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Coastal Trade in Roman Britain: the Investigation of Crandon Bridge, Somerset, a Romano-British Trans-shipment Port beside the Severn Estuary

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ABSTRACT

There is growing awareness of the significance of coastal trade around Roman Britain, though very few of the smaller ports and towns that were engaged in such activity have seen archaeological investigation. This paper reports on work at Crandon Bridge, in Somerset — including excavations in advance of the construction of the M5 motorway — that appears to have acted as a trans-shipment port where goods brought by road and river through Somerset were loaded onto larger vessels that could cross the Bristol Channel. Analysis of the buildings and artefacts suggests that this extensive site may also have been a small town.

INTRODUCTION: COASTAL TRADE IN ROMAN BRITAIN

When we think of transport and communications in Roman Britain the first thing that springs to mind is the network of long, straight roads that criss-crossed the entire province. As an island, however, whose coast is heavily indented with estuaries and tidal rivers, it is to be expected that water-based transport would also have been important, although most general discussions of Roman Britain and its economy have relatively little to say on the matter beyond a general awareness that navigable rivers may have been important.[1] Although most attention is devoted to cross-Channel, inter-province trade and the road system, and the role of intra-provincial coastal waters in the economy of Roman Britain has been relatively neglected, there is growing evidence for the shipping of goods, such as pottery and coal, around the coast of Britain.[2] It is noticeable how the forts of the 'Saxon Shore', along with Caister-on-Sea, were located beside sheltered estuaries,[3] and that the stone used to construct

1 e.g. Frere 1974; Salway 1981, esp. 562–72; Todd 1981; Millett 1990, 157–80.
2 Williams, D. 1977; Gillam and Greene 1981; Smith 1997.
3 Darling and Gurney 1993; Pearson 2002a, 104–21.

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them was shipped often considerable distances by river and around the coast.[4] A series of canals was also constructed across the extensive wetlands of the Fenland,[5] and a number of inland rivers that flow into the estuaries of eastern England may have been canalised during the Roman period, such as the Fossdyke in Lincolnshire and Turnbridge Dike at the head of the Humber Estuary in Yorkshire (although in no case is the evidence for a Roman date for these canals indisputable).[6] In south-east Wales, the legionary fortress at Caerleon lay beside the Usk estuary on the banks of which a substantial quay has been excavated,[7] and a third-century tile stamped 'LEG II AVG' from an extensive site at Seaton, on the coast of eastern Devon, is suggestive of a port or supply base there.[8] Grain storage facilities and a possible jetty with a crane-base have been recorded besides the Ouse at York,[9] while Chester, on the river Dee, was probably 'the busiest port on the west coast of Britain'.[10]

A number of other major towns lay on navigable rivers, e.g. Lincoln where an extensive waterfront on the river Witham was equipped with various dumped and revetted banks to aid the off-loading of vessels.[11] The fortress and colony at Colchester, in contrast, was too far upstream to have been reached by boat except at spring tides, and while it appears to have had a small port on the Colne estuary at Fingringhoe, the discoveries there 'were too poorly investigated and recorded to tell us much about the true nature of the site'.[12] Claudian material at Fingringhoe points to its origins as a military supply base for the fortress at Colchester, and a similar arrangement appears to have existed at Exeter with its port and supply base down the Exe estuary at Topsham, which in the medieval period was similarly used for the trans-shipment of goods.[13] A number of other coastal bases dating to the invasion/Conquest period testify to the significance of coastal transport at that time, e.g. Fishbourne beside Chichester Harbour, *Clausentum* (Bitterne) on the Itchen estuary,[14] Hamworthy beside Poole Harbour,[15] *Abone* (Sea Mills) beside the Severn Estuary,[16] and Old Winteringham and Brough-on-Humber on the Humber Estuary.[17]

That the military establishment made extensive use of coastal waters for transporting goods seems clear, and through the civilian settlements that grew up around fortresses such as Caerleon, Chester, and York, some of these goods will have passed into the local economy. Military establishments, however, formed an extremely small proportion of the settlements in lowland Britain and as much of this supply traffic was garrison-to-garrison, it would not have had a particularly significant impact on the wider landscape and economy (particularly bearing in mind the remote locations of many of the forts of the 'Saxon Shore'). The same was probably true of civilian cross-Channel trade, in that merchants engaged in this are likely to have congregated in the major cities such as London where the impressive waterfronts have seen extensive excavation.[18] While we know a certain amount about the functioning of these major Romano-British military and civilian ports, there has been far less work carried out on the minor

4 Allen and Fulford 1999; Pearson 1999; 2002b; 2003; Allen *et al*. 2001; 2003.
5 Silvester 1991; Hall and Coles 1994; Crowson *et al*. 2000; Rippon 2000b, 69–71.
6 Jones, M. 2002, 95; Van de Noort and Ellis 1997, 57, 77, 460.
7 Boon 1978.
8 Holbrook 1987; Maxfield 1999, 78.
9 Hall, R. 1991.
10 Mason 2001, 111.
11 Chitwood 1991, 169; Jones, M. 2002, 107; Jones, M. *et al*. 2003, 98–9.
12 Crummy 1997, 49.
13 Sage and Allan 2004.
14 Waterman 1952.
15 Jarvis 1993.
16 Bennett 1985; Ellis 1987.
17 Ellis 1987; Creighton 1990, 189–95; Millett 1990, fig. 12.
18 Milne 1985; 1995; Yule 2005.

coastal settlements. In their major overview of British coastal archaeology, for example, Fulford and Champion comment that 'As we have seen in the period-by-period review, apart from the major settlements like the principal ports, which have seen continuity since their establishment in the Roman or post-Roman period, the archaeological record contains remarkably little evidence of coastal settlement … and detailed understanding of the maritime aspect of this [Roman] history, let alone non-military and/or smaller settlements, is almost non-existent'.[19] Jones and Mattingly similarly reflect that 'with the notable exception of London, comparatively few traces of Roman harbours and quays have been properly examined in Britain', with most of those that they map being military.[20]

Jones and Mattingly go on to reflect that 'in spite of the impressive appearance of the road network we need not infer that overland haulage of goods was undertaken readily where a waterbourne alternative route existed. Whilst Map 6.20 [showing harbours, anchorages and inland ports] probably includes the major harbours, it is undoubtedly far from complete in relation to the overall complexity of the water transport network'.[21] The aim of this paper is therefore to try and shed some light on these lower-order coastal trading settlements. Around the Severn Estuary and inner Bristol Channel, for example, numerous Romano-British settlements have been located along the modern coastline but almost nothing is known of their character. A proportion of these will actually have originally been located some distance from the Romano-British shoreline, but are now exposed through erosion, the coast having retreated by up to 800 m: examples include Rumney Great Wharf near Cardiff and Oldbury in South Gloucestershire.[22] This illustrates the need to carry out careful palaeogeographical reconstruction when studying coastal sites of this, and indeed any, period.

Where erosion has been less, Romano-British coastal settlements may still survive, some of which would probably have been engaged in exploiting the rich natural resources of these wetland landscapes, for example grazing livestock on the marshes, fishing, and producing salt through boiling sea water.[23] There are, however, a number of larger settlements, usually located beside major creeks or estuaries, whose locations make them prime candidates for having functioned as small ports, e.g. Sea Mills, Portishead, Clevedon, Weston-super-Mare, Combwich, and Crandon Bridge (FIG. 1). But what would a small Romano-British port have looked like? There are at least two possibilities. The first is a relatively specialised site with trade as its major function which, if marketing went on elsewhere, would have formed a distinctive element in the settlement pattern of Roman Britain, dominated by the infrastructure of moving and storing goods such as quays and warehouses, with relatively little domestic occupation or other activities. Such sites certainly existed in the medieval and post-medieval periods when there were numerous small, specialised landing-places around the Severn Estuary and Bristol Channel that were not part of larger settlements.[24] The second possibility is that during the Roman period coastal trade was

19 Fulford *et al*. 1997, 220–1.
20 Jones and Mattingly 1990, 198, map 6.19.
21 Jones and Mattingly 1990, 200.
22 Allen and Fulford 1992; Fulford *et al*. 1994; Allen 1997; Rippon 2006, 64.
23 e.g. Highbridge in Somerset: Rippon 1995.
24 Russett 1989; Green, C. 1996; Fulford *et al*. 1992; Allen 1999; 2003a; 2003b. 'Crandon' is referred to in the Domesday Book, as are Crook and Horsey that also lay on or close to the probable course of the river Parrett at that time (Thorn and Thorn 1980). It is possible that they served as small landing-places. The excavations at Crandon Bridge did reveal evidence for medieval occupation in the form of 956 sherds of pottery weighing 8 kg. Jane Timby reports that nearly all the medieval sherds comprised one local fabric, an unglazed grey to reddish ware, which featured as jars. The assemblage appears to largely date to the thirteenth to fourteenth centuries. The medieval pottery was mixed with the Roman sherds and perhaps to the untutored eye may have been thought to be Roman in so far as the material is plain and fairly indistinctive. There are no glazed wares, which is unusual, even for a rural assemblage. This would suggest that the more distinctive component of the assemblage, the glazed tablewares and diagnostic featured sherds, have been separated out in the past for study but not reunited with the site assemblage.

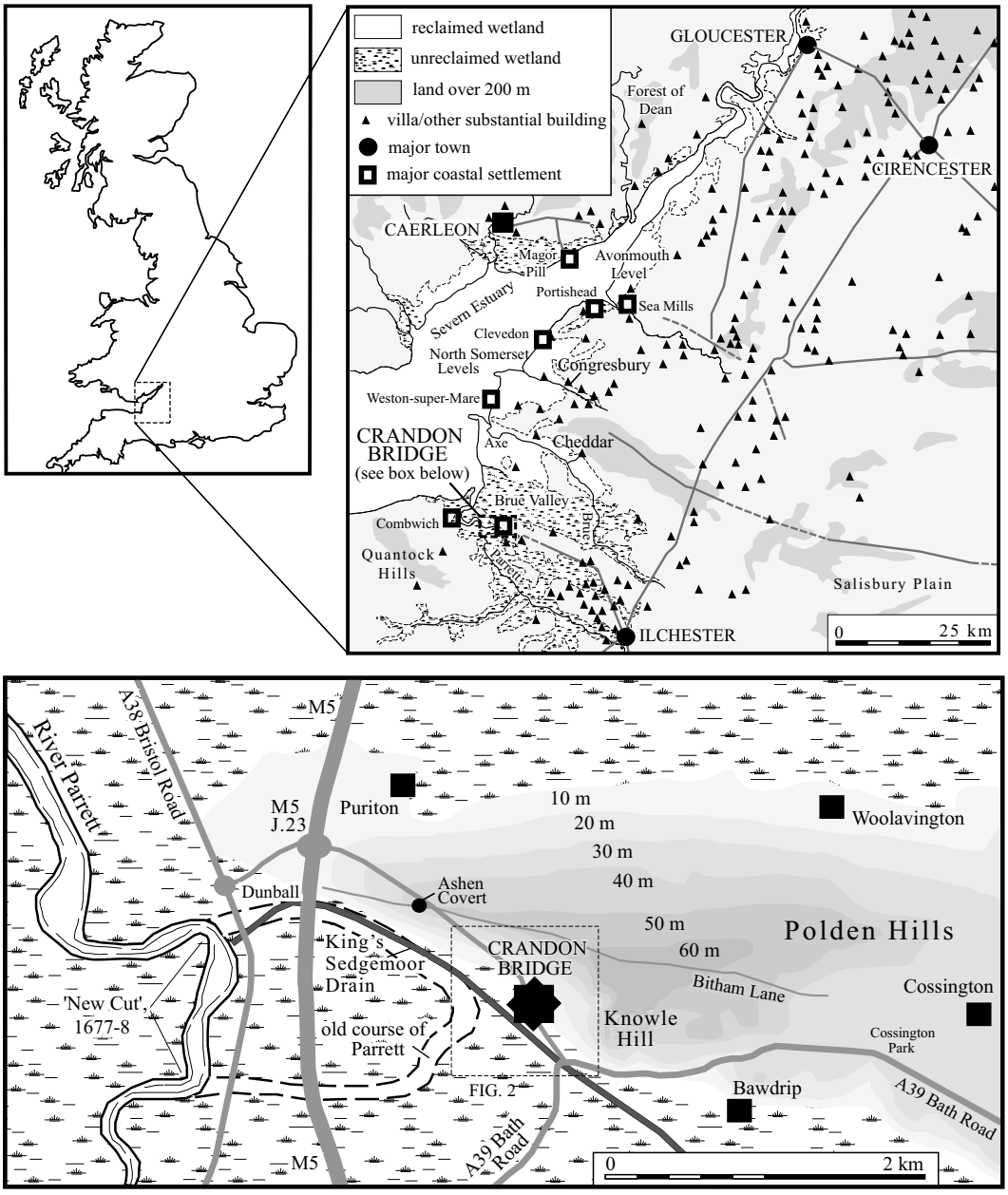

FIG. 1. Location of the site at Crandon Bridge, beside the former course of the river Parrett.

conducted through settlements whose function included the marketing of goods and provision of other services, and as such were in effect small towns. Such sites would also have had domestic occupation, and have been more extensive than a specialised port/landing-place. These two types

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of site should, therefore, leave distinctively different archaeological evidence in their buildings and material culture assemblages reflecting any industrial production, provision of services, and domestic occupation: whereas a specialised port facility would probably have been limited in extent, a small town type settlement will have been more extensive, and had some zonation in landuse (e.g. waterfront/storage facilities, shops, workshops, and residential houses).

Despite the logical possibility that there were small towns engaged in coastal as well as inland trade in Roman Britain, it is noticeable how few of the sites listed by Burnham and Wacher were in such locations (the only examples being the potential city of Rochester in Kent, which along with Springhead lay on the southern banks of the Thames, and Wilderspool on the south bank of the river Mersey).[25] A later overview of recent work on small towns also failed to identify a significant coastal network,[26] which raises the important issue of whether this apparent distribution of small towns, usually located at nodal points in the road network and apparently ignoring coastal locations, suggests that there was little use of maritime and estuarine waters in Romano-British trade.

A number of local studies are, however, suggesting possible small towns that are in coastal locations, such as Felixstowe in Suffolk, Winteringham and South Ferriby on the southern banks of the Humber Estuary, and Heybridge in Essex, most of which are included in Jones and Mattingly's category of unfortified small towns.[27] Around the Severn Estuary and inner Bristol Channel there were also a number of substantial Romano-British sites which could potentially have served as ports. One lies at Sea Mills beside the river Avon, west of Bristol, the pottery assemblage from which suggests greatest engagement in trade during the first and second centuries A.D.[28] Substantial coastal settlements of unknown character have also been discovered through stray finds and piecemeal excavations further down the Estuary at Combwich, on the Parrett estuary, at Weston-super-Mare and Clevedon, on creeks that flow across the North Somerset Levels, and at Portishead on the south bank of the Avon near its confluence with the Severn (FIG. 1).

The only one of these extensive Romano-British coastal sites around the Severn Estuary/Inner Bristol Channel to have seen any significant archaeological investigation is at Crandon Bridge close to the Parrett estuary, near Bridgwater in Somerset, which is the focus of this paper (FIG. 1). Roman material was first discovered in the area during the seventeenth century, with small-scale excavations carried out in 1939 and 1944, and a major campaign of work during 1971 in advance of the construction of a link road for the new M5 motorway. Ever since these investigations, the relatively high proportion of imported pottery, along with the apparent scarcity of domestic refuse and the simple rectangular form of the buildings, has led to speculation that this site was a port,[29] but for over three decades this hypothesis remained untested as the excavations were unpublished. In the 1990s the present author became aware of the site and its importance during his research into the Somerset Levels and the wider Severn Estuary region in the Roman period,[30] and so he undertook the writing up of these excavations from 2003 to 2006 with the financial assistance of Somerset County Council, the British Academy, and the Roman Research Trust.

In trying to determine the nature of this site three key questions were asked during the post-excavation analysis, and will be addressed in this report:

25 Burnham and Wacher 1990, fig. 1.
26 Burnham 1995.
27 Plouviez 1995; Whitwell 1995; Atkinson and Preston 1998; Jones and Mattingly 1990, map 5.12.
28 Bennett 1985; Ellis 1987, 90–2.
29 Leech 1977a, 25–6; Holbrook and Bidwell 1991, 23; Allen and Fulford 1996, 243; Rippon 1997, 54.
30 e.g. Rippon 1997; 2007a.

1. What was the contemporary landscape context of the site? (Today it lies 2 km away from the nearest navigable river, hardly a suitable location for a port.)
2. What was the extent of the site? (In addition to the main excavations, a series of small-scale observations have occurred in the area that, in addition to its topographical location, allow its extent to be determined with some accuracy.)
3. What is the nature of the activity on the site: is there evidence for the importation of goods, and are any other activities such as industrial production and domestic occupation reflected in the character of the buildings and the material culture assemblages?

THE LANDSCAPE CONTEXT OF CRANDON BRIDGE

The site lies at the foot of Knowle Hill in the parish of Bawdrip, near the western end of the Polden Hills which extend into the Somerset Levels west of Glastonbury. The excavated site is variously known as Bush Marsh and Crandon Bridge, the latter being the nearby bridge that carries the A39 from Bridgwater to Glastonbury across a major, artificial, seventeenth-century watercourse known as the King's Sedgemoor Drain. The site now lies 2 km to the east of the river Parrett, one of the major rivers that drains the southern part of the Somerset Levels, though it lies on the northern bank of a palaeochannel that was the course of the river until 1677 when it was diverted to its current position by Sir John Moulton (FIGS 1–2).[31]

The Romano-British site at Crandon Bridge lies at the heart of the Somerset Levels, the second largest area of wetland in Britain. Our understanding of any archaeological site relies on appreciating its landscape context and this is particularly the case with Crandon Bridge. FIG. 2 is a reconstruction of the Somerset Levels in the late Roman period (*c.* A.D. 300). In the north, recent survey, excavation, and palaeoenvironmental analysis on the North Somerset Levels have shown that this area was protected from tidal inundation around the mid-third century, as what had been a vast area of intertidal mudflats and saltmarshes was transformed into a freshwater, reclaimed landscape. To the south of Mendip, in Brent Marsh, an extensive buried soil associated with ditched field-systems and a series of well-constructed stone buildings, including a villa at Lakehouse Farm, suggest that this area was also reclaimed during the late Roman period.[32] In the Axe valley, further inland and so beyond the limit of post-Roman flooding, the Romano-British landscape survives as an impressive series of earthworks, suggesting that enclosure and drainage of the former saltmarsh was very extensive, with in places near continuous fieldscapes across several square kilometres.[33]

The southern limit of the reclaimed area was probably the palaeochannel of a substantial tidal river that has now largely silted up, but which is referred to as the *Siger* in the bounds of an Anglo-Saxon charter for the Brent estate dated to A.D. 693.[34] Between the *Siger* and the Polden Hills to the south lay a mosaic of natural environments with intertidal mudflats and saltmarshes towards the coast and freshwater peat bogs further inland. A recent study of aerial photographs and LIDAR (Light Detection and Ranging; an airborne remote sensing technique) data has allowed Brunning and Farr-Cox to map an extensive system of tidal creeks that drained these tidal marshes.[35] This 'dendritic' pattern of creeks is typically formed by waters draining off a saltmarsh following its inundation by the sea.[36] These creeks supported an extensive salt-production industry which is mostly buried under later alluvium, though beyond the inland limit of this flooding these salterns

31 Williams, M. 1970, 113; Leech 1977a, 25–6, figs 14–15.
32 Rippon 1995; 1997; 2000; 2006.
33 Grove 2002.
34 Sawyer 1968, no. 238.
35 Brunning and Farr-Cox 2005.
36 Allen 2000.

