

JOHN MOORE HERITAGE SERVICES

**11 WITTENHAM LANE,
DORCHESTER-ON-THAMES,
OXFORDSHIRE**

ARCHAEOLOGICAL EXCAVATION REPORT

On behalf of

Mr Tim Fisher

MAY 2013

REPORT FOR	Tim Fisher Peppers Plot 71 Watling Lane Dorchester on Thames Oxfordshire OX10 7JQ
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Summary

John Moore Heritage Services carried out a two-trench evaluation on land at 11 Wittenham Lane which subsequently led to an excavation within the footprint of the proposed new-build. The excavation indicated occupation from the Late Iron Age through to mid 2nd century AD, forming part of the Roman town's extra-mural settlement, and comprising rubbish pits and postholes as well as a number of ditches. It is suggested that this settlement was located on a road exiting the town leading to the Iron Age oppidum at Dyke Hills. By the late 2nd or early 3rd century, it appears that the postulated roadside activity had been abandoned and replaced by an organised cemetery, comprising at least 24 east/west oriented inhumations, and potentially 30 individuals, bounded on the south side by a boundary ditch, which may well be associated with an internal bank. Similar cemetery enclosures have been recorded elsewhere at Dorchester-on-Thames. The burials are undated, but the majority appear to have been interred in coffins, indicated by the presence of iron nails; some evidence of familial grouping may also be present.

1 INTRODUCTION

1.1 Site location (Figure 1)

The development site was located on the south side of Dorchester-on-Thames, on the western side of Wittenham Lane (NGR SU 5782 9379) to the rear of Rose Cottage (see below). The site lay at approximately 48m OD and the geology was First Terrace River Gravels. There was previously a bungalow and garden on the site, which was demolished between the evaluation phase and the excavation.

1.2 Planning Background

Planning permission was granted by South Oxfordshire District Council (SODC) for the demolition of the existing bungalow and erection of new two-storey building (P11/W0275). A condition required the implementation of a staged programme of archaeological investigation and mitigation in accordance with a written scheme of investigation approved by the Local Planning Authority. Oxfordshire County Archaeological Services (OCAS), on behalf of SODC, prepared briefs for both stages of work. A *Written Scheme of Investigation* outlining the methodology by which the work would be carried out in order to achieve the aims of the further works was prepared by JMHS, which was submitted to and agreed with OCAS.

1.3 Archaeological Background

The proposal site lies in an area of high archaeological potential, 140m south of the Scheduled Ancient Monument of the Roman Town of Dorchester (SAM OX116) and 190m north east of the Scheduled Monument of the Dyke Hills Iron Age *oppidum* or settlement site (SAM OX17). The Roman town consisted of roughly rectangular defences enclosing a civil settlement of about 13.5 hectares. It is generally thought to have been established in the Flavian period and the unusual increase in Late Roman

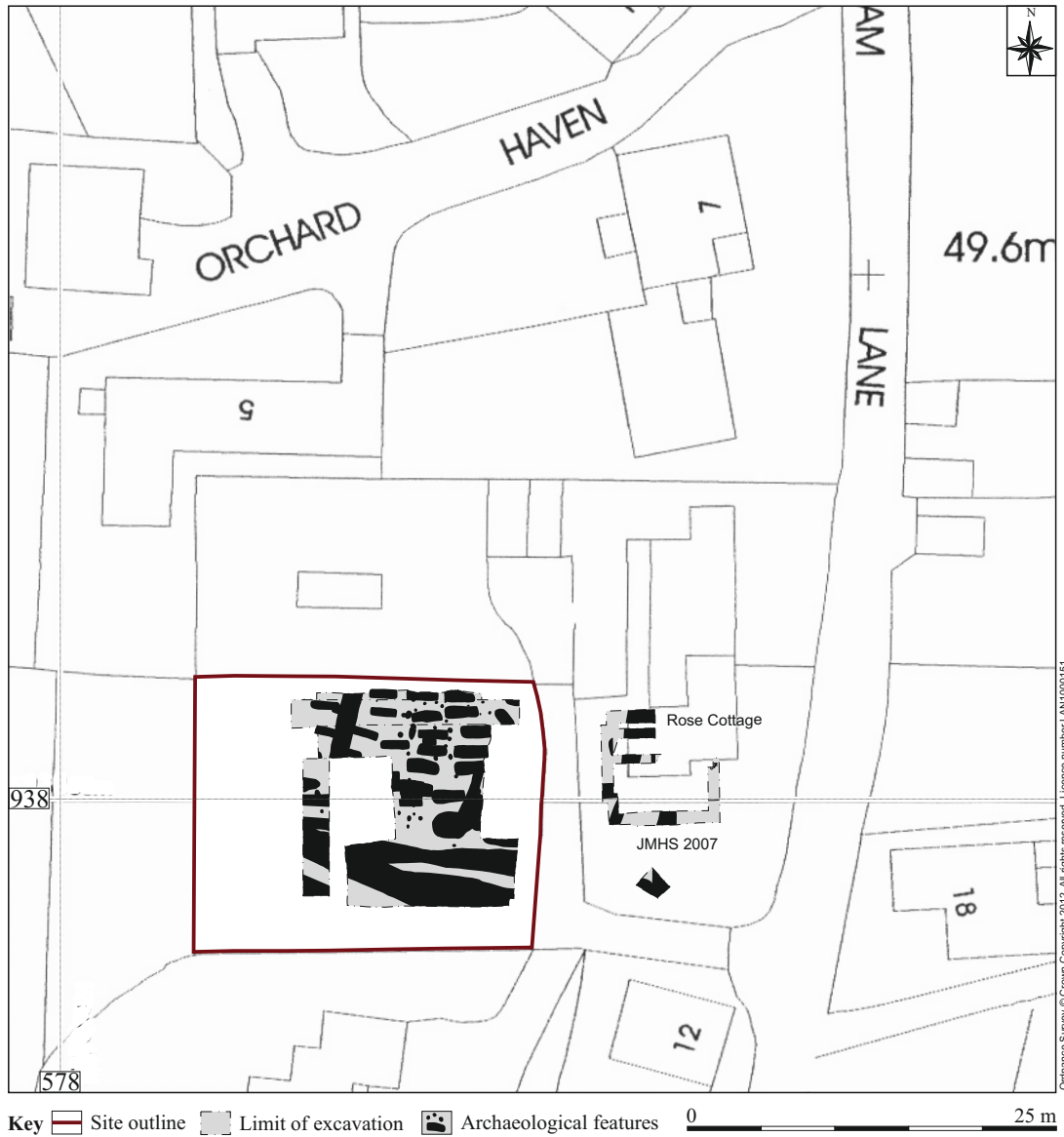
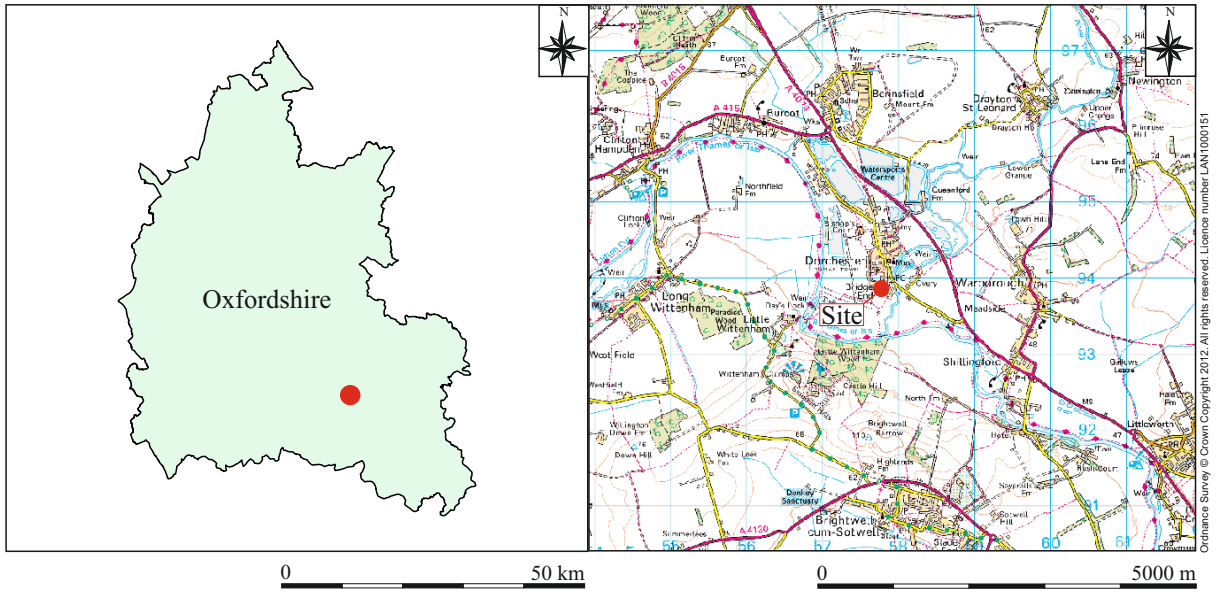


Figure 1. Site location

(Theodosian) coinage implies a thriving occupation throughout the 4th century and possibly into the 5th century. The area to the south of the town is known to have surviving aspects of an extra mural settlement and settlement evidence has been recorded 100m to the north (PRN 2954) and 160m to the northwest of the site (PRN 1983). Roman pottery and features were recorded on these sites during small excavations for footings and garden features.

Further north of the site, work was carried out in the early 60s by Shepherd Frere (1964 & 1984), which has been reopened by the Dorchester Project (Anon n.d.), yielding evidence for activity into the 4th century (Booth *et al.* 2011). The proposal site is located within a Roman cemetery to the south of the Roman town, which was located in the vicinity of what was probably a *vicus* potentially associated with the Thame crossing to the east (Malpas 1987).

A recent watching brief carried out during an extension 16m east of the proposal site recorded a series of several Roman ditches and two human burials (Sausins and Williams 2007). A separate watching brief 30m northwest of the site at 5 Orchard Haven recorded another burial and Roman settlement evidence in the form of a complex series of intercutting pits (Mundin 2008). Further finds of unrelated human bones in the fills of these burials suggest that they are part of a larger cemetery.

A further two Roman burials were discovered in 1965 during building works in the garden of what is now 1 Orchard Haven 60m to the north of the site (PRN 5530). Pottery and slag were also recovered. The two inhumations were buried east-west with one apparently interred within a wooden coffin. There were also indications of further grave cuts in the area suggesting that they were part of a cemetery as opposed to being isolated burials. The graves seemed to have been cut through gravel containing pottery of 1st century, possibly indicative of settlement of that period. Alternatively the gravel could represent a road surface. The graves are undated but given the location, just to the south of the Roman town, and the adjacent Roman cemetery, compounded by the lack of any later artefacts within the fills of the grave cuts it seems that they are more than likely of late Roman date.

More recent investigations at 4 Orchard Haven only revealed an infant burial (D. Wilkinson, *pers comm*), as well as a 2nd-century north/south oriented ditch (D. Bashford *pers. comm.*). The precise location of these finds is not known.

A further burial was discovered at the bottom of a posthole dug during the erection of a shed 60m to the south east of the site (PRN 13029). The grave had cut into the edge of an earlier Romano British pit or ditch indicating that Roman occupation extended this far south of the town prior to the area being used as a cemetery. This burial was in the general area believed to have been subject to geophysical survey by Time Team in 1992, although this has never been published; the episode has not been shown on television. Burials were believed to have been present, although John Gater of GSB Prospection, who subsequently took over geophysical survey for Time Team, believes that the results were inconclusive (J. Mower *pers. comm.*). Nevertheless, it would appear that this investigation lay within an area of Roman settlement and burials.

However, a watching brief carried out in 2004 during the construction of an extension to 8 Wittenham Lane, c. 40m to the north failed to find any archaeological remains (Moore 2004).

An archaeological evaluation by John Moore Heritage Services in May 2011 at the site identified a skeleton, a number of ditches, postholes, and an area of possible pit activity indicating settlement from AD 2nd to 3rd centuries. At least one boundary ditch, for the cemetery, which had been observed during the watching brief at Rose Cottage, appeared to extend into the evaluation area.

The origin of Wittenham Lane is unknown, but at its north end joins the line of the Roman road leaving Dorchester-on-Thames (Malpas 1987, Fig.3), itself extending beyond the edge of Dorchester-on-Thames south towards Dyke Hills immediately to the east of the present footpath. This accesses Dyke Hills from the northeast. The other proposed route out of Dorchester connecting with Dyke Hills, is located to the west, aligned at 90° to the line of earthworks. There is no break in the earthworks which might be expected if this were a significant line of communication. The location of a cemetery adjacent to a road is evidenced at other Dorchester-on-Thames cemetery-sites: Queensford Mill (Durham & Rowley 1972), Queenford Farm (Chambers 1987), Meadside (PRN 1985) and Church Piece (Harman *et al.* 1979)

Some of the above has been taken from the Oxford County Council's Brief.

2 AIMS OF THE INVESTIGATION

The aims of the investigation as laid out in the Written Scheme of Investigation were as follows:

- To make a record of the surviving significant remains that will be impacted on by the proposed development
- To collect artefacts to securely date the remains and to enable comparison with other local sites leading to a characterisation of the type of occupation activity present on the site
- To make special reference to the relationship between the settlement on the site and the establishment of the cemetery

In particular

- To establish the settlement's chronology with particular reference to its earliest occupation. What evidence is there for continuity of use from the early Roman period to the establishment of the roadside cemetery?
- To make available to interested parties the results of the investigation subject to any confidentiality restrictions

- To interpret the results of the investigations within the context of current knowledge and research at Dorchester-Upon-Thames and of Roman settlement of the Middle and Upper Thames Valley.
- To identify and record any previously unknown archaeological remains which are revealed

3 STRATEGY

3.1 Research Design

A field evaluation had previously been carried out, which comprised the first phase of a two-phase operation, and consisted of the mechanical excavation of two trenches to the north and west of the previous dwelling; the west trench was outside the excavation area.

This initial phase identified the presence of human remains in addition to ditches, pits and postholes within the proposal area, reported in a summary to OCAS. OCAS indicated that further work would need to be undertaken in the immediate area of impact of the new build. In response to a *Design Brief* issued by OCAS a Written Scheme of Investigation was prepared by John Moore Heritage Services and agreed with Oxfordshire County Council's Planning Archaeologist.

Site procedures for the investigation and recording of potential archaeological deposits and features were defined in the *Written Scheme of Investigation*. The work was carried out in accordance with the standards specified by the Institute of Field Archaeologists (1994) and the principles of MAP2 (English Heritage 1991). An OASIS record has been created with the ID: johnmoor1-112665.

3.2 Methodology

The proposal area had previously been evaluated 17th May 2011 by the author and a summary report prepared for OCAS. Trench 1 was outside of the excavation area; Trench 2 was within the northern limits of the excavation area.

The area for the new build was stripped down to the uppermost archaeological horizon under supervision of the author. Unclear areas were quickly hand cleaned to define archaeological remains and planned; a relict cultivation horizon, an east/west ditch, and six burials cut through the cultivation horizon were located with further activity south of the east/west ditch; the large pit was also revealed at this point. In the northwest area of site the relict soil horizon was machined away, and graves and a north/south ditch as well as some postholes were revealed early on during machining. Excavation of these burials was started.

The area was re-machined under archaeological control when the first six burials had been lifted, as it was clear that the relict cultivation horizon – through which the burials were cut, sealed earlier features, namely ditches and postholes associated with the earlier settlement activity. Finds recovered during the second machining were

provenanced to the appropriate features. Further burials were identified during the strip of the cultivation soil and these were excavated when the second strip was completed.

4 RESULTS

All deposits and features were assigned individual context numbers. Context numbers without brackets indicate features i.e. pit cuts; while numbers in () show feature fills or deposits of material. CBM refers to undifferentiated ceramic building material, which could be brick, tile or daub.

4.1 Fieldwork (Figs 2-6)

Early Prehistory

A small quantity of flint dating from after the late Mesolithic was recovered during the excavation as residual pieces indicating use of the sandy knoll, on which the site is located, from early prehistory.

Late Iron Age

No Late Iron Age features were present, although there was a small quantity of residual pottery which was recognisably in the later Iron Age pottery tradition, although continued into the earliest Roman period (see Timby below).

Early Roman

The earliest features in the stratigraphic sequence were located on the south side of the excavation area (Fig. 2). The gully 308/315, measuring more than 9m long, 1.3m wide and 0.5m deep, which was oriented north by northwest/east by southeast, yielding pottery dating from the earliest Roman period in the AD 1st century, as well as daub, animal bone and shell, formed the northern limit to this activity. The gully 308/315 may well have defined the edge of some settlement activity to the south, although how it related to the succeeding occupation is not clear. In addition to the gully, the pit 318, which was also located south of gully 308/315, was also dated to the earliest Roman period, yielding animal bone in addition to pottery from fill (318); the later fill (320) was undated. The pit 318 was only seen in section. There were other undated features here (see below) which may also be early Roman in date.

1st century

During the latter part of the 1st century there appears to have been a rearrangement of the site, when the gully 308/315 was replaced by the gully 208/346, measuring more than 11.5m long, 0.9m wide and 0.35m deep, which cut the north edge of gully 308/315. Pottery, tile and animal bone were recovered from the gully 208/346.

At a right angle to gully 208/346 was the gully 326, measuring more than 5m long, 0.65m wide and 0.3m deep, which was heavily truncated to the north by later burials.

