

## THE ROMAN VILLA AT MINSTER IN THANET. PART 11: THE GLASS

ROSE BROADLEY

Abbey Farm Roman villa complex at Minster in Thanet was excavated between 1996 and 2004 jointly by the Kent Archaeological Society, the Trust for Thanet Archaeology and the Thanet Archaeological Society (**Fig. 1**). The site on the southern coast of the Isle of Thanet would have had commanding views over the southern section of the Wantsum channel, the main seaway to *Londinium*, and across to the fort at Richborough, the gateway to the province of *Britannia*. This report is the latest in a series revealing the results of both the excavations themselves and post-excavation research.

A total of 376 glass artefacts was recovered, comprising 125 sherds of vessel glass, 234 sherds of window glass, 16 unidentifiable sherds and one bead, with the majority dating to between the late first century and the early third century. However, at least six and up to ten of the vessel glass sherds are likely to be post-medieval and have not been studied further, leaving 366 fragments of Roman date and 115 Roman vessel sherds. It is important to be aware at the outset that even this considerable assemblage of Roman glass fragments is certainly only a fraction of the glass used on the site during the lifetime of the villa – the glass that missed collection and recycling at the time or at any later point in history. Each sherd of vessel glass and the bead have been recorded and catalogued individually, while the window glass has been treated as a bulk find and quantified by number of sherds and total weight per context. [The catalogue of glass finds at Abbey Farm can be found on the KAS website. Ed.]

### *Glass from vessels*

Forty-six fragments (40% of the Roman vessel glass from the site) are definitely or very probably from prismatic bottles (an umbrella term for glass bottles with square, rectangular or hexagonal cross sections), with the range encompassing large and small, blue-green and pale green, and the less common hexagonal form. The fragments include rims, bases, body sherds and handles (e.g. 72, AFM 03-7210) (**Fig. 2; Plate I**). The proportion of bottle glass falls right in the centre of the typical range for bottle fragments on first- and second-century Roman sites described by Price and Cottam: ‘30-50% of glass assemblages’ (1998, 195). Square bottles in particular were in widespread use from the arrival of the Romans in Britain to the end of the second century. Vertical scratches usually present on the bodies indicate that the bottles were ‘lifted in and out of a close-fitting wood or basketry

