



# Forts, *Vici* and Related Extramural Activity in Wales and the Marches: Recent Discoveries at the Roman Fort of Pen y Gaer (Powys) and their Wider Implications\*

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## ABSTRACT

*Recent aerial photographs of Pen y Gaer have revealed significant new details about the fort and its extramural adjuncts. These provide a springboard for examining the wider implications for extramural activity outside other forts across Wales and the Marches, and for exploring the function and chronology of potentially official buildings within the wider landscape of communications and control. Such an approach invites comparison with other frontier regions.*

**Keywords:** forts; *vici*; extramural activity; Wales and the Marches; communications and control; Pen y Gaer

## INTRODUCTION

The publication of *Roman Frontiers in Wales and the Marches* in 2010 provided a valuable opportunity for reviewing the growing body of data concerning not just the military establishments themselves, but also their associated extramural adjuncts.<sup>1</sup> This had been greatly facilitated by the extensive application of geophysical survey at many Welsh sites, undertaken as part of Cadw's 'Roman Fort Environs Project'.<sup>2</sup> Since then, further useful

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<sup>1</sup> Burnham and Davies 2010.

<sup>2</sup> Hopewell 2005.

reviews have appeared concerning Hindwell Farm<sup>3</sup> and Caerau<sup>4</sup>, while some of the general issues have also been explored with respect to the excavations at the northern annexe and related settlement at the fort of Slack in West Yorkshire.<sup>5</sup> The extensive drought that affected Britain in 2018 provided an exceptional opportunity for aerial reconnaissance across Wales, resulting in several new discoveries of relevance to the Roman period.<sup>6</sup> During one long-distance flight undertaken in July by the Royal Commission on Ancient and Historical Monuments of Wales (RCAHMW), Toby Driver captured a remarkable series of images of Pen y Gaer, encompassing both the fort and its external adjuncts. This article seeks to present this evidence as a brief prelude to discussing its wider implications for our understanding of other extramural complexes across Wales and the Marches; such a review might also invite comparison with other frontier zones.

#### NEW EVIDENCE FROM PEN Y GAER (POWYS)

Pen y Gaer lies on a slight knoll, about halfway between the forts of Brecon Gaer and Abergavenny, some 2 km east of Bwlch and *c.* 500 m north of the modern A40. Though its remains were first recorded in the early nineteenth century,<sup>7</sup> the site's precise nature remained unresolved until small-scale excavations in 1966 examined what proved to be the north-eastern defences of a Roman fort, said to have been occupied during the period A.D. 80–130.<sup>8</sup> While additional data about the defences were forthcoming from aerial photography in 1975,<sup>9</sup> there the matter largely rested until the extramural areas were subjected to geophysical survey in 2005–06.<sup>10</sup> Areas north-west and north-east of the fort revealed only sporadic activity, whereas the two fields on its southern side, west of the modern lane, produced evidence indicative of extramural settlement, more than likely fronting the western side of a road leading south from the fort (FIG. 1). A possible building, identified *c.* 100 m south of the fort (Area A), was also investigated in 2007.<sup>11</sup> Further details emerged from continued excavations in 2011–12 (Areas B and C), extending both the 2007 trench and examining two further areas at right angles to the modern lane.<sup>12</sup> Buildings were identified in all the excavated areas, some multiphase, suggesting a degree of settlement longevity. Detailed dating will depend on an assessment of the finds, though it has been suggested that activity might have extended from the later first to later second century.<sup>13</sup>

The RCAHMW photographs, taken in 2018, together with those recorded by Mark Walters of Skywest Surveys when the site was subsequently overflowed with a drone, have radically transformed this picture (FIGS 2–4). Details of the fort plan are now much clearer, demonstrating that it enclosed *c.* 1.6 ha (3.9 acres) and faced east; various internal structures are also visible, including part of the *principia*, two probable barrack blocks arranged *per scamna* in the north-eastern corner of the *praetentura* and at least two more within the *retentura*, this time aligned *per strigas*. Far more significant, however, is the new detail that has emerged about the fort's extramural adjuncts, hitherto only certainly established west of the

<sup>3</sup> Britnell and Jones 2019.

<sup>4</sup> Hankinson and Britnell 2020.

<sup>5</sup> Bidwell *et al.* 2018.

<sup>6</sup> Driver *et al.* 2020.

<sup>7</sup> RCAHMW 1986, 146–9.

<sup>8</sup> Crossley 1968; 1969.

<sup>9</sup> St Joseph 1977, 150–1.

<sup>10</sup> Silvester and Hankinson 2006; Jones and Hankinson (2012, 3) note a few minor investigations between 1975 and 2005, though none added details of significance to the picture.

<sup>11</sup> Hankinson 2007.

<sup>12</sup> Jones and Hankinson 2012.

<sup>13</sup> Silvester 2010, 276.

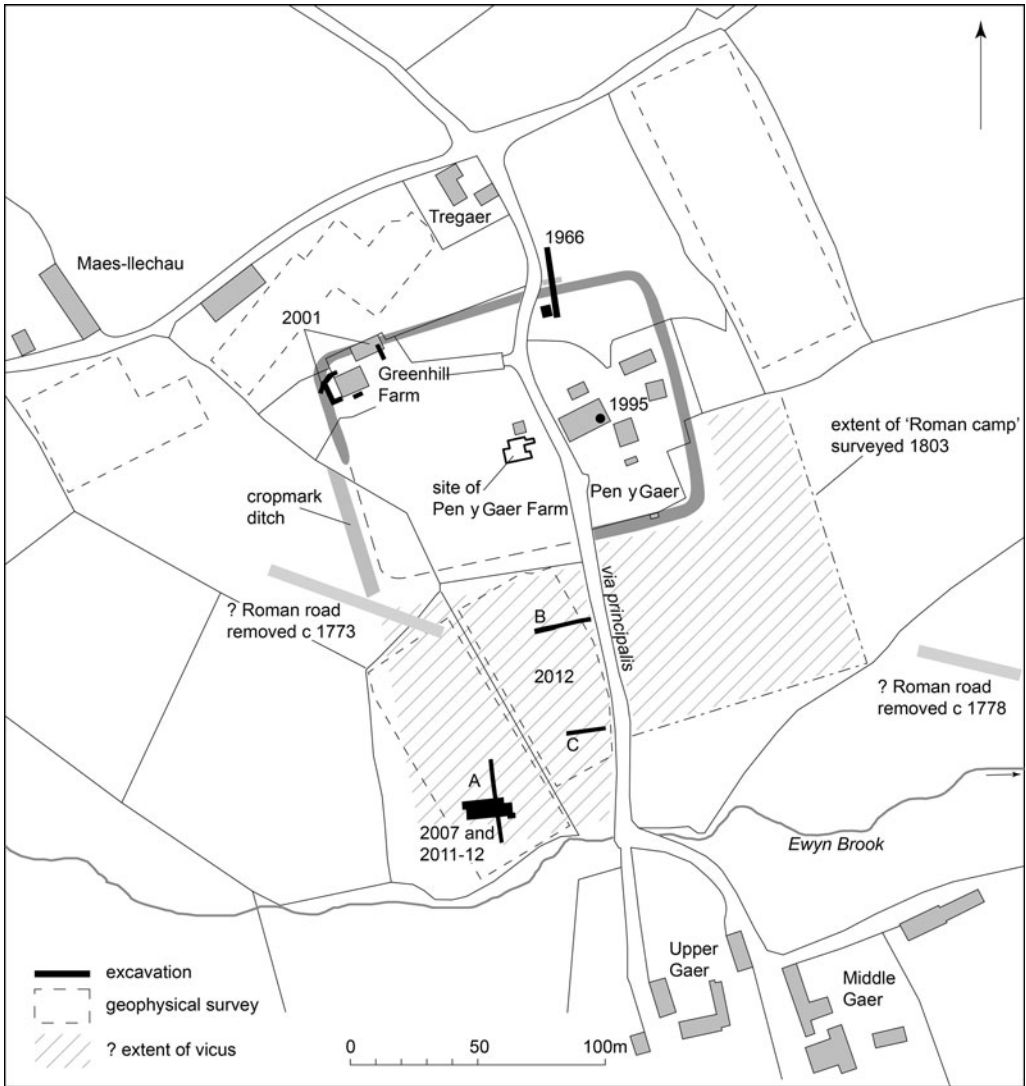


FIG. 1. Plan of Pen y Gaer as known prior to 2018 aerial photographs (after Jones and Hankinson 2012, fig. 1, with minor amendments). (Courtesy of Clwyd-Powys Archaeological Trust)

modern lane. Three distinct areas can be discerned: the settlement area south of the fort; a walled annexe; and a complex of buildings outside and south of the annexe.

It is now clear that extramural activity south of the fort also extended east of the modern lane. Here, several stone-built rectangular buildings are visible, their gable ends facing on to what was presumably an extension of the fort's *via principalis*, which would have functioned as the principal road within the civilian *vicus*. The excavations to the west in 2007 had already shown that similar buildings extended at least 100 m south of the fort, with subsidiary streets set at right angles to the presumed road. Pen y Gaer thus parallels the situation at many other forts, a pattern which will be discussed further below. No significant settlement features were recorded in the photographs along



FIG. 2. Pen y Gaer: general view of fort and related features from the east, taken on 19 July 2018. (Crown Copyright: RCAHMW AP\_2018\_5578)

the fort's northern and north-eastern sides, where geophysical survey had also proved unproductive.

Along the fort's eastern and south-eastern sides, however, where little activity had previously been recorded, significant new discoveries included a walled annexe and a series of large buildings. The single-ditched, walled annexe, attached to the fort's eastern side, extended up to 56 m along the southern side of the presumed extension of the *via praetoria*. It contained at least one stone building. While any interpretation of its character and function is somewhat hampered by the overlying vegetation, one possibility might be a freestanding bath-house outside the *porta praetoria*; elsewhere, such a location could be occupied by a courtyard building and an associated bath-house, though here there does not seem to be adequate space for such a combination.