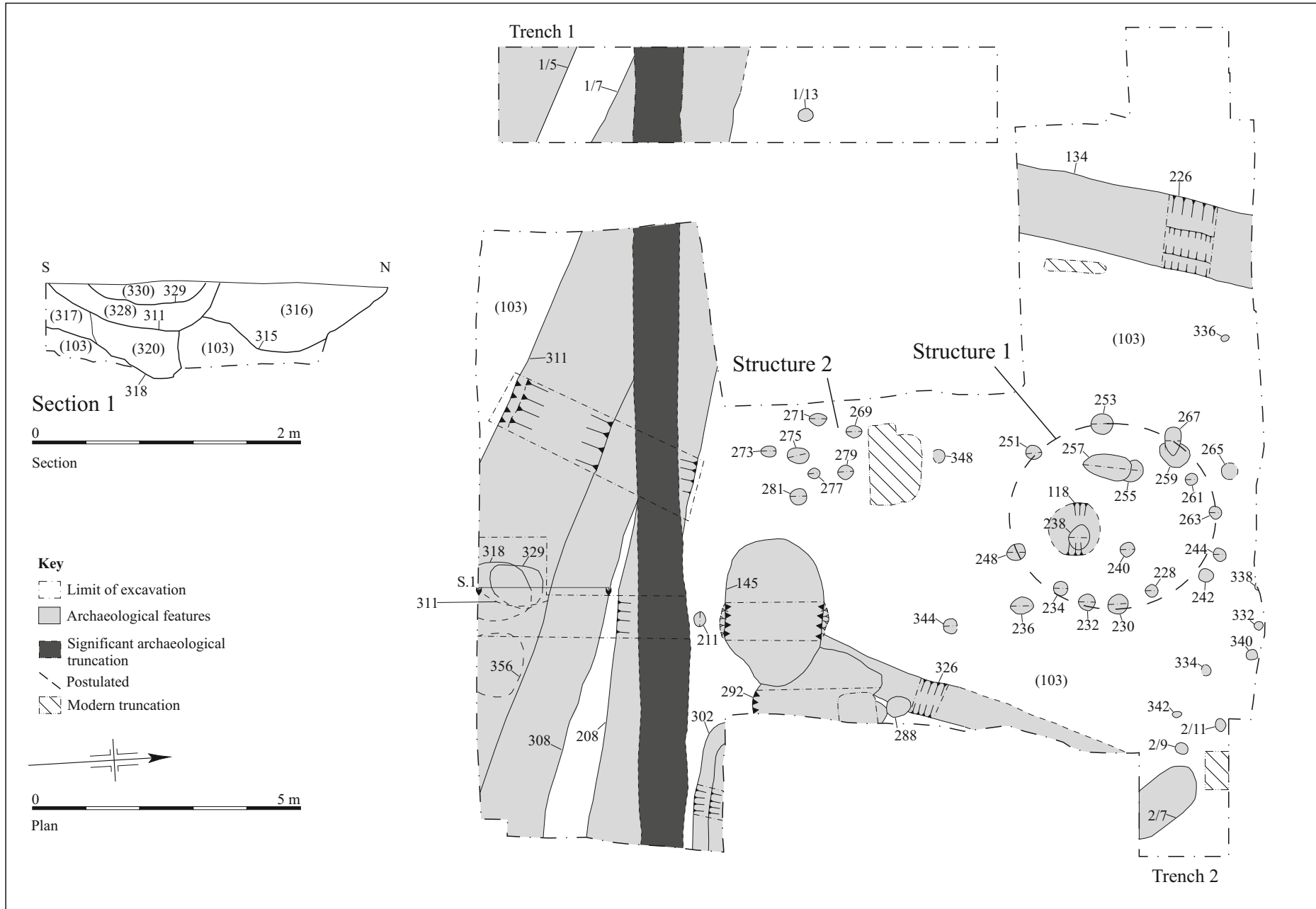


Figure 2. Settlement plan

The terminal of the gully 326 was not present, as it had been truncated by the later pit 145, but the distance between the north edge of gully 208/346 and the southern end of gully 326 was less than 3m. The northern extent (shown as a dotted line on Fig. 2) was not seen due to the later burials, cut through it; the slightly enigmatic cut 2/7, revealed during the evaluation may represent a return or terminal. A single undated posthole 211, which may have been part of a gate between the gullies, was located just to the north of 208/346.



Figure 3. Structure 2. Posthole 281 in foreground.

Posthole 281, which was located to the west of gully 326 and north of gully 208/346, dated from the AD 1st century. It is possible that the undated group of postholes (Fig. 3, Table 4) to the west form a contemporary structure. However, the form or function of any postulated structure cannot be ascertained. A small fragment of tile was also recovered from the fill of posthole 281.

To the east of the gully 326 was a possible large pit 302, which extended beyond the edges of excavation. The upper fills yielded AD 1st century pottery. Alternatively, the feature could be a gully parallel with 308/315.

2nd century onwards

The pit 292 cut the gully 326. The pit, which was roughly sub-rounded, although extending beyond the edges of excavation to the east, measured 2.45m × 1.4m × >0.8m although was not fully excavated. Tile, daub, animal bone and shell were recovered from the pit in addition to pottery. The cutting of grave 284 for Sk 24 into the top of the pit may well have introduced some later pottery into the fill (282).

The pit 145 cut the pit 292. In plan, the pit 145 was initially sub-rectangular cut through the layer of buried soil (129). In the centre of the sub-rectangular area, the cut 145 became sub-rounded, the walls of which evidenced some collapse of the walls. A sequence of charcoal-rich and sandy deposits filled the pit, yielding tile, daub and animal bone in addition to pottery. Although the uppermost fill (166) sampled was subject to the same modern contamination as the fill of pit 302, the

lower fills which were sampled were more fruitful, yielding good evidence for grain-processing, including weed seeds (McParland below).

The pit 118, which was located to the northwest of pit 145, was cut by the graves 112 and 115 of Skeletons 3 and 4 respectively. It measured *c* 1m across and was 0.1m deep. Tile and animal bone in addition to pottery were recovered from the fill. It appeared to cut through the posthole 238.

The shallow, sub-rounded pit 329 was cut into the top of gully 311. Tile, animal bone and pottery were recovered from the single fill of dark grey brown silty sand (330).

Undated features predating cemetery

Cutting the gully 308/315 was the northwest/southeast oriented ditch 311 – ditch 1/7 in the evaluation – which measured *c* 5m long within the excavation area, was 1.9m wide and 0.75m deep. The ditch was undated. The terminal, which was only seen in plan, cut the top of the earlier pit 318. Roughly parallel with both ditches 308/315 and 311 was the probable ditch 1/5, seen during the evaluation.

A second ditch, 134/226, was located at a right angle to ditch 311 in the northwest corner of the excavation area. The ditch 134/226 measured more than 4m long, 1.8m wide and 0.65m deep. No finds were recovered from the fill. Several burials – skeletons 5, 7, 8, 9 and 10 – were cut through the ditch.

The undated pit 356 was located south of the ditch 308/315. It was cut through the deposit of humic loam (181).



Figure 4. Structure 1, looking west.

Two potential structures were identified. Structure 1 (Figs 2 & 4) was located on the northern side of the investigation area and comprised at least eight postholes arranged in a rough circle of approximately 4m diameter (see Table 1). Further postholes might represent repairs, and others are proposed to represent possible wall posts.

Structure 1 may well represent part of a small roundhouse, although the comparatively small diameter does not readily lend itself to such an interpretation. However, if the ring of postholes functioned to support the roof, rather than the walls, with postholes 348 (not part of Structure 2, see below), 344, 334 and 332 representing the wall-posts, this would give the structure a diameter of 7.5m. However, the extensive truncation by later graves and the limited view of the structure within the excavation area precludes any certainty concerning the disposition of the postholes.

Cut	Fill	Diameter	Depth	Notes
228	227	0.25	0.10	
230	229	0.40	0.16	
232	231	0.30	0.07	
234	233	0.27	0.10	
248	249	0.35	0.21	
251	250	0.30	0.19	
253	252	0.40	0.22	
267	266	0.24	0.11	
263	262	0.35	0.25	
244	243	0.26	0.06	
242	241	0.30	0.14	
<i>236</i>	235	0.40	0.05	St 1 associated?
<i>261</i>	260	0.20	0.10	St 1 associated?
<i>265</i>	264	0.30	0.20	St 1 associated?
<i>259</i>	258	0.30	0.30	St 1 associated?
<i>255</i>	254	0.30	0.30	St 1 associated?
<i>238</i>	237	0.35	0.18	St 1 associated?
<i>240</i>	239	0.30	0.10	St 1 associated?
<i>257</i>	256	0.9×0.45	0.30	St 1 associated?
<i>332</i>	331	0.32	0.58	St 1 associated?
<i>334</i>	333	0.22	0.10	St 1 associated?
<i>348</i>	347	0.25	0.??	St 2 or St 1 associated
<i>344</i>	343	0.33	0.11	St 1 associated?

*Table 1. Structure 1 postholes (**bold** indicates postulated original roof posts; italics indicates postulated wall posts)*

What is clear, nevertheless, is that the quantity of roof-tile – in particular the larger fragments – and the box-tile (one fragment of which had mortar adhering) found in the graves have undoubtedly not travelled far and must indicate the presence of a Romano-British building in the vicinity, of some status.

Cut	Fill	Diameter	Depth	
269	268	0.30	0.19	St 2
271	270	0.27	0.18	St 2
273	272	0.20	0.14	St 2
275	274	0.24	0.12	St 2
277	276	0.20	0.12	St 2
279	278	0.30	0.10	St 2
281	280	0.30	0.12	St 2

Table 2. Structure 2 postholes

The Structure 2 (Figs 2 & 3) group of postholes (Table 2) were undated apart from posthole 281, which yielded pottery from the AD 1st century onwards and a tile fragment. The posthole 281 was located on the east edge of the group, and may not be associated with the other postholes. The group of postholes measured

approximately 3m × 1.5m, which must be assumed to have extended to the west, if the postholes form a coherent structure. They do not appear to have any functional relationship with the cemetery: three postholes – 269, 279 and 348 – were cut by graves. Too little was revealed to ascertain the nature or function of the postulated structure.

Cut	Fill	Diameter	Depth
336	335	0.18	0.02
338	337	0.13	0.22
340	339	0.25	0.20
342	341	0.25	0.4
1/13	2/8	0.25	Unexc.
2/9	2/8	0.25	Unexc.
2/11	2/10	0.25	Unexc.

Table 3. Postholes

Further postholes (Table 3) were present within the excavation area and the evaluation trenches, although here again their precise function could not be ascertained, although it is very possible that a larger area of excavation might have made it possible to interpret the postholes in the context of any potential structures. All these postholes were also undated, which may well be indicative of their dating from the earliest Roman period, when there was little pottery or bone present in the contemporary topsoil, to be introduced into the features when they were dug for use. The only exception was posthole 340 which contained a small quantity of animal bone in its fill.

3rd century onwards (Fig.6)

The ditch 142/306 was located on the south side of the excavation area to the south of the burials, oriented east/west. It measured over 11.5m in length, between 0.9m and 1m in width and 0.25m and 0.45m deep. It was filled with homogenous mid grey brown sandy silt with occasional gravel and no apparent tip-lines.



Figure 5. Cemetery ditch 142 (left) and earlier settlement ditch 208 (right)



Figure 6. Cemetery plan

Pottery dating from the early Roman to the 3rd or 4th centuries AD was recovered from the fill of ditch 142/306, in addition to a quantity of animal bone and some shell (Table 4). The pottery includes a reasonably high quantity of residual material, which is unsurprising given the overall high residuality in the cemetery features which cut through the settlement activity.

Context	Cut	Animal bone	Total no.	Total wt (g)	Shell	Total no.	Total wt (g)	Grog	Samm	FW	AMP	ABN	OXFERF	OXFRE	OXFWH	OXFRS	BW	Other	Tot No	Tot Wt	Date	Feature date
143	142		2	59				3	1	0	0	0	2	5	0	0	0	1	12	218	C3-C4	C3+
209	142							0	0	0	0	0	0	1	0	0	0	1	2	43	C1-C2	C3+
350	142							2	1	0	0	0	1	3	0	0	0	0	7	96	ero/C1	C3+
307	306		31	189		2	21	20	2	1	0	6	38	34	1	3	6	2	113	640.5	C1-mid	C3+
Total			33	248		2	21	25	4	1		6	41	43	1	3	6	4	132	997.5		

Table 4. Finds from ditch 142/306

The ditch 142/306 cannot be said unequivocally to correspond with any of the ditches seen previously at Rose Cottage (Sausins & Williams 2007), and although it was not seen in the evaluation, its line has been projected (Figure 6) west to indicate the postulated south edge of the cemetery enclosure.

The ditch probably represents the enclosure boundary ditch to the cemetery. Inhumations to the north were located no nearer than approximately 3m allowing for a low internal bank to the cemetery. The excavations at Queensford Mill (Durham and Rowley 1972) and, more recently at Queenford Farm (Chambers *et al* 1987, 65), noted the same anomaly and discussed such a possibility. Investigations at Church Piece (Harman *et al* 1979, 6-16) revealed a cemetery enclosure ditch, but no internal bank.

There were 24 burials within the area investigated during excavation (for details see catalogue below). There were a further two cuts - 200 (and the associated footstone 198) and 212 – as well as a further four potential burials seen in the evaluation trenches but not investigated as they lay outside the impact area – cuts 1/11, 1/15 and 1/9 in Trench 1 and 2/5 in Trench 2 (a posthole or later intrusion cut the grave 1/15) – yielding a *minimum* number of 30 graves within the investigation area.

Of grave cuts, 12 – located in the northeast corner of the excavation area – formed part of a clearly ‘managed’ cemetery. Other inhumations to the west were more scrappily laid out, but were clearly within a generally west-east inhumation cemetery. Neat grouping and less tidy areas of inhumations has also been noted at Queensford Mill (Durham and Rowley 1972, Fig. 3; Chambers *et al* 1987, Fig. 2).

The graves were dug to a depth of between 49.22 m OD (Skeleton 1) and 48.14m OD (Skeleton 18), with the majority of burials between *c.* 48.7m OD and 49.1m OD. Of the burials, 13 were clearly buried in coffins – represented either by iron nails (less

than four nails was not counted) or stone/tile packing; this contrasts with the results from Queensford Mill (Durham & Rowley 1872, 35). Pottery, animal bone and daub were also recovered from the graves. Furthermore, a number of the graves yielded fragments of roof- and box-tile, ranging in size from small to large. There were also five burials which yielded daub, also indicating the previous existence of structures beneath the cemetery. The presence of this is unsurprising in the context of the former extra-mural settlement.

Overlying the site was yellow brown silty sand (102) which was a buried cultivation soil between the archaeological layer 129/144 and the topsoil (101).

4.2 Reliability of Techniques and Results

The reliability of results is considered to be good. The archaeological excavation took place in unseasonably good conditions. Richard Oram, Planning Archaeologist for Oxfordshire County Council, came out on several visits to monitor the work and provide information and advice to all parties. John Moore, Project Manager, and Linzi Harvey, human osteologist, also visited the site.

5 FINDS AND ENVIRONMENTAL REMAINS

5.1 Pottery by Jane Timby

Introduction and methodology

The archaeological work resulted in a moderately large assemblage of 1874 sherds of pottery, weighing *c* 34.2 kg, accompanied by four pieces (12 g) of ceramic building material (CBM) and six pieces of fired clay weighing 251 g. Most of the pottery dates to the Roman period but there is a single sherd of post-medieval date present and a few sherds may date back into the later prehistoric period.

Pottery was recovered from 74 individual contexts with the quantities ranging from single sherds up to a maximum of 113 sherds from fill (307) of ditch 306. In general terms the sherds are quite well preserved with an average sherd size of 18 g. There are a few instances of multiple sherds from single vessels.

For the purposes of this assessment, the material was scanned macroscopically and sorted into fabrics based on firing colour and inclusions (type, size and frequency) in the clay. The pre-Roman wares were analysed following the recommendations outlined by the Prehistoric Ceramics Research Group (PCRG 1997). The sorted fabrics were quantified by sherd count and weight and a note made of the forms present from the rim sherds. Known named traded Roman wares were coded using the National Roman fabric reference collection codes (codes in brackets) (Tomber and Dore 1998). Freshly broken sherds were counted as single pieces. Appendix 1 summarises the data for each context with a provisional spot date for the group.

A very wide-ranging and quite diverse collection of pottery was recovered, dominated by locally produced wares but accompanied by a variety of regional and continental

imports. A quantified summary of the main fabrics defined can be found in Appendix 2.

In the following report a brief description is given of the range of fabrics and forms recorded followed by a discussion of the chronology of the site. The report concludes with a comment on the potential of the material for further work.

Description of pre-Roman native-style wares

A small group of material could potentially be of pre-Roman Iron Age date. This includes sherds tempered with sand, quartzite, alluvial shell and flint. In most, if not all cases, the material appears to be residual. In addition, there is a substantial quantity of grog-tempered ware which spans the later Iron Age and early Roman period.

Eleven sherds of handmade sandy ware were identified (fabrics SA1-2). These include a very thick base from fill (307) of ditch 306; a bowl with an internal black burnished finish and a sherd of scratch-marked ware both from the soil horizon, layer (129). Amongst the four sherds of glauconitic sandy ware was a thin-walled slightly curved wall rimsherd from a bowl residual in fill (221) of grave 223.