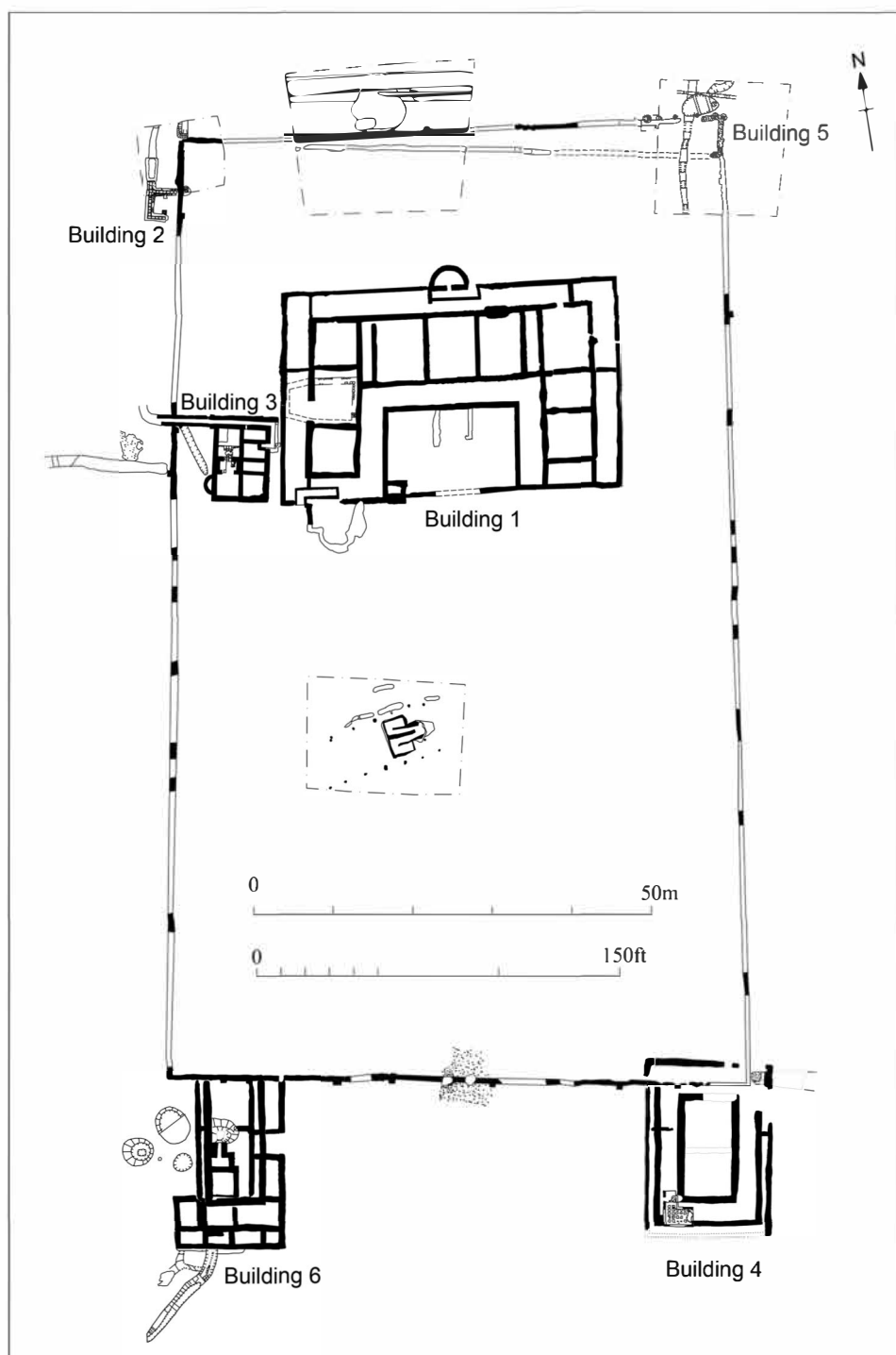


Fig. 1 Plan of the Minster villa complex.