Outside the annexe, and separated from it by what may be a road following the line of its south-eastern defences, lay at least two and possibly three large structures, which are clearly discrete from the rest of the civilian activity to the west; taken together as a distinctive group, they currently have few parallels among the extramural buildings known at other forts in Wales (FIG. 4). At the northern end lies a courtyard building, measuring *c.* 28 by 25 m, with a range of rooms across its southern side (area A on FIG. 3). This is apparently linked to a second courtyard structure immediately to the south, measuring *c.* 42 by 33 m, with a central yard bounded by ranges of rooms along its western, southern and eastern sides (area B). The drone photographs suggest that they may be part of a single complex. To the east of the northern

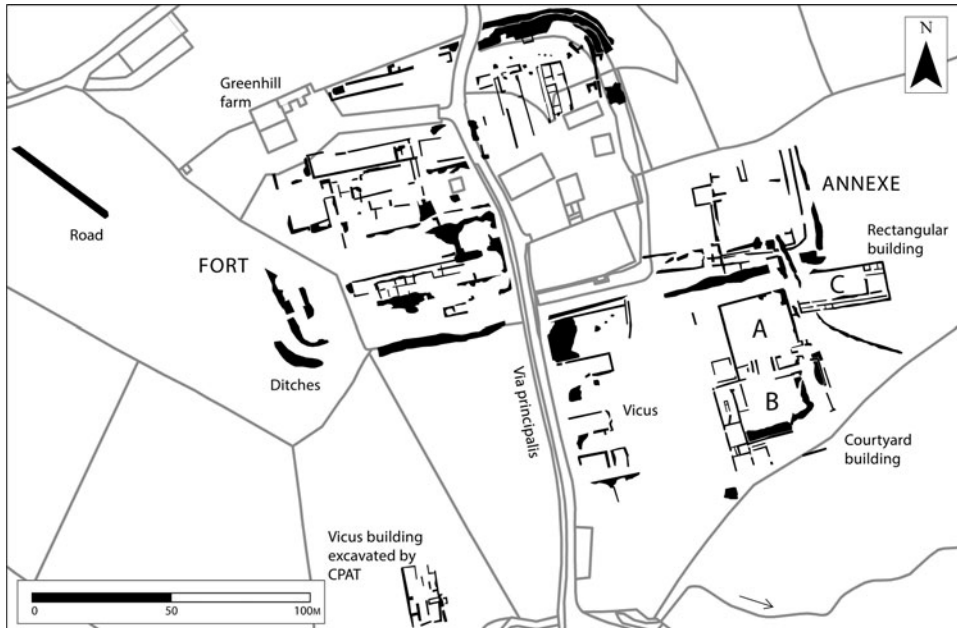


FIG. 3. Pen y Gaer: plot of cropmarks revealed on aerial photographs (drawn by Toby Driver). (Crown Copyright RCAHMW, Ordnance Survey licence number: 100022206)

building, and set at a slightly oblique angle, is a rectangular, multi-roomed structure aligned east–west (area C). Measuring 34 by 15 m, it apparently had a ‘corridor’ along its southern side and one large and three smaller rooms at its eastern end. Such evidence raises intriguing questions about the nature and function of such buildings at Pen y Gaer and at other sites across Wales and the Marches, and beyond.

#### WIDER IMPLICATIONS FOR EXTRAMURAL ACTIVITY

(see FIG. 5 for Welsh sites mentioned in text)

Any discussion of the implications of this new evidence from Pen y Gaer is necessarily hampered by the absence of all but small-scale excavations at the site and by a similar lack of any recent large-scale work in the extramural areas associated with other forts across Wales and the Marches. What evidence there is, however, has an enormous potential to inform us about the character and development of extramural complexes during the critical Flavian to Trajanic era in Britain, by way of comparison and contrast with the better-known but later complexes in the northern part of the province; it is equally important because parallel data from early sites across southern England are very patchy, though the recently discovered timber buildings outside the Neronian to early Flavian fort at Okehampton in Devon offer some interesting points of comparison in terms of their location and plan.<sup>14</sup>

Two aspects of the new evidence from Pen y Gaer are particularly striking. The first is the self-evident separation of the three distinct elements of the fort’s extramural adjuncts – the annexe,

<sup>14</sup> Salvatore 2019, 449, fig. 30.





FIG. 4. Pen y Gaer: vertical drone photograph of major extra-mural buildings, north to the right, taken on 26 July 2018. (Courtesy of Mark Walters, Skywest Surveys)

the likely civilian settlement and what would seem to be discrete official structures – which must surely imply oversight in the overall planning and layout of the different areas. The second is the presence of a distinctive complex of buildings to the south of the annexe, which must have exercised specialised functions within a wider landscape. Both aspects raise interesting questions about the picture elsewhere, both in Wales and beyond. The recognition of some sort of spatial separation is not entirely new, however. In an earlier discussion of extramural settlement, the authors had already noted a very similar threefold split at Caerhun and elsewhere, as well as a tendency for likely official buildings to occupy discrete locations away from the zones of civilian activity, which generally straddled the main roads extending out from the fort.<sup>15</sup> That study did not specifically consider the question of fort annexes, as they were clearly seen as being, for the most part, an integral feature of the military or official sphere of operations;<sup>16</sup> the only exception to this concerned those sites where the annexe could be shown to house substantial official structures. The importance of such annexes in a Welsh context has, however, featured in a recent discussion of the annexe and related features at Slack, which has done much to redress the imbalance.<sup>17</sup> In what follows, each of the discrete elements will be treated separately, before moving on to explore the function and wider implications of the various large building complexes.

<sup>15</sup> Burnham and Davies 2010, 106–14.

<sup>16</sup> Burnham and Davies 2010, 75.

<sup>17</sup> Bidwell *et al.* 2018.

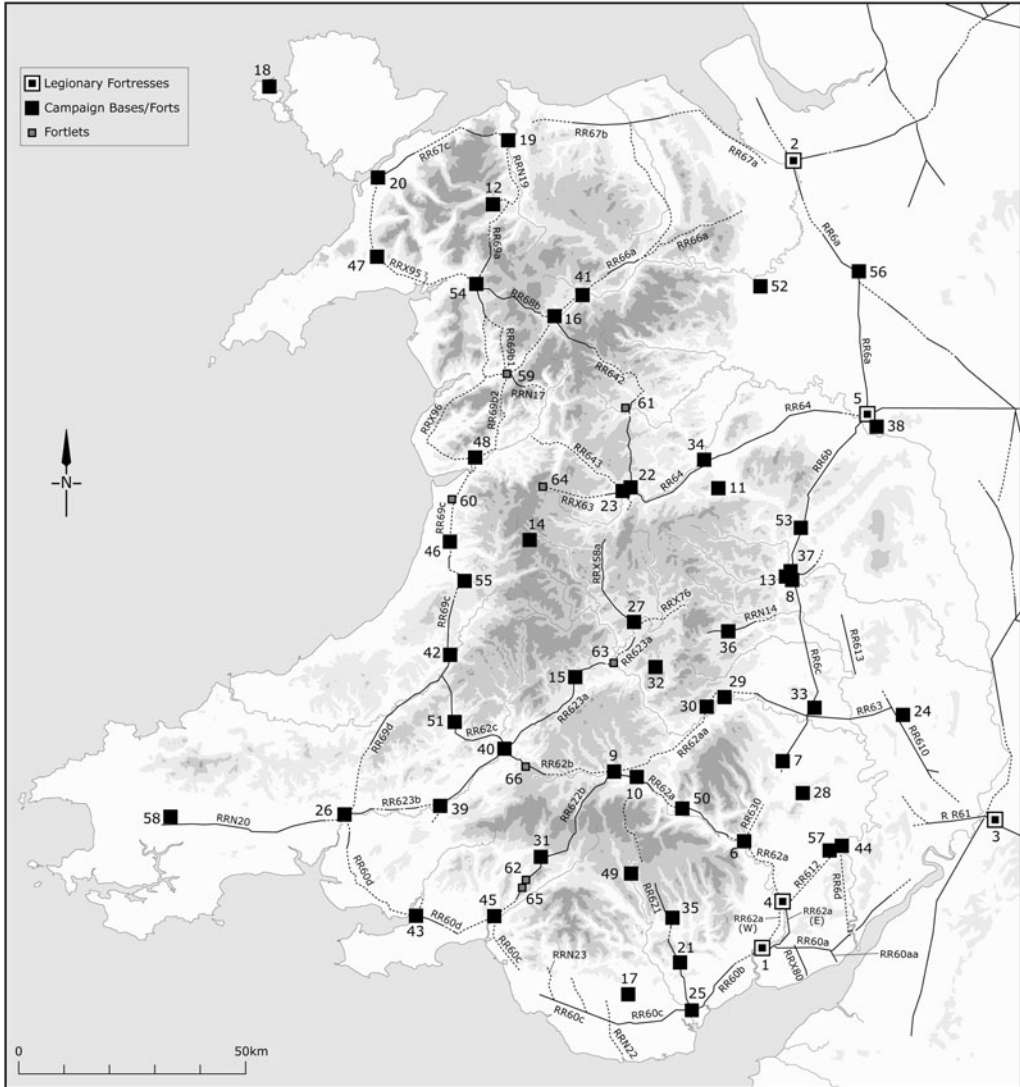


FIG. 5. **Fortresses:** 1. Caerleon; 2. Chester; 3. Kingsholm and Gloucester; 4. Usk; 5. Wroxeter. **Forts:** 6. Abergavenny; 7. Blackbush Farm; 8. Brandon Camp; 9. Brecon Gaer; 10. Cefn Brynich; 11. Brompton/Pentrehyling; 12. Bryn y Gefelliau; 13. Buckton; 14. Cae Gaer; 15. Caerau (Beulah); 16. Caer Gai; 17. Caerwanaf; 18. Caer Gybi; 19. Caerhun; 20. Caernarfon; 21. Caerphilly; 22. Caersws I (Llwyn-y-brain); 23. Caersws II; 24. Canon Frome/Stretton Grandison; 25. Cardiff; 26. Carmarthen; 27. Castell Collen; 28. Castlefield Farm, Kentchurch; 29. Clifford and Whitehouse Farm, Clifford; 30. Clyro; 31. Coelbren; 32. Colwyn Castle; 33. Credenhill; 34. Forden Gaer; 35. Gelligaer I and II; 36. Hindwell Farm; 37. Jay Lane; 38. Leighton; 39. Llandeilo; 40. Llandovery; 41. Llanfor; 42. Llanio; 43. Loughor; 44. Monmouth; 45. Neath; 46. Pen-llwyn; 47. Pen Llystyn; 48. Pennal (Cefn Gaer); 49. Penydarren; 50. Pen y Gaer; 51. Pumsaint; 52. Rhyn Park; 53. Stretford Bridge; 54. Tomen y Mur; 55. Trawscoed; 56. Whitchurch; 57. Wonastow; 58. Wiston. **Fortlets:** 59. Briithdir; 60. Erglodd; 61. Hafan, Llanerfyl; 62. Hirfynydd; 63. Penmincae; 64. Pen y Crocbren; 65. Rheola Forest; 66. Waun-ddu (Y Pigwn III) (after Burnham and Davies 2010, fig. 1.9, with amendments; drawn by Hubert Wilson, Dyfed Archaeological Trust).