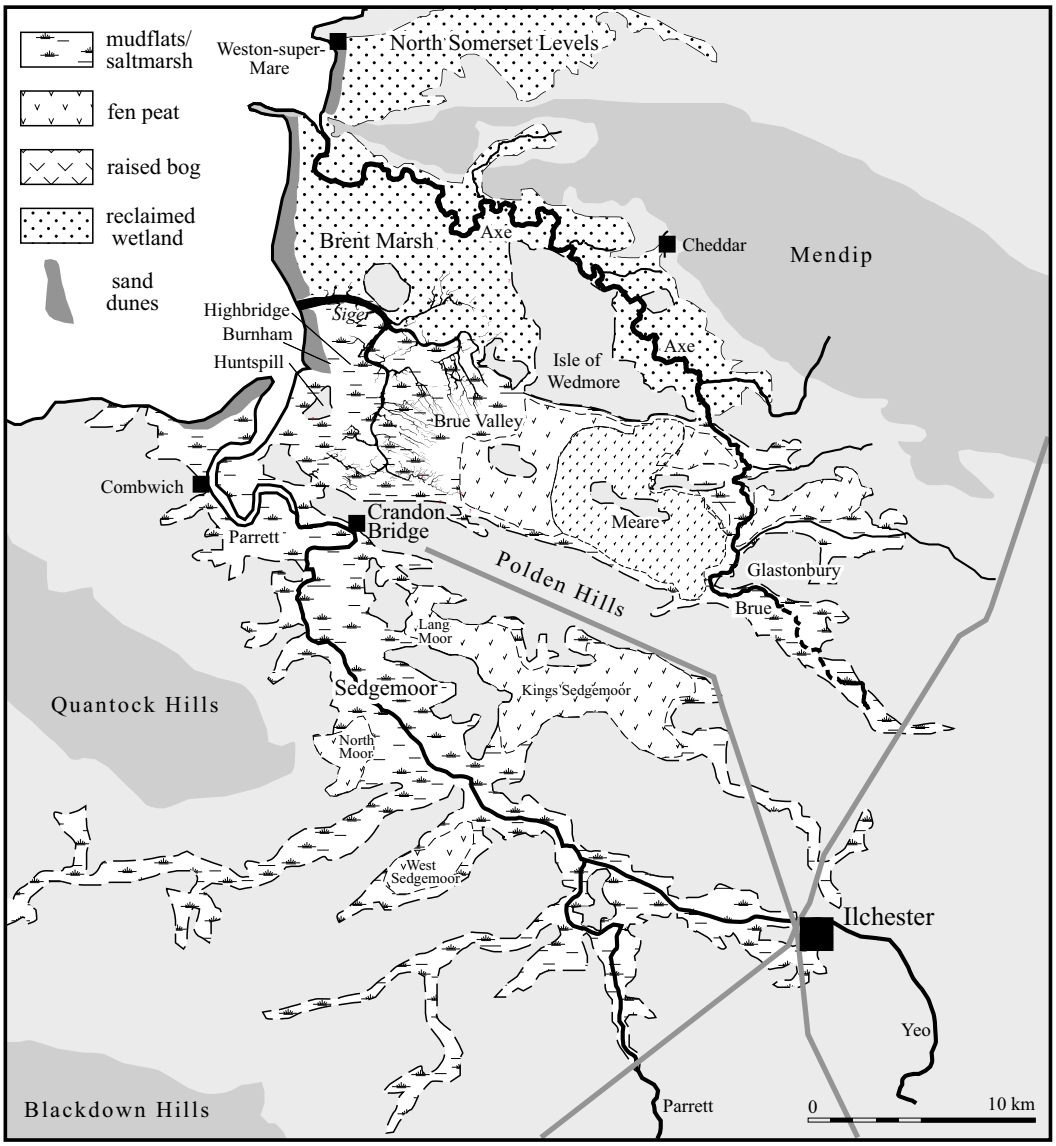

FIG. 2. Reconstruction of the Somerset Levels during the Roman period. The palaeochannel complex associated with the river *Siger* is after Brunning and Farr-Cox 2005.

(known locally as 'briquetage mounds') still survive as earthworks. Several deep excavations within the coastal alluvium, notably at various places in Burnham-on-Sea, the Huntspill River that provides an east to west cross-section right through the area, and the Walpole Landfill Site, show that salterns are found all the way to the coast.[37] Based on the density of surviving earthworks

37 Rippon 1995; Grove and Brunning 1998; Brunning 1999; Hollinrake and Hollinrake 2001.

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and those salterns seen in cross-sections such as the Huntspill River, and interpolating this density across the rest of the marshes south of the *Siger*, there were probably between 500 and 1,000 salterns in the area. Virtually all these sites are Romano-British: just a single Late Iron Age site is known, and a recent reassessment of the pottery from other sites produced just a single further Late Iron Age sherd (Fairford Road, Highbridge).[38] The early Roman period saw an increase in the number of sites in coastal areas (around Highbridge and Huntspill), but during the third century there was a dramatic expansion in the industry as salterns spread further inland. While production continued in coastal areas, salterns were now found as far as the margins of the freshwater peat bogs which provided an important source of fuel.[39] While not all of these sites will have been in use at the same time, the consistency with which they produce later third- to fourth-century pottery suggests that several hundred sites may have been in production at any one time.

There is no evidence of a significant freshwater river flowing into this area of saltmarsh, which is not surprising as to the east there was an extensive raised peat bog between the Polden Hills and the Isle of Wedmore to the north.[40] Today, this area is crossed by the river Brue, which flows west from Glastonbury, past the small bedrock island of Meare, to the coast at Burnham-on-Sea, although this present course of the river is medieval in origin and in the Roman period it flowed north from Glastonbury to join the river Axe to the west and north of Wedmore (FIG. 2).[41]

To the south of the Polden Hills lies another extensive area of wetland known as Sedgemoor (FIG. 2). The Yeo, Parrett, and a series of other rivers that drain into this southern part of the Somerset Levels wind their way through a series of freshwater peat bogs, and although less archaeological and palaeoenvironmental work has been carried out in this area compared to the Brue Valley,[42] several studies have established that the peat bogs at King's Sedgemoor, North Moor, and West Sedgemoor were growing in the Roman period.[43] The Parrett itself rises to the south of this vast expanse of wetland, while a tributary, the Yeo, rises to the east and flows past the Romano-British small town (and from the third century probable *civitas* capital) of Ilchester.[44] Ilchester was located immediately to the south of where the Fosse Way (Margary route 5) and the road north from Dorchester (Margary route 47) crossed the Yeo, while a third major road appears to have branched off the Fosse Way immediately north of Ilchester heading north-west along the Polden Hills towards Crandon Bridge (Margary route 51).[45] The Yeo may also have been an important communications route, and possible quays have been observed in the north-western suburbs of Ilchester at Great Yard.[46] The present course of the Yeo has clearly been partly canalised, and on the basis of a decrease in sedimentation on the floodplain it is suggested that this may have taken place during the Roman period.[47]

The exact course of the Roman road along the western part of the Polden Hills (Margary route 51) is unclear (FIG. 1). It can be traced as far as Cossington Park (as the Bath Road, the modern A39), whereafter it may have continued north-west, possibly joining up with Bitham Lane, a long straight road that leads to Ashen Covert and Dunball on the river Parrett. Rahtz *et al*. even suggest that it continued on to Pawlett and Combwich, though there appears to be no actual evidence for this.[48] There is, however, another possible course for Margary route 51: at

38 Leech 1977b; Seagar Smith 2002, 3.
39 Leech *et al*. 1983.
40 Beckett and Hibbert 1979; Somerset County Council 1992; Housley 1995; Housley *et al*. 2007.
41 Aalbersberg 1999; Housley 1995; Rippon 2004; 2007b.
42 But see Alderton 1983; Coles and Orme 1983.
43 Cole 1983; Morgan 1988; Brown *et al*. 2003.
44 Leach 1982; 1994; Fulford 2006.
45 Margary 1973.
46 Leach 1994, 6, 19.
47 Thew 1994, 169–70.
48 Rahtz *et al*. 2000, figs 2 and 10.

Cossington Park the modern Bath Road changes line, heading directly west, and this stretch of road is also unusually straight before it curves around Knowle Hill to Crandon Bridge which may have been its terminus.

A number of conclusions can be drawn from this reconstruction of the landscape context of Crandon Bridge. First, it was indeed on the banks of a major tidal river that flowed into the Bristol Channel/Severn Estuary downstream of the legionary fortress at Caerleon. Secondly, the probably navigable river Yeo also flows into the Parrett (and hence past Crandon Bridge), and the site is also connected to the network of Roman roads that radiate from Ilchester. Thirdly, Crandon Bridge lay on the margins of a wetland landscape that comprised a mosaic of environments, including extensive saltmarshes that were used for salt production. Overall, it is in an ideal location for a small port. The legionary fortress at Caerleon lay on the opposite side of the Severn Estuary to Crandon Bridge, and it is known that the military establishment there received a significant proportion of its pottery from Poole Harbour, in south-east Dorset. Allen and Fulford have previously suggested that the supply route from Poole Harbour to Caerleon was via the road and river network that radiated from Ilchester, possibly embracing a trans-shipment port at Crandon Bridge.[49]

THE EXTENT OF THE SITE

EARLY OBSERVATIONS

Romano-British material has been recovered from around Knowle Hill on many occasions (FIG. 3):

- In 1670 Andrew Pashal, who lived in the village of Chedzoy 2 km south of Bawdrip, wrote to the antiquarian Aubrey, describing how a tessellated pavement had been uncovered 'near the Knoll Hill' along with some coin moulds.[50]
- A hoard of around seventy bronze objects dating to the mid-first century A.D. was uncovered in 1803 near the summit of Knowle Hill (0.5 km to the east of the excavated site at Crandon Bridge), where there were 'evident remains of a Roman station' including a tessellated pavement. The hoard included a range of horse fittings and terrets, along with several brooches and three shield bosses; a further terret, whose condition suggests that it was not part of that hoard, was found at a later date.[51]
- In 1939 H.S. Dewar observed the widening of the King's Sedgemoor Drain below Knowle Hill that revealed approximately north to south-oriented walls associated with a roughly paved and cobbled area some 100 yards in length. Finds included white Lias tesserae, first- to fourth-century Romano-British pottery, including amphorae, and a coin of Domitian. A typescript report (in the 1971 excavation archive) by J. Davis Pryce describes 30 sherds of samian dating from *c*. A.D. 75/85 to *c*. A.D. 140/60.[52]
- In 1944 Dewar excavated the foundations of another north to south-oriented building in a marshy field about 100 m to the north of the discoveries made in 1939.[53] This structure comprised substantial walls of dressed Lias, the lowest two courses being 0.76 m wide and laid in sandy mortar; the three surviving courses of the wall proper were 0.53 m wide.

[49] Allen and Fulford 1996.
[50] Haverfield 1906, 329, 352.
[51] Somerset County Council HER 10038; Brailsford 1975.
[52] *c*. ST 328 401; Somerset County Council HER 44740; Anon 1940, 174–5.
[53] ST 3279 4036, based on a measured plan in the Somerset Archaeological and Natural History Society Library; Somerset County Council HER 44739.

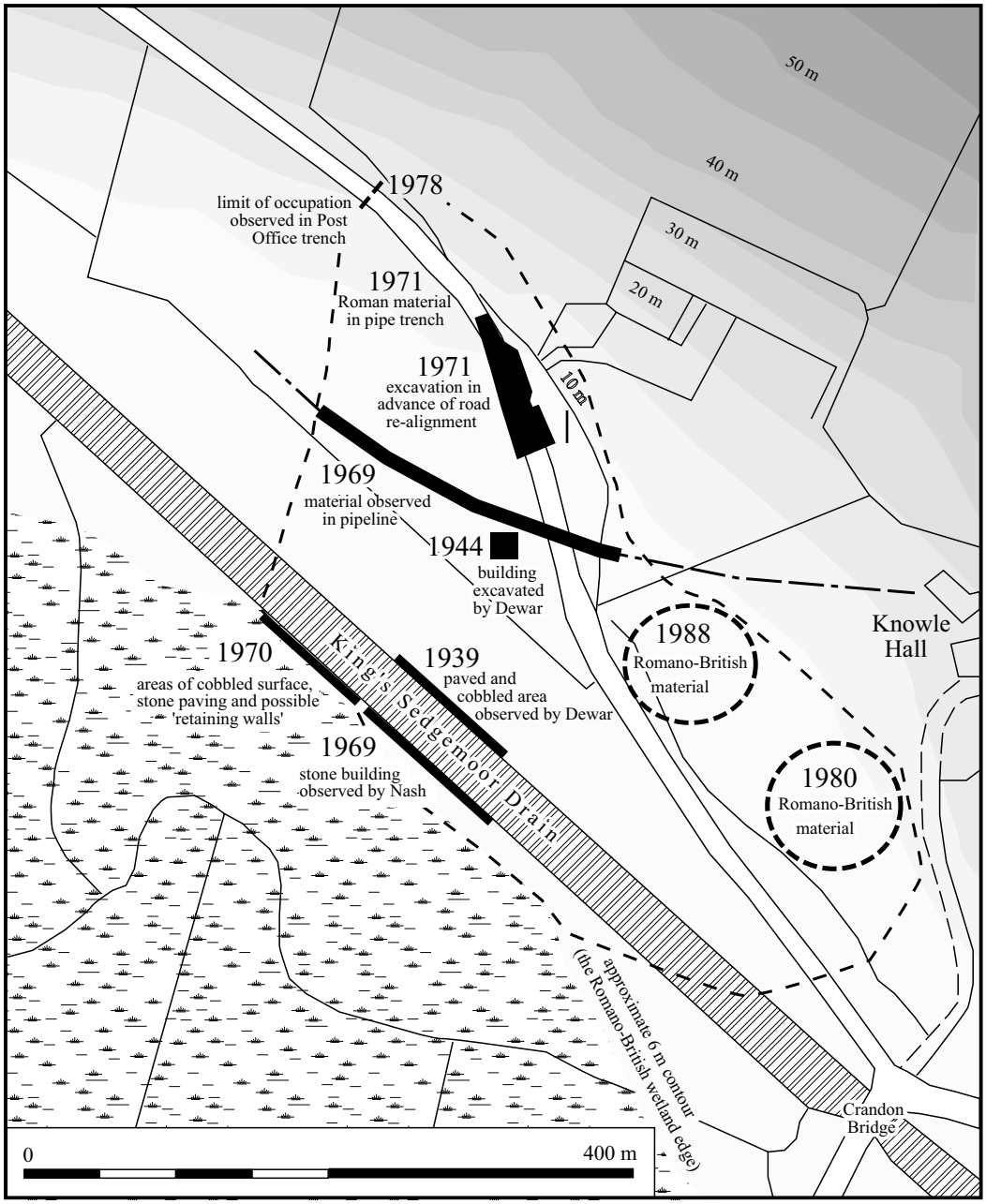

FIG. 3. The location of excavations and other records of Romano-British material at Crandon Bridge.

The walls were 5.5 m apart and were associated with a red clay floor topped with sand, on the surface of which were coins of Probus and Constantine (*Urbs Roma*) along with large amounts of second- to fourth-century pottery. The clay floor sealed the skeleton of a very

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young child and second-century samian pottery.[54] These finds were deposited in Taunton Museum in 1950 and include fragments of amphorae.[55]

- In 1969 local amateur archaeologist Samuel Nash observed a further stone building associated with Roman pottery, including samian, in the south side of the King's Sedgemoor Drain, directly to the south of the occupation horizon observed by Dewar in 1939. This pottery was examined by Leech and was found to be all first-century A.D. apart from one sherd of what is described as Iron Age 'Glastonbury Ware'.[56]
- In 1969 a water pipeline laid from Knowle Hall down towards the King's Sedgemoor Drain revealed pottery either side of the road north-west of Crandon Bridge.[57]
- In 1970 further work on the south bank of the King's Sedgemoor Drain, up to 75 m to the north-west of the location observed by Nash in 1969, revealed more evidence of Romano-British occupation, including areas of cobbled surface, flat limestone paving, and lines of Lias stones which appeared to form 'retaining walls' as opposed to buildings, all associated with a 'black occupation layer'. These structures rested on natural marl at a depth of 0.9–1.2 m below the present surface (6.1–5.8 m OD), and were sealed by alluvium. Pottery dated from the first to the fourth centuries, and there was a coin of Tetricus.[58]
- In 1971 Romano-British material was observed by members of the Bridgwater and District Archaeological Society in a pipe trench along the Crandon Bridge Road, higher up than the subsequent excavation.[59]

BACKGROUND TO THE EXCAVATIONS IN 1971 *By* Peter Fowler (Chairman, former M5 Research Committee)

In 1971 excavations were carried out *c*. 200 m to the north of the building observed by Dewar in 1944 in advance of the widening of a minor road on the southern side of Knowle Hill between Crandon Bridge and Puriton that was to become a link between the new M5 motorway and the A39 from Bridgwater to Glastonbury (ST 326 404; FIGS 1–2). This excavation was one of a number carried out between 1969 and 1973 in advance of and during the construction of the M5 motorway through Gloucestershire and Somerset by the M5 Research Committee. This was an *ad hoc* committee set up under the aegis of the Regional Group of the Council for British Archaeology to organise what was a largely volunteer effort. The objective was to examine from an archaeological, air photographic and documentary point of view every bit of ground affected by the motorway across the length of the two counties, before and during construction.[60] At the time, the immediate results were regarded as significant, with academic, political and financial implications.[61] The Crandon Bridge site[62] contributed to this impression and briefly enjoyed its five minutes of regional media fame as the road under which it partly lies was blocked in both directions when over a thousand people visited the excavation one Sunday afternoon.

Along the M5, archaeological observers quickly realised that far more disturbance was involved in motorway construction than on the motorway line alone and the Crandon Bridge site, 2 km east of what at the time was the proposed motorway interchange on Puriton Hill, was a case in point.

54 Anon 1945, 86; unpublished letters from Dewar to H. St George Gray, dated 8 July 1944, and Miss Taylor, dated 7 June 1945, in the 1971 excavation archive.
55 Accession SO-A-57; Dewar 1950.
56 ST 3275 4019; Somerset County Council HER 44738; Nash 1975, site 563A; Leech 1977a, 26.
57 Sketch plan and manuscript note by D. Wallace in the 1971 excavation archive.
58 ST 326 403; typescript notes and measured plan in the archive of the 1971 excavation; Nesbitt 1970.
59 Manuscript note in 1971 excavation archive.
60 Fowler 1972; 1979.
61 Fowler 1974.
62 Dawson *et al.* 2003, site 41.

The site was anticipated as a result of observations in the 1930s and 40s (see above), but no further excavation was possible in advance of the M5 construction. It duly came to light in mid-February, 1971, immediately contractors began mechanical removal of topsoil to improve the minor road from Crandon Bridge north-westwards across the southern slope of the Polden Hills towards Interchange 23, with the tops of walls and Romano-British pottery being exposed. The discovery was promptly reported by (the late) Madge Langdon (of the Bridgwater and District Archaeological Society), access and a time-limit were negotiated, some funds were obtained from the Inspectorate of Ancient Monuments, Department of the Environment, and for some three weeks David Miles was able to direct a small full-time team with limited volunteer help in partially excavating the site. Due to time and resource constraints (and very wet and cold weather), there never was any question of being able to excavate the whole of the site properly: the objective was merely to establish the extent of settlement remains within the area of the roadworks, to define the plans of individual structures partly exposed by mechanical scraping, and, by concentrating on one small area-excavation in particular, to establish some stratigraphical and chronological data for the site.[63]

The M5 Committee published interim annual reports in the early 1970s in the regional CBA journal, *Archaeological Review*. It was its intention to publish for Somerset a single comprehensive unified final report, either as a monograph or as a series of papers as was successfully achieved for Gloucestershire, but this has unfortunately not happened.[64] A good start was made early on, with the publication of an excavation carried out well in advance of the M5 in what was then Somerset,[65] while one other full report, on a medieval post-mill at Chedzoy, was prepared by the excavator (Trevor Miles) but remains unpublished because it waited in vain for similar reports.[66] One of those should have been on a major excavation of an Iron Age settlement at Christon[67] but the excavator took all the records abroad and both he and they had disappeared without trace when I pursued them to their last known location in Port Royal, Jamaica. A comprehensive report on the material from the site was nevertheless prepared and published independently of the Committee.[68] An authoritative gazetteer with site-summaries of the *c*. 100 sites noted in Somerset under the Committee's aegis is thankfully now published, and perhaps eight of the excavated sites in it deserve fuller publication.[69] An M5 archive exists in the City Museum, Bristol, and at the County Museum, Taunton (Somerset County Museums Service).

This report has been compiled from the Committee's records, papers held by the late Mrs Madge Langdon (of the Bridgwater and District Archaeological Society), and material from the site in the Somerset County Museum (in Taunton) and Bridgwater Museum, by a new generation of colleagues who were not at all involved with the original work on the site 35 years ago. I am particularly happy to thank Stephen Rippon for taking the initiative over the Crandon Bridge site and for seeing the project through successfully to completion. He points a way ahead to remedy in another generation the publication deficiencies resulting from an effort that was indomitable in the field but, as it has turned out, has proved unsustainable without close professional academic support thereafter.

