



Site details

Report title	An archaeological excavation on the A46 Ashchurch Railway Bridge, Ashchurch, Gloucestershire, 2003			
Site address	A46 Ashchurch Railway Bridge, Ashchurch, Gloucestershire			
OS NGR	SO 9279 3329			
Site type	Excavation and watching brief			
GSMR no.	22031			
Site code	AS03			
Client	Dew Construction Ltd on behalf of RPS Planning, Mouchel Parkman and the Highways Agency			
Planning Agent	RPS Planning, Transport and Environment			
GCC ref.	477.76			
Planning ref.	ROAD036R			
Date of fieldwork	7 th May 2003 to 4 th March 2004			
Recipient museum	Cheltenham Art Gallery & Museum			
Accession No.	2003.38			
Author	Paul W. Nichols			
Date of report	14 th May 2008			

Contents Page					
Summ	nary	1			
1	Introduction	2			
2	Site location, geology and topography	3			
3	Archaeological and cartographic background	3			
4	Background to the excavation	6			
5	Excavation methodology	6			
6	Archaeological description	7			
7	Archaeological watching brief	28			
8	Phasing	31			
9	Artefactual evidence	37			
9.1 9.2 9.3 9.4 9.5 9.6	Pottery and ceramic building material by Jane Timby				
10	Environmental evidence	57			
10.1 10.2 10.3	Human skeletal remains by Malin Holst	71			
11	Discussion	83			
12	Bibliography	88			
Figure	98	99			
Plates		111			
Appen	ndices	112			

List of Tables

Page

Table 1: Quantified summary of Iron Age and Romano-British pottery	40
Table 2: Quantified summary of Saxon and medieval pottery	
Table 3: Catalogue of worked stone	53
Table 4: Catalogue of worked flint	54
Table 5: Quantified summary of slag types	55
Table 6: Summary of osteological and palaeopathological results	58
Table 7: Animal bone. Number of Identified Specimens (NISP). Periods 2 and 3	72
Table 8: Animal bone. Mandibular wear stages. Periods 2 and 3	72
Table 9: Summary of environmental remains	76
Table 10: Plant remains	77
Table 11: Pollen species counts from various contexts	

List of Figures

Fig 1	Site and trench location plan	99
Fig 2	Plan of features showing phasing	100
Fig 3	Plan of excavated slots showing the locations of sections	101
Fig 4	Sections	102
Fig 5	Sections	103
Fig 6	Sections	104
Fig 7		105
Fig 8		106
		106
		107
		107
Fig 12	Period 3.3 enclosures D, E and F	108
Fig 13	Period 3.3 showing trackway G	108
Fig 14	Pottery	109
Fig 15	Pottery	110

List of Plates

Plate 1 Grey inflammatory deposits on ribs of skeleton 705	111
Plate 2 Grey inflammatory deposits on the internal skull surface of skeleton 731	111
Plate 3 Porosity on vertebra of skeleton 081	111
Plate 4 Schmorl's node depression in thoracic vertebra of skeleton 731	111
Plate 5 Shiny eburnated surface on upper part of lunate (wrist bone) from osteoar	thritis
in skeleton 084	
Plate 6 Dental infraction of canine of skeleton 081	111

Appendices

Appendix 1: Context list								112
Appendix 2: Osteological and palaeopathological catalogue								148

Summary

An archaeological excavation and a programme of archaeological monitoring were carried out in advance of the construction of a new railway bridge and road corridor on the A46 at Ashchurch, Gloucestershire.

The excavation provided evidence for occupation and use of the site from the mid to late Iron Age through to the early post-medieval period, with residual flint and ceramic finds suggesting activity in the vicinity of the site from as early as the Neolithic and Bronze Age periods. The majority of the features recorded related to the Romano-British occupation of the site and consisted of linear and rectilinear ditches forming enclosures or boundaries. The ceramic and stratigraphic evidence suggests that the earliest features are mid to late Iron Age in date and that the origins of the Romano-British occupation lie in the 1st century AD, with continuity of occupation through to at least the 3rd century AD. The limited evidence for structures, and the presence of a small cemetery of five inhumations, suggests that the excavation area was on the periphery of the Roman settlement.

The limited amount of Saxon pottery from the site suggests that the area was utilised as relatively open agricultural land in the immediate post-Roman period, intensive use of the site continuing at some point after the 12th century, with the setting out of a series of ditched enclosures. The remains of a probable late 16th century building, in the south-eastern corner of the excavated area, provides evidence for the continued use of the site into the post-medieval period.

1 Introduction

1.1 An archaeological excavation and a programme of archaeological monitoring were carried out by Gloucestershire County Council Archaeology Service prior to the construction of a new railway bridge and road corridor on the A46 at Ashchurch, Gloucestershire. The work was carried out as a condition attached to the planning permission (Planning Application Reference: ROAD036R). The work was commissioned by Dew Construction Ltd on behalf of the Highways Agency. RPS Planning, Transport and Environment instigated and monitored the archaeological work on behalf of Mouchel Parkman for the Highways Agency.

1.2 The excavation was carried out in accordance with a Written Scheme of Investigation (Watkins 2003a) and a standard brief for archaeological excavation issued by the Senior Archaeological Officer of Gloucestershire County Council (ref. 477.76). The excavation was carried out as outlined in the English Heritage Document *Management of Archaeological Projects* (EH 1991) and was in accordance with the *Institute of Field Archaeologists Code of Conduct* and *Standards and Guidance for Archaeological Excavation* (IFA 2001).

1.3 The archaeological excavation followed an evaluation, which was carried out on the site in March 2003. The evaluation work was instigated by Rob Masefield (RPS Planning, Transport and Environment), as the agent for the Highways Agency, and was agreed with Charles Parry (Senior Archaeological Officer, Gloucestershire County Council) as a risk avoidance strategy. Once archaeological deposits were encountered a strategy for their preservation, excavation and recording was agreed between RPS, the Highways Agency and the Senior Archaeological Officer. As the western part of the new road (the area evaluated by Trenches 1 and 2) was to be constructed on a raised embankment, it was possible to preserve the archaeological deposits *in situ* below a geo-textile membrane and bunding. However, the eastern part of the new road, including the access to Church Farm (the area evaluated by Trenches 3, 4 and 5), was in cutting and it was not possible to preserve the archaeological deposits in *situ*. This area was subject to archaeological excavation.

1.4 The excavation was managed by Toby Catchpole and Jo Vallender (Senior Project Officers). On site work was supervised by Kim Watkins assisted by Neil Wright, Angus Crawford, Rosemary Jones, Simon Sworn, Alvaro Mora-Ottomano, Andy Brown, Marc Steinmetzer, James Goad and Andrew Mann. The archaeological watching brief was carried out by Neil Wright. Specialist reports were compiled by Jane Timby, David Mullin, Fiona Roe, Hilary Cool, Lynne Keys, Ian Baxter, Malin Holst (York Osteoarchaeology Ltd), Andrew Mann and Katie Head (Worcestershire County Council Historic Environment and Archaeology Service) and John Carrott. X-radiography of the metal finds was carried out by Phil Parkes (Cardiff Conservation Services). Thanks are due to Rob Masefield of RPS Planning, Transport and Environment, to Dew Construction Ltd and to the Highways Agency. The work was monitored by Charles Parry, Senior Archaeological Officer, Gloucestershire County Council. This report was edited by Jon Hoyle.

2 Site location, geology and topography (Fig 1)

2.1 Ashchurch lies *c*.3.5km east of Tewkesbury and *c*.1.2km east of the M5/A46 junction (Junction 9). The site is located in a pasture field on the northern side of Ashchurch Road, the A46, and to the south of the parish church of St. Nicholas, centred on OS NGR SO 9279 3329. The areas which were archaeologically excavated comprised the line of the new road between the former track to Church Farm and Church Lane (Area 1) and the line of the new track to Church Farm (Area 2), covering *c*.0.2532ha in total. Areas examined during the watching brief included the northern stretch of the new track to Church Farm, the trenching for the new drainage system, the link between the new and old roads, the area of the new pond within Area 1 and groundwork for the new road east of Area 1 (including Church Lane).

2.2 The site is located on the upper part of the Second Terrace sand and gravels of the River Avon (O.S 1988). The underlying Jurassic Lower Lias Clay formed the natural deposit in the south-east corner or the site. The topography of the site was slightly uneven, in part due to the faint remains of ridge and furrow, running west-south-west to east-north-east. There was a gradual reduction in ground level from 21.26m above Ordnance Datum (AOD) at the western end of the site to 19.61m AOD at the eastern end. A pond lay to the south-east, adjacent to the A46 and Church Lane. A large hollow to the north of the development area, and close to the churchyard, may be the result of quarrying of the terrace sand.

3 Archaeological and cartographic background

An archaeological evaluation was carried out on the site prior to the excavation (Watkins 2003b). The results of the evaluation, evidence for archaeology in the vicinity of the site and evidence for the use of the site in the historic period are outlined below. Published and unpublished reports, the Gloucestershire Sites and Monuments Record (GSMR) and cartographic sources curated by the County Records Office and GSMR have been consulted in the preparation of this section.

3.1 Prehistoric

Evidence for prehistoric activity within the vicinity of the proposed development area is limited, although some sherds of pottery of possible mid to late Iron-Age date (4th century BC to 1st century AD) were recorded during the archaeological evaluation of the site in March 2003 (Watkins 2003b).

3.2 Romano-British (43 to 410 AD)

Prior to the archaeological evaluation of the site in March 2003 (Watkins 2003b, GSMR 22031, see below) there were no known Romano-British sites within the vicinity of the development area. However, a single sherd of Romano-British pottery was retrieved during an archaeological watching brief on the site in 1998 (Goult 1998, GSMR 19887) and Romano-British pottery was retrieved during an archaeological evaluation at St. Nicholas's Church, 120m to the north, in 1998 (Nichols 1999a, GSMR 5478).

3.3 Medieval (410 to 1540 AD)

The parish of Ashchurch lies immediately to the east of Tewkesbury parish, from which it established independence shortly after the Dissolution of the Monasteries in the mid 16th century. St Nicholas's Church, to the north of the development area, is thought to have been built by 1145 as a chapel of ease to Tewkesbury Abbey. The earliest parts of the existing building date to the late 12th century (Elrington 1968, 186). Settlement was thinly scattered throughout the parish of Ashchurch in the medieval period, with a number of small hamlets, including Newton, the closest to the development area. The area was largely agricultural and much of it lay in open fields until Inclosure took place from the 16th century onwards (Elrington 1968, 172). Traces of medieval ridge and furrow are still visible in areas close to or within the development area. Archaeological deposits of medieval date were recorded in the evaluation (Watkins 2003b, GSMR 22031, see below) and in an evaluation at Church Farm, 150m to the north, in 2001 (Brett 2001, GSMR 21005, see below).

3.4 Post-medieval (1540 to 1901 AD)

The present route of the A46 road was turnpiked during the 18th century and became a major thoroughfare from that time. By 1828 a number of houses had been built along the road at Newtown although most of these had been demolished by the mid 20th century (Elrington 1968 173). The main Bristol to Birmingham railway line was built in 1840, with a station located near the church to the north-west of the proposed development area. A railway bridge, on the west side of the excavation area was also built at this time (Elrington 1968, 173). It was the location of this railway bridge, and the station to the north, which encouraged a settlement to develop along the main road in the 19th century.

3.5 **Previous archaeological work in the area**

3.5.1 An archaeological watching brief (Goult 1998, GSMR 19887) was undertaken by Gloucestershire County Council Archaeology Service in 1998 within the development area, during geotechnical test pitting. A single pot sherd of probable late medieval date was recovered from a sandy-clay layer, beneath the topsoil and a sherd of Romano-British pottery was recovered from the ploughsoil.

3.5.2 An archaeological evaluation and subsequent watching brief were undertaken by Gloucestershire County Council Archaeology Service in 1998 and 1999 prior to construction of a septic tank and associated drainage within the churchyard of St Nicholas's Church (Nichols 1999a and 1999b, GSMR 5478). The work recorded grave cuts associated with the church and residual pottery of Romano-British and medieval date.

3.5.3 In 2001 an archaeological evaluation was carried out by Cotswold Archaeological Trust on land at Church Farm, 150m to the north (Brett 2001, GSMR 21005). Three trenches were excavated, revealing a number of medieval features which may represent a field system contemporaneous with the construction of the adjacent St. Nicholas's Church, and the formalisation of the village layout in the 12th century.

3.5.4 An archaeological evaluation was carried out on the site in March 2003. Five trenches were excavated (see Fig 1) and archaeological features were found to be present across the whole of the development area (Watkins 2003b, GSMR 22031). There was some limited settlement activity within the central part of the evaluation area (Trench 3), dating from the 1st century AD, or possibly earlier. The most widespread phase of activity on the site was of Romano-British date, with evidence of 2nd to 3rd century AD domestic activity concentrated in the northern and eastern parts of the evaluation area (Trenches 3, 4 and 5), and features of a more agricultural nature elsewhere. Other areas of disturbance dating to the Romano-British period were interpreted as possible quarry pits. The western half of the evaluation area (Trenches 1 and 2) produced a number of undated features, some cutting the 2nd to 3rd century Romano-British deposits, and a sherd of pottery of possible Saxon date was retrieved from a post hole, which may indicate post-Roman activity on the site.

Medieval deposits, indicative of domestic activity, were recorded in the south-eastern corner of the evaluation area (Trench 4), and an assemblage of 13th to 14th century pottery was recovered from one feature. Ridge and furrow was visible across much of the site, suggesting that the area was largely agricultural in the medieval and early post-medieval periods.

Post-medieval deposits were also recorded in the south-eastern corner of the site, evidenced by large quantities of 15th to 17th century pottery from at least one feature. The presence of iron slag associated with this suggests that some industrial activity was taking place at that time.

3.6 Cartographic background

3.6.1 Inclosure map of 1816

The Inclosure map shows the layout of the landscape in the area prior to the construction of the railway (Gwatkin 1993a). The area around the church, including the development area to the south, is open fields at this time and the settlement along the main road is all on the southern side. The excavation area is shown as a field called Sheep Close.

3.6.2 Tithe map of 1842

The tithe map for Ashchurch shows the location of the newly constructed railway line on the western side of the development area. The site is an open pasture field known as Middle Close (Gwatkin 1993b).

3.6.3 Ordnance Survey maps

The First Edition Ordnance Survey map (OS 1885-6) shows similar field boundaries to the 1842 tithe map. The excavation area is within a single field with a small area in the south-western corner enclosed separately and a small pond in the south-eastern corner. The Second Edition map (OS 1902) shows the same information. The Third Edition map (OS 1923) shows the same information with the exception of the small enclosed area in the south-western corner, which has been incorporated into the larger field by this date.

4 Background to the excavation

4.1 The archaeological excavation followed an evaluation (Watkins 2003b), which was carried out on the site in March 2003. The evaluation work was instigated by Rob Masefield (RPS Planning, Transport and Environment), as the agent for the Highways Agency, and was agreed with Charles Parry (Senior Archaeological Officer Gloucestershire County Council) as a risk avoidance strategy. Once archaeological deposits were encountered a strategy for their preservation, excavation and recording was agreed between RPS, the Highways Agency and the Senior Archaeological Officer. As the western part of the new road (the area evaluated by Trenches 1 and 2) was to be constructed on a raised embankment, it was possible to preserve the archaeological deposits *in situ* below a geo-textile membrane and bunding. However, the eastern part of the new road, including the access to Church Farm (the area evaluated by Trenches 3, 4 and 5), was in cutting and it was not possible to preserve the archaeological deposits in *situ*. This area was subject to archaeological excavation.

4.2 The programme of archaeological works comprised the archaeological excavation of the eastern part of the new section of main road (Area 1) and the access road to Church Farm (Area 2). Archaeological monitoring was carried out on additional works including the excavation of a drainage trench to the south of Ashchurch Primary School (watching brief (WB) Trench 1), the northern section of the access track to Church Farm (WB Trench 2), a drainage trench on the southern side of Area 1 (WB Trench 3), a drainage trench on the northern side of Area 1 (WB Trench 3), a drainage trench on the A46 and Church Lane (WB Trench 5).

5 Excavation methodology

5.1 Excavation procedures

Within the excavation area all undifferentiated topsoil and overburden of recent origin was removed down to the first significant archaeological horizon. This was carried out using a mechanical excavator equipped with a wide bladed, toothless ditching bucket, under constant archaeological supervision. Following machine stripping and cleaning the whole of the excavation area was photographed and planned at a scale of 1:50. All subsequent excavation of archaeological features was by hand and all features were sampled to levels agreed by the Senior Archaeological Officer. A Home Office licence was obtained prior to the excavation and removal of the human remains.

5.2 Recording

5.2.1 A unique site code (GSMR 22031) has been obtained from the County Sites and Monuments Officer. An accession number (2003.38) has been obtained from Cheltenham Art Gallery and Museum, the local archive depository.

5.2.2 All archaeological deposits were recorded on a pro-forma context sheet and their full extent was planned in relation to the site grid. Sections were drawn through features and at sample points along trench edges. Recording conventions were those detailed in the Museum of London Manual (MOL 1994). A photographic record of the investigations was made. This comprised black and white prints and colour transparencies (on 35mm film), illustrating the principal features and finds discovered.

6 Archaeological description

6.1 The results of the excavation are outlined below and in the context list (Appendix 1). Fig 2 shows the recorded features by period and Fig 3 shows the sections excavated through each feature. In the text cut and structure numbers are shown in square brackets [] and fill and deposit numbers are shown in rounded brackets (). The archaeological deposits consisted of features cut into the natural substrata along with limited evidence for stone structures in the south-eastern part of the site. The majority of the cut features were linear ditches or gullies. Eighty ditches and five possible ditches were recorded. Twenty-one pits, of varying sizes, were also recorded along with 12 possible pits, which were either heavily truncated or indistinct. Twenty post holes were recorded and, although some of these may have been contemporary, no plans of structures or boundaries could be determined. Five grave cuts for inhumation burials were present at the eastern extent of the site. The remainder of the cut features consisted of eight furrows (derived from a ridge and furrow field system), three probable tree boles and two indistinct features. Evidence for structures on the site was limited and consisted of two stone deposits, which may have been foundations or supports for timber posts, and the heavily truncated remains of a possible building.

6.2 The site was divided into two areas: Area 1, the main excavation area for the eastern part of the new road; Area 2, the access road to Church Farm.

6.2.1 Area 1

In Area 1 the natural clay deposits (000) were encountered at a depth of between 0.37m and 0.65m below ground level. The archaeological features were sealed by a mid orange-brown sandy clay subsoil (002), measuring between 0.14m and 0.40m in depth, above which was a dark grey-brown silty clay topsoil (001), measuring between 0.20m and 0.25m in depth. Ground level was at a height of between 19.22m AOD, in the south-east corner, and 20.81m AOD, on the west side of Area 1.

6.2.2 Area 2

Area 2, excavated for the access road to Church Farm, was a narrow trench orientated north-west to south-east and measuring 73m in length by up to 6m in width. The natural geological deposit was a mid orange-brown sand with patches of gravel and clay (000), which was encountered at a depth of between 0.45m and 0.65m below ground level. The archaeological features were sealed by a mid orange-brown sandy clay subsoil (002), measuring between 0.25m and 0.35m in depth, above which was a dark grey-brown silty clay topsoil (001), measuring between 0.2m and 0.25m in depth. Ground level was at a height of between 20.71m AOD, at the south-east end of Area 2, and 21.18m AOD, at the north-west end.

6.3 There is evidence for occupation and use of the site from the mid to late Iron Age through to the early post-medieval period, with residual flint and ceramic finds suggesting activity in the vicinity of the site from as early as the Neolithic period. The features and their stratigraphic relationships are described below. Where possible the feature descriptions are grouped by period, starting with the earliest. A number of features could not be accurately dated and these features are discussed at the end of this section along with post-medieval and modern features. Dates used in the text are AD unless otherwise stated. The phasing of the archaeological features is dealt with at section 8, below.

6.3.1 Mid to late Iron Age and early Roman (4th century BC to 1st century AD)

The ceramic and stratigraphic evidence suggests that the earliest features on the site are potentially mid to late Iron Age in date. Six features in Area 1, ditches [414], [670], [744], [746] and [747] and pit [522], and four features in Area 2, ditches [376], [436] and [666] and post hole [446], may be attributed to this phase and are described below.

Ditch [414] (Fig 4.1) was orientated north-east to south-west, continuing beyond the limit of excavation to the north-east and terminating at its south-western end. The feature measured 5.5m in length, 1.4m in width and 0.7m in depth, and was stratigraphically earlier than ditch [377], post hole [385] and mid to late Iron Age pit [522]. Pottery from the feature included eight sherds of Malvernian ware (from the fill of cut [383]), along with Romano-British sherds and two medieval pieces. The stratigraphic relationship with pit [522] suggests that ditch [414] is of mid to late Iron Age date and that the later pottery is intrusive, probably from furrow [390], which truncated the top of ditch [414].

Pit [522] was ovoid in plan and measured 2m in length by at least 1.3m in width and 0.8m in depth. The feature was stratigraphically later than ditch [414] and earlier than ditch [320] and was ceramically dated to the mid to late Iron Age, producing eighteen sherds of Malvernian pottery.

Ditch [670] (Fig 4.2) was orientated north to south, terminating at its northern end and continuing beyond the limit of excavation to the south. The feature measured at least 5.4m in length, 2.2m in width and 0.95m in depth, and was truncated by ditch [387]. The earliest fill of ditch [670] contained five sherds of mid to late Iron Age pottery and fragments of fired clay with wattle impressions. Later fills contained Romano-British pottery of 2nd to 3rd century date. Based on the ceramic evidence it may be suggested that the feature was first in use in the mid to late Iron Age, finally going out of use in the 3rd century. However, it is equally possible that the early pottery was residual and that ditch [670] was of Romano-British date. The ditch may have been contemporary with a probable 2nd century ditch, [686], to the north, possibly forming an enclosure with an entrance on the eastern side.

Ditch [744] was orientated east to west with a possible terminus at the eastern end. The feature was stratigraphically earlier than ditch [492] and was truncated at its western end by ditch [377], with no continuation apparent to the west of [377]. Ditch [744] measured 8.5m in length, 2.1m in width and 0.62m in depth. Pottery from the fill of cut [680] was of mid to late Iron Age date, and may date the feature, however 2nd and 3rd century pottery was retrieved from what were either later fills, a recut or a later intrusion (cut [750]). The feature was parallel to two other potentially early features, ditches [746] and [747], to the south.

Ditch [746] (Fig 4.3) was orientated east to west, with a terminus at its western end. The ditch measured at least 6.2m in length, but was truncated at the eastern end by ditch [188], and did not appear to continue to the east of this ditch. The feature was 0.57m in depth and at least 0.9m in width, although its original width was not established as the stratigraphically later ditch [747], which ran parallel to [746], had removed its southern side. Ditch [746] was both stratigraphically and ceramically early, containing a single sherd of Malvernian Palaeozoic limestone-tempered pottery of probable late Iron Age date.

Ditch [747] (Fig 4.3) was orientated east to west, parallel to the stratigraphically earlier ditch [746], to the north. The southern edge of the feature was outside the southern limit of excavation and it was also heavily truncated, being apparent neither to the west of ditch [699] nor to the east of ditch [661]. The ditch measured at least 12.7m in length, at least 1m in width and 0.55m in depth. Ditch [747] was early in the stratigraphic sequence, predating ditches [188], [387], [661] and [699]. The majority of the pottery suggests a late Iron Age date (1st century BC/AD) for the feature, with only a single sherd of pottery of later Romano-British date, which may be intrusive.

Ditch [376] was only partially exposed, continuing beyond the south-western limit of excavation in Area 2. The feature was orientated east to west, with a terminus at the eastern end, and measured at least 1.2m in length, 0.33m in width and 0.34m in depth. Three sherds of pottery of mid to late Iron Age date were retrieved from the ditch fill.

Ditch [436] (Fig 4.4) was orientated north-east to south-west and measured at least 5m in length, up to 1.8m in width and up to 1m in depth. Pottery of mid to late Iron Age date was retrieved from the primary fills of the feature, with successive later fills producing Romano-British pottery of 1st century date. The sizeable ceramic assemblage from ditch [436] provides evidence for activity on the site around the period of the Roman conquest and suggests possible continuity of settlement from the late Iron Age into the Roman period. Ditch [436] was stratigraphically earlier than ditches [429] and [425] (which may have been 2nd century re-cuts of [436], to the north-west) and was also cut by several later ditches.

Ditch [666] was orientated east to west, with a possible terminus at the western end. The feature measured at least 4.3m in length, 0.5m in width and up to 0.3m in depth. Ditch [666] was stratigraphically earlier than ditches [664] and [663] and was also cut by ditch [662]. Pottery from the feature was of mid to late Iron Age date, with a single small sherd of Severn Valley ware, and this, combined with its stratigraphic position, suggested an early date for the feature.

Post hole [446] measured 0.49m in diameter and 0.15m in depth and was adjacent to two other, possibly contemporary, post holes [448] and [484]. The feature may have cut furrow [450], however the relationship was unclear, and a single sherd of mid to late Iron Age pottery from [446] suggests an early date.

6.3.2 Romano-British

The vast majority of the features at Ashchurch date to the Romano-British period. Many of these features can only be broadly dated, however the ceramic and stratigraphic evidence allows a number of features to be dated more precisely, to the 2nd century, the 2nd to 3rd century, the 3rd century and the late 3rd to 4th century. The more precisely dated features are discussed first followed by the features dating broadly to the Romano-British period.

6.3.2.1 Romano-British: 2nd century

Twelve features in Area 1 and ten features in Area 2 potentially date to the 2nd century. The features in Area 1 were [698S], [698N], [686], [154], [255], [319], [098], [101], [188], [460], [486] and [470]. The features in Area 2 were [547], [145], [499], [328], [429], [425], [199], [136], [132], and [129].

Ditch [698S] (Fig 4.6) was orientated north-north-west to south-south-east, turning at a right angle at the northern end to run west-south-west. The ditch was the southern part of a feature, which was thought, on excavation, to be a single entity (i.e. [698]). However, there was no physical relationship between the southern and northern parts of this feature and it was renumbered, in post-excavation, as ditches [698S] and [698N]. Ditch [698S] measured at least 14m in length, 0.9m in width and 0.32m in depth. The feature appears to be stratigraphically and ceramically early in the Romano-British sequence, being below ditches [257], [387] and [686]. Pottery from the feature suggested a 2nd century date. Although not physically connected to ditch [698N] the two features may have been contemporary, forming a rectilinear ditch system.

Ditch [698N] (Fig 4.1) measured 14m in length by 0.8m in depth and was orientated eastnorth-east to west-south-west, turning at a right angle at the western end to run south-southeast. The feature was heavily truncated and was stratigraphically earlier than pit [186], post hole [693] and ditches [386] and [686]. No dateable finds were retrieved from ditch [698N], but a number of the features which it pre-dates can be dated to the Romano-British period. Ditch [698N] may well have formed a rectilinear ditch system with ditch [698S], to the south, and a 2nd century date for the feature seems likely.

Ditch [686] (Figs 5.1 and 5.2) formed a right angle, running from a terminus at the westsouth-west end to the east-north-east and then turning to run north-north-west to southsouth-east. A second terminus may have been present at the southern end of this feature, below ditch [389]. Ditch [686] measured 16m in length, 1.42m in width and 0.62m in depth. No dateable finds were retrieved from the feature, but it was stratigraphically earlier than Romano-British ditches [255], [256] and [389] and stratigraphically later than undated ditch [698N] and Romano-British ditch [698S], suggesting a 2nd century date for the feature. The possible southern terminus of ditch [686] may indicate that it was contemporary with ditch [670], the earliest fills of which contained pottery dating to the mid to late Iron Age (see 6.3.1, above). The two ditches may have formed an enclosure with an entrance on the eastern side.

Feature [154] was a section of curving ditch or possibly a pit, which was only partially exposed and heavily truncated. The feature measured at least 2m in length, 0.7m in width and 0.34m in depth. Feature [154] was cut by ditch [255] and furrow [390], and contained two sherds of Romano-British pottery of 1st to 2nd century date.

A slightly curving ditch, [255], was recorded in the north-western corner of Area 1 (Figs 5.1 and 5.2). The feature was orientated east-north-east to west-south-west, continued beyond the western limit of excavation and had a terminus at its eastern end. The feature measured 12.4m in length, 1.72m in width and 0.6m in depth, and was stratigraphically later than ditches [686], [215], [689] and [154]. Ceramic material from the feature dated to the 2nd century and the stratigraphic position suggested a later 2nd century date.

Feature [319] was a short section of linear ditch or gully orientated north-east to south-west and measuring 2.6m in length, 0.45m in width and 0.28m in depth. The ditch was truncated at the south-western end by ditch [320] and at the north-eastern end by pit [754], and did not appear to continue beyond these later features. Romano-British pottery of 2nd century date was retrieved from the fill of [319].

Feature [098] (Fig 5.3) was a shallow depression interpreted as the base of a probable pit. The pit was rectangular in shape and measured 1.6m by 1.4m and 0.2m in depth. Pottery from the feature dated to the 2nd century and may date the feature, however the pit cut ditch [189] and this stratigraphic relationship may suggest a slightly later Romano-British date for the feature.

Feature [101] (Fig 5.3) was only partially exposed and was interpreted as a ditch or possible pit. The feature measured at least 2.4m in length, 1.4m in width and 0.45m in depth and cut ditch [188] and possibly also ditch [189]. Ceramic evidence gives a potential 2nd century date for the pit, however stratigraphic relationships may suggest a slightly later Romano-British date.

Ditch [188] (Fig 5.4) was orientated north-north-west to south-south-east and measured at least 17.5m in length, continuing beyond the northern and southern limits of excavation. The feature was up to 2.8m in width and up to 1.15m in depth. Ditch [188] was stratigraphically later than pit [754] and ditch [747] and earlier than ditch [101] and furrow [745]. Pottery from the 1st to 2nd centuries favours a 2nd century date for the feature and it may have formed part of an enclosure with ditches [698N] and [698S]. However, ditch [188] appeared to have been re-cut, and could have been associated with one of two parallel ditches, [377] or [699], to the west, both of which were dated to the 3rd century.

Post hole [460] measured 0.4m by 0.3m and 0.25m in depth, and was truncated by feature [455]. Pottery of probable 2nd century date was retrieved from the fill of the post hole.

Ditch [486] (Fig 4.1) was orientated east to west, with a terminus at its west end. The ditch continued beyond the eastern limit of excavation, but measured at least 5.5m in length, 3.5m in width and 1m in depth. Feature [486] was stratigraphically later than post hole [462] and ditch [532] and earlier than ditch [377] and feature [455]. The fills of feature [486] contained Romano-British pottery dating the ditch to the 2nd century. A parallel terminus, [414], to the south, may potentially have been associated with ditch [486], but its stratigraphic position suggests a mid to late Iron Age date.

A short section of ditch, [470], orientated north to south, was recorded below the southern end of ditch [320]. The feature measured at least 0.9m in length, 0.6m in width and 80mm in depth. Two sherds of pottery of 1^{st} to 2^{nd} century date were retrieved from the fill of ditch [470].

An irregular triangular shaped feature, [547], was recorded in a poorly defined part of Area 2 and was interpreted as a probable tree bole. The feature measured 3.2m by 2.5m and up to 0.5m in depth and appeared to cut features [145], [285], [498] and [639]. Romano-British pottery of 2nd century date, retrieved from the fill of [547], may date the feature, however this material may well have been derived from earlier features.

Ditch [145] was orientated north-east to south-west and measured at least 6m in length by up to 0.87m in width and 0.14m in depth. The feature was truncated by probable tree bole [547] and contained Romano-British pottery of 2^{nd} century date.

Ditch [499] was orientated north-west to south-east and was recorded between two furrows, [396] and [533], but was not visible on either side of these. The feature measured 4m in length and between 0.6m and 0.14m in width, tapering to a narrow point at its south-eastern end, and was 0.43m in depth. Romano-British pottery from the ditch dated it to the 2nd century. The feature was cut by post hole [501].

Ditch [328] was orientated east-north-east to west-south-west and measured at least 5m in length, 0.56m in width and 0.17m in depth. The feature was cut by parallel ditch [326], to the north. The fill of ditch [328] contained Romano-British pottery of 2nd century date.

Ditch [429] (Fig 4.4) was a re-cut of ditch [436] (see 6.3.1, above). The feature was orientated north-east to south-west and appeared to curve round to the west at its south-western end. The feature measured at least 6m in length, up to 1m in width and up to 0.9m in depth and was cut by a probable second re-cut, [425], on the same alignment. Romano-British pottery of 2nd century date was retrieved from the fill of ditch [429].

Ditch [425] (Fig 4.4) was on the same north-east to south-west alignment as ditch [429], to the south-east, and was interpreted as a re-cut of this earlier ditch. The feature measured at least 6.4m in length, up to 1m in width and 0.8m in depth. Ditch [425] was stratigraphically earlier than ditches [271] and [664] and probably also pre-dated pit [270]. The ceramic evidence suggests a date in the 2nd century for this re-cut.

Feature [199] (Fig 5.5) was a section of ditch or gully below ditch [195]. The feature was orientated north-east to south-west, turning at a right angle at the south-western end. Ditch [199] measured at least 1.2m in length by 0.3m in width and 0.2m in depth and contained pottery of 2nd century date.

Ditch [136] (Fig 5.5) was orientated north-east to south-west and measured at least 4.5m in length, 1.6m in width and 0.5m in depth. The ditch was stratigraphically earlier than ditch terminus [132] and was dated, by the pottery within its fill, to the 2nd century.

Feature [132] (Fig 5.5) was the terminal end of a north-north-east to south-south-west orientated ditch, which continued beyond the south-western limit of excavation. The ditch measured at least 1.3m in length, 1.4m in width and 0.4m in depth. Although pottery from the feature suggested a mid to late Iron Age date, it cut 2nd century ditch [136] and was therefore of probable Romano-British in date.

Ditch [129] was orientated east to west and measured at least 7m in length, 0.3m in width and 0.25m in depth. The fill of the feature contained pottery of mid to late Iron Age date but it was stratigraphically later than ditches [132] and [136] and is therefore more likely to date to the 2nd century or later.

6.3.2.2 Romano-British: 2nd to 3rd century

Six features in Area 1 and four features in Area 2 may date to the 2nd to 3rd century. The features in Area 1 were [280], [365], [256], [259], [455] and [729]. The features in Area 2 were [162], [288], [664] and [270].

Ditch [280] (Fig 6.1) was only partially exposed within the excavation and was heavily truncated by ditch [388]. The feature measured at least 1.2m in length by 0.4m in width and 0.39m in depth. Romano-British pottery of 2^{nd} to 3^{rd} century date was retrieved from the feature.

Pit [365] measured 0.68m in diameter by 0.38m in depth and contained a single sherd of Romano-British pottery of 2^{nd} to 3^{rd} century date.

Ditch [256] (Figs 5.1 and 5.2) was orientated east-north-east to west-south-west, with a terminus at its western end. The feature measured 12.2m in length, 2.06m in width and 0.82m in depth and was stratigraphically earlier than ditch [699] and stratigraphically later than ditches [686] and [246]. Although it is possible that ditch [259] was the heavily truncated continuation of ditch [256], [256] did not appear to continue to the east of ditch [699] and it may have terminated below ditch [377]. Romano-British pottery retrieved from ditch [256] suggests a 2nd to 3rd century date for the feature.

Ditch [259] (Fig 6.2) was orientated east-north-east to west-south-west, with a terminus at its eastern end. The feature was cut by and stratigraphically earlier than ditch [377], to the west. Ditch [259] measured 2.2m in length, 1.1m in width and 0.2m in depth and may have been the eastern continuation of ditch [256] (although it was considerably narrower and shallower than [256]). The fill of feature [259] contained pottery of 2nd century or later date.

A possible shallow feature, [455] (Fig 4.1), measuring 4.6m by 4m and 0.15m in depth was recorded at the north-western end of Area 1. The eastern edge of this feature continued beyond the limit of excavation. The feature was stratigraphically later than ditch [486] and post hole [460] and earlier than post hole [453]. Forty sherds of pottery of 2nd to 3rd century date came from the fill of [455], and whilst it may have been a spread of material or midden of Romano-British date it is possible that it was the remains of a furrow from a ridge and furrow system of agriculture.

The remains of what appeared to be a large north-north-west to south-south-east orientated ditch, [729], were recorded on the eastern side of Area 1 (Fig 6.3). The feature was stratigraphically earlier than ditches [147] and [727] and was also cut by ditches [494] and [495]. The ditch was not apparent to either the north of [727] or to the south of [147]. Ditch [729] measured at least 10.5m in length, up to 5.1m in width and 0.86m in depth. Romano-British pottery from the fill of the ditch suggested a 2nd to 3rd century date for the feature, although sherds of Iron Age pottery and single intrusive sherds of medieval and post-medieval pottery were also retrieved from the ditch. Ditch [729] would appear to have formed a significant boundary, and may represent the eastern extent of the Romano-British agricultural activity at Ashchurch.

Post hole [162], in Area 2, measured 0.18m by 0.1m and 0.1m in depth. The feature contained Romano-British pottery of 2^{nd} to 3^{rd} century date and may have been contemporary with an adjacent post hole, [164].

Ditch [288] was orientated east-north-east to west-south-west and measured at least 5m in length, 1.7m in width and 0.47m in depth. Romano-British pottery of 2nd to 3rd century date was retrieved from the feature.

Ditch [664] (Figs 4.4 and 4.5) was orientated north-north-west to south-south-east and measured at least 6m in length, up to 1.2m in width and up to 0.55m in depth. The feature was stratigraphically later than ditches [425] and [666] and earlier than ditch [662]. Romano-British pottery dating to the 2^{nd} to 3^{rd} century was retrieved from the latest fill of the feature.

Feature [270] (Fig 6.4) was an amorphous shallow depression, measuring at least 1.7m in length, 1m in width and 0.14m in depth, and may have been the base of a pit. The fill of [270] contained a single sherd of Romano-British pottery of 2nd to 3rd century date. Pit [270] was cut by ditch [271], but may have been stratigraphically later than ditch [425].

6.3.2.3 Romano-British: 3rd century

Twelve features in Area 1 and seven features in Area 2 may date to the 3rd century. The features in Area 1 were [387], [755], [257], [388], [699], [389], [720], [305], [492], [377], [320] and [753]. The features in Area 2 were [300], [326], [662], [665], [663], [197] and [195].

In the south-west corner of Area 1, and continuing beyond the western limit of excavation, was a linear ditch, [387], measuring at least 23.6m in length, 1m in width and up to 0.66m in depth (Figs 4.3 and 4.6). The feature was orientated east to west with two returns at right angles, which ran north to south and continued beyond the southern limit of excavation. Feature [387] was stratigraphically earlier than ditches [755] and [377] and pit [568] and was stratigraphically later than ditches [670], [698S] and [747]. Ditch [387] may have formed a rectilinear field system along with ditches [257], [246] and possibly [755]. The pottery assemblage from ditch [387] comprised 3rd century material with a single sherd of 4th century date. The 3rd century ceramic dates of the features which are stratigraphically later than [387] may suggest that the single 4th century sherd was intrusive and that [387] also dates to the 3rd century.

Ditch [755] (Fig 6.1) was orientated north to south with a probable terminus at its northern end. The feature continued beyond the southern limit of excavation, and measured at least 4.8m in length, 0.74m in width and 0.62m in depth. Ditch [755] appeared to be stratigraphically later than ditch [387], although the two may have been contemporary, forming part of the same rectilinear ditch system. The northern end of ditch [755] was cut by ditch [388]. Pottery retrieved from the fill of ditch [755] was of late 2nd to 3rd century date.

Ditch [257] measured 7.7m in length, 1m in width and 0.44m in depth, and was orientated north to south, with a terminus at the northern end. The ditch fills appeared to be contemporary with those of ditch [387], which it joined at its southern end, and the features probably formed a single rectilinear ditch. Feature [257] was cut by and stratigraphically earlier than ditch [389] and was stratigraphically later than ditch [698S]. Romano-British pottery of 2nd century or later date was retrieved from the fills of ditch [257].

Feature [388] (Fig 6.1) was a curving ditch measuring at least 12m in length, up to 2.44m in width and 0.8m in depth. The ditch continued beyond both the southern and western limits of excavation. Ditch [388] was stratigraphically earlier than ditch [389] and stratigraphically later than ditches [280], [387], [363] and [755]. Pottery from the fills of the ditch date it to the 3rd century.