## ANNEXES

The walled annexe at Pen y Gaer clearly occupies a discrete location along the southern side of the road forming an eastward extension of the *via praetoria*, well away from the presumed civilian activity outside the *porta principalis dextra*. Its relatively small size and the presence of at least one internal stone building makes it highly likely that its origin and function should lie in the military or official sphere. It should be emphasised, however, that the precise relationship between the fort, walled annexe and building has not been tested by excavation, so their relative chronology must remain uncertain; in this respect, Pen y Gaer does not stand alone. Across Wales and the Marches the evidence now clearly indicates that annexes of one form or another were especially common from the later first century onwards. Indeed, of the 34 forts included in TABLE 1, some 20 have now produced either clear or suggestive traces of at least one attached annexe (some have two), most self-evidently discrete from any of the areas characteristically associated with civilian activity, which typically lay outside at least one of the other gates of their respective forts.<sup>18</sup>

While it is difficult to characterise all the examples, some trends are apparent. Where their overall size can be determined, the vast majority are smaller in relative terms than their respective forts; one of the smallest, at Caerhun, is only 0.17 ha, while the larger of the two at Pennal encloses 0.68 ha.<sup>19</sup> In a handful of cases, as at Pen y Gaer, relatively small annexes only occupy part of one side of the fort; those known at Caer Gai (that on the south-western side),<sup>20</sup> Caerhun,<sup>21</sup> Llandeilo II<sup>22</sup> and Tomen y Mur<sup>23</sup> seem to be largely devoid of any significant internal activity, much like the two successive (if slightly larger) annexes on the north-eastern side at Pennal.<sup>24</sup> A more distinctive group extended across the whole of one side. In the case of those at Abergavenny,<sup>25</sup> Caersws I and II,<sup>26</sup> Cefn Brynich,<sup>27</sup> Pen Llwyn<sup>28</sup> and Pen Llystyn<sup>29</sup> the evidence for internal activity is at best limited and so its precise character and status remains uncertain. By contrast, similar annexes at Bryn y Gefeiliau (represented by the *retentura* of the original fort),<sup>30</sup> Buckton,<sup>31</sup> Caer Gai (that on the south-eastern side)<sup>32</sup> and Pennal (that on the south-western side)<sup>33</sup> have all been shown to have housed a distinctive architectural complex, comprising both a bath-house and a substantial courtyard building; the annexe at Pen y Gaer also contained at least one stone building, as did that on the southern side at Hindwell Farm,<sup>34</sup> while the secondary annexe at Gelligaer II incorporated a bath-house and one other complex of uncertain character.<sup>35</sup> In all these cases the location of the annexe, well away from the apparent areas of civilian activity, and the character of the associated buildings would seem to indicate that they belonged in the official rather than the civilian

<sup>18</sup> cf. Sommer 2006, 118–23.

<sup>19</sup> cf. Burnham and Davies 2010, 75.

<sup>20</sup> Hopewell 2010b, fig. 7.39.

<sup>21</sup> Hopewell 2010c, fig. 7.44.

<sup>22</sup> Hughes 2010, fig. 7.78.

<sup>23</sup> Crew and Webster 2010, fig. 7.110.

<sup>24</sup> Hopewell 2010e, fig. 7.99.

<sup>25</sup> Olding 2010, fig. 7.23.

<sup>26</sup> Davies 2010a, fig. 7.52; Jones 2010, fig. 7.54.

<sup>27</sup> Davies and Driver 2015, fig. 12.

<sup>28</sup> Davies 2010d, fig. 7.94.

<sup>29</sup> Burnham 2010a, fig. 7.95.

<sup>30</sup> Hopewell 2010a, fig. 7.30.

<sup>31</sup> Berry 2010, fig. 7.32.

<sup>32</sup> Hopewell 2010b, fig. 7.39.

<sup>33</sup> Hopewell 2010e, fig. 7.99.

<sup>34</sup> Britnell and Jones 2019, fig. 6.

<sup>35</sup> Brewer 2010, fig. 7.73.



sphere. As will become clear below, however, such buildings are also found as freestanding elements at other sites, which raises interesting questions as to what factors determined why some were defended and others not.

Two exceptions need closer scrutiny. One is represented by the Neronian fort at Hindwell Farm, where recent excavation has suggested that the civilian activity to the east of the fort was enclosed within a defensive circuit, represented by a triple-ditched enclosure and the remains of a possible gateway.<sup>36</sup> If correctly interpreted, this would seem to represent a surprisingly early example of a defended *vicus* of the type discussed at Slack,<sup>37</sup> though the curving nature of the circuit is unusual and might indicate a civilian rather than an official enterprise in an exposed military location. The second example is represented by the apparently larger annexe located on the north-eastern side of the fort at Caerau, which (among other structures) also enclosed a substantial courtyard building and a probable bath-house, all discrete from the main focus of civilian settlement on the north-western side,<sup>38</sup> though issues remain over the precise character of the presumed defences along its north-western and north-eastern sides, if correctly identified as an annexe (rather than a simple boundary ditch), then its extent and some of its internal elements might suggest that it was also designed to enclose an additional area of civilian settlement. Were it not for the meandering nature of the ditch along the western and northern sides of the fort at Caerhun, this might have been considered in the same light.<sup>39</sup>

In general there appears to be no absolute preference for the location of these different annexes. Of those where it is possible to establish the direction in which the fort faces, nine had annexes outside the *porta praetoria*, seven had them outside the *porta decumana*, while only three and one respectively were located outside the *porta principalis dextra* and *porta principalis sinistra*, precisely those sides that were especially favoured when it came to the location of most extramural occupation; this point will be explored further below. The absence of any locational preference is particularly evident in the case of the smallest of the annexes. Interestingly, however, of the eight forts with annexes incorporating one or more large building, five lay outside the *porta praetoria* (Buckton; Caer Gai; Hindwell Farm; Pennal; Pen y Gaer); this clearly indicates a specific preference for this particular location, which was also favoured for several similar freestanding, but unenclosed, structures. Only two forts had similar annexes and buildings outside the *porta decumana* (Bryn y Gefelliau and Caerau), while that at Gelligaer was located outside the *porta principalis dextra*.

While much has been written about the location and function of annexes, a good deal of it with reference to those on the Antonine Wall, the overwhelming impression from the Welsh evidence suggests that, with few exceptions, they should belong exclusively in the military or official sphere of operations: the majority are all relatively small; they are frequently located on a different side of the fort from that occupied by the recognisable civilian settlement; many have revealed limited, if any, trace of internal settlement activity, and, where there is evidence, its status remains somewhat ephemeral or uncertain; some were clearly designed, however, to enclose substantial buildings and/or bath-houses to the exclusion of any other structures. With the possible exceptions of Hindwell Farm and Caerau, none conforms to the evidence recently rehearsed at Slack, where the annexe clearly enclosed a defended *vicus*. This evidence is very much in line with that presented by C.S. Sommer and W.S. Hanson, both of whom conclude that, without evidence to the contrary, such annexes should be seen as discrete from any associated extramural civilian settlement and that the two elements were almost certainly designed to serve very different purposes.<sup>40</sup>

<sup>36</sup> Britnell and Jones 2019, figs 6–7.

<sup>37</sup> Bidwell *et al.* 2018.

<sup>38</sup> Hankinson and Britnell 2020.

<sup>39</sup> Hopewell 2010c, fig. 7.44.

<sup>40</sup> Sommer 2006, 118–23; Hanson 2007, 668.

## CIVILIAN SETTLEMENT

Both the geophysical and aerial surveys at Pen y Gaer have shown clearly that a discrete area of extramural activity developed along the road extending south of the fort's *porta principalis dextra*. The overwhelming impression is of a series of strip-buildings arranged end-on to the frontages, some of which have been shown by excavation to have been associated with small-scale industrial activity. There can be little doubt that this represents an undefended civilian *vicus* of a type well known elsewhere in Britain and beyond.<sup>41</sup> Of the 34 forts included in TABLE 1, some 20 have produced definite or suggestive evidence for comparable extramural settlements extending along one or more of the approach roads, while the precise character and status of the activity at a further five remains uncertain; at the remaining nine the apparent absence of settlement evidence to date should not necessarily be taken as evidence of absence in the past.

While much of the evidence for specific sites in Wales and the Marches has been well covered elsewhere,<sup>42</sup> a few general points might usefully be rehearsed here. First, as at Pen y Gaer, such extramural *vici* consistently take the form of discrete ribbon settlements extending along one or more of the roads leading out from their respective forts. In this respect they clearly conform to two of the characteristic types identified by Sommer,<sup>43</sup> though of these the street or ribbon type is cumulatively more common across Wales than his tangent type. Typical examples include the early site at Hindwell Farm,<sup>44</sup> the short-lived fort at Llanfor<sup>45</sup> and the developed complexes at Brecon Gaer,<sup>46</sup> Caerau,<sup>47</sup> Caer Gai,<sup>48</sup> Caerhun,<sup>49</sup> Llanio,<sup>50</sup> Pennal,<sup>51</sup> Tomen y Mur<sup>52</sup> and Trawscoed,<sup>53</sup> some with additional internal streets and lanes. With the enigmatic early exception of Hindwell Farm (and less certainly Caerau), none of these extramural *vici* can be shown to have been set within a defended enclosure.

A second point concerns the location of such extramural *vici*. Where this can be reliably assessed from TABLE 1, it exhibits a marked (though not exclusive) preference for one or other of the *portae principales*: these latter together account for some 17 examples – nine and eight respectively outside the *porta principalis dextra* and *porta principalis sinistra* – followed by six examples outside the *porta praetoria* and only three outside the *porta decumana*. Such a preference clearly reinforces the point, already noted above, that *vici* and annexes either lay on different sides of their respective forts or were sufficiently discrete one from the other to indicate that they operated in different spheres; this latter aspect is particularly well attested at Pennal, where the line of the road leading out from the *porta decumana* (and therefore its associated settlement) was clearly determined and deflected by two apparently successive, but otherwise empty, annexes.<sup>54</sup> While the preference for one or other of the *portae principales* no doubt partly reflects official oversight and control, it should be remembered that such *vici* were also focused on the main approaches by which incoming traffic would have gained access both to their respective forts and thereby to the granaries.

<sup>41</sup> cf. Sommer 1984; 2006.

<sup>42</sup> cf. Burnham and Davies 2010, 106–20

<sup>43</sup> Sommer 2006, 97–103.

<sup>44</sup> Britnell and Jones 2019, fig. 6.

<sup>45</sup> Hopewell 2010d, fig. 7.84.

<sup>46</sup> Casey and Davies 2010, fig. 7.27.

<sup>47</sup> Hankinson and Britnell 2020.

<sup>48</sup> Hopewell 2010b, fig. 7.39.

<sup>49</sup> Hopewell 2010c, fig. 7.44.

<sup>50</sup> Davies 2010c, fig. 7.85.