LATER OBSERVATIONS AT THE SITE

A number of later observations have shed further light on the extent of the site at Crandon Bridge which is even more extensive than previously thought (FIG. 3):

63 Langdon and Fowler 1971.
64 Fowler 1973; 1977; Fowler *et al*. 1971; 1973; 1974; 1976.
65 Green, H. 1973.
66 Dawson *et al.* 2003, site 44.
67 Dawson *et al.* 2003, site 18.
68 Morris 1988.
69 Dawson *et al*. 2003, 44, 49, 52, 64, 71, 80, 84/85, 88/89/92.

- In 1978, a Post Office telephone trench was dug alongside the new road, revealing Romano-British and medieval pottery along with Lias stone rubble from the area of the excavated site and up to *c*. 150 m to the north-west.[70]
- In 1980, Romano-British material was collected from the southern slopes of Knowle Hill, *c*. 300 m to the south-west of the 1971 excavation in an area of medieval settlement.[71]
- In 1988, an extensive area of stone rubble associated with Romano-British pottery, tesserae and coins was recorded at the foot of Knowle Hill when the playing fields for Knowle Hall School were being constructed, some 200 m to the south-west of the 1971 excavation, and around 100 m east of the probable location of the occupation horizon observed by Dewar and Nash in the side of the King's Sedgemoor Drain.[72] Madge Langdon (pers. comm.) recalled that the footings of several Roman buildings, all on the same orientation, were of a similar character to those found in 1971.

DISCUSSION: THE EXTENT OF THE ROMAN SITE AT CRANDON BRIDGE

The extent of the site at Crandon Bridge can be established with some certainty. Romano-British material is found up to *c*. 150 m to the north-west of the limit of the 1971 excavation, but no further. To the south-east the limit of the site was certainly not reached in 1971, as a machine trench *c*. 6–7 m east of the excavated parts of Buildings 1/2 similarly revealed areas of paving, stone rubble and evidence for burning. Indeed, the excavation of Dewar in 1944 in 'Bush Marsh' field, and the observations of Dewar (1939), Nash (1969), and Nesbitt (1970) show that occupation extended downslope for at least 300 m, while to the east observation in the grounds of Knowle Hall in 1980 and 1988 shows that the site extends at least 300 m to the south-east of the 1971 excavation. The site is, however, unlikely to have extended far to the north, where the side of Knowle Hill gets prohibitively steep. To the south, Romano-British occupation observed in the side of the King's Sedgemoor Drain at *c*. 6 m O.D. rested on the natural marl bedrock, though occupation cannot have extended much beyond this point as areas below this would have been marshland in the Roman period. This gives a settlement at least 550–600 m long (the south-eastern limit has not yet been established), and around 150–200 m wide, suggesting a site of some 8–12 ha in extent.

INITIAL INTERPRETATIONS OF THE NATURE OF THE SITE AT CRANDON BRIDGE

An interim report published in 1971 described how occupation was recorded for some 300 m along the road, and that an area 150 m by 25 m was excavated.[73] The earliest material was 'Durotrigian' pottery associated with a series of first-century A.D. timber structures; these were overlain by ten rectangular, late Romano-British buildings all aligned north to south (i.e. perpendicular to the hillside). This report suggested that the very limited amounts of stone tumble indicated that these footings supported timber structures, that none was definitely domestic, and that some were best interpreted as warehouses based on their simple rectangular plan. It was also noted that the material culture was not domestic in character, and it was claimed that some of the storage jars and amphorae were comparable in fabric with imported Mediterranean wares of *c*. A.D. 500 at Cadbury Congresbury (though this was soon refuted[74]). These various lines of argument culminated in the suggestion that the likelihood of the site being a port was 'strong'.

[70] ST 322 407; typescript note in the 1971 excavation archive.
[71] ST 330 402, in an area of medieval settlement; Langdon 1981.
[72] ST 3292 4027; Somerset County Council HER 44744; Langdon 1988.
[73] Langdon and Fowler 1971.
[74] Leech 1977a, 26; and see Timby below.

The site has also seen some further interpretation. Roger Leech initially suggested that it could not have been a port, because it lay so far from the present estuary.[75] He argued instead that it was simply a larger agricultural settlement, though he later revised this view once the former course of the Parrett, before its diversion down the new cut of 1677, became clear.[76] Holbrook and Bidwell agreed with the site's interpretation as a port, suggesting that the high quantities of Dorset BB1 pottery found in the area of the Roman road between Dorchester, Ilchester, and the mouth of the Parrett (Margary Routes 47 and 51) indicate that it was traded along this road in quantity and was probably destined for a port at Crandon Bridge.[77] Allen and Fulford reached the same conclusion following a more systematic analysis of the distribution of BB1,[78] suggesting that at Crandon Bridge 46.5 per cent of the pottery assemblage was BB1 compared to 20 per cent in other local sites (but see Timby below). All this was, however, speculation, as there was no report available on the excavations.

THE 1971 EXCAVATIONS, POST-EXCAVATION ANALYSIS AND THE SURVIVING ARCHIVE

In advance of the 1971 excavations, the topsoil was mechanically stripped from an area measuring about 100 m by 25 m following the footprint of the proposed road, revealing a series of stone buildings. The site was divided into a series of 'Areas' numbered I to VII, each based on a stone building (FIG. 4). In the short amount of time available (three weeks), and in the light of adverse weather conditions at the time (February), the decision was taken to focus on Areas I and II, which were fully excavated. Elsewhere only the uppermost layers were cleared, although a machine-dug trench in Area IV provided a cross-section through the complete stratigraphic sequence, revealing 0.5 m of stratigraphy similar to that at the southern end of the excavation. The excavation pre-dated modern context-based recording systems. Within each of the seven Areas (I–VII), each layer or feature was given a separate number (i.e. II/4 was Layer 4 in Area II; V/F.4 was Feature 4 in Area V), and in this report the original site numbering has been retained. Nine buildings were excavated and in the archive these are referred to as I–IX, but to avoid confusion with the use of Roman numerals for Areas, these buildings have been renumbered 1–9. The site archive comprises several notebooks, a set of record cards recording the finds from each layer, a number of plans and section drawings (sketched and measured), lists of various categories of artefacts, and a typescript draft of the first part of a report which gives the background to the excavations and a description of Area I (the most extensively excavated part of the site). Although no slides or photographs have survived, there is a short cine-film showing the excavation under way. The archive has been deposited in Bridgwater Museum.

Post-excavation analysis of the artefacts was carried out by members of the Bridgwater and District Archaeological Society (BDAS) under the direction of Mrs Madge Langdon, and although some manuscript lists survive for various categories of material, there are few complete reports. The animal bone was examined by the late Barbara Noddle and a complete typescript report survives, though the bone itself does not. An anonymous typescript report was also drawn up for the glass. Members of the BDAS had washed and marked all the pottery, and an attempt had been made to sort the material into different categories with the amphorae separated from the rest of the Romano-British material. It appears that obviously medieval pottery was also extracted from the surviving assemblage (notably the glazed wares), though small amounts of coarse ware

[75] Leech 1976.
[76] Leech 1977a; 1982a, 222–3.
[77] Holbrook and Bidwell 1991, 23.
[78] Allen and Fulford 1996.

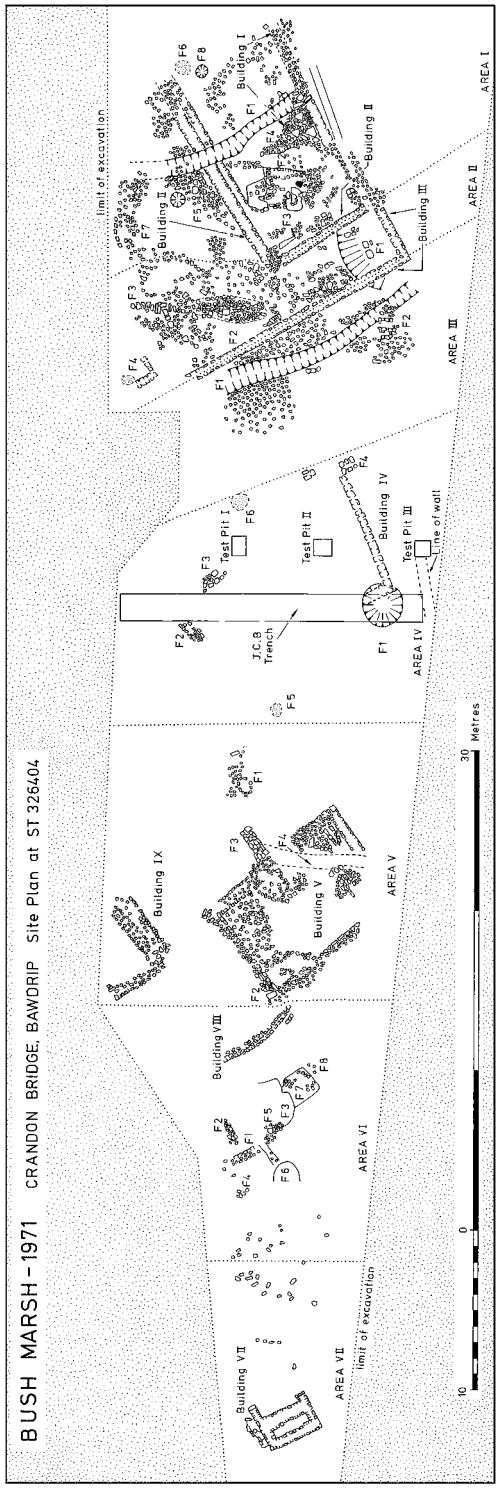

FIG. 4. Plan of the 1971 excavations (based on an inked up drawing in the site archive). Note that to avoid confusion with the Area numbers, the building numbers in the text of this report have been changed from I, II, III etc. to 1, 2, 3 etc.

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were left behind (probably because it was mistakenly thought to be Romano-British: see Timby below). The collection then became split between museums in Bridgwater and Taunton, and Mrs Langdon's house. As part of this post-excavation programme all of these collections were re-united and reports commissioned from John Allen (the stone artefacts and slag), Gill Juleff (the slags), Felicy Wild (the samian), and Jane Timby (the remaining imported pottery and local coarse wares). P.J. Casey has prepared a report on the coins based on his original manuscript list that survives in the archive. Notes on several other categories of material have been prepared by the author based on surviving material (building materials, marine shellfish), or notes in the archive where the original material has been lost (animal bone, glass, and some other small finds).

THE STRATIGRAPHIC SEQUENCE AND PHASING

From the post-excavation analysis of 2003–6, the present author has established the following sequence:

0. Pre-Roman occupation.
1. Timber building in Area 1 (early second century).
2. Series of red clay floors, probably associated with timber buildings, stratified beneath later stone structures (second to third centuries).
3. Layers of material stratified between the red clay floors and later stone buildings (early fourth century).
4. Stone buildings 1–5, 7–9 (early to mid-fourth century).
5. Abandonment of the stone buildings (late fourth century).
6. Medieval occupation (*c*. thirteenth to fourteenth centuries: not reported here).
7. Desertion/collapse of medieval buildings (not reported here).
8. Late medieval use of site (not reported here).

PHASE 0: PRE-ROMAN

No pre-Roman occupation was recorded on the site, although several worked flints found in Romano-British contexts in Area II and the topsoil of Area VI are described in the typescript report as 'Neolithic or Bronze Age'. Several sherds of 'Iron Age' pottery were also said to have been found in later contexts.

PHASE 1: THE EARLIEST TIMBER BUILDING (EARLY SECOND CENTURY A.D.)

The earliest feature cut into the natural (a greenish marl) in Area I is F.10, a rectangular slot 0.33 m wide and 0.04 m deep, running for at least 10 m (to the north it was truncated by later activity, and to the south it went beyond the edge of the excavation) and filled with a 'dark brown humus' and fragments of burnt clay/daub (Layer I/77). A possible parallel slot, marked by a line of similar dark material, was located 1 m to the north-east but was left unexcavated. The slots were associated with a red clay floor (I/55) that rested directly on the natural bedrock and extended for at least 2 m to the south of F.10. The character of the slot(s) and the lack of associated building stone in this phase led to the interpretation that this represents a timber structure. This building was aligned roughly north-west–south-east, a similar orientation to several later stone buildings on the site. A coin of Constantine (dated A.D. 318–319) is likely to be intrusive as pottery from I/77 suggests an early second-century date (see Timby below).

PHASE 2: CONTINUED OCCUPATION – RED FLOORS ASSOCIATED WITH TIMBER BUILDINGS (SECOND TO THIRD CENTURIES A.D.)

In Area I the timber slots and their associated red clay floors (F.10, I/55 etc.) were sealed by a layer of 'silty dark earth with flecks of burnt clay and charcoal' (I/71): pottery suggests a second-century date. This silt was sealed by a cobbled surface overlain by 'dark grey humus' with some charcoal (I/76): pottery once again suggests a second-century date.

Further red clay floors were recorded across the site that date to the third century. In Area I, a spread of red clay *c*. 0.5 m below the surface extended either side of the north wall of the later Building 2, sealing a layer of charcoal (I/56) that rested on the natural. A further, very disturbed, spread of red clay (I/40) to the south of I/56, with charcoal-rich layers both above and below, was also at *c*. 0.5 m depth. This may be part of what was originally a single red clay surface across the whole area. Pottery suggests a later third-century date. In the north of Area III there was a further red clay floor (III/22) resting on the natural; this was overlain by a layer of charcoal (III/21) and then a layer of cobbling (III/20). Similar red clay floors were recorded in Area IV (IV/10 and IV/22), cut by a pit IV/F.1, and Area V (V/17), both underlying and extending beyond the walls and flooring of later stone buildings. The floor surface V/17 contained a coin of Carausius (A.D. 286–293). In Area VII, the stone structure Building 7 also overlay a red clay floor, although this was unexcavated.

PHASE 3: POST-RED FLOOR–PRE-STONE BUILDING OCCUPATION (EARLY FOURTH CENTURY A.D.)

A discontinuity of use of the site between the timber structures of Phase 2 and the construction of a series of stone buildings in Phase 4 is suggested by various intervening layers of dark soil: the red clay floor (I/40) in Area I was sealed by *c*. 0.2 m of 'black/clayey soil/dark humus with charcoal' that contained no building material and few finds (I/39), while in Area V a 'loamy dark earth' (V/13) sealed the red clay floor (V/17). Pottery suggests an early fourth-century date.

PHASE 4: STONE BUILDINGS (EARLY TO MID-FOURTH CENTURY A.D.)

Across the site these earlier contexts are cut/sealed by a series a stone buildings (1–5, 7–9), all on a roughly north-east–south-west or north-west–south-east orientation; pottery and coins suggest these date to the early to mid-fourth century. It is not clear from the surviving archive whether there was a Building 6.

Buildings 1–3

In Area I, Building 2 measured 6.5 m by at least 10 m (the southern end wall having been destroyed by later activity, and the northern end lying outside the excavated area). It comprised a series of low Lias stone footings on a sandy mortar base, surviving to a maximum of three courses high, and was associated with a flagstone floor (I/39 and I/54). The building contained a 'metalworker's hearth with a flue', associated with a surface of stone paving and burnt clay (I/F.3), in its north-west corner. Immediately west of Building 2 lay a further structure, that was called 'Building 3' and was the major feature of Area II. Based on its plan and the construction of the walls (on a sandy mortar base), it appeared to be contemporary with Building 2. This long narrow structure, of which only the southern and western walls survived, was paved with stone slabs and may have formed some form of corridor. These paving slabs were sealed by a 'brown clay' (II/22) and a 'dark earth' (II/30) that might mark a period of abandonment. These in turn were sealed by several patches of stone cobbles (II/11; II/16; II/21; II/25) that were partly overlain by a red clay floor (II/18), suggesting a period of re-occupation. The amount of pottery and other artefacts suggest domestic occupation in the vicinity.

Building 2 appears to have been demolished and was replaced by the slightly larger Building 1, which measured 7.5 m by at least 13 m (the northern end lying beyond the limit of excavation). The 0.67 m-wide walls were laid in very shallow (0.05 m-deep) foundation trenches cut into the natural marl, and were 'roughly made', lacking the sandy mortar base seen in Buildings 2 and 3. They survived to a maximum of three courses of unmortared Lias stone laid in herringbone fashion, standing up to 0.4 m high. The earliest floor appears to have been made of red clay and was associated with an area of burning, possibly a hearth (I/F.6; I/30), close to the north-west corner. Six coins of Constantine I (A.D. 309–316) were found on the surface of this floor, which was sealed by an extensive layer of charcoal in the eastern part of Building 2. Further building work/use of the building is represented by the construction of Wall VIII above the charcoal.

The area to the north of Building 1 appears to have been some form of yard, with a roughly cobbled surface (I/17). Similar cobbled surfaces to the north of Building 3 (III/4 and III/11) contained three coins of Valens (A.D. 364–375) and one of Valentinian I (A.D. 367–375), showing that the site remained in use into the third quarter of the fourth century. The amount of pottery and other artefacts suggest domestic occupation in the vicinity.

Building 4

Traces of a further stone building, Building 4, lay 9 m to the west of Building 3, overlying the earlier red clay floor (IV/10 and IV/22). Only a single stone course of the southern end survived, the south wall being 9 m long. The northern end of the building may be represented by a fragmentary stretch of an almost parallel wall (IV/F.2) 13 m to the north. Building 4 was floored with a series of discontinuous rammed sandstone and cobble surfaces (IV/11, 13 and 14), with the middle one cut by a bowl-shaped hearth (IV/13). Traces of a further wall, on a slightly different orientation, were found *c*. 2 m to the west of Building 4.

Building 5

In Area V the red clay floor (V/17) and overlying 'dark humus' layer were overlain by Building 5, a simple rectangular structure 'of good masonry', measuring 10 m by 7.5 m with walls *c*. 0.7 m thick, and a stone flagged floor (V/18), beneath which was found a coin of Constantine II (A.D. 330–335). A square stone setting (V/F.1; V/14) to the east of Building V was interpreted as a hearth, which hints at further, possibly timber, buildings in the area (whose ephemeral remains are unlikely to have been recognised due to the conditions of the excavations). A coin of Constantine I (A.D. 330–335) suggests this structure was contemporary with the other stone buildings in the excavated area. A stretch of walling running north from the north-west corner of Building 5 into Area VI may be the remains of a further structure (Building 8). The amount of pottery and other artefacts suggest domestic occupation in the vicinity.

Building 7

Building 7 lay at the far northern end of the excavation, though this area appears to have seen only rudimentary cleaning after the removal of the topsoil. This small, well-constructed, rectangular stone structure measured just 2 m by 3.3 m, with the 0.5 m thick walls comprising two surviving courses of a double line of 'substantial' Lias blocks. This room was divided by a 1.7 m wide 'mass of Lias, or wall base', to the west of which (i.e. against the western wall of the room) was a stone-lined channel surviving to a depth of 0.58 m. The channel was filled with 0.08 m of 'grey silty clay' (VII/16), sealed by 0.11 m of 'reddish clay' (VII/5), and then 0.39 m of 'dark brown clay and humus' with a scatter of stone rubble. The lowest fill (VII/16) contained a coin of Gallienus (A.D. 258–268) that may have been residual as all the other stone buildings appear

to have been early fourth-century. The building as a whole was interpreted as a latrine with the 'mass of Lias' dividing it interpreted as the base for seats. This was clearly part of a larger building as there was an area of flagstones, set in brown clay, to the north, and robbed-out walls projecting at least 1.9 m to the east.

Building 9

Building 9 lay to the north of Building 5 in Area V, although only the south-west corner lay within the area of the excavation.

PHASE 5: ABANDONMENT OF STONE BUILDINGS (LATE FOURTH CENTURY)

No pottery was recovered from these excavations later than the mid-fourth century, with distinctly late fabrics, such as late Roman shelly ware and impressed decorated Oxfordshire vessels, being absent (see Timby below). The latest coins from the site date to the third quarter of the fourth century. In Area I, Building 1 may have been destroyed by fire as the 'occupation deposit' (I/76) was overlain by a 0.04–0.05 m layer of charcoal that contained burnt clay/daub, and some burnt pottery (I/75). An overlying 0.15 m-thick layer of 'fine dark earth'/'dark grey soil' with some charcoal, burnt clay/daub, and a scatter of Lias stone (I/74) may have built up as the building lay abandoned. In the adjacent Building 3 the cobbled surfaces (II/16; II/21; II/25) and red clay floor (II/18) were overlain by a 'brown clay' (II/17), 'silt' (II/15), and 'dark, fine silty earth' (III/4; III/6; III/10). Stone rubble from Building 1 (I/16 and I/27) contained a coin of Magnentius (A.D. 351–353) and copy of a coin of Constantine, giving a *terminus post quem* of A.D. 355+. The floor of Building 5 was covered in a 'fine brown loam' (V/3) and a 'dark grey fine humus' and stone rubble (V/2), with no evidence for the burning seen in Building 2.