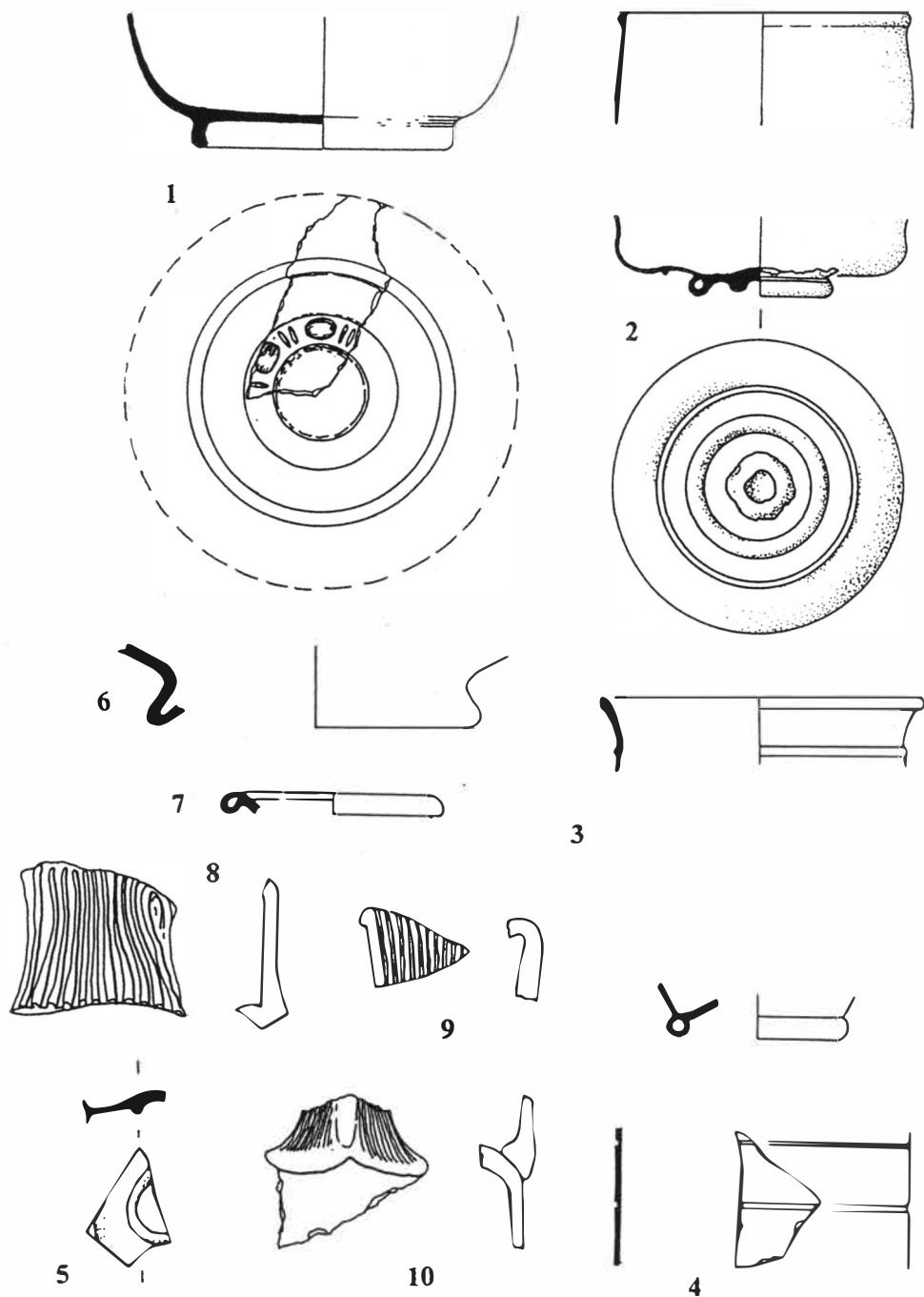


Fig. 2 A range of vessel glass from Minster villa, including colourless cup and bowl fragments, and sherds from jars and bottles (D. Perkins).

2.1 is 5, AFM 96-45; 2.2 is 23a-c, AFM 98-246 SF29; 2.3 is 17b, AFM 98-221 SF523; 2.4 is 18, AFM 98-23 SF24; 2.5 is 22a, AFM 98-246 SF28; 2.6 is 19a-c, AFM 98-240 SF25; 2.7 is 6, AFM 97 unstratified, between Room 18 and Building 3 SF42; 2.8 is 9, AFM 97-1021 SF12; 2.9 is 13a, AFM 97-1022 SF17; 2.10 is 31, AFM 99-4073 SF13.



A large ribbon handle (72, AFM 03-7210) (J. Piddock).

container' (Price and Cottam 1998, 194), although we cannot prove exactly what they contained or how they were used.

Twenty-eight fragments (24% of the Roman vessel glass) are colourless tableware sherds, forming the second-largest sub-group within the vessel glass assemblage (Fig. 2, **Plate II**). Most are from fine cups and small bowls, although there is evidence for a colourless bottle with engraved decoration (Fig. 2.8, AFM 97-1021, SF12), a colourless jug (66a, AFM 03-7131), and one of two larger colourless plates or bowls (e.g. 79, AFM 04-7277). This type of material is also often found on villa sites and others where dining took place: for example, similar vessels have been recently found at a likely temple site at Augustine House, just outside the city walls at Canterbury (Broadley 2014, 62). The remaining 36% of the vessel fragments are generally not securely diagnostic, but certainly include a number of large jars or bottles, some smaller jars (e.g. Fig. 2.6) and an outstanding polychrome mosaic glass bowl (33a and b, AFM 99-9036, SF31, **Fig. 3, Plate III**).

