translucent blue glass (F479.01/4027, and 4037), although these fragments were too small to identify further. These fragments were of early Roman date (Dr. R. White, pers. comm.). Another early fragment of clear blue/green glass (F479.01/4027) was partially melted. A possible neck fragment (F475.01/4004), in a clear blue glass is also probably of Roman date.

The largest fragment of Roman glass was an opaque blue fragment (layer 4002). This fragment is likely to date to the 1st or early 2nd century, when tablewares were produced

in a range of bright colours (Price and Cottam 1998, 15). Further analysis by a Roman glass specialist should help to definitively identify this fragment. Two incomplete melon beads (F436/4074, F455/4115) were also recovered.

Statement of potential

A full catalogue and analysis should be undertaken for this assemblage, which could be usefully related to similar material from other excavations at Metchley, and from other Roman military complexes.

4.3.6: Fired clay objects by Erica Macey-Bracken

A total of 201 pieces of fired clay, weighing a total of 3593g, were recovered from the site. The assemblage was quantified by count and weight, and examined macroscopically for the purposes of this report. The assemblage was fragmentary, and most of the pieces were small and abraded. The assemblage is quantified in Table 4.

Two fragments of possible kiln furniture were recovered from annexe palisade trench F481.01 (4010). These are the only fired clay items worthy of a catalogue, and photography; no other work is recommended. The remainder of the material comprised unidentifiable fired lumps of clay.

TABLE 4: Quantity of fired clay objects by feature

Feature/ context	*Number of frags*	*Wt (g)*
F401/4006	3	32g
F402/4007	1	7g
F403/4010	57	1486g
F405/4022	5	36g
F408/4027	3	10g
F407/4028-4029	5	15g
F403/4033	14	187g
F415/4042	1	3g
F403/4043	2	5g
F418/4044	1	9g
F417/4052	8	299g
F436/4073	31	265g
F436/4074	3	17g
F437/4075	2	8g
F426/4080	5	27g
F442/4094	3	15g
F445/4099	7	43g
F451/4108	33	820g
F445/4110	5	63g
F451/4130	1	31g
F463/4134	11	18g

4.3.7: Pottery by C Jane Evans

Quantification

The Roman pottery (Table 5) was all hand collected. It was rapidly-scanned, spot-dated and quantified by count and weight (g) A *terminus post quem* was assigned for the purpose of assessment. A total of 621 sherds weighing 10663g was recovered from 23 features, including 46 contexts. Nine feature fills (F475.01/4003, F475.02/4005, F475.02/4006, F479.01/4027, F481.01/4033, F481.02/4052, F477.02/4089, F481.03/4107, F481.03/4108), containing in total 250 sherds of Roman pottery also contained post-medieval pottery. A number of the feature fills also contained samian and amphorae, which should make a significant contribution to dating activity in this part of the Metchley complex.

Condition, range and variety

The pottery was all badly abraded, typical of assemblages excavated at Metchley. However, some decoration survived, and limescale was noted on the surface of at least one sherd. Many sherds were very fragmentary, and the average sherd weights are deceptive, reflecting the presence of numerous sherds of heavy amphorae.

The bulk of the pottery comprised coarsewares (Table 5), produced locally, or at other regional centres. Fabrics included a range of reduced and oxidised sandy wares, organic tempered Severn Valley ware, handmade Malvernian ware and a 'corky' vesicular fabric; all represented in the Metchley fabric type series. The small quantity of mortaria was probably locally produced. The spout on one sherd is very similar to a locally produced example published by Kay Hartley (Hartley 2001, fig. 41, M4). This rim is of particular interest, being inscribed with a graffito, and is discussed further below. Imported wares included amphorae, mainly Dressel 20, and South Gaulish samian.

The assemblage included 27 rims, representing a number of diagnostic forms. The coarsewares included the handle from a Hofheim flagon, Severn Valley ware storage jars, Malvernian tubby cooking pots, various everted rim jars, a flanged bowl and a grooved rim dish; all paralleled in the Metchley form type series. Samian forms included cups, bowls and platters.

TABLE 5: Summary of pottery by class

Pottery class	*Qty*	*% Qty*
Coarsewares	478	77
Samian	23	4
Mortaria	4	<1
Amphora	116	19

Date

The samian, mortaria and amphorae will provide the best dating evidence for this assemblage, when they are analysed by the appropriate specialists. A preliminary identification of the samian indicated a couple of typically pre-Flavian forms: a DR 15/17 (F481.01/4033), a type which declines in popularity in the Flavian period, and a Ritterling 9 cup (F481.02/4052), rare after *c* AD 60. Feature F481.03 (4107) produced a DR 27 cup, broadly dating to the 1st century. One sherd from the western annexe palisade trench F481.04 (4073) may be from a Curle 15 bowl. This form was produced from the late 1st century onwards, and could perhaps be evidence for later 1st century activity. These identifications will, however, need specialist confirmation. The western annexe palisade trench (F481.07) produced a rim (4109) and a handle (4112) from a Dressel 20 amphora. The forms of these are consistent with a mid 1st century/pre-Flavian date (Peacock and Williams 1986, fig. 65.11). This feature also produced a mortarium sherd inscribed with a *graffito*. The angular form of the spout is reminiscent of products of the local workshop dated by Kay Hartley to AD 45-65 (Hartley 2001, fig. 41M4).