THE NATURE OF THE SITE AT CRANDON BRIDGE: THE MATERIAL CULTURE

THE POTTERY *By* Jane Timby, with a contribution on the samian by Felicity Wild

Introduction and methodology

The 1971 excavations at Crandon Bridge produced some 7,895 sherds of pottery weighing 122.4 kg, largely dating to the Roman and medieval periods. This report is concerned with the Roman assemblage which amounts to some 6,923 sherds, 119.5 kg, and 7,318 estimated vessel equivalents (EVE). Given the long interlude between the excavations and this report being prepared it is possible that some of the pottery has been lost. The bulk of the amphorae had been boxed separately unbagged and some of the marking has become illegible making it difficult to trace all the material back to its original findspot. It is also clear that a high percentage of the Roman material either comes from post-Roman horizons or cannot be phased. This effectively accounts for 70.5 per cent of the total recorded assemblage by sherd count. In order to gauge the overall chronology of the site and to look at the range and proportions of the different wares present to see if this would provide an insight into the possible interpretation of the site, the entire Roman assemblage was analysed. The medieval wares, largely of thirteenth- to fourteenth-century date, were noted where present but not looked at in detail (suffice it to say that these mainly comprised plain domestic wares with few glazed tablewares present). A small number of sherds from Roman contexts have been selected for illustration alongside a range of redeposited material of intrinsic interest.

The Roman sherds were sorted into fabric groups. Named or traded wares were coded using the National Roman fabric reference series.[79] Most of the other wares appear to be of local origin

[79] Tomber and Dore 1998.

and these were subsumed into general classes according to firing colour and fabric type. The sherds were quantified by sherd count, weight and EVE. Table 1 provides a quantified summary of all the defined fabrics. In the following section well-known wares are not described in detail. Brief descriptions are given for the other categories.

Pre-Roman wares

Three sherds are present, all residual, which appear to be Iron Age in origin, one each from Areas I, II and IV. Two are decorated (FIG. 5, Nos 18–19) and may even derive from the same vessel. Both are brown or dark grey with a medium sandy fabric. The third sherd is plain and has a quartzite temper.

Roman imports

The samian ware By Felicity Wild

The site produced 261 sherds of samian from about 226 vessels, mostly broken into small pieces, making precise identification of the form in many cases impossible, and with few joining sherds. Decorated ware amounted to about 19 per cent of the total assemblage, both by sherd count and number of vessels. This, too, tended to be in tiny pieces, in many cases too small to be attributable to the style of a particular potter, though the general date was not in doubt. There were two fragmentary potter's stamps, both Central Gaulish and probably of Antonine date.

The date of the material ranged from the Flavian period to the later second century A.D. South Gaulish ware amounted to 18 per cent of the material by sherd count (47 sherds), 16 per cent by number of vessels (35), and Central Gaulish ware to 80 per cent by sherd count (210), 82 per cent by vessel count (185), of which 17 sherds/vessels were in the fabric of Les Martres-de-Veyre, 6–7 per cent of the total assemblage. There were four probable examples of East Gaulish ware, of second- or perhaps third-century date. Forms were as follows:

South Gaulish: 30 (1), 37 (9), 27 (4), 33a (1), 15/17 (1), 18 (3), 18 or 18/31 (4), 18R or 18/31R (1), 36 (1), 36 or Curle 11 (1), bowls (5), scraps (6)
Central Gaulish (Les Martres-de-Veyre): 30 (1), 37 (3), 27 (3), 18 or 18/31 (3), 18/31 (1), large cup? (2), bowls (2), scraps (2)
Central Gaulish (Lezoux): 30 (2), 37 (38), 27 (5), 33a (2), 33 (11), 18/31 (8), 18/31 or 31 (11), 31 (2), 18/31 or 18/31R (1), 18/31R or 31R (3), 18/31, 31 or R variant (12), 36 (2), Curle 11 (1), 36 or Curle 11 (1), 38 (5), bowl (16), bowl or dish (7), scraps (51)
East Gaulish: 31R variant (2), dish (1), bowl or dish (1)

Despite its scrappy condition, it was clear that the material had seen considerable wear. At least one footring was heavily worn, four sherds showed signs of repair in the form of drill-holes or slots for lead rivets, another had seen secondary usage as a disk or counter. A number of sherds showed signs of burning.

The assemblage as a whole suggests occupation on site, or at least the use of samian, from the mid-Flavian period. No examples of Form 29 were found and only one of Form 15/17. The pre-Flavian forms were absent. The decoration surviving on South Gaulish examples of Form 37 appeared more typical of the later Flavian or Flavian-Trajanic periods than the early Flavian period. This is in contrast to the site at Fosse Lane, Shepton Mallet,[80] which produced Form 29 and a little pre-Flavian material, and Ilchester where the earliest Form 29s are likely

[80] Dickinson 2001, 144.

be Neronian.[81] The contrast seems worth noting, although the quantity of material from Crandon Bridge is so small that the absence of earlier material may merely be fortuitous. The present group suggests that the use of samian on site did not start until the later A.D. 80s or even 90s, a date only slightly later than the latest date, in the mid-80s, suggested by Dickinson for Shepton Mallet.[82]

Samian ware from Central Gaul was clearly reaching the site throughout the second century A.D., first from Les Martres-de-Veyre, and later from Lezoux. It is difficult to estimate how much material was reaching the site in the later part of the century. The work of the later second-century decorated ware potters is present (Paternus v (2 examples), Casurius i (1), Do(v)eccus i (3)), though the later Antonine plain forms, with the exception of Form 38, are not. It is impossible to make a reliable comparison of the proportions of 18/31:31 and 18/31R:31R owing to the fragmentary nature of the material. The scarcity of later second-century plain forms can be paralleled at Shepton Mallet, though Dickinson concludes, particularly from the proportions of 18/31R:31R, that the plain ware shows a bias towards the later Antonine period.[83] Viewing the material as a whole, apart from the absence of pre- or early Flavian material, the Crandon Bridge material appears very similar, both in general composition and in its worn and fragmentary nature, to the much larger and well-published groups from Ilchester and Shepton Mallet.

The samian ware appears to be mainly residual in its contexts on site and is therefore unlikely to help greatly with the site dating. The South Gaulish material, in particular, is almost exclusively from later, post-Roman, contexts. In Area I, the earliest stratified material attributable to the period of the timber buildings (Phase I) was likely to be of Trajanic-Hadrianic date, comprising Form 18/31, probably from Les Martres-de-Veyre, and another scrap of similar date. Phase 3 contexts, also pre-dating the stone Building 2, similarly produced material from Les Martres-de-Veyre and Form 18/31 of Hadrianic–early Antonine date. The earliest context in Area V, the red clay floor (V/17), produced two decorated sherds of late second-century date. The other areas did not produce samian of relevance to the earliest levels.

Other imported finewares

Small quantities of other imported fine tablewares are present in the assemblage, largely from beakers. These include Argonne colour-coated wares (ARG CC) (FIG. 5, No. 27), Central Gaulish black slip (CNG BS) and colour-coated wares (CNG CC1/2), and Moselle colour-coated ware (MOS BS). These are typical products imported from the mid-second to third century, but collectively contribute less than 0.3 per cent of the total assemblage. Also present is a platter with a footring (Layer II/8) with a very micaceous buff fabric and a dark red glossy colour-coat probably from Lezoux (CNG CC2). The vessel is partly burnt. A possible sherd of residual *céramique à l'éponge* came from Layer I/8.

Amphorae

Some 329 sherds of amphora, 38.4 kg in weight, are present. Most of these, 93.6 per cent by count, are from South Spanish Dressel 20 olive oil containers (BAT AM). Most of the remainder are from Gallic wine containers (GAL AM), although at least one sherd of a probable Haltern type 70, also from Southern Spain, is present. The Dressel 20 assemblage includes at least 16 handles, two of which were stamped, although the stamps are in poor condition (FIG. 6, Nos 39–40). Typologically the rims suggest a date-range in the second century.[84] The material is

81 Rodwell 1982, 134.
82 Dickinson 2001, 144.
83 Dickinson 2001, 145.
84 cf. Peacock and Williams 1986, fig. 66.

not fresh and a number of pieces show evidence of reuse. One of the stamped handles has been ground smooth at the break and a cross incised into the end of the stub. A sherd from Layer I/53 has an *in-situ* lead rivet and two unstratified pieces have been ground smooth at the handle springing and rim/neck respectively. The Dressel 20 sherds account for 31.5 per cent of the total Roman assemblage by weight, 4.4 per cent by sherd count. Stratified sherds first appear in Phase 2. There does not seem to be any particular focus or single deposit of this material, which largely comes from Areas I–III where the excavations were most extensive. At least 18 sherds from Gallic wine amphorae were recorded mostly redeposited in later contexts. In addition a single sherd of possible Haltern 70 and two unidentified sherds were recorded.

Imported mortaria

Twelve sherds are present from North Gaulish mortaria (NOG WH), mostly bodysherds and at least three can be noted as very worn. These first appear in Phase 3 and 4 contexts. A further imported whiteware mortaria of uncertain provenance repaired with a lead rivet came from Layer II/13.

Regional wares

A great variety of regional imports is present in the assemblage (see Table 1), including south-eastern and south-western black burnished wares (DOR BB1, SOW BB1), various products from the Oxfordshire, New Forest and Wiltshire industries, and minor amounts from Alice Holt, Surrey, the Nene Valley, Gloucester, and Verulamium.

TABLE 1. QUANTIFIED SUMMARY OF ROMAN POTTERY

Source	Fabric code	Description	No.	%	Wt	%	Eve	%
Imports								
	SGSAM	South Gaulish samian	45	0.6	255	0.2	64	0.9
	CGSAM	Central Gaulish samian	225	3.2	1483	1.2	214	2.9
	EGSAM	East Gaulish samian	3	0.0	9	0.0	0	0.0
	ARG CC*	Argonne colour-coat	2	0.0	10	0.0	10	0.1
	CNG BS*	Central Gaulish black slip	3	0.0	3	0.0	0	0.0
	CNG CC1*	Central Gaulish colour-coat	1	0.0	3	0.0	0	0.0
	CNG CC2*	Central Gaulish colour-coat	4	0.1	64	0.1	15	0.2
	MOS BS*	Moselle colour-coat	5	0.1	12	0.0	0	0.0
	NOG WH*	North Gaulish mortaria	12	0.2	521	0.4	10	0.1
	IMP MORT	whiteware mortaria	1	0.0	20	0.0	0	0.0
	BAT AM*	Baetican (Dressel 20) amphora	308	4.4	37707	31.5	254	3.5
	GAL AM*	Gallic amphora	18	0.3	644	0.5	0	0.0
	? HA 70	Haltern 70	1	0.0	33	0.0	0	0.0
	MISC AM	miscellaneous amphorae	2	0.0	28	0.0	0	0.0

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Source	Fabric code	Description	No.	%	Wt	%	Eve	%
Regional								
	ALH RE*	Alice Holt grey ware	12	0.2	153	0.1	0	0.0
	DOR BB1*	Dorset black burnished ware	1169	16.9	12147	10.2	1613	22.0
	GLOS 9B	Gloucestershire mortaria	2	0.0	212	0.2	0	0.0
	LNV CC*	Nene Valley colour-coat	1	0.0	7	0.0	0	0.0
	NFO CC*	New Forest metallic colour-coat	60	0.9	513	0.4	86	1.2
	NFO RS2*	New Forest colour-coat	10	0.1	73	0.1	6	0.1
	NFO WH*	New Forest whiteware	1	0.0	2	0.0	0	0.0
	NFO WH(M)	New Forest whiteware mortaria	3	0.0	84	0.1	5	0.1
	NFO PA*	New Forest parchment ware	5	0.1	18	0.0	2	0.0
	OXF RS*	Oxfordshire colour-coat	297	4.3	1610	1.3	193	2.6
	OXF RS(M)*	Oxon colour-coat mortaria	19	0.3	197	0.2	11	0.2
	OXF PA*	Oxon parchment ware	1	0.0	4	0.0	0	0.0
	OXF WH*	Oxon whiteware	9	0.1	167	0.1	15	0.2
	OXF WH(M)	Oxon whiteware (mortaria)	9	0.1	251	0.2	27	0.4
	OXF WS(M)	Oxon whiteslipped mortaria	12	0.2	110	0.1	11	0.2
	SAV GT*	Savernake ware	93	1.3	5382	4.5	12	0.2
	SOW BB1*	South-west BB1	712	10.3	9899	8.3	1029	14.1
	SOW OX*	South-west oxidised ware	4	0.1	71	0.1	11	0.2
	SOW WS*	South-west white-slipped	17	0.2	195	0.2	20	0.3
	SVW OX*	Severn Valley ware	138	2.0	2850	2.4	43	0.6
	VER WH*	Verulamium ware	3	0.0	102	0.1	0	0.0
	WIL OX	Wiltshire oxidised ware	2	0.0	19	0.0	0	0.0
	WIL SAM	Wiltshire imitation samian	1	0.0	3	0.0	0	0.0
Local/Unknown								
	SHM RS(M)*	Shepton Mallet mortaria	28	0.4	962	0.8	35	0.5
	BUFF	buff sandy wares	4	0.1	62	0.1		0.0
	BUFFCC	buff sandy with colour-coat	2	0.0	11	0.0		0.0
	BWF	fine black sandy	25	0.4	162	0.1	13	0.2
	BWFMIC	fine black micaceous ware	42	0.6	410	0.3	58	0.8

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Fabric code	Description	No.	%	Wt	%	Eve	%
CC	misc. colour-coated wares	61	0.9	494	0.4	62	0.8
CREAM	cream fine sandy wares	6	0.1	144	0.1	3	0.0
GREY	medium-fine grey/ black wares	2293	33.1	26142	21.9	1581	21.6
GRGW	grogged grey ware	2	0.0	57	0.0	7	0.1
GRSA	sandy grey with grog	5	0.1	124	0.1	0	0.0
GRSJ	grogged hm storage jar	13	0.2	381	0.3	0	0.0
GWMIC	micaceous grey sandy	4	0.1	30	0.0	6	0.1
GYF	fine grey wares	65	0.9	357	0.3	119	1.6
LTGW	light grey sandy well-fired	681	9.8	8680	7.3	1276	17.4
MORT	misc. mortaria	4	0.1	201	0.2	10	0.1
MISC	miscellaneous	44	0.6	287	0.2	0	0.0
NORT	Norton Fitzwarren type	91	1.3	2765	2.3	67	0.9
NSOM	North Somerset grey wares	26	0.4	611	0.5	183	2.5
OXIDF	fine oxidised wares	128	1.8	950	0.8	123	1.7
OXID	misc. oxidised sandy wares	146	2.1	1275	1.1	66	0.9
OXIDFE	fine pale orange with iron pellets	17	0.2	237	0.2	56	0.8
OXIDMIC	micaceous oxidised wares	18	0.3	165	0.1	2	0.0
OXIDWS	white-slipped oxidised ware	11	0.2	140	0.1	0	0.0
WW	misc. white wares	3	0.0	70	0.1	0	0.0
TOTAL		**6929**	**100.0**	**119578**	**100.0**	**7318**	**100.0**

* = National Roman fabric reference codes

Dorset black burnished wares

Dorset black burnished ware is the commonest regional import present and the second commonest fabric overall, accounting for 10.2 per cent by weight, 16.9 per cent by count of the overall assemblage. The earliest vessel, a second-century jar (FIG. 5, No. 2), and a flat rim bowl occur in Phase 1 associated with the construction of the timber building (I/77). Further second-century sherds are associated with Phase 2 along with a grooved rim bowl of third-century type, whilst most of the vessels associated with Phases 2–3 seem to be largely second-to early third-century types. The first conical flanged bowl of later third- to fourth-century date features in Phase 4 alongside quite a high proportion of earlier material, notably flat rim bowls and dishes. Looking at the DOR BB1 assemblage as a whole, jars dominate the group, accounting for 54 per cent (based on rim EVE). Plain rim dishes account for a further 21.7 per cent and conical flanged bowls for 12.6 per cent. The remaining 11.7 per cent comprises flat rim bowls (5.2 per cent), grooved rim bowls (4.6 per cent), lids (1.6 per cent), and a handled mug (0.3 per cent) (FIG. 5, No. 25). Of particular note are three vessels with graffiti, two with crosses and one sherd with two parallel lines (FIG. 6, Nos 36–8), four sherds fashioned into counters, one perforated (Layers I/1; I/N1; II/13), and one vessel with an internal calcareous lining (Layer IV/2).

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South-West black burnished ware (SOW BB1)

South-West black burnished ware items account for 10.3 per cent by count, 8.3 per cent by weight of the total assemblage. As with DOR BB1 sherds, they first appear in the Phase 1 timber slot (FIG. 5, No. 1). Further jars occur in Phase 2, including examples with countersunk handles. Jars are again dominant, accounting for 73.6 per cent by rim EVE, followed by conical flanged bowls (6.8 per cent) and plain-rimmed dishes (4.7 per cent). Other vessels include several sherds from a large strap-handled flagon (FIG. 5, No. 21), flat rim and grooved rim dishes/bowls, reeded rim dishes and lids. Amongst the jars/bowls are a few examples of bead rim types decorated with applied ribs and dots (e.g. FIG. 5, No. 12: Holbrook and Bidwell 1991 type 7.2), dating to the second century. There is also a single example of a flanged rim jar (FIG. 5, No. 28). Flagons (ibid., type 3.1) seem to have been produced throughout the life of the industry.

Oxfordshire products

Most of the main products of the Oxfordshire industry are present, including colour-coated table wares, parchment wares, whitewares and mortaria. Collectively these account for 5 per cent by count of the assemblage. The colour-coated wares include various beakers, flagons and bowls types C45, C68, C75, C81 and C83, as well as mortaria types C97, C98.[85] Whiteware mortaria span the later second to fourth centuries with Young types M14 and M22 present. The earliest occurrence of whiteware is in Phase 2, consistent with the second-century attribution, although the colour-coated bowl type C45 and the flagon suggest that this must date to after *c.* A.D. 240.

New Forest wares

New Forest wares, whilst not quite as prolific as the Oxfordshire wares, are well represented with a total of 79 sherds, including examples of colour-coat, parchment ware, whitewares and mortaria. Most of the colour-coated wares are from beakers, with rare examples of bowls, a flanged bowl and mortaria. Sherds do not feature until Phase 4 and are unlikely to have arrived at the site before the fourth century.

Gloucestershire wares

At least two wares are imported from Gloucestershire: Severn Valley ware (SVW OX) and two examples of mortaria made at Gloucester (Glos type fabric 9B). The mortaria include the spout from a large vessel (from Layer II/2) and a sherd from III/6, both residual but likely to date to the Flavian-Trajanic period. Severn Valley wares account for 2 per cent of the assemblage by count and include everted rim and triangular-rimmed jars and tankards. One sherd is fashioned into a counter (from II/20). Sherds occur from Phase 2 onwards.

Wiltshire wares

A small number of wares from Wiltshire are present, including North Wiltshire oxidised ware, several sherds of Savernake ware (SAV GT), and South-West white-slipped and oxidised wares (SOW OX/WS). A single small residual sherd of Wiltshire imitation samian[86] with faint traces of moulded decoration came from III/16. The oxidised ware includes a copy of a samian form Dragendorff 30 with combed decoration.

[85] Young 1977.
[86] cf. Anderson 1979.

Other

Other regional imports include twelve sherds of Alice Holt grey ware (ALH RE), two from a storage jar (Phases 3 and 4), and ten sherds from Layer III/4 (Phase 4) with combed lattice decoration. A single sherd of Nene Valley colour-coated beaker (LNV CC) came from I/13 (Phase 4) and of the three sherds of Verulamium whiteware, probably flagon, the earliest is from Phase 4.

Local/unknown wares

Shepton Mallet type mortaria (SHM RS)

A total of 28 sherds of mortaria were recovered consistent with the Shepton Mallet fabric type, although none had a surviving colour-coat. Two pieces were stamped (FIG. 6, Nos 34–5) and one was repaired with a lead rivet still *in situ* (FIG. 6, No. 33). The earliest example occurs in Phase 3, with a number of pieces from Phase 4 contexts. Shepton Mallet mortaria are generally considered to date from the second century.[87]

Buff sandy wares (BUFF)

A small group of four sherds to which two with a colour-coated finish can be added. All residual.