A single sherd of quartzite-tempered ware came from the fill of burial 184 which may be of earlier prehistoric date and a sherd with fine shell inclusions of alluvial origin from ditch 306. The latter fabric is typical of the middle Iron Age in the region. Both pieces appear to be residual.

Flint-tempered wares collectively accounted for 1.3% of the assemblage, a total 24 sherds. The size and frequency of the flint varied but most vessels appear to be handmade. At least four jars are present with rolled rims and ovoid bodies from the fills (181) and (310) of pit 308, as well as fill (317) of pit 318. This tradition is likely to date to the later Iron Age but probably continued to feature in the early Roman period.

The largest category of later Iron Age/early Roman material is grog-tempered ware which accounts for 6.4% of the assemblage. A distinction was made between the 'Belgic' style grog-tempered ware and handmade grog-tempered storage jar which accounts for a further 21.8%. This latter ware although dating from the later Iron Age continues to feature well into the Roman period.

Most of the grog-tempered wares feature as closed jar forms. Three vessels are of note. First is a platter copying an imported form with an incised copy of a rouletted wreath on the interior surface which came from the uppermost fill (166) of the pit 145. Second are sherds probably from the same quite distinctive cordoned, carinated vessel decorated with burnished line crosses recovered from three contexts: the fill (188) of grave cut 305, the fill (215) of grave cut 217 and the backfill (151) of pit 145. The third vessel of note is the lower part of a large jar from the fill (178) of grave 180 which has a post-firing graffito in the form of an incised double line vertical cross.

Description of Roman wares

As noted above the assemblage mainly comprises wares of local origin but accompanied by a small quantity of continental and regional imports.

The continental imports include South and Central Gaulish samian, Gallo-Belgic fine ware and amphorae. The samian collectively accounts for 2.3% of the assemblage and is almost equally split between material of South and Central Gaulish origin. The former includes cups Drag. 24/25, 27; dishes Drag. 18 and a possible burnt 15/17, Curle 11, a decorated jar or beaker and a sherd from a Drag. 29 decorated bowl. One sherd from fill (282) of pit 292 has a rivet repair hole. The group includes material of pre and post Flavian date. The Central Gaulish samian includes cups Drag. 27 and 33, dishes Drag. 36 and Bet 17/Drag. 42 and decorated bowl Drag. 37.

Three imported Gallo-Belgic sherds are present: a sherd of *terra nigra* platter from ditch 306 and two sherds of *terra rubra* (TR3) beaker (Camulodunum (Cam) type 112) (Hawkes and Hull 1947) from layer (129) and fill (303) of grave 305.

The other imports are 12 body sherds of Baetican amphora from Southern Spain, used for transporting olive-oil and two sherds of Gallic wine amphorae. Both types were imported from the 1st to 3rd centuries AD.

Regional imports are poorly represented and are limited to 11 sherds of South-east black burnished ware (DORBB1), one sherd of south-west black burnished ware (SOWBB1) and two sherds of Lower Nene Valley colour-coated ware (LNVCC). The DOR BB1 featured sherds are mainly jar with acute lattice decoration and beaded rim dishes suggesting a broadly 2nd-century date although some pieces may be later. The LNVCC includes the rim of a plain-rimmed beaker probably with barbotine decoration from the fill (221) of grave 223 which would date to the later 2nd or 3rd centuries.

The remaining assemblage comprises products of the well-known Oxfordshire industries with grey wares and fine grey wares dominating accounting for 45.1% by count of the total recovered assemblage. Most of the vessels are jar forms with and without necks (e.g. Young 1977, types R21, R24, R27); a handled jug, lids (R76), flanged bowls (R47), dishes (e.g. R49, R60) poppyhead beakers with barbotine dot decoration (R34) and, not paralleled in the Young corpus, a carinated bowl, shallow dish copying an imported Cam. 12 form and a dish with an internal ridge at the base-wall junction. The group appears to broadly date from the later 1st through to the later 3rd century.

A small group of white wares and burnt white wares are present including a much worn mortaria, Young (ibid.) type M2 and rims of form M3 and M14 which collectively span the 2nd-3rd centuries. The finer white wares include butt beaker with rouletted decoration and sherds with red-painted decoration and incised lattice.

Colour-coated wares are less well-represented accounting for just 0.6%. The only identifiable forms are from beakers and a shallow bowl C41 from fill (307) of ditch 306 which is a 4th-century type.

Oxidised wares, parchment ware and white-slipped wares are present but in small amounts. The former includes beakers, flagon and a bowl Young (ibid) type O45 with white-painted decoration.

The other main ware present is a black sandy ware which accounts for 6.6% of the assemblage and undoubtedly another local product. Vessels are mainly necked, everted rim jars with a few flat-rim dishes.

A few sherds of other fine wares are probably local products. These include 45 sherds of Abingdon-type ware; one sherd of mica-slipped ware and one sherd of fine roughcast decorated ware. The former occurs in oxidised, grey and white fabrics and is largely used to make butt beakers. A concentration of finds from the Abingdon-Dorchester-on-Thames area suggest the presence of an early industry based in this area dating to the pre-Flavian period (Timby *et al.* 1997). Mica-dusted wares were produced at the Nuneham Courtenay kilns (Booth 1993) in the early 2nd century.

Site chronology

The date for the earliest use of the site appears to be the later Iron Age-early Roman period, although pottery dating from the early 4th century is also present. The emphasis of the material is very much towards the earlier Roman period. It is also evident however, that there is a considerable amount of redeposition of material, many of the grave fills, for example, contain only 1st-2nd century sherds. There was no Saxon or later material in the assemblage examined.

One of the earlier features on the site with a good assemblage of pottery is pit 145 which yielded 133 sherds, weighing 4766g. This produced a number of pre-Flavian fine ware sherds including Abingdon-type butt beaker, South Gaulish samian (forms 24/25; 15/17?) and Baetican amphorae alongside several fine grey sandy wares and grog-tempered ware which might suggest a Flavian or later date. There is little detailed dating evidence available for the inception of the Oxfordshire grey ware industry.

Other earlier features appear to be the early ditch 308 and the pit 318, which produced 119 and 50 sherds respectively. Both these features could potentially be pre-Flavian in date. Slightly later in date and dating to the 2nd century, probably the first half, is pit 292 with 83 sherds. This includes a number of Oxfordshire grey and orange wares with some Lezoux samian.

The various graves produced at least 1052 sherds of pottery, weighing 8938.5 g, at least 56% of the total assemblage. These can roughly be divided into those with early Roman sherds only; those with material likely to date to the 2nd century and those with material of mid-later 3rd century finds. It is possible that all this material is residual and has no relevance to the dating and may simply be reflecting the underlying archaeology. The graves with the latest Roman pottery are 115, 196, 203 and 284 three of which had single sherds of Oxfordshire colour-coated ware and one with a sherd of burnt white ware all suggesting a date after AD 240.

One of the latest features on the site from a ceramic point of view is ditch 306. This produced 113 sherds of pottery but it is noticeably very fragmented with an overall

average sherd size of just 5.6 g compared with, for example feature 308, which ditch 306 cuts, where the average sherd size is 20.8 g. This produced the only definite 4th-century pottery on the site but many of the other sherds from the ditch-fill are earlier redeposited pieces.

Potential and further work

Although this is a reasonably sized assemblage of pottery, it is clear that ongoing soil movement on the site has served to create quite a chronologically mixed up assemblage. Possible hints of pre-Roman activity in the area can be seen in the presence of odd sherds but none of these are diagnostic enough to be closely datable and perhaps in view of the known archaeology of the immediate area their presence is not surprising.

The Roman assemblage broadly conforms with that recovered by the excavations to the north within the defences in the 1960s (Frere 1964; 1984) where the pottery also dates from the 1st century and contains a similar range of imports and local wares. The difference lies towards the end of the Roman period where the Wittenham Lane site has produced little 4th century pottery which appears to have been prolific on the earlier site which also continued to be used in the Saxon period.

If publication is envisaged a fairly brief pottery report could be produced accompanied by approximately 15-20 illustrations to characterise the assemblage.

In terms of discard, ideally this should be done once a publication report is prepared. If this needs to be done earlier, it is recommended that all featured sherds (rims, decorated) irrespective of context should be retained. Unfeatured bodysherds from unstratified levels, topsoil layers and grave fills could be discarded.

5.2 Ceramic building materials

The ceramic building materials comprised a range of tile forms – *tegula*, *imbrex*, and flue box-tile – in addition to brick and fragments catalogued as unknown, where they were too small to be identified. There was a total of 46 fragments weighing 19814g.

Tile was recovered from eleven graves and six of the other features, five of which are earlier than the cemetery. A single fragment weighing 97g was recovered from the cemetery enclosure ditch.

Although flue tile was recovered from graves of skeletons 6 and 22, by far the most common form of tile was tegula, frequently found at the head and foot of graves.

Skeletons 2, 4 and 21 had large tegula fragments incorporated into the grave-fills (Fig. 3). Other tile fragments might feasibly have found their way into the grave when the graves were being dug for the remains to be interred.

The material recovered from the grave-fills undoubtedly derives from structures in the vicinity rather than imported material. Cross-fitting of fragments would confirm this, but was not carried out within the constraints of the assessment.

It is not recommended disposing of the ceramic building materials until a full analysis has been undertaken.

Ctx	No.	W (g)	Sk no.	tegula	imbrex	flue	brick/ bessales	unk.	grave location
111	1	1874	Sk 2	Yes					Head
111	6	678	Sk 2					Yes	Foot
111	1	2703	Sk 2	Yes					Foot
111	11	1730	Sk 2	Yes	Yes			Yes	
116	4	5638	Sk 4	Yes					
123	2	274	Sk 6			Yes		Yes	
128	2	17	Sk 7					Yes	
139	1	177	Sk 10	Yes					
185	1	894	Sk 13	Yes					
204	1	26	Sk 18					Yes	
219	1	69	Sk 20					Yes	
245	1	3473	Sk 21	Yes					
289	1	375	Sk 22			Yes			
289	1	551	Sk 22				Yes		
303	2	107	Sk 23					Yes	
Subtotal	36	18586							
119	1	725	Pit 118				Yes		
166	1	73	Pit 145					Yes	
207	1	97	Ditch 208					Yes	
280	1	6	P/hole 281					Yes	
282	2	197	Pit 292				Yes	Yes	
282	1	15	Pit 292					Yes	
330	3	115	Cut 329					Yes	
Subtotal	10	1228							
Total	46	19814							

Table 5. Tile by context by number by weight

5.3 Human remains

5.3.1 Catalogue of human remains by Linzi Harvey & Gwilym Williams


There were 24 inhumations lifted, of which 22 were nearly complete. A single skeleton number – 17 – was issued but never used. Skeleton 18 had been disturbed in the past and comprised the remains of a single individual gathered into the head of the grave. Only the skull of skeleton 24 was lifted, as the rest extended into the edge of excavation.


Catalogue of inhumations


All the burials excavated at the site were supine and oriented roughly west/east. The cemetery as exposed consisted of three rows, with further inhumations to the west. It was not possible to say whether these were in a row, as too little was revealed. There were no grave-goods in any of the inhumations, although a number had nails, indicative of a coffin-burial. Other inhumations may well have been buried in shrouds directly in the ground, although no shroud-pins were recovered.


Abbreviations


YA – Young Adult, **MAa** – Middle Adult A, **MAb** – Middle Adult B, **OA** – Older adult


Skeleton	1				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
104	106	105			
<i>Grave cut (LxBxD)</i>	>1.55	0.55			
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-	-	-	-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>					
<i>Shroud</i>					
<i>Preservation</i>	2-3				
<i>Completeness</i>	c.30% Partial lower limb bones present, also fragment of pelvis and left calcaneus.				
<i>Arms</i>					
<i>Sex</i>	F?	<i>Stature (cms)</i>			
<i>Age range</i>	18+	<i>Pathology/trauma</i>	Distal end of right fibula is thickened and misshapen. Possible trauma?		
<i>Notes</i>	Skeleton 1, which was revealed during stripping, was recovered from directly below the site of the former bungalow, construction of which had impacted upon the body. Only the lower femurs and fragments of the tibia and fibula were preserved.				


Skeleton	2				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
109	110	111			
<i>Grave cut (LxBxD)</i>	2.42	0.89	0.13		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-	8	49	-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>	Tegula at foot and head				
<i>Shroud</i>					
<i>Preservation</i>	2				
<i>Completeness</i>	c. 90% Skull present but highly fragmentary, few vertebrae and all long bones represented. Some hand and feet bones.				
<i>Arms</i>					
<i>Sex</i>	M	<i>Stature (cms)</i>	175.5		
<i>Age range</i>	40-46 MAb	<i>Pathology/trauma</i>	Osteophytosis and eburnation of vertebral articular surfaces (particularly lumbar). Bony spur/thickening of area of left distal femoral shaft. Dental calculus, caries, ante-mortem tooth loss and abscesses present.		
<i>Notes</i>					


Skeleton	3				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
112	113	114			
<i>Grave cut (LxBxD)</i>	2.20	0.52	0.11		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-	-	-	-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>					
<i>Shroud</i>					
<i>Preservation</i>	2				
<i>Completeness</i>	c.75% All long bones, feet and skull present.				
<i>Arms</i>	Right hand over left arm				
<i>Sex</i>	M	<i>Stature (cms)</i>	178.5		
<i>Age range</i>	44-60 OA	<i>Pathology/trauma</i>	Left femur is broken $\frac{3}{4}$ down shaft, healed with overlap of approximately 70mm. Little evidence of infection. Distal end of right ulna is substantially thicker than left – well healed break? Dental calculus, caries, hypoplasia, ante-mortem tooth loss and periodontal disease present.		
<i>Notes</i>	Daub in grave backfill				


Skeleton	4				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
115	116	117			
<i>Grave cut (LxBxD)</i>	2.10	0.80	0.2		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-	1	6	-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>	Limestone pieces and tegula at head				
<i>Shroud</i>					
<i>Preservation</i>	1				
<i>Completeness</i>	c.90% Skull and mandible complete, all long bones, most foot bones and few hand bones. Fragmentary ribs present.				
<i>Arms</i>	Hands folded over pubis; right over left				
<i>Sex</i>	M	<i>Stature (cms)</i>	167.5		
<i>Age range</i>	40-45 MAB	<i>Pathology/trauma</i>	Left shoulder exhibiting <i>os acromiale</i> . Joint surfaces between C6 and C7 is porous and osteophytic. Some thoracic and lumbar vertebrae also osteophytic. Dental calculus, caries, hypoplasia, ante-mortem tooth loss, abscesses and periodontal disease present.		
<i>Notes</i>	An iron brooch (SF 1), weighing 5g, was recovered from the burial backfill				


Skeleton	5				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
120	122	121			
<i>Grave cut (LxBxD)</i>	>1	>0.8	>0.2		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-	-	-	-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>					
<i>Shroud</i>					
<i>Preservation</i>	1-2				
<i>Completeness</i>	c.75% Skull fragmentary, all vertebrae represented and most long bones. Some feet and hand bones.				
<i>Arms</i>	Left arm over stomach				
<i>Sex</i>	F	<i>Stature (cms)</i>	158.5		
<i>Age range</i>	18-20 YA	<i>Pathology/traum</i> <i>a</i>	Dental calculus and hypoplasia observed. No other pathologies.		
<i>Notes</i>	Truncated by Skeleton 10. c.50 small additional fragments, which may be from another individual nearby.				


Skeleton	6				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
125	124	123			
<i>Grave cut (LxBxD)</i>	2.10	0.80	0.5		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-	1	8	-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>	3 limestone fragments at head; 6 at foot; 1 fragment box-flue tile				
<i>Shroud</i>					
<i>Preservation</i>	2				
<i>Completeness</i>	c.50% All long bones represented, feet and some hand bones, skull, partial mandible and few pelvis fragments.				
<i>Arms</i>	Folded over stomach; left over pubis, right over left elbow				
<i>Sex</i>	?M	<i>Stature (cms)</i>	166.5		
<i>Age range</i>	Adult	<i>Pathology/traum</i> <i>a</i>	No pathologies observed.		
<i>Notes</i>	Burial possibly disturbed.				


Skeleton	7				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
126	127	128			
<i>Grave cut (L×B×D)</i>	1.98	0.62	0.28		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-	17	111	-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>					
<i>Shroud</i>					
<i>Preservation</i>	1				
<i>Completeness</i>	c.90% Near complete, missing just some hand bones and patellae.				
<i>Arms</i>	Folded over pubis				
<i>Sex</i>	?M	<i>Stature (cms)</i>	164		
<i>Age range</i>	25-35 MAa	<i>Pathology/trauma</i>	Two possible Schmorl's nodes in thoracic vertebrae. Dental calculus, post-mortem tooth loss and periodontal disease observed.		
<i>Notes</i>	WNW/ESE aligned burial				


Skeleton	8				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
130	132	131			
<i>Grave cut (L×B×D)</i>	1.95	0.60	0.3		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-	5	100	-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>					
<i>Shroud</i>					
<i>Preservation</i>	2-3				
<i>Completeness</i>	c.60% Skull and most long bones present, most feet and a few hand bones.				
<i>Arms</i>	Folded over stomach				
<i>Sex</i>	?	<i>Stature (cms)</i>	172		
<i>Age range</i>	Adult	<i>Pathology/trauma</i>	Small amount of eburnation and porosity at the distal end of right ulna, at articulation with radius. Left distal fibula thickened and slightly displaced, possible healed fracture. Ante-mortem tooth loss.		
<i>Notes</i>	WNW/ESE aligned burial; buried with bone pins at waist, a Cu tubular object (SF 3), weighing 12g, was recovered from the grave fill.				