While occasional forms amongst the coarse wares are diagnostically pre-Flavian, for example the Hofheim flagon, most were only broadly datable to the 1st century. Many, however, are paralleled in other pre-Flavian assemblages from Metchley (eg Green *et al* 2001) and there is no reason to assume that these examples are any later than this period. Negative evidence supports this date; in particular, no Flavian-Trajanic rusticated jars were noted, although these have been found elsewhere. Spot dating for all features can be found in Table 6 below.

Statement of potential

Detailed analysis of this assemblage will provide further quantified data with which to assess patterns of pottery use and deposition at Metchley fort and *vicus*. Along with analysis of the other finds, this will enhance understanding of both the chronological development of the site, and any differences in the use of particular zones within the overall military complex. Publication will add to the growing corpus of accessible data for Metchley which, because of the importance of this Roman site, will contribute to regional and national studies.

It is recommended that the Romano-British assemblage is fully analysed and a report produced for publication. Specialist reports should be commissioned for amphorae (David Williams), samian (specialist to be identified), mortaria (Kay Hartley) and the graffito (Dr Roger Tomlin). The pottery will need to be recorded in detail using the Birmingham Archaeology pottery recording system, and the Metchley fabric and form type series housed at Birmingham Archaeology. Approximately 20 diagnostic sherds will require illustration.

Storage and curation

The pottery will remain stable through time and poses no long-term storage problems.

TABLE 6: Summary and spot dating of the pottery by feature

Phase	*Feature*	*Context*	*Sherd count*	*Wt (g)*	*Spot date*	*Comment*
1B(2B)	F475.01	4003	4	52	1st (Pre-Flavian)	Post-medieval sherds
1B(2B)	F475.02	4005	1	5	1st (Pre-Flavian)	1 amphora, 108 post-medieval sherds
1B(2B)	F475.02	4006	1	1	1st (Pre-Flavian)	15 post-medieval sherds
1B(2B)	F475.02	4009	5	483	1st (Pre-Flavian)	5 amphora sherds
1B(2B)	F475.02	4012	6	30	1st (Pre-Flavian)	
1B(2B)	F475.02	4018	1	22	1st (Pre-Flavian)	
1B(2B)	F475.03	4008	15	20	1st (Pre-Flavian)	
1B(2B)	F475.03	4011	20	40	1st (Pre-Flavian)	
1B(2B)	F476.03	4022	3	17	1st (Pre-Flavian)	
1B(2B)	F476.03	4023	4	12	1st (Pre-Flavian)	
1B(2B)	F476.03	4024	6	11	1st (Pre-Flavian)	
1C	F481.02	4052	56	491	1st (Pre-Flavian)	1 mortaria, 4 amphora, 12 samian (Ritterling 9), 1 post-medieval sherd
1C	F481.01	4010	66	889	1st (Pre-Flavian)	11 amphora sherds
1C	F481.01	4033	32	627	1st (Pre-Flavian)	2 amphora, 1 samian Dr 15/17, 4 post-med
1C	F481.01	4043	20	814	1st (Pre-Flavian)	15 amphora sherds
1A	F479.01	4027	22	565	1st (Pre-Flavian)	12 post-medieval, 16 amphora sherds
1A	F479.01	4036	3	79	1st (Pre-Flavian)	2 amphora sherds
1C	F482.07	4080	11	127	1st (Pre-Flavian)	
1-2	F407	4135	5	39	1st (Pre-Flavian)	
5	F477.01	4053	1	103	1st (Pre-Flavian)	
5	F477.02	4089	1		1st (Pre-Flavian)	Hofheim flagon handle, 13 post-med sherds
1A	F479.01	4041	9	17	1st (Pre-Flavian)	
1A	F479.01	4042	5	72	1st (Pre-Flavian)	3 amphora sherds
2B	F431	4078	3	5	1st (Pre-Flavian)	
1C	F481.04	4073	55	778	1st	14 amphora, 1 samian (Curle 15??) sherd
1C	F481.04	4074	9	671	1st (Pre-Flavian)	3 amphora sherds
1C	F481.04	4093	3	123	1st (Pre-Flavian)	
2B	F484	4075	5	432	1st (Pre-Flavian)	3 amphora sherds
2B	F442	4094	3	8	1st (Pre-Flavian)	3 samian sherds
1C	F481.05	4099	15	286	1st (Pre-Flavian)	1 amphora sherd
1C	F481.05	4100	18	159	1st (Pre-Flavian)	1 amphora sherd
1C	F481.01	4110	5	86	1st (Pre-Flavian)	
1C	F481.03	4107	22	281	1st (Pre-Flavian)	1 samian, 10 amphora, post-medieval sherds
1C	F481.03	4108	111	939	1st (Pre-Flavian)	4 samian, 8 amphora, 1 post-medieval sherd
1C	F481.03	4121	7	132	1st (Pre-Flavian)	
1C	F481.03	4130	12	98	1st (Pre-Flavian)	
1C	F481.07	4109	6	674	1st (Pre-Flavian)	6 amphora sherds
1C	F481.07	4111	1	24	1st (Pre-Flavian)	
1C	F481.07	4112	8	417	1st (Pre-Flavian)	3 Mortaria, one with graffito, 5 amphora (*c* mid 1st) sherds
2B	F484	4075	5	432	1st (Pre-Flavian)	3 amphora sherds
2B	F455	4114	11	360	1st (Pre-Flavian)	1 samian sherd
2B	F455	4115	3	23	1st (Pre-Flavian)	
2B	F462	4131	1	26	1st (Pre-Flavian)	
2B	F483.01	4134	17	186	1st (Pre-Flavian)	
1-2	Layer	4059	1	3	1st (Pre-Flavian)	
-	-	MD3	3	4	1st (Pre-Flavian)	3 samian sherds

Quantification taken from assemblage summary database. Phase in parenthesis relates to backfilling.