Polychrome mosaic glass vessels of the kind found here had a very narrow period of popularity in the middle of the first century AD, *c.* 45-70. The technique was closely associated with several bowl types, although cups and plates were also produced. In this case the pattern featured opaque red, pale blue and black concentric circles on an opaque yellow ground. The original bowl or cup appears to have had a flat surface, distinct from the vertical ribs typical of pillar-moulded bowls. These vessels were manufactured using a series of discs of glass, sections sliced from a mosaic cane which were fused together into a larger disc. The larger disc was then reheated and 'sagged' or 'cast' over a hemispherical mould (e.g.



The base fragment from a colourless cast bowl with a base ring and a pattern of cut decoration on the base (5, AFM 96-45, top right), alongside three other sherds of colourless tableware all featuring a similar pattern (top left 79, AFM 04-7277; bottom left 35, AFM 01-5001 SF11; bottom right 68, AFM 03-7153) (J. Piddock).

Allen 1998, 7; Price and Cottam 1998, 11-12). A number of well-known examples were found at Colchester (e.g. Cool and Price 1995, 27-31; Niblett 1985, fig. 80, nos. 1 and 10), while another was found recently at the opposite end of Roman Britain at Chester Roman amphitheatre which was too small to show the wider pattern, but large enough to display bright red, yellow and green colours (Chester Amphitheatre Project). An illustration of the variety of colours and patterns known from Britain was provided by Price and Cottam (1998, plate 1). The two mosaic sherds were found in the lower filling of a re-cut of the boundary ditch, F. 9036, just outside the villa boundary to the north of Building 1 (Parfitt, Boast and Moody 2009, 350, figs 3 and 7; Minster Part 6), which also contained pottery dating to 70-140. This supports the obvious conclusion that the original vessel was used and broken in the principal villa building, and the fragments were then deposited in a suitable nearby open ditch, which would have been close by, but not visible from the main house. Unlike the majority of the vessel glass assemblage, the bowl or cup that produced these mosaic sherds was used and broken at the villa at the very beginning of the Roman period in Britain, at a time when the villa itself must have been very new.



The two polychrome mosaic glass sherds (33a and b, AFM 99-9036, SF31)  
(J. Piddock).

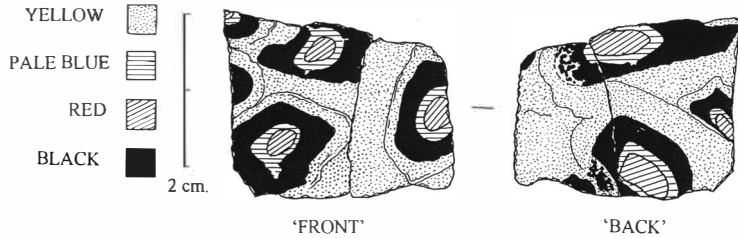


Fig. 3 The two polychrome mosaic glass sherds (33 a and b, AFM 99-9036, SF31) (D. Perkins)

The second key find indicating the status of some of the glass vessels in use at the villa is a base fragment from a colourless cast bowl with a base ring (5, AFM 96-45), dating to the late first or second century AD (Plate II). Characteristic horizontal polishing marks are visible on the inner and outer surfaces, and a pattern of cut decoration features on the base but not on the surviving portion of vessel wall, which is unusual. The pattern comprises a curved line (originally a circle), surrounded on the outside by a band of ground oval facets alternating with pairs of wheel-cut lines pointing from the centre of the base to the edge. This sherd was found in a demolition layer south of the south wall of Room 10 in the main villa building (Fig. 4), and it seems likely that it was used close by, this time probably