Skeleton	9				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
136	137	138			
<i>Grave cut (LxBxD)</i>	>1.5	0.60	0.31		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-	1	7	-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>					
<i>Shroud</i>					
<i>Preservation</i>	1				
<i>Completeness</i>	c.40% Lower limbs only.				
<i>Arms</i>	N/A				
<i>Sex</i>	?M	<i>Stature (cms)</i>	181.5		
<i>Age range</i>	Adult	<i>Pathology/trauma</i>	Mid-shaft of medial left tibia with periostitis, thickened and mis-shaped. Left fibula the same.		
<i>Notes</i>	Only half of skeleton excavated (extended under section).				

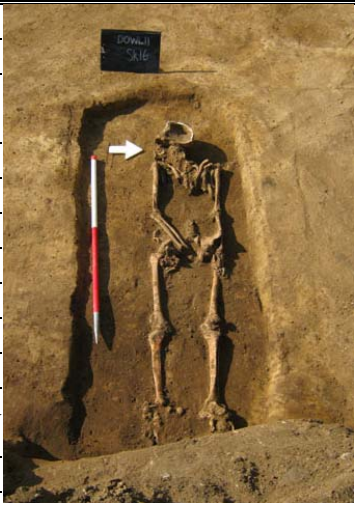
Skeleton	10				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
141	140	139			
<i>Grave cut (LxBxD)</i>	1.90	0.74	0.25		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-			-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>					
<i>Shroud</i>					
<i>Preservation</i>	1				
<i>Completeness</i>	c.90% Mostly complete, missing some hand and feet bones. Ribs fragmentary. Extra lumbar vertebra.				
<i>Arms</i>	Alongside body; hands on pubis				
<i>Sex</i>	F	<i>Stature (cms)</i>	157.5		
<i>Age range</i>	30-40 MAB	<i>Pathology/trauma</i>	Most thoracic vertebrae with Schmorl's nodes. Dental calculus, hypoplasia and periodontal disease present.		
<i>Notes</i>	Daub in grave backfill				


Skeleton	11				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
180	179	178			
<i>Grave cut (L×B×D)</i>	2.15	0.70	0.30		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-			-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>					
<i>Shroud</i>	Feet collapsed together				
<i>Preservation</i>	1				
<i>Completeness</i>	c.90% Mostly complete, missing some hand and feet bones. Ribs fragmentary.				
<i>Arms</i>	Alongside body; right hand on pubis, left under pubis				
<i>Sex</i>	M	<i>Stature (cms)</i>	172.5		
<i>Age range</i>	35-45 MAb	<i>Pathology/trauma</i>	Lumber vertebra (L5) has healed fracture with a false joint formed by the break, right side between spinous process and superior articular facet. Spinous process has dropped on the right side and points left because of this. Small amount of periostitis on distal tibiae and fibulae. Dental calculus, caries, hypoplasia, ante-mortem tooth loss, abscesses and periodontal disease present.		
<i>Notes</i>	SUERC-44864 (GU29754) ¹⁴ C date 1725 ±33				

Skeleton	12				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
184	183	182			
<i>Grave cut (L×B×D)</i>	1.84	0.62	0.18		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-	13	173	-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>					
<i>Shroud</i>	Feet collapsed together				
<i>Preservation</i>	1				
<i>Completeness</i>	c.50% Skull fragmentary, very little vertebrae or ribs remain, most long bones represented, most feet bones, few hand bones.				
<i>Arms</i>	Arms folded over stomach; right over left				
<i>Sex</i>	?M	<i>Stature (cms)</i>	170.5		
<i>Age range</i>	30-35 MAa	<i>Pathology/trauma</i>	Dental calculus, caries, hypoplasia, ante-mortem tooth loss, abscesses and periodontal disease present. No other pathologies observed.		
<i>Notes</i>					

Skeleton	13				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
187	186	185			
<i>Grave cut (L×B×D)</i>	2.10	0.58	0.24		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-	7	104	-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>	Stone and tegula at head; stone at foot				
<i>Shroud</i>	Feet collapsed flat				
<i>Preservation</i>	1-2				
<i>Completeness</i>	c.90% Mostly complete, missing some hand and feet bones. Ribs fragmentary.				
<i>Arms</i>	Arms folded over pubis; right over left				
<i>Sex</i>	?F	<i>Stature (cms)</i>	161.5		
<i>Age range</i>	35-45 MAb	<i>Pathology/trauma</i>	Some thoracic vertebrae with Schmorl's nodes. Dental calculus, hypoplasia, periodontal disease present.		
<i>Notes</i>					

Skeleton	15				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
193	194	193			
<i>Grave cut (L×B×D)</i>	2.04	0.90	0.60		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-	17	221	-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>					
<i>Shroud</i>	Feet collapsed together				
<i>Preservation</i>	1				
<i>Completeness</i>	c.90% Mostly complete, missing some hand and feet bones. Ribs fragmentary.				
<i>Arms</i>	Arms alongside body, under collapsed pubis				
<i>Sex</i>	F	<i>Stature (cms)</i>	155.5		
<i>Age range</i>	25-35 MAa	<i>Pathology/trauma</i>	Dental calculus, caries and periodontal disease present. No other pathologies observed.		
<i>Notes</i>					

Skeleton	16				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
196	195	194			
<i>Grave cut (LxBxD)</i>	2.18	0.88	0.15		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-			-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>					
<i>Shroud</i>	Feet collapsed apart				
<i>Preservation</i>	1-2				
<i>Completeness</i>	c.75% Skull fragmentary, pelvis, long bones and feet bones present.				
<i>Arms</i>	Right arm over pubis; left under pubis				
<i>Sex</i>	M	<i>Stature (cms)</i>	174.5		
<i>Age range</i>	30-40 MAa	<i>Pathology/trauma</i>	Cervical vertebrae with small amount of eburnation, porosity and osteophytic lipping. Dental calculus, hypoplasia, caries and periodontal disease present.		
<i>Notes</i>					


Skeleton	17				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
203	202	201			
<i>Grave cut (LxBxD)</i>	2	>0.3	0.12		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-	6	78	-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>					
<i>Shroud</i>	Feet collapsed together				
<i>Preservation</i>	1				
<i>Completeness</i>	c.80% Mostly complete, missing some hand and feet bones. Ribs fragmentary.				
<i>Arms</i>	Right arm over stomach, left over pubis; right over left				
<i>Sex</i>	?	<i>Stature (cms)</i>	174		
<i>Age range</i>	35-45 MAb	<i>Pathology/trauma</i>	Few thoracic and lumbar vertebrae with Schmorl's nodes and osteophytosis on articular surfaces and body. Dental calculus, abscesses, caries and periodontal disease present.		
<i>Notes</i>	A small, ?residual, fragment of shale bracelet was recovered from the fill 201				


Skeleton	18				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
206	205	204			
<i>Grave cut (LxBxD)</i>	1.96	0.75	0.52		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-			-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>					
<i>Shroud</i>					
<i>Preservation</i>	3				
<i>Completeness</i>	c.40% Skull, pelvis, most long bones represented, some feet bones (no hands).				
<i>Arms</i>					
<i>Sex</i>	F	<i>Stature (cms)</i>	151.5		
<i>Age range</i>	25-35 MAa	<i>Pathology/trauma</i>	Distal right femur has small piece of trabecular bone adhering to anterior face. May be pathological? Dental calculus present.		
<i>Notes</i>	Burial disturbed by later pit; some bone present but much disarranged and gathered in a pile at the head of the grave; bones are eroded at ends. A fragment of iron – possibly a hook – weighing 29g, was recovered from the fill.				

Skeleton	19				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
217	216	215			
<i>Grave cut (LxBxD)</i>	1.85	0.60	0.30		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-	13	173	-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>					
<i>Shroud</i>					
<i>Preservation</i>	1				
<i>Completeness</i>	c.90% Mostly complete, missing some hand and feet bones. Ribs fragmentary.				
<i>Arms</i>	Right arm over pubis; left under pubis				
<i>Sex</i>	M	<i>Stature (cms)</i>	167.5		
<i>Age range</i>	30-40 MAa	<i>Pathology/trauma</i>	Possible damage in right humerus in area of rotator cuff muscle attachment, very porous. Left and right tib/fib have new bone deposits. Dental calculus, abscesses and periodontal disease present.		
<i>Notes</i>					

Skeleton	20				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
223	222	218, 219, 221	220		
<i>Grave cut (L×B×D)</i>	2.14	0.92	0.54		
<i>Coffin (L×B×D) external/ internal</i>	1.80/ 1.68	0.56/ 0.35	0.29/ 0.24	Coffin tapers to east	
	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-	11	396	4, 5, 6, 7, 9, 10, 11	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>					
<i>Shroud</i>					
<i>Preservation</i>	3				
<i>Completeness</i>	c.10% Very fragmentary incomplete skull, few vertebrae fragments, left patella and proximal femur fragment.				
<i>Arms</i>					
<i>Sex</i>	?F	<i>Stature (cms)</i>			
<i>Age range</i>	Adult	<i>Pathology/ trauma</i>	Possible small amount of <i>cribra orbitalia</i> , left eye socket.		
<i>Notes</i>	Associated with SK201 × right cuboid; coffin				

Skeleton	21				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
247	246	245			
<i>Grave cut (L×B×D)</i>	1.90	0.60	0.30		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-	14	214	-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>	Tegula at foot				
<i>Shroud</i>					
<i>Preservation</i>	2-3				
<i>Completeness</i>	c.40% Complete skull, all long bones represented, some hand and most feet bones. Very few ribs or vertebrae.				
<i>Arms</i>	Hands over pubis; left over right				
<i>Sex</i>	F	<i>Stature (cms)</i>	160		
<i>Age range</i>	20-25 YA	<i>Pathology/ trauma</i>	Small button osteoma, left frontal area. Small exostosis, medial part of distal left humerus. Dental calculus and periodontal disease present.		
<i>Notes</i>					

Skeleton	22				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
291	290	289			
<i>Grave cut (L×B×D)</i>	2.15	1.10	0.34		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-	1	7	-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>	Limestone fragments round body; 2 fragments tile (1 box-flue)				
<i>Shroud</i>	Feet collapsed together				
<i>Preservation</i>	2				
<i>Completeness</i>	c.80% Complete but fragmentary skull, all long bones represented, some hand and most feet bones. Very few ribs or vertebrae.				
<i>Arms</i>	Right hand over pubis; left under pubis				
<i>Sex</i>	F	<i>Stature (cms)</i>	163.5		
<i>Age range</i>	45+ OA	<i>Pathology/trauma</i>	Right proximal phalange has small lesion (hole) in joint surface. Corresponding metacarpal is porous in small area. Dental calculus, caries and periodontal disease present.		
<i>Notes</i>	Overlies Skeleton 25; daub in grave backfill				

Skeleton	23				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
305	304	303			
<i>Grave cut (L×B×D)</i>	2.35	0.90	0.26		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-	2	9	-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>					
<i>Shroud</i>	Feet collapsed flat				
<i>Preservation</i>	1-2				
<i>Completeness</i>	c.80% Complete skull, all long bones represented, few hand and feet bones. Very few ribs or vertebrae.				
<i>Arms</i>	Right arm under pubis; left over pubis				
<i>Sex</i>	M	<i>Stature (cms)</i>	176.5		
<i>Age range</i>	35-45 MAb	<i>Pathology/trauma</i>	Osteophytosis and porosity of left and right femur heads, near <i>ligamentum teres</i> . Eburnation of the left also. Osteophytic action around bodies of lumbar vertebrae. Dental caries, calculus, abscesses and periodontal disease present.		
<i>Notes</i>	Associated with SK23: 1 × right lower orbit fragment, (possibly female); 1 × small fragment hyoid; probable coffin				

Skeleton	24				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
284		283			
<i>Grave cut (L×B×D)</i>	>0.55	0.5m	0.3m		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-	1	26	-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>					
<i>Shroud</i>	Feet collapsed flat				
<i>Preservation</i>	3				
<i>Completeness</i>	c.5% Very fragmentary, partial skull and some teeth.				
<i>Arms</i>	Arms folded over stomach; right over left				
<i>Sex</i>	?F	<i>Stature (cms)</i>			-
<i>Age range</i>	Adult	<i>Pathology/trauma</i>	Dental calculus and periodontal disease present. No other pathology observed.		
		<i>a</i>			
<i>Notes</i>	Partially excavated; only skull lifted				

Skeleton	25				Photograph
<i>Cut</i>	<i>Skeleton</i>	<i>Fills</i>			
325	324	323			
<i>Grave cut (L×B×D)</i>	1.85	0.84	0.49		
<i>Coffin</i>	<i>Nails</i>	<i>No.</i>	<i>W (g)</i>	<i>SF Nos</i>	
	-	24+	222	-	
<i>Other</i>		<i>No</i>	<i>W (g)</i>		
		-	-		
<i>Packing</i>					
<i>Shroud</i>	Feet collapsed together				
<i>Preservation</i>	1				
<i>Completeness</i>	c.90% Mostly complete, missing some hand and feet bones. Ribs fragmentary.				
<i>Arms</i>	Arms folded over stomach; left over pubis, right over left elbow				
<i>Sex</i>	M	<i>Stature (cms)</i>	163.5		
<i>Age range</i>	50+ OA	<i>Pathology/trauma</i>	Most vertebrae are osteophytic. Articulation between right scapula and clavicle is porous and enlarged. Eburnation and osteophytosis of distal right ulna, radius and scaphoid. Possible healed fracture in distal radius. Bony spur in distal lateral right tibia area, osteophytic and porous. Almost entirely edentulous, remaining two teeth with dental calculus, caries and periodontal disease.		
		<i>a</i>			
<i>Notes</i>	Very robust individual. Additional fragment of skull. Under Skeleton 22				



5.3.2 Analysis of human remains by Linzi Harvey

Nature of sample

Twenty-four probable inhumations were identified in east-west grave-cuts during archaeological investigations in Dorchester-on-Thames in 2012. The majority of the grave-cuts were separate from one another, although three were cut by the insertion of later inhumations. All skeletons were found to be lying supine, with their arms across their bodies or at their sides. All skeletal material recovered from these contexts has been assessed here in order to provide information about the demography and health of the population (see Catalogue above). A small amount of disarticulated material was recovered and has also been assessed in Appendix 3.

The excavated remains are likely to date from the 2nd to 3rd centuries AD and have been assessed in comparison to the Roman (AD 43-410) British populations described in Roberts & Cox 2003.

Methods

Skeletal remains were examined macroscopically and data recorded onto paper record forms following both IFA and English Heritage standards and guidelines (Brickley & McKinley 2004, Mays & Brickley *et al* 2004 respectively). The assemblage was assessed using site generated information, including skeleton recording sheets and site plans in order to better contextualise the skeletal material.

Preservation and completeness

An assessment was made of the state of preservation of the inhumed remains: from 'good' (1) to 'poor' (3).

- 1) 'Good' Bone surface is in good condition with no erosion, fine surface detail such as coarse woven bone deposition, if present, would clearly be visible to the naked eye.
- 2) 'Moderate' Bone surface is in moderate condition, with some post-mortem erosion on long bone shafts, but the margins of the articular surfaces and some prominences eroded.
- 3) 'Poor' Bone surface is in poor condition with extensive post-mortem erosion, resulting in pitted cortical surfaces and long bones with articular surfaces absent or severely eroded.

A skeletal inventory, estimation of completeness and description of each context was undertaken. Disarticulated material or bone that appeared charnel in nature was also examined in order to calculate the minimum number of individuals present in the assemblage.

Age at death

Age at death estimation was based on a number of commonly-used aging techniques. The adult sample was aged using epiphyseal fusion data (Schwartz 1995), cranial suture closure (Meindl & Lovejoy 1985), age-related changes of the pubic symphysis and the auricular surfaces of the ilium (Buikstra & Ubelaker 1994, Schwartz 1995) and dental attrition (Brothwell 1981) where appropriate. The age of the sub-adult and

neonatal sample was determined using epiphyseal fusion data, dental development (Moorrees *et al* 1963a, 1963b) and length of long bones (Scheuer *et al* 1980) where appropriate.

For descriptive purposes, the skeletons were assessed and then assigned to the following broad age categories:

Description	Age range
Neonate	< 1 year and <i>in utero</i>
Infant	< 3 years
Juvenile	< 18 years
Young adult	18-25 years
Middle adult A	26-35 years
Middle adult B	36-45 years
Older adult	>46 years

Table 6. Age codes

Sex estimation

Estimation of sex was only considered appropriate for the adult sample and was based on macroscopic observation of key skeletal landmarks in the cranium/mandible and pelvis. Where present, a number of predetermined sexually diagnostic features were marked on a five point scale as follows: 1 = male, 2 = possible male, 3 = intermediate, 4 = probable female and 5 = female. The sex category that was scored most frequently for each skeleton was taken to reflect the overall sex of the individual.

Stature

The maximum lengths of complete long bones were used to provide an estimate of stature for the adult skeletons. Where present the length of a complete femur was preferentially used to determine stature. This was calculated using formulae created by Trotter (1970). When sex could not be determined, stature was calculated using both female and male data and averaged.

Metrical data

Where preservation and completeness allowed, measurements were taken of a number of post-cranial features, using landmarks identified in Brothwell (1981) and Bass (2005). No dental or cranial metrics were undertaken.

Non-metric traits

Non-metric traits were not recorded in this sample due to the incomplete nature of the assemblage and the fragmentation of the cranial material.