4.3.7: Charred plant remains by Wendy Smith

Introduction and method of sampling

Archaeobotanical samples were collected during the course of the excavation. A total of 28 samples were selected by the excavator for assessment on the basis of either (or both) their secure dating and the importance of the deposit sampled. Samples come from a variety of contexts, including: ditches, gullies, ovens, beam-slots and segments of the western annexe palisade trench. The majority of samples are from Phase 2B, which represents the backfilling of the Phase 1 fort ditch and the abandonment of the oven group. However, eight of the samples are attributed to other phases.

In most cases a 10L sub-sample was processed by flotation at Birmingham Archaeology for assessment of charred plant remains; however, 20 L of sediment was processed for four of the samples. The flots (the material which floats) were sieved to 0.5 mm and the heavy residues (the material which does not float) were sieved to 1mm and both were air-dried. The heavy residues were sorted at Birmingham Archaeology and no charred plant remains (with the exception of charcoal) were observed. As a result, this assessment is based entirely on the flots.

This assessment is intended to determine if charred plant remains are present, and, if so, to establish if they are of interpretable value. In addition, this assessment aims to determine the potential for charred plant remains in answer to the following questions:

- Do any of the plant remains recovered provide information about agricultural practices?
- Do the assemblages recovered provide information about rubbish disposal patterns on site?
- Do any of the plant remains recovered provide information about the wider environment of the site?

Method of assessment

The author assessed charred plant remains from the flots using a low-power binocular microscope at magnifications between x12 and x40. The flots were rapidly scanned and, therefore, smaller seeds and plant parts may have been overlooked. Comparative material was not consulted during this assessment. As a result, all of the identifications presented here should be seen as highly provisional.

Results and discussion

TABLE 7: Charred plant remains assessment

Feature	*Context*	*Sample Vol. (L)*	*Flot Vol. (ml)*	*Feature type*	*Phase*	*Charcoal*	*Mollusc or marine shell*	*Plant Remains (Flot only)*			*Comments on Flot (Unless otherwise stated, 100% of flot was scanned)*
								Grain	Chaff	Weed/wild	
F475.01	4004	10	80	Fort ditch	1-2B	+	-	-	-	-	50% of flot scanned. Modern root present. No charred plant remains observed. Assessed as poor
F475.03	4008	10	25	Fort ditch	1-2B	+	-	-	-	-	80% of flot scanned. Modern root present, as well as small quantities of charcoal/ anthracite. No charred plant remains observed. Assessed as poor
F475.03	4011	10	25	Fort ditch	1-2B	+	-	-	-	-	80% of flot scanned. Modern root present. No charred plant remains observed. Assessed as poor
F475.02	4012	10	40	Fort ditch	1-2B	+	-	+	-	-	Modern root present. A single barley grain, a single spelt grain and an indeterminate cereal grain were observed. Assessed as poor
F481.01	4010	20	400	W annexe	1C	++	-	-	-	-	33% of flot scanned. No charred plant remains observed. Assessed as poor
F407	4029	20	170	*Intervallum* oven	1-2B	++	-	-	-	-	80% of flot scanned. Modern root present. No charred plant remains observed. Assessed as poor
F407	4028	10	350	*Intervallum* oven	1-2B	++	+	-	-	-	33% of flot scanned. No charred plant remains observed. Assessed as poor
F411	4031	10	200	*Intervallum* oven	1-2B	+	-	-	-	-	50% of flot scanned. No plant remains observed. Assessed as poor
F479.01	4036	10	125	W annexe	1C	+	-	-	-	-	50% of flot scanned. One ?modern clever (*Galium* sp.) seed present No charred plant remains were observed. Assessed as poor
F415	4041	10	100	Fence-slot	2B	+	-	-	-	-	75% of flot scanned. ?Modern clever (*Galium* sp.) seeds present, as well as fungal bodies. No charred plant remains observed. Assessed as poor
F481.01	4033	10	100	W annexe	1C	+++	-	-	-	+	50% of flot scanned. ?Modern clever (*Galium* sp.) seeds present, as well as a few fragments of coal/ anthracite. One charred dock (*Rumex* sp.) seed observed. Assessed as poor
F422	4048	10	105	*Intervallum* gully	1-2B	++	-	-	-	-	50% of flot scanned. No charred plant remains observed. Assessed as poor
F425	4064	10	30	Fence-slot	2B	+	-	-	-	-	80% of flot scanned. ?Modern clever (*Galium* sp.) present. No charred plant remains observed. Assessed as poor