<sup>51</sup> Hopewell 2010e, fig. 7.99.

<sup>52</sup> Crew and Webster 2010, fig. 7.111.

<sup>53</sup> Davies 2010e, fig. 7.114.

<sup>54</sup> Hopewell 2010e, fig. 7.99.

A third aspect concerns such issues as internal layout, patterns of land use and the nature of the internal buildings. Given the importance of the road frontages in such ribbon-type settlements, it is no surprise to find that they were the focus of intensive occupation, a point consistently reinforced by aerial photography, geophysical survey and limited excavation. Several trends are apparent:<sup>55</sup> the dominant impression is one of large numbers of rectilinear plots or structures arranged end-on to the frontages, which thereby maximised the number of properties in the available space; where discernible or excavated, many of the associated structures tend to be strip-buildings, often with evidence of small-scale industrial activity; such buildings often stand at the street end of an associated plot or yard extending away from the frontage, perhaps with a boundary marker towards the rear. A typical example at Caerau should suffice to avoid unnecessary repetition: geophysical survey here has revealed just such a layout, with plots extending up to 30 m away from the road frontages, over a distance of *c.* 150 m north-west of the fort's *porta principalis dextra*, with numerous anomalies indicating the presence of substantial hearths.<sup>56</sup>

One further distinctive feature at Caerau is the absence of any obviously larger buildings within what can be characterised as the extramural *vicus*, as these are otherwise found discretely located to the north-east, within a possible annexe outside the *porta decumana*. This reinforces the separation already noted at Pen y Gaer and raises interesting questions which are explored below.

#### OFFICIAL BUILDINGS

In their previous discussions the authors chose to treat larger buildings – principally courtyard structures and bath-houses – as integral elements alongside their respective *vici*, though they recognised that their location was not infrequently peripheral or secondary to the main areas of settlement.<sup>57</sup> The discovery of a very distinctive complex of buildings to the south of the annexe at Pen y Gaer, again clearly discrete from the extramural *vicus*, must surely reinforce the need for a reassessment of such issues as location and potential function, not just here but more widely across Wales and beyond. As [TABLE 1](#) emphasises, however, this is not an easy task, particularly where details about the plan and location of the different extramural components remain uncertain in the face of limited excavation.

Despite the difficulties, it is still possible to detect some distinctive trends. The presence of various courtyard buildings and bath-houses, whether in combination or independently within what must be official fort annexes, needs no further discussion here, except to note the preference for their location outside the *porta praetoria*; rather, our primary interest must be the presence of similar such buildings (presumably with similar functions?) as apparently freestanding, but unenclosed, elements within the extramural fabric of their respective forts. The *porta praetoria* was certainly favoured in several other cases: at Tomen y Mur, for instance, a bath-house and what has been identified as a possible courtyard structure lay on the south-eastern side of the fort,<sup>58</sup> while at Caerhun a bath-house lay outside the eastern side of the fort, with a larger building of uncertain plan to the north.<sup>59</sup> In both cases they lay on a different side to that on which the extramural *vicus* was located. Freestanding bath-houses not infrequently occupied similar locations outside the *porta praetoria*: examples include Caernarfon,<sup>60</sup> Caersws II,<sup>61</sup> Castell Collen (outside the south-eastern corner of

<sup>55</sup> cf. Burnham and Davies 2010, 110–20.

<sup>56</sup> Webster and Silvester 2010, fig. 7.37.

<sup>57</sup> Burnham and Davies 2010, 112.

<sup>58</sup> Crew and Webster 2010, fig. 7.110.

<sup>59</sup> Hopewell 2010c, fig. 7.44.

<sup>60</sup> Davies and Casey 2010, fig. 7.47.

<sup>61</sup> Jones 2010, fig. 7.54.

the fort)<sup>62</sup> and Llanio;<sup>63</sup> this might also be the case at Penydarren.<sup>64</sup> In some cases, however, no doubt conditioned in part by the availability of the water supply, such baths lay outside other gates, as may have occurred at Abergavenny,<sup>65</sup> Llandovery<sup>66</sup> and Pumsaint.<sup>67</sup> In virtually all these examples, the chosen location lay on a different side to that on which the extramural *vicus* lay.

Of particular interest in this context is the discovery at Pennal of a second possible courtyard building (in addition to that in the south-western annexe), lying immediately outside the *porta principalis dextra*, south-west of the road extending through the *vicus*.<sup>68</sup> An equally interesting group of buildings has also been recognised at Brecon Gaer, all of them lying immediately outside the fort's *porta principalis sinistra*, west of the road extending through the *vicus*: two are known from R.E.M. Wheeler's excavations, one with a complex of rooms of several phases around a central hall or courtyard (Building B) and the other said to be a bath-house (C); geophysical survey has added a second courtyard structure east of Building B, set back *c.* 25 m from the extramural road.<sup>69</sup> With the complex of buildings at Pen y Gaer in mind, it might also be worth noting that within the presumed annexe at Caerau, north-east of the fort, at least three buildings are represented in the geophysics; they comprised not just a courtyard building and possible bath-house, but also a long rectangular building with traces of numerous internal partitions, particularly along its north-eastern side.<sup>70</sup>

Several other possible buildings are noted in TABLE 1, but in most cases their plan is too poorly known for detailed discussion here. Enough has been said, however, to indicate that the majority of the examples discussed above were located in peripheral or secondary locations, either discrete from areas occupied by the extramural *vici* or else set back from the immediate frontages of the external roads. This must surely indicate that their location was primarily determined by their military or official associations, rather than by any desire to integrate them within the fabric of the extramural settlements; it must surely also have had a bearing on their wider functions, a point that is considered further below. In the absence of excavation at all but a handful of sites, however, the possibility should not be discounted that the location of some of these buildings was conditioned by their secondary date, meaning that they had to occupy such land as was available at the time;<sup>71</sup> that this was certainly the case with courtyard/bath-house complexes elsewhere across the province is considered further below.

#### EXPLORING THE NATURE OF OFFICIAL BUILDINGS

In trying to understand the nature of the different buildings at Pen y Gaer and of other, potentially official, complexes across Wales and the Marches, it is important to acknowledge that very few have been the subject of any extensive excavation. This raises two significant problems, which inevitably provide a rich harvest for speculation without the assurance of any certainty; the effort should, however, identify useful lines of enquiry which, in turn, might help to spur the direction of future research. The first problem concerns the difficulty of identifying the specific function(s) of the various buildings now known to us, even when their plans are 'reassuringly' well defined from extensive geophysical survey. The second, and perhaps more pressing, issue arises from the

<sup>62</sup> Davies 2010b, fig. 7.63.

<sup>63</sup> Davies 2010c, fig. 7.85.

<sup>64</sup> Evans 2010, fig. 7.100.

<sup>65</sup> Olding 2010, 198.

<sup>66</sup> Webster and Murphy 2010, fig 7.80.

<sup>67</sup> Burnham 2010b, fig. 7.103.

<sup>68</sup> Hopewell 2010e, fig. 7.99.

<sup>69</sup> Casey and Davies 2010, fig. 7.27.

<sup>70</sup> Hankinson and Britnell 2020.

<sup>71</sup> Sommer 2006, 108–9.

difficulty of establishing even the relative chronology of the different buildings vis-à-vis other elements in the overall plan, whether that be fort, annexe or *vicus*. Both aspects are considered below.

#### FUNCTION

In the absence of explicit documentary or epigraphic evidence, assigning a specific function to the different categories of building discussed above is no easy task. Most problematical of all are the various non-standard building types, which will probably always defy definitive functional classification on purely archaeological grounds. In the case of the relatively common bath-houses, it is reasonably clear that most, if not all, began life to serve the garrisons of their respective forts and that, where they did not accrue any other functions, their occupation and demise mirrored those of their parent installations. The situation is more complex, however, where they were located alongside other substantial building complexes, as this raises questions about the extent to which they were contemporary in origin or necessarily changed roles and acquired new functions during their lifetime.

The most distinctive of the structures are the courtyard buildings, whether enclosed within an annexe or set outside the fort defences, which are not infrequently found in association with bath-houses. They are, of course, examples of a common architectural type that, depending on the individual context and circumstances, was flexible enough to function as a market complex or as a military, official or urban residence; more importantly, for our purposes, several province-wide examples have also been interpreted as official, custom-built accommodation, or *mansiones*, providing facilities associated with the imperial *cursum publicum*.<sup>72</sup> While this latter is an attractive hypothesis for some of the Welsh material, it needs to be treated with caution in individual cases, as any identification is ultimately dependent upon analogy to sites elsewhere in the province, which are deemed to incorporate a range of distinctive archaeological features of varying dates.

Parallels for some of the Welsh courtyard buildings might fruitfully be sought in the frontier zones of northern Britain, though it should be borne in mind that military activity in this area long outlasted the second quarter of the second century, by which time the bulk of the Welsh garrison had been withdrawn. The number of such buildings that have been plausibly identified as potential *mansiones* is surprisingly small, however, while details of their chronology often remain slight. Particular interest necessarily attaches to the later first-century complex identified at Newstead, where a stone courtyard building lay within an annexe attached to the Flavian fort's western side, fronting the *porta praetoria*;<sup>73</sup> it was probably also originally connected to a walled enclosure to the east, containing a bath-house and latrine.<sup>74</sup> Somewhat later in date is the complex identified within the annexe of the Antonine fort at Camelon; this included a bath-house and a second stone building, the latter set at an oblique angle.<sup>75</sup>

Elsewhere in the north, the most likely candidates are rarely closely datable and often exhibit complex sequences of development. A clearly defined stone courtyard building is visible on aerial photographs at Old Carlisle, lying south of the fort and a branch road from the *porta principalis dextra*, where it is manifestly a separate entity from the *vicus*.<sup>76</sup> Geophysical survey at Carvoran has revealed two large masonry buildings outside the fort's eastern gate, one apparently of courtyard plan and both discrete from the *vicus* which straddles the line of the Stanegate to the south.<sup>77</sup> A similar survey at Chesters also revealed a masonry building of apparent courtyard plan, occupying

<sup>72</sup> Black 1995.

<sup>73</sup> Curle 1911, 92–103; Black 1992.

<sup>74</sup> Sommer 2012, 80–1.

<sup>75</sup> Black 1995, 53–4.

<sup>76</sup> Jones and Woolliscroft 2001, fig. 41.