Palaeopathology

Pathological changes were recorded using guidelines set out by the British Association of Biological Anthropologists and Osteologists (Roberts & Connell 2004). Basic pathological information was obtained from Roberts & Manchester (1995) and Roberts & Cox (2003) with additional references as required.

Dental pathology

The recording of dental pathology, where dental remains were present, covered five pathological changes; calculus deposits, periodontal disease, carious lesions, hypoplastic defects, periapical lesions and antemortem tooth loss. Each observation

was recorded by tooth or tooth position as appropriate and scored for severity according to established schemes such as Brothwell (1981).

Results

Completeness and preservation

The individuals awarded skeleton numbers on-site were largely complete or near complete. Of the twenty-four, twelve were between 75-100% complete. Long bones were well represented, as were elements such as skulls and pelvises. However, many skeletons were missing vertebrae and ribs, or these elements were fragmentary. This may be a result of taphonomic conditions after burial. A number of the larger hand and foot bones were retrieved from most near complete inhumations, but the phalanges and smaller wrist bones were not well represented, which may reflect the lack of sampling of the feet and torso areas during excavation.

Due to the nature of the excavation, partial remains were occasionally excavated where whole remains were present. In the case of SK9 for example, only the legs were fully excavated as the upper half of the body was not within the area of excavation. Similarly, only the head of SK24 was exposed within the area of excavation, although it is likely an entire individual was present. Several inhumations were disturbed by mechanical excavation or had other post-depositional damage (including SK5, SK6 and SK18).

Completeness	No.	Skeleton nos.
0-25%	2	20 and 24
26-50%	6	1, 6, 9, 12, 18 and 21
51-75%	4	3, 5, 8 and 16
76-100%	12	2, 4, 7, 10, 11, 13, 15, 17, 19, 22, 23 and 25
Total	24	

Table 7: Completeness of individual inhumations

The preservation of skeletal elements was generally good, with clear surface detail visible on most elements. However, some of the material was fragmentary and some elements were abraded in appearance. It was noted on-site and during analysis that posterior skeletal elements (such as the back of the cranium and vertebrae) were the elements most often observed to be eroded or absent. All results have been summarised in the Catalogue above and Appendix 3.

During the assessment of the skeletal remains it was noted that some of the remains had been processed incorrectly and subsequently mislabelled. Based on skeletal recording sheets and photographs taken on-site, it was possible to match the correct 'lost' skeletal elements with the correct skeleton in all cases.

Animal bone

A number of fragments of animal bone were recovered along with the human bone and were removed from the human bone assemblage to be combined with the animal bone assemblage. Animal bone is a common find on archaeological sites of all periods and is likely to be related to 'kitchen' waste and rubbish disposal.

Other finds

No other finds were observed in the human bone assemblage during analysis. However, on-site finds included ferrous nails in several grave-cuts, indicating coffin burials for at least some of the individuals recovered.

Minimum number of individuals (MNI)

A minimum number of twenty-four individuals are represented in this assemblage (see Table 8, below). This number should be thought of as a conservative estimate of the number of individuals present in the assemblage, and the true number is likely to be higher. There were no obviously repeated elements within each grave cut, indicating one grave-cut was intended and used for one individual.

Although a number of individuals must be represented by the disarticulated material, it is impossible to determine if these elements belong to individuals other than those represented by the inhumations, therefore the minimum number of individuals, taking into account all contexts remains at twenty-four.

	Context numbers / information	MNI
Inhumations	SK1 – SK3, SK15 – SK25	24
Disarticulated and charnel material	219 (associated with SK20), 303 (associated with SK23), and U/S (unstratified)	0
	Total	24

Table 8 Minimum number of individuals (MNI) in the assemblage.

Age at death

The age of death for all individuals associated with inhumations could be broadly estimated (see Figure 7, below). It was possible to attribute an adult age-estimation, i.e. over 18 years of age at death, to six individuals (SK1, SK6, SK8, SK9, SK20 and SK24). Two individuals were placed in the ‘Young Adult’ category, aged between 18 and 25 years of age at death (SK5 and SK21). Four individuals (SK12, SK15, SK16 and SK19) were aged between 26 and 35 years of age at death, falling into the ‘Middle Adult A’ category, whilst seven (SK2, SK4, SK10, SK11, SK13, SK17 and SK23) were between 36 and 45 years of age at death, falling into the ‘Middle Adult B’ category. The oldest individuals were SK3, SK22 and SK25, who were almost certainly all over 46 years old at death, placing them into the ‘Older Adult’ category.

All of the disarticulated material appeared to be adult in age. No sub-adult (i.e. less than 18 years old at death) remains were observed within this material. The youngest individual present (SK5) was aged between 18 and 20 years old at the point of death, as indicated by the presence of partially erupted third molars and partially unfused skeletal elements.

Mortality profiles are typically ‘U’ or ‘J’ shaped, reflecting peaks of death in the population occurring in the infant years and then again in older adult years. However, as is clear from Figure 7, there are no infant or juvenile individuals in the assemblage and only two young adults were recovered (SK5 and SK21). Although there is some recovery bias inherent in the recovery of infants and very young children due to their small size (see Buckberry 2000), this is probably not the case in this assemblage,

where even juveniles are missing. The population presented here is therefore not representative of a wider, general population, but is in fact biased towards adults, i.e. adults were preferentially selected for burial at this site, or in this part of the site.

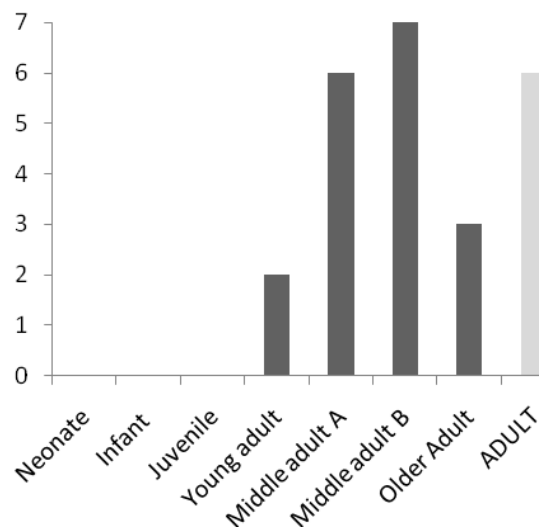


Figure 7: Age distribution

Sex estimation

The biological sex of twenty-two inhumed adult individuals could be estimated using diagnostic features of skull/pelvis fragments or measurements (Figure 8). Eight definite males (SK2, SK3, SK4, SK11, SK16, SK19, SK23 and SK25) four probable males (SK6, SK7, SK9 and SK12), six definite females (SK5, SK10, SK15, SK18, SK21 and SK22) and four probable female (SK1, SK13, SK20, SK24) were identified. It was impossible to ascertain the sex for two individuals (SK8 and SK17) due to a lack of sexually diagnostic material.

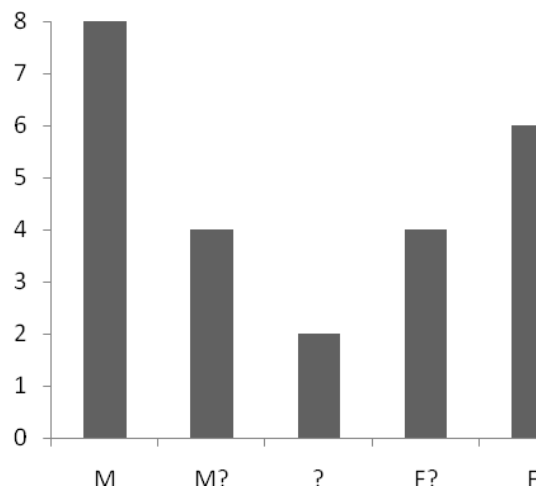


Figure 8: Sex distribution

Males and probable males (n=12) slightly outnumber females and probable females (n=10). This is a male to female sex ratio of 1.2: 1. Given the small sample size and the presence of individuals of unknown sex, the slightly higher number of male

individuals is unlikely to be significant. This ratio of male and females is what would be expected from a burial population representative of the living population from which it came.

Dissection of the distribution of the age and sex of the individuals of the assemblage is not particularly informative (Figure 9). Although there are more definite males in the Middle Adult B category, given the size of the population as whole, this is unlikely to be significant.

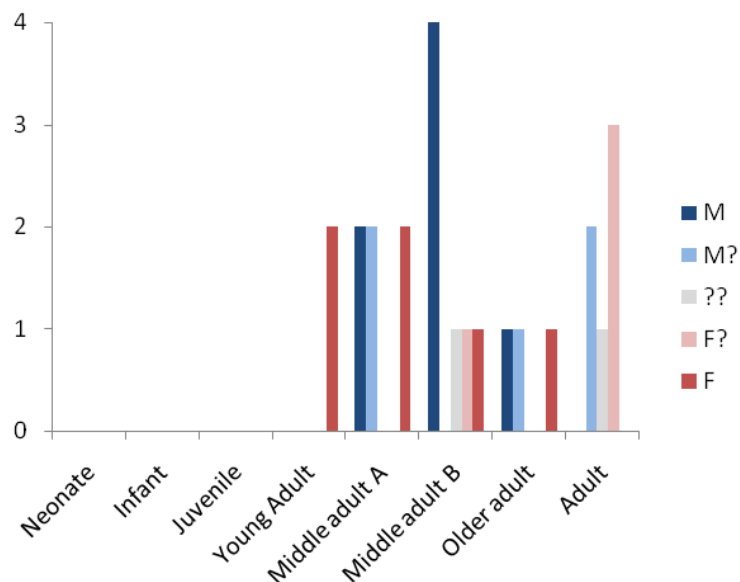


Figure 9: Sex distribution by age category

There does not appear to be a meaningful spatial distribution of burials within the area of excavation, based on age or sex of the individuals. The female and male individuals appear to have been buried within the same area, with no obvious grouping related to sex. Additionally, there does not appear to be any age related distribution of skeletons.

Stature

Stature could be reliably estimated in nineteen known sex individuals using complete long bone measurements (See Figure 10 below). The seven female or probable females who could be measured for stature were estimated to be between 151.5cm and 163cm tall, the average height being around 158cm. The male or probable male assemblage (12 individuals) ranged between 163.5cm and 181.5cm, with an average height of 171.5cm. Two individuals of unknown sex, with complete long bones, were estimated to be 172cm (SK8) and 174cm (SK17). Since these heights are an average of the male and female estimates and both statures fall well above the female range and around the mean for male stature, it may indicate that SK8 and SK17 are male individuals.

For the most part, these measurements appear to fall close to the mean stature observed in Roman Britons, with the national average stature for males being 169cm and females 159cm (Roberts & Cox 2003: 396). In this assemblage, males are slightly taller than might be expected at 171.5cm whilst females are slightly smaller at

158cm. Although stature is primarily genetically determined; the attainment of maximum height is dependant on nutrition, social position and lifestyle. Therefore it is possible that socio-economic conditions were more favourable for males than females in this assemblage. However, the difference is not great enough to draw any firm conclusions.

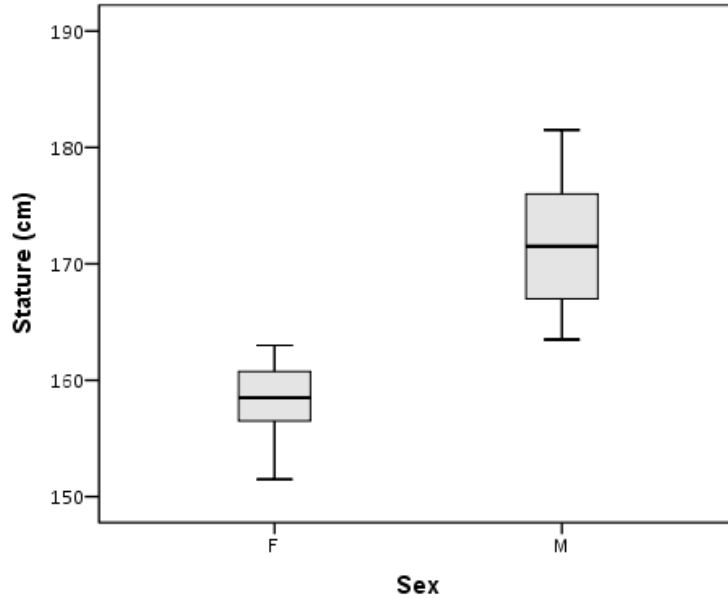


Figure 10: Box-plot showing the mean and stature ranges for males and females.

Metrical data

Metrical data, including complete long bone lengths for all articulated individuals, were collected where preservation allowed and have been stored within the paper archive.

Palaeopathology

A number of pathological conditions and several possible examples of trauma (i.e. fractured bones) were observed in this assemblage.

Periostitis

Periostitis (inflammation of the periosteum) was observed in three individuals. SK11 exhibited new bone formation on the distal left and right tibia and fibula (See Figure 11, below). SK19 was also affected in a similar location, on both the left and right tibia and fibula. SK9 was affected on the left side, mid-shaft tibia and fibula. The anterior tibia surface is close to the skin and is often affected by recurrent small trauma (Aufderheide & Rodriguez-Martin 1998: 179). Periostitis can also be indicative of non-specific infection or a manifestation of a more general disease.

Degenerative joint disease

Three individuals in this assemblage exhibit pathological changes consistent with degenerative joint disease (DJD). Degenerative joint disease is a progressive condition in which joint cartilage is lost and lesions subsequently form on the joint surfaces. It is usually considered age-related and generally occurs in older adults, although it can also be related to traumatic events, i.e. after bone fractures.



Figure 11: New bone formation, SK11 distal tibia.

SK8 has eburnation (a polished surface caused by bone-to-bone contact in cartilage free areas) and porosity of the distal end of the right ulna, at the articulation with the radius. SK23 (Figure 12 below) exhibits eburnation, osteophytosis (extra bone formation and ‘bony spurs’) and porosity of the left and right femur heads, near the *ligamentum teres* (the ligament holding the femur head in position in the hip joint).



Figure 12: SK23, femur head with clear osteophytosis and macroporosity. Scale bar 7cm.

SK25 (Figure 13, below) has major structural change in the distal right ulna, radius and scaphoid (wrist) bone, which includes very notable eburnation of the articulations between the bones, osteophytosis of the joint margins and macroporosity of the joint surfaces. This may be related to a traumatic event, since there is a possible healed fracture of the radius also.



Figure 13: SK25, distal radius with clear eburnation 'gouging' and osteophytosis around joint surface. Scale bar 3cm.

Degenerative spinal disease

Degenerative spinal disease (DSD) is well represented in the sample. Of the thirteen individuals recovered with some spinal remains present, nine exhibited degenerative change in the spine (69%).



Figure 14: SK16, cervical vertebrae (inferior view) with eburnation, osteophytes and porosity of the right articular surface. No scale.

These changes included osteophytosis (the development of new bone at the vertebral body margins), eburnation, porosity of the articular surfaces and vertebral disk hernias, where a defect is caused by the intervertebral disc pushing into the vertebral body. This defect is commonly termed 'Schmorl's nodes' (Aufderheide & Rodriguez-Martin 1998: 97). A good example of the typical changes seen in degenerative spinal disease can be seen in the cervical vertebrae of SK16, which show osteophytic change, eburnation and porosity of the articular surfaces and vertebral bodies (Figure 14).



Figure 15: SK10, thoracic and lumbar vertebrae with Schmorl's nodes. Scale bar 15cm.

Schmorl's nodes were present in four individuals, including SK7, SK10, SK13 and SK17. SK10 was notable in that she had a well preserved and complete vertebral column, with the majority of thoracic and lumbar vertebrae affected by the condition (Figure 15).

Cribra orbitalia

Although largely incomplete, probable female SK20 exhibited pathological changes in the roof of her left eye socket consistent with cribra orbitalia, a condition with multiple proposed aetiologies. Typically associated with iron-deficiency anaemia, recent research has suggested that many cases of cribra orbitalia may in fact be a result of maternal vitamin B12 deficiency (Walker *et al* 2009: 119).

Trauma

Clear evidence of trauma was present in a number of skeletons. In fact, eight of the 24 individuals present (33%) exhibited changes in the skeleton consistent with fractures or other traumatic incidents. These incidences range from apparently minor incidents to more extreme examples of trauma. The distal fibula or tibia has been left misshapen and thickened in appearance in SK1, SK8 and SK9. This is probably a result of a broken ankle. Ankle fractures are usually low-energy twisting injuries caused by a fall, and it is frequently the smaller fibula bone that is affected.

A more serious traumatic example can be seen in SK3 (Figure 16 below). This individual has complete break three-quarters of the way down the left femur, with an overlap of the lower and upper portions of the shaft of about 70mm. This overlap is well healed with few signs of infections. Such injuries are considered to be the result of high-energy forces - such as from a collision, industrial accident or a fall. Interestingly, SK3 also has a probable healed fracture in his distal right ulna. This kind of break most often occurs when a fall causes someone to land on their outstretched hands. Although it is impossible to tell if the injuries are concomitant, it is possible that they are associated with the same traumatic event.



Figure 16: SK3. Left femur, with healed break. Scale bar 5cm.

SK11, an adult male, has a vertebral fracture in the last lumbar vertebra (Figure 17). The fracture, although healed, is on the right side of the element, between the spinous process and the superior articular facet and has formed a pseudoarthrosis, a false joint. This type of injury is likely to be the result of a fall or some other high impact incident, such as a work related accident. It is common for vertebral fractures to be associated with other visceral trauma (Agrawal *et al* 2009), and it is probable that it caused a degree of discomfort when it occurred.