Ditch [699] (Fig 6.2) was a slightly curving ditch, orientated north-north-west to south-southeast and measuring at least 21m in length, up to 1.3m in width and 0.5m in depth. The feature was heavily truncated by numerous later features and was stratigraphically earlier than ditch [389] and pit [720]. Ditch [699] was stratigraphically later than ditches [256] and [747]. A large amount of pottery of 3rd century date was retrieved from feature [699], and the combination of the ceramic and stratigraphic evidence from this feature suggests that much of the Romano-British activity on the site took place in the 3rd century. Ditch [699] may have been associated with the re-cut of a parallel ditch, [188], to the east, possibly forming the side ditches of a trackway. Ditch [389] (Fig 5.1) was orientated east to west and curved round to the north at its eastern end, where it was truncated by ditch [377]. The feature measured at least 17m in length, continuing beyond the western limit of excavation, and was 1.98m in width and 0.7m in depth. Ditch [389] was stratigraphically later than ditches [388], [257], [686] and [699] and features [324] and [339]. Romano-British pottery of 3rd century date was retrieved from the fills of ditch [389].

Pit [720] measured 2.4m in length by 1.2m in width. The feature was not excavated, but Romano-British pottery of 2^{nd} to 3^{rd} century date was retrieved from the surface of the feature. The pit was stratigraphically later than ditch [699] and earlier than pit [305], suggesting a likely date in the 3^{rd} century.

Pit [305] measured 4.3m in length, 1m in width and 0.32m in depth and was stratigraphically later than pit [720] and earlier than ditch [377]. Romano-British pottery of 2nd to 3rd century date was retrieved from the fill of the feature and its stratigraphic relationship with dated features suggests a 3rd century date.

Feature [492] was a curvilinear section of ditch running approximately north-west to southeast and truncated to the north-west by ditch [377] and to the south-east by ditch [320]. The feature measured 3.2m in length, 0.8m in width and 0.28m in depth and was stratigraphically earlier than ditch [377] and later than ditch [744]. Romano-British pottery of 3rd century date was retrieved from the fill of ditch [492].

Ditch [377] (Fig 6.2) was a slightly curving ditch, orientated north-north-west to south-southeast and measuring at least 28.7m in length by up to 2.6m in width and 0.95m in depth. The feature was stratigraphically late in the Romano-British sequence, being above ditches [259], [414], [486], [492] and [389] and pit [305], with only ditch [320] later in the Romano-British sequence. In common with ditch [699], which [377] cuts, a large amount of 3rd century pottery was retrieved from this ditch and provides further evidence for considerable activity on the site during this period. Ditch [377] may have been associated with the re-cut of a parallel ditch, [188], to the east, possibly forming the side ditches of a trackway.

Ditch [320] (Fig 4.6) was a curvilinear feature running in a generally north to south direction, with a terminus at its northern end. The feature continued beyond the southern limit of excavation, but measured at least 24.5m in length, up to 1.8m in width and 0.85m in depth. With the exception of two furrows, [390] and [249], the only feature in this area which cut ditch [320] was ditch [701]. Ditch [320] was stratigraphically later than ditches [468], [470], [377], [319] and [386] and pits [472], [186], [316] and [522]. The pottery assemblage from ditch [320] was largely 2nd to 3rd century in date, but the stratigraphic evidence suggests that much of the assemblage was residual and that the feature dates to the later 3rd century.

Feature [753] was an irregular ovoid pit, measuring 2.3m in length, 1.3m in width and 0.25m in depth. The feature was late in the Romano-British stratigraphic sequence, cutting ditch [189], and contained pottery of 3rd century date.

A large irregular feature, [300], which may have been a quarry pit, was recorded on the south-western part of Area 2 and continued beyond the limit of excavation. The feature measured 7m in length, at least 2.5m in width and at least 0.84m in depth. Over 200 sherds of Romano-British pottery of largely 3rd century date were retrieved from the fill of the pit, which was stratigraphically later than ditch [639] and was cut by furrow [396].

Ditch [326] was orientated east-north-east to west-south-west and measured at least 5m in length, 1.34m in width and 0.58m in depth. The feature cut parallel ditch [328], to the south, and Romano-British pottery retrieved from the fill dated the ditch to the 3rd century.

Feature [662] (Figs 4.4 and 4.5) was an east to west orientated ditch with a v-shaped profile, which measured at least 5.6m in length, 0.42m in width and 0.71m in depth. The ditch was cut on its south side by a shallow undated post hole [551] and at its western end by ditch [272], with no continuation of ditch [662] apparent on the western side of [272]. The ditch was stratigraphically later than ditch [664] and contained Romano-British pottery of 3rd century date.

Ditch [665] (Fig 4.5) was orientated east-north-east to west-south-west and measured at least 4.8m in length, 0.5m in width and 0.33m in depth. The fill of ditch [665] contained Romano-British pottery, which dated the feature to the 3rd century. The feature was stratigraphically earlier than ditch [663] to the north, and later than pit [635], to the south.

Ditch [663] (Fig 4.5) measured at least 4m in length, 0.7m in width and 0.22m in depth and was orientated east-north-east to west-south-west, terminating at the west-south-west end. The ditch terminus was cut by feature [630], but [663] was stratigraphically later than ditches [665] and [666]. The latest pottery from the fill of the feature dated it to the 3rd century, although earlier residual material of mid to late Iron Age date was also retrieved.

Ditch [197] (Fig 5.5) was orientated north-east to south-west and measured at least 4.2m in length, 0.8m in width and 0.3m in depth. The feature contained pottery of 3rd century date and had been re-cut, to the north-west, by ditch [195].

Ditch [195] (Fig 5.5) was a re-cut of ditch [197], measuring at least 4.2m in length by 1.5m in width and 0.4m in depth. Romano-British pottery from the feature dated it to the 3rd century. Ditch [195] was also stratigraphically later than ditch/gully [199].

6.3.2.4 Romano-British: late 3rd to 4th century

Only two features, both in Area 2, can be ceramically dated to the late 3rd to 4th centuries, although other stratigraphically late features may also date to this period.

Feature [212] measured 0.75m by 0.55m and was 0.26m deep; it was interpreted as a pit or possible large post hole.

Ditch [141] was orientated east-north-east to west-south-west and measured at least 4.3m in length, 2.3m in width and 0.8m in depth. The feature was cut by ditch [271] and contained Romano-British pottery, which dated it to the late 3rd to 4th centuries.

6.3.2.5 Other Romano-British features

A number of features were broadly dated to the Romano-British period (2nd to 4th centuries). Some of these features can be shown to be stratigraphically earlier or later than the Romano-British features discussed above, but are less precisely dated ceramically and are therefore discussed together here. Fifteen features in Area 1 and seven features in Area 2 fall into this broader Romano-British category. The features in Area 1 were [246], [324], [339], [186], [386], [113], [754], [189], [651], [741], [065], [082], [085], [706] and [732]. The features in Area 2 were [205], [203], [284], [498], [597], [251] and [210].

A linear ditch, [246] (Fig 5.1), ran east to west from the northern end of ditch [257]. Ditch [246] continued beyond the western limit of excavation, and measured at least 8.4m in length, 0.77m in width and 0.4m in depth. No dateable finds were retrieved from the feature, but it appeared to be stratigraphically earlier than Romano-British ditch [256]. However, this relationship is questionable as the feature also appeared to be a return of a 3rd century ditch, [257], and may therefore, along with ditch [387], have formed part of a rectilinear ditch system.

An irregular feature, [324], measuring 0.8m by 0.6m and 70mm in depth was recorded on the southern side of ditch [389]. The feature may have been the base of a heavily truncated pit, but could alternatively have resulted from tree root disturbance. Three sherds of Romano-British pottery were retrieved from the fill of the feature.

Feature [339] measured 0.9m by 0.6m and 0.13m in depth and was interpreted as the base of a probable pit. The feature was stratigraphically earlier than a probable 3rd century ditch, [389], and contained pottery of 2nd to 4th century date.

A shallow, poorly defined feature, [186], was interpreted as the probable base of a large pit (possibly a quarry pit), but could have been a tree bole. The feature, which measured 4.8m by at least 1.5m and 0.15m in depth, was stratigraphically later than ditch [698N] and earlier than ditch [320]. The fill of pit [186] contained Romano-British pottery of 2nd century or later date.

A short section of ditch, [386], was orientated east to west and continued beyond the limit of excavation at its eastern end. The feature measured at least 2.4m in length, 0.45m in width and 80mm in depth. Ditch [386] was stratigraphically later than ditch [698N] and earlier than ditch [320], and no continuation of [386] was apparent to the west of ditch [320]. As earlier ditch [698N] produced no dating evidence, the single sherd of Malvernian pottery retrieved from [386] may potentially date the feature to the mid to late Iron Age. However, ditch [698N] is likely to date to the Romano-British period and a similar Romano-British date would be most appropriate for ditch [386].

Pit [113] measured 0.9m in diameter and 0.15m in depth and contained pottery of 2nd to 4th century date.

Pit [754] (Fig 5.4) measured 5.2m in length, 3.5m in width and 0.51m in depth. Although no finds were retrieved from the feature, it was stratigraphically earlier than Romano-British ditches [188] and [189] and later than Romano-British ditch [319] and an undated pit [175].

Feature [189] (Fig 5.3) was a slightly curving ditch or gully, orientated north-west to southeast. The feature measured 12.5m in length, continuing beyond the northern limit of excavation, up to 1m in width and up to 0.25m in depth, becoming shallower at the southeastern end, and probably petering out below furrow [745]. Ditch [189] was stratigraphically earlier than pits [098] and [753] and later than pit [754] and ditch [734]. Romano-British pottery of 2nd to 4th century date was retrieved from the ditch fills. Two sherds of postmedieval date were also present, but these came from a section excavated close to furrow [249], and were interpreted as intrusive finds.

Feature [651] measured 2.5m in length, 1.8m in width and 0.15m in depth and was interpreted as the base of a heavily truncated pit. The feature contained pottery of 2nd to 4th century date and was stratigraphically earlier than ditch [661].

A poorly defined section of ditch, [741], was recorded in the south-eastern part of Area 1. The ditch was orientated north-east to south-west, but was truncated to the north-east by ditch [147] and to the south-west by ditch [026]. No continuation of the ditch was apparent on either side of the two later ditches. Ditch [741] measured at least 4.8m in length by 0.95m in width (although the north-western edge of the feature was unclear) and 0.39m in depth. Three sherds of Romano-British pottery retrieved from the fill of the ditch suggested a 2^{nd} to 4^{th} century date for the feature.

Grave cut [065] was rectangular in plan, with rounded ends (Fig 7.1). The feature was orientated north to south and measured 1.8m in length, 0.6m in width and was very shallow in depth having been heavily truncated by later activity. The grave contained the skeleton of a mature adult female, (047), orientated north to south and in a supine, extended position with the head at the north end. The only finds retrieved from the burial consisted of a single sherd of undated pottery, two fragments of ceramic building material and 16 hob nails. Based on the finds of hobnails, the orientation of the grave and four associated burials in this part of the site, the feature was dated to the Romano-British period.

Grave cut [082] was rectangular in plan with a rounded northern edge, the southern edge having been truncated by burial [085] (Fig 7.2). The feature was orientated north to south and measured 1.6m in length by 0.65m in width. Within the grave was the skeleton of a mature adult male, (081), laid north to south, in a supine, extended position with the head to the north. Although the feet of burial [082] had been truncated by burial [085] two hobnails were retrieved from the fill of the grave. The finds of hobnails, the orientation of the grave and its association with four other burials in this part of the site would suggest the feature dated to the Romano-British period.

Grave cut [085] (Fig 7.2) measured 1.85m in length, 0.6m in width and was very shallow, having been heavily truncated by later activity. The edges of the feature were indistinct, but it was approximately rectangular and orientated north to south, truncating burial [082] to the north. The grave contained the skeleton of a mature adult male, (084), orientated north to south and in a supine, extended position with the feet to the south. The head of skeleton (084) had been decapitated and placed by the feet and was only found after the excavation of grave [085], having been imperceptible when the body of the skeleton was excavated. (The skull and its cut were given a separate number, (723) and [724] respectively). Two hobnails were retrieved from the fill of feature [085], which together with the decapitated skull suggested a Romano-British date for the feature.

Grave cut [706] was shallow and heavily truncated and the edges of the feature were difficult to establish accurately, however it was approximately rectangular in shape with rounded ends (Fig 7.3). The cut was orientated north to south and measured 1.45m in length, 0.55m in width and 0.15m in depth. The grave contained the skeleton of an adolescent, (705), orientated north to south and in a supine, extended position with the feet to the south. The head of the skeleton had been decapitated and placed by the feet. The only finds from the feature were hobnails (28 from the right foot and 20 from the left foot). These finds, the burial rite and the associated burials in this part of the site would suggest that the grave dated to the Romano-British period.

Grave cut [732] was rectangular in plan, with a rounded north end, the south end having been truncated by machining (Fig 7.4). The feature was orientated north to south and measured 1.2m in length, 0.55m in width and 0.13m in depth. The grave contained the skeleton of an adolescent female, (731), orientated north to south and in a supine, extended position with the head to the north end. The lower legs and feet of the skeleton had been truncated by machining. Although no finds were retrieved from the feature, its association with four other burials in this area suggest that it was of Romano-British date.

In Area 2, an indistinct sub-rectangular feature, [205], measuring 0.78m by 0.6m and 0.11m in depth was interpreted as a probable pit. The feature contained Romano-British pottery of 2^{nd} to 4^{th} century date.

Post hole [203] measured 0.46m in diameter by 0.24m in depth and contained a post pad, which may have indicated a structural purpose for the feature. Romano-British pottery of 2^{nd} to 4^{th} century date was retrieved from the post hole fill.

A ditch or gully, [284], was recorded in a poorly defined part of Area 2. The feature was orientated east to west and measured at least 1.7m in length, being truncated to the west by feature [285] and continuing beyond the limit of excavation at the eastern end. The ditch was 0.26m in width and 0.24m in depth. Six sherds of Romano-British pottery and a single sherd of pottery of either Iron Age or Saxon date were retrieved from the feature. The stratigraphic sequence suggests that [284] is likely to be of Romano-British date, and that the possible Saxon sherd is intrusive, however the stratigraphically later features (particularly [547]) may be the result of root action, and a Saxon date for the feature is not impossible.

A poorly defined feature, [498], was interpreted as a probable pit or post hole. The feature measured 0.53m in diameter by 0.24m in depth and was truncated by probable tree bole [547]. Romano-British pottery from the pit was dated to the 2nd to 4th centuries.

The edge of a probable north-west to south-east orientated ditch, [597], was recorded at the north-eastern edge of Area 2. The exposed sections of the feature measured 4m in length and only a 0.1m in width. The ditch pre-dated furrow [533] and contained a single sherd of Romano-British pottery.

A partially exposed pit, [251], was recorded on the north-eastern side of Area 2 and continued beyond the limit of excavation. The feature measured 1.27m by at least 0.55m and was 0.43m deep. Pottery from the fill of pit [251], suggested a 2nd century or later Romano-British date for the feature.

Ditch [210] was orientated north-east to south-west and measured at least 4.4m in length, 0.4m in width and 0.26m in depth. The feature cut undated ditch [144] and contained Romano-British pottery of late 2^{nd} to 4^{th} century date.

6.3.2.6 Possible prehistoric or Romano-British features

A number of features contained no dateable finds, but were cut by Romano-British features and were therefore stratigraphically either prehistoric or Romano-British in date. Ten features in Area 1 and four features in Area 2 fall into this category. The features in Area 1 were [363], [215], [689], [468], [472], [316], [462], [532], [175] and [734]. The features in Area 2 were [285], [639], [635] and [144]

The remains of a small section of a ditch, [363], were recorded below Romano-British ditch [388]. Ditch [363] measured 1.5m in length, 0.63m in width and 0.12m in depth. No finds were retrieved from the feature.

Feature [215] was a short section of gully, orientated north-east to south-west and truncated by ditch [255] to the south and by furrow [390] to the north. The gully measured 1m in length, 0.19m in width and 0.1m in depth. No dating evidence was retrieved from the feature, but ditch [255], which cut it, was of Romano-British date.

Part of a curved gully, [689], was cut by Romano-British ditch [255], to the south, and by furrow [390], to the north. The feature measured 2.5m in length, 0.3m in width and 70mm in depth. Although too little of the feature survived to determine its function, it is possible that it formed the drip gully to a roundhouse and that it was contemporary with post hole [687]. No dateable finds were retrieved from feature [689].

Ditch [468] was orientated north-west to south-east and measured at least 0.5m in length, 0.35m in width and 0.4m in depth. No finds were retrieved from the fill of feature [468], however it pre-dated Romano-British ditch [320].

Feature [472] (Fig 4.6) was a possible pit or ditch terminus measuring 0.74m by at least 0.3m and 0.42m in depth and going beyond the southern limit of excavation. The feature was undated, but was stratigraphically earlier than Romano-British ditch [320].

A very shallow feature, [316] was probably the base of a pit. The pit measured 1.1m in diameter and only 30mm in depth. No dateable finds were retrieved from the feature, but it was truncated by Romano-British ditch [320].

Post hole [462] measured 0.3m in diameter by 0.15m in depth. No dateable finds were retrieved from the feature, but it pre-dated Romano-British ditch [486].

Part of a heavily truncated ditch or gully, [532], was recorded below ditch [486]. The feature measured 0.75m in length, 0.3m in width and 0.35m in depth. No dateable finds were retrieved from the feature, but the stratigraphically later ditch, [486], was of Romano-British date.

Pit [175] was heavily truncated by ditch [189] to the west and by ditch [188] to the east and measured 1.4m in diameter and 0.58m in depth (Fig 5.4). No dateable finds were retrieved from the feature, but it was stratigraphically earlier than Romano-British pit [754].

A short section of ditch or gully, [734], with a terminus at its western end, measured 1.8m in length and 0.3m in width. The feature was perpendicular to ditch [189] and the two features may have been contemporary, although ditch [189] appeared to cut [734]. No dateable finds were retrieved from ditch [734].

Pit [285] measured 0.7m by 0.6m and 0.45m in depth. The feature was poorly defined, but appeared to cut ditch [284] and to be cut by feature [547]. No dateable finds were retrieved from pit [285], but its stratigraphic relationships suggest it was of Romano-British date.

A short section of ditch or gully, [639], was orientated east to west. The feature was truncated to the east by probable tree bole [547] and to the west by pit [300] and measured at least 1.4m in length, 0.33m in width and 50mm in depth. No dateable finds were retrieved from the feature, but it pre-dated Romano-British pit [300].

Feature [635] was a partially exposed feature measuring 1.8m in length, at least 0.6m in width and up to 0.6m in depth, which was interpreted as a probable pit, but which may have been a ditch terminus. No dateable finds were retrieved from the feature, but it was stratigraphically earlier than Romano-British ditch [665].

Ditch [144] measured at least 3.4m in length, 2m in width and 0.4m in depth, and was orientated north-north-east to south-south-west. The feature was cut by undated ditch [254] and by Romano-British ditch [210]. No dateable finds were retrieved from the feature.

6.3.3 Saxon

The evidence for activity on the site in the Saxon period is limited, with only 11 sherds of pottery from the excavation dating to this period. A single feature, ditch [272], may be of Saxon date, although ditch [284] also contained a possible Saxon sherd (see 6.3.2.5, above).

Ditch [272], in Area 2, was orientated north-north-west to south-south-east and measured at least 6.4m in length, up to 1.74m in width by 0.58m in depth (Fig 6.4). The pottery retrieved from the latest fill of the feature consisted of mainly 3rd century Romano-British sherds along with residual prehistoric sherds and a single sherd of Saxon date. Ditch [272] cut ditch [662] and the stratigraphic and ceramic evidence may date the feature to the Saxon period, however, the single Saxon sherd was potentially intrusive and the feature may date to the 3rd century.

6.3.4 Medieval

The majority of the medieval features at Ashchurch dated to the later medieval period (14th to 16th century), with only a single feature, ditch [122], potentially dating to earlier in the medieval period (12th to 14th century). Fourteen features were recorded, all on the eastern side of Area 1. The features were [122], [643], [147], [495], [727], [071], [165], [044], [146], [041], [026], [034], [037] and [494].

Ditch [122] was a curvilinear feature orientated approximately north to south, with a terminus at its southern end. The ditch continued beyond the northern limit of excavation, but measured at least 10m in length, 0.9m in width and 0.3m in depth. Ditch [122] was cut by furrow [745] and the latest pottery from the feature dated from the 12th to 14th centuries.

Ditch [643] continued beyond the northern and southern edges of Area 1 and measured at least 14.3m in length, 1.7m in width and 0.6m in depth. The feature was stratigraphically earlier than furrow [745], but appeared to cut the subsoil in this area. Medieval pottery of 14th to 16th century date was retrieved from the feature.

Ditch [147] was orientated east-north-east to west-south-west, terminating at its western end and continuing beyond the eastern limit of excavation. The ditch measured at least 25.7m in length, up to 3.8m in width (widening towards the south-western end) and 0.53m in depth. The feature was stratigraphically earlier than ditch [495] and later than ditches [042], [146], [729] and [741]. The majority of pottery retrieved from the feature was residual material of Romano-British date, found in association with medieval pottery of 14th to 16th century date. A single sherd of post-medieval pottery was retrieved, but given the stratigraphic relationships of feature [147] this was almost certainly an intrusive find.

Ditch [495] (Fig 6.3) was a north to south orientated feature, with a terminus at its southern end. The ditch was not apparent to the north of a modern pipe trench, but measured at least 8.5m in length, 0.91m in width and 0.42m in depth and was stratigraphically later than pit [071], ditch [147] and post hole [401] and earlier than ditch [494]. The fill of ditch [495] contained medieval pottery which dated it to the 14th to 16th centuries.

Ditch [727] was within an area of the site which flooded during excavation and was therefore poorly defined. The feature was orientated north-east to south-west and measured at least 23m in length, up to 1.76m in width and 0.4m in depth. The ditch pre-dated ditch [494], which cut it to the west and was stratigraphically later than ditches [671] and [729] and may have also cut ditch [146]. The only dateable finds from ditch [727] were two sherds of Romano-British date. The stratigraphic relationships suggest that these finds were residual and a medieval date for the feature would seem more likely. Ditch [727] was on the same alignment as the furrows, and it is possible that the feature was actually the remains of furrow.

Pit [071] was an irregular feature measuring 4m by 3.2m and 0.34m in depth, which was stratigraphically earlier than ditches [165] and [495]. The latest pottery retrieved from the pit was medieval and dated the feature to the 14th to 16th centuries.

Feature [165] was a slightly curving ditch, orientated north-east to south-west, which measured 11m in length by 0.49m in width and 0.27m in depth. The feature was stratigraphically earlier than pit [044] and later than pit [071] and ditch [146], although a continuation of the ditch to either the east of [146] or the west of [071] was not apparent. The ditch contained medieval pottery of 14th to 16th century date as well as residual Romano-British pottery and a single Saxon sherd.

A large shallow pit, [044], measuring 5.1m by 3.2m and 0.25m in depth was stratigraphically later than medieval ditch [165]. The pit contained 19 sherds of residual Romano-British pottery and a single sherd of medieval date.

Ditch [146] was orientated north-north-west to south-south-east and measured 13m in length, 1.74m in width and 0.44m in depth. The northern end of the ditch was unclear, and may have been cut by ditch [727], whilst the southern end was cut by ditch [147]. The feature was also stratigraphically earlier than ditch [165] and later than pit [041]. Although Romano-British, Saxon and 12th century medieval pottery was retrieved from the fill of ditch [146], the feature post-dated pit [041], which contained pottery of 14th to 16th century date. It may be of note that this ditch is parallel to the Romano-British burials to the east.

A shallow pit, [041], measuring 2.2m by at least 1.9m and 0.13m in depth was truncated by ditch [165]. The latest pottery from the feature was of 14th to 16th century date.

A shallow linear feature, [026], which was only partially visible, was interpreted as a ditch, but may have been the remains of a furrow. The feature was orientated north to south but continued beyond the southern limit of excavation and was not apparent to the north of a later intrusive pipe trench. Ditch [026] measured at least 6m in length by up to 3.73m in width and 0.32m in depth. The feature truncated ditch [741], but pre-dated structure [006] and ditch [037] and contained medieval pottery which dated it to the 14th to 16th century.

Pit [034] measured 3.4m by at least 1.5m and 0.19m in depth. Medieval pottery of 14th to 16th century date was retrieved from the pit, which was cut on its southern edge by medieval ditch [037].

Ditch [037] was orientated east to west with a terminus at its western end. The feature was only partially exposed, with its southern side extending beyond the southern limit of excavation. The ditch measured at least 7m in length, at least 0.82m in width and 0.51m in depth and was stratigraphically later than ditch [026] and pit [034]. Medieval pottery of 14th to 16th century date was retrieved from the ditch fill.

Ditch [494] (Fig 6.3) was orientated north-west to south-east, turning slightly at the southeastern end to run north to south and terminating at its southern end. The ditch continued beyond the northern limit of excavation, but measured at least 18.5m in length, up to 2.1m in width and 0.4m in depth, and was stratigraphically later than ditches [495] and [727] and earlier than structure [008], post hole [709] and furrow [745]. The feature was late in the stratigraphic sequence, and contained pottery of mostly 14th to 15th century date with a few sherds of 16th century date, suggesting a late medieval to early post-medieval date for the feature.

6.3.5 Early post-medieval

A number of the medieval features described above were truncated by a further phase of activity, probably dating to the early post-medieval period (16th century). Structural remains, [008], [004] and [006], and a pit, [718], were recorded on the eastern side of the site and are described below.

Pit [718] was a shallow, heavily truncated, feature below structure [008]. The feature measured 0.97m in diameter and 0.1m in depth and contained seven sherds of pottery of 15th to 17th century date.

The remains of an irregular stone structure, [008], covering an area 9m in length by 5m in width and measuring only 0.3m in depth, were recorded in the south-eastern part of Area 1. The structure was an irregular shape with no uniform edges and no coherent plan. The western part of the feature comprised a probable north to south linear alignment of pitched stones, (609), which may have been the lowest course of a herringbone wall foundation. The stones forming this foundation were roughly hewn limestone blocks, typically 0.4m by 0.25m by 0.15m in size. There was no bonding material around the stones, but they were within a silty clay soil matrix (610).

The central part of structure [008] was formed from roughly hewn limestone blocks, (602), typically 0.2m by 0.15m by 50mm in size, bonded with only a silty clay soil. This central area was interpreted as a possible floor surface.

The eastern side of structure [008] consisted of similarly sized limestone blocks, (614), in a single course, which may have been a continuation of surface (602), but which could have been a collapsed wall running approximately east to west. A compacted silty clay deposit, (615), around these stones contained eight sherds of medieval pottery of 14th to 15th century date.

Structure [008] was stratigraphically later than subsoil deposits (605), (619) and (620), which contained pottery of 14th to 16th century date. These subsoil deposits were removed by mechanical excavator and the finds assemblage retrieved during excavation (numbered (702)) included iron objects, slag and 39 sherds of pottery of 15th to 16th century date. Pottery of 14th to 16th century date was also retrieved from ditch [494], which was below structure [008], and the ceramic dating from the deposits and features below the structure, suggest that it was an early post-medieval (or possibly a late medieval) building, perhaps constructed in the late 16th century.

Feature [008] may have been associated with structural elements [004] and [006], to the east.

A stone deposit, structure [006], was recorded above feature [026] and consisted of a single course of roughly hewn limestone blocks typically 0.3m by 0.2m by 0.1m in size. The deposit measured 2m by 1.4m and was 0.2m deep. There was no apparent cut for the feature and it may have been a dumped stone deposit. It appeared, however, to be associated with a similar feature, [004], to the east and may have been a foundation or support for a timber post. Structures [006] and [004] may also be contemporary with structure [008] to the west. No dateable pottery was retrieved from structure [006] but a fragment of moulded stone (sf 1) re-used in its construction has been identified as part of a possible medieval coffin. Medieval pottery from earlier ditch [026] provided a 14th to 16th century *terminus post quem* for feature [006].

Structure [004] consisted of a single course of medium-sized, roughly hewn limestone blocks, typically 0.2m by 0.1m by 50mm in size, together with cobbles and a single block of stone with chisel marks, 0.6m by 0.3m by 0.15m in size, which was a re-used piece from an earlier structure. Although the stones had no bonding material they were partially bonded by deposit (009), which they overlay. The north-east side of the feature was formed by approximately five lines of stone, which may have been deliberately placed as a support for a post. The feature may have been contemporary with structures [008] and [006], and may have formed a pair of post supports or pads with the latter. Subsoil deposit (009), on which the structure sat, was dated to the 15th to 16th centuries.

6.3.6 Post-medieval, modern and undated features

A series of furrows, resulting from a system of ridge and furrow cultivation, and a number of later features of post-medieval or modern date are outlined below. Features which were undated are also included here. The features in Area 1 are described first followed by those in Area 2.

An indistinct feature, [341], measuring 0.6m by 0.6m and 60mm in depth was interpreted as a probable tree bole. No dating evidence was recovered from the feature.

A possible south terminus of a ditch or pit, [373], was recorded on the southern edge of furrow [390]. The feature was undated and measured 0.9m by 0.6m and 0.38m in depth.

Post hole [687] measured 0.5m in diameter by 0.16m in depth. The feature was undated, but may have been associated with gully [689] to the west.

Pit [568] measured 1m by 0.9m and 0.2m in depth. No dateable finds were retrieved from the feature, however it cut Romano-British ditch [387].

A short section of ditch, [701], was orientated north-north-east to south-south-west and was stratigraphically later than ditch [320]. The feature measured 6m in length, 0.4m in width and 0.15m in depth. No dateable finds were retrieved from the feature, but it post dated one of the latest Romano-British features, ditch [320].

Furrow [249] was orientated north-east to south-west and measured 24.5m in length by up to 2m in width and 0.2m in depth.

Post hole [693] measured 0.24m in diameter by 70mm in depth. No finds were retrieved from [693], but it was stratigraphically later than ditch [698N].

Post hole [385] measured 0.3m by 0.26m and 0.5m in depth. No finds were retrieved from [385], but it appeared to be stratigraphically later than ditch [414].

Furrow [390] was orientated east-north-east to west-south-west and measured 20.7m in length, up to 2.2m in width and 0.25m in depth.

Post hole [453] measured 0.3m in diameter and 0.25m in depth. No dateable finds came from the post hole, but it was stratigraphically later than feature [455].

Furrow [490] was orientated east-north-east to west-south-west and measured 5.8m in length, up to 2.8m in width and 0.1m in depth.

Furrow [745] was orientated east-north-east to west-south-west and measured 44m in length by up to 2.4m in width and 0.12m in depth.

A north-west to south-east orientated ditch, [661], continued beyond the southern limit of excavation. The ditch had a terminus at its north-western end and measured at least 9.6m in length, 2m in width and 0.6m in depth. Ditch [661] was stratigraphically later than Romano-British features [747] and [651], but was undated. The feature was truncated by furrow [745].

A shallow irregular feature, [600], measuring 1.6m by 1.4m and only 50mm in depth was interpreted as a probable tree bole.

Pit [622] was a shallow, heavily truncated, feature below structure [008], which was interpreted as the base of a possible pit or a tree bole. The feature was undated and measured at least 0.8m by 0.5m and was 0.1m deep.

Ditch [613] was orientated north to south, continuing beyond the southern limit of excavation and below structure [008] at its northern end. No continuation of the ditch was apparent to the north of [008]. The feature measured at least 3m in length by 0.38m in width and 0.15m in depth. No finds were retrieved from the feature, but it pre-dated the early post-medieval structure.

Post hole [709] measured 0.48m in diameter by 0.14m in depth and cut late medieval ditch [494].

Post hole [401] measured 0.23m in diameter by 0.22m in depth. No dateable finds were retrieved from the feature, but it was below, and pre-dated, medieval ditch [495].

Ditch [671] was within a poorly defined area of the site and the relationships between it, and neighbouring features were unclear. The ditch ran from south-west to north-east, where it curved slightly to the east-north-east. The feature measured at least 19.9m in length, up to 1.7m in width and 0.59m in depth and was truncated along much of its southern edge by later ditch [727]. The relationship between ditch [671] and ditch [729], to the west, could not be established. No dateable finds were retrieved from ditch [671], however it was on approximately the same alignment as the furrows and may have been the remains of a furrow.

In the north-eastern corner of Area 1 was a pit, [748], measuring at least 3.5m by 1.5m and containing a large amount of animal bone. The feature appeared to be cut through the subsoil and was interpreted as a probable animal burial pit of modern date.

Post hole [018] measured 0.51m by 0.45m and 0.21m in depth. No finds were retrieved from the feature.

A ditch or gully, [042], was orientated north-west to south-east with a terminus at the north-western end. The feature was truncated by a modern intrusion at its southern end, but measured at least 8.5m in length, 0.5m in width and 0.11m in depth. Ditch [042] was undated, but was stratigraphically earlier than medieval ditch [147].

A probable furrow, [012], orientated north-east to south-west, was recorded in the southeastern corner of Area 1. The feature continued beyond the southern and eastern limits of excavation and was truncated to the west by a modern intrusion. Furrow [012] measured at least 5m in length, at least 2m in width and 0.25m in depth.

A shallow undated pit, [020], was recorded in an area which contained a number of Romano-British burials. The feature measured 1m by 0.5m and 0.12m in depth. Given the location of pit [020] it is possible that it was the base of a heavily truncated grave.

An undated post hole, [164], measured 0.19m in diameter and 0.14m in depth and may have been contemporary with an adjacent Romano-British post hole, [162].

Furrow [396] was orientated east-north-east to west-south-west and measured at least 5.2m in length, up to 1.7m in width and 0.17m in depth.

Post hole [501] measured 0.26m in diameter by 70mm in depth. No dateable finds came from the feature, but it post dated Romano-British ditch [499].

An irregular feature, [533], orientated approximately north-east to south-west was interpreted as a probable furrow. The feature was up to 1.9m in width by 80mm in depth.

Post hole [448] measured 0.44m by 0.27m and 70mm in depth. The feature was undated, but may have been contemporary with adjacent post holes [446] and [484].

Post hole [484] measured 0.33m in diameter and 0.17m in depth. The feature was undated, but may have been contemporary with adjacent post holes [446] and [448].

Furrow [450] was orientated north-east to south-west and measured at least 4.1m in length, up to 3.1m in width and 0.15m in depth.

Post hole [397] measured 0.32m in diameter and 0.31m in depth. No dateable finds were retrieved from the feature.

A partially exposed oval pit, [752], measuring at least 2.2m in length, 0.4m in width and 0.5m in depth, was recorded on the north-eastern edge of Area 2. No dating evidence was found within the fill of the feature.

Post hole [638] was undated and measured 0.35m in diameter by 70mm in depth.

An undated post hole or possible pit, [630], cut Romano-British ditch [663]. The feature measured 0.7m by 0.57m and 0.2m in depth.

A shallow undated post hole, [551], measuring 0.5m in diameter by 0.1m in depth, cut Romano-British ditch [662].

A north-north-west to south-south-east orientated ditch, [271], was recorded on the western side of ditch [272] (Fig 6.4). Ditch [271] measured at least 6.2m in length, 0.6m in width and 0.22m in depth. Although no dateable finds were retrieved from feature [271], it post-dated ditch, [141], which contained pottery of late 3^{rd} to 4^{th} century date and pit [270], which contained 2^{nd} to 3^{rd} century material.

Ditch [254] was orientated north-east to south-west, with a terminus at the south-western end. The feature measured at least 3.4m in length, up to 1.6m in width and 0.3m in depth. Ditch [254] was undated, but truncated ditch [144], which was of probable prehistoric or Romano-British date.

A north-east to south-west orientated feature, [191], was interpreted as a possible ditch or gully, but could have been a plough cut. The feature, which measured at least 4m in length, 0.25m in width and 0.15m in depth, was undated.

7 Archaeological watching brief

7.1 An archaeological watching brief was carried out on groundworks outside of the main excavation areas, where there was a risk of intrusion into archaeological levels. The watching brief involved the monitoring of groundworks in five areas, numbered WB Trenches 1 to 5 (see Fig 1). The results of the watching brief are outlined below. Context numbers used in the watching brief are prefixed "W".

7.2 WB Trench 1

7.2.1 Trench 1 was excavated for drainage and ran south from the A46, between the Village Hall and Ashchurch County Primary School, and then through the school playing field to the Tirle Brook stream. The trench measured c.225m in length, by up to 1.6m in width and up to 2.6m in depth.

7.2.2 The natural deposit, in the area of the school playing field, was a light to mid orangebrown clay with blue-grey mottling which was recorded at a depth of between 0.9m and 1.15m below ground level. Above the natural was a mid orange-brown silty clay deposit measuring between 0.6 and 0.8m in depth. The upper layer was a mid grey-brown silty clay topsoil measuring up to 0.35m in depth. No archaeological deposits were recorded in this part of Trench 1.

7.2.3 The natural deposit, where the trench cut through the Village Hall car park, was a blue-grey clay at a depth of 1m below ground level. Above the natural was a dark grey-brown silty clay, which contained frequent red brick and tarmac fragments. This was interpreted as a modern building rubble/levelling layer and measured c.1m in depth. Above the modern rubble layer was a modern tarmac surface, with associated hardcore bedding layers. No archaeological deposits were recorded in this part of Trench 1.

7.3 WB Trench 2 (Fig 8)

7.3.1 Trench 2 was located at the north-western end of excavation Area 2, and formed the final section of the access road to Church Farm. The trench partially overlapped the area which had been archaeologically, excavated and measured 18m in length, 3.2m in width and up to 0.83m in depth. The excavation of Trench 2 was only sufficiently deep to expose the natural deposits and archaeological features across part of the trench. An overburden of subsoil obscured the natural deposits across the remainder of the trench. No archaeological excavation was carried out beyond or below the limits of excavation necessary for the construction of the road.

7.3.2 The natural deposit was a mid orange-brown sand with grey mottling (W402), encountered at a depth of between 0.65m and 0.83m below ground level. The natural was cut by three archaeological features, which are described below.

7.3.3 At the north-western end of the trench was a mid grey-brown sandy clay (W404), which was interpreted as the fill of a cut [W403]. The edges and extent of feature [W403] were not established as the feature was covered by subsoil overburden (W401) to the northwest and cut by a service trench to the east. The feature was interpreted as a possible ditch or pit. No finds were retrieved.

7.3.4 A ditch [W405], orientated approximately east to west, was recorded cutting the natural in the south-eastern half of the trench. The feature measured up to 1.55m in width and continued beyond the limits of excavation at either side of the trench. The fill of ditch [W405] was a mid grey-brown sandy clay with orange mottling (W406), from which no finds were retrieved.

7.3.5 A post-hole [W407], measuring 0.32m in diameter, was recorded at the south-eastern end of Trench 2. The feature was filled by a mid grey-brown sandy clay (W408), from which no finds were retrieved.

7.3.6 The features were sealed by a mid grey-brown sandy clay subsoil (W401), which remained as overburden and obscured the natural deposit across parts of the trench. The subsoil was cut by two service trenches, orientated approximately east to west. Above this was a dark grey-brown silty clay topsoil (W400). Ground level was an average height of 21.16m AOD.

7.4 WB Trench 3 (Fig 9)

7.4.1 Trench 3 was a drainage trench located along the southern edge of excavation Area 1. The trench measured 50m in length by up to 4m in width. Excavation was carried out prior to an archaeologist being present on site, and the base of the trench was at a level below that of the Area 1 trench and between 0.54m and 0.8m below ground level. The features recorded in Trench 3 did not match up well with those recorded in the archaeologically excavated area (due in part to the deeper level of machining of the drainage trench). A number of the excavated features which appeared to be running to the south, into this area, were not seen at all in Trench 3. However, some continuation of features was apparent and this has been noted in the descriptions below.

7.4.2 The natural deposit was a light to mid grey-blue clay with orange sandy mottling (W500), encountered at a depth of between 0.65m and 0.83m below ground level. The natural was cut by a number of archaeological features, which are described below.

7.4.3 A possible ditch [W501], orientated approximately east to west, was recorded at the eastern end of the trench. The feature measured at least 15.2m in length and between 0.9m and 1.7m in width. The ditch was filled by a mid blue-grey clay, with occasional light greybrown mottling (W502), which contained occasional fragments of animal bone. It was unclear whether [W501] was a continuation of a feature recorded in Area 1, however it may have been a continuation of one of the medieval ditches recorded on the eastern side of the excavation area.

7.4.4 A second possible ditch [W503], orientated north-west to south-east, measured at least 3.9m in length by up to 1.1m in width. The fill of feature [W503] was a light blue-grey clay, with mid grey-brown clay mottling (W504), from which no finds were retrieved. The feature was possibly a continuation of ditch [188], recorded in Area 1.

7.4.5 On the western side of ditch [W503] was a possible feature [W506], which may have been either part of a large ditch or a spread of material. The dimensions of the feature could not be established within the confines of the trench and the relationship between this feature and features [W503] and [W508], to the east and west respectively, was unclear. The fill of [506] was a mid blue-grey clay with mid grey-brown silty clay patches (W505), from which sherds of Romano-British pottery were retrieved.