<sup>77</sup> Hodgson 2009, 126–7.



an area between the fort and the bath-house, discrete from the *vicus* to the SSW.<sup>78</sup> At Manchester a substantial masonry building is known in the *vicus*.<sup>79</sup> Where dating evidence is available, such courtyard buildings seem to be relatively late in the development sequence. At Lancaster, for instance, E. Black has assigned a large courtyard building with baths, located to the north of the second-century fort, to the later third century, apparently succeeding several second- to third-century phases of timber building of uncertain plan.<sup>80</sup> Likewise, at Catterick, the courtyard building was only constructed *c.* A.D. 160, though it too succeeded an earlier structure of indeterminate plan.<sup>81</sup> More problematical is the multi-phase stone building with an attached bath-house at Vindolanda, which lay within an annexe, cheek by jowl with other buildings; originally identified as a *mansio*, thought to have been built in the mid- to later second century, it has more recently been reinterpreted as the *praetorium* of a Severan fort.<sup>82</sup> Doubts have also been expressed about the identification of another possible structure outside the fort at Benwell on Hadrian's Wall.<sup>83</sup>

It is noteworthy that extensive geophysical surveys at other forts in northern England – Maryport, Birdoswald, Housesteads, Halton Chesters and High Rochester<sup>84</sup> – have not revealed any evidence for substantial stone buildings potentially identifiable as *mansiones*. This does not rule out the possibility that they were of timber construction or that relevant facilities were housed in less well-defined types of building, either of which could help to explain their apparent absence. While excavation is said to have located a possible timber example of Hadrianic date at the Pennine fort of Melandra Castle, where occupation came to an end early in the Antonine period, there is some uncertainty as to its status.<sup>85</sup> Another possible example in the east *vicus* at Greta Bridge<sup>86</sup> has been reinterpreted as two strip-buildings, which makes better sense given their later replacement in stone.<sup>87</sup>

Only further work will clarify whether the apparent scarcity of such courtyard complexes in the north simply reflects the vagaries of our current knowledge or, more likely, that purpose-built accommodation was only selectively provided across the military network, at key points on the main arterial roads. The same might arguably be true in Wales, for which TABLE 1 tentatively lists only nine probable and two possible examples, representing at best 33 per cent of the garrison posts.

Similar purpose-built courtyard buildings, often associated with a bath-house, have also been identified in the civilian zone of the province, where they have been interpreted as part of a concerted programme of construction at roadside settlements, consequent upon a reform of the *cursum* under Hadrian. Well-known examples include those excavated at Chelmsford<sup>88</sup> and Godmanchester,<sup>89</sup> and that visible on aerial photographs at Wanborough,<sup>90</sup> to which might be added the later examples at Wall<sup>91</sup> and Whitchurch;<sup>92</sup> all five are characteristically set well back from the main road frontages so as not to impinge on land otherwise occupied or available for the resident population. This is not the place to discuss such buildings in detail; it

<sup>78</sup> Burnham 2004, 273–4; Hodgson 2009, 108–9.

<sup>79</sup> Gregory 2007.

<sup>80</sup> Black 1995, 37–8; Bidwell and Hodgson 2009, 86.

<sup>81</sup> Wilson 2002, 453, 456.

<sup>82</sup> Birley 1970; 1999, 133.

<sup>83</sup> Breeze 2006.

<sup>84</sup> Maryport: Hodgson 2009, 163, fig. 50; Birdoswald: Hodgson 2009, 130–1, fig. 36; Housesteads: Hodgson 2009, 112–14, fig. 29; Halton Chesters: Taylor *et al.* in Bidwell 1999, 109–10, fig. 27; High Rochester: Hodgson 2009, 168–70, fig. 53.

<sup>85</sup> Bidwell and Hodgson 2009, 95–6.

<sup>86</sup> Casey and Hoffmann 1998.

<sup>87</sup> Sommer 2006, 128–9.

<sup>88</sup> Drury 1988, 130–5.

<sup>89</sup> Green 2018.

<sup>90</sup> Philips and Walters 1977.

<sup>91</sup> Round 1992.

<sup>92</sup> Jones and Webster 1968, 205–9.

is enough to note that Black has suggested that the adoption of a courtyard plan was not commonplace before the mid-second century,<sup>93</sup> while elsewhere the evidence indicates a much more diverse range of plans being employed over a lengthy time span extending into the third and fourth centuries. What links them together is their location on key arterial routes connecting London to key administrative centres and the military zones of the province, along which soldiers, civilians and supplies were constantly moving. Interestingly too, as A. Smith and M. Fulford have recently emphasised, many of the same roadside settlements were later provided with defended circuits, clearly reflecting their continuing importance along the main roads, even if earlier purpose-built accommodation had sometimes ceased to operate.<sup>94</sup>

While some of the potentially official complexes across Wales and the Marches might well have been connected with the provision of facilities associated with the *cursus publicus*, other possibilities should also be considered, including a role in local administration and policing, the collection, storage and transport of supplies and taxes, and the oversight of mineral exploitation, with or without a significant military presence. While potentially attractive in individual cases, such identifications are rarely capable of proof. Elsewhere in the province, the presence of various officials and seconded soldiers is well attested in the epigraphic record,<sup>95</sup> among them three cases of a *centurio regionarius*, various *beneficarii consulares*, a single *singularis consularis* and two cases of a *strator consularis*, not least (though not exclusively) at various forts and settlements on the main roads leading north from York. Interestingly, at Catterick, a *beneficiarius consularis* rededicated an altar that had originally been erected by a *singularis consularis* to the ‘god who devised roads and paths’;<sup>96</sup> while this could be plausibly interpreted as indicating oversight of the *cursus* and the security of the roads, elsewhere the precise function of such officials remains a matter of much discussion. Unfortunately, no such officials are attested in the epigraphic record for Wales and the Marches, which makes any further speculation problematic.

Sadly, none of this provides conclusive evidence to help us understand the functions of the specific buildings identified at Pen y Gaer, let alone those at other sites across Wales and the Marches, though it would seem to emphasise the potential significance of the road network as a focus for ongoing military and official functions; as such, it offers some useful lines of enquiry, which are explored further below.

## CHRONOLOGY

The review of potential British parallels has clearly shown that, whatever the precise function of the various building complexes, the requirement for them long outlasted the second quarter of the second century, by which time a significant number of the Welsh forts and their associated *vici* had ceased to be occupied.<sup>97</sup> This is not the case everywhere, however: several key forts certainly survived for varying durations beyond the reign of Hadrian, often with a reduced garrison; a few sites have also revealed renewed, military activity or interest in the later third/fourth century, and yet others have produced an enigmatic tail of activity in the form of small quantities of finds extending into the later second century (and sometimes beyond). It is essential, therefore, to explore such chronological evidence as currently exists with respect to individual forts, *vici* and official buildings, not least because they may well exhibit quite different occupation sequences of relevance to the wider themes under discussion here. This is no easy task, given the differential levels of excavation that have been undertaken at each.

<sup>93</sup> Black 1995, 90; Davies and Casey 2010, fig. 7.50.

<sup>94</sup> Smith and Fulford 2019.

<sup>95</sup> For a convenient summary of some *beneficarii* and *stratores*, see Birley 1979, 86–8; for examples of a *centurio regionarius* at Ribchester, see *RIB* 583, 587.

<sup>96</sup> *RIB* 725.

<sup>97</sup> Davies 1980.

A particular problem surrounds the dating of the major building complexes, because (bath-houses apart) few of the key structures have ever been explored. Independent bath-houses present few problems, as they generally reflect the chronology of their respective forts. For the larger courtyard complexes, evidence is confined to a handful of cases only. At Bryn y Gefelliau, the building was clearly a secondary feature, occupying an annexe formed out of the *retentura* of the original Flavian fort when it was reduced in size; this seems to have occurred *c.* A.D. 120, as the new structure overlay earlier levels that extended down to that point at least. While the fort seems to have gone out of use *c.* A.D. 140 at the latest, a small amount of later material associated with the stone building points to continuing activity on this site through to the end of the second century at least (and perhaps beyond), well after the demise of the military phase.<sup>98</sup> Interestingly, this dating brings it into line with the earliest phase of the timber structure at Pentre, in north-eastern Wales, which comprised three ranges of rooms, most probably associated with a lead-working complex,<sup>99</sup> and those buildings of periods 5B–6 within the south-eastern corner of the fort at Caernarfon, which Black considers to be the functional predecessors of the Antonine courtyard building.<sup>100</sup>

Further south, at Pennal, small-scale work in the south-western annexe located two phases of timber buildings beneath one of the stone structures with a hypocaust; this raises the tantalising possibility that the courtyard building and, less certainly, the bath-house were secondary features in the life of that part of the annexe,<sup>101</sup> even if their chronological relationship to it remains untested. Though the absence of samian beyond A.D. 160 suggests that the fort may have gone out of use by that date, despite it never having been the subject of any excavation, small-scale work in the *vicus* has shown that occupation certainly continued there into the later second century, while several sherds of later pottery from the topsoil would seem to point to a tail of activity into the third century.<sup>102</sup> The situation is somewhat clearer at Brecon Gaer, where one of the two possible courtyard buildings, which also included a heated suite (Building B), is certainly datable to the early to mid-second century, though a somewhat longer usage is suggested by the recovery of several mid-third-century coins from the area, all this in association with a functioning fort.<sup>103</sup>

Such evidence, though potentially significant, cannot easily be extended to other sites, where little or no excavation has been directed at the relevant building complexes. In a few cases a secondary date might be indicated by their location in peripheral areas of the settlement, away from the main road frontages, but it would be unwise to depend on this as there may be other factors at work. Instead, it is necessary to rely upon such dating evidence as is available from either the forts or their extramural *vici*, as a proxy for identifying sites with activity extending into the later second century and beyond. It is easiest to begin with the forts where military activity definitely continued, principally because the details have already been well rehearsed and fully referenced elsewhere.<sup>104</sup> At least five – Brecon Gaer, Caernarfon, Caersws II, Castell Collen and Forden Gaer – have all produced clear evidence for military activity extending down to the Severan era, though it may have been on a reduced scale from levels in the Antonine period; the same has also been claimed at Abergavenny. Thereafter, several sites have produced material evidence for later third- and fourth-century activity. Such evidence clearly betokens continued military occupation, which is also reflected in the rebuilding or maintenance of defences and internal buildings at Brecon Gaer, Caernarfon, Castell Collen, Forden Gaer and probably Loughor and Neath. At both Caersws II and Castell Collen, the forts

<sup>98</sup> Hopewell 2010a, 207.

<sup>99</sup> O'Leary 1989.

<sup>100</sup> Black 1995, 34.

<sup>101</sup> Frere 1984, 266.

<sup>102</sup> Hopewell 2005, 259.

<sup>103</sup> Davies and Casey 2010, 204.