Fine black sandy ware (BWF)

A group of 25 sherds with examples of beakers, jars and bowls. One of the latter is decorated with compass-inscribed, London-style decoration. One vessel has comb-impressed decoration. Possibly a Wiltshire product.

Fine black micaceous ware (BWFMIC)

A group of 42 sherds, several of which are decorated. Vessels include jars, beakers, and bowls, many of the latter imitating Dragendorff type 30 forms. Decoration includes incised, wavy line and compass-inscribed, London-style designs. This ware occurs from Phase 3 onwards but is probably of second-century origin.

Miscellaneous colour-coated wares (CC)

A mixed group, probably of diverse origin and date. Several of the sherds have a very pale fabric with an orange-red colour-coat and probably come from a local source. Vessels include beakers with cornice rims and roughcast decoration, and bowls. The earliest miscellaneous colour-coated sherd comes from Phase 1 and may be an import. Another distinctive type has a fine orange fabric with a matt brown colour-coat.

Fine cream/pinkish sandy wares (CREAM)

Just six sherds, from flagons of unknown provenance. A strap handle came from II/12.

87 Hartley 2001.

Medium-fine grey or black sandy wares (GREY)

A very large group accounting for 33 per cent by count, 21.9 per cent by weight of the overall assemblage. A few distinctive sub-groups have been identified (see below) but otherwise there is little to sub-divide the group in a meaningful way. The source or sources are undoubtedly local and the wares appear to span the Roman period. Many of the forms imitate black burnished types. Jars dominate, accounting for 82 per cent (rim EVE), with a range of rim forms including lid-seated, everted, rolled, beaded and bifid. Other forms include bowls, plain-rimmed dishes, a colander, beakers, lids, jugs with bifid rims (FIG. 5, No. 29), and a part of a triple vase (FIG. 5, No. 24). A counter came from I/3 and a deliberately holed base from I/10. A few vessels had a black surface slip. Distinctive sub-groups include a micaceous greyware (GWMIC), a well-fired, light grey, sandy ware (LTGW), a dark grey, hard ware often with a red core resembling material from the Congresbury kilns (NSOM),[88] and a very fine grey ware.

The micaceous grey wares form a very small group but include a copy of a bowl of Dragendorff type 30. The light grey wares form a very large, well-defined group, which like NSOM shows close similarities to some of the material from the Congresbury kilns. Both wares show a similar range of forms, largely everted rim jars, bifid rim narrow-necked jars or jugs, lids, beakers, and copies of DOR BB1 forms (jars and bowls). A few countersunk handles also feature. A sherd from I/37 is probably from another triple-ring vase and at least three pieces have been fashioned into counters (I/1; III/5; III/18). The fine grey wares mainly feature as beakers and bowls, including Dragendorff 30 copies, with occasional lids and jars. One beaker has a hole drilled through the wall just below the rim and a small number of sherds have barbotine dot decoration.

Grogged wares (GWGR, GRSA, GRSJ)

A small number of wares show a grog temper. GWGR is a hard, fine grey ware with sparse to common grog and includes a second-century bowl with burnished lattice decoration; GRSA is a much sandier ware with occasional grog; and GRSJ is represented by a large, handmade storage jar, with a soapy feel and a grog temper.

Oxidised wares (OXIDF, OXID, OXIDFE, OXIDMIC, OXIDWS)

The oxidised wares of unknown source were divided according to distinctive pastes (micaceous (MIC), iron-rich (FE)), surface finish (white-slip (WS)), and texture (fine (F); general sandy (OXID)). It is possible that some of the fine wares were once colour-coated. These are mainly bowls and beakers including cornice-rim beakers with rough-cast decoration, and at least one cup-mouthed flagon. The oxidised sandy wares include a number of dishes/shallow bowls in the style of Young type C45. The iron-rich fabric, a pale orange-pink soft ware with a distinctive presence of dark red-orange iron, is quite similar to the Shepton Mallet type mortaria suggesting a common source. Vessels include ring-necked flagons and bowls.

Norton-Fitzwarren-type ware (NORT)

An orange, brown or grey ware containing a moderate scatter of inclusions including angular white quartzite, rounded quartz grains and fragments of a purple-grey, fine-grained, argillaceous rock (?shale), fine white mica and occasional sandstone. The fabric was quite common amongst material excavated from Norton Fitzwarren hillfort and a local source was suggested.[89] There

[88] Usher and Lilley 1964.
[89] Timby 1989.

are 91 sherds in the Crandon Bridge assemblage mainly comprising jars, some with countersunk handles, and large storage jars, including examples with impressed decoration (e.g. FIG. 5, No. 13). The style of the storage jars is a well-known one in the South-West, particularly in the fourth century.

Discussion

Overall the assemblage is quite well preserved with an average sherd weight for the Roman material of 17 g. One observation that can be made is that several sherds from different contexts appear to come from the same vessels, although it should be noted that the excavation conditions were difficult and finds from one layer may have been mixed with another. The assemblage has a number of curious features which make it slightly difficult to interpret. Despite the fact that there are joining sherds, the material is not fresh and there appears to be a relatively high incidence of material broken and reused in antiquity, or showing evidence of wear. There are, for example, at least seven vessels with rivet repair holes: three of these are samian, one a mortarium, one an amphora, and two local wares (GYF and BW). There are also at least nine counters fashioned from potsherds. Although a high level of reuse and repair is not uncommon in the West Country, it would not be expected of material being stored in warehouses for example. There is also a fairly diverse range of material both local, regional and continental.

An overall breakdown of the forms present by rim EVE shows quite a typical pattern with jars dominating the group at 57.4 per cent, followed by bowls/ dishes (Table 2). Amphora accounts for 3.5 per cent but all other vessels are present in moderately low amounts. Of note is the presence of at least two triple-ring vases and one colander from base fragments.

TABLE 2. PERCENTAGE OF FORMS BY ESTIMATED VESSEL EQUIVALENTS (EVE)

Forms	**% EVE**
jar	57.4
jar/beaker	0.1
jar/jug	0.1
bowl/dish	25.6
mortaria	1.6
tankard	0.1
beaker	3.4
cup	0.6
triple vase	0.2
flagon	2
jug	3.1
flask	0.7
amphora	3.5
lid	1.6
TOTAL	**100**

Pottery and the site stratigraphy

Only the material from Phases 1–4 comes from stratified Roman levels, some 29.6 per cent of the total assemblage by count, 31.6 per cent by weight. A further 44.9 per cent came from post-

Roman horizons and 25.5 per cent remains unphased. The Phase 1 timber building produced some 20 sherds from timber slot I/77, including a cream flagon sherd, DOR BB1, SOW BB1, GW, and an unknown colour-coated ware. The forms include beaded rim and everted rim jars (FIG. 5, Nos 1–3) and a flat rim bowl, suggesting a date in the early second century.

The floors associated with the timber building (Phase 2) produced substantially more material, some 168 sherds. I/71 produced a range of essentially second-century material, the samian indicating a *terminus post quem* in the second half of the second century. The accompanying wares include DOR BB1, SOW BB1, OXF WH, BAT AM, and colour-coated oxidised dishes broadly concurrent with this date. I/55 and I/56, with just body sherds of DOR BB1 and BAT AM, are not closely datable but the material from I/40 includes Oxfordshire colour-coated wares (OXF RS), a colour-coated flask (FIG. 5, No. 4), and a DOR BB1 grooved rim dish, suggesting a *terminus post quem* in the later third century. Further OXF RS came from I/103, again pointing to the later third century, although most of the 28 sherds from I/76 are probably second-century. The floor material generally comprises quite large sherds, the overall average weight being 25 g.

Contexts allocated to Phase 3, post-dating the red floors of Phase 2, produced some 348 sherds (5,923 g). The assemblages appear more chronologically mixed. The presence of OXF RS, Norton Fitzwarren-type storage jar, Alice Holt storage jar, Oxfordshire white-slipped mortaria, and conical flanged bowls (e.g. FIG. 5, No. 6) all point to a date in the early fourth century. A single medieval sherd in IV/5 may be intrusive. Of note were at least 11 large sherds of BAT AM from I/120.

The Phase 4 stone buildings collectively produced 1,799 sherds of pottery, 28.1 kg. Apart from eight presumably intrusive sherds of medieval pottery, all the material is Roman spanning the later first through to the early fourth century. New Forest wares appear for the first time with examples of colour-coated ware, parchment ware and whiteware confirming a date in the early to mid-fourth century. Several products of the Oxford industry also feature, the latest datable forms being bowls C75 (A.D. 325–400). There are quite a significant number of sherds of Dressel 20 amphora distributed across Phase 4 contexts. The complete absence of any impressed decorated Oxfordshire vessels and also the absence of any late Roman shelly wares would suggest that the site was abandoned from around the mid-fourth century.

The remaining pottery assemblage was recovered from Phases 5–8 dating to the post-Roman period but broadly replicates the material already found from the Roman layers. This is accompanied by increased numbers of medieval pieces.

Inter-regional comparison

There are few fully-quantified, published assemblages from the region north of the Polden Hills with which to make any meaningful comparisons with Crandon Bridge but certain components of the assemblage, notably some of the traded wares, can be compared more widely with other sites from the Somerset area. Fully-quantified pottery data are available from excavations at Sea Mills 1965–68,[90] Fosse Lane in Shepton Mallet,[91] the Shapwick sites,[92] and Kenn Moor.[93] Slightly more limited data are available from excavations at Catsgore,[94] Bradley Hill,[95] Ilchester,[96] and Lamyatt Beacon.[97] These sites give a useful cross-section of site types, including small towns

90 Timby 1987.
91 Evans 2001.
92 Timby 2007.
93 Timby 2000.
94 Leech 1982b; Ellis 1984.
95 Leech 1981.
96 Leach 1982b.
97 Leech 1986.

TABLE 3. COMPARISON OF CRANDON BRIDGE, SEA MILLS AND FOSSE LANE (SHEPTON MALLET)

			Crandon		Shepton Mallet		Sea Mills	
Source	**Fabric code**	**Description**	**No %**	**Wt%**	**No %**	**Wt %**	**No%**	**Wt%**
Imports	SGSAM	South Gaulish samian	<1	<1	<1	<1	not q	not q
	CGSAM	Central Gaulish samian	3.2	1.2	3.0	2.0	not q	not q
	EGSAM	East Gaulish samian	<1	<1	<1	<1	not q	not q
	ARG CC*	Argonne colour-coat	<1	<1	0.0	0.0	<1	<1
	CNG BS*	Central Gaulish black slip	<1	<1	0.0	0.0	0.0	0.0
	CNG CC1*	Central Gaulish colour-coat	<1	<1	0.0	0.0	0.0	0.0
	CNG CC2*	Central Gaulish colour-coat	<1	<1	0.0	0.0	<1	<1
	MOS BS*	Moselle colour-coat	<1	<1	<1	<1	0.0	0.0
	NOG WH*	North Gaulish mortaria	<1	<1	0.0	0.0	<1	1.5
	IMP MORT	whiteware mortaria	<1	<1	0.0	0.0	0.0	0.0
	BAT AM*	Baetican (Dressel 20) amphora	4.4	31.5	4.0	17.0	2.6	18.3
	GAL AM*	Gallic amphora	<1	<1	<1	<1	1.0	1.7
	MISC AM	miscellanaeous amphorae	<1	<1	<1	<1	1.0	3.6
Regional	ALH RE*	Alice Holt grey ware	0.2	0.1	0.0	0.0	<1	<1
	BB1	Black burnished ware	27.2	18.5	37.0	30.0	19.0	15.0
	GLOS 9B	Gloucestershire mortaria	<1	<1	0.0	0.0	0.0	0.0
	LNV CC*	Nene Valley colour-coat	<1	<1	0.0	0.0	<1	<1
	NFO	New Forest wares	1.1	0.6	2.0	1.0	0.0	0.0
	OXF	Oxfordshire wares	5.0	1.9	2.0	2.0	1.0	1.0
	SAV GT*	Savernake ware	1.3	4.5	1.0	3.0	2.0	2.7
	SOW OX*	South-west oxidised ware	0.1	0.1	0.0	0.0	0.0	0.0
	SOW WS*	South-west white-slipped	0.2	0.2	0.0	0.0	0.0	0.0
	SVW OX*	Severn Valley ware	2.0	2.4	4#	3#	8.0	6.0
	VER WH*	Verulamium ware	<1	0.1	<1	<1	<1	<1
	WIL	Wiltshire wares	<1	<1	0.0	0.0	3.0	3.3
	SHM RS(M)*	Shepton Mallet mortaria	0.4	0.8	<1	<1	not id	not id
Unknown/ local			53.3	36.6	51.0	44.0	58.0	41.0

not q = not quantified
- differently defined
* = National Roman fabric reference codes

(Ilchester and Shepton Mallet), a large rural settlement or 'village' (Catsgore), a military site later succeeded by a small settlement dating from the second to fourth centuries (Sea Mills), a fourth-century farmstead (Bradley Hill), a temple (Lamyatt Beacon), and farmsteads on the coastal wetlands of the North Somerset Levels (Kenn Moor). Not only does this allow comparison of different sized settlements but also inland examples with coastal sites.

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TABLE 4. COMPARISON OF WARES ACROSS DIFFERENT SITES (% BY SHERD COUNT)

	No. sherds	Main period of occupation	Native	BB1	Samian	Amph.	Oxon	NF	Late shelly	Other	
Crandon Bridge		C1-C4	p	27	4	5	5	1	0	58	
other small towns/ports											
Ilchester	30,000		2	73	72	2	8	1	0.2		Leach 1982
Ilchester Great Yard				46	2.9	0	2.6	0.6	0	47.9	Broomhead 1999
Shepton Mallet	27,682		0	37	3	5	2	2	p	51	Evans 2001
Sea Mills			0	19	nq	5	1	0	p	75	Timby 1987
rural settlements											
Bleak Bridge, Huntspill	503	C3-C4	0	64.2	0.4	0	4.0	1.4	0	30	Seagar Smith 2002
Bradley Hill	3,472	C4	p	76.3	1.2	0	7.7	1.9	0.4	12.5	Leech 1981
Cannington	629		0	57.0	5.0	1.0	9.0	p	0	28.0	Rahtz *et al*. 2000
Catsgore	30,000		0	70	2.8-3.2	0.4-4.2	7.1	1.4	p	16.5	Leech 1982b; Ellis 1984
Gatcombe	20,000	Late C3-C4		49.8	1		4.8	3.3	0	41.1	Branigan 1977
Kenn Moor	2,800	Late C3-C4	0.2	33.5	2	0	2.3	0.3	0	62	Timby 2000
Shapwick			7.4	48.3	1.3	1.8	1	0.5	0	35	Timby 2007
Upper Holway, Taunton	505	Late C3-C4	2.4	42.2	0.6	0	4.2	0	0	50.7	Leach 2003
Romano-Celtic temples											
Henley Wood	3,000			27.9	3.5	0	1.2	0.9	p	66.5	Watts and Leach 1990
Lamyatt Beacon	5,363	Late C3 – early C5	0	60	0.39	0	3.07	3.11	1.13	32	Leech 1986

Table 3 compares the main components of the Crandon Bridge assemblages with those from Shepton Mallet and Sea Mills, whilst Table 4 compares the main traded wares in broad terms. For most sites DOR BB1 is not distinguished from SOW BB1, so the figures have been conflated. Looking at imported fine wares, in terms of sherd count Crandon Bridge is near the top of the league table with *c*. 4 per cent, closely followed by Shepton Mallet and Catsgore with around 3 per cent. The other sites have figures more typical of rural sites in the West, averaging around 1 per cent. When it comes to non-samian fine wares, Crandon Bridge appears to have a wider spectrum of material, although the individual quantities are very small, followed by Sea Mills, which has additional types not present at Crandon Bridge probably reflecting its first-century military connections. The same is true for imported mortaria which are present on the coastal/

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riverside sites of Crandon Bridge and Sea Mills but absent from the inland settlements. The difference is not so marked, however, for amphora, dominated in all cases by Dressel 20 olive oil containers, with Crandon Bridge, Sea Mills, and Shepton Mallet all having similar proportions against the rest of the assemblages. The rural settlements in Shapwick collectively had less than 2 per cent and it appears to be absent from some of the other rural sites in Somerset. This would suggest that there was a greater demand for oil for cooking and other purposes on these larger settlements, while the numbers of reused and repaired examples noted at both Crandon Bridge and Shepton Mallet suggest that the empty containers were also clearly important.[98]

Looking at the regional wares, black burnished wares were clearly an important component of all the assemblages, ranging from over 70 per cent at Ilchester, Catsgore and Bradley Hill down to 27 per cent at Crandon Bridge and 19 per cent at Sea Mills. It should be noted that the figure arrived at from the above work at Crandon Bridge is substantially lower than that of 49.9 per cent cited by Allen and Fulford.[99] This does not necessarily affect the conclusion of Fulford and Allen that substantial quantities of BB1 were transported via roadways through Ilchester heading for Crandon Bridge for transferral to a coastal distribution method: if Crandon Bridge was acting as a riverine port on the river Parrett then material would have been shipped on. It should also be observed that none of the material looked at from the analysed assemblage suggested unused merchandise but rather material that had been used, broken and repaired in a domestic context. However, it should also be observed that the range of BB1 forms noted at Crandon Bridge exceeds that found at Shepton Mallet.

Products of the later Roman colour-coated and associated wares from Oxfordshire and the New Forest are present from most of the sites. The Oxfordshire wares seem markedly high at Catsgore and Bradley Hill at over 7 per cent, compared to 5 per cent at Crandon Bridge and between 1 and 2 per cent at Sea Mills, Shepton Mallet and Shapwick. Similarly, New Forest wares are not that marked at Crandon Bridge compared with some of the inland sites. Two possible reasons can be suggested: one of chronology — Crandon Bridge does not continue late in the fourth century — and the other that different marketing networks operated for these two industries. A demise in the mid-fourth century for Crandon Bridge has been suggested due to the complete absence of recognisable late Roman products, including shelly wares. Although never prolific in the West Country, most of the other sites, with the exception of Shapwick and Kenn Moor, have produced small amounts indicating continued activity until at least the last quarter of the fourth century, if not later.

Being a riverside site of at least 8 ha in extent, with what has been suggested in the past to be warehouse-like buildings (see above), Crandon Bridge has often been referred to as a port on the tidal river Parrett. The pottery assemblage does indeed have some slightly unusual features but is clearly not stock-piled material from warehouses awaiting trans-shipment. It does have a greater range of traded material compared to the inland sites and in that sense is not dissimilar to Sea Mills, another port. It would seem more likely that the wares are there because of its location on a tidal river receiving coastal traffic and that we are seeing material used by the settlement that undoubtedly developed there. The only other possible angle on the material is that of ship ballast but in this case one might have expected much greater quantities of imported material. Crandon Bridge could well, therefore, have acted as a through-route for BB1 with perhaps a return traffic in food commodities, including olive oil and wine, and finer bulk table wares such as samian. In conclusion the assemblage from Crandon Bridge appears to reflect a fairly typical domestic range of material with evidence of reuse to make counters and a number of vessels having been repaired to prolong their usefulness, a feature more typical in the West Country perhaps compared to sites in the South-East.

[98] Evans 2001.
[99] Allen and Fulford 1996, 275, site 55.