F424	4050	10		*Intervallum* oven	1-2B	+	-	-	-	-	80% of flot scanned. ?Modern clever (*Galium* sp.) present. No charred plant remains observed. Assessed as poor
F422	4065	10	50	*Intervallum* oven	1-2B	++	-	-	-	-	?Modern/ ?Ancient calcified grape pip was present. No other mineralised or charred plant remains observed. Assessed as poor
F481.04	4073	10	90	W annexe	1C	++	-	-	-	-	Modern root present. No charred plant remains observed. Assessed as poor
F481.05	4099	10	100	W annexe	1C	++	-	-	-	-	50% of flot scanned. Small quantities of wheat and barley grain, as well as indeterminate cereal grain were present. A mustard (*Brassica* sp.) seed was also observed. Assessed as poor
F442	4094	10	40	Post-pit assoc. W annexe	1C	+	-	-	-	-	70% of flot scanned. Modern root, fungal bodies and ? modern clever (*Galium* sp.) seeds present No charred plant remains observed. Assessed as poor
F481.05	4110	10	50	W annexe	1C	+	-	-	-	-	50% of flot scanned. Modern root present. No charred plant remains observed. Assessed as poor
F486.03	4106	10	20	Fence-slot	2B	+	-	-	-	-	Modern root, fungal bodies and ? modern clever (*Galium* sp.) seeds present. No charred plant remains observed. Assessed as poor
F467	4129	10	20	Ditch	2B	+	-	-	-	-	50% of flot scanned. Modern root and fungal bodies present. No charred plant remains observed. Assessed as poor
F483.01	4134	20	175	W annexe	1C	++	-	-	-	-	50% of flot scanned. No charred plant remains observed. Assessed as poor
F407	4135	10	80	*Intervallum* oven	1-2B	++	-	-	-	-	50% of flot scanned. No charred plant remains observed. Assessed as poor
F483.01	4130	10	30	W annexe	1C	++	-	-	-	-	50% of flot scanned. No charred plant remains observed. Assessed as poor
F453	4075	10	25	Fence-slot	2B	++	-	-	-	-	60% of flot scanned. Modern root present. No charred plant remains observed. Assessed as poor
F454	4113	10	175	*Intervallum* gully	1-2B	++	-	-	-	+	60% of flot scanned. Charred vetch/ vetchling (*Vicia* sp./ *Lathyrus* sp.) and ?modern/ ?ancient clever (*Galium* sp.) observed. Assessed as poor
F447	4102	10	150	*Intervallum* oven	1-2B	++	-	+	-	-	50% of flot scanned. A few indeterminate wheat (*Triticum* sp.) grains observed. Assessed as poor
F447	4101	10	90	*Intervallum* oven	1-2B	++	-	-	-	-	50% of flot scanned. No charred plant remains observed. Assessed as poor

The results of the assessment are presented in Table 7. Nomenclature for economic plants follows Zohary and Hopf (2000) and nomenclature for indigenous taxa follows Stace (1997).

Chared plant remains were not observed in most of the flots examined. A few flots contained extremely small quantities (i.e. <10 identifications) of cereal (barley, spelt, indeterminate wheat and indeterminate cereal) grains and/or weed/wild seeds (both dock (*Rumex* sp.) and vetch/ vetchling (*Vicia* sp./*Lathyrus* sp.) were noted).

Unfortunately none of the flots assessed contained sufficient charred plant remains to be of interpretable value, even if further sediment could be processed from the samples. This lack of charred plant remains could be due to several factors. Certainly, the recovery of modern roots in many of the flots may suggest that these samples were so near the modern surface level that they were subjected to bioturbation, as well as freezing, wetting and drying. In addition, it is possible that ancient re-working of the defences of the site may also have damaged/destroyed deposits of charred plant remains. The paucity of environmental remains from this site emphasises the importance of similar data from elsewhere in the military complex.

Statement of potential

The paucity of charred plant remains in these samples means that none of the flots examined are of interpretable value. As a result, it is recommended that no further work should be carried out on this material.

5.0: UPDATED PROJECT DESIGN

5.1: General

The following research themes may be highlighted:

1) Sequence of Phase 1 features. The sequence of Phase 1 features is perhaps unusual. The earliest suite of Roman features (Phase 1A) comprise a small, interrupted ditch (F478-F479), and the corner of a timber-framed building (F433-F434), all pre-dating the western Phase 1 fort defences, here ascribed to Phase 1B. The small ditch could represent an early marking-out of the fort permiter, although it is notably irregular in plan. Alternatively the features could be associated with a construction camp. Some of the Phase 1 oven group identified in Area 12 (Jones in preparation b) pre-dated Structure 1, which formed part of the first fort layout. This early oven group from Area 12, and the Phase 1A features from Area 14 presently comprise the only evidence for pre-Phase 1B fort activity. The dating evidence from Areas 12 and 14 is not helpful in chronologically separating the two sub-phases of activity. Further parallels for this early activity, including construction camps, should be sought from other Roman military complexes.

2) Phase 1B western fort defences. The profile and fill sequences of the excavated western fort defences in Area 14 appeared to suggest deliberate backfilling, rather than gradual infilling. In particular, the innermost ditch appeared to have been almost wholly backfilled in the Roman period, presumably at the end of Phase 2B. Re-cutting of the Phase 1B defences is recorded on the other sides of the complex. The implications of this data for our understanding of the developing morphology of the complex defences through the 1st century should be considered.