<sup>104</sup> For details and references, see Davies 1991; Burnham and Davies 2010, 53–62.

were eventually abandoned at the close of the third or beginning of the fourth century; at Brecon Gaer there is plentiful numismatic material as well as evidence of changes to the fortified perimeter with occupation continuing into the reign of Gratian (A.D. 367–75); at Forden Gaer it took the form of a substantial refortification in the Valentinianic era, after a long phase of abandonment; at Caernarfon the occupation continued to the last decade of the fourth century. More enigmatic is the evidence from the forts at Neath and Loughor, though in both instances at these southern forts it can plausibly be interpreted as reoccupation in the context of coastal defence in the period *c.* A.D. 275–330 on the basis of numismatic evidence; this is also probably the case at Cardiff, where a ‘Saxon Shore’ type fort (Cardiff IV) was established sometimes after the mid-third century.<sup>105</sup> Of all these, only one at Brecon Gaer has so far produced evidence that might be identifiable as two courtyard buildings and a possible bath-house outside the defences.

At other fort sites the evidence is much more problematic, as several have produced material evidence for a tail of activity extending into the later second century at least, and sometimes beyond, though it is not always easy to decide whether this is military or civilian in character. This might provide support for the view that some of the official-looking building complexes could have had a role after the abandonment of their respective forts, hence the urgency of exploring them with a targeted programme of excavation. A tail of activity at Pennal has already been discussed above. A similar tail of activity has also been suggested at Caer Gai, where the fort seems to have gone out of use in the later Hadrianic period; small-scale work in the *vicus*, however, has recovered coarseware sherds from the uppermost levels of a yard, datable to the later part of second century.<sup>106</sup> At Caerhun, in north Wales, where occupation inside the fort probably ended prior to *c.* A.D. 160,<sup>107</sup> the recovery of a few Constantinian to Valentinianic(?) coins from the excavations,<sup>108</sup> as well as a scatter of mostly unstratified later pottery, might relate to renewed (or continuing?) activity at a key river crossing on the route to Caernarfon.

In south Wales, a similar picture emerges at several sites. At Pen y Gaer, the site that forms the starting point for this paper, military activity most probably ended during the reign of the emperor Hadrian or slightly later; small-scale excavations within the *vicus*, however, have suggested that some of its buildings continued to be occupied into the later part of the century.<sup>109</sup> Further west, much the same sequence is identifiable at Llandovery, though here the latest sherds indicate activity continuing into the third century at least, at what was a key site on the road network.<sup>110</sup> While military activity ceased within the fortlet at Pumsaint in the early A.D. 120s, occupation certainly continued for a generation or so south of the river, in the vicinity of the bath-house excavated in the 1830s, perhaps in association with the nearby gold mines; even later activity is represented by a pottery assemblage from the mine area, which includes both samian of the second half of the second century and coarsewares extending down to the later third century, if not beyond. The presence of a burnt timber building, dating to the later third or early fourth century, inside the fortlet perimeter might also represent a renewed military or official interest in the site.<sup>111</sup> Rather more enigmatic is the fort at Gelligaer II, which was founded in the first decade of the second century and is unlikely to have lasted beyond *c.* A.D. 160. Later activity is indicated, however, by small amounts of later pottery of the late second and mid-third/fourth centuries,<sup>112</sup> while the annexe was only added at a late date, as its defences overlay the heavily silted fort ditches; this latter may have been a focal point for later

<sup>105</sup> Webster and Marvell 2010.

<sup>106</sup> Hopewell 2005, 262.

<sup>107</sup> Simpson 1962, 136–7.

<sup>108</sup> Casey 1969, 59.

<sup>109</sup> Jones and Hankinson 2012.

<sup>110</sup> James *et al.* 1983.

<sup>111</sup> Burnham and Burnham 2004, 322–3.

<sup>112</sup> Simpson 1963, 65.

activity, though its precise relationship with the bath-house and another complex of uncertain character remains uncertain.<sup>113</sup>

Interestingly, several of these sites with a tail of activity also possessed major building complexes, often including at least one courtyard building and a bath-house, hence the urgency of clarifying their chronology. Three other sites might also be mentioned here – at Buckton, Caerau and Tomen y Mur – if only to note that the only dating evidence is derived from their respective forts, all of which went out of use during the Hadrianic period; as a consequence, nothing is known about their extramural buildings, which is especially unfortunate at Caerau, where at least three buildings are represented in the geophysics.

The explanation for such later Roman activity or material is most likely to be multi-causal: a military presence, whether long-term or spasmodic in character, represents one clear thread, with personnel involved being potentially few in number, perhaps concerned with policing duties or the collection of taxes and the *annona militaris* from the later third century; the defensive perimeter could have been used conveniently, even in a decayed condition, to provide a ready-made enclosure for the temporary corralling of livestock; the presence of official buildings, potentially *mansiones*, might represent the continued provision of facilities along major routes into the later period, even after the cessation of their respective forts and of most, if not all, the related activity in the extramural *vicus*; some such buildings might also have served an administrative or marketing function, or at least as a focus for such activity in the later Roman period. Sadly, in the absence of any inscriptions recording the presence of relevant officials, there is no easy way of judging between competing options. These aspects are developed in the next section.

#### COMMUNICATIONS AND CONTROL ACROSS WALES AND THE MARCHES?

Despite the difficulty of identifying specific functions over time, one recurring feature common to most, if not all, sites, seems to be the ongoing significance of the communications network and such interrelated activities as the *cursus publicus*, policing and tax collection. This aspect is explored in detail by Black and has recently been reinforced by Smith and Fulford with respect to the province as a whole.<sup>114</sup> The situation in the northern military zone might be instructive in this respect. Here, the plausibly identified or suspected *mansiones* all lie on key routes, several of which have also produced milestones indicative of their continuing upkeep and importance.

East of the Pennines, the key route north of York, via Catterick, to Corbridge and thence northwards to Newstead and Camelton during the second century was certainly studded with custom-built facilities at most of these sites, no doubt alongside lesser provision at other fort sites. The continued upkeep of this route is further emphasised by the discovery of several milestones, with examples at Aldborough, Piercebridge, Lanchester and Corbridge.<sup>115</sup> West of the Pennines, known installations at Manchester and Lancaster both lie on key north–south routes, with a northern terminal at Carlisle. Here too, milestones are known from Castleford, Lancaster, Ribchester, between Ribchester and Borrow in Lonsdale, Brougham, Old Penrith and near Carlisle, testifying to their continued upkeep;<sup>116</sup> another route from Carlisle via Old Carlisle to the fort at Maryport has a single milestone.<sup>117</sup> The Stainmore route linking Catterick to Carlisle has also produced milestones at Greta Bridge and Bowes, though custom-built facilities are currently lacking.<sup>118</sup> The maintenance of the Stanegate and probably the Military

<sup>113</sup> Brewer 2010, 247–8.

<sup>114</sup> Black 1995; Smith and Fulford 2019.

<sup>115</sup> *RIB* 2276–8, 2293, 2295, 2296–7.

<sup>116</sup> *RIB* 2273–5, 2270–2, 2268–9, 2283, 2285, 2288, 2289, 2290–2.

<sup>117</sup> *RIB* 2286–7.

<sup>118</sup> *RIB* 2279, 2280–2.



Way is also attested;<sup>119</sup> unsurprisingly, custom-built facilities have been plausibly recognised at Corbridge, Chesters, Carvoran and Old Carlisle. The relative ubiquity of milestones along both the York to Corbridge and the Stainmore roads, in particular, is clearly indicative of their long-term importance. By contrast, the lack of milestones from other trans-Pennine routes, coupled with the virtual absence of garrison bases in this area in the later Roman period, must surely be linked.

Such evidence might provide a plausible model for considering the situation across Wales and the Marches, where it might be hypothesised that most traffic in the post-Hadrianic period might have been constrained to the prioritisation of ‘arterial’ routes, linking key nodes such as the *civitas* centres, the legionary fortresses and those military and official installations that remained in use (FIG. 6).<sup>120</sup> This might supply a plausible explanation for both the buildings and the extended occupation at Pen y Gaer, which would have lain on one such strategic route. Evidence in support of this might be drawn from two sources: the routes recorded in the third-century Antonine Itinerary and the incidence of milestones. Iter XII in the Antonine Itinerary from Carmarthen to Wroxeter lists Caerleon, Burrium (Usk) and Gobannium (Abergavenny), all three on road RR62a, and Magnis (Kenchester) on RR6c; thence RR6a continued to Chester via Whitchurch. The status of Usk is unclear, though coinage indicates a settlement of uncertain character on the ex-fortress site to the mid-fourth century.<sup>121</sup> Abergavenny too appears to be a settlement of some significance after the apparent abandonment of the fort, certainly by the mid-third century, and has a coin list to the reign of Valentinian.<sup>122</sup> It may be no accident that these two places are listed, since both may represent spontaneous(?) settlement growth in the lower Usk valley, possibly with a role in the marketing and supply of the legionary base downstream, while Kenchester ranks as a *vicus* in Dobunnic territory, fulfilling both a marketing and administrative role.<sup>123</sup>

Although Abergavenny is the most northerly place mentioned on RR62a, it is clear that the road, and by implication places along its course, was maintained further north and west (RR62a, b). This seems to be confirmed by the presence of several milestones. One stone, found c. 8 km south-east of the fort at Brecon Gaer, bears the titles of Constantius Chlorus and Constantine II,<sup>124</sup> while another to the west at Trecastle Hill bears the titles of Postumus and Victorinus,<sup>125</sup> indicating road maintenance at the time of the Gallic Empire. It has already been noted that Brecon Gaer has produced extensive coinage and ceramics of the mid-third to mid-fourth century, as does one of the enigmatic stone buildings north of the fort. Given that Pen y Gaer lies equidistant between Brecon Gaer and Abergavenny, could one of the stone buildings outside that fort have been occupied as a long-lived *mansio*/administrative focus, long after the parent fort and *vicus* had been abandoned in the Antonine period? It should also be noted that there is evidence in the form of a milestone, now lost, from near Dinevor,<sup>126</sup> bearing the titles of the emperor Tacitus (A.D. 275–76), indicating that the road continued to be maintained west to Llandovery and thence south-west into the Tywi valley on its way to the *civitas* centre at Carmarthen (RR623b); Llandovery is another site that has produced a small amount of late Roman ceramics, perhaps connected to the presence and continued usage of at least one stone building, of uncertain plan and function, close to the long-abandoned fort. Beyond this, to the north-east, along RR62c, lies Pumsaint, where activity in the second century and beyond may indicate continuing interest in the nearby Dolaucothi gold mines.

<sup>119</sup> *RIB* 2308 and 2310 (Stanegate), 2306–7 and possibly 2311 (Military Way).

<sup>120</sup> For the most up-to-date assessment of Welsh roads, see Evans *et al.* 2010.

<sup>121</sup> Guest and Wells 2007; Manning 2010, 192.

<sup>122</sup> Guest and Wells 2007; Olding 2010, 198.

<sup>123</sup> Burnham and Wachter 1990, 70–6.