Catalogue of illustrated vessels (FIGS 5–6)

1. Bead rim jar. SOW BB1. Layer I/77. Phase 1.
2. Everted rim jar decorated with a zone of vertical burnished lines. DOR BB1. Layer I/77. Phase 1.
3. Jar with a bulged shoulder. GW. Layer I/77. Phase 1.
4. Greyware bowl with a black slip. BSLIPGW. Layer I/10. Phase 2.
5. Colour-coated flask. Black colour-coat on an orange fabric. CC. Layer I/40. Phase 2.
6. Flanged rim conical bowl. DOR BB1. Layer I/120. Phase 3.
7. Bifid rim narrow-necked jar. GW. Layer I/29. Phase 4.
8. Flask. Hard whiteware with irregular red-painted patches. WW. Layer I/29. Phase 4.
9. Everted rim jar. DOR BB1. Layer I/37. Phase 4.
10. Lid. Light grey sandy ware. GW. Layer I/37. Phase 4.
11. Black-slipped grey ware lid. BSLIPGW. Layer I/37. Phase 4.
12. Ribbed bead rim jar. SOW BB1. Layer I/10. Phase 4.
13. Large storage jar with stabbed inner rim. NORT. Layer VII/1. Phase 4.
14. Everted rim jar with burnished line lattice decoration. Light grey ware. GW. Layer I/37. Phase 4.
15. Body sherd from a storage jar with impressed dots. OXID. Layer VII/1. Phase 4.
16. Everted rim grey ware jar with a red core. GW5. Layer III/13. Phase 4.
17. Flanged rim conical bowl. DOR BB1. Layer III/13. Phase 4.
18. Handmade body sherd in a light brown sandy ware with a grey core. Impressed decoration. Layer I/7. Phase 7.
19. Handmade body sherd in a dark grey-black sandy ware. Impressed decoration. Layer II/25. Phase 4.
20. Carinated bowl with faint burnished line lattice decoration. Grogged grey ware. GRGW. Layer I/21. Phase 6.
21. Large double-handled flagon. Vertically burnished neck. SOW BB1. Layer I/21. Phase 6.
22. Reeded rim bowl. DOR BB1. Layer II/17. Phase 4.
23. Beaded rim bowl. SOW BB1. Layer II/9. Phase 4.
24. Part of a triple vase. GW. Layer I/12. Unphased.
25. Handled mug. DOR BB1. Layer III/5. Phase 8.
26. Cornice rim beaker with rough-cast decoration (CC). Dark grey fineware. Layer I/8. Phase 7.
27. Cornice rim beaker. ARG CC. Layer II/21. Phase 4.
28. Flanged rim jar. DOR BB1. Layer III/3. Phase 8.
29. Bifid rim narrow-necked jar. GW. Layer I/7. Phase 7.
30. Hemispherical bowl in a fine oxidised sandy ware with a worn orange-red slip. Possibly a Wiltshire colour-coated ware. Decorated with rouletting and tooled wavy lines. From West Bank, King's Sedgemoor Drain 1939.
31. Black sandy ware lid. GW. Layer II/9. Phase 4.
32. Black burnished dish with burnished line decoration on the rim. BW. Rivet hole through wall. Layer I/53. Phase 7.
33. Shepton Mallet type mortarium (SHM RS). Repaired with a lead rivet, still partly *in situ*. Layer II/13. Phase 8.
34. Shepton Mallet type mortarium (SHM RS). Fragment of stamp on flange. Layer II/2. Phase 8.
35. Shepton Mallet type mortarium (SHM RS). Stamp across flange. Layer VI/1. Unphased.
36. Everted rim jar, DOR BB1. Two incised vertical lines in inner rim face made after firing. Layer IV/2. Phase 8.

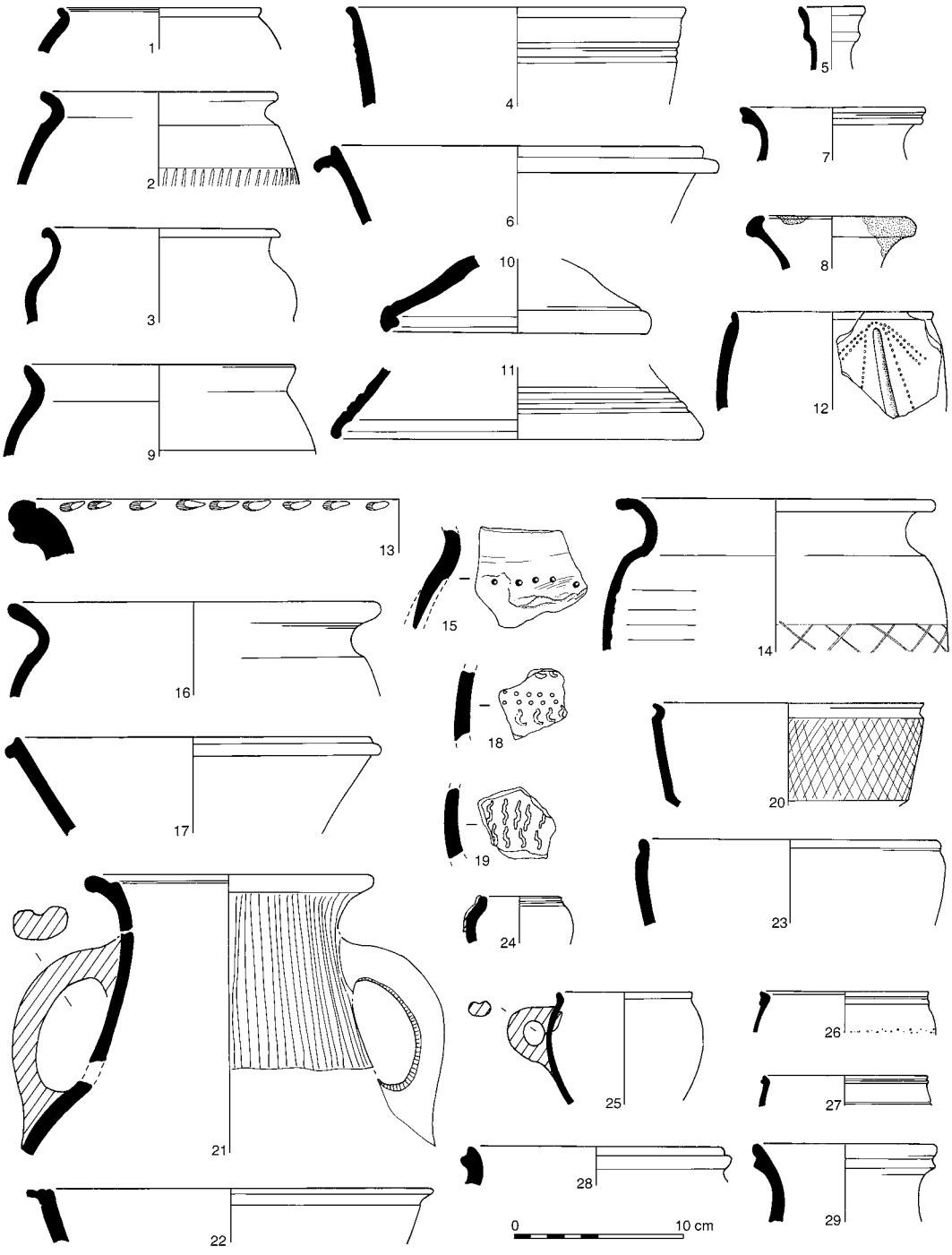

FIG. 5. The Roman pottery. (*Drawing by Jane Timby*)

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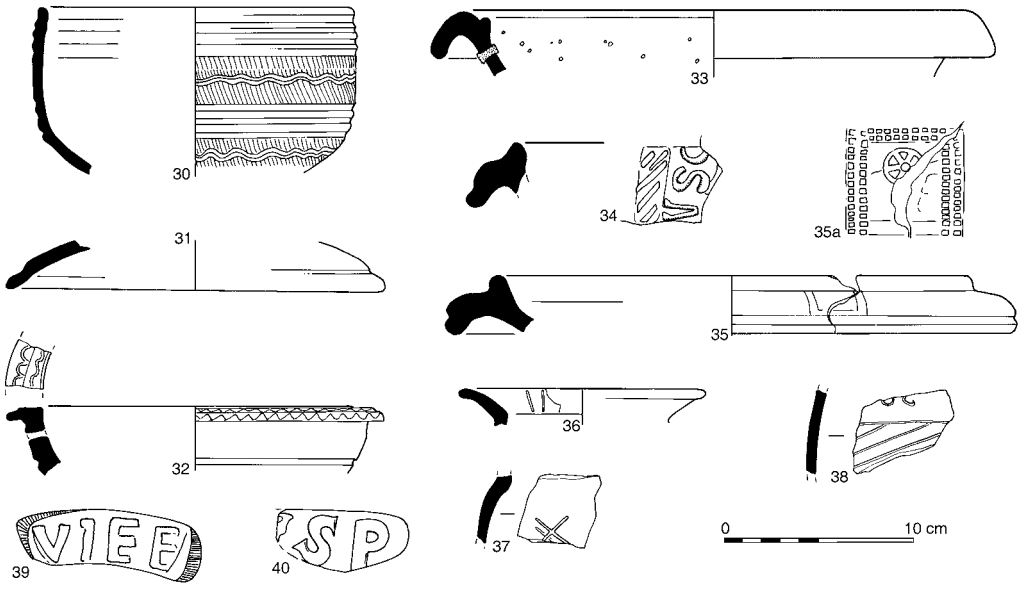

FIG. 6. The Roman pottery. (*Drawing by Jane Timby*)

37. Body sherd from DOR BB1 jar. Incised X on shoulder. Layer II/17. Phase 4.
38. Body sherd from a DOR BB1 jar. Part of graffiti on shoulder. Layer I/4. Phase 6.
39. Dressel 20 stamp. Unstratified.
40. Dressel 20 stamp. Unstratified.

THE COINS *By* John Casey

A total of 132 coins was submitted for report in 1972 and a working list, that employed the conventions of the period, was prepared for the use of the site director. The present report is based upon this list and thus omits a number of features which would now be usual in a coin report; notably there is no reference to the weights and die axes of the coins, to the wear condition, or the phase of the site to which they may be allocated. In the absence of these factors only general comments are offered on the likely chronological implications of the coins in the light of the detailed studies which have established the general pattern of coinage in Britain through the Roman period.

Such discussion must start with the startling number of Constantinian coins dating to the period *c*. A.D. 312–330. Coins of this period are extremely scarce as individual finds for, despite the miserable appearance they present after excavation, in their day they were of well-silvered appearance and a 3 per cent silver content. There is reason to believe that the coins, weighing *c*. 4.5–4.00 gm, were tariffed as 12.5 denarius pieces. On the other hand such coins are conspicuous in hoards.[100] The occasion for such hoarding can be attributed to the introduction of a lighter coinage, of lower intrinsic value (*c*. 3–2.5 gm) but of similar nominal value, in A.D. 330. Issues of this latter coinage, normally represented by Gloria Exercitus, Urbs Roma and Constantinopolis types, usually provide the dominant feature of fourth-century site assemblages.

[100] Robertson 2000, no. 988 etc.

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In these circumstances it is probable that the following items from Area I are components of a single scattered hoard (24–35; 37–40; 42–46; 48–53; 55–59; 61–63; 65; 68; 70; 73; 84–90). In the absence of specific information as to where similar coins were recovered from adjacent areas it is best to err on the side of prudence rather than to claim them also as part of the putative hoard.

Removing the 'hoard' brings the recovered coins into conformity with the provincial pattern for civil sites having their origins in the second half of the third century with continuity to at least the end of the fourth century, with the last period being represented by the long continued use of Valentinianic copper coinage such as is present in items 120–32. Variations in imperial coin supply, withdrawals in the face of intermittent inflation, and provincial political events account for the fluctuations in coin numbers from period to period. In short this is a normal fourth-century site insofar as coin studies contribute to its elucidation.

Catalogue

Abbreviations and references

BMCRE	*Coins of the Roman Empire in the British Museum*. Vol. 3, London, 1966
LRBC2	R.A.G. Carson and J.P.C. Kent, *Late Roman Bronze Coinage*. Pt 2, London, 1960
RIC	H. Mattingly *et al*., *The Roman Imperial Coinage*. Vols 7–8, London, 1923–81
Robertson, 2000	A.S. Robertson, *An Inventory of Romano-British Coin Hoards* (ed. R. Hobbs and T.V. Buttrey), London, 2000

No.	Ruler	Reference	Issue Date	Area	Layer	SF. No.
1	Domitian	RIC 417	95-96	1	topsoil	36
2	Nerva	as RIC 64	96-98	3	11	96
3	Trajan	BMCRE 998	112-14	1	29	204
4	Commodus	RIC 550	186-89	1	17	39
5	Crispina	RIC 668	177	1 n	2	156
6	Caracalla	RIC -	200	6	2	54
7	Valerian	RIC 106	253-60	3	2	116
8	Gallienus	RIC -	258-68	7	16	233
9	Postumus	RIC -	259-658	7	topsoil	162
10	Victorinus	RIC 67	268-70	1	4	66
11		RIC 118	268-70	1	2	83
12		RIC 118	268-70	3	11	153
13		RIC 118	268-70	1	103	217
14	Tetricus I	RIC 140 etc.	270-73	3	4	64
15	copies	RIC 101	270+	2	1	6
16		RIC 140 etc.	270+	1	103	212
17		RIC -	270+	2	1	50
18	Tetricus II	as RIC 272	270-73	5	topsoil	44
19	Claudius II	RIC -	268-70	1	4	69
20		RIC -	268-70	3	13	241
21	Carausius	RIC 1017	286-93	5	17	228
22		RIC -	286-93	1	1	169
23	Diocletian	RIC6(Tr)547a	302-3	5	1	42
24	Maximinus Daia	RIC6(Lon)211	310-12	1	2	90
25	Licinius I	RIC6(Lon)210	310-12	1	2	128
26		RIC6(Tr)825	309-13	1	2	111

No.	Ruler	Reference	Issue Date	Area	Layer	SF. No.
27	copy	as RIC7(Ar)224	321+	1	2	113
28	Constantine I	RIC6(Lon)104	307-12	1	topsoil	176
29		RIC6(Lon)121a	310	1	2	104
30		RIC6(Lon)281	312-13	1	1	37
31		RIC6(Tr)873	310-13	1	103	222
32		RIC6(Tr)873	310-13	1	13	82
33		RIC6(Lug)309	309-10	1	103	213
34		RIC6(Lug)153	310-12	1	103	215
35		RIC7(Lon)10	313-14	1	101	183
36		RIC7(Lon)10	313-14	2	1	1
37		RIC7(Lon)13	313-14	1	2	108
38		RIC7(Lon)51	316	1	103	216
39		RIC7(Lon)75	316	1	2	108a
40		RIC7(Lon)88	316-17	1	101	186
41		RIC7(Lon)137	318	3	11	154
42		RIC7(L0n)156	319	1	2	143
43		RIC7(Lon)156	319	1	2	146
44		RIC7(Lon)157	319-20	1	4	9
45		RIC7(Lon)158	319-20	1	2	142
46		RIC7(Lon)158	319-20	1	1	34
47		RIC7(Lon)159	319-20	2	1	40
48		RIC7(Lon)159	319-20	1	2n	151
49		RIC7(Lon)169	320	1	20	103
50		asRIC7(Lon)291	323+	1	2	126
51		RIC7(Lon)293	324-25	1	2	231
52		RIC7(Lon)293	324-25	1	2	118a
53		RIC7(Tr)102	316	1	103	218
54		RIC7(Tr)104	316	2	101	178
55		RIC7(Tr)105	316	1	101	181
56		RIC7(Tr)109	318-19	1	2	139
57		RIC7(Tr)208a	318-19	1	2	107
58		RIC7(Tr)209	318-19	1	2	119
59		RIC79(Tr)209	318-19	1	2	85
60		RIC7(Tr)209	318-19	3	11	95
61		RIC79Tr)209	318-19	1	2n	152
62		RIC7(Tr)209	318-19	1	55	182
63		RIC7(Tr)221	319	1	24	76
64		RIC7(Tr)258	320	3	11	210
65		RIC7(Tr)279	320-21	1	2	144
66		RIC7(Tr)519	330-35	3	11	201
67		RIC7(Tr) 522	330-35	3	11	190
68		RIC7(Tr)522	330-35	1	101	171
69		RIC7(Tr)554	330-35	4	2	202
70		RIC7(Lug)3	313-14	1	103	214
71		RIC7(Lug)255	330-35	5	1	41
72		RIC7(Ar)412	335-37	spoil		198
73		RIC7(Tic)83	318-19	1	2	129

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No.	Ruler	Reference	Issue Date	Area	Layer	SF. No.
74		RIC7(Sisc)224	330-35	5	14	227
75	copies	RIC7(Tr)209	318+	1	2	121
76		RIC7(Tr)229	330+	1	2	163
77		RIC7(Tr)518	330+	3	13	250
78		RIC7(Tr)528	330+	1	2	84
79		as RIC7(Tr)523	330+	2	11	199
80		as RIC7(Tr)580	335+	1	27	100
81		RIC7(Lug)242	330+	3	4	71
82	Helena	as RIC7(Tr)42	337-41	1	2	118
83	Crispus	RIC7(Lon)115	317	3	11	210
84		RIC7(Lon)174	320	1e	2	91
85		RIC7(Tr)431	323-24	1	13	35
86	Constantine II	RIC7(Lon)198	320-21	1	2	131
87		RIC7(Lon)236	321-22	1	2	157
88		RIC7(Lon)-	330-35	1	27	97
89		RIC7(-)-	320	1	2	135
90		RIC7(Lug)205	323	1	2	130
91		RIC7(Tr)527	330-35	5	2s	220
92		RIC7(Tr)539	335-41	3	2	62
93	Constans	as RIC7(Tr)586	335-41	3	2	132
94		RIC8(Tr)85	337-41	1	2	133
95		RIC8(Tr)106	337-41	1	2	147
96		RIC8(Tr)111	337-41	1	2	109
97		RIC8(Tr)111	337-41	3	11	75
98		RIC8(Tr)111	337-41	1	2	149
99		RIC8(Tr)182	341-48	1	2	115
100		as RIC8(Tr)182	341-48	1	2	134
101		RIC8(Tr)188	341-48	1	2	125
102		RIC8(Tr)196	341-48	1	2	110
103		RIC8(Tr)196	341-48	1	27	98
104		RIC8(Tr)206	348	1	1	141
105		RIC8(Tr)210	348	1	2	86
106		RIC8(Lug)41	341-48	1	2	118
107		RIC8(Ar)85	341-48	1	101	203
108		RIC8(Ar)93	341-48	2	2	77
109	Constantius II	RIC7(R0m)366	330-35	1	4	9
110		RIC8(Tr)58	337-48	1	1	61
111		RIC8(Tr)108	337-41	1	2	124
112		RIC8(Tr)115	337-41	3	11	89
113		RIC8(Tr)183	341-48	1	2	87
114		RIC8(Con)22	341-48	2	2	77
115		RIC8(Ar)127	348-50	2	-	122
116	copies	as RIC7(tr)586	335+	1	2	106
117		as RIC8(Lug)183	353+	1n	2	127
118	Magnentius	RIC8(Amb)11	351-53	1	16	174
119	copy	as RIC8(&r)315	351+	5	F1	81
120	Valentinian I	LRBC2.527	367-75	1	33	185
121		LRBC2.527	367-75	5	11	99

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No.	Ruler	Reference	Issue Date	Area	Layer	SF. No.
122		LRBC2.1011	367-75	1	2	52
123		LRBC2.1386	367-75	3	11	191
124		LRBC2.2279	364-75	3	2	192
125		LRBC2. -	364-75	3	4	59
126	Valens	LRBC2.283etc	364-75	1	topsoil	51
127		LRBC2.289	364-75	3	10	53
128		LRBC2.480	364-67	3	4	64
129		LRBC2.516	367-75	1	1	60
130		as LRBC2. 280	364-75	1	2	105
131		as LRBC2.280	364-75	3	11	193
132		as LRBC2.280	364-75	3	11	200

GLASS

The surviving collection of artefacts only contains a few unstratified fragments of glass, but the archive includes a typescript report on eight fragments of which six are from secure Romano-British contexts:

SF 38, Area I, Building 2, Layer 7 (early to mid-fourth century): Fragment of colourless glass, curved, 3 mm thick at the base, 1 mm at the top; bubble crazed. ?Base of small bowl.

SF 57, Area V, Layer 13 (early fourth century): Two pieces of very pale green, very thin curved glass, 0.7 mm thick. ?From beaker.

SF302, Area V, Building 5, Layer 13 (early fourth century): Fragment of green, curved bubbled glass, 9 mm thick.

SF 88, Area III, cobbled surface, Layer 11 (early fourth century): Fragment of pale green, thin glass, 1 mm thick, curved with smooth convex surface and raised ornamentations on the concave surface.

SF 173, Area I, red clay floor, Layer 40 (late third century): Fragment of pale green, curved glass, 1 mm thick.

SF 238, Area I, red clay floor, Layer 55 (later second century): Fragment of pale green, curving glass, 2 mm thick.

Two further fragments came from medieval contexts that include large amounts of residual Roman pottery:

SF 137, Area I, Layer 2: Fragment of pale brown, very thin curved glass, 0.5 mm thick.

SF 244, Area I, Layer 4: Two fragments of very thin, curved glass, 0.6 mm thick.

CRAFT AND INDUSTRY

Metal working

A range of evidence suggests that there was metal working on the site. Building 2, in Area I, contained what notes in the site archive describe as a ‘metalworker’s hearth with a flue’, associated with a surface of stone paving and burnt clay (I/F.3), in its north-west corner.

Possible bronze working

Manuscript notes in the archive refer to small lumps of what was described as ‘molten bronze’ from Area II Layers 17 and 21.