3) Western annexe. The earlier, Area 9 excavation identified a group of shallow, north-south aligned ditches, which were backfilled rapidly, but the extent and function of these features was not clear at the time. The Area 14 excavation has facilitated the re-interpretation of these features as probably defining a narrow annexe on the western side of the fort. The comparatively early date of this annexe may be noted; it may have been given up by the time that the northern, eastern and southern annexes were laid out in Phase 2A. The western annexe may be distinguished from the other, later annexes at the complex by the comparatively shallow palisade trench which defined it, suggesting only a temporary period of use. Further parallels for similar 'temporary', and early (eg Alchester, Oxfordshire) annexes should be sought.

4) Industrial activity. Excavation of the western annexe palisade trench has uncovered fragments of possible kiln furniture, providing further evidence for pottery manufacture on/near the site. Further evidence for pottery production at other military complexes in the midlands should be considered.

5) Phase 2B military stores depot and the landscape. The excavation has provided further evidence for fenced compounds, presumably for livestock located to the west of the fort. Similar features were identified in Area 9 (Jones 2001b), also to the west of the fort, as well as within the fort interior itself. Taken together, the evidence indicates the 'zoning' of the area to the west of the fort for livestock coralling during Phase 2B. Of equal importance is the negative evidence for Phase 1 civilian occupation during the 2004 excavations (Areas 13 and 14). This negative evidence clearly indicates that, at least on the western side of the fort, civilian settlement was notably small in extent. It is unlikely that any evidence of civilian occupation in Area 14 could have been scoured out, because of the generally high level of preservation, particularly just outside the Phase 1B fort. It is admitted that any civilian features within Area 13 (Jones 2004) are likely to have been scoured-out, although this comparatively low-lying area may not have been favoured for settlement.

6) Dating evidence. Although the pottery assemblage is small overall, the majority derives from well-stratified contexts and could help to date the overall sequence, in particular, the Phase 1C western annexe palisade trench. Comparison with the dating evidence obtained from the same feature within Area 9 should be attempted.

7) Post-Roman history of Metchley. The post-Roman use of the site is well documented from maps and antiquarian descriptions. The resurfaced trackway represents an important element of the post-medieval landscape, which should be considered further. Parallels should be sought for the concrete structure (F471) of possible Second World War date.

5.2: Updated project design

The project design can be re-focussed to the following themes:

1) Evidence of the sequence of Phase 1A and Phase 1B features, and construction camps generally.
2) Evidence of the sequence of western Phase 1B fort defences.
3) Evidence of 'early' and temporary annexes and their functions.
4) Evidence of pottery manufacture and other industrial activities within a 1st century military context.
5) The fort landscape: the settlement morphology and livestock coralling.
6) The dating evidence.
7) Post-Roman history of Metchley and the surrounding landscape.

6.0: PUBLICATION SYNOPSIS

It is proposed to publish the results of the excavation as part of a monograph in the *Transactions of the Birmingham and Warwickshire Archaeological Society*.

The provisional title of the monograph will be:

Roman Birmingham 3, Metchley Roman fort, excavations within the vicus and western fort defences, 1999-2001 and 2004

The monograph will be in two parts:
Part 1, relating to excavations in the *vicus* and including the western annexe, excavations 1999-2001
Part 2, relating to excavations along the western fort defences and western annexe, May 2004, July-August 2004
Simplified plans will be prepared linking the main phases within both parts of the monograph

The layout of the text and the lengths of the individual contributions relating to the Area 14 (July-August 2004 excavation) only will be as follows:

Text

Summary (1000 words)
Introduction and methodology, the site, phasing and context (1,500 words)
Results (8,000 words)
Description and interpretation of the evidence by phase

Finds
Coins (500 words)
Copper alloy, iron, stone, glass objects (1,500 words)

Fired clay objects (250 words)
The pottery, coarse and fine wares (5,000 words)

Discussion (6,000 words)
Integrated discussion of the Area 14 excavation results

Conclusion (500 words)

Appendix: Roman pottery fabric series

TOTAL 24,250 words

Illustrations

1	Location of area investigated
2	Metchley forts phasing
3	Archaeological investigations 1999-2001 and 2004: areas investigated
4	Simplified plan of all Phase 1 features (Phase A-B: Areas 9, 13-14)
5	Plan of Phase 1 features in Area 14
6	Phase 1 sections
7	Simplified plan of all Phase 2 features (Phase C: Areas 9, 13-14)
8	Phase 2 plan of features in Area 14
9	Phase 2 sections
10	Simplifield Phase 5 plan
11	Small finds
12	Pottery

10 plates and 12 tables

TOTAL, APPROX. 40 PAGES

7.0: TASK LIST

The task numbers below give the initials of the individual responsible for the completion of the task, and the number of days allotted.

Task	*Details*	*Initials*	*No. of days*
1	Stratigraphic analysis	AEJ	1
2	Project management	AEJ	1
3	Coarse ware pottery recording	PS	3
4	Samian spot-dating/report	FW	1
5	Amphora spot-dating/report	DW	1
6	Mortaria spot-dating/report	KH	1
7	Small finds: copper alloy objects	EM	0.5
8	Small finds: iron objects	EM	0.5
9	Small finds: Glass objects	EM	0.5

10	Small finds: fired clay objects	EM	0.5
11	Coarse ware pottery report	PS	4
12	Project management	AEJ	1
13	Draft section roughouts	AEJ	1
14	Sections/small finds/ pottery drawings	ND	5
15	Write revised narrative/discussion	AEJ	2.5
16	Edit/integrate specialist texts	AEJ	1
17	Correct drawings	ND	0.5
18	Edit	Editor	1
19	Liaison with Bham Warws AS	AEJ	1
20	Prepare/deposit archive	-	-

Completion date: 30 May 2005 for first draft

KEY:
AEJ = Alex Jones, author/editor; PS = pottery specialist; FW = Felicity Wild; DW = David Williams, amphora; KH = Kay Hartley, mortaria; EM = Erica Macey, small finds; RG = Rowena Gale, charcoal identification; ND = Nigel Dodds, illustrator.