<sup>124</sup> *RIB* 2258–9.

<sup>125</sup> *RIB* 2260–1.

<sup>126</sup> *RIB* 2262.

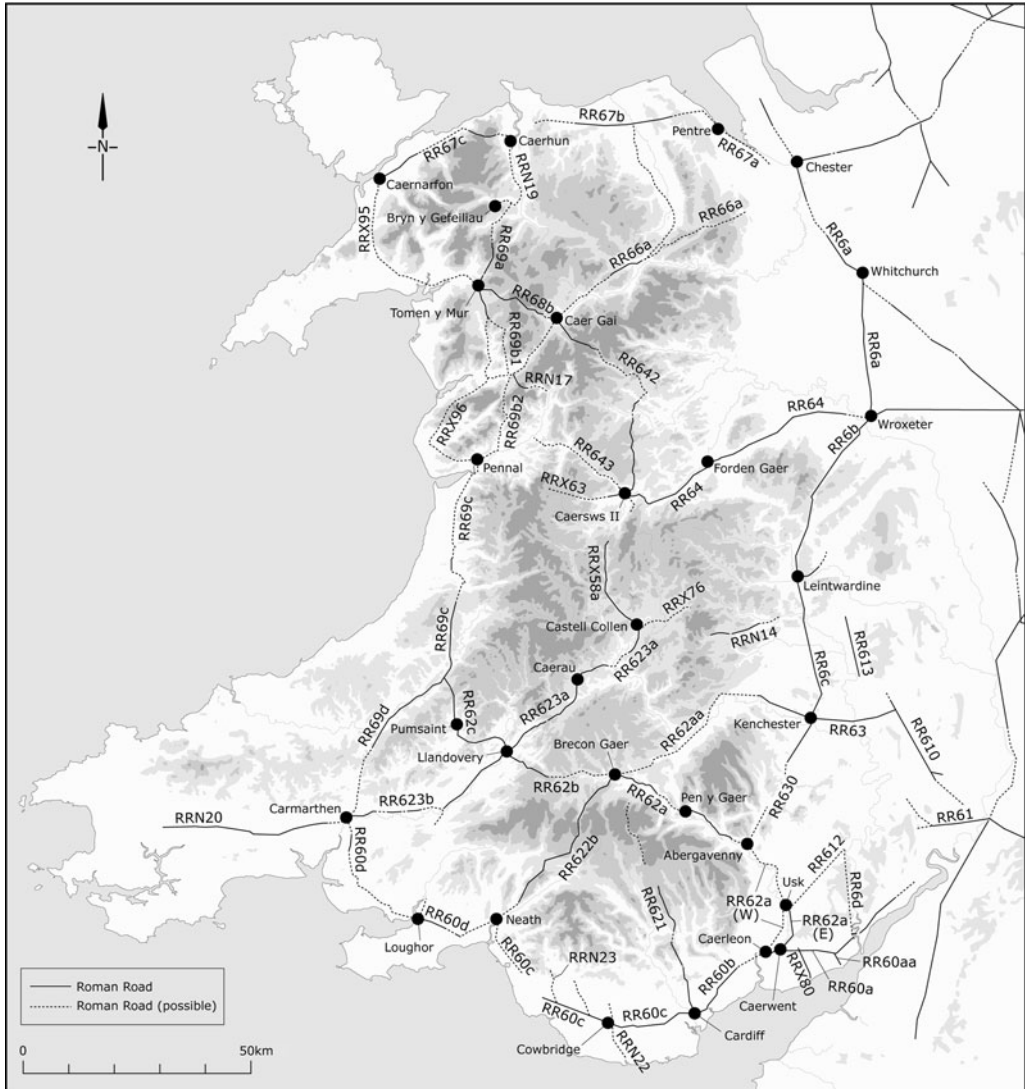


FIG. 6. Communications and control: main sites mentioned in the discussion in relation to the road network (after Burnham and Davies 2010, fig. 4.3, with amendments; drawn by Hubert Wilson, Dyfed Archaeological Trust).

Such ideas might be extended to other routes. In north Wales, road RR67a–c from Chester to Caernarfon also shows continuity of maintenance as an arterial route, both in *Iter XI* of the Antonine Itinerary, with at least one intermediate stop at Canovium (Caerhun), and in the form of three milestones: one stone found near Bangor bearing the titles of Pertinax and Caracalla,<sup>127</sup> another seven miles west of Caerhun with those of Constantine I<sup>128</sup> and a third

<sup>127</sup> *RIB* 2264.

<sup>128</sup> *RIB* 2267.

found east of Caernarfon with the titles of Trajan Decius (A.D. 249–51).<sup>129</sup> Once again, the late activity at Caerhun is unsurprising in this context. Likewise, in south Wales, RR60a–d from Caerwent to Carmarthen unsurprisingly shows a similar continuity of use as might be expected from a road linking two *civitas* centres as well as the legionary base at Caerleon. Iter XII from Carmarthen to Wroxeter mentions Leucarum (Loughor), Nidum (Neath) and Bomium (Cowbridge); the latter is a roadside settlement with activity extending into the fourth century,<sup>130</sup> while the former pair have demonstrated renewed, probably military-related interest in the later third and early fourth centuries at least; the late fort at Cardiff also lay along the route. A notable cluster of seven milestones has also come from the vicinity of Neath/Port Talbot south to Pyle; their texts span the reigns of Gordian III to Licinius, with a concentration in the period of the Gallic Empire.<sup>131</sup>

Such evidence provides a plausible explanation for the link between an ongoing upkeep of key arterial routes across Wales and those sites that betray either military activity or a tail of activity (with or without the presence of potential official buildings) extending beyond the Hadrianic era. It does not, however, explain all the sites that fall into the latter categories. Prime among these is the fort and settlement at Caersws II, which occupies a key location in central Wales, at the western end of RR64 from Wroxeter, via Forden Gaer, a route along which no milestones are yet known. Caersws does, however, lie at the focus of a road network that connects it to several key sites: via RR642 to Caer Gai and thence via RR64b to Tomen y Mur and other sites in Snowdonia; more than likely via RRX63, perhaps as far as Pennal on the Dyfi estuary; and probably via RRX58a and RR623a to Castell Collen, Caerau and ultimately Llandovery. The presence of several major building complexes at all these sites must surely reinforce the importance of these routes, irrespective of any evidence for milestones; this latter might be explained by a change in circumstances in the later period, which led to a relative decline in their significance.

There might also be evidence for a continuing interest in controlling access to mineral resources in north-west Wales; certainly, the buildings in the reused *retentura* at Bryn y Gefeiliau have been plausibly linked with mineral extraction and processing,<sup>132</sup> while the large courtyard building in the south-eastern corner of the fort at Caernarfon has also been linked to an official with oversight of mineral exploitation.<sup>133</sup> A similar case has been made above for the building at Pentre. One final possibility at Caerhun and Pennal is their location close to navigable estuaries, which might have been convenient points for the transshipment of goods around the Welsh coast. One anomalous site remains to be mentioned. At Buckton, a fort with an associated courtyard building and bath-house, which was apparently abandoned *c.* A.D. 130, is somewhat oddly located 1.5 km west of the known north–south road. This does not conform easily with the pattern discussed so far, though Black has suggested that this may be because it was succeeded by roadside facilities at nearby Leintwardine.<sup>134</sup>

However speculative this discussion might be, given the problems of functional and chronological clarity, it does at least point a way forward for future research.

#### AGENDA FOR FUTURE RESEARCH

Much valuable detail has clearly been provided in recent years as a result of Cadw's 'Roman Fort Environs Project' and the RCAHMW's aerial photographic surveys. Where and when possible, such work should continue. Aerial photography is particularly well suited to the needs of

<sup>129</sup> *RIB* 2263.

<sup>130</sup> Burnham and Wachter 1990, 300.

<sup>131</sup> *RIB* 2251–7.

<sup>132</sup> Hopewell 2005, 242.

<sup>133</sup> Casey and Davies 1993, 13–14.

<sup>134</sup> Black 1995, 27.

recurrent monitoring at the better-known forts and their extramural adjuncts, especially during periods of extended drought, both to enhance existing detail and to identify distinctive new features in the overall layout and planning. Drones could also play a useful role by virtue of their relative cheapness and application on a near day-by-day basis. Such monitoring might usefully be complemented, where possible, by enhanced geophysical survey, though this may need to be more focused than hitherto on specific forts and areas within them, in order to sharpen an understanding of key issues concerning the relative importance of major building complexes, particularly at those sites that have an extended period of occupation.

Such surveys can only take us so far, however, in moving from a state of speculation to one of greater clarity. In the Welsh context there is now an urgent need for a programme of targeted excavation with the following aims and objectives:

- (1) to establish the relative chronologies of the different elements, whether forts, annexes, extramural *vici* or official buildings;
- (2) to clarify the nature of the late military sequences at those forts that survived beyond the Hadrianic period, as well as the extent of the related internal occupation and size of the resident garrisons;
- (3) to sample the major building complexes, in particular, to determine their individual dating sequences relative to their parent military installations and other extramural activity, to explore their ground plans in more detail and to clarify any points of comparison and contrast; this is especially relevant to questions such as the potential presence of any timber predecessors and their respective functions over time;
- (4) to seek to explain why some building complexes were enclosed within annexes while others were not, as this might be a question of function, chronology, convenience or perceived threat; specific attention might also be directed at those sites with more than one example of a large courtyard building, especially when one such structure is located inside an annexe and the other outside, often peripheral to the main *vicus*;
- (5) to trace the courses of the less well-known routes leading out from such key sites as Caersws II, as these must have been important connections to sites further north-west, west and south, where there is evidence of ongoing activity and the presence of large building complexes;
- (6) to clarify the character, function and relative chronology of the diverse range of annexes now known, not least where, as in many cases, they seem to be bereft of any visible internal structures; this obviously has a wider relevance in view of the importance of annexes at many other forts across Britain.

On a wider front, such a programme might also facilitate the recovery of a range of cultural and environmental data, which could potentially contribute to some of the wider research themes and questions that now form the focus of contemporary Romano-British archaeology. Looking even further afield, many of the themes discussed in this paper are equally relevant to, and invite comparison with, better-known sites in other frontier contexts. One line of research, which might prove especially fruitful, would be a detailed analysis of the ground plans of the various official and *mansio*-type buildings across Britain and beyond, not least because much useful and relevant comparative material has recently come to light in Gaul,<sup>135</sup> this has an obvious potential for the Welsh sites under discussion here, but might also contribute to updating Black's analysis within a wider continental dimension. In turn, this might help to clarify both the role of the military in constructing such buildings in the military zone and their precise functions with respect to the *cursus publicus* and related activities.

<sup>135</sup> Colleoni 2016.