Figure 17: SK11. Lumbar vertebra with healed break. No scale bar.

Os acromiale

One individual, **SK4** has changes of the left scapula consistent with *os acromiale*, the failure of one of the ossification centres in the scapula (the lateral, acromial part) to fuse.



Figure 18: SK4, inferior view showing os acromiale of the left scapula. Scale bar 9cm.

This condition is not typically associated with any symptoms or pain and has reported to be found in between 1.4 to 8.1% of modern populations (Warner *et al* 1998). It is often found to occur in individuals who undertake strenuous activities in the formative years, where recurrent mechanical stress of the shoulder joint can prevent acromial fusion in the mature skeleton. Archaeologically, it has typically been associated with archery (Roberts & Manchester 1995: 113) although any physical activity stressing that part of the anatomy can result in the condition.

Dental pathology

A large amount of dental material was recovered from the excavations at Wittenham Lane. Out of the 24 identified inhumations, 19 had dental remains present and many of those dentitions were complete or near complete. A total number of 353 teeth were recovered.

Dental pathology prevalence rates have been calculated using the number of individuals present (n=19) who had well preserved dental remains, rather than the number of individuals overall. This is termed the Crude Prevalence Rate (CPR) and represents a more significant indicator of the numbers of individuals affected by the various conditions. 'True Prevalence Rates' (TPR) of dental disease, i.e. the number of affected teeth present within the actual number of teeth recovered is also presented in Table 9, below.

The overall rates of disease in this assemblage are, on the most part, within the ranges observed for other sites in Britain in the Roman period. Dental disease can be highly variable between and within populations depending on factors such as location, diet, socio-economic status and the age/sex profile of the population.

	Overall prevalence rate - CPR (%)	Prev. rate per tooth position - TPR (%)	Overall prev. rate - CPR (%), range in parentheses)	Prev. rate per tooth position - TPR (%), range in parentheses)
Caries (cavities)	47.4	7.1	19.1 -	7.5 (3.1-64.5)
Dental calculus	100.0	45.0	26.8 (0.8-100)	43.4 (13.2-58.5)
Periapical voids (abscesses, cysts)	36.8	4.3	10.7 -	3.9 (0.2-26.8)
Periodontal disease	94.4	-	29.3 (1.6-76.6)	- -
Dental Enamel Hypoplasia	36.8	8.8	13.5 (2.9-58.3)	9.1 (5.1-29.0)
Antemortem tooth loss	84.2	19.7	8.3 -	14.1 (3.9-36)

Table 9: Overall prevalence rates and rates per tooth position for the Dorchester assemblage and Roman sites in Britain (data after Roberts & Cox 2003: 131 – 141).

Cariou lesions (cavities) are formed by the acidic waste products of bacteria, which are typically associated with starch and sugar rich diets, in addition to poor dental hygiene. Caries had a CPR of 47.4% in the Dorchester assemblage, compared to an average national CPR of 19.1%. This is obviously a much higher rate in the Dorchester assemblage, indicating that almost half of the people in the population were affected by dental cavities. However, the TPR was 7.1%, which is roughly the same as the British average. It is possible that the age profile of the population, being skewed to older individuals with very few younger people, might be responsible for the greater CPR, since cavities are age progressive and accumulate with time.

Dental calculus was present to some extent in all of the skeletons with dental remains (100%), with an average of 45% of teeth affected. These figures are within the ranges observed for Roman Britain. Calculus is a mineralised plaque deposit which adheres to the surface of the tooth and is often linked to poor dental hygiene and carbohydrate consumption. It is likely that the population represented by the Dorchester assemblage was not regularly cleaning its teeth.

The CPR of periapical voids (dental abscesses and cysts) was 36.8%, which is much higher than the national average CPR of 10.7%. However, the Dorchester TPR was 4.3%, very close to the national mean TPR of 3.9%. It is possible the well preserved nature of the cranial material and the maxillary and mandibular areas might have increased the number of observable abscesses. It is also possible that the older age of the assemblage and the high prevalence of caries (generally considered to be a precursor of abscesses) might also be responsible for the higher CPR.

94.4% of the skeletons with dental remains had periodontal disease present. This is higher than the mean for overall periodontal disease (37.5%), but still within the range observed for the period. Periodontal disease is commonly linked to poor dental hygiene, diet and the presence of other conditions such as dental calculus. Since

100% of the observable population had calculus deposits, it is not surprisingly that periodontal disease has affected such a high percentage also.

Antemortem tooth loss (AMTL) is usually an indication of dental disease or trauma, particularly the damage caused by caries (Roberts & Cox 2003:265). The CPR of individuals who lost teeth before death was 84.2%. This is much greater than the mean observed for similar populations (8.3%). However, the prevalence rate per tooth position was 19.7%, which falls within the observed TPR range of 3.9 – 36% for other Roman sites. Once again, it seems likely that the number of older individuals in the sample is responsible for the higher crude prevalence rate observed here.

A total of seven individuals (36.8%) exhibited dental enamel hypoplasia (DEH), a condition linked to periods of malnutrition or poor health in childhood years. This is within the range typically observed in Roman populations (2.9 – 58.3%). The true prevalence rate for hypoplastic lesions position was 19.7% in Dorchester assemblage, which was also within the range typically observed for the period (3.6 – 36%). DEH is visible as horizontal lines on adult teeth and was observed on the anterior teeth (incisors and canines, to a lesser extent premolars) in four males or possible males (SK3, SK11, SK12 and SK16) and in three females or possible females (SK5, SK10 and SK13). The roughly equal numbers observed between males and females for DEH would suggest no notable differences in childhood physiological stress between the sexes.

Disarticulated material

Very little disarticulated material was recovered and it is likely the material recovered from two contexts is associated with complete inhumations. A single right cuboid bone was recovered from context 219, and is assumed to be associated with SK20. Two fragments were recovered from context 303 and are deemed to be associated with SK23. Some unstratified cranial, rib and pelvis fragments were recovered and it is likely these also belong to a more complete inhumation. No disarticulated material was found to be pathological.

Discussion

This assemblage represents a group of at least 24 individuals who were buried in accordance with later Roman funerary rites. Inhumation was practised towards the end of the second century AD and onwards, as both a Christian and Pagan method of disposal. Prior to this, cremation was a more popular way of dealing with the dead. The lack of grave-goods in this assemblage however, may indicate a Christian cemetery and local population. It must be noted however that the appearance of the cemetery may say more about funerary 'fashion' rather than the religious persuasion (Harman *et al* 1979: 16) of the local population.

There were 24 skeletons considered individual inhumations, SK1 to SK13 and SK15 to SK24. The inhumations that were fully or partially excavated were aligned east-west, with their heads towards the west, all of which were in a supine position, frequently with their arms crossed or at their sides. Ferrous staining of a number of skeletons and the presence of nails indicates that at least some of inhumations were

buried in a coffin. The outline of a wooden coffin can be distinctly seen in the case of SK20.

Some of the burials examined were disturbed some time after deposition, either for the insertion of new burials, or latterly for maintenance/building works. However, since only a few graves were observed to intercut other graves, it is probable that some sort of grave markers (grave stones or some other sort of monument) were present for a period following inhumation, marking the location of specific graves.

Very little disarticulated material was present, with only some cranial, rib and pelvis fragments considered to be truly 'unstratified' in nature. This material is likely to be from one of the 24 inhumations present. This is in keeping with what would be expected of a cemetery with single cut graves intended for lone inhumations, with minimal intercutting. The recovery of partial remains where whole remains are presumed present at the edge of the excavation area indicates that the true extent of the cemetery is unknown and other work indicates that it extends much further, particularly to the north and west. It is very likely that any further work undertaken in the same area would reveal more burials.

No sub-adult fragments (representing individuals less than 18 years old at death) were recovered in the assemblage, which was exclusively made up of young, middle aged and older adults. This is also in keeping with the date of the burials, as it was unusual for children and juveniles in Roman contexts to be treated the same in death as adults, i.e. they were not disposed of in the same manner or in the same locations. For example, infants are occasionally found buried in under thresholds of buildings and in the corners of rooms, locations not considered suitable for adults.

However, in some cemeteries of similar date in Dorchester (Harman *et al* 1979) a number of infants and juveniles *were* found alongside adult remains – which raises the possibility the sample is simply incomplete at the lower end of the age scale. The burial of an infant was recorded at 4 Orchard Haven (Wilkinson *pers. comm.*); infant burials may well have been located apart from adults.

There were a roughly equal number of males and females present in this assemblage, with men just outnumbering women at a ratio of 1.2:1. This indicates that the population at this site in Dorchester is likely to be reflective of a normally distributed civilian population rather than a military population, despite the possible presence of a fort in the area (Frere 1984).

Many of these adults exhibited pathological changes in the joint surfaces of their vertebrae and long bones indicative of degenerative joint and spinal disease. This is probably what we would call osteoarthritis today and is an almost inevitable consequence of aging. Since there are no sub-adult individuals in the sample, it is not surprising to find a condition connected with advancing age represented in the sample.

There was significant evidence of trauma (33%, n=8) in the assemblage, with several skeletons exhibiting a number of well healed fractures, primarily of the legs (and ankles) and wrists. *Os acromiale* was present in one male individual (SK4),

indicating an amount of strenuous activity in the formative years of this individual. This level of trauma is more than what might be expected in Roman Britain, which is around 11% (Cox & Roberts 2003: 151). This might indicate that the population examined here was involved some of the large scale production or building industries that flourished in Roman Britain under military occupation. It would certainly seem reasonable to posit an active life for the individuals represented here.

Dental remains were plentiful and several pathological conditions were present, including caries, calculus, dental abscesses, periodontal (gum) disease and dental hypoplasia. This indicates a lack of dental hygiene for most of the population, little dental care and periods of possible childhood malnutrition or illness for a number of individuals.

In summary, the assemblage assessed here is an interesting and well preserved one, from which detailed information regarding the age, sex and health status of nearly all individuals was possible to attain. The skeletons examined here form part of a larger assemblage, which remains buried in the locale of Wittenham Lane, Dorchester. It is stressed that any further exaction will reveal more skeletons. This assemblage also adds a great deal of data to the growing corpus of information about Roman activity in England and specifically in Dorchester-on-Thames and should be considered important as such.

Recommendations

It is recommended that radiocarbon dating is undertaken on a small sample of the assemblage (around 20%, or five skeletons) to confirm the date range suggested by the presence of pottery in and around grave cuts. There is little point, given the size of the assemblage, looking at DNA (for sex or familial relationships) or stable isotopes (for diet or migration), since the majority of individuals are likely to be local and finding any anomalous results would require testing each skeleton – an unnecessary expense considering the size and nature of the assemblage.

Dorchester-on-Thames is considered a ‘key site in British history’ with Neolithic and Bronze Age heritage, and Iron Age, Roman and Anglo-Saxon towns overlapping in a single area. However, by itself, the assemblage from Wittenham Lane cannot provide a great deal of information about the incorporation of Dorchester-on-Thames into the Roman Empire or about the transitional periods between eras. As part of a wider demographic data set however, it is invaluable - and if the wide date range suggested by the pottery is accurate, does suggest some continuity of burial practice in that area.

A full catalogue of the quantity and nature of the assemblage has been undertaken for inclusion within the site archive, and the skeletal material itself may be deposited at an appropriate museum. This assemblage is considered an important resource as a recently examined assemblage, which has been excavated with the aid of modern technology and up-to-date archaeological methods. It is recommended it is kept at a museum rather than reburied if possible.

5.4 Environmental Remains by HayleyMcParland

A total of four bulk samples (Table 10) were taken from suitable features during excavations carried out at 11 Wittenham Lane, Dorchester on Thames. Three samples of approximately 40 litres each were taken from deposits (146), (158) and (166) within pit 145; a single 20-litre sample was taken from fill (349) of pit near to the limit of excavation.

The samples were processed for the recovery and assessment of charred plant remains and charcoal by Gavin Davis, using a 'Siraf' style flotation tank with meshes of 0.5mm aperture for the retention of the flot and the residue. The residue was sorted and assessed for the presence of microscopic magnetic metalworking residues, including hammerscale. It is recommended that this residue be retained until sorting is complete.

The flot was fractionated to 5mm, 2mm and 0.5mm, then sorted and assessed using a stereozoom microscope. Identifications were made using a reference collection and nomenclature follows Stace (2010). Only a preliminary rapid assessment has been carried out as required, the results of which are described below (Table 10). Species have been recorded as present or absent but have not been quantified with certainty and the assemblages have not been subjected to detailed identification. The purpose of this assessment is to inform the need for further assessment.

The large quantities of charred grain, in conjunction with the presence of chaff and weed seeds are suggestive of potential crop processing. The larger weed species, for example, *Lithospermum arvense*, *Agrostemma githago*, *Polygonum* sp., *Galium* sp. and Fabaceae e.g. *Vicia/Lathyrus* sp., are all species which are removed during the final stages of crop processing before use (Van der Veen 1992, 204-207). Therefore it is important to analyse the assemblage in full in order to understand the stages of crop processing being undertaken within the activity area. The low levels of chaff present within the samples may also indicate that the later stages of crop processing were being carried out immediately prior to use, with fine sieving taking place to remove any foreign seeds from the grain, however, chaff is often subject to differential preservation due to taphonomic factors (Boardman & Jones 1990).

This cursory assessment does not enable inferences to be made regarding the level of processing taking place on the site, as further work is required in order to identify the grain species and to identify smaller weed species which were less abundant than the larger species noted as present within the samples. Due to the large quantity of material present in these samples, this was not possible under the remit of this assessment, necessitating further work be carried out.

It is strongly recommended that the floated material from samples <1000>, <1001> and <1002>, taken from three fills of a single pit, pit 145 are subject to full assessment by an archaeobotanist prior to full reporting and publication. No further work is required for sample <1003> due to the paucity of material within the sample and the abundance of modern material within the sample. The residues of all samples were sorted (Table 11) and tested for magnetic material such as hammerscale as a matter of course. Magnetic residues were recovered from all samples, although much of this may well be naturally occurring iron.

Sample No.	Context	Feature	Sample Vol. (l)	Flot Vol. (ml)	Residue discard weight (g)	Comments
<1000>	166	Pit 145	40	55	1487	Frequent small charcoal fragments were noted. Charred grain was noted (58 +/-), as well as two fragments of chaff. Charred weed seeds including <i>Lithospermum arvense</i> (40 +/-), Fabaceae (28 +/-), possible <i>Polygonum</i> sp. and possible <i>Agrostemma githago</i> were noted. Several charred seeds were unidentified (38 +/-). Three fragments of probable fish bone were also recovered. Frequent <i>Cecilioides</i> sp. were present, as well as other species of land snail, intrusive modern seeds were also noted.
<1001>	158	Pit 145	40	75	2272	Frequent small charcoal fragments present. More than 163 charred grains noted – some in poor condition, the majority well preserved. Chaff was also noted, including some diagnostic fragments. In addition the following charred weed seeds were noted: large quantities of Fabaceae (50 +/-), probable <i>Carex</i> sp., <i>Lithospermum arvense</i> , <i>Agrostemma githago</i> , <i>Polygonum</i> sp. and <i>Galium</i> sp.. In addition greater than 43 unidentified carbonised seeds were noted, with a further 76 indeterminate due to preservation. Modern <i>Chenopodiaceae</i> sp. seeds were noted as present, as well as occasional modern <i>Cecilioides</i> sp.. No modern intrusive root material was noted.
<1002>	146	Pit 145	40	50	4148	Frequent charcoal fragments present. More than 80 charred grains noted – the majority poorly preserved. Chaff was more commonly noted than in <1001>, (158), with more than 20 diagnostic fragments noted. In addition the following charred weed seeds were noted: Fabaceae (20 +/-), possible <i>Carex</i> sp., probable <i>Polygonum</i> sp., <i>Lithospermum arvense</i> (20 +/-), <i>Galium</i> sp. and possible <i>Agrostemma githago</i> . More than 66 weed seeds remain unidentified. Modern <i>Chenopodiaceae</i> seeds were also noted as present, as well as modern <i>Cecilioides</i> sp.. No intrusive modern root material was noted.
<1003>	349	Pit (302)	20		6065	70% modern root material. Frequent <i>Cecilioides</i> sp. and other land snail species noted, as well as occasional intrusive modern seeds. A single charred grain was noted, as well as occasional charred weed seeds.

Table 10. Environmental samples

Sample No. Context	1000 (166)	1001 158	1002 146	1003 349
<i>Pottery</i>	5 sherds; 21g	×	×	×
<i>Daub</i>	5 frags; 19g	×	×	×
<i>Flint</i>	2 pieces, 1g	×	×	×
<i>Bone</i>	10 pieces; 30g	×	4 frags; 5g	9 frags; 38g
<i>Burnt bone</i>	35 pieces; 21g	×	×	×
<i>Oyster shell</i>	1 frag.; <1g	×	×	×
<i>CPR</i>	20 pieces; 2g	×	×	×

Table 11. Contents of environmental sample residues.

5.5 Animal bone and shell

A total of 231 fragments, weighing 2,300g, of animal bone and shell were recovered from non-grave features during the excavation (Table 12). The quantities of oyster shell were limited and none were diagnostic beyond confirming the consumption of oyster, with only one complete shell recovered.