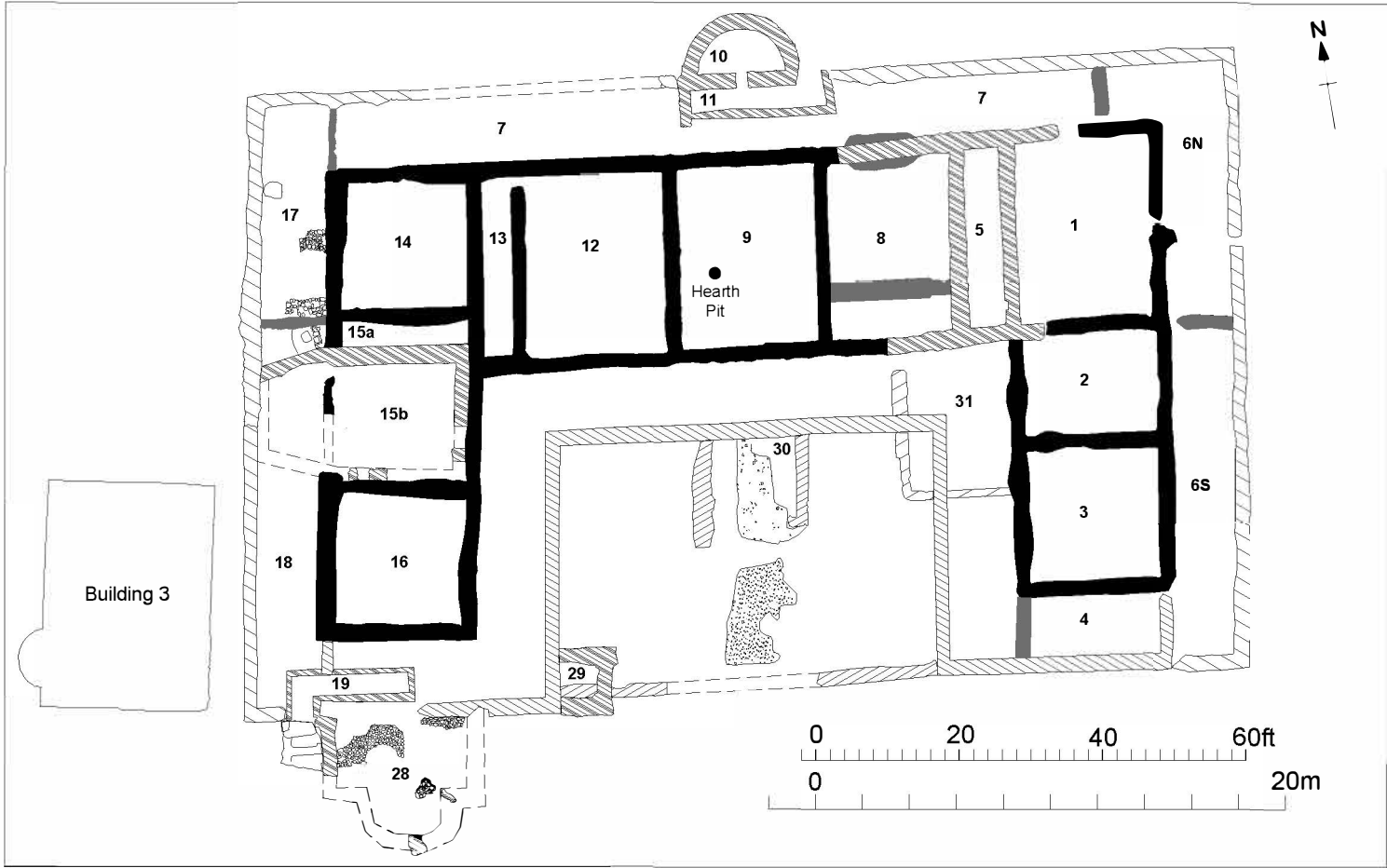


Fig. 4 Plan of Building 1.