8.0: ACKNOWLEDGEMENTS

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9.0: REFERENCES

Birmingham Archaeology 2004 *Written Scheme of Investigation, Ambulance Compound and Mock-Up Building, Archaeological Excavation.*

Green, S, Dickinson, B, Evans, J, Hancocks, A, Hartley, B, Hartley, K, Pengelly, H, and Williams, D, 2001 '*Pottery* (Areas 1-6)', in Jones, A E, 2001, 90-7.

Hartley, K, 2001 '*Mortaria (Areas 2-4)*', in Jones, A E, 2001, 98-101.

James, S, 2001 'Soldiers and Civilians: identity and interaction in Roman Britain, in James, S, and Millett, M (eds.) Britons and Romans: advancing an archaeological agnda, Council for British Archaeology, Research report, 125.

Johnson, A, 1983 *Roman Forts*, Batsford.

Jones, A E, 1988 *Metchley, Birmingham: an archaeological evaluation 1988*, BUFAU report no 46.

Jones, A E, 1989 *Metchley, Birmingham: an archaeological evaluation 1989*, BUFAU report no. 74.

Jones, A E, 1999 *University Hospital Birmingham NHS Trust, Archaeological Assessment 1999, Metchley Roman forts*, BUFAU report no 617.04.

Jones, A E, 2001a Roman Birmingham 1, Metchley Roman Forts, Excavations 1963-4, 1967-9 and 1997, *Transactions of the Birmingham and Warwickshire Archaeological Society*, 105.

Jones, A E, 2001b *Vincent Drive, Birmingham, Archaeological Investigations 1999-2001, Post-Excavation Assessment*, BUFAU Report No. 751.

Jones, A E, 2004 *Practice Camps at Metchley Roman forts, excavation May 2004,* Birmingham Archaeology report no 1050.

Jones, A E, forthcoming Roman Birmingham 2, Metchley Roman Forts, Excavations 1998-9 and 2002, The Annexes and Other Investigations, *Transactions of the Birmingham and Warwickshire Archaeological Society.*

Jones, A E, in preparation a Roman Birmingham 3, Excavations at the Vicus, 1999-2000 and 2004, *Transactions of the Birmingham and Warwickshire Archaeological Society.*

Jones, A E, in preparation b Excavations in *Praetentura*, Metchley Roman Forts, 2003, *Transactions of the Birmingham and Warwickshire Archaeological Society.*

Jones, M J, 1975 *Roman Fort Defences to AD117*, British Archaeological Reports, British series, 21, Oxford.

Peacock, D P S, and Williams D F, 1986, *Amphorae and the Roman Economy: an Introductory Guide*, Longman Archaeology Series.

Price, J, and Cottam, C, 1998 Romano-British Glass Vessels: a Handbook, Council for British Archaeology Practical Handbook in Archaeology, 14, York.

St Joseph, J K, and Shotton, F W, 1937 'The Roman camps at Metchley, Birmingham', *Transactions of the Birmingham and Warwickshire Archaeological Society*, 58, 68-83.

Sommer, C S, 1984 *The Military Vici in Roman Britain: Aspects of their Origins, their Location and Layout, Administration, Function, and End*, British Archaeological Reports, British series, 129, Oxford.

Stace, C, 1997 *New Flora of the British Isles*. (2nd edition), Cambridge, Cambridge University Press.

Zohary, D, and Hopf, M, 2000 *Domestication of Plants in the Old World: The Origin and Spread of Cultivated Plants in West Asia, Europe, and the Nile Valley* 3rd edition, Oxford, Oxford University Press.