7.4.6 Ditch [W508] was orientated north-west to south-east and measured at least 3.4m in length by up to 0.7m in width. The fill of the feature was a mid grey-brown silty clay (W509), containing a single sherd of Romano-British pottery and occasional fragments of animal bone. The ditch may have been a continuation of either ditch [387] or [698S], both of which were recorded as extending beyond the southern limit of the Area 1 excavation.

7.4.7 At the western end of the trench was a north to south orientated ditch [W511], measuring at least 2.4m in length by 0.4m in width. The ditch was filled by a mid grey-brown silty clay (W510), which contained Romano-British pottery of 1^{st} to 2^{nd} century date. The feature may have been the continuation of a larger ditch, [388], recorded in the excavation.

7.4.8 The features were sealed by a mid grey-brown sandy clay subsoil below a dark greybrown silty clay topsoil. Ground level was at a height of between 19.6m and 20.59m AOD.

7.5 WB Trench 4

Trench 4 was a drainage trench located along the northern edge of excavation Area 1, and overlapping Area 1 at the eastern end. The trench measured 28m in length by only 0.6m in width, and the narrowness of the trench made the recognition and recording of the exposed deposits difficult. Natural clay and gravel was apparent at a depth of 0.52m below ground level, and occasional bands of mid grey-brown clay, on a north to south orientation, were noted and could have been the continuation of features recorded in Area 1.

7.6 WB Trench 5

Trench 5 was located at the southern end of Church Lane and measured 14m in length by up to 8m in width and was excavated to a depth of up to 0.6m below ground level. The natural clay was encountered at a depth of 0.5m below ground level in part of the trench. Above the natural was a mid grey-brown silty clay subsoil at least 0.3m in depth below a dark grey-brown silty clay topsoil 0.33m in depth. These deposits had been cut for the laying of a modern surface for Church Lane, and hardcore and tarmac deposits were present across the eastern half of the trench. No archaeological deposits were recorded.

8 Phasing

8.1 The archaeological features recorded during the excavation provide evidence for occupation and use of the site from the mid to late Iron Age through to the early post-medieval period, with residual flint and ceramic finds suggesting activity in the vicinity of the site from as early as the Neolithic and Bronze Age periods.

8.2 Six main periods of activity have been identified at the site, with the Romano-British activity further sub-divided into four periods. The phasing of the site is primarily based on stratigraphic relationships and ceramic dating.

Period 1	Early prehistoric
Period 2	Mid to late Iron Age to early Roman (4 th century BC to 1 st century AD)
Period 3	Romano-British (2 nd to 4 th century AD)
Period 3.1	2 nd century AD
Period 3.2	2 nd to 3 rd century AD
Period 3.3	3 rd century AD
Period 3.4	late 3 rd to 4 th century AD
Period 4	Saxon (5 th to 11 th century AD)
Period 5	Medieval (12 th to early 16 th century AD)
Period 5	Medieval (12 th to early 16 th century AD)
Period 6	Early post-medieval (16 th century AD)

8.3 Period 1: Early prehistoric

The earliest evidence for activity on the site comes from residual flint finds. Two blade sections (sf 18 and sf 22) of probable Neolithic date were recovered from ditches [436] and [195] respectively and a barbed and tanged arrowhead (sf 13), of early Bronze Age date, was retrieved from ditch [666]. In addition to this two residual sherds of pottery, of probable Bronze Age date, were found in ditch [272]. These finds add to the evidence for the occupation of the Tewkesbury area during the Neolithic and Bronze Age periods.

8.4 Period 2: Mid to late Iron Age to early Roman (4th century BC to 1st century AD)

8.4.1 The ceramic and stratigraphic evidence suggests that the earliest features are mid to late Iron Age in date and that the origins of the Romano-British occupation lie sometime in the later 1st century AD. Whilst much of the late prehistoric pottery is residual, within later deposits, ten features can be dated to this period.

8.4.2 In Area 1, a north-east to south-west orientated ditch terminus, [414], contained eight sherds of mid to late Iron Age pottery and was cut by pit [522], containing 18 sherds of Malvernian ware. Pottery from the primary fill of a heavily truncated east to west orientated ditch, [744], suggests that it may have originated in the 1st century AD. To the south of ditch [744] were two more east to west orientated ditches, [746] and [747], which were both ceramically and stratigraphically early, with a likely date in the 1st century BC/AD. The earliest fills of ditch terminus [670] contained five sherds of mid to late Iron Age pottery, indicative of a primary use for the feature in this period.

8.4.3 In Area 2, a partially exposed east to west orientated ditch terminus, [376], and ditch [666] both contained mid to late Iron Age pottery, the latter also being early in the stratigraphic sequence. Post hole [446] was early on ceramic grounds and could have formed part of a structure with two undated post holes, [448] and [484]. The primary fill of ditch [436] produced mid to late Iron Age pottery with successive later fills producing Romano-British pottery of 1st century date. The sizeable ceramic assemblage from ditch [436] provides evidence for activity on the site around the conquest period and is the most compelling evidence for continuity of settlement from the late Iron Age into the Roman period.

8.4.4 Whilst it is clear that there is evidence for activity on the site in the mid to late Iron Age few coherent patterns are formed by the features attributed to this early phase. This is due in part to the limited number of features which can be attributed to this phase, but is also due to the inevitable truncation caused by later features. It is notable that a number of the ditches are orientated east to west or north-east to south-west on similar alignments to many of the Romano-British ditches, and it may be the case that some of the features dated to the Romano-British period had their origins in the Iron Age.

8.4.5 The function of the early features is uncertain, although at least one ditch, [436], may have been a substantial boundary feature, based on its size and the continued presence of a ditch on this alignment (re-cuts [429] and [425]) from the mid to late Iron Age through to at least the 2^{nd} century AD.

8.5 Period 3: Romano-British (2nd to 4th century AD)

8.5.1 The vast majority of the features recorded at Ashchurch date to the Romano-British period (2^{nd} to 4^{th} century AD). The ceramic dating is somewhat problematical as the assemblage is dominated by the two major industries, Severn Valley ware and Malvernian ware, both of which are long-lived and conservative in their output. A further caveat is the potential for residuality and the risk of intrusion posed by the density of features within the confined site area. However, despite these limitations it has been possible to date some features more precisely. The general Romano-British trends and features which are dated more broadly to the 2^{nd} to 4^{th} century are discussed first (8.5.2 to 8.5.6), this is followed by the more precisely dated features which are discussed in four phases, Periods 3.1 to 3.4 (8.5.7 to 8.5.10).

8.5.2 The Romano-British features are indicative of the use of the site as farmland, comprising successive phases of ditches, perhaps for stock enclosures. The proliferation of features within the limited excavation area make it difficult to identify individual enclosures or boundary systems, but it is possible to recognise some general patterns and to attribute certain features to phases within the broader 2nd to 4th century period. The ditches are generally aligned north-west to south-east and north-east to south-west, with occasional east-west and north-south alignments. Ceramic evidence points to a high degree of activity in the 2nd to 3rd centuries with limited evidence for occupation into the 4th century. There is little evidence for structures within the excavation area, and it is likely that the focus of domestic settlement lay elsewhere. However, a number of post holes dating to the Romano-British period, and an undated possible eaves drip gully were recorded. At the eastern extent of the excavation area were five inhumation burials of Romano-British date.

8.5.3 The Romano-British activity is confined almost exclusively to the western half of the site. Ditch [188] would appear to define the eastern extent of the main phase of agricultural activity, although ditch [729], to the east, may have performed the same function at a later date. The two ditches are on the same north-north-west to south-south-east alignment and ditch [729] undoubtedly formed a significant boundary at some stage in the Romano-British period. The only significant Romano-British features to the east of ditch [729] are the five burials. The location of the burials here, apparently on the fringes of the settlement, fits a pattern seen at other Roman sites.

The focus of the domestic settlement in the Romano-British period was likely to have 8.5.4 been outside of the excavated area. Twenty post holes, which may have been evidence for structures or fence lines, and a curved section of gully, were however recorded during the excavation. Few of the post holes were dated and only four produced Romano-British pottery. A line of post holes, [462], [385] and [693] may have been contemporary, possibly forming a fence, whilst two further post holes, [453] and [460], to the north (the latter containing Romano-British pottery) may also have been associated with them. Post hole [203] was dated to the Romano-British period and contained a post pad, which may indicate a structural purpose. [203] may have been associated with two further post holes, [162] and [164], to the south-east. Post holes [446], [448] and [484], in Area 2, were in close proximity and may have been part of a structure. An undated post hole, [687], may have been associated with a section of curved gully, [689], which was of either prehistoric or Romano-British in date. Although gully [689] was heavily truncated, and only a 2.5m long section of the feature survived, it is possible that it formed the drip gully to a roundhouse with [687] forming one of the post holes. Whilst these features could be evidence for domestic structures they could equally be evidence for farm outbuildings. Further evidence for structures comes from the ceramic building material, which includes fragments of Roman roofing tile, and fired clay fragments with wattle impressions from early ditch [670] and from ditch [377]. The presence of large fragments of fuel ash slag could be indicative of the burning down of huts. The worked stone assemblage includes two probable pad-stones, which are likely to date to the Roman period and which may have been used in the construction of an aisled building (see Roe 9.4, below).

8.5.5 Five inhumation burials, [065], [732], [706], [085] and [082] were found at the eastern edge of the site, away from the main area of Romano-British activity. No dateable pottery was retrieved from these burials, but they had a number of characteristics which strongly suggested they dated to the late Romano-British period. These included the presence of hobnail shoes on all four individuals with surviving feet, the extended supine burial position with heads to the north, relatively orderly burial in rows and decapitation in two of the individuals, with the skulls placed by the feet.

The proximity of the burials to one another and the mixed ages and sexes of the individuals may indicate that this was a family group, and although this could not be verified from physical characteristics two of the burials, [082] and [085], were intercutting and may have been related individuals (see Holst 10.1, below). The shallow truncated nature of the graves may suggest that other burials in the area had been destroyed by later agricultural activity. Further burials may also be present to the east, outside of the excavation area. It may be of note that three late medieval ditches, [146], [147] and [727], enclose the area in which the burials are located, perhaps indicating that these later ditches were on the line of Romano-British ditches, or that this plot remained a landscape feature from the Roman to the Medieval period.

8.5.6 A number of pits can be dated to the Romano-British period. No clear function can be discerned for these features, however they may have been quarry pits exploiting the natural clay. A group of similarly sized pits, measuring between 0.9m and 5.2m in width and between 0.15m and 0.51m in depth, were located in the central part of Area 1. Pits [098], [753], [754], [113], [305] and [720] all contained pottery of Romano-British date, and a further two pits in this area, [175] and [316], were cut by Romano-British features. A much larger pit, [300], measuring 7m in length, at least 2.5m in width and 0.84m in depth, was recorded in Area 2. Pit [300] may also have been a quarry pit, but if so was for clay extraction on a far larger scale than that of the other pits.

8.5.7 Period 3.1: Romano-British 2nd century AD

8.5.7.1 Twenty-two features were dated to the 2nd century. The majority of the ditches were on north-east to south-west and north-west to south-east alignments, forming a number of rectilinear enclosures. Ditch [698S] forms the eastern and northern boundaries of enclosure A (Fig 10), in the south-western corner of the site, while to the north-east ditch [698N] forms the northern and western boundaries of enclosure B. The limits of excavation, and heavy truncation by later features, meant that the size and extent of these enclosures were not clearly established, however ditch [188] could have formed the eastern boundary of enclosure B, making it c.14m in width. Later 2nd century ditches [686] and [255] were on similar alignments, cutting ditches [698S] and [698N]. Right-angled ditch [686] may have been contemporary with a later phase of ditch [670], the earliest fills of which produced pottery dating to the mid to late Iron Age. These two ditches possibly formed enclosure C (Fig 11), in the south-western corner of Area 1, with an entrance on the eastern side.

8.5.7.2 Two other 2nd century ditches in Area 1, [154] and [319], were on similar alignments, and, in Area 2, 2nd century ditches [145], [499], [328], [429], [425] and [136] were also aligned either north-east to south-west or north-west to south-east.

8.5.8 Period 3.2: Romano-British 2nd to 3rd century AD

Ten features were dated to the 2nd to 3rd century. As with the 2nd century ditches the ditches from this period are generally aligned north-east to south-west and north-west to south-east. Ditch [729] may have marked the eastern extent of agricultural activity in this period, with only a single ditch and the Romano-British burials to the east.

8.5.9 Period 3.3: Romano-British 3rd century AD

8.5.9.1 Nineteen features, mostly comprising a series of linear and curvilinear ditches, were dated to the 3^{rd} century. The stratigraphic and ceramic evidence indicate a peak of activity in this period. This is emphasised by the presence of three large inter-cutting ditches, [320], [377] and [699], all dating to the 3^{rd} century, with [699] being relatively early in the stratigraphic sequence and ditch [320] representing one of the latest phases of activity at the site. More than 200 sherds of pottery of 3^{rd} century or earlier date were retrieved from ditch [320] and this, combined with its late stratigraphic position, may emphasise the lack of a significant 4^{th} century element on the site.

8.5.9.2 The first phase of 3^{rd} century activity was marked by a rectilinear system of ditches on a north to south and east to west alignment, in the south-western corner of the site. At least three enclosures were formed by ditches [387], [257] and [246] (Fig 12). Enclosure D was bounded by ditch [246] to the north, ditch [257] to the east and ditch [387] to the south, with its western boundary presumably beyond the western limit of the site. Enclosure D must have been either small or long and narrow, measuring only 6m from north to south. To the south of enclosure D, ditch [387] formed the northern and eastern boundaries of enclosure E, which continued beyond the limits of excavation to the south and west of the site, but measured at least 14m east to west. Ditch [387] also formed the northern, eastern and western boundaries of enclosure F, which continued beyond the south continued beyond the south continued beyond the south continued beyond the south and west of the site and measured 8m from east to west.

8.5.9.3 Ditches [387], [257] and [246] were cut by a series of curvilinear ditches, [388], [389] and [320], which were also dated to the 3rd century. The three curvilinear features are unlikely to have been contemporary and form no coherent plan, but they serve to highlight the multitude of phases within the later Romano-British period.

8.5.9.4 Two 3rd century ditches, [699] and [377], run north-north-west to south-southeast through Area 1 and may have been significant boundaries in this period. One of these ditches may have formed the western boundary of a trackway, G (Fig 13), the eastern boundary being marked by parallel ditch [188], c.9m to the east. Whilst the earlier, 2nd century, date for ditch [188] (see 8.5.7.1, above) may argue against this relationship, it is notable that ditch [188] appeared to have been re-cut, and this re-cut may have been contemporary with either [377] or [699]. This possible trackway does not continue into Area 2.

8.5.10 Period 3.4: Romano-British late 3rd to 4th century AD

Only two features, ditch [141] and pit [212], both in Area 2, produced pottery dating them to the late 3rd to 4th centuries. Other stratigraphically late features may also date to this period and pottery from elsewhere on the site, including a probable intrusive sherd of later Roman shelly ware from ditch [284], hint at occupation in the later 4th century. However, the lack of features of late 3rd to 4th century date and the large amounts of pottery retrieved from features of 3rd century date suggest that the Romano-British occupation was in decline from the late 3rd century.

8.6 Period 4: Saxon (5th to 11th century AD)

8.6.1 There is some limited evidence for activity on the site in the Saxon period, with at least 11 Saxon sherds present in the ceramic assemblage. The pottery is distributed across the site, with no obvious focus and is most likely to reflect continued use as agricultural land rather than *in-situ* occupation. The majority of the Saxon material is residual within contexts of a later date, however a single feature, ditch [272], may date to this period. The ditch falls late in the stratigraphic sequence and, although it contained mainly 3rd century Romano-British pottery, it also produced a single Saxon sherd. The north-north-west to south-southeast orientation of ditch [272], on the same alignment as adjacent Romano-British ditches, may also favour a Romano-British date for the feature, however it could also reflect continuity of use of the Roman field layout and the ditch may have originated in the late Romano-British period and been backfilled and gone out of use in the Saxon period.

8.6.2 A singe small find, a bone spindle whorl, may date to the late Saxon period, but was a residual find in medieval ditch [494].

8.7 Period 5: Medieval (12th to early 16th century)

8.7.1 A series of features on the eastern side of Area 1 reflect occupation of the site in the medieval period. Ten ditches and four pits were recorded in this area. The majority of the features dated to the later medieval period (14th to 16th century), with only one ditch, [122], dating to earlier in the medieval period (12th to 14th century). Four of the ditches, [147], [146], [727] and [494] may have formed one or two rectilinear enclosures on a north-west to south-east and north-east to south-west alignment. Ditches [727] and [147] formed the respective north-west and south-east boundaries with ditches [146] and [494] orientated north-west to south-east, creating an enclosure on the western side measuring c.15m by 12m and a possible enclosure on the eastern side which continued beyond the eastern limit of excavation. The ditches would appear to represent the setting out of a medieval field system and are comparable with the features recorded at Church Farm, to the north-west, in 2001 (Brett 2001). It is also notable that the ditches are not only on the same alignment as the A46 Ashchurch Road and Church Lane, but that they are also on a similar alignment to the Romano-British ditches and the Romano-British burials to the east.

8.7.2 Four pits, [034], [041], [044] and [071], were dated to the later medieval period. The pits were generally an irregular shape in plan and may have been quarry pits for the extraction of natural clay.

8.8 Period 6: Early post-medieval (16th century)

8.8.1 The remains of a probable late 16th century building, [008], were present in the southeastern part of the site and two possible stone foundations for timber posts, [004] and [006], may have been associated with this structure. The structural remains were very fragmentary, although a possible foundation and floor surface were present within structure [008]. A number of iron finds came from this general area and included pieces of structural ironwork, which are likely to have been associated with a building. A whetstone and an assemblage of knives, of typical late 15th to 16th century type, were also retrieved from this area and although none of the knives have any features, which suggest a specialised function, they may be indicative of craft activity taking place in this area. The position of the building, close to the junction of the present A46 Ashchurch Road and Church Lane, may be significant. Ashchurch Road is known from the late 10th century, when it was known as Port Street (Elrington 1968, 172) and the location of a building here, close to the church, the main focal point in a parish of dispersed hamlets, would be advantageous for trade.

8.8.2 At some stage in the medieval or post-medieval periods a system of ridge and furrow cultivation was introduced, with eight furrows, [012], [745], [249], [390], [490], [396], [533] and [450], surviving across the site. The furrows were aligned east-north-east to west-south-west, at approximately 8m intervals, and had truncated the earlier archaeological features.

9 Artefactual evidence

9.1 **Pottery and ceramic building material** by Jane Timby

9.1.1 Introduction and methodology

The archaeological work resulted in the recovery of 3,331 sherds of pottery weighing 57kg largely dating to the Roman and late medieval/ early post-medieval periods. In addition there are two possible Bronze Age sherds, a few sherds of Iron Age character, 11 Saxon sherds and two modern pieces. Overall pottery was recovered from some 220 individual contexts

In general the condition of the material was very good with a number of large unabraded sherds. This is reflected in the moderately high average sherd size of 16.6g. At least one profile of a grog-tempered jar, from ditch [436], can be reconstructed (Fig 14.3).

During the analysis stage the pottery was sorted into fabrics based on the macroscopically visible inclusions in the pastes. Known Roman regional or traded wares are coded using the National Roman fabric reference collection codes (Tomber and Dore 1998). More local wares are described more generically and where relevant cross-referenced into the Gloucester City type fabric (TF) series currently housed at Gloucester Museum (cf Ireland 1983). The Saxon fabrics are described and the medieval fabrics classified using the Gloucester fabric series (cf Vince 1983). The assemblage was quantified by sherd count and weight only and the data entered onto an MS Excel spreadsheet a copy of which is deposited with the site archive. Tables 1 and 2 summarise the quantified record.

In the following report the fabrics and forms are described followed by a chronological discussion of the assemblage in relation to the site. A small number of pieces were selected for illustration.

9.1.2 Description of fabrics and forms

9.1.2.1 Iron Age-early Roman native handmade wares

Within the assemblage are a number of handmade wares of Iron Age character. Most of these are Malvernian in origin but also present are some grog-tempered, fossil shell and alluvial shell tempered, calcite and sandy wares. Some of these are definitely pre-Roman in date but many could be later Iron Age or early Roman. Handmade Malvernian rock-tempered wares continue to be made well into the 2nd century and beyond and the grog and Palaeozoic limestone wares often remain in circulation well after the Roman conquest in rural areas.

Fossil shell-tempered ware (SHELL1). Eight sherds of handmade ware. Brown or black with a moderate to coarse fossil shell temper. Limited to seven unfeatured sherds, probably all from jars. Probably MIA-LIA.

Alluvial shell-tempered ware (SHELL2). Dark brown ware with a sparse temper of fine alluvial shell, probably naturally occurring in the clay, suggesting collection from a stream bed or river bank. Often found in MIA assemblages in the Upper Thames Valley. Limited to three handmade bodysherds. Probably MIA-LIA.

Jurassic limestone-tempered (LIME). Another small group of Jurassic limestone tempered ware with mixed oolitic limestone and fossil shell inclusions. A small group of seven handmade sherds, one a rim from an everted rim jar. Probably MIA-LIA

Calcite-tempered ware (Glos TF 34). A small group of three sherds from handmade jars. A typical LIA ware found across the region in small quantities.

Sandy ware (SAND). A moderately rare ware represented by just four handmade sherds. These are probably Iron Age in date although a Saxon date cannot to completely discounted.

Malvernian metamorphic rock-tempered ware (MAL RE A) (Tomber and Dore 1998, 147). This ware accounts for 5.1% by sherd count, 5.8% by weight. Vessels are handmade simple forms usually with a burnished or vertical burnished line finish. Decorated sherds include two with zones of incised crossed or diagonal lines (Figs 14.1, 14.2 and 14.8). Forms are exclusively jars with beaded (Fig 14.9), internally thickened, everted (Fig 14.4), or plain undifferentiated rims. Some vessels show evidence of use from sooting around the rim or on the exterior surface. This ware has its origins in the middle Iron Age and continues well into the Roman period.

Palaeozoic limestone-tempered. (MAL RE B) (Glos TF 33/216). This ware accounts for 8.8% by count, 6.1% by weight of the Iron Age and Roman assemblage and has a source within the Malvernian outcrops. Forms are mainly jars, tubby, necked everted (Figs 14.6 and 14.7), beaded rim forms, one with a countersunk handle and less commonly larger storage jars (Fig 14.11) and hammer-rim bowls (cf Spencer 1983). Several vessels have a burnished finish or more rarely decorated with incised lines or stamped decoration (Fig 14.2). A few jars have external sooting from use. The ware is generally thought to date from the early 1st century BC through into the later 1st century AD. One sherd of this ware from (93) has been fashioned into a perforated disk, possibly for use as a spindle-whorl (sf 7) (Fig 14.16).

Malvernian sandstone-tempered (Glos TF 30). A rare fabric represented by just two body sherds in a black, sandy, handmade ware.

Grog-tempered ware (Gloucester TF 2A). A handmade, brown or black ware with grog-tempering. Forms are limited to jars often with a burnished finish (Fig 14.3). Usually appears in Gloucestershire in the early years of the 1st century AD continuing until the end of the 1st century.

9.1.2.2 Local Roman wares

Severn Valley ware (SVW OX) (Tomber and Dore 1998, 148-9). This fabric was by far the commonest in the assemblage accounting for 52% by sherd count, 52.5% by weight. Forms included a large number of jars, bowls, plain-rimmed dishes, beakers and tankards. The jars in particular include several wide-mouthed varieties with pendant rims, necked everted or flared rim varieties, hooked and bifid rim forms (Figs 15.17 and 15.20). The bowls include early carinated forms (Fig 14.10) to later flanged rim hemispherical forms (Fig 15.18) and large hammer-rim types. Basesherds also attest the presence of a small number of colanders. A few jar sherds have an internal calcareous deposit from holding or heating water. The Severn Valley wares typologically span the 1st to 4th centuries.

Severn Valley ware variants (Glos TF 11D and TF 17) (Ireland 1983, 100). Two early Severn Valley ware variants, one with organic and grog inclusions (TF 11D); the other with a charcoal temper (TF 17). Mainly found in the mid-later 1st century AD. Limited to just seven sherds.

Later Roman Malvernian wares (Glos TF 19; MAL RT). This is the second commonest ware to occur in the assemblage accounting for 18.7% by count, 22.9% by weight. It comprises a mixture of handmade and wheelmade forms, usually in a grey fabric and is a later development of the Malvernian metamorphic rock-tempered ware. Forms include flanged conical bowls, flat rim bowls (Fig 14.12) and plain-rimmed dishes imitating DOR BB1 types, jars and lids. The jars include large storage types with everted rims and sharply everted rim neckless varieties. The lids have distinctive flat or thumb-impressed knobs (e.g. Fig 14.13).

Wheelmade grog-tempered ware (GROG). Grog-tempered wares of presumed local, but unknown source. Limited to a single wheelmade sherd.

Local colour-coated ware (Glos TF 12D). A local colour-coated ware with an orange fabric and brownish colour-coat making a form similar to the Oxford industry. Five sherds only.

Micaceous grey ware (Glos TF 5). This industry, dating from the later 2nd to 4th centuries, is represented by just 19 sherds, less than 1% of the assemblage, suggesting that Ashchurch lies towards the periphery of the distribution of this ware, which is more common towards Gloucester and sites south of the Severn. Forms generally copy BB1 forms with jars, flanged bowls and plain-rimmed dishes.

9.1.2.3 Roman regional imports

Dorset black burnished ware (DOR BB1) (Tomber and Dore 1998, 127). This is the commonest of the regional imports on the site, accounting for 8.2% by count and 4.4% by weight. The forms present span the 2nd through to the 4th century. In particular there are several jars with acute through to oblique latticing, flat rim bowls, grooved rim bowls, plain rimmed dishes and flanged conical bowls and dishes (Fig 15.19).

Mancetter-Hartshill whiteware mortarium (MAH WH) (ibid, 189). Two sherds of mortaria were recovered one from feature [455], the other in a worn condition from ditch [328].

Oxfordshire colour-coated ware (OXF RS) (ibid, 176). These account for 1.3% by sherd count. Recognisable forms include flanged bowls (Young 1977, type 51), dishes and bowls (ibid, C8, C45, C59 (Fig 14.14), C68 and C75), beakers and mortaria (ibid, type C100). A stamped base was amongst the unstratified finds (Fig 14.15).

Oxfordshire white ware mortaria (OXF WH) (Tomber and Dore 1998, 175). Eight sherds are present which include Young (1977) forms M10 with a worn interior (AD 180-240), M17 (240-300 AD) and M18 (180-240 AD).

Late Roman Midlands shelly ware (ROB SH) (ibid, 212). Just two small sherds of this distinctive later 4th-century ware are present, one from furrow group [390] and one from gully [284].

South-west white-slipped ware (SOW WS) (ibid, 192). A single sherd from fill (248) of furrow [390].

9.1.2.4 Roman continental imports

Samian. Some 50 sherds of Central Gaulish samian and one of probable East Gaulish samian are present. Most of the sherds are from plain forms, in particular dishes Dr 18/31 and 31 and cups Dr 33. Just two sherds from a decorated form Dr 37 came from ditch group [389]. One dish had a lead rivet repair; another sherd had a rivet hole. Collectively the samian accounts for 1.8% by count of the assemblage, 0.9% by weight.

9.1.2.5 Source unknown (Roman)

Grog-tempered storage jar (GRSJ). A single grog-tempered sherd from a large storage jar from ditch group [414]. Source unknown.

Fine grey ware (GYF). Limited to just two sherds from a vessel, probably a beaker, with rouletted decoration from cut [463] of ditch group [387].

Miscellaneous grey ware (GW). A number of grey sandy wares of unknown provenance have been subsumed into this category. These include jars/ beakers with rusticated decoration, plain-rimmed dishes and flanged bowls.

	Fabric	Description	No	No %	Wt	Wt %
Native	SHELL1	hm fossilshell tempered	8	0.3	150	0.3
SHELL2 hm a		hm alluvial shell tempered	3	0.1	46	0.1
	LIME limestone-tempered		7	0.2	55	0.1
	Glos TF 2	hm grog-tempered	16	0.6	859	1.7
	MALREA	Malvernian rock tempered	145	5.1	2927	5.8
	MALREB	Malvernian limestone tempered	251	8.8	3112	6.1
	Glos TF 30	Malvernian sandstone	2	0.1	32	0.1
	Glos TF 34	calcitic tempered	3	0.1	42	0.1
Local	Glos TF 11D	early Severn Valley ware	1	0.0	6	0.0
	Glos TF 17	early Severn Valley ware	6	0.2	258	0.5
	SVW OX	Severn Valley ware	1480	52.0	26603	52.5
	MAL RT	Malvernian Roman	529	18.6	11509	22.7
	Glos TF 12D	local colour-coated ware	5	0.2	22	0.0
	GROG wm fine grog-tempered		1	0.0	15	0.0
	Glos TF 5 micaceous grey ware		18	0.6	318	0.6
Regional	DOR/SOW BB1	Dorset/SW black burnished ware	234	8.2	2224	4.4
	MAH WH	Mancetter-Hartshill mortaria	2	0.1	72	0.1
	OXF RS	Oxfordshire colour-coated ware	37	1.3	511	1.0
	OXF WH	Oxfordshire white ware mortaria	8	0.3	520	1.0
	ROB SH	late Roman shelly ware	2	0.1	15	0.0
	SOW WS	South-west white slipped ware	1	0.0	7	0.0
Import	CGSAM	Central Gaulish samian	49	1.7	437	0.9
	EGSAM	East Gaulish samian	1	0.0	21	0.0
Unknown	GYF	fine grey ware	2	0.1	14	0.0
	GW	miscellaneous greyware	33	1.2	804	1.6
	GRSJ	grog-tempered storage jar	1	0.0	61	0.1
	MISC	unidentified	3	0.1	28	0.1
TOTAL			2848	100.0	50668	100.0

Table 1: Quantified summary of Iron Age and Romano-British pottery

9.1.2.6 Saxon wares

A small assemblage of at least 11 handmade Saxon sherds was recovered. These were quite diverse in fabric, most with varying quantities of organic material. It is possible that some of the wares classified as Iron Age may belong here. In most cases the sherds came from furrows or the subsoil.

Description of fabrics

Fabric SXO1: Dense organic-tempered ware. Handmade, moderately hard, black ware with a dark brown exterior surface. At x20 the finely micaceous matrix shows a sparse scatter of rounded to sub-angular, clear quartz, well sorted and a high frequency of coarse organic inclusions giving a laminar fracture. Two sherds.

Fabric SXO2: Organic-tempered ware. Handmade ware with a smoother finer, more micaceous fabric with less frequent organic matter and a sparse scatter of rounded quartz sand, rare limestone and iron. Surface colour varies from dark orange to red-brown, dark brown or black. Four sherds including one rim (Fig 15.24).

Fabric SXL1: Limestone-tempered ware. Handmade, moderately hard ware with a sparse to moderate scatter of sub-angular limestone up to 2mm in size and less, discrete limestone ooliths and sparse organic inclusions in a very finely micaceous paste. Two sherds.

Fabric SXS1: Dense sandy ware. A hard, granular sandy ware with dark brown or red-brown surfaces and a black core. The matrix contains a common to dense scatter of well-sorted, rounded quartz 0.5 to 1mm in size. Variable, but sparse quantities of organic matter are also present. Two sherds, one a rim (Fig 15.23).

Fabric SXS2: Glauconitic sandy ware. A handmade, hard ware containing a high density of fine sand amongst which is a scatter of fine black glauconitic grains and sparse organic inclusions. The individual grains are not macroscopically visible measuring less than 0.25mm. One sherd.

9.1.2.7 Medieval wares

A total 487 sherds, 15% of the recovered assemblage, date to the medieval and later medieval periods. Most of the wares derive from the local Malvernian industry with a few sherds potentially dating to the later 12th to 14th century but with the bulk of the material probably dating to the 14th to 16th century. In addition there are a few vessels from the Minety industry, North Wiltshire, a single sherd of Worcestershire green glazed jug and some sherds of Tudor Green perhaps indicative of a greater level of activity from the late 14th to 15th century. These latter vessels appear to be the only imports to the site.

Malvernian ware (Glos TF 40). Unglazed, handmade cooking pots dating from the 12th to 14th century. A small group of 14 sherds, three from the subsoil, the rest from ditches [122], [147] and [414] and lens (614).

Medieval sandy ware (Glos TF 42). Probably from Hereford or Worcester. Unglazed cooking pot. Four sherds from one context; ditch group [122].

Minety ware (Glos TF 44). Another small group of oolitic limestone tempered ware from North Wiltshire. Vessels include a glazed pitcher, a jug with a thumbed base and jars. Dates from the late 12th to 15th century. Sherds came from the subsoil, pit [044] and ditches [122] and [643].

Tudor Green ware (TF 65). Such wares are a common feature of 15th to 16th century contexts in Gloucester. Four sherds were recovered, two from a handle. Two sherds came from topsoil and subsoil contexts, two from cut [683] of ditch [494].

Malvern Chase ware (Glos TF 52). A large group of wares accounting for 93.43% of the medieval wares, by sherd count. This was the most common coarseware in Gloucester throughout the 15th and 16th centuries and into the early 17th century (Vince 1977; 1983, 132). Vessels include tripod pipkins, jugs, jars, bowls, pans and dishes.

Herefordshire Border ware (Glos TF 54). A small group of four sherds dating to the 17th to 18th century.

	Fabric	Description	No	No %	Wt	Wt %
Saxon	Saxon SXO1 sandy with dense organic temper		2	0.41	32	0.5
	SXO2	fine micaceous with sparse organic	4	0.82	48	0.8
	SXLI	angular limestone and ooliths (Jurassic)		0.41	22	0.4
	SXS1	dense sandy ware	2	0.41	20	0.3
	SXS2	glauconitic sandy ware	1	0.21	32	0.5
Med/late med	Glos TF 40	Malvern Chase hm cooking pots	14	2.87	163	2.6
	Glos TF 42	Hereford and Worcester sandy ware	4	0.82	127	2.0
	Glos TF 42	Minety ware	5	1.03	158	2.5
	Glos TF 52	Malvern Chase ware	455	93.43	5679	91.5
	Glos TF 54	Herefordshire Border ware	4	0.82	44	0.7
	Glos TF 65	Tudor Green	4	0.82	11	0.2
	Glos TF 90	Worcester-type green glazed jug	1	0.21	24	0.4
TOTAL			487	100.00	6206	100.0

Table 2: Quantified summary of Saxon and medieval pottery

9.1.3 Discussion: the site

9.1.3.1 Iron Age-early Roman

The earliest material present are two residual Bronze Age sherds from ditch [272]; similarly most of the potentially pre-Roman pottery also appears to be residual in later features. A number of features can be isolated as potentially mid-late Iron Age on the basis of the pottery present but in all instances the assemblages were very small, with only one feature producing more than 10 sherds. Features which contained Iron Age pottery included ditch [729], with four Jurassic limestone-tempered sherds coming from fill (124); ditch [129] with a single sherd of MAL RE A and some fired clay; ditch [132] with a limestone-tempered jar rim and four sherds of MAL RE A; ditches [376] and [386] and cuts [383] of ditch [414], [628] of ditch [663] and [680] of ditch [744], which collectively produced just 15 sherds of Malvernian ware; and posthole [446] with a single sherd. The largest assemblage came from pit [522] with 18 sherds, a mixture of MALRE A and B and including a highly burnished decorated jar (Fig 14.8).

With such a small group it is difficult to determine whether there was continuous occupation into the Roman period or whether there was a hiatus, but the sizeable assemblage from ditch [436], some 139 sherds, is indicative of a date around the conquest period suggesting some small scale activity at this time. The assemblage is diverse and includes typical Iron Age material with sherds tempered with fossil shell, alluvial shell, oolitic limestone or calcite, both types of Malvernian handmade ware, several sherds from a grog-tempered jar with holes made through the base (Fig 14.3), one sherd of prototype Severn Valley ware in a black fabric and five bodysherds of standard Severn Valley ware. The Iron Age wares include one sherd with stamped decoration (Fig 14.2) and one with diagonal burnishing (Fig 14.8).

9.1.3.2 Roman

The Roman assemblage is well preserved and quite typical of a fairly modest establishment or small settlement relying largely, but not exclusively, on local wares. The incidence of samian at 1.7% of the Iron Age-Roman assemblage is quite typical of a rural site. The origins of this phase of the settlement appear to lie in the 1st century AD with an intensification of activity in the 2nd to 3rd centuries. The quantity of material varies greatly between features with a number producing no sherds. In nearly all cases the assemblage comprises a mixture of Severn Valley ware, Malvernian wares and Dorset black burnished ware. The typological range of the two major producers, Severn Valley ware and Malvernian ware, can be very conservative. Both industries are very long-lived, extending through most of the Roman period and dating unfeatured sherds is thus problematical when unaccompanied by other wares.

Based on both the pottery and stratigraphic evidence the earliest features in the Roman sequence, dating to the 2nd century, can be identified as ditches [136], [425], [429], [499], [145], [486], [698S], [255], [319] and [188], pits [098], [101], [754] and possible tree bole [547]. Ditch [686] produced no pottery but predates ditch [255]. Dating is largely based on DOR BB1 forms and a high residual component of native wares.

The next group of features, which may be of 2nd or 3rd century date, include ditches [195], [256], [744] and feature [455]. By the 3rd century the assemblages include a greater number of later Malvernian ware (Glos TF 19), DOR BB1 wares and wide mouthed SVW OX with pendant rims. Potentially of 3rd century date are ditches [197], [662] and [699] and pit [753]. The assemblage from ditch [320] would appear to be largely 2nd to 3rd century but since it appears to cut ceramically later ditches must contain a high residual component. Similarly some of the furrows contain mainly Roman wares accompanied by single medieval or later sherds.

The next sequence of ditches, largely with 3rd century pottery include ditches [663], [665], [388], [389], [377], [492] along with pit 300. A rectilinear layout in the south-end of the trench (ditches [246]/[387]) is cut by these ditches yet produced a 4th century sherd which is either intrusive or the entire sequence is later with no diagnostically late pottery.

Other late 3rd to 4th century pottery, reflected in the presence of Oxfordshire colour-coated ware and late DOR BB1 forms, includes ditch [141], gully [284] and pit [212]. Two sherds of later Roman shelly ware from the site, one from gully [284], the other redeposited, hint at later 4th century occupation.

9.1.3.3 Saxon

The 11 sherds of Saxon pottery largely come from furrows and are distributed across the site betraying no particular foci. A single sherd, from ditch [272], may date the context, however this sherd could well be intrusive as the remaining sherds suggest the feature is of 3rd century date with residual prehistoric pottery.

9.1.3.4 Medieval and post-medieval

Most of the stratified medieval and later wares came from the eastern end of the site but nearly 60% came from the topsoil and subsoil horizons or from furrows. As a result a high proportion of the sherds are quite abraded and small. A few sherds of potentially medieval date (12th to 14th century) were found scattered across the site; the only feature to exclusively produce such material being ditch [122]. Two presumably intrusive sherds came from pre/early Roman feature [414].

Many of the medieval and later features produced more Roman material than post-Roman material, the dating often hinging on single sherds. Ditch [146] produced largely Roman wares accompanied by one Saxon and two medieval sherds. Ditch [729], stratigraphically Roman in date, produced four Iron Age sherds, 41 Roman sherds, one later medieval and one modern piece. This was cut by ditch [494] which yielded 71 late medieval sherds, including two sherds of Tudor Green; the rest Malvernian Chase ware, just two Roman and a single Saxon sherd. This was by far the most productive post-Roman feature on the site and appears to date to the 14th to 16th century. Structure [008] produced a small assemblage of just seven Malvernian Chase wares, one medieval Malvernian ware and two Roman sherds suggesting a *terminus post quem* in the 15th to 16th centuries.

9.1.4 Discussion: region

The ceramic assemblage from Ashchurch reflects an extended history of sporadic occupation and use in the locality dating from the Bronze Age through to the 16th century. Such longevity of occupation is not unusual in this area and direct parallels for similar premedieval occupation can be cited at Childswickham, Worcestershire, south of Evesham, the Eastern Relief Road south of Tewkesbury (Walker *et al* 2004) and Longdon, Worcestershire.

Apart from some sparse Bronze Age material, the pottery assemblages from both Longdon and Childswickham span the mid-later Iron Age through to the later Roman period (Timby 2004b; 2006). At Childswickham a small group of wares, largely redeposited in later contexts, hint at a mid Iron Age origin for the later prehistoric occupation with a much more apparent intensification of activity from the later Iron Age. There is continuous activity until the later 4th century but no apparent Saxon presence. At Longdon the site appears to have started in the later pre-Roman Iron Age continuing until the 3rd century from when it was abandoned. At Tewkesbury again some earlier and later prehistoric activity was documented but the emphasis of the Roman activity dated to the 2nd and 3rd centuries finishing in the later 3rd to early 4th century (Timby 2004a).