during the second century. A similar vessel was found at Fishbourne Palace, West Sussex (Price and Cottam 1996, 172). This bowl and the mosaic bowl used here in the first century help to convey the type of settlement this was, the activities that took place here and the connections that were in place for the delivery of fragile imported goods. Furthermore, other colourless vessel fragments with a strikingly similar pattern of incised decoration were found near Buildings 4 and 6. A body sherd with a slightly larger version of the same pattern appearing above an angle on the vessel wall where it bends outwards, was found with unstratified material in the area of Building 4 (35, AFM 01-5001). A completely flat sherd showing part of a band of the same design between two concentric circles, probably from the base of a small bowl, was found in the fill of Room 35 in Building 6A (68, AFM 03-7153); (79, AFM 04-7277). Finally, a rim fragment featuring a very similar but larger band of ground oval facets alternating with pairs of vertical wheel-cut lines below the rim, and a pattern of facets and grooves cut into the rim itself, was found in the fill of robber trench F.7278 in Room 43 of Building 6A. The latter was probably from a large bowl as the estimated rim diameter is over 20cm. This specific decorative theme across four vessel sherds that appear to be from four different vessels points enticingly to the presence of a matching set of colourless tableware in use in the second century AD.

### *Window glass*

The total number of window glass sherds found at Abbey Farm villa is 234, weighing a total of 1,640g. This quantity is significant and certainly dwarfs the 17 sherds recently found at Folkestone Roman villa, for example. The 21 sherds found in the single context AFM 97-1077 represent a larger quantity of window glass than the entire assemblage of window glass from Folkestone. It is also, according to the provisional report written by the late Dave Perkins, the Project Director, several times as much as all of the other villas in Kent combined.

The Minster villa window glass falls broadly into two colour categories, blue-green (153 sherds, or 65% of the assemblage by sherd count) and another category best described as colourless to pale green (81 sherds, or 35% of the site sherd count), although the variation in the latter actually embraces pale greys and even pinkish hues (**Plate IV**). The thickness of the glass is a major factor in the appearance of colour, but the key point is that the colourless-pale green group is clearly distinct from the classic blue-green material, and both are present in quantity.

All of the window glass from Minster villa was made using the earlier manufacturing method known as 'cast glass', which produces panes that are glossy on one side and matt on the other, and was used from the first to third centuries AD. The method of production has been successfully reproduced in recent times by the glass makers Mark Taylor and David Hill, who described it clearly on their website and in *Glass News* (Taylor 2000). In summary, the gather of molten glass is poured onto a kiln bat (a flat surface probably made of ceramic tile or stone that can be manoeuvred in and out of the kiln on a rod), and then reheated repeatedly while metal rods and pincers were used to tease the glass from its natural disc shape into a rectangle. Some of the Minster villa sherds have clear undulations and indentations on the top side from such pouring, reheating and shaping (e.g. AFM





The window glass assemblage from context AFM 97-1077, SF23 (94), illustrating the range of colours and the size of some sherds (J. Piddock).



The largest window fragment found at Minster, from 94, AFM 97-1077, SF23 (J. Piddock).

96-39), and tool marks visible on the glossy side (AFM 97-1077, SF23). Many others have a visible texture from the casting surface on the matt side, and even inclusions from the surface material.

Several of the largest sherds come from one context – AFM 97-1077, SF23. The very largest amongst that context group measures 86.2 by 84.5mm, and weighs 52g (**Plate V**). This contextual assemblage of 21 sherds of window glass came from the fill of a pit in Room 14, in the north-western corner of the main villa building (Fig. 4). The most probable explanation for the larger than average size of the sherds is that they did not travel far to be discarded, suggesting that they were originally installed in this room or one nearby. There are only four large context assemblages of window glass from the Minster villa site, three of which are from the main house: 33 sherds from an ash deposit in Room 17 (90, AFM 97-1007), 24 sherds from a ‘late fill’ of Room 17 (93, AFM 97-1022), and 21 sherds from the fill of a pit in Room 14 mentioned above (94, AFM 97-1077, SF23). Interestingly, Rooms 14 and 17 were next to each other in the western corner of the main range of rooms of the villa (Fig. 4). Perhaps these were a convenient disposal point for



A selection of the re-worked window glass (top left AFM 96 u/s 'plough soil over apse' 84, SF142; bottom left 82, AFM 96 u/s SF140; top right 83, AFM 96 u/s SF141; bottom right 86, AFM 96-39 SF139) (J. Piddock).