TABLE 1. DATABASE OF MILITARY SITES ACROSS WALES AND THE MARCHES

Site*	Fort faces	Location of annexe	Location of vicus	Nature and location of large buildings	Chronology, including extended 2nd-century activity
Abergavenny	NW	Outside <i>porta praetoria</i> on NW	Various traces known on NE, probably outside <i>porta principalis dextra</i>	Possible bath-house on SE near Castle, beyond <i>porta decumana</i>	Neronian to Antonine; possibly later; thereafter civilian settlement to 4th century
Brecon Gaer	W		Ribbon settlement along road extending N from <i>porta principalis dextra</i>	Three large buildings lay west of road immediately outside <i>porta principalis dextra</i> , including possible bath-house (C) and two possible courtyard structures (B/geophysics), one a possible <i>mansio</i>	Flavian to at least Antonine; fort has complex history to reign of Valentinian; Building B certainly assigned to early/mid-2nd century; coin finds might suggest it lasted into 3rd century
Brompton/ Pentrehyling	E	Traces outside <i>porta principalis dextra</i> on S side	Ribbon settlement along road extending E from <i>porta praetoria</i>		Flavian to c. A.D. 125 at latest; some later 3rd- to early 4th-century activity
Brithdir fortlet	?		Activity S and SW of fortlet not certainly civilian	Possible bath-house on S side	Flavian to Trajanic
Bryn-y-Gefeiliu	E	Former <i>retentura</i> used as later annexe	Scattered traces of activity along road extending E from <i>porta praetoria</i>	Annexe housed complex of buildings arranged around three sides of courtyard; tentatively identified as <i>mansio</i> or bath-house	Fort down to c. A.D. 140 at latest; Flavian to second half of 2nd century in annexe, with a ceramic tail into 3rd century at least; courtyard building structure said to overlie late 1st-/early 2nd-century material
Buckton	E	Outside <i>porta praetoria</i> on E	No evidence despite good air photos	Annexe housed bath-house and large courtyard building, tentatively identified as <i>mansio</i>	Flavian to c. A.D. 125–30 from defences
Caerau	SW	Outside <i>porta decumana</i> on NE; large by comparison with most other forts	Ribbon settlement along branch road extending NW from <i>porta principalis dextra</i> ; further activity extending NE from <i>porta decumana</i> , apparently inside extensive annexe	Annexe housed large courtyard building or <i>mansio</i> , a possible bath-house and at least one other long rectangular building	Flavian to c. A.D. 130–40 inside fort

Continued



TABLE 1. CONTINUED

Site*	Fort faces	Location of annexe	Location of <i>vicus</i>	Nature and location of large buildings	Chronology, including extended 2nd-century activity
Caer Gai	SE	One annexe outside <i>porta praetoria</i> on SE; second annexe occupies N side of SW defences, outside <i>porta principalis dextra</i>	Ribbon settlements along road extending NE from <i>porta principalis sinistra</i> and along S side of road extending SW from <i>porta principalis dextra</i>	SE annexe housed large courtyard building and probable bath-house	Flavian to c. A.D. 130–40 from defences and interior; pottery from <i>vicus</i> may suggest occupation into later part of 2nd century
Caerhun	E	Small annexe occupies E side of S defences, outside <i>porta principalis dextra</i> ; meandering ditch along W and N? sides may be a simple boundary rather than annexe	Ribbon settlement along road extending N from <i>porta principalis sinistra</i> ; status of activity in small annexe uncertain	Bath-house and second larger building of uncertain plan lay on E side, outside <i>porta praetoria</i> ; two larger buildings N of the defences very tentatively identified as courtyard buildings?	Flavian to Antonine; ceramics and coinage indicate activity in 3rd and 4th centuries in vicinity of fort
Caernarfon	SW		Various traces along road extending NW from <i>porta principalis dextra</i> ; also much activity further W	Two stone buildings, one a bath-house on SW, outside <i>porta praetoria</i>	Complex history spanning Flavian to close of 4th century
Caersws I	E	Outside <i>porta decumana</i> on W	No evidence despite good air photos and geophysics		Probably short-lived early Flavian fort
Caersws II	SE	Outside <i>porta decumana</i> on NW; secondary feature	Ribbon settlement along road extending NE from <i>porta principalis sinistra</i> ; some activity also on SE outside <i>porta praetoria</i>	Bath-house on SE, W of road outside <i>porta praetoria</i>	Complex history spanning Flavian to late 3rd/early 4th century; annexe apparently not added until 2nd century
Cardiff	?		Various traces of activity along road extending S from S gates of forts I and II		Complex history from pre-Flavian to 4th century; complex history to late fort III/IV
Carmarthen	?		Probably to E of forts		Flavian to early 2nd century
Castell Collen	E		Various traces of activity extending S from <i>porta principalis sinistra</i> and outside <i>porta praetoria</i> to E	Bath-house lay outside SE corner	Flavian to Severan and probably beyond down to late 3rd century; bath-house said to overlie Flavian deposits
Cefn-Brynich	?	Outside S defences			Claudio-Neronian
Coelbren	E??	N side identified on E, outside probable <i>porta praetoria</i>			Flavian to c. A.D. 130–40

Continued

Fordeu Gaer	?		Scattered traces to S of fort		Flavian to later Antonine, possibly to early 3rd century; Valentinianic reoccupation
Gelligaer II	NE	Outside <i>porta principalis dextra</i> on SE; secondary feature	No evidence	Annexe housed bath-house and further large building	Fort Trajanic to c. A.D. 160; small quantity of later material, including mid-3rd to 4th century; annexe shown to be a late feature after silt had accumulated in fort ditches
Hindwell Farm	E	Large single-ditched annexe on S side, outside <i>porta praetoria</i> ; triple-ditched annexe on E outside <i>principalis sinistra</i>	Ribbon settlement along road extending E from <i>porta principalis sinistra</i> , apparently within defended annexe	S annexe enclosed possible bath-house seen during destruction in 1957	Pre-Flavian to later 1st century
Llandeilo II	NE	Small annexe occupies N side of SW defences, outside <i>porta decumana</i>	Ribbon settlement along road extending NE from <i>porta praetoria</i>		Flavian to c. A.D. 140 at the latest
Llandovery	NE	Part of fort I reused as annexe on NE	Ribbon settlement along road extending NE from <i>porta praetoria</i>	One large building under vicarage to W; tentatively identified as bath-house or <i>mansio</i>	Complex sequence spanning Flavian to Hadrianic at least; later occupation indicated by pottery of later 2nd and mid-3rd/4th century
Llanfor	NE		Ribbon settlements along roads extending NE and NW from <i>porta praetoria</i> and <i>porta principalis sinistra</i> respectively		Short early Flavian occupation
Llanio	SSE		Ribbon settlement along branch road extending SSW from <i>porta principalis dextra</i>	Bath-house 100 m S of fort, outside <i>porta praetoria</i>	Flavian to Hadrianic
Loughor	W??		No evidence	Traces of bath-house on W side	Flavian to early Hadrianic, with reoccupation c. A.D. 260–310
Neath	SE		Traces along road extending NE from <i>porta principalis sinistra</i>	Traces of large stone building on NW, outside <i>porta decumana</i>	Flavian to c. A.D. 140–70, with some later material
Pen Llwyn	SW	Outside <i>porta praetoria</i> on SW	No evidence		Flavian to Hadrianic
Pen Llystyn	SW	Outside <i>porta praetoria</i> on SW	No hard evidence		Flavian to c. A.D. 125 at latest

*Continued*

TABLE 1. CONTINUED

Site*	Fort faces	Location of annexe	Location of <i>vicus</i>	Nature and location of large buildings	Chronology, including extended 2nd-century activity
Pennal	SW	One annexe on SW, outside <i>porta praetoria</i> ; two successive? annexes on NE, outside <i>porta decumana</i>	Ribbon settlements along roads leading NW and NE from <i>porta principalis dextra</i> and <i>porta decumana</i> respectively; further activity along road parallel to NW defences; road outside <i>porta decumana</i> deflected around successive annexes – raises question of status of any internal activity	SW annexe housed bath-house and substantial stone building tentatively identified as <i>mansio</i> ; further large courtyard building on NW, immediately outside <i>porta principalis dextra</i>	Fort likely to be Flavian to c. A.D. 150–60; some later pottery from <i>vicus</i> may suggest occupation into 3rd century; <i>mansio</i> /baths found to overlie 2 phases of earlier timber buildings
Penydarren	S??		No evidence	Bath-house on S, outside probable <i>porta praetoria</i> ; other rooms nearby very tentatively identified as part of <i>mansio</i> ?	Flavian to Hadrianic, possibly a bit later
Pen y Gaer	E	Occupies S side of E defences, outside <i>porta praetoria</i>	Ribbon settlement along road extending S from <i>porta principalis dextra</i>	Annexe housed large building, possibly a bath-house; major complex of three buildings S of annexe on SE side of fort, including two conjoined courtyard structures	Flavian to c. A.D. 160 in fort; <i>vicus</i> may have survived into later 2nd century
Pumsaint	W		Traces of activity alongside road E of fort/fortlet; further activity S of the river Cothi along road to Llandovery	Large building on E – bath-house?; bath-house S of river, E of road to Llandovery	Flavian to Hadrianic in fort; late 3rd- to early 4th-century building inside enclosure; Flavian to mid-2nd century south of river
Tomen y Mur	SE	Small annexe occupies N side of NW defences, outside <i>porta decumana</i>	Ribbon settlement along road extending NE from <i>porta principalis sinistra</i> ; further activity SE along road extending from <i>porta praetoria</i>	Bath-house and possible courtyard structure on SE, outside <i>porta praetoria</i> ; tentatively identified as <i>mansio</i> ; amphitheatre lay beyond <i>vicus</i> on NE side	Flavian to c. A.D. 130 in fort
Trawscoed	SW	Possible annexe on SE side, outside <i>porta principalis sinistra</i>	Focused on rudimentary street grid on NW side outside <i>porta principalis dextra</i> ; further activity also on SE outside <i>porta decumana</i>	Possible large building very tentatively identified in geophysics to N of road extending out from <i>porta decumana</i>	Flavian to c. A.D. 130 at the latest

\*Other fort sites from Burnham and Davies 2010 not included, as evidence for *vicus*, annexes and buildings either unproven or uncertain: Blackbush Farm; Brandon Camp; Caer Gaer; Caergwannaf; Caerphilly; Canon Frome/Stretton Grandison; Canon Frome Bridge; Castlefield Farm, Kentchurch; Clifford; Clyro; Colwyn Castle; Credenhill; Gelligaer I; Llandeilo I; Jay Lane; Leighton; Leintwardine; Monmouth; Rhyn Park; Stretford Bridge; Wiston.

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