From the later 1st century AD all the assemblages from these sites are dominated by SVW OX accounting for 35.9% at Childswickham, 46.8% at Longdon and between 51% and 69% for the different sites at Tewkesbury, compared to the 52% at Ashchurch, reflecting a pattern seen across the lower Severn Valley basin. In the 2nd century sherds of Dorset black burnished ware start to appear at all these sites. The percentages of 6% count at Childswickham and 8% at Ashchurch and Tewkesbury (MacRobert 1993) fall within that predicted by Allen and Fulford (1996). Ashchurch probably appears to be the most 'rural' of the all the assemblages with a smaller range of other regional and continental imports reaching the site compared to Tewkesbury and Childswickham.

Of all the sites noted above Ashchurch is the only one with post-Roman Saxon finds although a quantity of late Roman shelly ware (ROB SH) from Childswickham suggests this lasted into the later 4th or early 5th century. The Saxon sherds are more likely to reflect continuity in the use of the field layout and the agricultural land rather than *in-situ* occupation. Similar potentially contemporary material has been found on various local sites including Bishops Cleeve, Winchcombe and Wormington.

The medieval and later activity is perhaps not surprising given the proximity of the church and other contemporary settlement close to the site, which probably developed out of medieval origins. The assemblage appears to reflect a typical domestic household with a variety of forms but very limited in terms of different wares.

9.1.5 Ceramic building material and fired clay

Accompanying the pottery were 98 pieces of ceramic building material (CBM) and 90 fragments of fired clay. The CBM was generally quite fragmentary and mainly in coarse Malvernian fabrics with just the occasional piece of standard red sandy ware. Diagnostic fragments included Roman roofing tile (tegula), one with a rounded rather than angular flange (cut [184] of ditch [320]) and flat round clay plates.

Parts of at least eight flat clay plates in Malvernian wares were noted from edge pieces (from cuts [184] and [474] of ditch [320], cuts [351] and [556] of ditch [377], from ditches [388] and [698S] and from furrow [249]). All are earlier rather than later Roman features. These are a common feature of sites in this area supplied by the Malvernian industry but their purpose remains unknown. They do not have attached mortar to suggest a structural use or heavily fired surfaces to indicate a cooking or industrial purpose. The upper surfaces are smoother and in rare cases (e.g. Fig 15.21) scored with lines. The example from ditch group [388], scored on the underside, has a diameter of 0.6m (Fig 15.22). It is possible that they were used for domestic purposes, such as kneading bread, or that they functioned as lids.

Amongst the CBM is also some modern brick from the topsoil and a fragment with a heavily vitrified surface or attached slag deposit from later medieval ditch [494].

Most of the fired clay comprises abraded amorphous fragments but of particular note are 23 fragments (773g in weight), with wattle impressions from pre-Roman ditch [670] (669) indicating structural material. Early to mid Roman ditch group [377] also has a piece with wattle impressions.

9.1.6 Catalogue of illustrated sherds (Figs 14 and 15)

Fig 14 (14.1 to 14.16)

1. Handmade Malvernian jar with some external sooting. Decorated with incised crosses. Fabric: MAL RE A. Pit [522] (516).

2. Palaeozoic-limestone-tempered ware jar decorated with a single line of impressed stamps. Fabric: MAL RE B. Ditch [436] (435).

3. Several sherds from a handmade grog-tempered jar with a burnished finish. The base has a minimum of three crudely made holes made after firing. Fabric: Glos TF 2A. Ditch [436] (432).

4. Everted rim, handmade jar. Fabric: MAL RE A. (218). Ditch group [255], cut [217] (218).

5. Handmade tubby jar decorated with a burnished line lattice. Fabric: MAL RE A. Ditch group [377], cut [510] (511).

6. Everted rim, handmade jar decorated with horizontal grooves. Fabric: MAL RE B. Ditch group [387], cut [439](441).

7. Everted rim handmade jar with a sooted exterior. Fabric: MAL RE B. Ditch group [256], cut [224] (225).

8. Handmade Malvernian ware jar with a highly polished black exterior finish. Decorated with groups of lightly incised diagonal lines set between two horizontal girth grooves, Fabric: MAL RE A. Gully group [666], cut [553] (552).

9. Handmade rolled rim jar with a sooted exterior. Fabric: MAL RE A. Ditch group [188], cut [92] (91).

10. Wheelmade carinated bowl. Fabric: SVW OX. Ditch group [486], cut [530] (529).

11. Large, handmade, beaded rim storage jar. Fabric: MAL RE B (Glos TF 216). Ditch group [486], cut [530] (529).

12. Handmade, flat rim dish with irregular spaced burnished line decoration on the interior. Grey in colour. Fabric: MAL RT (Glos TF 19). Ditch group [389] (505).

13. Lid knob. Grey in colour. Fabric: MAL RT (Glos TF 19). Ditch [141] (138).

14. Bowl with stamped decoration. Fabric: OXF RS. Young 1977, form C59 dated 310-60. Ditch group [387], cut [439] (441).

15. Base from a bowl with an illiterate potter's stamp (cf Young 1977, fig.68.no.18). Fabric: OXF RS. sf 11. Unstratified.

16. Perforated disk made from a potsherd. Fabric: MAL RE B (Glos TF 216). sf 7 Furrow group [390] (93).

Fig 15 (15.17 to 15.24)

17. Wide-mouthed jar with a pendant lip. Fabric: SVW OX. Ditch group [188], cut [92] (91).

18. Hemispherical bowl with an out-turned rim. Fabric: SVW OX. Ditch group [377], cut [487] (489).

19. Shallow, flanged bowl with a worn interior. Fabric: DOR BB1. Ditch group 377 [487] (489).

20. Wide-mouthed bowl. Fabric: SVW OX. Ditch group [377], cut [487] (489).

21. Fragment of a round flat tile in Malvernian fabric. Incised lines on upper surface. Furrow group [249], cut [115] (114).

22. Fragment of a round flat tile in Malvernian fabric. Incised lines on lower surface. Possible stud marks on edge of break on upper surface (not illustrated). Diameter 0.6m. Ditch group [388], cut [276] (279).

23. Handmade jar in a sandy fabric with organic content. Fabric: SXS1. Red-brown surfaces with a black core. Ditch group [495], cut [148](149).

24. Small narrow necked, handmade jar. Fabric SXO1. Red-brown exterior with a black interior and core. Subsoil (009).

9.2 Metal and worked bone objects by H.E.M. Cool

9.2.1 Introduction

The small finds recovered during the excavation were predominantly of iron and, where independently dateable, of late medieval or post-medieval date. Much of this later material was found concentrated in the vicinity of structure [008]. The small number of items that can be associated with Romano-British and late Saxon occupation on either contextual or typological grounds are discussed first, followed by the later material. Unidentifiable fragments of iron from the topsoil are not presented here.

9.2.2 Roman

The fact that there are so few Romano-British items given the number of features of that date excavated, confirms the view that the focus of domestic occupation at this period lay elsewhere. The people who lived in Gloucestershire at that time were prolific users of material culture, and even quite small native settlements can be expected to produce modest but varied assemblages of 'things'.

A trumpet brooch of very uncommon form was found unstratified (no. 1). It is a variant of a Hull type 170 and its rarity can be appreciated from the fact that in discussing brooches like this Hattatt (1989, 86-7) knew of only three examples and it is not discussed at all in Bayley and Butcher's survey (2004). It is unfortunate that no. 1 was unstratified as none of the others have any contextual information that might help dating. The trumpet-shaped head would suggest that it was made during the period from the final quarter of the 1st century AD to, probably, the third quarter of the 2nd century; but no closer dating is currently possible.

Hobnails from shoes were found with skeletons (047), (081), (084) and (705). In addition individual examples were found in the topsoil 334 (no. 2) and the subsoil 002 (no. 3). The latter includes two that were corroded together, possibly indicating they were disturbed from a grave. The only other items of Roman date were one complete and two fragmentary iron nails from the fill of ditch [414] (408) and a small fragment of copper alloy (no. 4) from a 3rd century ditch fill.

9.2.3 Saxon

Only one item, the spindle whorl (no. 5), can be suggested as being of Saxon date. Spindle whorls made of cattle epiphyses such as this are commonest in the late-Saxon to early medieval period (Walton Rogers 1997, 1741-3; see also Woodland in Biddle 1990, fig. 45 no. f). It was recovered from the fill of ditch [494] where it may be assumed to be residual.

9.2.4 Medieval and post-medieval

A rowel spur (no. 6) found in the topsoil is characterised by having arms that were not deeply curved below the ankle and a relatively short neck for the rowel. Such features would not be typical of the earlier rowel spurs from the 13th to 15th centuries (Ellis 1991, 58-61), so it seems most likely that this piece was associated with the early post-medieval occupation on the site. From its context the horseshoe fragment, no. 7, is probably of similar date. Horseshoe fragments are notoriously difficult to date, but this one has no features that would argue it needed to be residual in the context it was found in.

Knives were a common find with one (no. 8) coming from ditch [494] and two others (nos. 9 and 10) coming from the topsoil that sealed structure [008]. In addition there were two other blade fragments (nos. 11 and 12) coming from the ditch fill and a further two from other topsoil contexts (nos. 13 and 14). No makers marks were recognised on any of these items, but it should be noted that the iron was not in good condition and the surfaces were frequently missing. From its size no. 8 is clearly a small personal knife. None of the others show any specialised features and can be regarded as general purpose knives. Two have whittle tangs (nos. 8 and 9) whilst the third, where indications of the handle attachment remain (no. 10), is a scale tang knife which had handle plates fastened by copper alloy fittings. An assemblage of knives with both scale and whittle tangs would be typical of the later 15th and 16th centuries (Every and Richards 2005, 144-5).

The rest of the finds for which a function can be suggested are all items of structural ironwork. All of them came from either the fill of ditch [494] or the topsoil sealing structure [008] and so are associated with the early post-medieval occupation of Period 6. Structural ironwork tends not to be chronologically sensitive but all are types known to have been in use during the 15th to 16th centuries. The candle-holder no. 15 with an angled stem designed to be driven into a wall can be paralleled in a 15th century context at Winchester (Goodall, in Biddle 1990, 983 no. 3534). Hinge pivots such as no. 16, also designed to be driven into a wall, were a common find in that city from the 10th to the 17th centuries (*ibid.* 338-43 nos. 564-647). From its size no. 16 would probably have been appropriate for a relatively small door or shutter. A virtually complete hinge with U-shaped eye is also present (no. 17). It would have been used with a pivot such as no. 16, though is of a size suitable for a more substantial door. Again these have a long history though they appear to become more common in the later medieval period (Ottaway 1992, 637-9). The fragmentary curved bar no. 18 is probably from a similar hinge whilst the terminal no. 19 might have come from the end of a hinge strap or from the sort of binding straps put around chests. The out-curved ends are typical of the decorative flourishes often seen on such straps (e.g. Goodall in Biddle 1990, fig. 85).

In contrast to this concentration of late structural ironwork around structure [008], iron nail fragments were slightly more widely scattered, but remained concentrated in the eastern side of Area 1. One came from the fill of ditch [494], others came from subsoil and topsoil contexts associated with structures [004] and [006], and seven fragments in total came from the fills of ditch [037] and pit [034] on the southern margin of the area. Given that these contexts all lie away from the main concentration of Romano-British features, it is likely that they were all associated with the late occupation rather than being residual from the earlier activities on the site.

Finally a fragmentary iron bar (no. 20) from the topsoil over structure [008] can be considered. One end has a semi-circular curve and the other may have been bending before it was broken. Though the identification can only be offered tentatively, these features and the size of the piece would be consistent with it coming from a lock mechanism, see for example one from London in a context dated to the second quarter of the 16th century (Egan 2005, 75 no. 323).

9.2.5 Catalogue of metal and bone objects

9.2.5.1 Roman material

- 1 Unstratified, sf 4. Trumpet brooch; copper alloy. Trumpet head with scar indicating it originally had a cast headloop; two semi-circular lugs behind head holding spring which judging from iron corrosion products around the lugs was probably of iron; D-sectioned bow tapering and flattening to flat projecting foot; deep trapezoidal catch-plate. Centre of bow has a flat projecting lug in the form of two D-shapes, each perforated; side of bow has small semi-circular expansion at centre point of this lug. Present length 49mm, width of head 14.5mm.
- 2 (334). Hobnails (2), iron. Lengths 12mm
- 3 (002). Hobnails (3), iron. Heads only, two corroded together.
- 4 (548), sf 23. Fragment, copper alloy. Irregular sphere. Diameter 5mm.

9.2.5.2 Saxon (?) material

5 (073). Spindle whorl: proximal epiphysis of cattle femur. Edge chipped; shows evidence of burning. Diameter 45mm, depth 23mm, perforation diameter 10mm.

9.2.5.3 Medieval and post-medieval material

- 6 (007), sf 27. Rowel spur; iron. D-sectioned curved sides, one with single ring terminal, other broken; rectangular neck divided along half of its length. Length 135mm, span c. 95mm.
- 7 (702), sf 33. Horseshoe; iron. Central part of web with four rectangular nail holes. Current length 90mm, width of web 30mm.
- 8 (708), sf 30. Knife, whittle tang; iron. Square-sectioned tang, broken at expanded terminal; blade has straight edge with back sloping down slightly towards angled tip. Length 130mm, length of blade 82mm, maximum width of blade 12mm.
- 9 (007), sf 34. Knife, whittle tang; iron. Rectangular-sectioned tapering tang; blade with straight back and edge tapering up to (missing) point. Tang set centrally to blade but at slight angle so that blade would have been pointing down. Present length 151mm, length tang 58mm, maximum width blade c. 24mm.
- 10 (007), sf 35. Knife, scale tang; iron and copper alloy. Lower part of tang extant with one copper alloy rivet, possibly of tube form; traces of copper alloy hilt guard; straight back continuing line of tang; much of blade edge and point missing. Present length 130mm, maximum width of blade extant 16mm.
- 11 (708), sf 29. Blade fragment; iron. Straight back with edge sloping up to point. Present length c. 115mm, present maximum width of blade c. 14mm.
- 12 (708), sf 28. Blade fragment; iron. Straight back with edge sloping up to (missing) point. Present length 79mm, maximum width of blade extant 12mm.

- 13 (005), sf 32. Blade fragment; iron. Straight back with edge sloping up to (missing) point. Present length 95mm, maximum width of blade extant 14mm.
- 14 (003). Blade fragment; iron. Rounded tip. Present length 50mm, maximum width of blade extant 18mm.
- 15 (708). Candleholder; iron. Broken conical holder; L-shaped stem. Length 68mm, length of arm 78mm; diameter of socket c. 20mm.
- 16 (073). Hinge pivot; iron. L-shaped. Length 57mm.
- 17 (007), sf 38. Hinge with U-shaped eye; iron. Strap with one end tapering and bent into a U-shape with a nail closing the U; other end has perforation for second nail. Length 123mm, maximum width 24mm.
- 18 (007), sf 36. Strap hinge; iron. Rectangular-sectioned bar; one end rounded with central perforation; other end bent up and broken. Present length 54mm, width 20mm, perforation diameter 6.5mm.
- 19 (708), sf 31. Strap hinge fragment (?); iron. Tapering plate, upper end broken, terminal has two curved points. Present length 47mm, maximum width extant 36mm.
- 20 (007), sf 39. Hooked bar; iron. Rectangular-sectioned, broken at both ends; one end has semi-circular curve, other possibly bending up. Present length 65mm, maximum width bar c. 7mm.
- 21 (054), sf 5. Bar; iron. Rectangular-sectioned, broken across perforation. Length 20mm, width 12mm.
- 22 (031), sf 2. Ring; iron. Now much fragmented. Diameter c. 50mm.
- 23 (201), sf 10. Collar; iron. Much fragmented. Diameter c. 25mm, width 17.5mm.
- 24 (008), sf 37. Object; iron. Broken plate with circular lug set at right angles. Dimensions 43 x 38mm.

9.3 Coin

A single unstratified copper alloy coin (sf 12) was retrieved from the site. The coin measures 16mm in diameter, but has lost almost all of its edge, and therefore any inscription, which could provide an accurate date. However, the obverse features a bust with a radiate crown of typical 3rd century date. The reverse features a figure standing.

9.4 Worked stone by Fiona Roe

9.4.1 Introduction

There are 13 pieces of utilised stone in this assemblage, consisting of three objects, five pieces of building stone, one funerary item and four fragments of burnt stone (Table 3). Not all come from dateable contexts but in most cases it has been possible to suggest where they may fit in the site sequence.

The earliest pieces are likely to be the four fragments of burnt stone, which may be later Iron Age or perhaps early Roman in date. Two of the objects are almost certainly Roman while the third could be Roman or medieval. A piece of worked Lias (W504) came from a probable Roman context, while the rotary quern, sf 41 (334), and the whetstone, sf 19 (615), could both relate to Roman activity on the site. Two of the pieces of building stone are also likely to be Roman. These are both pad-stones, sf 42 (702) and sf 43, found either poorly dated or unstratified. A fragment of window tracery (sf 40) is likely to be medieval and the funerary piece sf 1, part of an apparent coffin also seems likely to be medieval although it had been re-used in a probable post-medieval structure [006]. The two fragments of roofing tile, (002) and sf 25 (605), are less easily assigned to a particular phase but may well be later medieval or post-medieval.

9.4.2 Later prehistoric

There is no worked stone from later prehistoric contexts but a certain amount of later Iron Age/early Roman pottery was found and the burnt stone is likely to belong with the finds in this date range. One fragment is quartzite, one sandstone and two are limestone, all probably collected locally. Burnt stone is typical of the Iron Age in general, being found for instance at sites such as Beckford, Worcestershire (Roe, in prep), and Hillcourt Farm, Longdon, Worcestershire (Oxford Archaeology, in prep).

9.4.3 Roman

The main activity at Ashchurch was during the Roman period and this is where the stone objects probably should belong. Part of the lower stone of a rotary quern sf 41 (334) was found in topsoil. This is made of quartz conglomerate from the Upper Old Red Sandstone of the Forest of Dean/Wye Valley area, and is a material that is typical of Roman sites all over Gloucestershire and Worcestershire (Roe, in prep). A whetstone fragment sf 19 (615) came from a late medieval or post-medieval context, but the slab shape suggests a possible Roman artefact, although it could alternatively be a medieval one. It is made from a grey sandstone which macroscopic examination suggests could be Pennant sandstone, another material obtainable from the Forest of Dean and one that was much utilised during the Roman period. A worked fragment of the local Lias (W504) is less easily explained. It came from a Roman ditch and has a flat surface covered with a red deposit.

Building stone of probable Roman date takes the form of two pad-stones, sf 42 (702) and sf 43, neither of which comes from a fully dated context. Both are blocks of Jurassic limestone that is both oolitic and shelly and could have been obtained from the nearby Cotswolds or else from Bredon Hill. Each block has a rectangular hollow cut into the upper surface. Such shaped pad-stones are not of particularly common occurrence, but Cotswold limestone would have been ideal for making them and three examples, each with a square socket, were found at Birdlip Quarry, Cowley, Gloucestershire (Roe 1999, 420). A complete socketed pad-stone has also been recorded from Roman Alcester (Cracknell and Mahany 1994, 232 and fig 110, 29). Other Roman pad-stones were simpler, being unmodified stone slabs placed almost directly on the ground, such as the slabs used in the construction of the aisled building at the Bays Meadow villa in Droitwich, Worcestershire (Hurst 2006, 115 and fig 77.2), or the timber framed building found at Woolaston, Gloucestershire (Fulford and Allen 1992, 161). Sometimes slabs were placed at the base of post pits and there is some evidence for these at Orton Hall Farm (Mackreth 1996, 55). These last three sites demonstrate how post-pads were used in the construction of large aisled buildings or barns.

Two pieces of burnt stone came from Roman ditch fills (349) and (408) but, as discussed above, they probably relate to earlier activity in the area.

9.4.4 Medieval

No pieces of worked stone occurred in actual medieval contexts but two finds seem likely to fit within this particular period. Both would appear to have links with the nearby church. An unstratified piece of window tracery (sf 40) can be identified as an early example, plate tracery, in which circles were cut through solid stonework. Two such circular openings survive on the piece. It was made from good quality freestone, an oolitic limestone from the Jurassic. A potential source area for the similar oolite that was used in medieval Tewkesbury is quarries in the Inferior Oolite near Cheltenham (Sutherland 1997, 207). More Jurassic limestone, a cream coloured oolite with some fossil shell fragments, was used for a possible coffin of which only part of one end now survives, sf 1 [006]. Again quarries near Cheltenham seem a possible source for the limestone.

9.4.5 Late medieval/post-medieval

The whetstone sf 19 (615) was found inside a possible early post-medieval building. It has been suggested above that this could be a Roman object but it could alternatively be medieval or earlier post-medieval, being comparable, for example, with whetstones found at Deansway, Worcester (Roe 2004, 469). A fragment of roofing tile with a hole sf 25, was also found in a late medieval or post-medieval context (605), and this was made from a fine-grained, shelly limestone, probably not unlike roofing material used in medieval Tewkesbury (Sutherland 1997, 209) and also Deansway, Worcester (Roe 2004, 476). Fissile limestone suitable for roofing material occurs at many locations in the Cotswolds, and a fairly local source may be presumed. A fragment of another roofing material, dark grey shale sf 2, was unstratified, but its use may also be medieval or post-medieval, since similar shale was recorded in use during those periods at Deansway, Worcester (Roe 2004, 477). It is likely to have come from the borders of Wales, most probably by a route involving transport by boat down the river Teme and then the Severn.

9.4.6 Discussion

This small assemblage is entirely as might be expected from a site on the Gloucestershire/Worcestershire border. When it came to a choice of quern and whetstone materials, an element of conservatism operated, so there are no surprises in the selection of Upper Old Red Sandstone and Pennant sandstone. The pad-stones are of less usual occurrence and suggest the presence of an aisled building such as a barn at Roman Ashchurch. Local material, mainly Cotswold limestone, tended to be used for building stone, as far as was possible. However during the medieval period, river transport may have been used to bring shale for roofing from the Welsh borders, thus providing a wider choice in materials.

Context	SF	Description	Stone type
2		fragment possible roofing tile	shale, dark coloured, some mica, possibly from Wales
605	25	fragment roofing tile with hole	Jurassic limestone, fine-grained and shelly
702	42	large limestone block, irregularly shaped, with small square hollow in top. Pad-stone; block is c. 260 x 170 x 145 mm, hollowed part measures 99 x 92 mm, depth c 40 mm. ?Roman	Jurassic limestone, oolitic and shelly
u/s		large limestone block with irregular, rectangular hollow cut in top, all rather roughly worked Pad- stone; block is 365 x 283 x 200 mm, hollowed part measures 250 x 175 x 200 mm. ?Roman	Jurassic limestone, oolitic and shelly
u/s	40	shaped fragment, possible part of window tracery from nearby church, well shaped with carved grooves round two circular openings; now 185 x 158 x 68 mm. ?Medieval	Jurassic limestone, oolitic
334		1 fragment, burnt	quartzite
334		1 fragment, burnt	sandstone
349	21	1 fragment, burnt, part of small pebble	limestone
408		1 fragment, burnt	limestone
006		large moulded piece, possibly the head end of a limestone coffin; outer measurements 220 x 224 x 74 mm, width of hollowed part at end 92 mm. ?Medieval	Jurassic limestone, shelly and oolitic
334	41	lower stone from rotary quern with incomplete rim, fully pierced, underside left rough; present max diam c. 315 mm, th at hole 34 mm. ?Roman	Upper Old Red Sandstone, quartz conglomerate
615		fragment from whetstone, broken at either end, worn down to a bar shape; 51 x 35 x 19 mm. Late medieval/post medieval context	Coal Measures Sandstone, possibly Pennant sandstone
W504		2 fitting fragments burnt Lias, triangular cross- section and 2 flat surfaces, one of which is covered with red deposit; 61 x 39 x 22 mm	Jurassic limestone, Lias

Table 3: Catalogue of worked stone

9.5 Flint by David Mullin

9.5.1 Introduction

A total of 20 flints were recorded from the excavations at Ashchurch, the majority of which were waste flakes (Table 4). None were from features of certain prehistoric date. The material in the collection has been quantified and assessed using standard descriptions of lithic material outlined in Andrefsky (1998), Saville (1990) and Clark (1960). Descriptions follow the form: type, length/width, raw material, description/date. Cores were divided by Clark (1960) into three categories: single platform, bi-polar and multi-platform, with core maintenance pieces including core rejuvenation flakes and core trimming flakes. The width and breadth of flakes removed from a core can be indicative of date, but this is usually only on very broad terms, with a change from narrow to broad flakes noted from the Neolithic to the Bronze Age (Pitts 1978a and 1978b). Young and Humphrey (1999) suggest the continuation of flint use into the Iron Age, with a noticeable decline in knapping skills, increased use in local raw materials and a restricted range of tool types through time. Waste material can be divided into three classes, depending upon its stage in the core reduction process, following Saville (1990, 155) and further sub-divided into those flakes which retain a bulb of percussion and those that do not, the latter are classified here as shatter (Andrefsky 1998, 81-3). Chips are defined as pieces of waste less than 10mm by 10mm.

Context	SF	Description
007		Tertiary flake, gravel flint.
010		Secondary flake. Dark brown flint.
040		Thermally fractured flint flake. Gravel flint, unaltered.
061	26	Tertiary flake. Light brown flint. Utilisation along one lateral margin.
127		Natural gravel flint nodule. Some thermal fractures but unaltered.
127		Tertiary Flake. Gravel flint.
149		Tertiary flake. Gravel flint.
193	22	Distal blade fragment. Light grey flint ?Neolithic.
292		3x tertiary flakes. Gravel flint.
424		Chip. Light grey flint.
427	20	Broken tertiary flake with ?utilisation along one lateral margin. Gravel flint.
434	18	Blade mid-section. Light grey flint ?Neolithic.
541	13	Barbed and tanged arrowhead. Dark brown flint. One barb and one tang broken.
552		2x tertiary flakes. Patinated ?gravel flint.
554	14	Tertiary flake. Chert.
007		Tertiary flake, gravel flint.
010		Secondary flake. Dark brown flint.

Table 4: Catalogue of worked flint

9.5.2 Discussion

The majority of the material recovered from the excavations at Ashchurch consisted of waste flakes, predominantly of gravel flint. This material is probably of local origin: an island of Wasperton Terrace gravel occurs immediately to the north of the site. The other flint is of non-local origin, probably from the Wiltshire chalk and is of generally good quality. The two blade sections (sf 18 and sf 22) are probably Neolithic in date and the barbed and tanged arrowhead (sf 13) is early Bronze Age. Although the flints are residual in features of a later date they indicate Neolithic and Bronze Age activity in the vicinity. Early Bronze Age activity is not uncommon in the Tewkesbury environs and the barbed and tanged arrowhead adds to the evidence for occupation in this period.

An early Bronze Age pit containing two Beaker sherds, was excavated at Bredon Road, Mitton, Tewkesbury, c.3km to the north west of Ashchurch (GSMR 27139, Barrett 2004). Two phases of Bronze Age activity were recorded at Holm Hill, Tewkesbury, 4km south-west of Ashchurch (GSMR 4235), including a pennanular enclosure and a ditch. A pit associated with the ditch contained fragments of a vessel of shelly fabric and a rim "with Beaker affinities", together with the remains of a small animal internment (Hannan 1976). The site was one on which "about" ten worked flints, including a barbed and tanged arrowhead had been found in the ploughsoil in 1974 (Hannan 1975). An early Bronze Age burial was excavated at the Sabrina Cinema site in Tewkesbury, c.3km to the west of Ashchurch (GSMR 7724, Hannan 1993, 31) and a double Beaker burial was excavated from Bredon Hill, c.6km to the north-east of Ashchurch (Thomas 1967). Extensive excavations along the line of the Tewkesbury Eastern Relief Road (Walker et al 2004) uncovered worked Neolithic flint, as well as a barbed and tanged arrowhead. Beaker pottery was also recovered from a residual context at Rudgeway Lane, c.2.5km to the south west of Ashchurch (ibid, 41).

The material from the excavation at Ashchurch, although from residual contexts, adds to the evidence for the occupation of the Tewkesbury area during the Neolithic and early Bronze Age periods.

9.6 Slag by Lynne Keys

9.6.1 Introduction and methodology

A small quantity of material (almost 8.7kg), initially identified as iron slag, was examined by eye for this report. Most had been recovered by hand but there were some small quantities from samples. The assemblage was categorised on the basis of morphology and each slag type in each context was individually weighed and recorded. In addition, a magnet was run through the soil in the bags of slag and the sample residues to detect micro-slags such as hammerscale. Table 5 summarises the quantified record. A detailed quantification is held in the site archive.

Table 5: Quantified summary of slag types

Slag type	Weight g
cinder	1116
fuel ash slag	2098
run slag	1042
smithing slag	169
undiagnostic	3648
vitrified hearth lining	327

9.6.2 Explanation of terms and discussion of the slag types

High temperature industries generate waste products and residues, some diagnostic of the process being carried out and others not. The process can only be determined in the light of any diagnostic evidence from the site. Similar debris can be produced by more than one high temperature process (even within an industry) and, in the absence of any diagnostic evidence, is referred to as being undiagnostic.

Some types of iron slag are diagnostic of iron smelting or smithing, while others are not. Run slag is what its name suggests and was usually a product of smelting. The run slag from Ashchurch, however, consists of single or very small fragments and it is not possible to say for certain whether it was smelting rather than smithing which produced it. Iron slag described as undiagnostic could have been produced by either process or has lost its morphology in being broken up during deposition, re-deposition or excavation. Most of the pieces found amongst the Ashchurch material were very small and abraded. Some samples presented for examination were labelled as hammerscale but no hammerscale was present in these – the bags contained only tiny pieces of clay or pea grit magnetised by exposure to high temperature. Only one small hammerscale sphere was present amongst all the slag and this from a fairly late context.

Other types of debris in the assemblage may be the result of a variety of high temperature activities - including domestic fires - and cannot be taken on their own to indicate iron-working was taking place. They include materials such as fired clay, vitrified hearth lining, cinder, and fuel ash slags. However if found in association with iron slag they may be products of the process.

Hearth lining can vary from highly vitrified (which may include cinder) nearest the tuyère region (the region of highest temperature) to burnt clay on the side furthest from the heat. By itself it is not diagnostic of high temperature industrial activity and much of the Ashchurch cinder probably originated in domestic hearths.

Cinder is a very porous, highly vitrified material formed at the interface between the alkali fuel ashes and siliceous material of a hearth lining. On many excavations it represents the lighter portion of vitrified hearth lining but on the Ashchurch material it was sometimes so similar to fuel ash slag that often only the adherence to it of other parts of hearth lining permitted secure identification.

Fuel ash slag is a very lightweight, highly porous, light coloured (grey-brown) residue produced by a high temperature reaction between alkaline fuel ash and siliceous material such as a clay lining or surface. It can be produced by any high temperature activity where these two constituents are present including domestic hearths, accidental fires, and even cremations (for further discussion on the subject see Bayley 1985, 41 and Henderson et al 1987a and 1987b). The fuel ash slag from Ashchurch is not indicative of any industrial activity and probably originated from domestic activity or the accidental burning down of huts; the size of some pieces indicates the latter.

9.6.3 Interpretation of the assemblage

Most of the assemblage was recovered from ditches, gullies, topsoil and, occasionally, pits. The presence of considerable quantities of fuel ash slag, sometimes as large fragments, indicates burning down of huts (possibly late Iron Age or Romano-British) rather than industrial activity. The larger pieces of cinder probably derive from the same fires.

The undiagnostic iron slag is very abraded and found in all kinds of features in small quantities. The diagnostic iron slag is mainly present in late or possibly fairly recent contexts. It is unfortunate that the quantities of both types are not large enough to enable them to be interpreted as iron-working activity taking place on site in any particular period.

10 Environmental evidence

10.1 Human skeletal remains by Malin Holst

10.1.1 Summary

Osteological analysis was carried out on five skeletons, which were thought to date to the Romano-British period. The analysis revealed that this group included three mature adults and two adolescents. Two of the adults were male, while one of the mature adults and one of the adolescents were female. It was not possible to estimate sex in the second adolescent. The three adults showed evidence for age-related joint deterioration as well as signs of hard physical work. Both children had suffered from infectious diseases, which may have been fatal. Potentially, both adolescents suffered from tuberculosis and this appears to correlate with a higher prevalence of tuberculosis in Roman Gloucestershire compared with that in other parts of the country.

The cemetery was organised with burials in flat graves and the skeletons were buried with the head to the north and the feet to the south. All five skeletons were interred in extended supine positions. The skulls of one of the mature males and an adolescent had been removed and placed by the skeletons' feet. This is a probable ritual practice, which is widely distributed particularly in late Roman cemeteries.

10.1.2 Introduction

In September 2004 York Osteoarchaeology Ltd carried out the osteological analysis of five skeletons. The skeletons were placed in single graves and orientated in a north to south direction, with the heads to the north. They were laid in supine extended positions, with the hands on the hips or beside the thighs. Notably, the skulls of skeleton (084) and skeleton (705) were found by the feet of the individuals; in the case of skeleton (705), the skull had been placed upside down.

10.1.2.1 Aims and objectives

The aim of the skeletal analysis was to determine the age, sex and stature of the skeletons, as well as to record and diagnose any skeletal manifestations of disease and trauma.

10.1.2.2 Methodology

The skeletons were analysed in detail, assessing the preservation and completeness, as well as determining the age, sex and stature of the individuals (Appendix 2). All pathological lesions were recorded and described.

10.1.3 Osteological analysis

Osteological analysis is concerned with the determination of the identity of a skeleton, by estimating its age, sex and stature. Robusticity and non-metric traits can provide further information on the appearance and familial affinities of the individual studied. This information is essential in order to determine the prevalence of disease types and agerelated changes. It is crucial for identifying gender dimorphism in occupation, lifestyle and diet, as well as the role of different age groups in society.

10.1.3.1 Preservation

Skeletal preservation depends upon a number of factors, including the age and sex of the individual as well as the size, shape and robusticity of the bone. Burial environment, post-depositional disturbance and treatment following excavation can also have a considerable impact on bone condition. Preservation of human skeletal remains is assessed subjectively, depending upon the severity of bone surface erosion and post-mortem breaks, but disregarding completeness.

Preservation was assessed using a grading system of five categories: very poor, poor, moderate, good and excellent. Excellent preservation implied no bone surface erosion and very few or no breaks, whereas very poor preservation indicated complete or almost complete loss of the bone surface due to erosion and severe fragmentation.

Three of the skeletons were in a poor condition (Table 6). They exhibited considerable erosion and had suffered from considerable post-mortem fragmentation. Skeleton (081) and (731) were less severely affected and showed little evidence for erosion, but also exhibited many post-mortem breaks.

It is probable that medieval ploughing had caused loss of the majority of spongy bones, including the spines and joints. Additionally, many of the smaller bones, such as fingers and toes, as well as the fragile bones of the skull had been lost. As a result, the skeletons were only between 40% and 70% complete (see Table 6).

When skeleton (084) was excavated, its skull was not located. Later excavation by the feet of the skeleton revealed a skull, which was given context number (723) and which was found to be associated with skeleton (084). Upon osteological analysis, it was confirmed that the skull was likely to have belonged to skeleton (084).

Skeleton	Preservation	Completeness	Age	Sex	Stature	Pathology
047	Poor	40%	46+	F	_	Spinal DJD, DJD in left scapula, right clavicle, both wrists and hips, bone excavations, haematoma or osteoma on left tibia
081	Moderate	70%	46+	M	169.3 ± 4.05cm	Spinal DJD, DJD in clavicles, pelvis, wrists, Schmorl's nodes, bones excavations, enthesopathies, periodontitis, caries, calculus, abscesses, dental infractions
084/723	Poor	55%	46+	М	-	DJD in jaw, left hip and right wrist, osteoarthritis in left wrist, bone excavations, calculus, caries
705	Poor	70%	13-15	-	-	Periostitis of ribs, calculus
731	Moderate	70%	15-17	F?	-	Endo- and ectocranial periostitis, Schmorl's nodes, bone excavations, calculus

Table 6: Summary of osteological and palaeopathological results

10.1.3.2 Minimum number of individuals

A count of the 'minimum number of individuals' (MNI) recovered from a cemetery is carried out as standard procedure in osteological reports on inhumations in order to establish how many individuals are represented by the articulated and disarticulated human bones (without taking the archaeologically defined graves into account). The MNI is calculated by counting all long bone ends, as well as other larger skeletal elements recovered. The largest number of these is then taken as the MNI. The MNI is likely to be lower than the actual number of skeletons which would have been interred on the site, but represents the minimum number of individuals which can be scientifically proven to be present.

The presence of five left mandibles suggested a MNI of five individuals.

10.1.3.3 Assessment of age

Age was determined using standard ageing techniques, as specified in Scheuer and Black (2000a and 2000b) and Cox (2000). Age estimation relies on the presence of the pelvis and uses different stages of bone development and degeneration in order to calculate the age of an individual. Age is split into a number of categories, from foetus (up to 40 weeks in *utero*), neonate (around the time of birth), infant (newborn to one year), juvenile (1-12 years), adolescent (13-17 years), young adult (ya; 18-25 years), young middle adult (yma; 26-35 years), old middle adult (oma; 36-45 years), mature adult (ma; 46+) to adult (an individual whose age could not be determined more accurately as over the age of seventeen).

In the three adult skeletons, age was established using dental wear, and the deterioration of the pelvic joints. These criteria corresponded in all three adults, who were aged 46 or older.

The development of the teeth and fusion of the joints was used to establish age in the two children (see Table 6). While the two ageing criteria corresponded in skeleton (731), who was aged between fifteen and seventeen years, they differed in skeleton (705). The dentition of this individual indicated that it was aged between twelve and thirteen years, whereas the bone fusion suggested an age of thirteen to fifteen years. It is possible that the dentition developed slower than the skeleton. The mean age for this individual would be thirteen to fourteen years. Alternatively, it is possible that the skeleton of an older individual was interred with the skull of a younger child. Parallels for this practice exist at America Street, Southwark, London (Melikian 2003, 25).

10.1.3.4 Sex determination

Sex determination was carried out using standard osteological techniques, such as those described by Mays and Cox (2000). Assessment of sex in both males and females relies on the preservation of the skull and the pelvis and can only be carried out once sexual characteristics have developed, during late puberty and early adulthood.

Few sexing characteristics survived in the case of skeleton (047) and skeleton (084). However, the feminine characteristics of the pelvis of skeleton (047) indicated that this individual was female, whereas the robust nature of the skull of skeleton (084) suggested that this was a male. On the basis of the characteristics of the skulls and hips, as well as measurements of the long bone joints, skeleton (081) was also found to be male.

Although it is normally not possible to determine the sex in adolescent remains, the wide sciatic notch of the pelvis suggested that skeleton (731) was likely to have been female.

10.1.3.5 Metric analysis

Stature depends on two main factors, heredity and environment. However, stature can also fluctuate between chronological periods. Stature can only be established in skeletons if at least one complete and fully fused long bone is present. The bone is measured on an osteometric board, and stature is then calculated using a regression formula developed upon individuals of known stature.

Based on measurements of the left humerus, skeleton (081) was 169.3cm tall, with a standard error of 4.05cm. The standard error was relatively great, because arm bones only provide a rough guide to stature. The leg bones, which did not survive intact, in this case, would have provided a much more accurate estimate. The stature of skeleton (081) corresponded with the mean stature for Roman males calculated by Caffell (1997), which is 169.03cm.

Leg measurements were obtained from the femora and tibiae and used to calculate robusticity indices. The *platymeria* index is a method of calculating the shape and robusticity of the femoral shaft. The femora of skeleton (047) and (084) were *platymeric* (broad and flat), while the femora of skeleton (081) were *eurymeric* (flatter). The *platycnemia* index of the tibiae was calculated in order to establish the degree of tibial shaft flatness. The tibial shafts of skeleton (047) and (081) were *eurycnemic* (of average dimensions), while the tibiae of skeleton (084) could not be measured.

It was not possible to measure any of the crania, as the skulls were incomplete and very fragmentary.

10.1.3.6 Non-metric traits

Non-metric traits are additional sutures, facets, bony processes, canals and foramina, which occur in a minority of skeletons and are believed to suggest hereditary affiliation between skeletons (Saunders 1989). The origins of non-metric traits have been extensively discussed in the osteological literature and it is now thought that while most non-metric traits have genetic origins, some can be produced by factors such as mechanical stress (Kennedy 1989) or environment (Trinkhaus 1978).

A total of thirty cranial (skull) and thirty post-cranial (bones of the body and limbs) non-metric traits were selected from the osteological literature (Buikstra and Ubelaker 1994, Finnegan 1978, Berry and Berry 1967) and recorded. The majority of non-metric traits were observed on the skull. These were anomalies that would not have affected the individual.