window glass from the entire main building once occupation was in decline. The fourth large context assemblage is a group of 10 sherds from the fill of stoke pit F.7107 in Building 6A (136, AFM 03-7106). However, it is worth noting how frequently individual window glass sherds were found across the rest of site – of 82 contexts containing window glass, 46 (56%) contained only one fragment. Overall, the window glass is clearly concentrated in the main villa building, and to a lesser extent the associated bath house (Building 3). Other than the group of 10 in stoke pit F. 7107 in Building 6A, the distribution across the remainder of the site is essentially a light scatter.

Most interestingly, approximately 15 sherds, or 6% of the site window glass, seem to have been re-worked after their original use as window panes (**Plate VI**). A paper on this phenomenon has recently been published (Fünfschilling 2015), which notes that 're-worked glass sherds are known from all over the Roman Empire' (*ibid.*, 170). The function of flat sherds that appear to have been cut or grozed into specific shapes is unclear at present, although Fünfschilling suggests a range of possibilities that may all have applied in different times and places: for inlay work, as jewellery, and as tools for cutting or scraping (*ibid.*, 172-174). Fünfschilling describes the possible inlay work as perhaps relating to either furniture or walls, although there is

a lack of evidence at present for any examples *in situ* in either Britain or Switzerland (she uses glass from the Roman fort at *Augusta Raurica*, located on the south bank of the Rhine in modern Switzerland, as a case study). However, in the case of the villa at Minster, the four small white patches adhering to the matt side of one of the shaped sherds (82, AFM 96 unstratified, SF140) may provide a clue: could these be the remains of mortar used to install the glass in an inlaid scheme? One of the find labels may provide another clue: that of AFM 96 unstratified, SF142 (84) reads on the reverse ‘plough soil over apse’. Perhaps the other two similar unstratified sherds from 1996 were found in a similar location, and this label indicates the original home of the proposed inlaid glass feature. The ‘apse’ refers to a hemispherical room with painted wall plaster, *opus signinum* and underfloor heating (a hypocaust), which seems a fitting location. This room (Room 10, Fig. 4) is described in the previous report published on the main house (Building 1):

The full significance of Room 10 is still under consideration and more research is required. Its positioning astride the main axis of symmetry through the building, its apsidal form, the provision of under-floor heating and perhaps a mosaic, all clearly imply that this was an important, albeit small, room. At present, it can perhaps be provisionally suggested as being a small private chamber used for study or relaxation – possibly it was the villa owner’s personal office, positioned a little away from the bustle of the main house but still close to its principal rooms. (Parfitt *et al.* 2008, 321)

The evidence is slim, but the suggested scenario is both tempting and plausible.

There are other isolated examples of re-worked window glass from elsewhere on the site. For example, AFM 03-7208 (156) is an example of a colourless sherd that appears to have been cut to shape, and was found in the fill of robber pit F. 7215, in Rooms 42 and 43 of Building 6A – a context dated by pottery to 120-160+. Fünfschilling comments that at *Augusta Raurica* the finds there appear to be concentrated to two *insulae* interpreted as craft quarters (2015, 174), although she does not differentiate by shape between those suited as cutting tools, jewellery or inlay. Furthermore, it is challenging to interpret find locations and distribution of this material as contexts could relate to the ‘production’, or use, or both. However, the existence of reshaped window glass fragments at Minster villa is worth highlighting in the hope that progress can be made in this area in the future.

### *The bead*

The only bead from the site is a small and uneven blue-green melon bead, found in the fill of a robber trench (F. 7270) in Building 6A, a context that has been dated to 70-150. This bead type was very long-lived, enduring from the first century AD well into the early Anglo-Saxon period, and was more widely distributed on the Continent than in Britain (Brugmann 2004, 74).