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Iron working By John Allen and Gill Juleff

A large quantity of material identified at the time of excavation as 'slag' was found mostly in Areas 1–V. Surface morphology, density, visual inclusions, polished sections and semi-quantitative x-ray fluorescence analysis suggest that the material is derived from two sources. A small amount (*c*. 10 per cent of the 'slag' assemblage, *c*. 30 fragments, 1,360 g) had a structure typical of metallurgical slag with iron silicate and iron oxide phases, and was made up of *c*. 64 per cent iron oxide (FeO) and *c*. 20 per cent silica. This is probably iron smithing slag. (For the remainder see Building Materials, below.)

Lead working By John Allen

A single unstratified fragment of galena (lead sulphide, lead grey in colour, very dense and coarsely crystalline), the most likely source of which is Mendip where there was a thriving lead-mining industry known from both the mine workings and the lead pigs that were produced.[101] Fragments of molten lead from Area II Layer 11 (SF 263) and the topsoil are from contexts containing medieval pottery along with large amounts of residual Roman material.

Salt production/processing

Amongst the large collection of 'burnt clay and daub' (see below) there are several examples of definite and possible briquetage (the debris from salt production). The three definite fragments all came from Area I, Layer 103, an unlocated late third-century red-clay floor in Area I, and are made of a well-fired, pale brown/buff, roughly prepared clay with occasional voids and abundant vegetable tempering. Two fragments were from the square-cut rim of a straight- and vertical-sided vessel (probably a square or rectangular vat or pan), while the other fragment is from the right-angled base of the same type of vessel. Chemical analysis of a similar fragment from Huntspill in the Brue valley shows that it was heavily impregnated with salt.[102] The material from Crandon Bridge is discussed further below.

Textile production *By* John Allen

1. An almost circular disc of weathered, off-white to pale grey slate pierced from both sides by an off-centre circular hole (from Context VI/1). It is too large and weighty to be a spindle-whorl, but may have functioned as a light loom-weight.[103]
2. Roughly one half of a turned spindle-whorl of Kimmeridge shale (from Context I/2).

Rounded pebbles

26 rounded pebbles were also recovered from across the site that cannot be natural to the site.

PERSONAL ITEMS AND DAILY LIFE

Brooches *By* Elizabeth Fowler (typescript report in site archive)

1. SF 58. Bronze brooch. Strip bow, half decorated, half plain; plain catch-plate, broken hinge pin. Local close parallels are from Sea Mills, Charterhouse, and Chew Valley Lake, the last mid-first-century in date.

[101] Elkington 1976; Jones and Mattingly 1990, 184–5; Todd 1994; 1995.
[102] Leech *et al*. 1983, 77.
[103] cf. Lyne 2002, fig. 18, no. 24.

2. SF 63. Bronze dolphin brooch. Segmented flat bow, with a cast stud on head. Complete catch-plate, broken hinge pin. Chevron decoration down bow. Type of brooch, though not decoration, paralleled by one from Priddy, Somerset, which had a cast triangle on the head and two empty sockets below, hinge pin and broken head loop.[104] Presumably also first century A.D.
3. SF 148. Pennanular bronze brooch. Fowler type 'C'. First or second century, though could be later.
4. SR 164. Half only of a strip brooch decorated only by grooves and ridges. Long arms: possibly early type of crossbow brooch and therefore third century or later?
5. SF 170. Flattened-strip bow brooch with tiny rivet fastening (for decoration) on head not unlike No. 2. Probably had a hinge-pin, though whole brooch is badly damaged and details are difficult to ascertain. Very similar to Collingwood's Group K, and particularly a Charterhouse brooch (A 46 in Bristol Museum).
6. SF 189. Humped, almost dolphin-like, bow brooch with two (?)red enamelled triangles on bow. Small protruding arms and hinge-pin, now broken. Close to brooch from Charterhouse (M 14 in Bristol Museum), but also the Priddy brooch (F3722) referred to under No. 2 above.

Other personal items

Artefacts of personal adornment included two pins made of bronze (III/11, SF 155; V/1, SF 188) and one of bone (I/4, SF 70), the latter similar to one from a mid-fourth-century context at Gatcombe,[105] a single glass bead (I/40), two bronze rings (I/2, SF 145; V/I, SF 196), and a bronze 'ringlet' (I/2, SF 136). Other utilitarian artefacts included a bone needle (47 mm long and 2 mm in diameter; II/10, SF 140), a bronze needle (II/9, SF 158), and a 'toilet piece' (Area V, no layer number, SF 180). An iron 'razor' (IV/2, SF 290) and an iron knife (I/2, SF 248) were from later contexts that contained large amounts of Roman pottery. A fragment of a small, well-used honestone of fine-grained, slightly micaceous metaquartzite (identified by John Allen) came from Context VI/6. One bone counter came from a secure later Romano-British context (V/4, SF 48), while three others came from post-Roman contexts (I/topsoil, SF 47; II/topsoil, SF 92; and the topsoil from bulldozing, SF 240 and SF 246); nine counters were made from ceramic material (see Timby above).

Food processing

A single fragment of quernstone was recovered, from Area I, Layer 22.

BUILDING MATERIAL

Tesserae *By* John Allen

Tesserae were made from five or six different materials.

1. Hard, dense, white chalk with delicate calcite veins: three large or 'double' tesserae[106] were recovered from Contexts II/14, III/5 and V/7, along with a badly weathered fragment of a single tessera from Context I/13. Four further tesserae of the same dense, hard, white

[104] Bristol Museum F3722, Acc 94/1957.
[105] Branigan 1977, fig. 28, no. 630.
[106] See Allen and Fulford 2004 for the definition of double and single tesserae.

chalk came from unstratified contexts. None carry traces of mortar or show signs of use-wear, and so are probably unused. The nearest outcrops of the Chalk from which these tesserae are likely to derive, are in south-east Dorset and western Wiltshire. These items are, therefore, definite importations and could represent goods in transit. Tesserae of hard chalk are common in mosaics at Caerwent and Caerleon.

2. Dull, greyish green cementstone, probably from the Lias, which outcrops close to Crandon Bridge as well as in north and east Somerset: a single, large, cuboidal tessera from Context I/2.
3. Liassic cementstone, probably from the Lias: two shaped fragments probably intended as large tesserae from Contexts I/13 and II/1. No evidence of mortar or use-wear.
4. Pale grey cementstone, probably from the Lias: two platy fragments that may have been intended as tesserae, though the shapes are not typical.
5. Hard, dark brown to black, very fine-grained bituminous limestone, possibly from the earliest Jurassic bituminous shale, outcropping on the north Somerset coast, though a source in the Carboniferous Limestone Series, outcropping in Mendip (also in north Somerset), cannot be ruled out: a single tessera from Context V/2.
6. Pale orange ceramic (tile) with coarse-grained quartz sand: a roughly shaped, double tessera, with no trace of mortar or use-wear (from Context V/14).

The lack of cement or use-wear suggests that these were tesserae that were being shipped from source to market rather than having been used on-site.

Plaster and roofing materials

Other building materials suggest structures of moderate status, but higher than simple warehouses. Small amounts of plaster were recovered from across the site. Three large fragments of white plaster survive: one came from a securely stratified Roman context (Layer I/39: flagstones set in brown clay that seals one of the red clay floors in Area I and appears to pre-date the stone Building 2), while two others are from post-Roman contexts (I/29 and IV/2). The site Small Finds register contains references to painted plaster from a number of contexts: the abandonment phase of Building 1 (Area I Layer 8 (SF 272, two fragments) and Area I Layer 10 (SF 303)), and the 'base of the charcoal' (SF 243). Several residual pieces were also found in medieval/later contexts (Area I Layer 2 (SF 138), Area III Layers 2 (SF 305, two fragments) and 9 (SF 306), Area VI topsoil (SF 307), and Area VII topsoil (SF 304)). One fragment of red-painted plaster survives, though this is unprovenanced.

Manuscript notes in the archive record that 96 fragments of red ceramic tile were recovered from across the site. Several fragments were noted as curving (presumably *imbrex*) while sketched cross-sections through others show that they were *tegulae*, of which two fragments were retained: in both cases the tile was 20 mm thick. A fragment of possible floor tile, 46 mm thick, was also retained (from Area VII Layer 5). 'Stone tiles' were noted as being present across the site but were not systematically collected or quantified. Ten complete examples were retained (though their provenance is unknown): all were typical Romano-British roughly diamond/lozenge-shaped roof tiles of local Lias limestone with a hole drilled at one end. The majority were 22–25 cm across and 34–40 cm long.

Large amounts of daub, some with wattle impressions, and large numbers of nails were also recovered, suggesting that at least some of the excavated stone walls may have supported timber structures. Scientific analysis of a large amount of 'slag' shows that it results from the burning of a building of mixed carbonate (including dolomite) and siliceous rocks in the presence of clay (such as daub) and an abundant carbon fuel such as thatch or wooden uprights/beams (full report in the site archive).

THE NATURE OF THE SITE AT CRANDON BRIDGE: THE PALAEOENVIRONMENTAL EVIDENCE

ANIMAL BONE *By* Barbara Noddle

Editorial note: the following extracts are from a typescript report by Barbara Noddle prepared around 1978. The reader should also be reminded that this excavation was carried out under difficult circumstances in the winter of 1971, and no evidence has been found in the archive for any sampling strategy for the recovery of animal bone other than hand digging. Smaller species, and especially bird and fish bone, will, therefore, be greatly under-represented. The significance of this assemblage is considered in the overall discussion of the site below.

Methodology

The bones were presented as separate groups from each layer, dated either Romano-British or medieval. The material was well-preserved, but fragmentary, and this factor, together with the large numbers of loose teeth, indicated that it has been subjected to considerable disturbance after deposition. A total of 2,322 fragments were identified of which 899 (39 per cent) were Roman. The proportions of the different species involved are set out in Table 5 for the major species, and Table 6 for the less common which are designated as 'other' in Table 5. Beside counting the number of fragments, the minimum number of individuals was assessed, for which purpose it was assumed that each archaeological layer comprised different individuals; though this cannot be proved, to assume the contrary distorts the data much more. The numbers of identified fragments are not a satisfactory statistic when considered alone, owing to the random nature of such fragmentation.

TABLE 5. PROPORTIONS OF MAIN SPECIES

(NIF = number of identified fragments; MNI = minimum number of individuals)

	Total	**Cattle**	**Sheep**	**Pig**	**Horse**	**Other**
NIF	829	352 (39%)	465 (51%)	47 (5%)	24 (3%)	11 (1%)
MNI	227	80 (35%)	103 (45%)	26 (11%)	12 (5%)	6 (4%)

Species composition

Whatever method of assessment is employed, cattle and sheep comprise the vast majority of the bones. It is possible that the sheep bones include those of goat, but since no goat bones were identified at all, it is assumed that if present, this species was in very small numbers. There were more sheep than cattle but if the bones are considered from the point of view of meat consumed, there is no doubt that the bulk of it was beef because one bovine animal is five to seven times as heavy as a sheep. Pig made up between 5 and 11 per cent of the material depending on the method of estimation used, the higher figure referring to individuals. There was roughly half as

TABLE 6. PROPORTIONS OF LESS COMMON SPECIES

(NIF = number of identified fragments; MNI = minimum number of individuals)

	Dog	**Cattle**	**Red deer**	**Roe deer**	**Hare**
NIF	7	0	1	2	1
MNI	3	0	1	1	1

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much horse as pig, but if this animal was eaten it would have supplied more meat, again because of the size factor. Cat is not represented in the Roman material, but both red and roe deer occur, with a single specimen of hare.

Age distribution

Bones were aged on the basis of dental eruption and epiphyseal fusion and the individuals which could be aged (about two thirds overall) were divided into three groups: juvenile, where only the earliest-maturing bones were fused and the only permanent teeth present were the first molars and perhaps the second in an unworn condition; immature, when the earliest-maturing bones were fused but the later-maturing not, temporary teeth were present or the third molar was not fully in wear; and mature animals, where all bones were fused and all the teeth in wear. As a rough guide these animals would be under 12 to 18 months according to species at the juvenile stage, under four years at the immature stage, and over four years when mature.

TABLE 7. AGE RANGE OF CATTLE, SHEEP AND PIG AS A PERCENTAGE OF THE TOTAL THAT COULD BE AGED

Age group	Cattle	Sheep	Pig
juvenile	11	18	0
immature	47	31	71
mature	42	51	29

The results of the age at death analysis are set out in Table 7. The proportion of juvenile animals can probably be attributed to natural deaths. The figure of 11 per cent for cattle is low, indicating a good standard of husbandry. If the animals were being kept for meat production, one would expect them to provide the best carcass at the immature period, and the proportion of animals slaughtered at this age suggests that meat or hide production was important. For sheep the number of mature animals indicates that wool production was important. Since the numbers of pig which could be aged are low, a considerable element of chance enters for this animal, but the higher proportion of immature to mature pigs when compared to the other animals is due to its only use being for meat.

Anatomical composition

Table 8 presents an anatomical analysis of the bone fragments. This demonstrates that slaughter waste was present in quantity. Carpals and tarsals are present in small quantity, particularly those of sheep, and this suggests that many of the bones are not in their initial place of deposition. The different proportions of sheep and cattle hind limb are almost entirely due to the large number of sheep tibia, an exceptionally durable bone.

Animal size

There were unfortunately very few measurable bones amongst those of Roman date. The sheep scapulae showed a mixture of forms with only one specimen of the definitely long-tailed modern type; the rest were either short-tailed comparable to the modern day Soay, or cross-breds. The cattle horn cores found were all short and oval in shape, typical of the medieval shorthorn.[107]

[107] Armitage and Clutton Brock 1976.

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TABLE 8. ANATOMICAL ANALYSIS OF CATTLE, SHEEP AND PIG BONES AS A PERCENTAGE OF THE TOTAL IDENTIFIED FRAGMENTS

Anatomical region	Cattle	Sheep	Pig
Mandible	7	9	15
Vertebrae	5	6	4
Upper fore limb	16	17	13
Upper hind limb	16	19	9
Carpals and tarsals	5	3	2
Metapodials	13	16	11
Phalanges	11	4	2
Loose teeth	26	24	19

They all appeared to be female, and it is possible larger male specimens were removed to a workshop for horn working. Sheep horn cores were markedly oval in shape, again comparable with the Soay. Fragments of frontal bones probably derived from polled specimens.

MARINE SHELLFISH

Marine shellfish were recovered from across the site, with the largest numbers not surprisingly being recovered from the most extensively excavated Areas I and II. In securely stratified Romano-British contexts just three species were present with oysters (86 per cent) dominating, and smaller amounts of limpets (7 per cent) and mussels (7 per cent) (Table 9). In most cases just a few individual shells were present in any one layer, apart from Layer 14 in Area II which contained 30 oyster shells (in the northern part of Building 3). As later contexts contain large amounts of residual Roman pottery, many of the shellfish will probably be Romano-British too, though it is noticeable that several new species appear for the first time (cockles, periwinkles, scallops and whelks). While the sample size is very small, this greater diversity in marine shellfish exploited is seen all around the British coast in the medieval period.[108]

TABLE 9. MARINE SHELLFISH FROM ROMAN AND LATER CONTEXTS

	Oysters	Limpets	Mussels	Cockles	Periwinkles	Scallop	Whelk	Total
Romano-British	95	8	8	0	0	0	0	111
Later contexts	85	4	1	2	2	2	1	97

Limpets can be found in abundance on rocky outcrops around the Severn Estuary such as Brean Down and Worlebury, although mussels live on sandy shores and, while they are abundant in the Bristol Channel, they have only been recorded very occasionally in the Severn Estuary due to its high suspended sediment load.[109] Oysters similarly do not grow locally. There used to be

[108] Rippon 2000b, 225.
[109] Boyden and Little 1973, 212; Boyden *et al.* 1977, 529–31.

a productive oyster bed at Blue Anchor Bay on the west Somerset coast (between Minehead and Watchet, over 20 km to the west) and odd dead shells have been collected on the South Wales coast, but there is no evidence that they have grown in the Severn Estuary.[110] Indeed, a survey of oyster beds conducted by the Fishmonger's Society in the early twentieth century records that the closest beds to Bristol were at the Mumbles on the Gower Peninsula in South Wales.[111]

DISCUSSION

THE ORIGINS OF THE SETTLEMENT AT CRANDON BRIDGE

Several sherds of Iron Age pottery were recovered during the 1971 excavations (see Timby, above) and the earlier watching-brief by Nash,[112] but as a relatively small area was excavated down to bedrock, the extent of pre-Roman occupation cannot be determined. It was notable, however, that there was no pre-Flavian samian and very little early Flavian (in contrast to the small towns at Ilchester and Shepton Mallet), suggesting that Crandon Bridge started to receive imported pottery no earlier than the late A.D. 80s or 90s. There is no evidence for an early military phase of occupation as there is at Sea Mills on the river Avon, evidenced by Claudian and Neronian samian ware, coins, and military equipment.[113]

CHARACTER OF THE SITE

The unfinished typescript report in the archives suggests that 'The nature of the finds may suggest that the site consisted of industrial or trading buildings rather than domestic [occupation]'. Ever since, the relatively high proportion of imports, notably amphorae, in the pottery assemblage from the 1971 excavations has led to speculation that the Romano-British site at Crandon Bridge was a small port, and its small rectangular buildings have been described as warehouses. These preliminary conclusions all need careful re-examination, bearing in mind the limitations posed by the writing-up of a 35-year-old excavation.

The area of 8–12 ha can be compared with other Romano-British sites in the region. The possible 'estate villages' at Catsgore (*c*. 2.1 ha) and Gatcombe (*c*. 4.1 ha) are both clearly on a far smaller scale, although the small towns of Bath (*c*. 9 ha), Camerton (*c*. 9 ha), Charterhouse (*c*. 12 ha), Ilchester (*c*. 17 ha), and Westland (*c*. 5–15 ha) were on a similar scale; Shepton Mallet (*c*. 35 ha) stands out as being significantly larger.[114] For comparison, individual farmsteads or courtyard villa complexes in this region covered just *c*. 0.5–1.5 ha, while the nearest *civitas* capitals at Dorchester and Cirencester had intramural areas of *c*. 42 ha and 84 ha respectively.[115]

Within the settlement simple rectangular structures predominate in both the 1971 and 1988 excavations; these were initially interpreted as warehouses, but they have clear evidence for domestic occupation and industrial activity. The buildings, including those observed in 1988,[116] all appear to have the same orientation (north-east–south-west) and while this might suggest some planning in the layout of the settlement, it might equally reflect the lie of the land (their being a right angles to the contours). This layout is, however, quite different to nucleated rural settlements, such as Catsgore, where the buildings were arranged in clusters around a central

[110] Boyden *et al.* 1977, 530.
[111] Blockley forthcoming.
[112] Leech 1977a, 26.
[113] Bennett 1985, 3.
[114] Burnham and Wacher 1990; Leech and Leach 1982; Leach 2001a; 2001b.
[115] Leech 1977a; Wacher 1995; Leach 2001a; Rippon 2000a.
[116] Information about the 1988 site is from correspondence with the late Madge Langdon.

yard,[117] and there is no evidence for corn-drying ovens at Crandon Bridge. A building of higher status must lie somewhere nearby to account for the finds of painted wall-plaster, and while the loose tesserae that were found in 1971 show no signs of having been used — and as such may be traded commodities — antiquarian references suggest there was a building with a mosaic floor in the vicinity.

Most of the building remains recorded in 1971 were fragmentary, though relatively simple rectangular forms appear to predominate, as was the case with those structures observed in 1988. The exception is Building 1 which may have had a corridor ('Building 3') to the west. The layout of these structures is quite unlike the warehouses (*horrea*) excavated on the waterfronts in London,[118] but close parallels for the Crandon Bridge buildings can be found at the small towns of Camerton, Ilchester (e.g. Little Spittle and Townsend Close), Sea Mills, and Shepton Mallet (e.g. Building IX).[119] There are also considerable similarities with Gatcombe, both in terms of the simple building plans and the overall site layout, although the nature of this site is unclear: the abruptness of its foundation and abandonment, the lack of shops or domestic houses, the absence of evidence for Roman roads leading to the site, or villas in its immediate vicinity suggest that it may not have been a small town.[120] All of the excavated buildings appear to have been used for food processing, storage, or industrial production but the absence of military metalwork suggests that this was not a *fabrica* (arms and munitions factory), which led Branigan to suggest that it was an agricultural estate village associated with an adjacent villa. This interpretation has been accepted by Hingley and Millett, although Esmonde Cleary suggests that it may have been a 'state controlled depot for the reception and processing of produce'.[121]

The analysis of the pottery assemblage by Timby and Wild (above) has confirmed that it is indeed quite unlike that of a rural settlement and, bearing in mind the absence of very early or very late occupation at Crandon Bridge, there is both a higher percentage of sherds from continental and regional industries, and a greater range of fabrics, than is seen at rural settlements such as those in nearby Shapwick, Bradley Hill and Kenn Moor. In contrast, the Crandon Bridge assemblage shows great similarities with the small towns at Ilchester and Shepton Mallet, and the percentage of samian that is decorated (19 per cent) is comparable to other small towns in Roman Britain.[122] Along with the site's location, beside a major tidal estuary, this supports the hypothesis that it may have acted as a port.