Cranial traits are more likely to be genetic in origin than those noted on the remaining part of the skeleton, which can often be created by mechanical stress. The latter included *hypotrochanteric fossae*, which are depressed areas at the back of the femora at the attachments of the *gluteus maximus* bottom muscle. The raised areas are thought to reflect strain on the muscle. Other post-cranial traits observed included *exostosis in trochlea fossa*, which is thought to reflect muscle strain and was noted in skeleton 081. *Allen's fossae* and plaque were noted on the hip joints of skeletons (731) and (081), which are characterised by bulging of the joint surface. None of these traits would have caused any symptoms.

Cranial non-metric traits observed included *parietal foramen* and *sutural mastoid foramen* (small depressions on the skull surface) on the temporal parts of the skulls of skeletons (081) and (084). The cranium of skeleton (705) exhibited *absent zygomaticofacial foramen* (an absent small hole in one of the facial bones). These minor anomalies were probably genetic in origin. skeleton (047) did not exhibit any non-metric traits.

10.1.3.7 Conclusion

The osteological analysis of the skeletal remains established that the three adults were aged 46 or older. Two of the adult skeletons were males, while the third mature adult was female. The two children were adolescents, aged between 13 and 14 years and between 15 and 17 years. It is probable that the older adolescent was also a female.

Stature could only be calculated in the case of one male adult, which corresponded with mean Roman stature. The skeletons were strongly built, suggesting that they had habitually carried out physical labour.

10.1.4 Pathological analysis

Pathological conditions (disease) can manifest themselves on the skeleton, especially when these are chronic conditions or the result of trauma to the bone. The bone elements to which muscles attach can also provide information on muscle trauma and excessive use of muscles.

10.1.4.1 Infection

Evidence for infection was observed in the two adolescent skeletons, skeletons (705) and (731). In both cases, the infection was characterised by grey woven bone, which is typical of infection that was active at the time of death. In the younger adolescent skeleton (705), woven bone was adhering to the pulmonary (lung) side of the necks (the spine end) of two central right ribs and the necks and shafts of eight central left ribs, as well as eight (unidentified) rib fragments (Plate 1).

Rib periostitis is thought to result from lung infections, such as pneumonia or tuberculosis. The lesions only form on the bone if the inflammation is chronic and long-standing (Roberts and Manchester 1995, 125). The presence of woven bone indicates that this adolescent had suffered from the infection at the time of death and that the disease may have been fatal.

Skeleton (731), a 15 to 17 year old adolescent, also showed evidence for active inflammation on the endocranial (inner) surface of the skull (Plate 2). Considerable deposits of woven bone were noted on the endocranial surface of the frontal bone (forehead) and around the eye orbits. The evidence is indicative of a brain infection, such as meningitis and may also have been the cause of death.

It is unusual to see two cases of such severe infection in such a small Roman cemetery (discussed below). Rib inflammatory lesions have been noted in several other Roman cemeteries in Gloucestershire, including Cirencester, Gambier-Parry Lodge and Kingsholm (Roberts and Cox 2003, 113). The crude prevalence rate of rib lesions at these sites varied from 2.2% to 6.4%, with a mean of 5%, which is relatively high compared to Roman cemeteries in other parts of the country. According to Roberts and Cox (*ibid*, 112), the prevalence rate of rib inflammatory lesions increased from the Iron Age to the Roman period by 0.5% to 0.8%. Roberts and Cox (*ibid*) suggest that the increase may be due to houses being more polluted with smoke in the Roman period, or to climatic changes, or perhaps resulting from an increase in denser living conditions, causing greater prevalence of transmitted infections, such as pneumonia and tuberculosis.

Interestingly, internal cranial infection has been rarely reported from the Roman period. Roberts and Cox (2003, 127) found five British cases in the osteological literature, one of which was a female from Gambier-Parry Lodge, Gloucestershire. This woman was also a pituitary (proportional) dwarf. Roberts and Cox (*ibid*) suggest that this woman may have suffered from tuberculosis meningitis and it is possible that skeleton 731 suffered from the same infection.

The first cases of tuberculosis in Britain were observed in the Roman period (Roberts and Cox 2003, 118). The disease is transmitted from humans via the lungs through droplet infection, or through animals, via infected meat or milk (*ibid*). In those rural areas where people shared dwellings with their animals, lung infection could also spread from animal to human (*ibid*, 119). Roberts and Cox (*ibid*) found a prevalence rate of 0.2% of tuberculosis overall for the Roman period, with individuals affected coming from Dorset, Hampshire, Lincolnshire and Gloucestershire. Potentially, both adolescents suffered from tuberculosis and this appears to correlate with the higher incidence of rib and cranial inflammation, as well as tuberculosis in general in Gloucestershire.

10.1.4.2 Degenerative joint disease

The term joint disease encompasses a large number of conditions with different causes, which all affect the articular joints of the skeleton. Factors influencing joint disease include physical activity, occupation, workload and advancing age, which manifest as degenerative joint disease and osteoarthritis. Alternatively, joint changes may have inflammatory causes in the *spondyloarthropathies*, such as sceptic or rheumatoid arthritis. Different joint diseases affect the articular joints in a different way, and it is the type of lesion, together with the distribution of skeletal manifestations, which determines the diagnosis.

The most common type of joint disease observed tends to be degenerative joint disease (DJD). DJD is characterised by both bone formation (osteophytes) and bone resorption (porosity) at and around the articular surfaces of the joints, which can cause great discomfort and disability (Rogers 2001).

All three mature adults suffered from joint disease. DJD was least evident in skeleton (084); however, this was probably the result of extensive post-depositional joint loss, rather than actual lower prevalence. The joints of the lower jaw of this individual showed extensive evidence for porosity, as well as osteophyte formation, (outgrowths of bone) indicative of joint degeneration.

Skeleton (047) and (081) suffered from mild DJD in the joints of the shoulders, hips and wrists. Both individuals also exhibited evidence for moderate joint disease in the spine (Plate 3). This was noted in almost all the excavated vertebral bodies and many of the articular facets. The bodies largely showed evidence for joint degeneration in the form of porosity, whereas the facets were more likely to be affected by osteophyte formation.

The intervertebral discs are the 'shock absorbers' of the spine, but these can degenerate as a result of gradual desiccation (age-related drying), which then causes transmission of the stress from the vertebral discs to the articular facets and ligaments (Hirsh 1983, 123). Spinal osteophytes form to compensate for the constant stress that is placed on the spine as a result of human posture (Roberts and Manchester 1995, 106). Increasing stress or activity can therefore lead to increased size and prevalence of osteophytes (*ibid*). Spinal joint disease was common in the Roman period, affecting 14% of the population (Roberts and Cox 2003, 145).

A different condition which affects the spine is Schmorl's nodes. Schmorl's nodes are indentations in the upper and lower surfaces of the vertebral bodies (see Plate 2), most commonly in the lower thoracic vertebrae (Hilton *et al* 1976). Schmorl's nodes can result from damage to the intervertebral discs, which then impinge onto the vertebral body surface (Rogers 2001), and may cause necrosis (death) of the surrounding tissue. Rupture of the discs only occurs if sufficient axial compressive forces are causing pressure on the central part of the discs; frequent lifting or carrying of heavy loads can cause this.

Schmorl's nodes were observed on the fourth to eleventh thoracic and second lumbar vertebrae of skeleton (081) and the sixth to eleventh thoracic vertebrae of skeleton (731) (Plate 4). The Schmorl's nodes were more severe in skeleton (731), the 15 to 17 year old adolescent. Schmorl's nodes were also common in the Roman period, with a crude prevalence rate of 8.9% (Roberts and Cox 2003, 147).

Skeleton (084) suffered from osteoarthritis on the left lunate, a wrist bone (Plate 5). One of the joint surfaces of the bone was smooth and shiny as a result of eburnation (bone on bone rubbing), which was caused by bone to bone contact following the complete destruction of the joint cartilage. It is possible that the presence of DJD in the same bone in skeleton (047) suggests that this population carried out a habitual activity, which placed particular strain on this part of the wrist. Notably, arm measurements suggested that this individual was right, rather than left, handed.

Osteoarthritis is a degenerative joint disease characterised by the deterioration of the joint cartilage, leading to exposure of the underlying bony joint surface. The great range of variation of patterns and prevalence of osteoarthritis in different populations suggests that it is not only an expression of mechanical stress, but influenced by a combination of factors, including the age profile of the population, lifestyle, food acquisition and preparation, social status, sex and general health (Larsen 1997, 179). It is possible that the osteoarthritis in the wrist had crippling effects on the individual, although some people may have severe joint changes without any disabling affects (Cockburn *et al* 1979).

10.1.4.3 Trauma

Occasionally, it is possible to infer trauma to the soft tissue on the bones, in the form of ligamentous or muscular trauma. This is expressed through the formation of bony processes (*enthesopathies*) at the site of ligament attachments. Additionally, it is possible to observe bone defects at the site of muscle insertions, which are the result of constant micro-trauma and are usually activity-related (Hawkey and Merbs 1995, 334).

The majority of muscular trauma was noted in the arms, particularly the humeri of this group. All individuals, with the exception of the young adolescent skeleton (705) exhibited bone defects or *enthesopathies* at the attachment sites of *pectoralis major* on the humerus. Further upper arm muscle trauma was noted in skeletons (047) and (081) at the attachment sites for *teres major* in skeleton (081) and (084). These muscles are responsible for movements of the upper arm and shoulder (Stone and Stone 1990). Further upper limb muscle trauma was noted on the ulnae of skeletons (081) and (084), at the attachment sites of *brachioradialis* and *brachialis*, which are responsible for flexing the forearm at the elbow. Trauma to *biceps* was noted on the right radius of skeleton (047) and both radii of skeleton (081). This muscle also flexes the forearm, and supinates the hand.

Several cases of muscular trauma were also observed in the lower limbs of the three mature adults. They included *enthesopathies* on the attachment sites of the Achilles' tendon at the feet of skeleton (084). This muscle causes the tip of the foot to move downwards, an action required for walking, climbing and squatting Stone and Stone 1990). This male skeleton also showed evidence for muscular strain to *gluteus maximus*, the main muscle of the bottom. The muscle extends and laterally rotates the hip joint and extends the trunk. It is possible that skeleton (084) sustained the leg and foot *enthesopathies* through an activity such as long-distance walking.

Skeleton (081) showed evidence for muscular trauma in the form of *enthesopathies* on the knee for *rectus femoris*, a muscle that extends the leg at the knee joint and flexes the thigh at the hip joint (Stone and Stone 1990, 166).

A well-incorporated raised area of bone was noted on the central part of the left tibia of the mature adult female, skeleton (047). The area was 16.2mm long (infero-superiorly) and 7mm wide. It was raised by 0.9mm and is thought to have been an ossified haematoma (a blood clot that has become bone). Haematomas can be the result of direct blunt force trauma, or tearing of muscle fibres, causing blood to collect and clot. If the muscle is exercised too soon following the injury, the blood clot may ossify, producing a bony lump at the site of the haematoma. Alternatively, it is possible that this raised area represents a benign tumour, such as an osteoid osteoma or osteochondroma.

10.1.4.4 Conclusion

The skeletal evidence suggests that the younger members of this population suffered from severe infection. The younger child suffered from a lung infection, such as pneumonia or tuberculosis, which may have been fatal. The older adolescent showed evidence for brain infection, which was active at the time of death. It is possible that this was tuberculosis meningitis. Notably, a relatively large number of cases for tuberculosis have been reported from the Roman period in Gloucestershire and it is possible that these two children also suffered from this often fatal disease.

Evidence for joint degeneration was noted in the three mature adults and is thought to have been age-related. Trauma to the spine and muscles of the arms and hips suggest that these individuals carried out heavy physical work, probably from a young age, as these lesions were also noted in the older adolescent. An ossified haematoma on the shin of skeleton (081) suggests that this individual had suffered a muscular injury some time before death.

10.1.5 Dental health

Analysis of the teeth from archaeological populations provides vital clues about health, diet and oral hygiene, as well as information about environmental and congenital conditions.

Some of the jaws were incomplete as a result of post-depositional factors. Of the total 125 tooth positions present, 97 teeth were recovered. Thirteen teeth had been lost ante-mortem, while a further 13 teeth had been lost post-mortem. In the case of skeleton (081) ante-mortem tooth loss was probably caused by dental abscesses, which were well-healed at the time of death. Severe erosion of the jaw bones in the other mature adults meant that it was not possible to determine the causes of ante-mortem tooth loss in these cases.

Two of the third molars of skeleton (705) were not erupted and this meant that these teeth could not be counted.

Dental wear tends to be more common and severe in archaeological populations than in modern teeth. Severity of the dental wear was assessed using a chart developed by Smith (1984). Each tooth was scored using a grading system ranging from 1 (no wear) to 8 (severe attrition of the whole tooth crown). The surviving teeth showed severe wear in the mature adults – particularly skeletons (047) and (084). The teeth of the two adolescents, which had relatively recently erupted teeth, exhibited little wear.

Calculus (dental plaque) is commonly observed in archaeological populations whose dental hygiene was not as rigorous as it is today. Calculus mineralises and forms concretions on the tooth crowns, along the line of the gums. Calculus was observed in the majority of teeth (92%), and was slight to moderate. Notably, both adolescents also suffered from extensive calculus deposits, suggesting that their oral hygiene had not been adequate. The calculus prevalence rate at this site was high, compared with a Roman tooth prevalence of 43.4% (Roberts and Cox 2003, 132). This may be related to poor dental care, or to a diet high in protein.

It is possible that a bump or fall caused the infractions (dental chipping) of the first upper right incisors of skeleton (081) (Plate 6). This individual also displayed the complete fracture of the upper left canine, causing loss of the whole tooth crown, down to the root. Wear on the chipped and broken parts of the three teeth implies that these injuries had occurred some time before death.

Skeleton (081) suffered from four dental abscesses, which were located around the root of four teeth. The infections were localised, causing holes to form at the base of the tooth roots, which had released pus from the bone into the mouth. It is probable that the infection was extremely painful. Even today, with the availability of antibiotics, dental abscesses can be very persistent. In the past, however, they must have played a more significant role, debilitating and causing extreme pain, weakening of the immune system and, if the infection entered the bloodstream, fatal septicaemia. It is probable that one of the infections had developed as a result of caries lesions (cavities) at the upper right second premolar.

Cavities are multifactoral in origin, but develop as a result of aggressive bacterial attack in the presence of sucrose (Hillson 1996, 282) and fermentable carbohydrates (Roberts and Manchester 1995, 47). Skeleton (081) suffered from two further cavities, on the right upper third molar and lower left third molar. This tooth is difficult to clean due to its position at the back of the mouth. A small cavity was noted on the first upper right premolar of skeleton (084). This gives a prevalence rate of 4.1% of caries lesions in this population, which is lower than the overall Roman prevalence rate of 7.5% (Roberts and Cox 2003, 132).

The dental health of the three mature adults was poor, and included abscesses, cavities, calculus formation, periodontal disease and dental infractions. Initially it was assumed that this was caused by dental deterioration as a result of old age. However, the presence of extensive calculus deposits in the two adolescents suggests that this population did not practise adequate oral hygiene or enjoyed a diet high in protein.

10.1.6 Mortuary practice

10.1.6.1 Funerary ritual at Ashchurch

The skeletons found at Ashchurch were interred in single flat graves. All five skeletons were buried in a similar manner, in supine extended positions, with the hands on the hips beside the thighs. The skeletons were orientated with the heads to the north and the feet to the south.

The graves of the two mature males, skeleton (081) and skeleton (084), were possibly intercutting. It is probable that skeleton (081) was cut by the grave of skeleton (084). Skeleton (081) lay to the north of skeleton (084), with the lower legs of skeleton (081) lying in place of the skull of skeleton 084/723. Notably, the skull of this individual lay by his feet; no feet were evident for skeleton (081).

The skull of the younger adolescent, skeleton (705) was also interred by its feet, with the chin facing towards the upper body and the top of the head towards the feet. Both skeletons, whose skulls were found by their feet, had no surviving vertebrae due to poor preservation. It was therefore not possible to verify, whether the individuals had been decapitated antemortem or peri-mortem (at death), or whether the heads had been removed from the trunks once the bodies were partly decomposed.

10.1.6.2 Burial position and orientation

The burial ritual at Ashchurch corresponds with that frequently observed during the later Roman period. The majority of burials during this period tend to lie on their backs, with extended legs and the arms in a variety of relatively orderly positions (Clarke 1979, 352). The direction of orientation varies considerably between different cemeteries.

North to south orientation was common in early Roman burials in Gloucestershire, such as those at Parliament Street, Gloucester (Holbrook *et al* 2002, 396). The majority of Roman cemeteries show a tendency to burial in rows, and it has been found that those burials within a vicinity of one another often belong to family groups (Molleson 1992, 44; 53).

10.1.6.3 Similar cemeteries in the area

Further rural cemeteries similar to that at Ashchurch have been excavated in other parts of Gloucestershire. Six inhumations and two cremation burials were discovered at the domestic second to third century AD site at Totterdown Lane, Horcott, near Fairford (Pine and Preston 2004, 26). The inhumations were laid out supine and extended. The cemetery was more chaotically laid out than Ashchurch, and a variety of orientations were represented (*ibid*). The cemetery contained adult burials of both sexes, aged from 17 to 45.

At the Gloucester Business Park excavations at Hucclecote, twelve burials were found (Thomas *et al* 2003, 2). The cemetery was located near a domestic site, which is thought to have been in use from the 1st to the early 4th century AD. The burials were orientated north to south, like the Ashchurch skeletons, but many were laid out in semi flexed positions (*ibid*, 16). The age range varied from late adolescent to mature adult and both sexes were represented. One mature adult female (Burial 16) was interred with hobnails.

Although decapitations were not observed in the two rural cemeteries discussed above, they were recorded at the Bath Gate cemetery in Cirencester. This burial ground contained 453 skeletons, most of which were interred in supine extended positions (Viner and Leech 1982). The majority lay with their heads to the south and the feet to the north, in a relatively orderly manner. Six individuals were found to be decapitated, and in all cases, the spine had been carefully replaced in its original position (*ibid*, 108). The spine was severed at the atlas and axis in two cases, or between the third and fifth cervical (neck) vertebra. Analysis of the remains suggested that the individuals had been decapitated from the front to the back with a sharp weapon (*ibid*).

10.1.6.4 Decapitation

Although the Roman period is regarded as a separate entity from the ritual practices of the Iron Age, continuation of certain rituals can be observed. Examples in mortuary practice include partial dismemberment of bodies after death, as well as the continued significance of the skull. Both of these trends are reflected in a burial ritual, which occurs in cemeteries throughout Roman Britain and consists of the removal or displacement of the skull. The skull is often placed between the legs or by the feet of the dead individual, but may be placed back in the correct anatomical position (Taylor 2003, 18).

Quensel-von-Kalben (2000, 218-219) carried out a study of ten British Roman cemeteries of different size and setting. Of these, three contained individuals that had been decapitated; the prevalence of decapitated individuals in these cemeteries varied from 1% to 7%. The decapitations occurred in all cases in urban cemeteries that dated to the late 3rd and 4th centuries AD (*ibid*). Clarke (1979, 374), however, observed that decapitated skeletons could also be found in isolated graves and suggested that they were, in fact, more common in rural cemeteries.

Clarke (1979) examined the available data from Roman cemeteries for evidence of decapitations. He found numerous examples, which were widely distributed throughout southern England, East Anglia, the Midlands and western England, although he does not list any examples in the southwest. Recent work at Driffield Terrace in York (Antoni 2004 *pers. comm.*) has shown that decapitation can also occur in the northeast of England. In fact, 75% of skeletons from this cemetery were decapitated (Mason 2005 *pers. comm.*).

The majority of decapitated individuals in Roman cemeteries were adults of both sexes and all ages, although a small number of decapitated children have also been found (Merrifield 1987, 72).

In some cases, cut marks are obvious on the vertebrae of the neck. Occasionally, these cut marks are noted on the front of the neck, suggesting that the head was removed once the person was dead (Taylor 2003, 19). Clarke (1979, 415) found that all skulls at Lankhills, Winchester, had been removed from the front, with a careful cut using a knife, severing the windpipe and jugular vein. It has been suggested that such a cut could only be carried out after death (Taylor 2003).

In other instances, no such evidence for beheading can be observed (Melikian 2004, *pers. comm.*; Barber and Bowsher 2000, 89) and it is presumed that the head was removed after the body was at least partly decomposed (Taylor 2003, 18). In some cases, the skull was removed while some of the vertebrae and the mandible were still attached (*ibid*). In other cases, as at Watling Street, the skull of a male was removed after decomposition without the mandible and placed on his chest (Mackinder 2000, 15). It is now thought that graves were often kept open for some time after disposal of the dead person to allow mourners to be able to visit the corpse (Barber and Bowsher 2000, 310). It is possible that the skull was only removed after the body had been viewed and was therefore partly decomposed.

In common with many other Roman decapitation burials, the dismembered skulls at Ashchurch were placed by the feet of the skeleton. Clarke (1979, 373-374) also found that the majority of skulls were placed by or over the feet, or between the knees.

Interpretations for Roman decapitations have ranged from criminal execution to religious or superstitious motives. Execution of criminals through decapitation was a punishment in the Roman Empire, although it was apparently reserved for Roman citizens – the better rank of criminal (Taylor 2003, 19). At Lankhills, Winchester, a decapitated man with his skull placed on his knees had been buried above an empty coffin. This was interpreted as a substitute for a proper burial of the individual whose body could apparently not be recovered (Merrifield 1987, 67). Other instances of decapitation have been interpreted as the dead person not being able to sever links with the world of the living (Clarke 1979, 71) and this may clarify why the decapitation was sometimes carried out after decomposition. This might also be explained by the belief that the soul was thought to live in the head and the decapitation was a ritual separation of the body, which might have ensured that the individual could not return (*ibid*, 74-76). The position of the head between the legs has been interpreted as a possible rebirth ritual, with the head 'being born' (Robinson 1997, *pers. comm.*).

The continuation of the importance of the skull in ritual practice from the Iron Age to the Roman period can be observed in the number of separate skulls observed in unusual contexts. This includes the placement of the skull of a six year old onto the knees of an articulated eleven year old juvenile at America Street, London (Melikian 2004, *pers. comm.*). A number of examples of skulls in Roman wells have been observed, including Queen Street and Cannon Street in London and Headington in Oxfordshire (Merrifield 1987, 45-46). An interesting amalgamation of these two rituals was noted at the Camomile Street bastion in London, where the head of the elaborate tombstone of a soldier was broken off and placed between the ankles (*ibid*, 104-105).

10.1.6.5 Hobnail boots

The three individuals with surviving feet wore hobnail shoes and two hobnails were found with skeleton (081) whose feet had been truncated by grave cut [085]. In ten Roman cemeteries studied by Quensel-von-Kalben (2000, 218-219), eight contained individuals with hobnails. Of these, the prevalence of individuals with hobnails varied from 1% to 33%. The highest percentages were found in urban cemeteries that dated to the 4th century (*ibid*).

It is thought that the dead were provided with, or wore, their shoes so that they were equipped for their journey into the underworld (Wardle 2000, 29). At Cirencester, a probable hob nail shoe makers was located at one of the cemeteries, suggesting that they might have been making the shoes especially for burial (Salway 1981, 705-706).

The presence of shoes with decapitated individuals means that the theory that shoes were provided for the walk to the other world does not correspond with the hypothesis that individuals were decapitated in order to stop the spirits from wandering after death (Clarke 1979, 419).

At Ashchurch, it appears that the hob nail shoes were worn in all cases. In other cemeteries, women and children often wore lighter footwear, which was not nailed (Barber and Bowsher 2000, 137). However, this appears not to have been the case at Ashchurch. Apart from the shoes, there is little surviving evidence in most cemeteries that the dead were dressed.

10.1.6.6 Conclusion

Extended supine burial was the most common manner of inhumation burial during the Roman period and was observed in the majority of burials at large cemeteries, such as Cannington in Somerset (Rahtz *et al* 2000, 76) and smaller rural burial grounds, such as Totterdown Lane, Horcott, in Gloucestershire (Pine and Preston 2004, 26).

Similarly, orderly burial, which often followed the same orientation and could be in rows, was the most common form of burial in the majority of cemeteries, although exceptions, such as Trentholme Drive in York, (Wenham 1968) do exist. It has been argued that orderly burial became increasingly widespread towards the later Roman period, particularly in the 4th century AD (Clarke 1979, 352). At Ashchurch, this organized manner of burial was also followed.

Many Roman cemeteries showed evidence for burial in family plots. This has been suggested by the presence of individuals of different ages and sexes in the same area, but also clusters of non-metric traits (which can suggest family relationships). Such family groupings have been most obvious in the large cemeteries, such as Cannington in Somerset (Rahtz *et al* 2000, 63). It is possible that the small group buried at Ashchurch also represents a family plot, although this could not be verified using non-metric traits or other physical characteristics. However, the lack of similarities may be due to the poor preservation of the remains, rather than reflecting actual differences.

Both the practice of decapitation for burial and the provision of shoes appeared to originate in rural Roman cemeteries (Cleary 1992, 35). Both traditions tend to be most common in an area extending from Wessex through the Cotswolds to the Midlands (*ibid*, 34). Ritual interpretations of the practices are still debated and sometimes conflict. However, it is probable that decapitation of the two individuals, an adolescent and a mature male was more likely to be connected to ritual, rather than criminal punishment. Whether this was related to the disease the child was suffering, or to beliefs related to the after-world could not be established.

10.1.7 Discussion and summary

The osteological analysis of the skeletal assemblage from Ashchurch has provided a glimpse into the lives of the people buried there. The small group of skeletal remains included three elderly adults, two men and a woman. Additionally, two adolescents were found, one of which is thought to have been female.

The average age in the Ashchurch cemetery was 33 years, which corresponds with the demographic patterns of six of the ten British Roman cemeteries studied by Quensel-von-Kalben (2000, 218-219). It is possible that the cemetery represents a family plot, although poor bone preservation meant that this could not be verified using genetic skeletal traits.

In common with most other Roman cemeteries, the Ashchurch assemblage represented a relatively orderly plot, where graves were aligned along the same orientation. All individuals were buried in extended supine positions, with the heads to the north and the feet to the south. The burials contained hobnails from footwear with the exception of skeleton (081), whose feet were lost due to truncation by grave cut [085].

Despite the general uniformity of the burials, anomalies were noted in the form of two decapitations. These affected a mature adult male skeleton (084) and the younger adolescent skeleton (705). The skulls of these individuals were placed by their feet and in the case of skeleton (705), also turned upside down. A further anomaly was the unusual relationship between the graves of skeleton (081) and skeleton (084). The burials formed a line, with the grave of skeleton (084) cutting the feet of skeleton (081). Whether the two men were related in any way, or the graves were unintentionally intercutting could not be established.

The skeletal remains were in a poor to moderate condition and therefore only incomplete. The poor spinal preservation meant that it was not possible to examine the manner of decapitation in skeleton (084) and skeleton (705).

Age-related disease was observed in the three elderly individuals (skeletons (047), (081) and (084)) all of whom suffered from joint disease of the wrists and hips. Skeletons (047) and (081) also showed evidence for spinal joint deterioration, while skeleton (084) exhibited evidence for degeneration of the jaw. More severe joint disease in the form of osteoarthritis was noted in this man's left wrist. It is probable that the lesion was activity-related, especially when considering that all three adults suffered from wrist joint deterioration. Notably, skeleton (084) was right-handed, suggesting that perhaps an activity-related injury may have produced the arthritic lesion.

Evidence for trauma to those muscles responsible for moving the arm, shoulder and forearm was noted in all individuals, with the exception of the young adolescent skeleton (705). This, together with the joint disease noted in the mature adults, as well as injuries to the spines of skeletons (081) and (731), suggests that these people carried out physically demanding activities. It is likely that involvement in these activities began in the mid teens and was continued throughout life. It is also feasible that the ossified blood clot on the left shin of the mature female skeleton (047) was caused through a work-related incident.

The presence and severity of infectious disease in this population was noteworthy. Generally, infectious disease was relatively rare in Roman populations in Britain, probably because the lack of dense settlements prior to the Roman period meant that infectious diseases had not been able to spread easily. It is only in the Roman period that the first cases of tuberculosis (Roberts and Cox 2003) and leprosy (Roberts 2002, 213) have been recorded.

Both adolescents from Ashchurch showed evidence for inflammation. Skeleton (705) exhibited numerous inflammatory rib lesions, which were active at death and were probably caused by pneumonia or tuberculosis. Skeleton (731) showed evidence for an active brain infection, present when the individual died, which could have been due to meningitis, or even tuberculosis. Potentially, both adolescents suffered from tuberculosis and this appears to correlate with a higher prevalence of tuberculosis in Roman Gloucestershire compared with that in other parts of the country.

Notably, during a recent excavation at Bourton-on-the-Water, to the southeast of Ashchurch (Holst 2004), two skeletons with lesions indicative of infection were found at an Iron Age site. An adolescent from this site also showed evidence for rib lesions, while a two-year-old juvenile exhibited evidence for brain infection. It is possible that the children in this much earlier cemetery also suffered from tuberculosis, or they may have been ill with pneumonia and meningitis.

The presence of the small Roman cemetery at Ashchurch provides an insight into Roman health in Gloucestershire, as well as Roman mortuary rituals. The funerary rites practiced at Ashchurch suggest that a small local group, perhaps representing a family, had been interred in a regular manner. The individuals were equipped with hobnail boots and may have been fully dressed, although no evidence for clothing survived. Decapitation of two of the individuals was probably carried out as part of a ritual custom, rather than criminal punishment. Theories for ritual post-mortem decapitation suggest it prevented spirits from wandering after death, or symbolised rebirth, although the reasons for this practice are evidently not yet understood.

10.2 Faunal remains by Ian L. Baxter

10.2.1 Introduction

Animal bones were recovered from contexts dating from the late Iron Age/early Romano-British to post-medieval periods. This analysis concentrates on the largest assemblage from 1st to 4th century AD features. A total of 147 "countable" animal bone fragments were recovered from deposits of this period (Table 7). The animal bones were primarily found in ditches, but also in pits, gullies and a spread.

10.2.2 Methods

All of the animal bones from Ashchurch were hand-collected, and an under-representation of smaller species and body parts is to be expected from this site.

The mammal bones were recorded on an Access database following a modified version of the method described by Davis (1992) and Albarella and Davis (1994). In brief, all teeth (lower and upper) and a restricted suite of parts of the skeleton was recorded and used in counts. These are: skull (zygomaticus), horncores (with a complete transverse section), antlers, atlas, axis, sacrum, scapula (glenoid articulation), distal humerus, distal radius, proximal ulna, the larger carpals, distal metacarpal, innominate (ischial part of the acetabulum), distal femur, distal tibia, calcaneum (sustenaculum), astragalus (lateral side), the larger tarsals, distal metatarsal, proximal parts of the 1st, 2nd and 3rd phalanges. Only the main pig metapodials (3 and 4) and phalanges were recorded. At least 50% of a given part had to be present for it to be counted. The presence of large (cattle/horse size) and medium (sheep/pig size) vertebrae and ribs was recorded for each context, although these were not counted.

The separation of sheep and goat was attempted on the following elements: dP_3 , dP_4 , horncore, distal humerus, distal metapodials (both fused and unfused), astragalus, and calcaneum using criteria described in Boessneck (1969) and Payne (1985). The shape of the enamel folds (Davis 1980; Eisenmann 1981) was used for identifying equid teeth to species. Equid postcranial bones were identified to species on the basis of size and morphology (Eisenmann 1986; Dive and Eisenmann 1991; Eisenmann and Beckouche 1986). Cattle horncores have been sexed using the criteria of Armitage and Clutton-Brock (1976) and aged following Armitage (1982). The cattle pelvis has been sexed according to criteria in Grigson (1982) and the sheep pelvis using criteria in Clutton-Brock *et al.* (1990).

Wear stages were recorded for all P_4 s and dP_4 s as well as for the lower molars of cattle, sheep/goat and pig, both isolated and in mandibles. Tooth wear stages follow Grant (1982).

Measurements are retained on the Access database. These in general follow von den Driesch (1976). All pig measurements follow Payne and Bull (1988). Humerus HTC and BT and tibia Bd measurements were taken for all species as suggested by Payne and Bull (1988) for pigs.

Taxon	Period		Total
	2	3	
	LIA to ERB	RB (C2-4)	
Cattle (Bos f. domestic)	7	74	81
Sheep/Goat (Ovis/Capra f. domestic)	9	31	40
Sheep (Ovis f. domestic)	(1)	(10)	(11)
Pig (Sus scrofa)	2	5	7
Horse (Equus caballus)	2	15	17
Dog (Canis familiaris)	1	1	2
Total	21	126	147

"Sheep/ Goat" also includes the specimens identified to species. Numbers in parentheses are not included in the total of the period. "+" means that the taxon is present but no specimens could be "counted" (see text).

Table 8: Animal bone. Mandibular wear stages (following Crabtree 1989 and O'Connor1988). Periods 2 and 3

Taxon/Phase	Mar	ndibul	ar wea	r stages	6									
	А		В		С		D		E		F		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	
Sheep/Goat/2	-		-		-		-		2		-		2	
Sheep/Goat/3	-		1		2		3		1		-		7	

Taxon/Phase	Mandibular wear stages											
	Juvenile		Immature		Subadult		Adult		Elderly		Total	
	n	%	n	%	n	%	n	%	n	%	n	
Cattle/3	-	0	2	18	2	18	2	18	5	45	11	
Pig/3	1		-		1		-		-		2	

Only mandibles with two or more teeth (with recordable wear stages) in the $dP_4/P_4 - M_3$ row, isolated unworn dP_4 or worn M_3 are considered. Percentages not given for totals less than 10.

10.2.3 Period 2. Late Iron Age to early Romano-British (4^{th} century BC to 1^{st} century AD)

Only 21 "countable" animal bone fragments were recovered from the 1st century AD deposits of Period 2 (Table 7). Cattle and sheep/goat occur at similar frequencies, seven and nine fragments respectively, other species present comprise pig, horse and dog. The only cattle bone sufficiently complete to calculate a withers height is a tibia from ditch [670] (668) which came from a beast approximately 116cm at the shoulder based on the multiplication factors of Matolcsi (1970). A cattle metacarpal from ditch [436] (434) has the distal epiphysis broadened, a condition typical of beasts used for draught and traction (Bartosiewicz *et al.* 1997). Of the nine sheep/goat fragments, one could be positively identified as sheep and none as goat. The two sheep/goat mandibles that could be aged came from animals of around four to eight years of age (Table 8). A fragmentary horse cranium found in ditch [670] (668) came from an animal aged approximately 7 years based on the comparative wear curves of Levine (1982). A horse metatarsal recovered from ditch [414] (381) came from a pony-sized animal of 124cm (c.12 hands) based on the multiplication factors of May (1985). The only domestic dog fragment recovered is a lower canine found in ditch [666] (552).

10.2.4 Period 3. Romano-British (2nd to 4th century AD)

The Romano-British assemblage of Period 3 accounts for 86% of the total (Table 7). Cattle are the most numerous taxon amounting to 59% of fragments by number of identified specimens (NISP), sheep/goat account for 25% with a third identified as sheep, horse 12% and pig 5%. There may be a bias operating at the site in favour of the remains of the larger domestic species as most of the assemblage was recovered from ditches, with the larger bones having a tendency to gravitate to features, such as ditches, that are more peripheral to areas of occupation (Wilson 1996). Nonetheless, the relative proportion of horse remains is high at 1:5 that of cattle. This is very similar to the situation at Haddon, Peterborough, a late Iron Age and Romano-British site, which is thought to have been engaged in ranching (Baxter 2003).

A fragmentary cattle cranium found in ditch [256] (94) has a frontal profile that appears to be a pointed boss and high double arched intercornual ridge (Grigson 1976). A frontal and occipital fragment found in pit [300] (299) has a convex frontal profile and a high single arched intercornual ridge. The attached short horned horncore indicates a male subadult. The horncore is grooved and flattened. A short horned subadult horncore was found in feature [547] (545). Based on the eleven cattle mandibles recovered 45% were elderly with immature, subadult and adult equally represented by the rest of the assemblage (Table 8). A perinatal distal humerus with unfused metaphysis was found in ditch [377] (352). Four complete cattle limb bones recovered from pit [300] (299), ditch [699] (349) and ditch [377] (352) came from animals from 116cm to 118cm high at the withers. Two metatarsals found in ditch [377] (352) have broadened distal epiphyses. A cattle astragalus found in ditch [377] (352) has slight polishing of the joint surface indicative of the onset of osteoarthritis (Baker and Brothwell 1980). A mandible from ditch [157] (121) had a reduced or absent M_3 third pillar or hypoconulid. Cattle sized vertebra and rib fragments are frequent throughout the deposits and the cattle remains are consonant with primary and secondary butchery waste.

Five out of seven sheep/goat mandibles recovered are at Grant (1982) wear stages C and D representing animals aged between one to four years old. One young animal aged around 6-12 months and one older animal aged 4-8 years complete the assemblage (Table 8). A sheep metatarsal from an animal approximately 58cm high at the shoulder based on the multiplication factors of Teichert (1975) was recovered from ditch [389] (231). The only pig mandibles that could be aged came from juvenile and subadult animals (Table 8).

Upper and lower teeth from horses aged around five, eight, eight to nine years and nine years were found in ditches [257] (417), [699] (349), [729] (714) and [320] (561). Based on the three complete horse limb bones recovered from pit [300] (299) and ditches [256] (228), [377] (352) these were pony-sized animals of between 118cm and 128cm (c. 12-13 hands) at the withers. The only countable dog fragment recovered was a premaxilla found in ditch [492] (509). The toothless mandible of a small dog was found in ditch [320] (526).

10.2.5 Summary and conclusion

With such a small assemblage no significant differences in husbandry or stock can be ascertained from the late Iron Age to the end of the Romano-British period at Ashchurch. It is possible that the relative frequency of the major domestic mammals is to some extent skewed by the nature of the features excavated in favour of the larger species. However, on the basis of the material recovered cattle are three times as numerous as sheep in the Roman period and the comparative abundance of horses is strongly suggestive of ranching, as has been previously suggested for other sites during this time. The size and conformation of the cattle, sheep and horses is typical of the period.

10.3 Environmental remains by Andrew Mann, Katie Head and John Carrott

10.3.1 Summary

Environmental analysis was carried out on samples from 29 deposits dating from the late Iron Age to the medieval period. The plant macrofossil remains recovered suggest that spelt wheat and barley was processed and consumed on the site during the Roman period, while the pollen and plant macrofossil analysis places the settlement within a predominantly open grassland environment at this time. Parasite analysis carried out on the samples removed from two burials produced negative results.

10.3.2 Introduction

10.3.2.1 **Project parameters**

The environmental project conforms to relevant sections of the Standard and guidance for archaeological excavation (IFA 2001) and *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation* (EH 2002).

10.3.2.2 Fieldwork and sampling policy

Samples were taken by the excavator from deposits considered to be of high potential for the recovery of environmental remains. A total of 30 samples were taken from the site (Table 9).

10.3.3 Plant macrofossil remains by Andrew Mann

10.3.3.1 Methods

Four samples, contexts (067), (624), (673) and (674) that potentially contained organic remains preserved by waterlogging were sub-sampled and 1 litre of material was processed by the wash-over technique as follows. The sub-sample was broken up in a bowl of water to separate the light organic remains from the mineral fraction and heavier reside. The water, with the light organic faction, was decanted onto a $300m\mu$ sieve and the residue washed through a 1mm sieve. The remainder of the bulk sample was retained for further analysis.

The remaining samples (10 litre size) were processed by flotation followed by wet sieving using a Siraf tank. The flots were collected on a $300\mu m$ sieve and the residue retained on a 1mm mesh. This allows for the recovery of items such as small animal bones, molluscs and seeds.

For assessment purposes, the residues were scanned by eye and the abundance of each category of environmental remains estimated. The flots were also scanned using a low power MEIJI stereo light microscope and plant remains identified using modern reference collections maintained by the Service, and seed identification manual (Beijerinck 1947). Nomenclature for the plant remains follows the *Flora of the British Isles*, 3rd edition (Clapham, Tutin and Moore 1989). The initial assessment showed that flots from contexts (131), (194), (253), (428), (430) and (493) contained sufficient remains to justify full quantification and these were subsequently fully sorted.

10.3.3.2 Results

Three of the samples removed from burials of Romano-British date, contexts (067), (704) and (730) were sorted for macrofossil remains relating to burials, such as mineralised soft tissue or gall stones, which can occasionally survive. However, no macrofossils remains were recovered. Of these contexts (067) and (704) were also sub-sampled for pollen and parasitic remains (see sections 10.3.4 and 10.3.5, below).