### Discussion

The glass from the principal villa building, Building 1 (seasons 1996 and 1997) features substantial groups of both prismatic bottles and window glass (19 bottle fragments, or 41% of the site bottle assemblage, and 102 window fragments,

or 44% of the site assemblage). A noticeable concentration of prismatic bottle fragments was found in Context 1022, a late fill of Room 17 of the main villa (Fig. 4) dated to the third to fourth centuries, although the glass dates to the early third century at the latest. One possibility is that the bottle glass was gathered from across the site and deposited in a suitable location towards the end of the lifetime of the villa, or afterwards, perhaps at the same time as the concentration of window glass was deposited in the same room. A few fragments of good quality colourless tableware were also found, most notably the sherd from the bowl with the engraved pattern that matches fragments from Buildings 4 and 6 (5a, AFM 96-45, a demolition layer south of south wall of Room 10). All four sherds date from AD 65 to the end of the second century. Interestingly, Room 10 was the well-fitted apsidal room described above (Fig. 4), which also produced some of the window glass that was cut to shape for re-use, perhaps as inlay in a wall decoration. It is likely that the colourless vessels with cut decoration were used in the main villa building, and that the deposition of sherds under the later satellite buildings shows that some fragments were then disposed of in suitable pits and ditches either before or during construction of the later buildings. The most notable vessel glass from the site as a whole – the two fragments from the polychrome mosaic bowl – were also almost certainly used in the main house and then deposited in a recut of the ditch just outside the northern boundary wall, to the north of Building 1. As stated previously, mosaic bowls of this kind date to a narrow period in the mid-first century (c.45-70), so this is the earliest glass from the Minster villa site. The vessel was probably imported and used here in the first phase of occupation in the decades immediately following the Roman invasion.

The glass from the bathhouse, Building 3 (season 1998), features an array of colourless tableware, including drinking cups and bowls, and fragments from a large amber jar. The most closely dateable of the colourless cups are from the late second or third century AD. The sherds from this building constitute the majority of the colourless tableware on the site, which raises the question of interpretation: were the inhabitants using these vessels in the bathhouse, or was it a convenient point for disposing of glass broken in the main house? The latter is more likely, as more than half of the contexts in question are ditch fills, some of which were located just outside the villa enclosure, near the bath house rather than in it, and most of the rest were pit fills.

The assemblage of glass from Building 4 (seasons 1999 and 2001), located in the south-eastern corner of the villa precinct, is a comparatively small one dominated by generic bottle and window glass. The contrast between the Building 4 group and the assemblage from Building 6 (seasons 2003 and 2004) is one of scale, as the Building 6 assemblage is much larger, although again substantial sub-groups of bottles and window glass are the main features. Interestingly, nine tiny fragments of colourless glass were found in the hearth of Room 36 in Building 6A, although they are too small to identify. These appear to be an example of an *in situ* deposition of glass (micro-refuse) indicating that the glass was broken in this room. Finally, an assemblage of glass was retrieved in 2002, mainly from the fills of a ditch and shaft outside the north-eastern corner of the villa precinct. This group consists of the remains of several large, globular jars, more prismatic bottles and some window panes.

It is unsurprising that window glass and glass from everyday storage vessels such as prismatic bottles and jars dominate the site assemblage. This was a substantial complex of buildings, and both the glazing and supply and storage of bottled goods would have been on a scale in keeping with that throughout most of the long period of occupation. However, the presence of high quality imported glassware of the mid-first and late first to second century AD represents another key function of glass at villa settlements: fine dining in the main house. The presence of re-worked window glass, potentially for inlay work, is also significant. The majority of the glass from the overall site assemblage that can be identified and dated with any accuracy is from between the late first century and the early third century AD, although the polychrome mosaic bowl was here at the beginning of the villa's occupation in the middle of the first century. No glass from the site can be confidently allocated to the later Roman period, and it seems likely that glass use on the site declined from the turn of the third century to the mid-third century, when all of the principal buildings were abandoned. However, there is no doubt that more could be learned from the Minster villa glass assemblage and that there is potential for further research and comparison with other Romano-British sites in the future.

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