Context	Number	W (g)	Cut	Type
101	5	17	layer	animal bone
119	27	281	pit 118	animal bone
129	3	10	layer	burnt bone
143	2	59	ditch 142	animal bone
151	1	16	pit 145	animal bone
156	1	9	pit 145	animal bone
158	1	11	pit 145	animal bone
164	9	183	pit 145	animal bone
166	22	584	pit 145	animal bone
167	5	91	pit 145	animal bone
168	2	191	pit 145	animal bone
172	6	76	pit 145	animal bone
175	2	14	pit 145	animal bone
207	2	18	ditch 208	animal bone
282	12	419	pit 292	animal bone
282	1	22	pit 292	shell
294	6	438	pit 292	animal bone
307	2	21	ditch 306	shell
307	31	189	ditch 306	animal bone
309	3	18	ditch 308	shell
309	29	117	ditch 308	animal bone
310	1	31	ditch 308	shell
310	28	186	ditch 308	animal bone
316	11	101	ditch 315	animal bone
316	1		ditch 315	shell
317	14	73	pit 318	animal bone
330	4	18	pit 329	animal bone
339	1	7	p/hole 340	animal bone
Total	231	3200		

Table 12. Animal bone and shell by context by number by weight.

It is not recommended that disposal of this assemblage is carried out at this stage until analysis of the animal bone assemblage has been carried out by an appropriately qualified animal osteoarchaeologist.

Several fragments of oyster shell were recovered from three graves. Some fragments were recovered from the fill of graves, but the fragments from context 219 (Skeleton 20) were possibly associated with the burial. It is recommended that the assemblage is not disposed of until the whole faunal remains have been examined by an animal osteoarchaeologist.

Context	Sk No	Quantity	Comments
201	17	1	Fragment.
218	20	1	Fragment.
219	20	3	Fragmentary.
303	23	3	Fragmentary.

Table 13. Oyster shell from graves.

5.6 Coffin nails

During the excavation a total of 142 nails, weighing 2019g, were recovered; of these 137 nails, weighing 1898g, were recovered from graves. Many of the nails were located on plan, with a small proportion – from graves 20 and 21 – being given small find numbers, permitting their location within the grave cut. The nails provide unequivocal evidence in a number of cases for the use of wooden coffins in burials on this side of Dorchester. Other iron fittings were also found. The number of recorded nails was also higher than at Queensford Farm (Durham & Rowley 1972, 35); it is not clear at this point in time of the significance of this observation. It is not recommended discarding any of these until a full analysis has been undertaken.

Context	Small find	Number	W (g)	Nails	Coffin	Other
101		5	102	Yes		
110		2	12	Yes	Sk 2	
111		6	37	Yes	Sk 2	
114		3	22	Yes	Sk 3	
117		1	6	Yes	Sk 4	
123		1	8	Yes	Sk 6	
128		16	111	Yes	Sk 7	
131		5	100	Yes	Sk 8	
137		1	7	Yes	Sk 9	
182		12	157	Yes	Sk 12	
183		1	14	Yes	Sk 12	
185		7	104	Yes	Sk 13	
191		17	221	Yes	Sk 15	
201		6	78	Yes	Sk 17	
219		2	25	Yes	Sk 20	
220		1	40	Yes	Sk 20	
220	4	1	30	Yes	Sk 20	
220	5	1	41	Yes	Sk 20	
220	6	1	48	Yes	Sk 20	
220	7	1	51	Yes	Sk 20	
220	9	1	52	Yes	Sk 20	
220	10	1	37	Yes	Sk 20	
220	11	1	40	Yes	Sk 20	
220	12	1	32	Yes	Sk 20	
245		7	65	Yes	Sk 21	

Context	Small find	Number	W (g)	Nails	Coffin	Other
245	3	1	14	Yes	Sk 21	
245	5	1	22	Yes	Sk 21	
245	6	2	45	Yes	Sk 21	
245	7	1	23	Yes	Sk 21	
245	8	1	19	Yes	Sk 21	
245	10	1	26	Yes	Sk 21	
245	13	4	147		Sk 21	Fe fittings
283		1	26	Yes	Sk 24	
289		1	7	Yes	Sk 22	
303		1	5	Yes	Sk 23	
304		1	4	Yes	Sk 23	
307		2	19	Yes	Ditch 306	
323		24	222	Yes	Sk 25	
Total		142	2019			

Table 14. Coffin nails by context by number by weight.

5.7 Shale bracelet

A fragment of shale bracelet – SF 14 – was recovered from the fill (201) of grave 23. The single piece, which weighed 8g, measured 34mm long and 14mm thick; the profile was sub-triangular with rounded corners. Some striations were present on the internal curved surface.

It is not likely that the piece was associated with the inhumation, but was rather residual from the earlier Roman farmstead activity.

5.8 Loomweight

Approximately half a limestone loomweight was recovered from the fill (119) of the early pit 118. The fragment, which weighed 114g, had a maximum represented diameter of 101mm, and the diameter of the slightly polished central piercing was 18mm; it had a maximum thickness of 29mm. Similar examples were recovered from Thornhill Farm, Fairford (Shaffrey 2004, 86; fig 4.9:194).

5.9 Flint and other stone by David Gilbert & Gwilym Williams

A total of twelve struck flints were recovered during the excavation (Table 15). The material was collected from ten separate contexts across the site. Six of the flakes were recovered from graves, and the rest from ditches on the south side of the excavation area.

The flint colour ranged from a chocolate brown with out patina to a pale grey-white patina all over. Most flint was a pale grey with a speckled patina.

The small quantity of blade-based industry would indicate sporadic activity in the area from the Late Mesolithic onwards. The predominance of flake debitage would suggest increased activity from the Late Neolithic onward. Although all material recovered was residual in later features, the small assemblage corresponds with other

flint finds in the area. Similar early flintwork was recovered from 4 Orchard Haven (D Wilkinson *pers comm*).

Context	Cut	Artefact	L (mm)	W (mm)	B (mm)	Notes
111	109	Tertiary Flake	30	23	6	Slight later damage; Sk. 2
123	125	Blade	26	8	2	Sk. 6
139	141	Uncorticated Flake	32	28	9	Broken in antiquity; Sk. 10
221	223	Secondary Flake	37	23	7	Slight later damage; Sk. 20
304	305	Tertiary Flake	30	23	6	Sk. 23
307	306	Blade	30	13	5	Proximal end missing; ditch fill
310	308	Tertiary Flake	23	21	5	Proximal end only, burnt; ditch fill
310	308	Tertiary Flake	35	24	6	Distal end missing; ditch fill
312	311	Blade	27	6	3	Damaged; ditch fill
312	311	Blade	40	10	2	Ditch fill
323	325	Retouched point	17	15	2	Broken, possible arrowhead; Sk. 25
350	142	Core Fragment (?)	53	27	11	Refacing flake (?) 17g

Table 15. Residual earlier prehistoric flint

Nine pieces of unworked burnt flint weighing a total of 187g were also recovered from six contexts (Table 16).

Context	No.	Weight (g)
111	1	15
194	4	31
282	1	120
304	1	7
309	1	4
310	1	10
Total	9	187

Table 16. Burnt flint

Other Stone

A burnt fossilised bivalve shell (30g) was recovered from context (172).

A fragment of polished granitic stone, weighing 172g, was recovered from fill (166) of the pit 145. It was broken in antiquity, revealing a rough surface, with two weathered surfaces also present. The polished surface was rounded as if used for smoothing or polishing. It measures 80mm × 47mm × 38mm.

5.10 Slag

A fragment of iron slag, weighing 229g, was recovered from the fill (317) of pit 318. The piece is quite possibly a fragment of smithing hearth bottom, although due to it being incomplete, this is not entirely certain.

Magnetic material was recovered from the residues of the environmental samples.

5.11 Radiocarbon dating by SUERC and Gwilym Williams

A single radiocarbon date was obtained from a sample taken from the right femur of skeleton 179 (SK 11). The skeleton was located on the northeast side of the cemetery and its stratigraphical position located it cut through the buried soil horizon (129). Its relationship with any of the other burials is unclear as there were no stratigraphic relations with any other inhumation. The main criterion for choosing this skeleton was its good preservation.

The sample was measured at the Scottish Universities Environmental Research Centre AMS Facility. The calibrated age range was determined using the University of Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.1 (Bronk Ramsey 2009), using the IntCal09 atmospheric curve (Reimer *et al.* 2009)..

The date obtained was 1725 BP ± 33 and the ¹⁴C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standards, background standards and the random machine error.

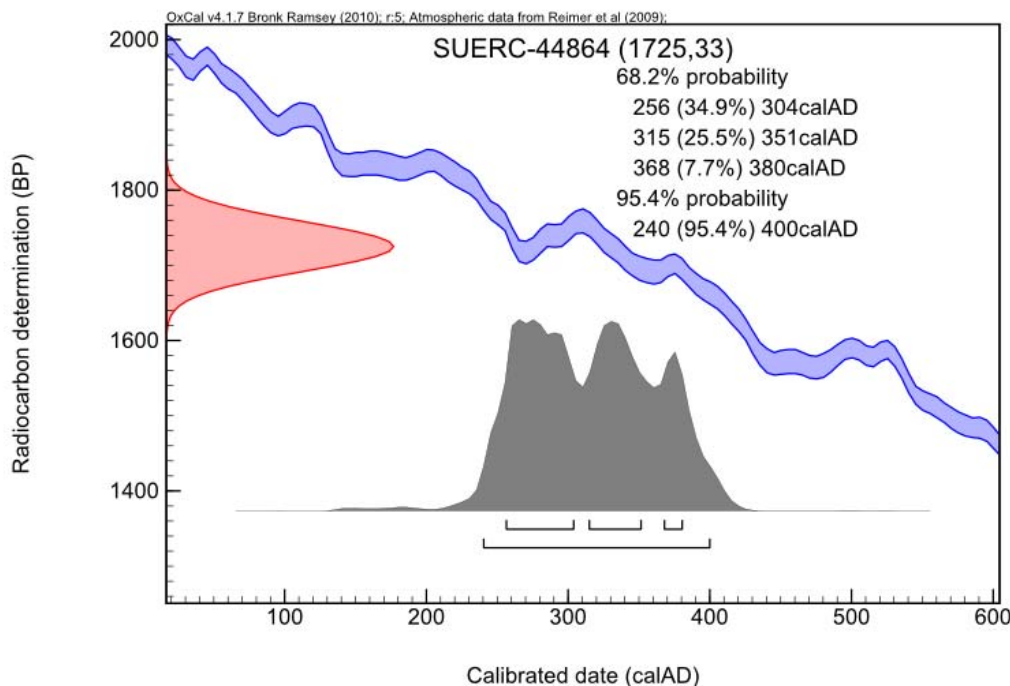


Figure 19. Calibrated date range of Skeleton 11.

5.12 Evaluation finds

The finds from the evaluation have been tabulated below. Further details are in Appendix 1. It is recommended that all finds are retained until a specialist has provided a full analysis of all the site assemblages.

Context	Pottery	Bone	Flint
1/02	32 sherds; (538g)	12 frags; (168g)	1 piece; (21g)
1/04	32 sherds; (256g)	14 frags; (359g)	12 pieces; (190g)
1/06	4sherds; (34g)	×	×

Context	Pottery	Bone	Flint
1/08	91 sherds; (1093g)	45 frags; (305g)	1 piece; (5g)
1/14	4 sherds; (84g)	×	×
1/18	1 sherd; (4g)	5 frags; (14g)	×
2/02	7 sherds; (114g)	×	×
2/04	1 sherd; (15g)	×	×
2/06	2 sherds; (10g)	×	×
2/12	2 sherds; (14g)	×	×
2/28	1 sherd; (9g)	×	×
2/30	5 sherds; (33g)	1 frag; (32g)	×
2/32	1 sherd; (15g)	×	×
Total	183 sherds, 2219g	77 frags; (878g)	14 pieces; (216g)

Table 17. Evaluation finds.

6 DISCUSSION

Early Prehistory

No evidence for early prehistoric features was recovered during the excavation, although the small quantity of flint dating from after the late Mesolithic corresponds with observations at both numbers 4 and 5 Orchard Haven.

Late Iron Age

Although there were no Late Iron Age features present within the excavation area, the presence of reasonably high quantities of residual pottery indicates that the area to the north and outside of the Iron Age *oppidum* of Dyke Hills was already being occupied during the Late Iron Age.

Such *oppida* can be considered ‘the last stage of ‘hillfort’ development in south-eastern Britain’ (Cunliffe 2005, 406), which are then replaced by more recognisably urban sites, such as Verulamium, Silchester, Canterbury and so forth (*ibid*). The site lies within the postulated line of the AD 1st-century fort defences (e.g. Frere 1964, Fig. 1) so that the presence of Late Iron Age/early Roman pottery is not unexpected.

Early Roman

The early features, comprising the gully 308/315 and the small ?rubbish pits, investigated on the south side of the site may well be indicative of either early Roman military or slightly later Flavian occupation in the vicinity of the site. How this activity relates to later activities is not clear within the limited constraints of this excavation.

1st century

By the end of the 1st century the northern part of the site has been brought into use, and the gullies 208/346 and 326 were laid out, possibly creating two small enclosed areas – the defining limits of which are beyond the edges of the intervention area. Whether these were merely agricultural enclosures predating the settlement activity is not entirely clear. It is very possible that these formed part of the *vicus*, functioning as either a part of a suburban farm unit or as an undefined domestic unit. Without further work in the area it is not possible to be more specific. The posthole group, Structure 2, to the west of gully 326 is possibly associated with the gullies, as well may Structure 1 be.

However, the complete absence of any dating material from Structure 1 makes such an association potentially tenuous, with only their formal attributes of a roundhouse and their preceding the cemetery associating them with this phase. Associating Structure 2 with the gullies is based solely on the single sherd from posthole 281, which is on the edge of the group of postholes comprising Structure 2; moreover, the form or function of Structure 2 is enigmatic, undoubtedly extending beyond the edges of the intervention area, it may indeed comprise two or more farming-related structures, or indeed, more general dwellings associated with the *vicus*. Such suburban buildings could extend to small businesses, workshops (Wacher 1978, 48-9) and presumably taverns and brothels. The undated posthole 211 may have been part of a gate between the gullies 208/346 and 326.

To the east of the gully 326 was a possible large pit 302, which extended beyond the edges of excavation. The upper fill yielded AD 1st century pottery. However, as only the very edge was revealed during the intervention it is not entirely clear what the form or function of the feature was. It is clear that no similar pits with charcoal-rich fills were present in the area of the watching brief at Rose Cottage (Sausin & Williams 200) to the east. The fill (349) of 302 was sampled but the degree of modern contamination, due to burrowing snails, means that no inferences can be drawn as to the function of the pit.

2nd century onwards

The pit 292, which cut the gully 326, could only be partially investigated as it appeared that the majority of the feature extended beyond the edges of excavation. The roughly sub-rounded pit, which yielded tile, daub, animal bone, shell and pottery, and measuring 2.45m × >1.4m × >0.8m was a rubbish pit, in contrast with the pit 145 that cut it. In plan pit 145 was sub-rectangular and cut through the layer of buried soil (129), indicating that the development of the buried soil (129) is perhaps related to the Late Iron Age/early Roman period. In the centre of the sub-rectangular cut was a sub-rounded cut which during excavation evidenced some quite marked collapse of the pit wall. Charcoal-rich and sandy deposits filled the pit but do not appear to have been deposited with any more intention than the backfilling of an open ?storage pit. The sampled fills were particularly rich in evidence for grain-processing.

The pit 118, which was located to the northwest of pit 145, is not easily explained. Fragments of a single vessel were recovered from the fill.

Undated features predating cemetery

The northwest/southeast oriented ditch 311 cut across the excavation area, although became very unclear on the east side where it ran into the edge of excavation. This area also revealed a reasonably dense area of pitting. The ditch 134/226 was at a right angle to ditch 311 in the northwest corner of the excavation area, possibly forming part of an enclosure. It appears that this area was subject to much modification during the earlier part of the Roman period.

It is perhaps noteworthy that the cemetery ditch is at a right angle to Wittenham Lane, whereas the early ditches are more west by northwest/east by southeast oriented. The significance of this is still unclear, but may well indicate the later formalising of the

road. Whatever else it demonstrates is a clear break between the settlement activity and the later cemetery.

There were two potential structures identified during the excavation, although it is clear that the early evaluation data only makes the picture more complex, indicating the extent and quality of archaeology beyond the edges of excavation in the area. Structure 1, which was located to the north comprised at least eight postholes arranged in a rough circle of approximately 4m diameter, although due to later truncation by the cemetery and postholes from the evaluation the number of associated postholes might be greater. Some postholes may well represent repairs, while others were wall posts, or perhaps other structures, which we cannot presently identify.

Structure 1 was a small roundhouse, despite the comparatively small diameter. As suggested above, if the ring of postholes functioned to support the roof, rather than the walls, then the structure would easily have had a diameter of 7.5m. Extensive truncation by the later graves and the limits of the excavation area precludes an unequivocal assertion regarding the nature and function of this building. However, the quantity and range of large and small pieces of ceramic building materials indicates the close proximity of a reasonably high-status Roman building in the vicinity.

Structure 2 was undated and undoubtedly extended to the west, for the postholes to form a coherent structure. The existence of posthole 1/13 to the west indicates the potential for such domestic activity to extend well beyond the edges of the excavation area.

3rd century onwards

The cemetery enclosure ditch 142/306 extended for over 11m across the south side of the excavation area, south of the burials; it was oriented east/west. It is not certain that it was seen at Rose Cottage.