The assessment of samples of mid to late Iron/early Roman, Roman and medieval date showed that plant macrofossil remains were poorly preserved in the majority of the samples (Table 10). Occasional charred cereal grains were common throughout, although their fragmentary nature makes identification to species difficult. Charred grass grains (*Gramineae* sp indet) were also recovered from contexts (444), (552), (554), and (633) and may represent crop contaminants. Various weed seeds survived in the anoxic (oxygen reduced) conditions of the well sealed clayey deposits. These included chickweed (*Stellaria media*), which was recovered from the majority of these contexts and suggests that cultivated ground may have existed near by. The presence of blackberry/bramble (*Rubus fruticosus* agg) and elder (*Sambucus nigra*) within many of these contexts also indicated that scrub or hedgerow were present within the vicinity. Sedge (*Carex* spp) would have inhabited the damper regions surrounding the ditches.

Plant remains from contexts (131), (253), (428), (430) and (493) were fully quantified, as these were richer assemblages with the potential to provide more information regarding agricultural subsistence strategies and to allow comparisons with other sites (Table 10). These were Romano-British in date, with the exception of context (253) which was undated, but likely to be Roman. Context (493) appears to represent a dump of charred wood and grain fragments. The latter probably represented fully cleaned and processed crop material, as few weed seeds or chaff remains are present in the assemblage. The identifiable cereal grain was dominated by emmer or spelt wheat (*Triticum dicoccum/spelta*). The remaining contexts contained a mixture of charred crop remains and weed seeds (both charred and waterlogged). The presence of both chaff and weed seeds suggests that these samples were only partially processed. The spelt wheat chaff (Triticum spelta glume bases) present in contexts (428) and (430) indicated that the grain fragments in these contexts (and (131)) were also likely to be spelt. Barley (Hordeum vulgare) grain was also present in low numbers in some samples, and thus was probably a minor crop. Flax, possibly the cultivar (cf Linum usitatissimum) in context (194) was also of interest as it has been grown for its fibres and oilseed since antiquity, and thus it is possible that it was cultivated at or near to the site. The uncharred weed seeds present within the guantified samples are dominated by chickweed (Stellaria media) and may have been introduced on to the site during harvesting and crop processing.

Context	Sample	Large	Small	Mollusc	Insect	Charcoal	Charred	Waterlogged
		mammal	mammal				plant remains	plant remains
067	2	000						
493	3					000	mod	
444	4	000			000	OCC	OCC	
142	5	OCC		OCC				OCC
137	6	000	OCC	OCC		000	OCC	
211	7	000	OCC			OCC	OCC	
297	8	000				000		OCC
669	9	000	000			000	000	OCC
131	10	000				000	000	occ
134	11	000				000	000	occ
135	12			occ	000			occ
194	13	000				000	000	occ
198	14	000						occ
196	15	000				000	000	occ
253	16	000				000	000	OCC
435	17					000		
434	18	000	OCC			000	OCC	
428	19	000				000	000	occ
424	20			000		000	000	
552	21	000				000	000	occ
554	22	000				000	000	occ
430	23	000		occ		000	000	occ
631	24	000				000	000	OCC
633	25					OCC	OCC	
704	26	000		OCC				
730	27	000						
624	28			OCC		OCC	OCC	
673	29					OCC	OCC	
674	30			OCC		000	OCC	

Table 9: Summary of environmental remains

Key: occ - occasional; mod - moderate; abt - abundant

Gloucestershire County Council Archaeology Service A46 Ashchurch Railway Bridge

Table 10: Plant remains

e																	Π						Π	Т	Τ	٦
673	an	-																_					H	-	+	4
633	9	10						+		+														_	_	_
253	ŋ	10					-	10							-	1	-		14					-	-	
211	an	0.5							+																	
142	g	10																	+				+			
674	MED	٢						+																		
624	MED	•						+																		
699	RB						+															+			+	
631	RB	10						+											+				+			
554	RB	10						+		+									+							
493	RB	1			15	63				1																
444	RB	10						+		+																
434	RB	10						+																		
430	RB	10		19		12	-	5		7									2							
428	RB	10		-		2	-	2		-																
424	RB	10						+																		
297	RB	10																	+			+				
198	RB	10																	+							+
196	RB	10								+									+			+				
194	RB	10						-		١	ł		2	-					12							
137	RB	10							+																	
135	RB	10																								+
134	RB	10																	+	+	+					+
131	RB	10		5	ю							-							20			÷				
552	LIA ERO	10						+		+															+	
Habitat				ш	LL.	ш	ш	ш	AF	AF	CD	ABCD	AB	ш	ABD	CD	ABCD	CD	AB	AB	ABCD	CD	BC	AB	CDE	CDE
				at	belt				ass			t/		flax	orrel	sorrel		nettle	p			y/		-		
Common name				spelt wheat	emmer/spelt wheat	wheat	barley	cereal	brome grass	grass	buttercup	goosefoot/ orache	fat hen	cultivated flax	sheep's sorrel	common sorrel	dock	common nettle	chickweed	fat hen	legume	blackberry/ bramble	Elder	milk/sow thistle	sedge	sedge
				eae	eae	eae	eae	eae	eae	eae	ulacea	ae	ae	e	laceae	aceae	laceae	sae	ae	ae	nosae	ae	iaceae	sitae	ceae	ceae
Family				Gramineae	Gramineae	Gramineae	Gramineae	Gramineae	Gramineae	Gramineae	Ranunculacea e	Cheno- podiaceae	Cheno- podiaceae	Linaceae	Polygonaceae	Polygonaceae	Polygonaceae	Urticaceae	Caryo- phyllaceae	Cheno- podiaceae	Leguminosae	Rosaceae	Caprifoliaceae	Compositae	Cyperaceae	Cypera
Latin name	Period/Date	Sample size (L)	Charred Plant Remains	<i>Triticum spelta</i> glume base	Triticum dicoccum/spelta	Triticum sp grain (fragments)	Hordeum vulgare grains (hulled)	Cereal sp indet grain (fragments)	Bromus sp grain	<i>Gramineae</i> sp indet grain	Ranunculus acris/repens/ bulbosus	Chenopodium/Atrip lex sp	Chenopodium album	cf Linum usitatissimum seed	Rumex acetosella agg	Rumex acetosa	Rumex sp	<i>Urtica dioica</i> Waterlogged Plant Remains	Stellaria media	Chenopodium album	Leguminosae sp indet	Rubus fruticosus agg	Sambucus nigra	Sonchus oleraceus	Carex sp	Carex spp

Key to Table 10

Habitat	Quantity	Period/Date
A= cultivated ground	+ = 1 - 10	LIA/ERO = Late Iron Age/Romano-British
B= disturbed ground	++ = 11- 50	RB = Romano-British
C= woodlands, hedgerows, scrub etc	+++ = 51 -100	MED - medieval
D = grasslands, meadows and heathland	++++ = 101+	UD = undated
E = aquatic/wet habitats		
F = cultivar		

10.3.3.3 Discussion

The plant remains from the majority of samples were badly preserved, and the more delicate seeds had probably decayed completely, therefore the assemblage may only provide a relatively incomplete picture of the surrounding environment. There was however some evidence of neglected ground (elder, nettle, and bramble) with areas of disturbed or cultivated ground (chickweed and fat hen). The common weeds of arable or ruderal habitats such as chickweed, (*Stellaria media*) and fat hen (*Chenopodium album*) are ubiquitous in charred cereal assemblages (Pelling 1999).

The occasional charred cereal grains, glume bases and weed seeds indicated that crop processing was taking place on-site throughout the phases represented, and that the remains represent the later stages of processing. The low numbers of grains from fully quantified samples are likely to represent general waste caused as a result of parching prior to storage or as a result of cooking. The lack of numerous chaff remains indicated that the assemblages are unlikely to have resulted from using the waste products of crop processing as fuel. The assemblages do not indicate intense agricultural activity or crop processing at the settlement, although it is possible that this may have taken place outside of the limits of excavation, as rural Romano-British settlements of this size are likely to have produced their own crops at this time.

The apparent dominance of spelt as the principle cereal, with occasional hulled barley, mirrors the pattern of other Romano-British sites in southern Britain (Greig 1991). Debris from the processing of spelt wheat was found widely scattered over the site in low concentrations, and a similar pattern was recorded at Birdlip Quarry (Pelling 1999), although, on this site, chaff accounted for approximately 50% of the assemblages.

10.3.4 Pollen remains by Katie Head

10.3.4.1 Processing and analysis

Two pollen samples were selected from contexts associated with two burials of Roman date (contexts (704) and (067)), and 2cm^3 of material was measured volumetrically. To remove clays, the samples were soaked for 24 hours and then boiled in tetra-Sodium Pyrophosphate for 1 hour, sieved through a 120µm mesh, washed onto a 10µm mesh, and the residue collected. The samples were then digested by Potassium Hydroxide for 20mins in a boiling water bath to dissolve any humic material. 10% Hydrochloric acid was then added in order to remove any calcium carbonate within the samples. Due to the silicaceous nature of the sediments, the samples were digested using Hydrofluoric Acid in a hot water bath for 1 hour; the chemical being refreshed every 30mins. The samples were then washed and sieved onto a 10µm mesh to remove any remaining clay or silica material. The samples were also acetolysed for 2mins to break down the cellulose material. Finally the pollen pellet was stained with safranine, washed in alcohol to dehydrate the sample, and preserved in silicon oil.

Pollen grains were counted to a total of 250 land pollen grains (TLP) for assessment purposes, on a GS binocular polarising microscope at 400x magnification, and identification was aided by using the pollen reference manual by Moore, Webb, and Collinson (1991). Nomenclature for pollen follows Stace (1997) and Bennett (1994).

Context / Sample No	704 / 26	067 / 2
Trees		
Betula	2	
Pinus	9	3
Quercus		1
Tilia		1
Alnus	2	5
Shrubs		
Corylus	13	7
Salix	5	
llex		8
Herbs		
Poaceae	186	175
Apiaceae	1	
Aster type		1
Brassicaceae	1	
Centaurea cyanus	1	3
Cirsium type	1	
Filipendula		2
(Lact.) cichorium type	4	18
Plantago lanceolata	2	1
Polygonum bistorta	1	
Ranunculus acris type	1	
Rosaceae	3	1
Rumex acetosella	3	
Succisa (e.g. pratensis)	8	
Taraxacum officinale	8	24
Total land pollen	251	250
Aquatics		
Nuphar	5	2
Spores		
Sphagnum		1
Polypodium	1	4
Pteridium	1	4
Pteropsida (mon) indet	2	7
Damaged pollen	15	17

Table 11: Pollen species counts from various contexts

10.3.4.2 Results

Context (704), sample 26, ?Roman

The pollen sample was taken from grave cut [706] and around skeleton (705). This context was dominated by grasses (Poaceae indet), making up 74% TLP (Table 11). Other herbs comprised much lower numbers of dandelion (*Taraxacum officinale*), devil's-bit scabious (*Succisa* (e.g. *pratensis*)), and (Lact.) *cichorium* type, all colonisers of damp meadowland or grassland. There were also occasional examples of other meadowland plants including common bistort (*Polygonum bistorta*), and buttercup (*Ranunculus acris* type), as well as grassland and/or wasteland species such as sheep's sorrel (*Rumex acetosella*), ribwort plantain (*Plantago lanceolata*), thistle (*Cirsium* type), and cornflower (*Centaurea cyanus*). Trees and shrubs were present in low numbers, primarily consisting of hazel (*Corylus*), as well as notable numbers of pine (*Pinus*). Other contributing arboreal species were willow (*Salix*), birch (*Betula*), and alder (*Alnus*). The aquatic taxon, water-lily (*Nuphar*) was minimal, tending to suggest the presence of standing water. Spores were represented by low numbers of ferns (*Pteropsida* (mon) indet) including polypody fern (*Polypodium*), as well as bracken (*Pteridium*).

Context (067), sample 2, Roman

The second pollen sample derived from soil within the pelvic cavity of burial (047). Again, the context primarily consisted of grasses (Poaceae indet), (Table 11). Other herbs were dominated by both meadowland and grassland species, particularly (Lact.) *cichorium* type, including a large number of dandelion (*Taraxacum officinale*). There were also occasional examples of cornflower (*Centaurea cyanus*), meadowsweet (*Filipendula*), ribwort plantain (*Plantago lanceolata*), aster (*Aster* type), and Rosaceae. Trees and shrubs made up a much lower part of the assemblage, primarily consisting of hazel (*Corylus*), holly (*Ilex*), and alder (*Alnus*), as well as lower numbers of pine (*Pinus*), oak (*Quercus*), and lime (*Tilia*). Aquatics were represented by just two examples of water lily (*Nuphar*). Spores were in low numbers but included ferns (*Pteropsida* (mon) indet) such as polypody fern (*Polypodium*), as well as bracken (*Pteridium*) and moss (*Sphagnum*).

10.3.4.3 Discussion

Both burial contexts reflect a mixture of meadowland and grassland species. It is difficult to determine however, where these originated, and whether any of these plants were associated with burial practices or represent foodstuffs consumed before death. The latter seems unlikely, as there are no species specific to diet. Perhaps the most likely scenario with regard to uncommon species such as water-lily, is that they are intrusive, having contaminated the context through the percolating of water into the burial. There is some possibility however, of symbolic deposition, evidence of this from other sites is discussed below. The other herbs recorded most likely reflect the regional pollen rain of the surrounding landscape, as there are not, with the exception of grasses (which tend to be a significant component in many Roman contexts), large quantities of any particular species.

The pollen remains from Ashchurch appear to reflect the surrounding, mainly, pastoral landscape, which is comparable to sites, for example, to the south in Devon. There may have been local cereal cultivation occurring at Ashchurch, although this could only have been established by greatly increasing the pollen counts (which was not considered to be appropriate here). The lowland landscape of the Romano-British period in the South West, on sites such as Middle North Combe in mid-Devon, was primarily pastoral with some small-scale arable cultivation (Fyfe *et al* 2004). Pastoral indicators such as *Potentilla*, Lactuceae, *Centaurea nigra*, and *Plantago lanceolata* were well represented throughout this period and beyond. Closer to Ashchurch, at Crose Mere in Shropshire, the landscape was still relatively wooded although there was the cultivation of cereals locally (Beales 1980).

Although the pollen evidence at Ashchurch only appears to reflect the surrounding landscape, at a few burial sites evidence of plant wrapping, associated with burial practice, has been found. At Hulton Abbey (Dickson 1985) for example, rushes were identified as the material for this wrapping. There were also fruits and seeds deriving from damp meadowland plants and grassland areas, while the pollen evidence was thought to represent both the rush/meadowland and the surrounding landscape. This vegetation is similar to Ashchurch, with species such as the cornfield weed, cornflower (*Centaurea cyanus*), identified. There is also evidence of other plants being used in Romano-British burials such as box (*Buxus sempervirens*) (Allison 1947), and bay laurel (*Laurus nobilis*) (CBA 1999), whereby the body was laid on a bed of plant material.

10.3.4.4 Significance

The pollen remains from the Roman burials were slightly degraded but still relatively easily identifiable, with the evidence reflecting the surrounding landscape rather than plant material that was deliberately placed in the graves. Few pollen investigations have been undertaken on burial contexts and therefore this work is of regional significance.

10.3.5 Parasite remains by John Carrott

10.3.5.1 Summary

Two small subsamples recovered during excavations were submitted for an investigation of their content of the eggs of intestinal parasitic nematodes. The submitted samples were taken from the pelvic areas of two skeletons of Roman date.

No eggs of intestinal parasitic nematodes, or other interpretatively valuable microfossils, were seen in the subsamples and no further investigation of the deposits for these remains is warranted. The subsamples from the current material may be discarded unless they are required for other purposes.

10.3.5.2 Introduction

Two small subsamples were submitted to Palaeoecology Research Services Ltd (PRS), County Durham, for an investigation of their content of the eggs of intestinal parasitic nematodes. Each of these samples was recovered from the pelvic area of a skeleton (located in two separate burials). One of the burials (047), from which sample 2, context (067) was recovered, was provisionally dated as Roman. No dating information was available for the second burial.

10.3.5.3 Methods

The sub-samples were inspected and their lithologies recorded, prior to examination.

The samples were examined for the eggs of intestinal parasitic nematodes using the 'squash' technique of Dainton (1992). The evaluation slides were scanned at 150x magnification with 600x used where necessary.

Although primarily for the detection of intestinal parasitic nematode eggs, the 'squash' technique routinely reveals other microfossil remains, and where present these have also been noted.

10.3.5.4 Results

The results of the investigations to determine the presence/absence and state of preservation of parasite eggs are presented below in context number order. Archaeological information provided by the excavator is presented in square brackets.

Context (067), sample 2 [soil subsample from the pelvic cavity of burial (047) – Roman] Moist, light to mid grey-brown, stiff (working plastic), clay. The 'squash' was almost entirely inorganic with just a trace of organic detritus. No parasite eggs or other identifiable microfossils were seen. *Context (704), sample 26* [soil subsample of grave fill – taken from bulk sample for small bone and artefact recovery]

Moist, light to mid grey-brown, stiff (working plastic), clay. The 'squash' was, again, almost entirely inorganic with just a trace of organic detritus. A single live soil-dwelling nematode was noted. No parasite eggs or other identifiable microfossils were seen.

10.3.5.5 Discussion and statement of potential

Both of the examined subsamples contained only trace amounts of organic detritus, with a live soil-dwelling nematode also seen in sample 26 (context 704). No eggs of intestinal parasitic nematodes, or other interpretatively valuable microfossils, were noted, however.

On the evidence from the examined subsamples, these deposits have no potential for further study of microfossil remains.

10.3.6 Conclusions

The pollen and plant macrofossil remains suggest that this site is typical of many rural Romano-British settlements within the south and south-west of the country. The pollen and weed species indicate that the settlement was situated within essentially an open grassland environment. The pollen record also implies that there may have been some cereal cultivation around the settlement, and the weed seeds of ruderal landscapes found within the bulk samples also support this. The presence of a typical Roman crop assemblage of spelt wheat and barley also supports the conclusion that crops were grown in the surrounding landscape, although it is likely that this activity was small-scale and focused away from the area excavated.

This contrasts, to some degree, with the evidence for more intensive arable activity and crop processing in parts of south-east Worcestershire, immediately to the north of Ashchurch, in the Severn and Avon Valleys. Richer concentrations of charred cereal crop waste have been found, for example, on sites at Leylandii Farm, Norton and Lenchwick (Jackson *et al* 1994), Strensham (Jackson *et al* 1996), and along the line of the Broadway Bypass (Hurst and Pearson 1994).

11 Discussion

The excavations at Ashchurch, in advance of the construction of a new railway bridge and road corridor, have increased considerably our knowledge of the archaeology of this area. Stray finds attest to activity in the vicinity from as early as the Neolithic period, with occupation on the site potentially beginning in the mid to late Iron Age and continuing through the Roman period to at least the 3rd century. A Saxon presence on the site is debateable, but there is ample evidence for the agricultural use of the site in the later medieval period (from the 12th to 16th century) and evidence for buildings, perhaps connected to craft working, in the early post-medieval period.

The discussion of the site is inevitably constrained by certain caveats, the principal factor being the relatively small area excavated, essentially a 75m long by 25m wide road corridor, which limits the conclusions that can be made about the extent and layout of the settlement. Additional chronological constraints are imposed by the potential for residuality and the risk of intrusion within the densely occupied area of excavation.

The dating of the site relies mainly on the ceramic evidence, hinting at sporadic occupation from the Bronze Age through to the post-medieval period. Timby (9.1, above) cites local parallels for similarly long-lived pre-medieval settlement at Tewkesbury Eastern Relief Road and at Childswickham and Longdon, in Worcestershire. Both the sites in Worcestershire, similar to that at Ashchurch, have a sparse Bronze Age component and Roman activity seems to have its origins in the late Iron Age. At the Eastern Relief Road Roman settlement was preceded by a more substantial phase of early to middle Bronze Age activity with limited amounts of later prehistoric pottery (Walker et al 2004). Elsewhere in the county there is evidence for continuity from the Roman period into the Saxon and medieval periods. A recently excavated site at Rudgeway Lane, Walton Cardiff, 3km to the south-west of Ashchurch, recorded features dating to the middle and late Bronze Age, the early and late Iron Age, the Roman period and the Saxon period, the latter consisting of two burials (Hart et al 2006). Continuity of settlement is also attested at Bishop's Cleeve (Parry 1999, 99-102; Holbrook 2006, 109), where occupation has been recorded for virtually all periods from the Bronze Age to the post-medieval period.

The ceramic evidence for earlier prehistoric activity at Ashchurch is supplemented by flint finds, which include two probable Neolithic blades and an early Bronze Age barbed and tanged arrowhead. Although these finds are residual within later features they are typical of flint assemblages from the Severn Valley and add to the evidence for occupation in the Tewkesbury area during the early prehistoric period. A similar flint assemblage was retrieved during excavations on the Tewkesbury Eastern Relief Road (Walker et al 2004, 35).

The earliest features recorded at Ashchurch may date to the mid to late Iron Age, although it should be stressed that the majority of the late prehistoric pottery is residual in later contexts and the features attributed to this period could fit just as easily into a post Roman conquest phase as a pre-conquest one. Due to the density of Romano-British features no coherent plan can be made of these earlier ditches. In a review of sites in the Severn Valley, Moore (2006, 69-70) suggests a densely occupied landscape of complex field systems by the late Iron Age, and the ditches recorded at Ashchurch may have formed boundaries within such a system. Further investigation would be required to clarify the nature of this early activity.

A single feature, ditch [436], with a sizeable pottery assemblage, is indicative of activity around the period of the Roman conquest. Whether there was continuity of settlement from the late Iron Age into the Roman period is open to question, but as Neil Holbrook has pointed out in discussing a similar question of continuity at Site II on the Tewkesbury Eastern Relief Road "there is no requirement to believe that that event was of immediate local significance" (Walker et al 2004, 89).

The most significant discovery of the excavations at Ashchurch is the presence of a previously unknown Romano-British settlement. The origins of the settlement lie at some point in the 1st century AD, with successive phases of ditch cutting providing evidence for the continuity of occupation through to at least the mid 3rd century, with a limited amount of evidence for late 3rd and early 4th century occupation. The constraints imposed by the limited area excavated are particularly marked for this period, with ditches extending beyond the limits of excavation in at least three directions, to the north, south and west, and the cemetery of five burials possibly extending beyond the eastern limit of excavation. The full extent and layout of the settlement are therefore unknown.

The Romano-British evidence points to an essentially agricultural settlement. Whether the focus of the domestic settlement was within or beyond the limit of excavation is debateable. The number of ditches, presumably for stock enclosure or field division, would argue against this, but the presence of a number of post holes and a possible roundhouse drip gully may be evidence for some domestic structures within the excavation area. It is also feasible that structures were built in a manner which left little archaeological trace. A similar 'lack' of evidence for domestic structures has been noted at the Eastern Relief Road (Walker et al 2004, 88-9), at Brockworth (Rawes 1981, 51) and at Hucclecote (Thomas et al 2003, 63), leading to conclusions that structures were built of cob or timber. Holbrook has even suggested that there was a tradition within the Severn Valley for "mass-walled" roundhouse construction in the late Iron Age and early Roman periods (ibid).

That Roman buildings were located close by, if not within the excavated area, is evidenced by the presence of building material, either dumped in cut features or re-used in structures of a later date. The presence of small amounts of ceramic roofing tile (tegula) hints at structures in the Roman tradition and two pad-stones, with Roman parallels, suggest the possible presence of an aisled barn at Ashchurch (see Roe, 9.4, above). Fired clay, some with wattle impressions, and large fragments of fuel ash slag, possibly from the burning down of huts (Keys, 9.6, above), are more indicative of buildings in the indigenous tradition.

The limited number of small finds recovered from Romano-British features, and the environmental evidence from the site, may further support the argument that the focus of the domestic settlement lay elsewhere. Discussing the small finds, Cool (9.2, above) suggests that the people who lived in Gloucestershire in the Roman period were prolific users of material culture, and that even quite small native settlements produce a varied assemblage of 'things'. The lack of small finds here would therefore favour this as an area on the periphery of the settlement. Similarly the plant macrofossil remains provide evidence for crop processing, but this was on a smaller scale than would be expected from a settlement of this type, and it is likely that crop processing was being carried out away from this area, nearer to the domestic centre of the settlement.

That we are most likely looking at the periphery of a settlement is further emphasised by the presence of a small cemetery on the eastern edge of the site. Such features are often found on the edges of settlement, although it should be stressed that rural cemeteries associated with farmsteads, as this seems to be, are by no means common. Similar cemeteries, peripheral to settlement, are known from Gilder's Paddock, Bishop's Cleeve (Parry 1999, 96-9 and 101), Roughground Farm, Lechlade (Allen et al 1993, 95-101 and 192-3) and Stoke Road, Bishop's Cleeve (Enright and Watts 2002, 41-4 and 68-9). The Ashchurch cemetery, consisting of five individuals, three mature adults and two adolescents, has a further parallel with Stoke Road, where two males and two females were recorded, in that the cemeteries were interpreted as probable family plots.

Twelve inhumations were found in association with the rural settlement at Hucclecote (Thomas et al 2003, 16-24 and 64-6). The cemetery here was made up of at least nine females, with no children, and rather than representing a family group it would appear that some element of selection in the burial population was taking place. The Hucclecote cemetery dates to the 2nd century, a period when the common burial rite was cremation, and it is suggested that it provides evidence for a distinctive burial tradition in the Severn Valley in the early Roman period (Holbrook 2006, 121). The Ashchurch burials were not accurately dated, but based on the associated funerary rites they were thought most likely to be later Roman in date. However, given the 1st to 4th century date range of the site it is possible that they were earlier and may therefore be part of a local 2nd century tradition of inhumation.

Two of the individuals at Ashchurch, an adult male and an adolescent, had been decapitated and their heads placed by their feet. Decapitated skeletons are not uncommon in later Roman cemeteries. However, where they are found they tend to only make up a small percentage of the total number of burials and whilst the limited number of skeletons at Ashchurch prohibits meaningful statistical analysis, it is noteworthy that two of the five burials are decapitated. Clarke (1979, 374) suggests that decapitated burials are more common in rural rather than urban cemeteries, examples of both are known from Gloucestershire. Six decapitations were present in the large cemetery of over 450 individuals in Cirencester (Viner and Leech 1982); at London Road, Gloucester 54 inhumation burials were recorded of which three adults and a child were decapitated (Mayer 2004); and a single decapitation, a possible juvenile, was present within the Southgate Cemetery, Gloucester (Bateman and Williams 2002, 25-8). Adults of both sexes are most commonly singled out for decapitation, so the presence of two juveniles at Gloucester and an adolescent at Ashchurch is of note. Examples from rural cemeteries in Gloucestershire were recorded at Roughground Farm, Lechlade (Allen et al 1993, 101), where two middle aged women had been decapitated, at Frocester (Price 2000, 203-216) where two of the 60 burials were decapitations and at Horcott Quarry, Fairford where recent excavations by Oxford Archaeology have uncovered a large rural cemetery of over 100 inhumations, a high percentage of which were decapitated (Charles Parry pers com). To the north-east of Ashchurch, at Beckford, Worcestershire, a cemetery associated with the Roman settlement contained a neonate and nine adults, of which four were decapitated (Wills forthcoming).

The Roman settlement at Ashchurch was undoubtedly rural in nature, a comparison of the ceramic evidence with that from Tewkesbury Eastern Relief Road and Childswickham suggesting that Ashchurch was the 'most rural' of the three sites, with a smaller range of regional and continental imports. The economy of the site was focused on food production, the environmental and faunal assemblages attesting to a mixed farming regime. Pollen and weed species indicate that the area was essentially open grassland, but the presence of typical Roman crop assemblages of spelt wheat and barley, along with the fragment of rotary quern (sf 41) are evidence for crop processing in the vicinity. Cattle were three times as numerous as sheep within the Roman faunal assemblage and the comparative abundance of horse is strongly suggestive of ranching (see Baxter, 10.2, above). Many of the ditches recorded here would therefore seem most likely to represent the boundaries of stock enclosures or paddocks.

Rectangular enclosures, similar to those recorded in Period 3.3 at Ashchurch, were present at Tewkesbury Eastern Relief Road Site II (Walker et al 2004, 52 Fig 13), at Brockworth (Rawes 1981, 46 Fig 1) and at Walton Cardiff, where the presence of stock enclosures and a corn drier testify to a similar mixed farming economy (Holbrook 2006, 110-111). Elsewhere stock enclosures and paddocks are recorded at Stoke Road, Bishop's Cleeve (Enright and Watts 2002), at West Drive, Cheltenham (Catchpole 2002) and at Hucclecote (Thomas et al 2003). A large sub-circular ditched enclosure at Ryall Quarry, Ripple, Worcestershire, c.9km north-west of Ashchurch, was interpreted as a corral for stock, with a smaller enclosure acting as a possible animal pen (Barber and Watts 2006). Further afield, at Thornhill Farm, Lechlade in the Upper Thames Valley, the large number of ditched enclosures have been interpreted as cattle breeding pens within an area of intensive cattle ranching (Jennings et al 2004). Whilst some of the ditches at Ashchurch may have served a similar function to those at sites like Thornhill Farm, the economy here was undoubtedly on more of a subsistence level with no evidence for a specialised agricultural function.

The presence of a possible ditched trackway at Ashchurch has parallels at the Tewkesbury Eastern Relief Road, at Walton Cardiff and at West Drive. Trackways are a particular feature of the Upper Thames Valley, testifying to the need to move animal stock from one area of pasture to another (Holbrook 2006, 102).

The Roman settlement at Ashchurch fits into a general pattern of rural settlement within the Severn Valley, as one of what Holbrook (2006, 110) has referred to as "the basic farmsteads from which the Vale was farmed." How these farms related to the higher status rural establishments (i.e. villas), and to urban centres, is open to question. Parry (1999, 101) considered the evidence from Bishop's Cleeve to represent the agricultural settlement surrounding a possible villa, with discrete zones set aside for horticulture and small scale industrial activity. At West Drive, Cheltenham the contradictory evidence provided by a ceramic assemblage, indicative of a farmstead, and stone finds and a faunal assemblage, indicative of a villa or urban centre, has led to the suggestion that it was a rural settlement providing the food requirements for a 'Romanised' elite (Catchpole 2002). In discussing rural cemeteries Philpott and Reece (1993, 422) have suggested that formal burial plots were maintained by landowners in order to assert their right to property, while tenant workers and slaves would not be buried on land to which they had no lasting attachment. The cemetery at Ashchurch, like that at Hucclecote (Thomas et al 2003, 65), may therefore represent an attempt by the occupants to reinforce their ownership rights. Whilst the presence of tegula and pad-stones might hint at an associated villa type establishment at Ashchurch the 'rural' nature of the pottery assemblage and the cemetery favour the site as an owner-occupied farmstead.

How the farmstead here at Ashchurch related to urban centres is unclear. Further south in the Severn Valley rural settlements were undoubtedly affected by their proximity to the colonia at Gloucester, whether they were within the area assigned by the Roman authorities for the provision of the legion, i.e. the territorium, or simply within the hinterland of the city (see Hurst 1999, 127-130 for a discussion of the territorium and Holbrook in Thomas et al 2003, 64, for a discussion of the relationship of the rural site at Hucclecote to Gloucester). Although Ashchurch was clearly beyond the hinterland of Gloucester it lies less than 4km east of Tewkesbury, the point at which the Roman road from Gloucester to Worcester is thought to have crossed the Avon (Margery 1957,21-2, route 180). Excavations in the Oldbury area of Tewkesbury identified buildings of timber and daub, with evidence for at least one higher status building, incorporating ceramic building material and painted wall plaster, close by (Hannan 1993, 43-5). Although the excavator interpreted this as a predominantly agricultural site he recognised the potential for a more substantial settlement at the confluence of two rivers and on the road between two urban centres, and Holbrook has suggested the possibility of a roadside settlement, or even a mansio, at Tewkesbury (Walker et al 2004, 88).

The evidence for activity on the site in the immediate post-Roman period is limited. The single potential Saxon feature, and only 11 sherds of Saxon pottery, suggests a hiatus in occupation in this period with the area utilised as relatively open agricultural land. Intensive use of the site appears to have resumed at some point after the 12th century, with the setting out of a system of ditches, forming enclosures, by the later medieval period. It is notable that these features were aligned not only with Ashchurch Road and Church Lane, but also with the Romano-British ditches and burials, perhaps suggesting that these enclosures either respected or utilised existing landscape features.

The continued use of the site into the post-medieval period is attested by the presence of a probable late 16th century structure in the south-eastern corner of the excavated area. Although the structural remains were very fragmentary a whetstone and a number of iron finds, including an assemblage of knives, may be indicative of craft activity taking place here. The position of the building, close to the junction of the present A46 Ashchurch Road and Church Lane, may be significant. Ashchurch Road is known from the late 10th century, when it was known as Port Street (Elrington 1968, 172), and the location of a building here, close to the church, the main focal point in a parish of dispersed hamlets, would be advantageous for trade.

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Abbreviations

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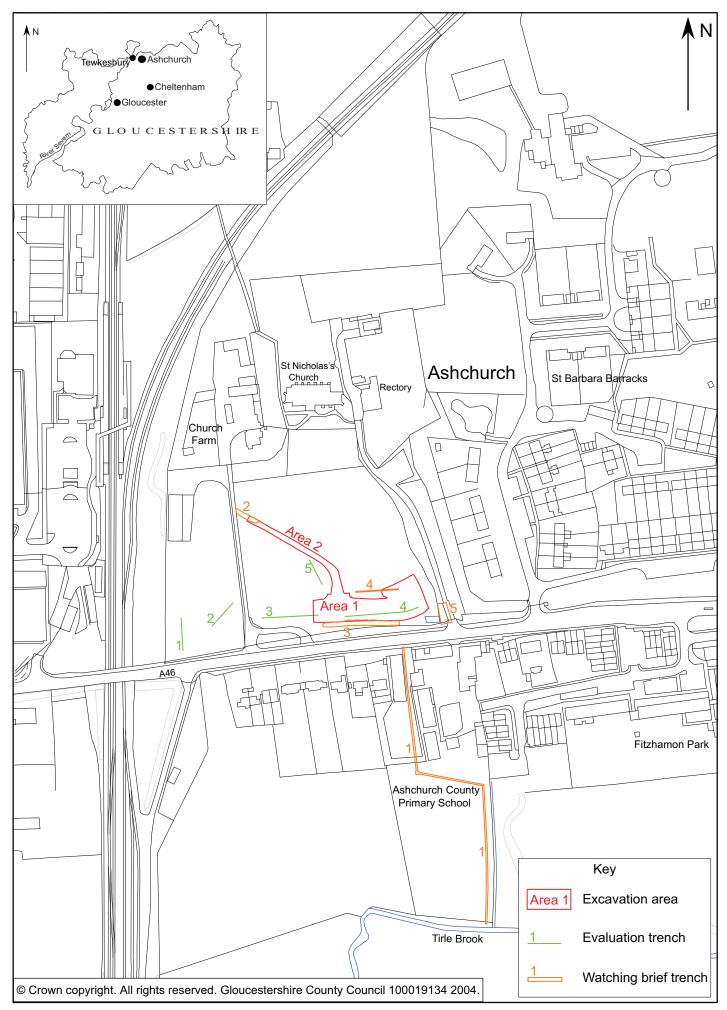
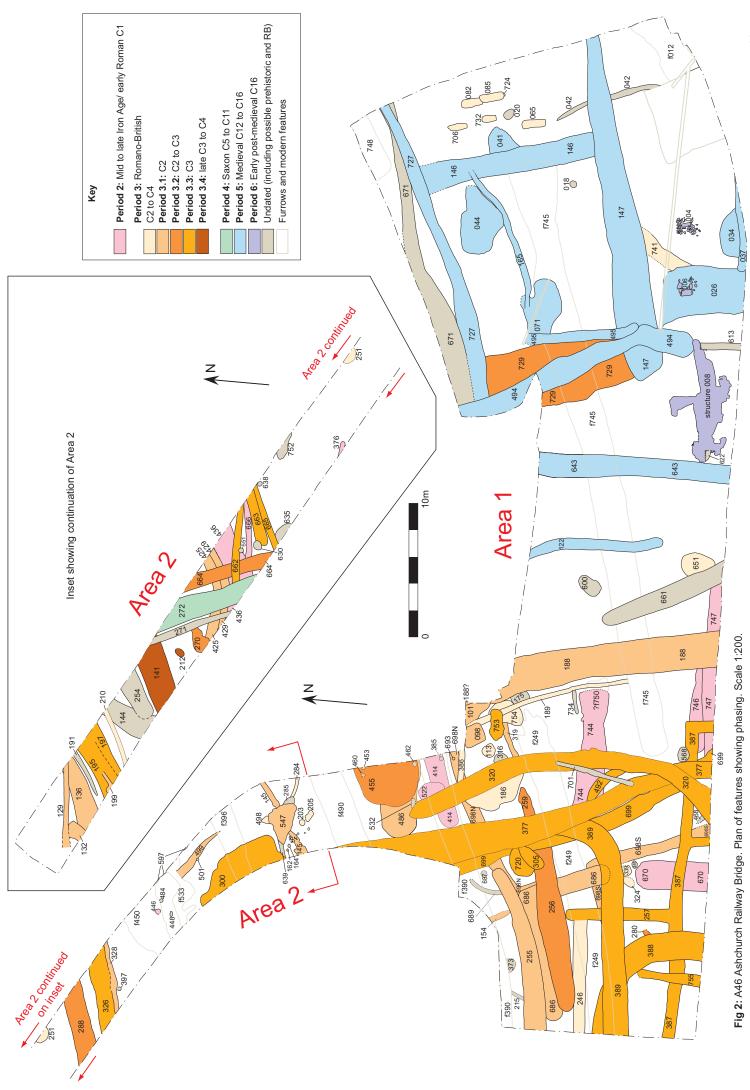
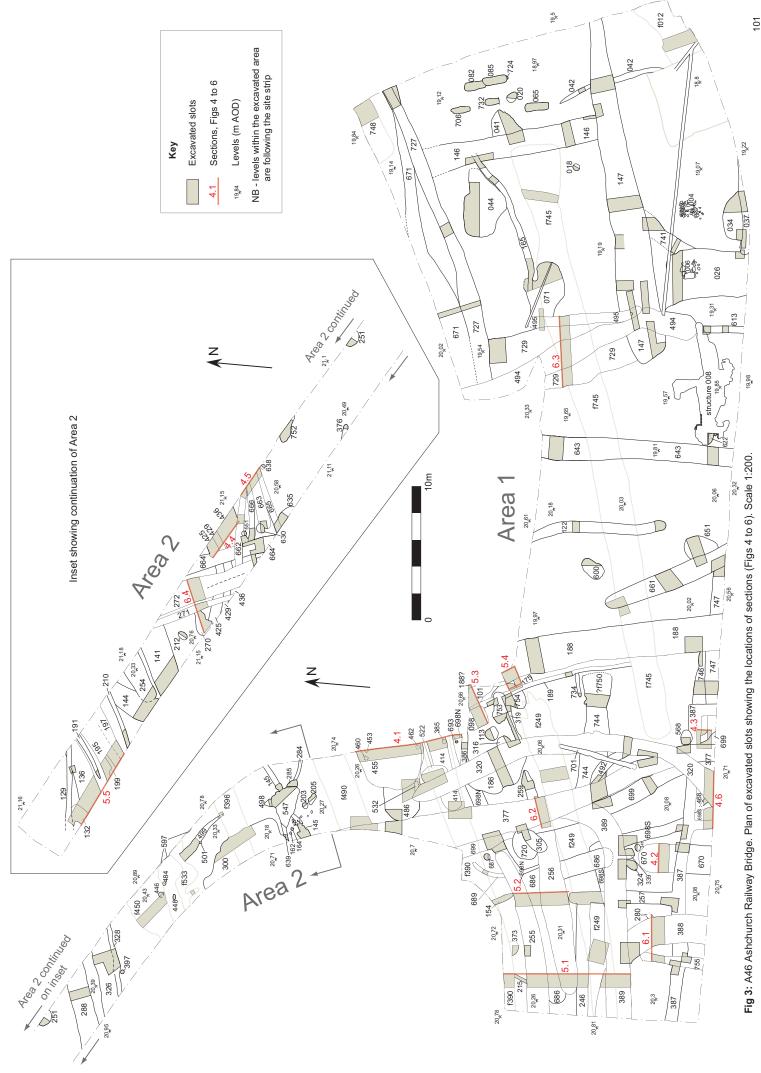


Fig 1: A46 Ashchurch Railway Bridge. Site and trench location plan. Scale 1:2500.