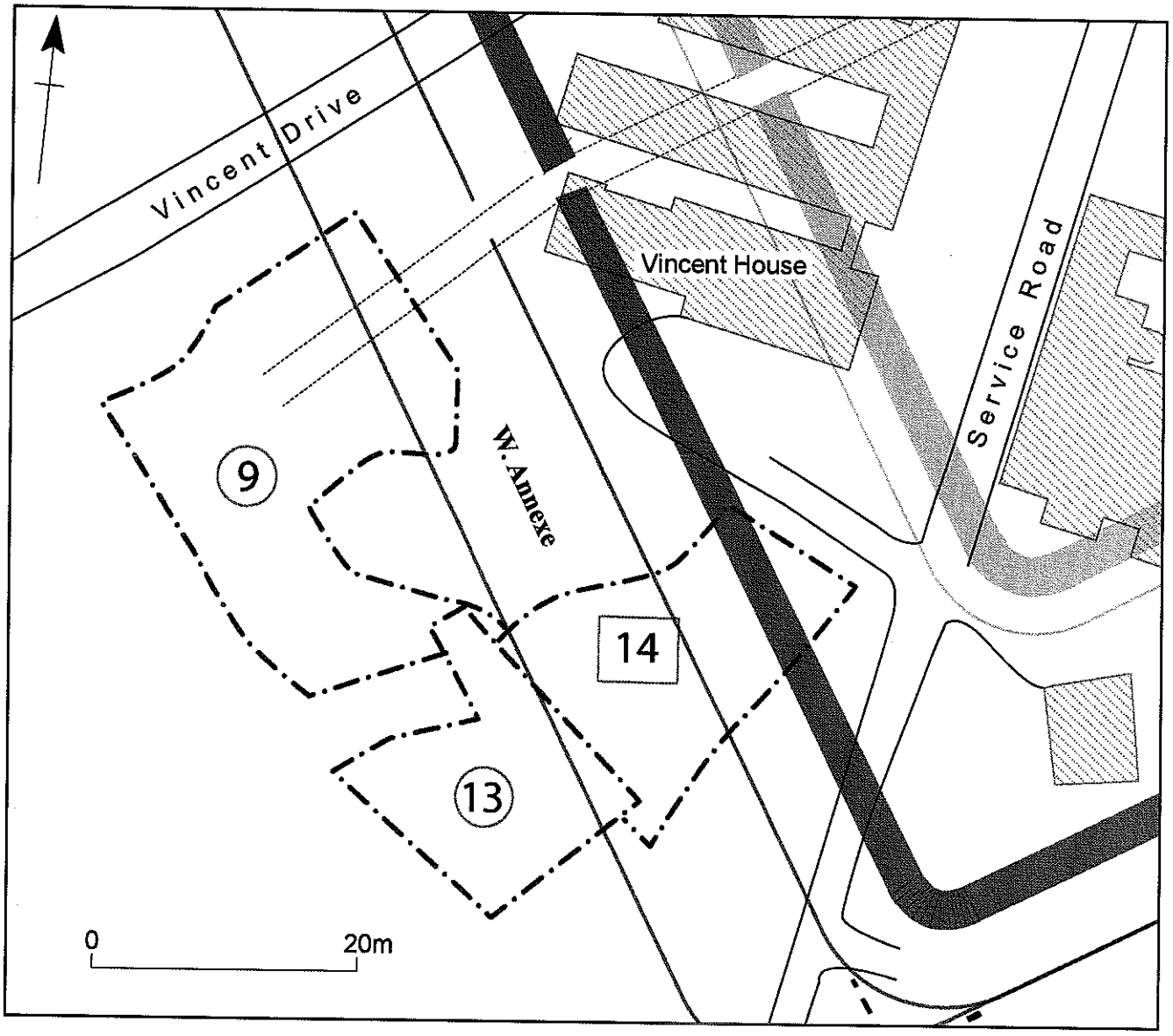
Vincent Drive
Vincent House
Service Road
W. Annexe
9
14
13
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Fig.2