The published interim report states that 'The material from the site was considerable but lacking in variety, domestic items being conspicuous by their scarcity'.[123] This statement needs careful re-examination. The pottery assemblage may include a relatively high proportion of imported material, but it has clearly seen considerable use. Of the samian, for example, at least one footring was heavily worn, four sherds show signs of repair in the form of drill-holes or slots for lead rivets (also seen in one of the amphora sherds, a mortarium, and two vessels of a local fabric), while another has seen secondary use as a disk or counter (along with eight examples from other fabrics). This is not what is to be expected from a warehouse assemblage. The scatter of animal bone and marine shellfish, including a group of oyster shells in Building 3, is similarly suggestive of domestic occupation nearby. A wide range of small finds was also recovered, including brooches, needles, pins, rings and spindle-whorls. The ratio of brooches (7) to coins (132) can be compared with other sites (Table 10). At Crandon Bridge brooches were

117 Leech 1982b.
118 e.g. Milne 1985, fig. 45; 1995, fig. 41.
119 Wedlake 1958; Leach 1982, figs 38 and 51; Bennett 1985; Ellis 1987; Leach 2001b, fig. 27.
120 Branigan 1977, 187–8.
121 Hingley 1989, 71; Millett 1990, 209; Esmonde Cleary 1990, 48.
122 Willis 2005, table 35.
123 Langdon and Fowler 1971, 53.

TABLE 10. COMPARISON OF THE NUMBERS OF COINS AND BROOCHES ON ROMANO-BRITISH SITES IN SOMERSET

	Brooches	Coins	% Brooches	Reference
Crandon Bridge	7	132	5.0%	
Small towns				
Camerton	93	452	16.8%	Wedlake 1958
Ilchester to 1974–5	32	365	8.1%	Leach 1982
Ilchester 1985	4	13	23.5%	Leach and Ellis 1991
Ilchester (Great Yard)	5	18	21.7%	Broomhead 1999
Ilchester total	41	396	10.4%	
Shepton Mallet 1990	39	1,401	2.7%	Leach 2001b
Shepton Mallet (Cannard's Grove)	2	68	2.9%	Birbeck 2002
Shepton Mallet total	41	1,469	2.8%	
Rural settlements				
Bradley Hill	3	78	3.7%	Leech 1981
Butcombe	3	27	10.0%	Fowler 1968
Catsgore	36	478	7.0%	Leech 1982b
Catsgore 1979	2	96	2.0%	Ellis 1984
Catsgore total	38	574	6.2%	
Chew Valley	17	150	10.2%	Rahtz and Greenfield 1977
Gatcombe	8	523	1.5%	Branigan 1977
Kenn Moor	2	34	5.6%	Rippon 2000a
Shapwick	13	26	33%	Gerrard with Aston forthcoming

5 per cent of the total number of brooches and coins. Bearing in mind that in older excavations brooches will probably be over-represented as they are larger and so more conspicuous during hand-digging, the proportion of brooches to coins at Crandon Bridge is far lower than at nearby Shapwick, half that at the small towns of Camerton and Ilchester, and marginally lower than at the rural settlements of Catsgore and Kenn Moor. It was, however, far higher than the ratio at Bradley Hill, Gatcombe, and the small town of Shepton Mallet. Clearly these figures will be affected by a wide range of factors including the recovery methods but they confirm that the number of small finds at Crandon Bridge is not out of keeping with domestic occupation, potentially of small town character.

Finds from the 1971 excavation and elsewhere on the site also suggest that there was at least one building of some status, reflected in the presence of painted wall-plaster and a small number of tesserae. Along with the antiquarian reference to the discovery of a mosaic pavement 'below Knoll Hill' which must lie in the vicinity, there appears to have been at least one well-appointed building in the area. Once again, everything in the character of the occupation at Crandon Bridge supports the idea of a small town type settlement rather than a specialised port/landing-place.

Based on the surviving report, the animal bone assemblage shows that both in terms of fragment count and the minimum number of individuals, sheep were more numerous than cattle (Table 11), though the latter will have provided the bulk of the meat: Harcourt suggests that if a

TABLE 11. COMPARISON OF THE PROPORTIONS OF THE CATTLE, SHEEP AND PIG FROM ROMANO-BRITISH SITES IN SOMERSET

	Fragment count			MNI			
	Cattle	**Sheep**	**Pig**	**Cattle**	**Sheep**	**Pig**	
Crandon Bridge	39%	51%	5%	35%	45%	11%	
Small towns							
Ilchester 1974–5	63%	33%	4%	44%	39%	17%	Leach 1982
Sea Mills	75%	32%	8%	60%	32%	8%	Bennett 1985
Shepton Mallet	77%	11%	12%	53%	23%	25%	Leach 1990
Rural settlements							
Bradley Hill	24%	67%	9%	not published			Leech 1981
Butcombe (1966–7)	48%	51%	1%	not published			Fowler 1968
Butcombe (1968–9)	not published			33%	61%	6%	Fowler 1970
Catsgore 1970–3	not published			21%	74%	3%	Leach 1982
Catsgore villa	43%	43%	5%	not published			Ellis 1984
Chew Valley Park	75%	17%	6%	61%	21%	18%	Rahtz and Greenfield 1977
Gatcombe				54%	30%	17%	Branigan 1977
Kenn Moor	54%	40%	6%	not published			Rippon 2000a
Shapwick villa	29%	64%	7%	not calculated			Gerrard with Aston forthcoming
Shapwick non-villa	30%	63%	8%	not calculated			Gerrard with Aston forthcoming
Temples							
Henley Wood	14%	66%	19%	not published			Watts and Leach 1990

sheep provides a meat unit of 1, a pig supplies 1.5 units and a cow 10.[124] This proportion of cattle is significantly lower than other small towns in the region, and based on King's comparison of animal fragment counts from sites across Roman Britain, Crandon Bridge would be classed as an 'un-Romanised' settlement.[125] Compared to rural sites in Somerset, however, Crandon Bridge has a higher proportion of cattle (e.g. Butcombe, Catsgore, and Shapwick). There is another reason why Crandon Bridge may have had a higher than normal proportion of sheep compared to other ports and small towns: the site lay at the western end of the Polden Hills peninsula and while this will have afforded some grazing land, by far the greatest amount of local pasture would have been down on the intertidal marshes that surrounded the Hills. Such ground is ideal for grazing sheep as the salt prevents common ailments such as liver fluke and foot rot (a similarly unexpected high proportion of sheep being found at Stonea in Fenland).[126]

Overall, the size of the site at Crandon Bridge and the material culture assemblage are in keeping with a small town. There is a range of buildings of varying status, with some well-appointed structures. While there is clear evidence for domestic occupation, the pottery assemblage, which includes a high proportion of imported pottery, and the location of the site beside a major tidal estuary and next to a major Roman road suggest that it served some form of port function. That part of the site that has been excavated is upslope from the waterfront which probably lay in the vicinity of the modern King's Sedgemoor Drain.

[124] Harcourt 1979.
[125] King 1988.
[126] Stallibrass 1996, 591.

CRANDON BRIDGE AS A TRANS-SHIPMENT PORT

In the light of this re-examination of the surviving archive and artefacts from Crandon Bridge, the view that the site functioned at least partly as a port can be re-asserted. Its position beside a major tidal estuary makes this a prime location for unloading larger sea-worthy vessels. The goods may have continued their journey along the Roman road (Margary route 51) that runs down the spine of the Polden Hills, while some material may have been transferred to smaller vessels ('trans-shipment') and continued along the Parrett and Yeo. Allen and Fulford have shown that the military establishment in south-east Wales appears to have obtained much of its pottery from south-east Dorset.[127] This is an area rich in natural resources, including Kimmeridge shale, Purbeck marble, and a range of other stone sources used in the production of tesserae that have also been found at Crandon Bridge and Caerleon.[128] Allen and Fulford have shown how the distribution of BB1 does not match that expected from a normal market distribution, but is clearly skewed first towards south-east Wales, and then the coastal areas of western Britain and up to the northern frontier.[129] The distribution of BB1 suggests that the pottery for military consumption was transported from Poole Harbour by road or river to Dorchester, and then overland to Ilchester from where it went either via the Roman road along the Polden Hills, or the rivers Yeo/Parrett, to Crandon Bridge. In order to cross the Severn Estuary it would then have been loaded into sturdier vessels that could cross to the Usk and Taff estuaries upon which the fortresses of Caerleon and Cardiff lay.

The distribution of products from a local greyware industry at Congresbury, on the edge of the North Somerset Levels, also illustrates the extent to which water transport was used in this region (FIG. 7). A number of mid-third- to fourth-century kiln sites, producing coarse cooking and storage vessels and some poor quality tableware, have been recorded around Congresbury village and, although only a short published note has appeared on the excavations, fabric series have been published for the assemblages from Henley Wood and Kenn Moor.[130] North of Mendip, Congresbury Ware was abundant at Henley Wood (62 per cent of the pottery assemblage), and was used at Brean Down, Butcombe, Chew Valley (15 per cent), Gatcombe (32 per cent), Havyatt, Pagan's Hill, and Star.[131] There has been no proper study of the wider dispersal of Congresbury Ware, though it certainly reached south of Mendip, forming 95 per cent of the assemblage at Lympsham and 26 per cent at Rooksbridge in East Brent.[132] It is present in smaller amounts at Cheddar, York Farm in Edingworth, and Cannington,[133] as well as Crandon Bridge (see Timby above). At Hinkley Point on the coast of west Somerset it comprised 45 per cent of the assemblage,[134] and this can only have been achieved through its use of river and coastal transport. It does not appear to have reached (or have been recognised in assemblages from) the small towns and adjacent settlements at Bath, Ilchester, Shepton Mallet, and Sea Mills.[135]

If pottery such as BB1 from Poole Harbour, and the more local Congresbury Ware (see above), was being transported along the rivers and creeks that flowed into the Severn Estuary and from there transferred onto larger vessels that could cross the Severn Estuary and even tackle the coastal waters around Wales and the North-West, there was presumably a return cargo. In the

127 Allen and Fulford 1996.
128 Hearne and Smith 1991; Lyne 2002; Allen and Fulford 2004.
129 Allen and Fulford 1996; and see Williams 1977; Gillam and Greene 1981.
130 Usher and Lilly 1964; Watts and Leach 1996, 98–9; Timby 2000.
131 Watts and Leach 1996; ApSimon 1965; Fowler 1968; 1970; Rahtz and Greenfield 1977; Branigan 1977; Neale 1970; Rahtz and Watts 1989; Barton 1964.
132 Broomhead 1991; Russett 1989.
133 Rahtz 1979; Rippon 1995; Rahtz *et al.* 2000, 293.
134 Cox and Broomhead 1993.
135 Cunliffe 1979; Leach 1982; Leech 1981; 1982b; Leach 2001b; Bennett 1985.

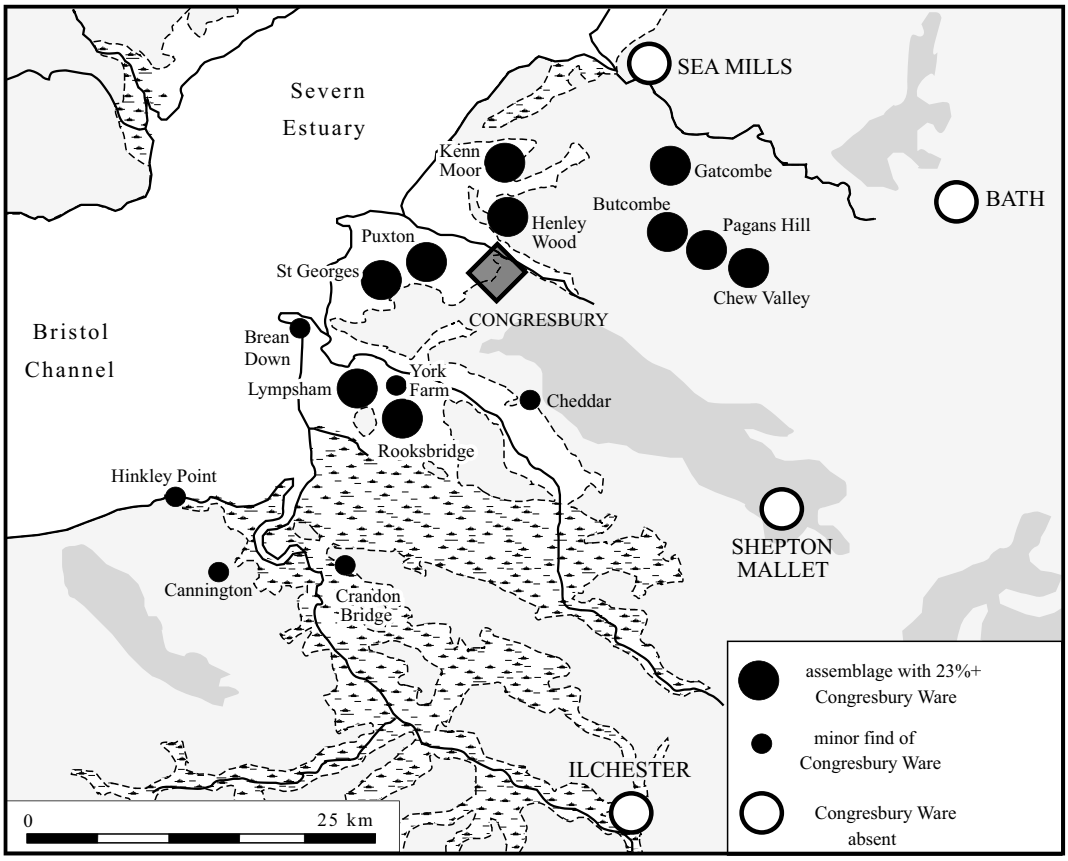

FIG. 7. Distribution of Congresbury Ware.

east of Britain, Allen and Fulford have suggested that this was probably foodstuffs and other perishables, but the numbers and opulence of villas in modern Somerset suggest that this was an agriculturally well-developed region.[136] One material that clearly was shipped down the Severn Estuary was coal from the Forest of Dean that is found in Caerwent, while material from the Somerset coalfield reached Cannington.[137]

SALT PRODUCTION AND PROCESSING

The excavations at Crandon Bridge may shed some light on one further issue of resource exploitation in Roman Britain. Studies of the wetlands that fringe the Severn Estuary have shown that many areas were reclaimed in the later Roman period, including Brent Marsh and the North Somerset Levels (FIG. 2).[138] To the south of Brent Marsh, however, there is no evidence

[136] Allen and Fulford 1999, 179.
[137] Smith 1997, 313.
[138] Rippon 1995; 1997; 2000b; 2006.

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for reclamation, but extensive traces of the production of salt by heating sea water. In the late prehistoric and early Roman periods salt production is attested throughout the Somerset Levels, but no further upstream than the southern part of the North Somerset Levels. While it is possible that a salt industry further up the Severn Estuary lies undiscovered — salterns were first found buried beneath later alluvium on the North Somerset Levels as late as 1998 (Banwell Moor)[139] — the amount of recent development-led work on these areas must make this increasingly unlikely (summaries of the evidence from the large number of recent evaluations, excavations, and watching-briefs on the Avonmouth and Gwent Levels appear elsewhere).[140] Rather, it would appear that North Somerset is the furthest upstream that salt production was viable, due to the decreasing salinity levels as one moves up the Severn Estuary. The Roman army would presumably have been a major consumer of salt, notably for preserving meat, yet unfortunately for them the extensive coastal wetlands that lay close to the fortresses at Cardiff and Caerleon lay upstream of the point at which salt production was viable. The military establishment in the West of Britain must have got their salt from elsewhere, and while in the north it was probably supplied by the inland brine springs of the West Midlands and Cheshire, in the south it may well have been supplied by the flourishing industry of the Somerset Levels. It has been suggested elsewhere that the marshes of the Brue valley may not have been reclaimed as they were 'reserved' for the production of salt, partly due to the demand of the military establishment, and that Crandon Bridge may have been involved in its transportation.[141] Support for this now comes from the discovery of a few fragments of briquetage amongst the 'burnt clay and daub' from the 1971 excavations (more briquetage may actually have been present but it is not clear what proportion of the 'burnt clay and daub' was kept).

Exactly what this involvement was is, however, unclear. The 1971 excavations lay approximately 200 m from the probable Romano-British fen-edge (FIG. 3), and this area of settlement cannot have been involved in the primary stages of production as this is known to have occurred beside tidal creeks in intertidal marshes.[142] Not a single Romano-British saltern has been recorded to the south of the Polden Hills, and while in part this may reflect the greater amount of archaeological work that has been carried out in areas such as the Brue valley and the North Somerset Levels, Romano-British salterns are a very distinctive phenomenon and, if they had occurred in the Parrett valley, then they will have been observed in the side of drainage ditches as is the case in the Brue valley.[143] The reasons why briquetage moves away from salt production sites is not altogether clear.[144] Vessel fragments could be derived from containers used to transport the salt and this is well attested in the prehistoric period in southern Britain and the West Midlands, although such vessels are not found in Somerset. The movement inland of other categories of briquetage in areas such as Essex, including fragments of pedestals, pans and other oven furniture, might relate to the final stages of salt production, such as refining and drying, or the bringing in of equipment from production sites over winter.

'SUB-ROMAN' OCCUPATION?

The lack of distinctive late Roman shelly ware and impressed decorated Oxfordshire vessels, along with the coin sequence stopping in the third quarter of the fourth century (the latest

[139] Rippon 2000a.
[140] Rippon 1997; 2000b; 2006.
[141] Rippon 2000b, 136–7.
[142] Leech *et al*. 1983; Rippon 2000a; 2000b; 2006.
[143] e.g. Leech 1977b; Leech *et al*. 1983.
[144] Rippon 2000b, 102; two possible fragments of unspecified form have even been recovered from Catsgore (Leech 1982b, 175).

coins being three of Valentinian I (A.D. 367–375)), suggests that the site was abandoned by the 370s. At the time of the excavation, there was some speculation that there may have been fifth- to sixth-century occupation on the site but this cannot be substantiated. The published interim report refers to some storage jars and amphorae that were comparable in fabric with imported Mediterranean wares of *c*. A.D. 500 'recently' found at Cadbury Congresbury, but the re-examination of the amphorae shows that they are all dated to within the Roman period.[145] The unpublished typescript report refers to 'slight structures of stone and post-holes were found above the ruined walls' and in the 'yard', which raised the intriguing possibility of what in the past has been called 'squatter' or sub-Roman occupation on the site (i.e. very late Roman or early medieval). These features are difficult to identify in the other site records but a range of features in Area III that fits the description was clearly cut into layers of silty soil that sealed the Roman buildings and probably represents colluvium/hillwash, suggesting a substantial period of abandonment of the site before its reoccupation.

CONCLUSION

Crandon Bridge was one of the most important sites discovered as part of the pioneering project to record the archaeology along the line of the M5 motorway in the early years of 'rescue archaeology'. Whilst acknowledging the difficulties in writing up an excavation carried out 35 years ago, the speculation that the site may have functioned as a small port has been confirmed, though rather than warehouses, the excavated buildings appear to have had a domestic/industrial function. This is, in fact, no great surprise as they lie significantly upslope from where the waterfront must have been, which was probably close to the line of the modern King's Sedgemoor Drain. The geographical location of the site makes it an ideal candidate for a trans-shipment port on the supply route from south-east Dorset to the military establishment in Wales, which is supported by the high proportion of BB1 pottery and tesserae made from chalk whose closest outcrops are in that area. The evidence for domestic occupation and industrial activity, the plan of the buildings, their regular layout, and the overall extent of the site are in keeping with a small town rather than a specialised port. The analysis of this site, and placing it in its wider landscape context, has therefore served to confirm that rivers, estuaries and the coast played a major role in the trade networks of south-west Roman Britain, and it is likely that many more such coastal settlements await recognition or discovery.

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[145] Langdon and Fowler 1971; Timby, above.

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