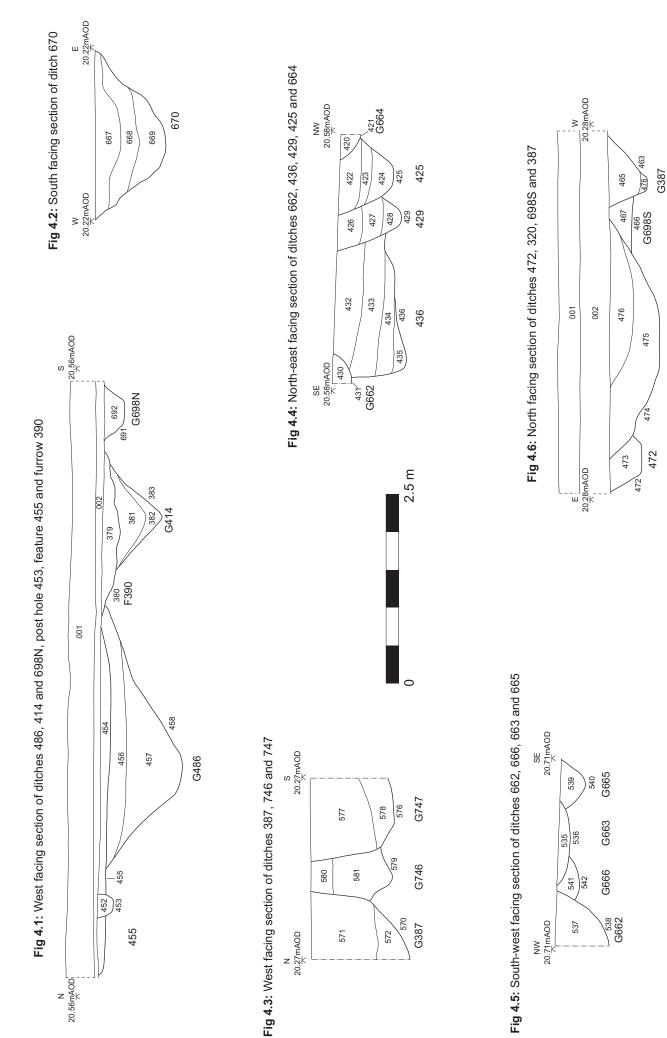
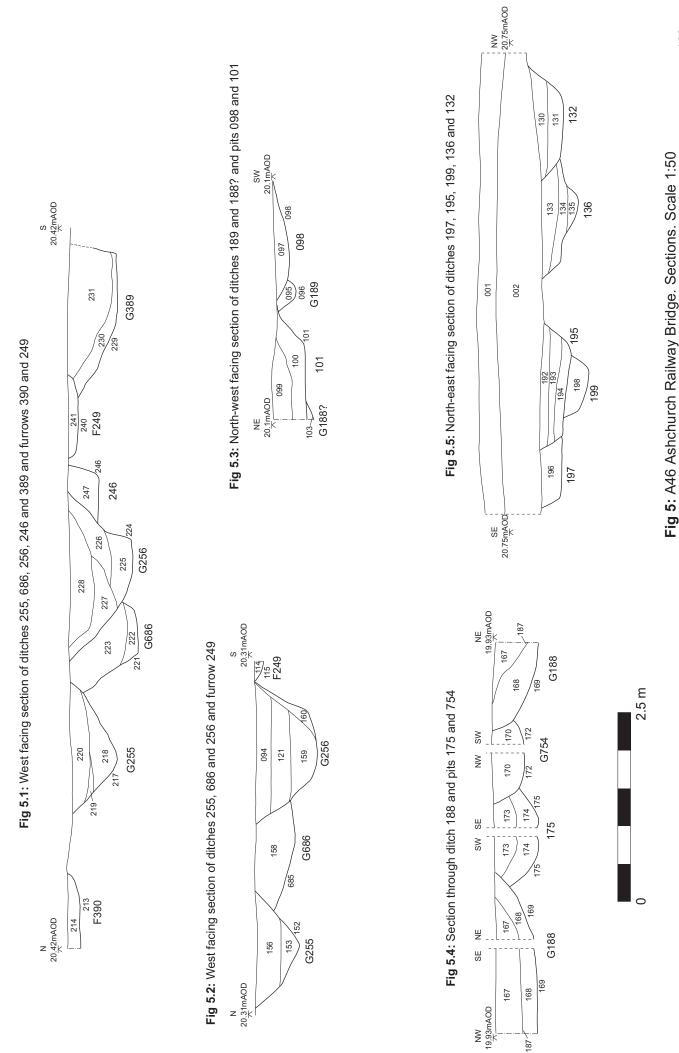
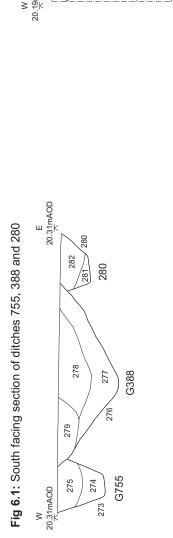


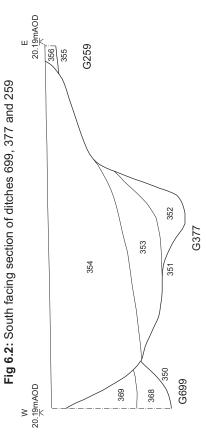
Fig 4: A46 Ashchurch Railway Bridge. Sections. Scale 1:50

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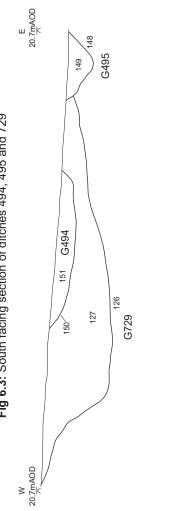
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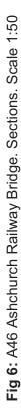












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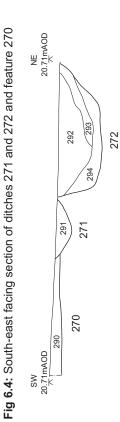
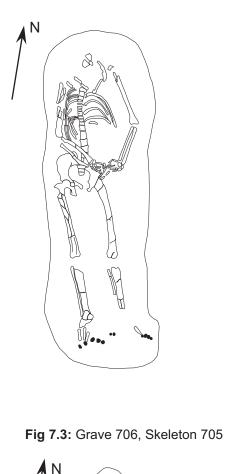
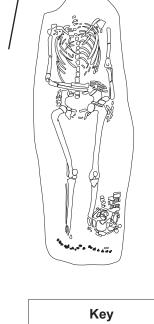
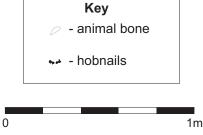


Fig 7.1: Grave 065, Skeleton 047







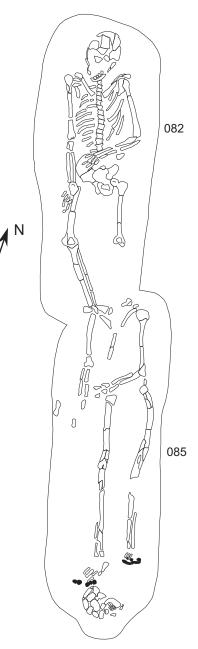


Fig 7.4: Grave 732, Skeleton 731

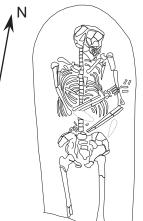
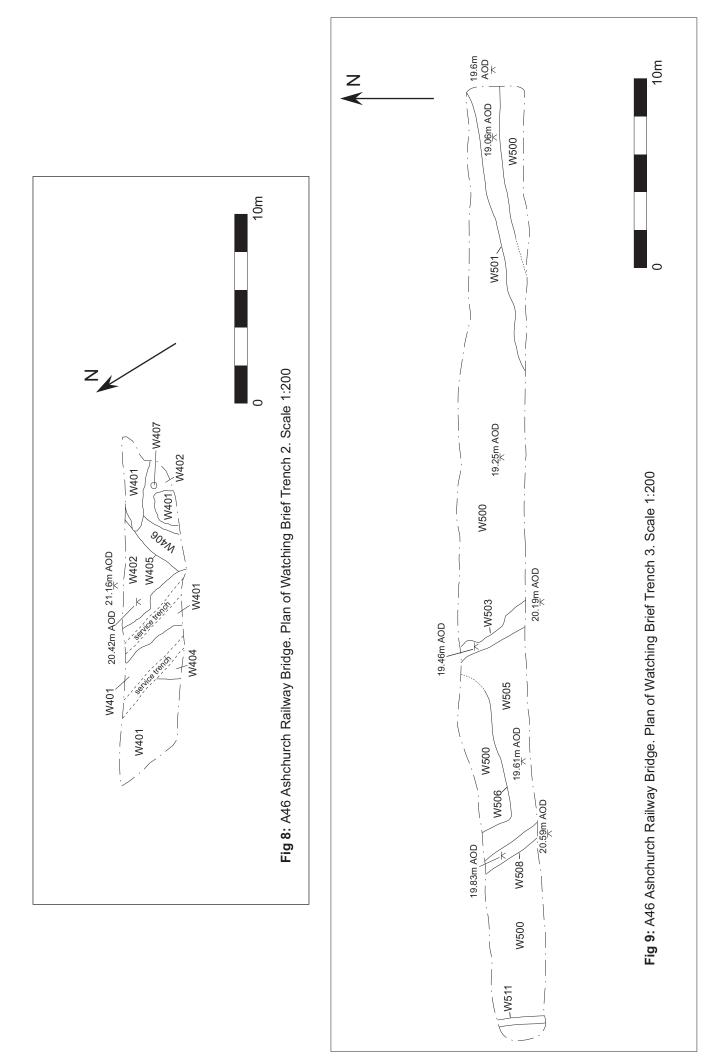


Fig 7: A46 Ashchurch Railway Bridge. Plans of skeletons. Scale 1:20



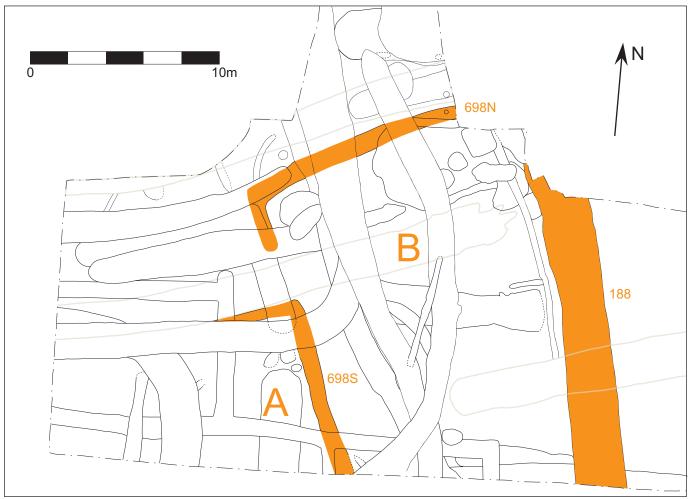


Fig 10: A46 Ashchurch Railway Bridge. Period 3.1 showing enclosures A and B. Scale 1:200.

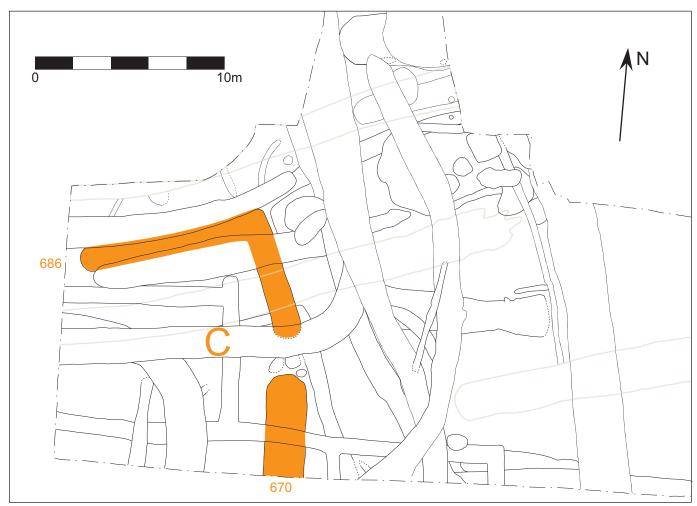


Fig 11: A46 Ashchurch Railway Bridge. Period 3.1 showing enclosure C. Scale 1:200.

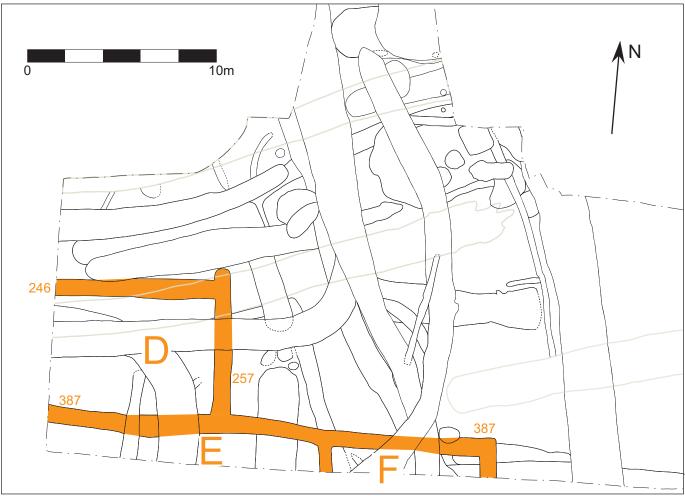


Fig 12: A46 Ashchurch Railway Bridge. Period 3.3 showing enclosures D, E and F. Scale 1:200.



Fig 13: A46 Ashchurch Railway Bridge. Period 3.3 showing trackway G. Scale 1:200.

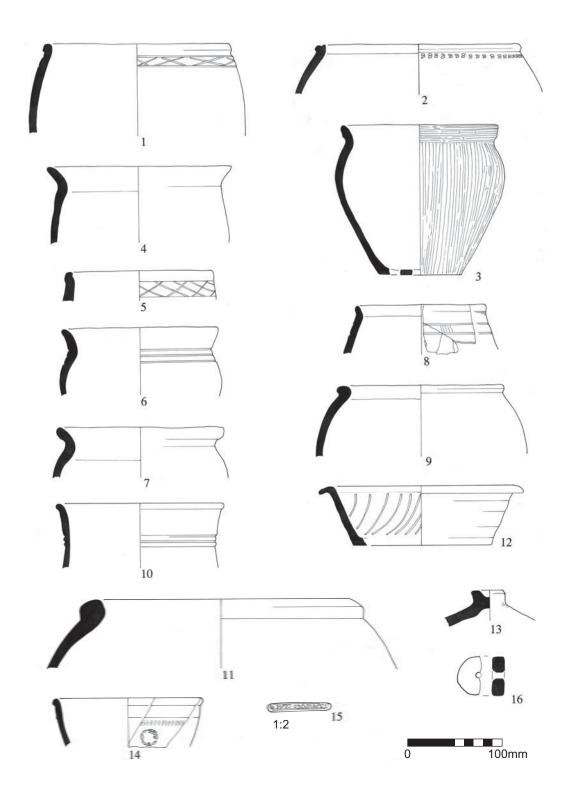


Fig 14: A46 Ashchurch Railway Bridge. Pottery. Scale 1:4 (except 15, 1:2)

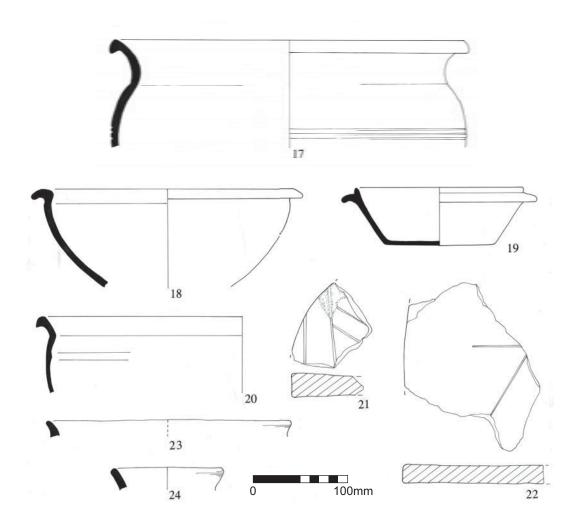


Fig 15: A46 Ashchurch Railway Bridge. Pottery. Scale 1:4.



Plate 1: Grey inflammatory deposits on ribs of Skeleton 705



Plate 2: Grey inflammatory deposits on the internal skull surface of Skeleton 731



Plate 3: Porosity on vertebra of Skeleton 081

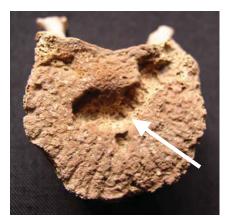


Plate 4: Schmorl's node depression in thoracic vertebra of Skeleton 731

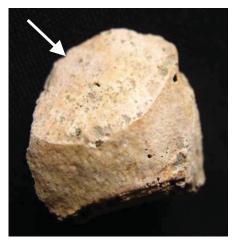


Plate 5: Shiny eburnated surface on upper part of lunate (wrist bone) from osteoarthritis in Skeleton 084



Plate 6: Dental infraction of canine of Skeleton 081

A46 Ashchurch Railway Bridge

Appendix 1: Context list

Notes on context list: Group, feature and structure numbers are shown in bold. These numbers indicate the stratigraphic relationships, dimensions and period, with a description of the features. The group numbers also show the cuts, and corresponding fills, which make up the group. Dimensions are the maximum dimensions established.

No.	Includes nos.	Contains fills	Below on matrix	Above on matrix	Dimensions	Period	Description
000			AII	None			Natural geology
001			None	002			Topsoil
002			001	Many			Subsoil: varies across site
003			None	004			Topsoil sealing 004
004		600	£00	600		C15-16	Stone structure? Possible post support or single course foundation. May be contemporary with 006 and 008.
005			None	006			Topsoil sealing 006
900			300	026	2.0 × 1.4 × 0.2	C15-16?	Stone deposit. Possible foundation or support/pad for a timber post. Single course of stones, no bonding. May be contemporary with 004 and 008.
200			None	008			Topsoil sealing 008
800	602, 609, 614	603, 610, 615	200	605, 619, 620	9.0 × 5.0 × 0.3	C15-16	Group number for irregular stone structure. Possible late med/early post- med C16 building. Small amount of pot suggests tpq of C15-16. Single sherd of C17-18 pot from 702, below this feature, but may be intrusive
600			004	000			Subsoil 'bonding' material for structure 004, see 004
010							Fill of pit 034
011							Fill of 012
012		011	002	000	5.0 x 2.0 x 0.25	P-med	Probable NE-SW furrow. Truncated by modern disturbance.
013							Fill of 014, see 745
014							Cut within furrow Group 745, see 745
015							Fill of 016
016		015	002	000	2.0 × 0.68 × 0.11	No date	E-W possible linear feature. Shallow and unclear

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A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on	Above on	Dimensions	Period	Description
			matrix	matrix			
017							Fill of post hole 018
018		017	002	000	0.51 × 0.45 × 0.21	No date	Post hole
019							Fill of pit 020
020		019	002	000	1.0 x 0.5 x 0.12	No date	Shallow pit in area of burials. Approximate N-S alignment. Possible base of heavily truncated grave?
021							Fill of 022, see 745
022							Cut within furrow Group 745, see 745
023							Fill of gully 024, see 165
024							Cut within Group 165, see 165
025							Fill of 026
026	050	025, 051	037, 006	741	6.0 x 3.73 x 0.32	C15-16	Shallow linear, only partially visible, possible furrow
027							Unallocated number
028							Fill of ditch 029, see 727
029							Cut within ditch Group 727, see 727
030			026				Natural deposit?
031							Fill of pit 044
032							Cut within ditch Group 147, see 147
033							Fill of ditch 032, see 147
034		010	037	000	3.4 x 1.5 x 0.19	C14-16	Shallow pit of uncertain function
035							Upper fill of 037
036							Primary fill of 037
037	048	035, 036, 049, 055	002	034, 026	7.0 x 0.82 x 0.51	C14-16	Linear feature, terminating at west end, only partially exposed
038							Fill of ditch 039, see 146
039							Cut within ditch Group 146
040							Fill of pit 041

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A46 Ashchurch Railway Bridge

QN	Includee noe	Containe fille	Below on	Ahove on	Dimensione	Dariod	Description
			matrix	matrix			
041		040	146	000	2.2 x 1.9 x 0.13	C14-16	Shallow pit of uncertain function
042		043	147	000	8.5 x 0.5 x 0.11	No date	Gully terminating at north, unclear to south. Pre dates ditch 147
043							Fill of 042
044	046	031, 045	200	165	5.1 x 3.2 x 0.25	C12-16	Large shallow pit. Single med sherd with 19 residual RB sherds. Quarry pit? Cuts med ditch 165
045							Fill of 046, see 044
046							Cut within pit 044, originally interpreted as a ditch, see 044
047							Human skeleton within grave cut 065, see 065
048							Cut same as 037, see 037
049							Primary fill of ditch 048, see 037
050							Cut same as 026, see 026
051							Fill of 050, see 026
052							Cut within ditch Group 146
053							Fill of 052, see 146
054							Fill of gully 066, see 165
055							Upper fill of ditch 048, see 037
056							Cut within ditch Group 147, see 147
057							Fill of Ditch 056, see 147
058							Cut within ditch Group 146
059							Fill of 058, see Group 146
090							Cut within ditch Group 146
061							Primary fill of Ditch 060, see Group 146
062							Upper fill of Ditch 060, see Group 146
063							Cut within Group 165, see 165
064							Fill of Gully 063, see 165

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A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on matrix	Above on matrix	Dimensions	Period	Description
065		047, 067	002	000	1.8 x 0.6 x ?	RB	N-S grave cut. Heavily truncated and shallow. Containing skeleton 047, extended with head at north end.
066							Cut within Group 165, see 165
067							Fill of grave cut 065
890							Cut within furrow Group 249, see 249
690							Fill of furrow 068, see 249
070							Fill of pit 071
071		070, 111	165, 495	000	4.0 x 3.2 x 0.34	C14-16	Irregular shaped pit. Quarry pit?
072							Unallocated number
073							Fill of 235, see 494
074							Fill of 237, see 237
075							Upper fill of ditch 077, see 122
076							Primary fill of ditch 077, see 122
077							Cut within ditch Group 122, see 122
078							Cut within ditch Group 147, see 147
079							Upper fill of ditch 078, see 147
080							Primary fill of ditch 078, see 147
081							Human skeleton from grave cut 082
082		081, 083	085	000	1.6 x 0.65 x ?	RB	N-S grave cut. Heavily truncated, edges difficult to establish. Containing skeleton 081, extended with head at north end.
083							Fill of grave cut 082
084							Human skeleton from grave cut 085
085	724	084, 086, 722, 723	002	082	1.85 × 0.6 × ?	RB	N-S grave cut. Heavily truncated and edges difficult to establish. Containing skeleton 084, extended with legs to south. Head decapitated and placed at feet cut 724, 723.
086							Fill of grave cut 085

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A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on	Above on	Dimensions	Period	Description
			matrix	matrix			
087							Upper fill of ditch re-cut 089, see 188
088							Primary fill of ditch re-cut 089, see 188
680							Probable re-cut of ditch 092, within ditch Group 188, see 188
060							Upper fill of ditch 092, see 188
091							Fill of ditch 092, see 188
092							Cut within ditch Group 188, see 188
093							Fill of 248, see 390
094							Upper fill of ditch 157, see 256
095							Fill of gully 096, see 189
960							Cut within gully Group 189, see 189
260							Fill of 098
860		097	002	189	1.6 x 1.4 x 0.2	RB C2	Shallow depression, possible heavily truncated pit. C2 pot, but cuts 189 which may be later RB date.
660							Upper fill of 101
100							Primary fill of 101
101		099, 100	002	188, ?189	2.4 × 1.4 × 0.45	RB C2	Partially exposed unclear feature. Pit/ditch terminus. C2 pot, cuts 188 which is also ceramically dated to C2
102							Fill of 103, see 188
103							Possible continuation of ditch Group 188 to the north, see 188
104							Cut within ditch Group 661, see 661
105							Primary fill of ditch 104, see 661
106							Secondary fill of ditch 104, see 661
107							Upper fill of ditch 104, see 661
108							Upper fill of ditch 104, see 661
109							Re-cut of ditch 104 within ditch Group 661, see 661

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A46 Ashchurch Railway Bridge

CN N	Includes nos	Contains fills	Below on	Ahove on	Dimensions	Period	Description
			matrix	matrix			
110							Fill of ditch re-cut 109, see 661
111							Primary fill of pit 071
112							Fill of pit 113
113		112	002	000	0.9 x 0.9 x 0.15	RB C2-4	Shallow pit, no stratigraphic relationships
114							Fill of furrow 115, see 249
115							Cut within furrow Group 249, see 249
116			256				?natural
117							Terminus, cut within ditch Group 257, see 257
118							Fill of 117, see 257
119							Cut within ditch Group 122, see 122
120							Fill of ditch 119, see 122
121							Tertiary fill of ditch 157, see 256
122	077, 119	075, 076, 120	745	000	10.0 × 0.9 × 0.3	C12-14	Group number for N-S linear, terminating at south end. C12-14 date suggests this ditch may be earlier than the other medieval features
123							Fill of 145, see 145
124							Edge of lens within fill of ditch 126, see 729
125							Material within 124, see 729
126							Cut within ditch Group 729, see 729
127							Fill of ditch 126, see 729
128							Fill of gully 129
129		128	002	132	7.0 × 0.3 × 0.25	RB C2+	E-W linear gully. Ceramically M-LIA, but cuts C2 ditch 136
130							Upper fill of ditch 132, see 132
131							Primary fill of ditch 132, see 132
132		130, 131	129	136	1.3 x 1.4 x 0.4	RB C2+	NE-SW ditch terminus. Ceramically M-LIA, but cuts C2 ditch 136
133							Upper fill of ditch 136, see 136

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A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on matrix	Above on matrix	Dimensions	Period	Description
134							Secondary fill of ditch 136, see 136
135							Primary fill of ditch 136, see 136
136		133, 134, 135	132	000	4.5 x 1.6 x 0.5	RB C2	NE-SW ditch. Pottery gives C2 date, suggesting the LIA pottery from strat. later ditches, 129 and 132, is residual
137							Primary fill of ditch 141, see 141
138							Primary fill of ditch 141, see 141
139							Fill of ditch 141, see 141
140							Unallocated number
141		137, 138, 139	271	000	4.3 x 2.3 x 0.8	RB late C3/C4	ENE-WSW ditch. Large boundary ditch? Late in RB ceramic sequence
142							Fill of ditch 144, see 144
143			002	000			Redeposited natural
144		142	209, 254	000	3.4 × 2.0 × 0.4	No date	N-S ditch. Undated, but cut by 209 which has a single sherd of RB pot
145	544	123	547	000	6.0 x 0.87 x 0.14	RB C2	NE-SW shallow linear feature, in a poorly defined area. Early in RB strat and ceramic sequence
146	039, 052, 058, 060	038, 053, 059, 061, 062	147, 165, ?727	041	13.0 × 1.74 × 0.44	C14-16	Group number for NNW-SSE linear, not apparent to south of ditch 147 and continuation to the north unclear. Pottery largely RB, but also saxon and C12-14 pot and cuts 041. NB parallel to RB burials
147	032, 056, 078, 237, 623, 681	033, 057, 079, 080, 236, 074, 624, 682	495	042, 146, 729, ?741	25.7 x 3.8 x 0.53	C14-16	Group number for NE-SW ditch, widening and terminating at west end. Residual RB and single intrusive Pmed sherd
148							Cut within ditch Group 495, see 495
149							Fill of gully 148, see 495
150							Cut within ditch Group 494, see 494
151							Fill of 150, see 494
152							Cut within ditch Group 255, see 255
153							Primary fill of ditch 152, see 255

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A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on matrix	Above on matrix	Dimensions	Period	Description
154		155	255	000	2.0 x 0.7 x 0.34	RB C1-2	Partially exposed and truncated feature, possible section of curving ditch or pit. Cut by 255 which is ceramically dated C2
155							Fill of 154
156							Secondary fill of 152, see 255
157							Cut within ditch Group 256, see 256
158							Fill of ditch 685, see 686
159							Basal fill of ditch 157, see 256
160							Primary fill of ditch 157, see 256
161							Fill of stake/post hole 162
162		161	002	000	0.18 × 0.1 × 0.1	RB C2-3	Stake/post hole, possibly associated with ph 164
163							Fill of stake/post hole 164
164		163	002	000	0.19 x 0.19 x 0.14	No date	Stake/post-hole, possibly associated with ph 162
165	024, 063, 066	023, 064, 054	044	071, 146	11.0 × 0.49 × 0.27	C14-16	Group number for NE-SW linear, continuation to east and west not apparent. Possible return to 495?
166			001	167			Subsoil layer
167							Fill of ditch re-cut 187, see 188
168							Fill of ditch 169, see 188
169							Cut within ditch Group 188, see 188
170							Fill of pit 172, see 754
171			754	None			Natural
172							Cut within pit Group 754, see 754
173							Upper fill of pit 175
174							Primary fill of pit 175
175		173, 174	754	000	1.4 × 0.6 × 0.58	No date	Pit, heavily truncated. Pre-dates RB features
176							Fill of pit 177, see 753

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A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on matrix	Above on matrix	Dimensions	Period	Description
177							Cut within pit Group 753, see 753
178							Fill of gully 179, see 189
179							Cut within gully Group 189, see 189
180							Fill of pit 181, see 754
181							Cut within pit Group 754, see 754
182							Upper fill of ditch 184, see 320
183							Primary fill of ditch 184, see 320
184							Cut within ditch Group 320, see 320
185							Fill of 186
186		185	320	N869	4.8 x 1.5 x 0.15	RB C2+	Poorly defined large shallow feature, possible pit (base of quarry pit?) or tree bole. Pot suggests RB date
187							Probable re-cut of ditch 169, within ditch Group 188, see 188
188	092, 169, 591, ?103 and ?re-cuts 089, 187	090, 091, 168, 592, 593, 594, ?102 and fills of ?re- cuts 087, 088, 167	101, 745	754, 747	17.5 x 2.8 x 1.15	RB C2	Group number for NNW-SSE ditch, which may mark the eastern boundary to significant RB activity. Recut of 188 may be associated with parallel ditch 377 to west, but ceramically 377 is dated to C3.
189	096, 179, 265, 310, 312, 675	095, 178, 264, 309, 311, 676	098, 753	734, 754	12.5 x 1.0 x 0.25	RB C2-4	Group number for NW-SE gully of probable RB date, 2 Pmed sherds, intrusive from area of furrow 249. Peters out to south.
190							Fill of gully or plough cut 191
191		190	002	000	4.0 × 0.25 × 0.15	No date	Possible NE-SW gully or plough cut
192							Fill of ditch re-cut 195
193							Fill of ditch re-cut 195
194							Basal fill of ditch re-cut 195
195		192, 193, 194	002	197, 199	4.2 x 1.5 x 0.4	RB C3	NE-SW ditch, re-cut of ditch 197. 195 is ceramically C2, but 197 is C3
196							Fill of ditch 197
197		196	195	000	4.2 x 0.8 x 0.3	RB C3	NE-SW ditch, which has been re-cut by 195
198							Fill of gully 199

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A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on matrix	Above on matrix	Dimensions	Period	Description
199		198	195	000	1.2 × 0.3 × 0.2	RB C2	NE-SW gully, turning to NW. Below and cut by 195
200			002	145, 203, 547			Stony layer, sealing features
201							Mottled natural?
202							Fill of post-hole 203
203		202	200	000	0.46 x 0.46 x 0.24	RB C2-4	Post-hole with post pad. Probable structural purpose, but no apparently related features
204							Fill of 205
205		204	002	000	0.78 × 0.6 × 0.11	RB C2-4	Shallow sub-rectangular feature with indistinct edges, possible RB pit
206							Cut within ditch Group 643, see 643
207							Upper fill of 206, see 643
208							Primary fill of 206, see 643
209							Fill of ditch 210
210		209	002	144	4.4 × 0.4 × 0.26	RB C2-4	NE-SW vertically sided ditch/gully. Late C2-4
211							Fill of pit 212
212			002	000	0.75 × 0.55 × 0.26	RB C3-4	Ovoid pit/large post hole. Late C3-4 date, late in RB sequence
213							Cut within furrow Group 390, see 390
214							Fill of 213, see 390
215		216	255, 390	000	1.0 × 0.19 × 0.1	No date	NE-SW gully, heavily truncated, only 1m length visible. Undated, but cut by RB feature, 255
216							Fill of gully 215
217							Cut within ditch Group 255, see 255
218							Primary fill of ditch 217, see 255
219							Secondary fill of ditch 217, see 255
220							Upper fill of ditch 217, see 255
221							Cut within ditch Group 686, see 686

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A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on	Above on	Dimensions	Period	Description
			matrix	matrix			
222							Primary fill of ditch 221, see 686
223							Upper fill of ditch 221, see 686
224							Cut within ditch Group 256, see 256
225							Primary fill of ditch 224, see 256
226							Secondary fill of ditch 224, see 256
227							Tertiary fill of ditch 224, see 256
228							Upper fill of ditch 224, see 256
229							Cut within ditch Group 389, see 389
230							Basal fill of ditch 229, see 389
231							Upper fill of ditch 229, see 389
232							Cut within ditch Group 388, see 388
233							Primary fill of 232, see 388
234							Secondary fill of 232, see 388
235							Cut within ditch Group 494, see 494
236							Fill of 237, see 147
237							Cut within ditch Group 147, see 147
238							Cut within ditch Group 495, see 495
239							Fill of gully 238, see 495
240							Cut within furrow Group 249, see 249
241							Fill of 240, see 249
242							Cut within ditch Group 389, see 389
243							Fill of 242, see 389
244							Cut within ditch Group 257, see 257
245							Fill of 244, see 257

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A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on matrix	Above on matrix	Dimensions	Period	Description
246		247	256	000	8.4 x 0.77 x 0.4	RB?	E-W ditch. Possibly part of a rectilinear system of ditches, along with 257, 387 and 755. Cut by C2-3 ditch 256
247							Fill of ditch 246
248							Shallow depression probably part of furrow 390, see 390
249	068,115,240, 399	069, 114, 241, 400	002	Many	24.5 x 2.0 x 0.2	P-med	Group number for NE-SW furrow.
250							Part of furrow 390?
251		252	002	000	1.27 × 0.55 × 0.43	RB C2-4	Partially exposed pit.
252							Fill of pit 251
253							Fill of ditch 254
254		253	002	144	3.4 x 1.6 x 0.3	No date	NE-SW ditch, terminating at SW end. No dating, but on same alignment as RB ditches
255	152, 217, 371	153, 156, 218, 219, 220, 372	002	686, 215, 154, 689	12.4 x 1.72 x 0.6	RB C2	Group number for c. E-W curvilinear ditch, terminating at east end. Ceramically C2 date. Cuts 686, 154, 698N, 689 and 215
256	157, 224, ?716	160, 159, 121, 094, 225, 226, 227, 228, ?717	699	686, 246	12.2 × 2.06 × 0.82	RB C2/3	Group number for c. E-W ditch, terminating at west end and possibly at east end (cut 716). No continuation apparent to east of 377, unless 259 is continuation
257	117, 244, 416	118, 243, 417	389	698S	7.7 × 1.0 × 0.44	RB C3	Group number for N-S ditch with terminus at north end. Possibly part of a rectilinear system of ditches, along with 246, 387 and 755. Fills suggest contemproneity with 418 of Group 387.
258							Fill of ditch 259
259	355	258, 356	377	000	2.2 × 1.1 × 0.2	RB C2+	E-W ditch terminus, possibly same as 256, but very shallow
260							Fill of pit 261, see 753
261							Cut within pit Group 753, see 753
262							Fill of gully 263, see 319
263							Cut within gully Group 319, see 319
264							Fill of gully 265, see 189
265							Cut within gully Group 189, see 189

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A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on	Above on	Dimensions	Period	Description
			matrix	matrix			
266							Primary fill of pit 269, see 754
267							Unallocated number
268							Upper fill of pit 269, see 754
269							Cut within pit Group 754, see 754
270		290	271	425?	1.7 × 1.0 × 0.14	RB C2- 3?	Shallow irregular (possible natural) depression. Containing a single RB sherd. Possibly cutting 425
271		291	002	270, 141	6.2 x 0.6 x 0.22	No date	NNW-SSE ditch/gully. No pottery, but parallel to 272 (Saxon pot) and cutting RB ditches
272		292, 293, 294	002	662	6.4 x 1.74 x 0.58	Saxon C5-11	NNW-SSE ditch, with possible re-cut. Late in stratigraphic sequence and containing a single saxon sherd (possibly intrusive). Remaining sherds suggest C3 date.
273							Cut within ditch Group 755, see 755
274							Primary fill of ditch 273, see 755
275							Upper fill of ditch 273, see 755
276							Cut within ditch Group 388, see 388
277							Primary fill of ditch 276, see 388
278							Secondary fill of ditch 276, see 388
279							Upper fill of ditch 276, see 388
280		281, 282	388	000	1.2 × 0.4 × 0.39	RB C2-3	NE-SW gully, only partially visible
281							Primary fill of gully 280
282							Upper fill of gully 280
283							Fill of gully 284
284		283	285	000	1.7 × 0.26 × 0.24	RB/ Saxon?	E-W gully in a poorly defined area. Single sherd of possible saxon (or IA) pot and 6 RB sherds, possible saxon date, but strat is contradictory, high probability of intrusion
285		343	547?	284	0.7 × 0.6 × 0.45	No date	Probable pit in a very poorly defined area. Appears to cut 284
286							Unallocated number

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A46 Ashchurch Railway Bridge

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.0N	includes nos.		matrix	matrix	חווופוואוסווא		Description
287							Unallocated number
288		289	002	000	5.0 × 1.7 × 0.47	RB C2-3	NE-SW ditch, parallel to 326
289							Fill of ditch 288
290							Fill of hollow 270
291							Fill of ditch/gully 271
292							Upper fill of ditch 272
293							Secondary fill of ditch 272
294							Primary fill of ditch 272
295							Cut within ditch Group 755, see 755
296							Fill of ditch 295, see 755
297							Cut within ditch Group 387, see 387
298							Fill of ditch 297, see 387
299							Upper fill of pit 300
300		299, 443, 444	396	639	7.0 × 2.5 × 0.84	RB C3	Large irregular feature. ?Quarry pit. 200+ RB sherds, largely C3
301							Cut within ditch Group 377, see 377
302							Primary fill of ditch 301, see 377
303							Secondary fill of ditch 301, see 377
304							Upper fill of ditch 301, see 377
305		306	377	720	4.3 x 1.0 x 0.32	RB C3	Oval pit of uncertain function. Cuts C3 ditch 699
306							Fill of pit 305
307							Cut within ditch Group 699, see 699
308							Fill of ditch 307, see 699
309							Fill of gully 310, see 189
310							Cut within gully Group 189, see 189

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A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on matrix	Above on matrix	u v	Dimensions	Period	Description
311								Fill of gully 312, see 189
312								Cut within gully Group 189, see 189
313								Fill of gully 314, see 319
314								Cut within gully Group 319, see 319
315								Fill of feature 316
316		315	320	000	~`	.1 × 1.1 × 0.03	No date	Very shallow feature. Possible base of a truncated pit. No pot, but pre- dates RB ditch 320
317								Upper fill of ditch 318, see 320
318								Cut within gully Group 320, see 320
319	263, 314, 331	262, 313, 330	320, 754	000	5	6 x 0.45 x 0.28	RB C2	Group number for NE-SW linear gully, only partially visible due to truncation. Ceramically C2 date
320	184, 318, 393, 474, 527, 559	182, 183, 317, 357, 394, 475, 476, 525, 526, 560, 561	701	377, 1 316, 3 386, 5 468, 4 472	186, 2 [,] 319, 522, 470,	24.5 × 1.8 × 0.85	RB C3	Group number for curvilinear ditch running generally N-S and terminating at north end. Pottery suggests a C2-3 date, but stratigraphically late in RB sequence, cutting C3 ditches, suggesting a large residual component
321								Cut within ditch Group 389, see 389
322								Primary fill of ditch 321, see 389
323								Upper fill of ditch 321, see 389
324		325	389	000	0.	.8 × 0.6 × 0.07	RB C2-4	Possible irregular feature, but could be the result of root disturbance
325								Fill of 324
326		327	002	328	5.	.0 × 1.34 × 0.58	RB C3	ENE-WSW ditch, parallel to 288 and 328
327								Fill of ditch 326
328		329	326	000	5.	.0 × 0.56 × 0.17	RB C2+	ENE-WSW ditch/gully, cut by 326
329								Fill of ditch/gully 328
330								Fill of gully 331, see 319
331								Cut within gully Group 319, see 319