The ditch represents the ditch of the enclosure boundary to the cemetery, and it is perhaps significant that the nearest inhumations to the north are approximately 3m north of the ditch, which would allow for a low internal bank to the cemetery. Excavations at Queensford Mill (Durham and Rowley 1972) and, more recently at Queenford Farm (Chambers *et al* 1987, 65), in 1981 indicated the presence of a similarly wide gap between the cemetery enclosure ditch and the majority of inhumations, which was interpreted as evidence for an internal bank to the cemetery, separating the mortuary enclosure from the 'outside world'. Investigations at Church Piece (Harman *et al* 1978, 6-16) revealed a cemetery enclosure ditch, but no apparent evidence for an internal bank. Within the limited constraints of an evaluation, however, this may not have been readily apparent. Similarly, the cemetery investigated at Wittenham Lane had no evidence for an internal bank in section.

The orientation of the cemetery enclosure ditch is noticeably different from that of the earlier settlement ditches. It is possible that this indicates that a change with the road occurred beyond the edges of investigation.

There were at least 30 burials within the area investigated during evaluation and excavation, of these 19 were largely complete (see catalogue above). Of these, 12 - located in the northeast corner of the excavation area – formed part of a clearly ‘managed’ cemetery. Other inhumations to the west were more scrappily laid out, but were clearly within a generally west-east inhumation cemetery; there were three – skeletons 7, 8 and 9 – on a similar distinct alignment (east by southeast/west by northwest), forming a small group. The layout of the graves deviates slightly from the more formal lines to the northeast, and may well represent the grouping of related burials taking precedence over the cemetery plan.

There is very little evidence for stratigraphic relationships between the graves; rather the majority appear to respect one another in rows of between four and nine inhumations. However, two burials – one of a male in his 50s and an overlying woman in her 50s – might feasibly represent a family grouping. Furthermore, in the immediate vicinity to the south of these burials is another pair of individuals – neither well-sexed – which may also represent a family grouping. The layout of the graves deviates slightly from the more formal lines to the northeast, and may well represent the grouping of related burials taking precedence over the cemetery plan. It is perhaps of note that despite such potential familial grouping, there is no evidence from this cemetery of any infant or child burials; investigations to the north at Haven Close revealed the presence of a single infant burial (Dave Wilkinson, *pers. comm.*). At present it is not clear from the results of his work whether the child burial is possibly within any putative cemetery enclosure. A ditch was present on the site, but as there has not yet been any publication of the investigation it is difficult to marry his results with either the work at Pippins (Mundin 2008) or the present site.

Pottery, which dated from the early Roman to the 3rd or 4th centuries AD, was recovered from the fill of the cemetery enclosure ditch, in addition to animal bone and shell (Table 4). Jane Timby notes that the sherd size from this ditch was significantly smaller than from the earlier ditches; the inference which can be drawn is that the material remains in ditch 142/306 was residual and had been moved on at least one occasion following discard prior to arriving in the backfill of the ditch. That some of the pottery was late AD 3rd or 4th century only indicates the comparatively late date of the cemetery; in the absence of a range of scientific dates, it is not possible to be more precise.

A single date was obtained from skeleton 179 (SK 11), which yielded a calibrated date range at 2 σ , that is 95.4% probability, between AD 240 and AD 400. At a calibrated date of 1 σ , with a probability of 34.9% the date range was between AD 256 and AD 304; at 25.5% it was AD 315 to AD 351; and at 7.7% between AD 368 and AD 380. The date is sufficient to confirm that the skeleton is Roman and not post-Roman and is broadly in line with the recent dates for Queensford Farm obtained by Catherine Hills and Tamsin O’Connell (2009). What is perhaps of greater interest is that the ‘main period of use at Queensford Farm is in the fourth and into fifth century’ (Hills & O’Connell 2009, 1105), while the radiocarbon date and the latest pottery from Wittenham Lane point to a late 3rd- to 4th-century date-range, which, clearly, is based on a single date. Nevertheless, this might indicate that a road from Dorchester to the Thames and the *oppidum* at Dyke Hills were the earlier focus for inhumation, replaced by the later cemetery west of the postulated road toward Fleet Marston

(Chambers 1987, Fig. 1; Malpas, 1987, Fig. 1). It is worth noting that Asthall, Alchester and Abingdon all evidence between two and four cemeteries round their respective peripheries (Booth 2001, Fig. 1), although Paul Booth (2009, 15) does not associate the Radley and Barton court Farm cemeteries with the Ashville cemetery.

7 CONCLUSIONS

The Roman town of Dorchester-on-Thames comprised the core of the modern town – c 6ha – with associated suburbs or *vici*. There has been very little systematic work on these satellite settlements in comparison with the settlement core, although recent commercial work on the east and south sides of the town indicates that these date from the 1st century onwards (Anon n.d.; Ricconboni 2011; Mundin 2008; Sausin & Williams 2007; Torrance & Durden 1998); much of this work is ‘grey literature’ and has not been integrated into the recent University of Oxford Department of Archaeology Research Design (Anon n.d.).

The suburban settlements more than likely comprised the ‘Romanised’ local population having adopted Roman material culture and integrated themselves into the Imperial economy, providing a range of services to those who lived within the walls of the town. Former soldiers may also have been counted amongst the denizens of the *vicus* (Wacher 1978, 35). The defences are believed to have been built in the late AD 2nd century (Frere 1964, 129). By the 3rd century there appears to have been a shrinking of the *vicus* at Bridge End, a trait of Roman urban life which is seen elsewhere in Britain.

The excavation carried out at 11 Wittenham Lane revealed evidence for the early Roman *vicus* which existed on the south side of the town of Dorchester-on-Thames. Investigations at 5 Orchard Haven (Mundin 2007) evidenced unequivocal evidence for settlement activity in the southern suburb; other interventions (Anon n.d.; Sausins & Williams 2007; Roberts 2007; Moore 2004) have proved to be less unambiguously fruitful, and indeed negative. During gardening Mr Green in 1954 found Roman remains at Tenpenny to the northwest of the site (PRN 1983), indicating that the settlement extends that far, although work carried out along Watling Lane has so far only revealed quarry pits (Fitzsimons 2010). The extent to the east is unknown, although it is believed that Bridge End has a Roman origin.

Bridge End, approximately 100m to the east of the site, is believed to have been the location of the Roman bridge crossing over the River Thames. Wittenham Lane lies parallel with Bridge End, and is part of the extra-mural *vicus* focussed on Bridge End. Wittenham Lane, which historically continued beyond its present line, as seen on early OS maps (1877, 1:2500; Berkshire), where it approached Dyke Hills in a break in the ditch. This break is no longer easily visible. It is therefore a possibility that the line of Wittenham Lane preserves a route to both Dyke Hills and feasibly a Thames crossing (VCH 1939).

The existence of a *beneficiaries* – or military-appointed tax-collector – (VCH 1939) in the 3rd century (evidenced by the erection of a now lost altar) is surely indicative of the potential for the existence of a wharf or similar. It is hard to appreciate the need for such an official, unless there were taxable goods either being laden or unladen, or

possibly using facilities such as storage in the town. The use of the river, in either case, would seem to be the key factor (VCH 1939).

It is only an observation but the line of the Silchester-Alchester road (Malpas 1987, Fig. 1) can be projected across the Thames east of its confluence with the Thame, which would enter Dorchester through the southern *vicus*. Such a crossing (while undoubtedly necessitating a ferry, as would any crossing of the river in Oxfordshire) would, nevertheless entail crossing a single river, rather than two.

The *vicus* appears to date from the early Roman period – although the presence of some ‘Belgic’ pottery may well be indicative of an earlier ‘flight’ from the *oppidum* at Dyke Hills. Abandonment is a phenomenon noted in connection with such enclosed *oppida* in the final decades of the 1st century BC (McOmish 2011). Whether this is due to environmental, political or social factors is not clear. The development of *vici* such as these at Dorchester around the initial fort and subsequent small town attest to the importance of a town that was half the size of Alchester and one-fifth the size of Silchester.

There are several cemeteries around Dorchester-on-Thames, both Saxon – including evidence for isolated inhumations from Dyke Hills – (Kirk & Leeds 1952-3; Sutton 1961; May 1977; Boyle *et al* 1995) and Roman (Durham & Rowley 1972; Harman 1978; Chambers 1987) and as well as circumstantial evidence for a further cemetery to the south of the town (Sausins & Williams 2007; Mundin 2008).

The dating of the Dorchester cemeteries and burials had been long problematic, with suggestions of apartheid, co-existence and displacement offered as models to explain the differences observed in the various cemeteries (Hills & O’Connell 2009). It appears now that the Roman cemeteries are late Roman extending into the AD 5th century with ‘Saxon’ inhumations occurring from the AD 5th century onwards in discrete cemeteries. The date from skeleton 179 (SK 11) was potentially slightly earlier than the Queensford Mill cemetery; the date range for the Church Piece burials is not known.

The Roman burials are generally characterised by being west/east inhumations within ‘managed’ cemeteries, in which intercutting is rare, and graves are laid out in long parallel rows. At Queensford Mill the cemetery was enclosed by a ditch (Durham & Rowley 1972, Fig 3), and possibly an associated bank, while the cemetery investigated at Church Piece was also within a ditched enclosure (Harman *et al* 1987 Figs 1, 2 & 3), initially identified from air photographs, and confirmed by evaluation. Excavations at Asthall (Booth 2002, 19) also revealed an enclosure ditch surrounding the cemetery there. As Paul Booth notes (*ibid*) only the Dorchester cemeteries exhibit evidence for the management of inhumations. Unlike many of the Oxfordshire where between one and 15 inhumations were decapitated, none were at Wittenham Lane; furthermore there were no prone burials, in contrast with many of the Oxfordshire cemeteries (*ibid*, 24). No grave goods or other paraphernalia were recovered which is not untypical for Oxfordshire cemeteries (*ibid*, 33).

The cemetery on Wittenham Lane is unusual in that it is located in moderately built-up area, in contrast with the other cemeteries investigated at Dorchester-on-Thames.

As a consequence of the local topography, the full extent of the cemetery is unclear, and in the absence of data from some interventions – i.e. 1 and 4 Orchard Haven – it is difficult to assess whether other work in the vicinity can corroborate or contradict the proposed interpretation. The intervention at 1 Orchard Haven indicated the presence of at least two east-west burials, with further possible burials.

The absence of data concerning the Oxford University/Oxford Archaeology excavation at 4 Orchard Haven makes it difficult to assess the significance of the work. There was a north-south oriented ditch, and an infant burial, but the location of these has not been published. It is not clear whether we can suggest the infant burial to be inside a postulated cemetery enclosure or whether it was outside. Indeed it is hard to suggest whether the north-south ditch is coeval with any of the ditches seen Rose Cottage (Sausins & Williams 2007), or whether these burials or those to the north in 1 Orchard Haven might have lain within or outside of a cemetery enclosure. Nevertheless, if the infant burial forms part of a group of such, then the south Dorchester cemetery at Wittenham Lane might, like Radley Barrow hills comprise both adults, sub-adults and children. In such a situation, the perceived absence is of evidence rather than being evidence of absence. Age segregation was also a factor at Queensford Mill (Booth 2002, 42). Only further work to the north of the present cemetery area can confirm this hypothesis.

Of the Oxfordshire cemeteries, the Dorchester cemeteries have the best potential to represent burial of a Christian population (Booth 2002, 42), and to that proposition, Wittenham Lane is apparently not an exception. There are neither grave goods nor hobnail-boot nails and extended and supine, undisturbed inhumations are oriented west-east, (Booth 2002, 41). The only exception to an undisturbed inhumation being skeleton 122 (SK 5) which was truncated by grave 141 (SK 10). There are the possible familial clusterings of skeletons 290 and 325 (SK 22 and 25) and skeletons 202 and 222 (SK 17 and 20), but these clearly respect the earlier inhumation in each case. The former of these pairs were male and female, the latter more ambiguous, but may well have represented a couple. In both cases the later grave was cut into the earlier grave fill but sufficiently shallow not to impact upon the earlier burial.

The watching brief carried out at 5 Orchard Haven (Mundin 2007) revealed an east-west oriented burial as well as, to the northeast, activity commensurate with the Late Iron Age into Roman period settlement activity from 11 Wittenham Lane. It is possible that any one of the features identified might be a ditch (*ibid*, 4) forming the northern extent of the cemetery. This however can only remain conjecture.

The watching brief indicated the probable further presence of inhumations, as the remains of more than one individual were recovered. If this were the northernmost extent there could be up to 100 further burials between the excavation at 11 Wittenham Lane and 5 Orchard Haven, although it is perhaps unlikely that the cemetery was quite so large.

The Queensford Mill cemetery was on the projected line of the road towards Fleet Marston (Harman 1978, Fig 1; Malpas 1987, Fig 1), whereas the Church Piece cemetery is on the line of the Roman Dorchester ‘by-pass’ (Malpas 1987, Fig. 1). On the east side of Dorchester, in the Thame floodplain, a number of roads intersect from

the south, the north and the east; the road between Silchester and Fleet Marston bypasses Dorchester. A further cemetery was located south of Overy, on the line of the London road (Harman 1987, Fig 1; Malpas 1987, Fig 1). It would be unsurprising if the cemetery on the south side of Dorchester were also on the line of a road into the town. Roman cemeteries tend to follow pre-existing topographical markers such as prehistoric monuments, field boundaries and roads; this tendency has been evidenced at Asthall and at Queensford Mill (Booth 2002, 38-9). Although the form and function of the underlying settlement activity at Wittenham Lane are ambiguous, it is clear that the line of the postulated enclosure ditch is at right angles to the present line of Wittenham Lane, which, it is proposed, formed part of the Roman road network at Dorchester-on-Thames.

While the cemetery on the south side of Dorchester is apparently not as large as either the Queensford Mill or Church Piece cemeteries, its presence on the south side of the town is a strong indication of Dorchester's occupants continued use of the river into the 4th century, even though the associated *vicus* would appear to have been largely abandoned. It is perhaps fitting that the arrival of *foederati* at the end of the AD 4th or beginning of the AD 5th century – if the Dyke Hills burials with late Roman military gear do indeed represent such a group of individuals – would undoubtedly have come to Dorchester by way of the river.

8 POST-EXCAVATION ANALYSIS AND PUBLICATION

On completion of the on-site works the site archive was compiled. This contained all the data collected during the recording action and the 2008 evaluation, including records, finds and environmental samples. It was quantified, ordered, indexed and made internally consistent. (See Appendix 1, 1.26-29)

The post-excavation assessment report preparation was undertaken in line with MoRPHE (English Heritage).

The full site archive will be deposited with Oxfordshire County Museum Services under accession code 2011.89 in anticipation of future analysis and publication.

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APPENDIX 1

Evaluation Results

This summary report presents the results of the evaluation at 11 Wittenham Lane, Dorchester-upon-Thames conducted on the 17 May 2011 (Fig. 1). Two trenches were excavated within the footprint of the proposed new build. Trench 1 was laid out north/south parallel with Wittenham Lane, and Trench 2 was laid out east/west, at right angles to the lane.

Trench 1, which was excavated to the top of the uppermost archaeological horizon below a subsoil deposit of former ploughsoil, a depth of *c.* 0.7m at the south end and *c.* 0.4m at the north end. The former ploughsoil, which sealed a number of archaeological features, yielded Black Burnished ware (AD 1st – 4th), ?Farnham ware (AD 2nd – 3rd), Oxford colour-coated ware (AD 2nd – 4th) and ?Savernake Style ware (AD 2nd – 3rd). Some sherds of early modern wares were also present. It was approximately 0.35m thick.

At the south end of Tr. 1 an east/west ditch containing Black Burnished ware, Samian (AD 1st – 3rd) and Oxford Parchment ware (AD 2nd – 3rd) as well as much animal bone and shell, in addition to roof tile (stone and ceramic) was investigated. To the north, further ditches and areas of archaeological activity were not investigated, although surface collection indicates broadly similar assemblages of pottery and bone. A possible storage pit was also investigated in Tr. 1, yielding a good assemblage of animal bone in addition to AD 1st – 2nd century pottery.

Trench 2, which was oriented east/west, was excavated to the top of the natural, to a depth of *c.* 0.5m at the west end and *c.* 0.4m at the east end. Pottery from the former ploughsoil, which was 0.15m thick here, was of a similar range to that from Tr. 1.

There were nine postholes in the eastern half of the trench; although no structure could immediately be discerned, these may well represent one or more structures. A similar range of Roman fabrics was recovered from the surface of features including pits and a gully. At the west end of the trench an east/west oriented skeleton was uncovered *c.* 0.4m below ground-level apparently above the archaeological horizon of settlement activity.

A fragment of early medieval pottery, OX162, was recovered from the surface of a pit extending to the north of the trench, as well as a sherd of post-medieval red ware from a second later pit. However, as these finds are the result of surface collection within a relatively shallow evaluation trench, it cannot be assumed that the features are necessarily medieval or post-medieval. Nevertheless, both medieval and post-medieval features were present at Rose Cottage, Wittenham Lane, adjacent to the current site.

The evaluation appears to indicate the presence of part of the extra-mural Roman settlement dating to the AD 2nd or 3rd centuries; part of the extra-mural cemetery; and some possibly medieval and post-medieval activity. Some of the ditches identified and investigated during the evaluation can be tied to those at Rose Cottage, indicating enclosures – either for fields or for settlement activity – extending from Wittenham Lane west. The postholes and pits suggest that at least some of the enclosures are associated with occupation activity. The burial appears to have post-dated this settlement activity. This is in accord with the results of other work in the immediate area of investigation.