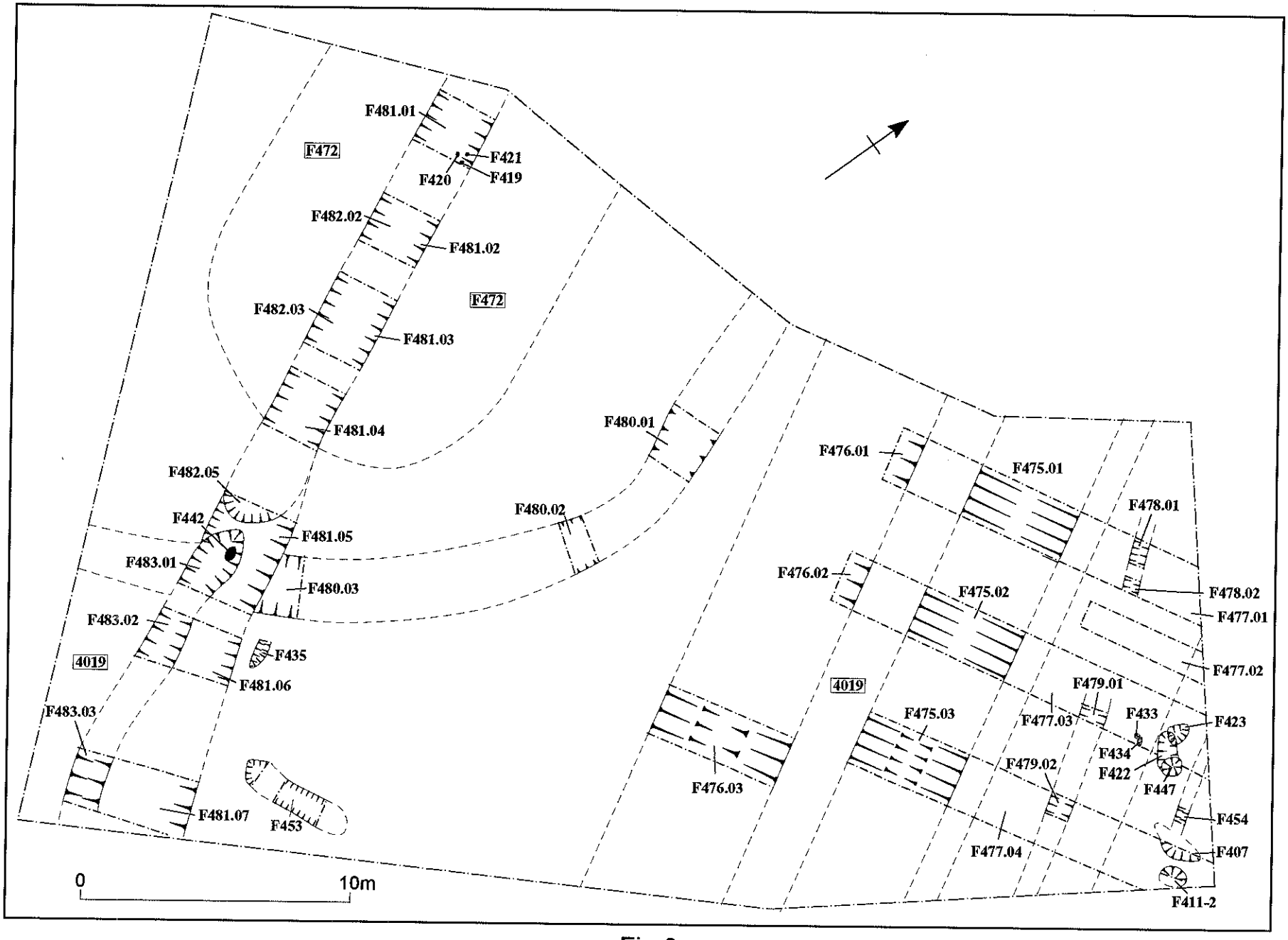
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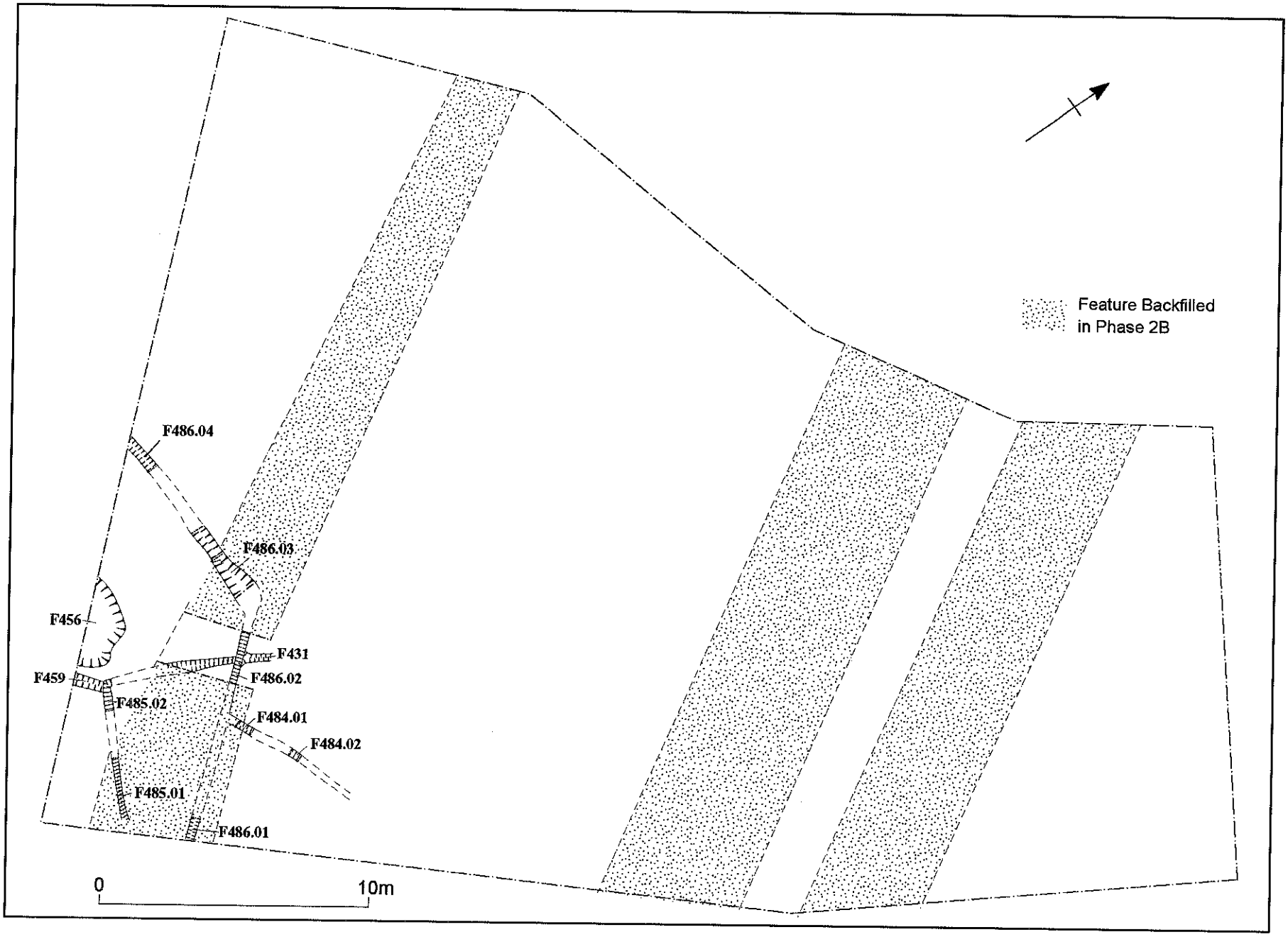
Fig.3


Feature Backfilled
in Phase 2B
F486.04
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F456
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Fig.4