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A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on	Above on	Dimensions	Period	Description
			matrix	matrix			
332							Fill of pit 333, see 753
333							Cut within pit 753, see 753
334			None	002			Topsoil layer above 425, 429 and 436, containing large amounts of residual RB pot, which may be derived from these features.
335							Cut within ditch Group 389, see 389
336							Fill of ditch 335, see 389
337							Cut within ditch Group 698S, see 698S
338							Fill of ditch 337, see 698S
339		340	389	000	0.9 × 0.6 × 0.13	RB C2-4	Shallow probable base of pit. Cut by 389
340							Fill of pit 339
341		342	002	000	0.6 × 0.6 × 0.06	No date	Probable tree bole
342							Fill of 341
343							Fill of pit 285
344							Possible pit/post-hole, but very uncertain and is probably part of 699
345							Primary fill of 344
346							Cut within ditch Group 699, see 699
347							Primary fill of 346, see 699
348							Upper fill of 344
349							Upper fill of 346, see 699
350							Cut within ditch Group 699, see 699
351							Cut within ditch Group 377, see 377
352							Primary fill of 351, see 377
353							Secondary fill of 351, see 377
354							Upper fill of 351, see 377
355							Part of 259, see 259

Gloucestershire County Council Archaeology Service

A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on	Above on	Dimensions	Period	Description
			matrix	matrix			
356							Fill of gully 355
357							Primary fill of ditch 318, see 320
358							Cut within ditch Group 388, see 388
359							Primary fill of ditch 358, see 388
360							Upper fill of ditch 358, see 388
361							Cut within ditch Group 389, see 389
362							Fill of ditch 361, see 389
363		364	388	000	1.5 x 0.63 x 0.12	No date	Small section of N-S gully observed below 388. Undated but cut by RB feature
364							Fill of gully 363
365		366, 367	366	000	0.68 x 0.68 x 0.38	RB C2/3	Pit, no stratigraphic relationships
366							Primary fill of pit 365
367							Upper fill of pit 365
368							Primary fill of ditch 350, see 699
369							Secondary fill of ditch 350, see 699
370							Upper fill of ditch 350, see 699
371							Cut within ditch Group 255, see 255
372							Fill of ditch 371, see 255
373		374	390	000	0.6 x 0.9 x 0.38	No date	Truncated partially exposed possible south terminus of N-S ditch, or a pit
374							Fill of 373
375							Fill of ditch 376
376		375	002	000	1.2 x 0.33 x 0.34	M-LIA	Partially exposed E-W ditch, terminating at east end. Ceramically mid to late IA (3 sherds MALRE A & B)

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A46 Ashchurch Railway Bridge

No.	Includes nos.	nos.	Contains fills	Below on matrix	Above on matrix	Dimensions	Period	Description
377	301, 351, 481, 487, 556, 562,	, 403, , 510,	302, 303, 304, 352, 353, 354, 404, 405, 406, 407, 482, 483, 511, 512, 513, 557, 558, 563, 564	320, 490	305, 259, 414, 486, 492, 389, ?568	28.7 × 2.6 × 0.95	RB C3	Group number for NNW-SSE ditch. Stratigraphically late in RB sequence, cut only by 320. Large amount of C3 pot. May be associated with re-cut of parallel ditch 188, to east, but ceramically 188 is dated to C2
378								Fill of gully 386
379								Fill of furrow 380, see 390
380								Cut within furrow Group 390, see 390
381								Upper fill of 383, see 414
382								Primary fill of ditch 383, see 414
383								Cut within ditch Group 414, see 414
384								Fill of post-pipe for post-hole 385
385			384, 415	390	414	0.3 × 0.26 × 0.5	No date	Post-hole with post pipe. Possibly cuts 414. Associated with 693 and 462?
386			378	320	698N	2.4 × 0.45 × 0.08	RB	E-W shallow gully, cut by and not observed to west of 320. Single sherd MALREA, but cuts 698N, which may be RB date
387	297, 418, 439, 463, 565, 570, 738	, 439, 70, 738	298, 419, 440, 441, 464, 465, 566, 567, 571, 572, 739, 740	755, 377, 568, 388	670, 698S, 747	23.6 × 1.0 × 0.66	RB C3?	Group number for E-W ditch with a N-S return at east end and a N-S return half way along the exposed length of ditch. Possibly part of a rectilinear system of ditches, along with 257, 246 and 755. The pot is mainly C3. A single sherd of C4 pot is likely to be residual, given the C3 ceramic dates for 377, 388 and 389, which cut 387
388	232, 358, 276	76	233, 234, 359, 360, 277, 278, 279	389	280, 363, 387, 755	12.0 x 2.44 x 0.8	RB C3	Group number for ditch, curving round from N-S to E-W. Pot suggests a C3. Cut by 389 and cuts 387
389	229, 242, 335, 361, 505	, 321, 05	230, 231, 243, 322, 323, 336, 362, 506	377	257, 324, 339, 388, 686, 699	17.0 × 1.98 × 0.7	C3	Group number for E-W ditch, which curves round to the north at the east end. Cut by 377, and relatively late in RB stratigraphic sequence. Pot suggests C3 date
390	213, 248, 412, 515	, 380,	214, 093, 379, 413, 514	002	Many	20.7 x 2.2 x 0.25	P-med	Group number for NE-SW furrow.
391								Cut within ditch Group 492, see 492
392								Upper fill of ditch 391, see 492
393								Cut within gully Group 320, see 320

Appendix 1

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A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on matrix	Above on matrix	Dimensions	Period	Description
394							Fill of ditch 393, see 320
395							Fill of 396
396	445	395, 442	002	300, 499	5.2 × 1.7 × 0.17	P-med	NE-SW probable furrow
397		398	002	000	0.32 × 0.32 × 0.31	No date	Post-hole with possible evidence of burning
398							Fill of post-hole 397
399							Cut within furrow Group 249, see 249
400							Fill of furrow 399, see 249
401		402	495	000	0.23 x 0.23 x 0.22	No date	Circular post-hole. ?Pre-dates med features. No apparently related features. Cut by and below ditch 495
402							Fill of post-hole 401
403							Cut within ditch Group 377, see 377
404							Primary fill of ditch 403, see 377
405							Secondary fill of ditch 403, see 377
406							Tertiary fill of ditch 403, see 377
407							Upper fill of ditch 403, see 377
408							Cut within ditch Group 414, see 414
409							Primary fill of ditch 408, see 414
410							Secondary fill of ditch 408, see 414
411							Upper fill of ditch 408, see 414
412							Cut within furrow Group 390, see 390
413							Fill of furrow 412, see 390
414	383, 408	381, 382, 409, 410, 411	522, 377, ?385	000	5.5 x 1.4 x 0.7	M-LIA?	Group number for NE-SW ditch, terminating at WSW end (with v-shaped profile). Early stratigraphically, cut by 522 of mid to late IA date. Slot 383 (of 414) is ceramically mid to late IA, but RB and 2 sherds med pot from slot 408. Possible large amount of intrusion from furrow 390
415							Primary fill of post-hole 385

Gloucestershire County Council Archaeology Service

A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on	Above on	Dimensions	Period	Description
			matrix	matrix			
416							Cut within ditch Group 257, see 257
417							Fill of ditch 416, see 257
418							Cut within ditch Group 387, see 387
419							Fill of ditch 418, see 387
420							Fill of ditch 421, see 664
421							Cut within ditch Group 664, see 664
422							Upper fill of ditch 425
423							Secondary fill of ditch 425
424							Primary fill of ditch 425
425		422, 423, 424	270?, 271, 664	429	6.4 x 1.0 x 0.8	RB C2	NE-SW ditch, possibly curving to west at SW end. Re-cut of 429. Probable 2^{nd} re-cut of a LIA/C1 AD ditch 436
426							Upper fill of ditch 429
427							Secondary fill of ditch 429
428							Primary fill of ditch 429
429		426, 427, 428	425	436	6.0 × 1.0 × 0.9	RB C2	NE-SW ditch, possibly curving to west at SW end. Probable 1 st re-cut of a LIA/C1 AD ditch 436 and itself re-cut by 425
430							Fill of 431, see 662
431							Cut within ditch Group 662, see 662
432							Upper fill of ditch 436
433							Tertiary fill of ditch 436
434							Secondary fill of ditch 436
435							Primary fill of ditch 436
436		432, 433, 434, 435	429	000	5.0 × 1.8 × 1.0	LIA C1 AD	Large NE-SW ditch, later re-cut by 429, then 425. Ceramic assemblage (139 sherds) is indicative of a date around the conquest period. May provide evidence for continuity from LIA to RB.
437							Cut within ditch Group 698S, see 698S

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A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on matrix	Above on matrix	Dimensions	Period	Description
438							Fill of gully 437, see 698S
439							Cut within ditch Group 387, see 387
440							Primary fill of ditch 439, see 387
441							Upper fill of ditch 439, see 387
442							Fill of 445, see 396
443							Secondary fill of pit 300
444							Primary fill of pit 300
445							Furrow, see 396
446		447	450?	450?	0.49 x 0.49 x 0.15	LIA?	Post-hole. Possibly cutting furrow 450, but uncertain, and could be below 450. Ceramically mid to late IA, but only 1 sherd. Related to 448 and 484?
447							Fill of post-hole 446
448		449	002	000	0.44 × 0.27 × 0.07	No date	Post-hole. Related to 446 and 484?
449							Fill of post-hole 448
450		451	002	484	4.1 x 3.1 x 0.15	P-med	NE-SW furrow, 28 residual RB sherds
451							Fill of furrow 450
452							Fill of post-hole 453
453		452	002	455	0.3 x 0.3 x 0.25	No date	Post-hole, cutting 455. Possibly late in date
454							Fill of shallow feature 455
455	524	454, 523	453	486, 460	4.6 x 4.0 x 0.15	RB C2-3	Shallow feature? Possible spread of material/midden/furrow. Contains 40 sherds RB pot, possibly derived from ditch 486
456							Upper fill of ditch 458, see 486
457							Primary fill of ditch 458, see 486
458							Cut within ditch Group 486, see 486
459							Fill of post-hole 460
460		459	455	000	0.4 × 0.3 × 0.25	RB C2?	Post-hole

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A46 Ashchurch Railway Bridge

Ň	Includes nos.	Contains fills	Below on	Above on	Dimensions	Period	Description
			matrix	matrix			
461							Fill of post-hole 462
462		461	486	000	0.3 x 0.3 x 0.15	No date	Post-hole. No pot, but pre-dates RB ditch 486. Related to 385 and 693?
463							Cut within ditch Group 387, see 387
464							Primary fill of ditch 463, see 387
465							Upper fill of ditch 463, see 387
466							Cut within ditch Group 698S, see 698S
467							Fill of ditch 466, see 698S
468		469	320	000	0.5 x 0.35 x 0.4	No date	Short section of NW-SE ditch. Heavily truncated, pre-dates C3 ditch 320
469							Fill of ditch 468
470		471	320	000	0.9m x 0.6 x 0.08	RB C1-2	Base of short section of N-S ditch. Heavily truncated by 320
471							Fill of ditch 470
472		473	320	000	0.3 × 0.74 × 0.42	No date	Pit/ditch terminus, only partially exposed. Pre-dates C3 ditch 320
473							Fill of pit/ditch terminus 472
474							Cut within gully Group 320, see 320
475							Primary fill of ditch 474, see 320
476							Upper fill of ditch 474, see320
477							Possible primary fill of ditch 391, but more likely fill of 320, see 492
478							Cut within ditch Group 486, see 486
479							Primary fill of ditch 478, see 486
480							Upper fill of ditch 478, see 486
481							Cut within ditch Group 377, see 377
482							Primary fill of ditch 481, see 377
483							Upper fill of ditch 481, see 377
484		485	450	000	0.33 × 0.33 × 0.17	No date	Post-hole. Related to 446 and 448?

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A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on matrix	Above on matrix	Dimensions	Period	Description
485							Fill of post-hole 484
486	458, 478, 530	456, 457, 479, 480, 528, 529	377, 455	462, 532	5.5 x 3.5 x 1.0	RB C2	Group number for E-W ditch, terminating at west end. Early in RB sequence and ceramically C2. Parallel and possibly associated with 414, to south (although 414 is probably earlier)
487							Cut within ditch Group 377, see 377
488							Primary fill of ditch 487, see 377
489							Upper fill of ditch 487, see 377
490		491	002	377	5.8 x 2.8 x 0.1	P-med	NE-SW furrow
491							Fill of furrow 490
492	391, 743	392, ?477, 509	377	744	3.2 x 0.8 x 0.28	RB C3	Group number for heavily truncated curvilinear section of ditch running c. NW-SE. Ceramic dating suggests C3. Cut by C3 ditch 377, and 320
493							Fill of 498
494	150, 235, 640, 683, 707	151, 073, 641, 684, 708	008, 709, 745	495, 727	18.5 x 2.1 x 0.4	C14-16	Group number for NW-SE ditch, curving to terminus at south end. Late in medieval stratigraphic sequence, contains mostly C14-16 pot. Cut by structure 008. Bone spindle whorl, possible residual saxon and iron finds consistent with a C15-16 date
495	148, 238	149, 239	4 64	071, 147	8.5 x 0.91 x 0.42	C14-16	Group number for N-S ditch terminating at south end, unclear at north end
496							Upper fill of 498
497							Primary fill of 498
498		493, 496, 497, 595, 596	547	000	0.53 × 0.53 × 0.24	RB C2-4	Pit/post-hole in a poorly defined area
499		500	396, 501, 533	000	4.0 x 0.6 x 0.43	RB C2	NW-SE gully, tapering, and not apparent to either side of furrows which truncate it. Ceramically C2, early in RB sequence
500							Fill of gully 499
501		502	002	499	0.26 × 0.26 × 0.07	No date	Post-hole. No pot, but post dates RB C2 ditch 499
502							Fill of post-hole 501
503							Cut within ditch Group 699, see 699
504							Fill of ditch 503, see 699

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A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on	Above on	Dimensions	Period	Description
			matrix	matrix			
505							Cut within ditch Group 389, see 389
506							Fill of ditch 505, see 389
507							Cut within ditch 744, see 744
508							Fill of ditch 507, see 744
509							Fill of gully 743, see 492
510							Cut within ditch Group 377, see 377
511							Primary fill of ditch 510, see 377
512							Fill of ditch 510, see 377
513							Upper fill of ditch 510, see 377
514							Fill of furrow 515, see 390
515							Cut within furrow Group 390, see 390 furrow
516							Burnt material in pit 522
517							Fill of pit 522
518							Fill of pit 522
519							Fill of pit 522
520							Fill of pit 522
521							Primary fill of pit 522
522		516, 517, 518, 519, 520, 521	320	414	2.0 x 1.3 x 0.8	M-LIA?	Ovoid pit. Ceramically early, probably LIA date, but cuts 414 which is either ceramically later or has intrusive pot.
523							Fill of 524, see 455
524							Cut, same as 455. Possible furrow?, see 455
525							Upper fill of ditch 527, see 320
526							Primary fill of ditch 527, see 320
527							Cut within gully Group 320, see 320
528							Upper fill of ditch 530, see 486

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A46 Ashchurch Railway Bridge

ON O	Include noe	Containe fille	Bolow on	Ahovon	Dimoneione	Doriod	Doscrintion
			matrix	matrix			
529							Primary fill of ditch 530, see 486
530							Cut within ditch Group 486, see 486
531							Fill of gully 532
532		531	486	000	0.75 x 0.3 x 0.35	No date	Heavily truncated E-W gully, terminating at east end and not apparent to west of ditch 320. Pre-dates RB ditch 486
533		534	002	499, 597	4.8 × 1.9 × 0.08	P-med?	Irregular feature, probable furrow
534							Fill of furrow 533
535							Fill of ditch 536, see 663
536							Cut within ditch Group 663, see 663
537							Fill of ditch 538, see 662
538							Cut within ditch Group 662, see 662
539							Fill of ditch 540, see 665
540							Cut within ditch Group 665, see 665
541							Fill of ditch 542, see 666
542							Cut within ditch Group 666, see 666
543							Fill of gully 544, see 145
544							Same as gully 145, see 145
545							Upper fill of 547
546							Primary fill of 547
547		545, 546, 599	200	145, 285, 498, 639	3.2 × 2.5 × 0.5	RB C2?	Irregular triangular feature in very poorly defined area of site. Probable tree-bole, which truncates and disturbs a number of features. Contains 16 sherds of C2 pot.
548							Fill of ditch 549, see 662
549							Cut within ditch Group 662, see 662
550							Fill of post-hole 551
551			002	662	0.5 x 0.5 x 0.1	No date	Shallow post-hole. No pot, but post dates RB ditch 662

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A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on	Above on	Dimensions	Period	Description
			matrix	matrix			
552							Fill of gully 553, see 666
553							Cut within ditch Group 666, see 666
554							Fill of ditch 555, see 664
555							Cut within ditch Group 664, see 664
556							Cut within ditch Group 377, see 377
557							Primary fill of ditch 556, see 377
558							Upper fill of ditch 556, see 377
559							Cut within gully Group 320, see 320
560							Primary fill of ditch 559, see 320
561							Upper fill of ditch 559, see 320
562							Cut within ditch Group 377, see 377
563							Upper fill of ditch 562, see 377
564							Primary fill of ditch 562, see 377
565							Cut within ditch Group 387, see 387
566							Upper fill of ditch 565, see 387
567							Primary fill of ditch 565, see 387
568		569	002	387	1.0 × 0.9 × 0.2	No date	Shallow round pit. No pot, but post dates 387
569							Fill of pit 568
570							Cut within ditch Group 387, see 387
571							Upper fill of ditch 570, see 387
572							Primary fill of ditch 570, see 387
573							Cut within ditch Group 699, see 699
574							Upper fill of ditch 573, see 699
575							Primary fill of ditch 573, see 699

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A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on	Above on	Dimensions	Period	Description
			matrix	matrix			
576							Cut within ditch Group 747, see 747
577							Upper fill of ditch 576, see 747
578							Primary fill of ditch 576, see 747
579							Cut within ditch Group 746, see 746
580							Upper fill of ditch 579, see 746
581							Primary fill of ditch 579, see 746
582							Cut within ditch Group 747, see 747
583							Upper fill of ditch 582, see 747
584							Primary fill of ditch 582, see 747
585							Cut within ditch Group 746, see 746
586							Upper fill of 585, see 746
587							Primary fill of 585, see 746
588							Cut within ditch Group 746, see 746
589							Upper fill of 588, see 746
590							Primary fill of 588, see 746
591							Cut within ditch Group 188, see 188
592							Upper fill of 591, see 188
593							Secondary fill of 591, see 188
594							Primary fill of 591, see 188
595							Fill of 498
596							Fill of 498
597	5	598	533	000	4.0 × 0.1 × 0.04	RB C2-4	Probable NW-SE linear feature, only partially exposed single SVW sherd
598							Fill of 597
599							Secondary fill of 547, see 547

Gloucestershire County Council Archaeology Service

A46 Ashchurch Railway Bridge

							:
No.	Includes nos.	Contains fills	Below on matrix	Above on matrix	Dimensions	Period	Description
600			002	000	1.6 × 1.4 × 0.05	No date	Shallow irregular feature, probable tree-bole?
601							Fill of 600
602							Part of surface of structure 008, see 008
603							Soil matrix within structure 602 of Group 008, see 008
604							Cut for structure 602 of Group 008, see 008
605							Subsoil above 008
606							Secondary fill of ditch 608, see 643
607							Primary fill of ditch 608, see 643
608							Cut within ditch Group 643, see 643
609							Wall foundation? Part of Group 008, see 008
610							Soil matrix within structure 609 of Group 008, see 008
611							Cut for structure 609 of Group 008, see 008
612							Fill of ditch/gully 613
613	618	612, 617	002	000	3.0 × 0.38 × 0.15	No date	N-S ditch/gully, below and pre-dating structure 008
614							?Floor surface of structure Group 008, see 008
615							Compacted soil matrix within 614 of Group 008, see 008
616							Cut for structure 614 of Group 008, see 008
617							Fill of ditch/gully 618, see 613
618							Ditch/gully, same as 613
619			008				Subsoil below structure 008
620			008				Subsoil below structure 008
621							Fill of 622
622		621	620	000	0.8 x 0.5 x 0.1	No date	Shallow feature, possible pit/tree bole. Below structure 008.
623							Cut within ditch Group 147, see 147

Gloucestershire County Council Archaeology Service

A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on	Above on	Dimensions	Period	Description
			matrix	matrix			
624							Fill of ditch 623, see 147
625		626	147?	000			Unclear, irregular spread, ?part of 642. Possible furrow, but could be disturbed natural, see 642
626							Fill of 625, see 642
627							Fill of ditch 628, see 663
628							Cut within ditch Group 663, see 663
629							Fill of post-hole 630
630		629	002	663	0.7 × 0.57 × 0.2	No date	Post-hole/pit. No pot, but post dates RB ditch 663
631							Fill of ditch 632, see 665
632							Cut within ditch Group 665, see 665
633							Upper fill of 635
634							Primary fill of 635
635		633, 634	665	000	1.8 x 0.6 x 0.6	No date	Partially exposed feature pit/ditch terminus. No pot, but pre-dates RB ditch 665
636							Fill of 639
637							Fill of post-hole 638
638		637	002	000	0.35 x 0.35 0.07	No date	Post-hole
639		636	300, 547	000	1.4 × 0.33 × 0.05	No date	E-W Shallow gully. No pot, but pre-dates 300 and 547
640							Cut within ditch Group 494, see 494
641							Fill of 640, see 494
642	?625, 711	626, 715	071, 729	000			Group number for very irregular spread of material, no more than 0.1m deep. Probable variation in natural/redeposited natural.
643	206, 608	207, 208, 606, 607	745	002	14.3 x 1.7 x 0.6	C14-16	Group number for N-S ditch. Late med date
644							Fill of ditch 645, see 747
645							Cut within ditch Group 747, see 747
646							Upper fill of ditch 649, see 661

Gloucestershire County Council Archaeology Service

A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on	Above on	Dimensions	Period	Description
			matrix	matrix			
647							Secondary fill of ditch 649, see 661
648							Primary fill of ditch 649, see 661
649							Cut within ditch Group 661, see 661
650							Fill of 651
651		650	661	000	2.5 × 1.8 × 0.15	RB C2-4	Shallow semi-circular hollow, possibly the base of a pit
652							Upper fill of ditch 654, see 661
653							Fill of ditch 654, see 661
654							Cut within ditch Group 661, see 661
655							Fill of furrow 656, see 745
656							Cut within furrow Group 745, see 745
657							Upper fill of ditch 660, see 660
658							Fill of ditch 660, see 660
629							Primary fill of ditch 660, see 660
660							Cut within ditch Group 661, see 661
661	104, 649, 654, 660, 109	105, 106, 107, 108, 646, 647, 648, 652, 653, 657, 658, 659, 110	745	651, 747	9.6 × 2.0 × 0.6	No date	Group number for NW-SE ditch, terminating at NW end. Possible re-cut 109. No date, but cuts RB features 651 and 747
662	431, 538, 549	430, 537, 548	272, 551	664	5.6 × 0.42 × 0.71	RB C3	Group number for E-W ditch, not apparent to west of 272.
663	536, 628	535, 627	630	665, 666	4.0 x 0.7 x 0.22	RB C3	Group number for ENE-WSW ditch, terminating at WSW end. Pot largely C3, with residual mid to late IA pot from slot 628
664	421, 555	420, 554	662	425, 666	6.0 x 1.2 x 0.55	RB C2-3	Group number for NNW-SSE ditch, parallel to ?saxon ditch 272, but pot suggesting RB date. Pre dates C3 ditch 662
665	540, 632	539, 631	663	635	4.7 × 0.5 × 0.33	RB C3	Group number for NE-SW ditch, pot largely C3 date
666	542, 553	541, 552	664, 663	000	4.3 × 0.5 × 0.3	M-LIA	Group number for E-W ditch, possibly terminating at west end where it is cut by 664. Ceramically and stratigraphically early in sequence. Pot is MALREA, with a single small SVW sherd
667							Upper fill of ditch 670

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Appendix

No.	Includes nos.	Contains fills	Below on matrix	Above on matrix	Dimensions	Period	Description
668							Secondary fill of ditch 670
699							Primary fill of ditch 670
670	735	667, 668, 669, 736, 737	387	000	5.4 x 2.2 x 0.95	M-LIA C2-3	N-S ditch, terminating at north end, and possibly contemporary with ditch 686, forming an entrance. Primary fill dates ceramically to mid to late IA, and ditch may originally date from this period, (includes structural daub). Later fills have C2-3 pot.
671	749	673, 725	727	000	19.9 x 1.7 x 0.59	No date	NE-SW ditch, slightly curving. Area poorly defined and flooded during excavation, so relationships uncertain. Cut by 727, which is on a similar alignment. Undated, but 727 contains 2 RB sherds. Both are on the alignment of furrows, and it is possible that they are also furrows
672							Cut within ditch Group 727, see 727
673							Fill of ditch 671
674							Fill of ditch 672, see 727
675							Cut within gully Group 189, see 189
676							Fill of gully 675, see 189
677							Possible fill of ?re-cut 750 of ditch Group 744, or subsoil, see 744
678							Fill of 750, see744
679							Fill of 680, see 744
680							Cut within ditch 744, see 744
681							Cut within ditch Group 147, see 147
682							Fill of ditch 681, see 147
683							Cut within ditch Group 494, see 494
684							Fill of 683, see 494
685							Cut within ditch Group 686, see 686

Gloucestershire County Council Archaeology Service

No.	Includes nos.	Contains fills	Below on matrix	Above on matrix	Dimensions	Period	Description
686	221, 685	222, 223, 158	255, 256	698N, 698S	16.0 x 1.42 x 0.62	RB C2	Group number for right angled ditch, running SSE-NNW and then ENE- WSW, and possibly terminating at both ends. No pottery, but stratigraphically relatively early in RB sequence (C2?). Possibly contemporary with 670, forming an entrance. Cut by C2 ditch 255 and cuts C2 ditch 698S
687		688	002	000	0.5 x 0.5 x 0.16	No date	Post-hole. No stratigraphic relationship but possibly associated with curved gully 689
688							Fill of post-hole 687
689			255	000	2.5 × 0.3 × 0.07	No date	Section of curved gully. Possible roundhouse drip gully, but heavily truncated by later features, and too little survives to determine function. Possibly related to Post hole 387. No pot, but pre-dates C2 ditch 255
069							Fill of gully 689
691							Cut within ditch Group 698N, see 698N
692							Fill of ditch 691, see 698N
693		694	002	698N	0.24 x 0.24 x 0.07	No date	Shallow post-hole. No pot, but post dates ditch 698N. Related to 385 and 462?
694							Fill of post-hole 693
695							Cut within ditch Group 698N, see 698N
696							Fill of ditch 695, see 698N
697							Unallocated number
698N	691, 695	692, 696	186, 386, 686, 693	000	14.0 x 0.8 x 0.33	No date	Group number for right angled ditch running ENE-WSW and then turning to SSE. Heavily truncated, so course not certain. Stratigraphically early feature, but no ceramic dating, probable early RB date, although cut by possible LIA ditch 386. May form a rectilinear ditch system with 698S.
698S	337, 437, 466	338, 438, 467	257, 387, 686	000	14.0 × 0.9 × 0.32	RB C2	Group number for right angled ditch running WSW-ENE and then turning to SSE. Heavily truncated, so course not certain. Stratigraphically early feature and ceramically C2 date. May form a rectilinear ditch system with 698N.

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No.	Includes nos.	Contains fills	Below on matrix	Above on matrix	Dimensions	Period	Description
669	307, 344, 346, 350, 503, 573	308, 345, 347, 348, 349, 368, 369, 370, 504, 574, 575	389, 720	256, 747	21.0 × 1.3 × 0.5	RB C3	Group number for NNW-SSE slightly curving ditch. Heavily truncated by later features. Stratigraphic position and C3 ceramic date, may suggest that much of the activity in this area took place in the C3. May be associated with re-cut of parallel ditch 188 to east, but ceramically 188 is dated to C2.
700							Fill of 701
701		200	249	320	6.0 x 0.4 x 0.15	No date	N-S shallow gully. Undated, but post dates latest RB feature. No continuation apparent to north of 249
702			008	000			Machined subsoil below 008
703							Material machined from NE corner
704							Fill of grave cut 706
202							Human skeleton from grave cut 706
706		704, 705	002	000	1.45 x 0.55 x 0.15	RB	N-S grave cut. Shallow and heavily truncated, edges difficult to establish. Containing skeleton 705, extended with legs to south. Head decapitated and placed at feet.
707							Cut within ditch Group 494, see 494
708							Fill of ditch 707, see 494
709		710	002	494	0.48 × 0.48 × 0.14	P-med	Post-hole, cuts med ditch 494
710							Fill of post-hole 709
711							Irregular depression, probably part of 642
712							Fill of 711, see 642
713							Cut within ditch Group 729, see 729
714							Fill of ditch 713, see 729
715							Western fill of 711, see 642
716							Possible east terminus within ditch Group 256, see 256
717							Fill of ditch 716, see 256
718		719	008	000	0.97 x 0.97 x 0.1	C15-16	Pit, heavily truncated by structure 008. With 7 sherds TF52, C15-16

Gloucestershire County Council Archaeology Service

A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on matrix	Above on matrix	Dimensions	Period	Description
719							Fill of pit 718
720		721	305	669	2.4 x 1.2 x ?	RB C3	Pit, not excavated, but cuts 699
721							Fill of pit 720
722							Fill of grave cut 724, see 085
723							Human skull from grave cut 724, part of skeleton 084, see 085
724							Grave cut for skull 723 from skeleton 084, see 085
725							Fill of 749, see 671
726							Cut within ditch 727, see 727
727	029, 672, 726	028, 674, 728	494	671, 729, ?146	23.0 × 1.76 × 0.4	Med?	Group number for NE-SW ditch. Area poorly defined and flooded during excavation, so relationships uncertain. Cuts 671, which is on a similar alignment. Both are on the alignment of furrows, and it is possible that they are also furrows. Contains 2 RB sherds, but these are probably residual.
728							Fill of ditch 726, see 727
729	126, 713	124, 125, 127, 714	147, 727	000	10.5 × 5.1 × 0.86	RB C2-3	Group number for large N-S ditch. Heavily truncated, no continuation apparent to north of 727 or to south of 147. May form the east boundary of RB activity. Contains RB C2-3 pot, but also 4 sherds IA and single sherds of probably intrusive late med and post-med pot
730							Fill of grave cut 732
731							Human skeleton from grave cut 732
732		730, 731	002	000	1.2 x 0.55 x 0.13	RB	N-S grave cut. Shallow and heavily truncated, edges difficult to establish. Containing skeleton 731, extended with head to north. Lower legs partially truncated.
733							Fill of 734

Gloucestershire County Council Archaeology Service

A46 Ashchurch Railway Bridge

No.	Includes nos.	Contains fills	Below on matrix	Above on matrix	Dimensions	Period	Description
734		733	189	000	1.8 × 0.3 × ?	No date	E-W section of gully, terminating at west end and not apparent to east of 189. Possibly contemporary with 189, forming a right angle off-shoot. No pot.
735							Cut within ditch 670, see 670
736							Fill of ditch 735, see 670
737							Upper fill of ditch 735, see670
738							Cut within ditch Group 387, see 387
739							Primary fill of ditch 738, see 387
740							Upper fill of ditch 738, see 387
741		742	026, 147	000	4.8 × 0.95 × 0.39	RB C2-4	NE-SW section of ditch. Poorly defined, not recorded to north of 147, nor to west of 026. Heavily truncated feature, stratigraphic relationships unclear. Pottery suggests RB date
742							Fill of 741
743							Cut within ditch Group 492, see 492
744	507, 680, ?750	508, 679, ?677, ?678	492	000	8.5 x 2.1 x 0.62	M-LIA RB C2-3	Group number for E-W ditch, possibly terminating at east end. Heavily truncated, not apparent to west of 377. Early in stratigraphic sequence. Pot from slot 680 is mid to late IA and may date the feature, but pot from 750, which may be a recut or a later intrusion is C2-3. Parallel to 746 and 747
745	014, 022, 656	013, 021, 655	002	Many	44.0 × 2.4 × 0.12	P-med	Group number for NE-SW furrow
746	579, 585, 588	580, 581, 586, 587, 589, 590	747	000	6.2 × 0.9 × 0.57	LIA	Group number for E-W ditch, with terminus at west end and possibly at east end, not apparent to east of 188. Early in ceramic and stratigraphic sequence, and consequently heavily truncated.
747	576, 582, 645	577, 578, 583, 584, 644	188, 387, 661, 699	746	12.7 x 1.0 x 0.55	LIA?	Group number for E-W ditch, southern edge beyond limit of excavation. Not apparent to east of 661 (possibly terminates) nor to west of 699. Early in stratigraphic sequence, and consequently heavily truncated. Cuts parallel ditch 746. C1 BC/AD pot with single later RB sherd
748			001	002	3.5 x 1.5 x ?	Modern	Modern pit, probable animal burial pit
749							Cut within ditch 671, see 671

Gloucestershire County Council Archaeology Service

No.	Includes nos.	Contains fills	Below on matrix	Above on matrix	Dimensions	Period	Description
750							Possible re-cut of 744, or furrow, see 744
751							Fill of pit 752
752		751	200	000	2.2 × 0.4 × 0.5	No date	Partially exposed oval pit, no pot or stratigraphic relationship
753	177, 261, 333	176, 260, 332	002	189	2.3 x 1.3 x 0.25	RB C3	Group number for irregular ovoid pit. Late in RB stratigraphic sequence, ceramically C3
754	172, 181, 269	170, 180, 266	188, 189	175, 319	5.2 × 3.5 × 0.51	ЯЯ	Group number for pit. No pot, but within RB stratigraphic sequence
755	273, 295	274, 275, 296	388	387	4.8 × 0.74 × 0.62	RB C2-3	Group number for N-S ditch with possible terminus at north end. Possibly part of a rectilinear system of ditches, along with 257, 246 and 387. Fills of 295 and 297 suggest 755 may be contemporary with 387

Appendix 2: Osteological and palaeopathological catalogue

Key to Appendix 2

Present - Tooth presence; am - ante-mortem tooth loss; pm - post-mortem tooth loss; p - tooth present; - - jaw not present Caries - Calculus; F - flecks of calculus; S - slight calculus; M - moderate calculus; H - heavy calculus; a - all surface; b buccal surface; d - distal surface; m - mesial surface; I - lingual surface; o - occlusal surface DEH - dental enamel hypoplasia; I - lines; g - grooves; p - pits Caries - caries; s - small lesions; m - moderate lesions; I - large lesions Wear - dental wear; numbers from 1-8 - slight to severe wear

Appendix 2.1: Skeleton 047

Skeleton I	Number			047												
Preservatio	on			Poor												
Completen	ess				, only ti and par				clavicles	s, scap	ulae, ar	rm bone	es, han	ds, leg	s bones	8,
Age				46+	mature	adult										
Sex				Fem	ale											
Stature				-												
Non-Metric	: Traits			-												
Pathology				auric pect	ular su	rface, e <i>ajor</i> at	e <i>nthesc</i> left hu	<i>pathies</i> merus,	right cla s for <i>bice</i> ossified	eps at	right rad	dius, bo	ne exc	avation	n for	
Dental Hea	alth			Calc	ulus on	1/1 too	oth; sev	/ere we	ar							
	Right	Dentitio	n						Left D	entitio	n					
Present	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Р
Calculus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	SI
DEH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Caries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wear	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
Maxilla	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8
Mandible	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8
Present	-	-	-	-	-	-	-	-	PM	PM	PM	PM	PM	РМ	AM	A M
Calculus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DEH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Caries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wear	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix 2.2: Skeleton 081

Skeleton I	Number			081												
Preservatio	on			Mode	erate											
Completen	iess								ivicles, a hips, lef					left fer	nur, pa	rts
Age				46+,	mature	adult										
Sex				Male												
Stature				169.3	32 ± 4.0)5 cm										
Non-Metric	c Traits				<i>ral mas</i> a (bilate		ramen	(right),	Allen's f	fossa (l	oilatera	l), exosi	tosis in	trocha	nteric	
Pathology				surfa		thesop			D in lef							ralis
Dental Hea	alth								3/23 tee acture o			3/23 tee	th, mo	derate	to seve	re
	Right	Dentitio	n						Left D	Dentitio	n					
Present	Р	Р	Р	Р	Р	PM	Р	Р	PM	PM	Р	AM	Р	AM	Р	Р
Calculus	Sd	Sa	Mb	Sa	Sa	-	Sb	Mb	-	-	Sd	-	SI	-	Sd	MI
DEH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Caries	Mm	-	-	-	-	-	-	-	-	-	-	-	M m	-	-	-
Wear	2	4	5	3	5	-	5	5	-	-	5	-	5	-	5	6
Maxilla	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8
Mandible	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8
Present	AM	Р	AM	PM	Р	PM	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р
Calculus	-	Sa	-	-	Sa	-	Ма	Ма	Ма	Ма	Fa	Sa	Sa	Sa	Sa	S d
DEH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Caries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S b
Wear	-	7	-	-	4	-	5	5	5	5	5	4	5	8	7	5

Appendix 2.3: Skeleton 084

Skeleton N	Number	•		084	(skull 7	23)										
Preservatio	on			Poor												
Completen	iess			55%	, parts o	of the s	skull, cl	avicles,	scapula	ae, arn	ns, legs	, hips, h	ands a	and fee	t	
Age				46+,	mature	adult										
Sex				Male												
Stature				-												
Non-Metric	: Traits			Parie	etal fora	imen (l	oilatera	I), hypc	trochan	teric fo	ossae (b	oilateral)), os tri	gonum	(right)	
Pathology				Achil	les ten	don on	calcar	ei, <i>glut</i>	m, right e <i>us max</i> on left h	kimus (on femo					for
Dental Hea	alth			calcu	ulus on	6/12 te	eth; sli	ght to r	noderat	e wear	, caries	1/12				
	Right	Dentitio	on						Left D	Dentitio	n					
Present	-	-	-	Р	Р	Р	Р	PM	PM	Р	PM	Р	Р	-	-	Ρ
Calculus	-	-	-	-	-	-	-	-	-	Sb	-	-	-	-	-	MI
DEH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Caries	-	-	-	Sm	-	-	-	-	-	-	-	-	-	-	-	-
Wear	-	-	-	7	8	7	7	-	-	7	-	8	7	-	-	7
Maxilla	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8
Mandible	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8
Present	-	-	-	Р	Р	Р	AM	AM	AM	-	Р	AM	AM	AM	-	-
Calculus	-	-	-	Sa	Sa	Sa	-	-	-	-	Sb	-	-	-	-	-
DEH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Caries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wear	-	-	_	7	7	7	-	-	-	_	7	-	-	-	-	-

Appendix 2.4: Skeleton 705

Skeleton N	705																	
Preservatio	Poor																	
Completen	70%, parts of the whole skeleton, with the exception of any foot bones																	
Age					13-14, adolescent													
Sex				-														
Stature				-														
Non-Metric Traits				absent zygomaticofacial foramen (right)														
Pathology				Periostitis on the necks of 2 central right ribs and the necks and shafts of 8 central left ribs, and 8 loose rib fragments														
Dental Health				calculus on 30/30 teeth; slight wear														
Right Dentition									Left Dentition									
Present	UE	Р	Р	Р	Р	Ρ	Р	Р	Р	Р	Р	Р	Р	Р	Р	UE		
Calculus	-	Fa	Fa	Fa	Fa	Fa	Fa	Fa	Fa	Fa	Fa	Fa	Fa	Fa	Fa	-		
DEH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Caries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Wear	-	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-		
Maxilla	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8		
Mandible	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8		
Present	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Е		
Calculus	Fa	Fa	Sb	Sb	Sb	Sb	Sb	Sb	Sb	Sb	Sb	Sb	Sb	Sb	Fa	Fa		
DEH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Caries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Wear	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1		

Appendix 2.5: Skeleton 731

Skeleton Number				731													
Preservation				Moderate													
Completeness					70%, most of the skeleton present, except the tibiae, fibulae and feet												
Age				15-17, adolescent													
Sex				Female?													
Stature				-													
Non-Metric Traits				Allen's fossae (bilateral), plaque (bilateral)													
Pathology				Schmorl's nodes, bone excavations for <i>pectoralis major</i> on humeri, endocranial periostitis													
Dental Health				calculus on 28/30 teeth; slight wear													
						Left Dentition											
Present	Е	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Е	
Calculus	-	Sa	Sa	Sb	Sb	Sb	Sb	Sb	Sb	Sb	Sb	Sb	Sb	Sa	Sa	-	
DEH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Caries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Wear	1	2	3	2	2	2	2	2	2	2	2	2	2	3	2	1	
Maxilla	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	
Mandible	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	
Present	Е	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Е	
Calculus	-	Sa	Sa	Sa	Sa	Sa	Sa	Sa	Sa	Sa	Sa	Sa	Sa	Sa	Sa	-	
DEH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Caries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Wear	1	2	3	2	2	2	2	3	3	2	2	2	2	3	2	1	