4. NORTHERN ENGLAND

By PETE WILSON

NORTHUMBERLAND

(1) **Corbridge**, *Farnley Grange, West Lodge* (NY 99724 63120): a watching-brief was carried out as part of emergency remediation works to a ruptured pipe caused by a landslip on to the Newcastle–Carlisle railway line. Repairs to the damaged section of foul pipe required the excavation of three trenches inside the boundary of Farnley Grange Scheduled Monument.[41] The area of the Scheduled Monument includes the whole of one Roman temporary camp (Camp 3) and the northern sections of two adjacent camps (Camps 1 and 2). The camps at Farnley Grange are no longer visible as upstanding earthworks as they lie in a heavily ploughed agricultural landscape, but their location and respective dimensions have been extrapolated from previous aerial photographic cropmark analysis (FIG. 9).[42]

The watching-brief revealed the location of two previously unidentified ditches, F307 and F308, east of Roman Temporary Camp 3. Ditch F308 was considered to be the southerly continuation of an external defensive ditch, identified during aerial photography, which curved around the north-east corner of Camp 3. Ditch F307 similarly respected the orientation of the principal ditches of Camp 3 and was also interpreted as another outwork or defensive embellishment of Roman provenance. Consequently, both features were considered to be representative of an expansion to the original camp layout and potentially indicative of long-term use or reuse of the camp defences. No other finds or features of archaeological significance were identified during the archaeological watching-brief.[43] However, the interventions monitored by the watching-brief exercise only effected a temporary repair to the ruptured water-pipe situated within the scheduled monument boundary and required a permanent solution which would limit future impact to the monument. Consequently, a phase of geophysical survey was conducted as part of a feasibility study to determine the route of least impact for a permanent diversion of the water-pipe network around the scheduled area.[44] The geophysical survey identified and accurately located the eastern side of Camp 2 and the north-western corner of Camp 3. The geophysical survey revealed new evidence for a possible defensive outwork, or *titulus*, associated with the western entrance into Camp 3 as well as a number of archaeological features, probably related to an earlier prehistoric phase of occupation, which appeared to underlie the north-west boundary ditch of Camp 3 (FIG. 10).[45]

(2) **Morpeth**, *St George's Hospital* (NZ 20331 86677): an archaeological excavation of *c.* 1.28 ha in advance of a housing development was focused on a late prehistoric or Roman Iron Age rectilinear enclosure which had been identified during an earlier phase of geophysical survey and archaeological evaluation trenching. The archaeological material identified during the

[41] National Heritage List for England 1009156.

[42] J.K. St Joseph, 'Air reconnaissance of north Britain', *Journal of Roman Studies* 41 (1951), 53.

[43] R. Lotherington, *An Archaeological Watching Brief at Farnley Haugh, Corbridge, Northumberland*, Archaeological Research Services Ltd unpublished Report No. 2016/12. Archaeology Data Service link: http://archaeologydataservice.ac.uk/archives/view/greylit/details.cfm?id=45073

[44] R. Durkin, *Geophysical Survey at Farnley Grange, West Lodge, Corbridge, Northumberland*, Archaeological Research Services Ltd unpublished Report No. 2016/133.

[45] Work by Archaeological Research Services Ltd was commissioned by Northumbrian Water Limited. Summary compiled by R. Lotherington. Dr C. Waddington sent information.

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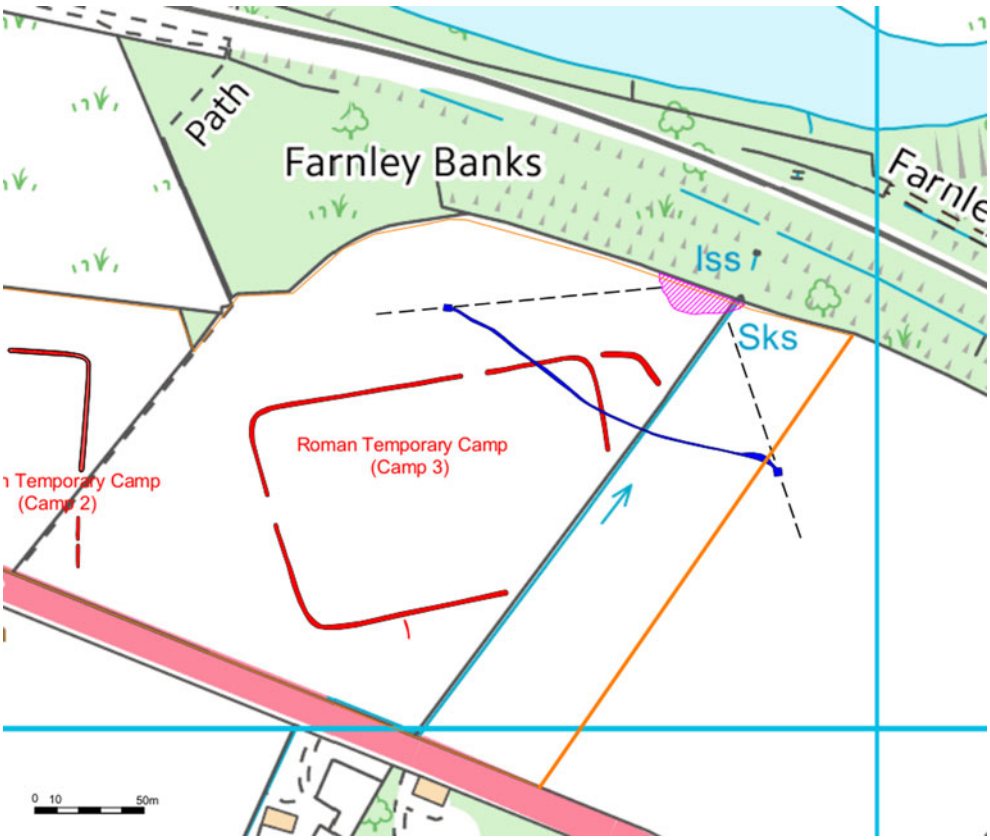


FIG. 9. Farnley Grange, West Lodge. Plan of Roman temporary camps (highlighted in red) and location of archaeologically investigated trenches (highlighted in blue). (© *Archaeological Research Services Ltd*)

excavation revealed evidence for multiple phases of activity dating from the Neolithic to the post-medieval periods with concentrated activity occurring during both middle Iron Age and Roman phases of occupation (FIG. 11).

The dating evidence suggested that the middle Iron Age settlement was abandoned by the end of the third century B.C. at the latest. Subsequent re-occupation of the site was later characterised by the establishment of a much larger, irregular rectilinear enclosure during the Roman Iron Age. The enclosure comprised a long ditch circuit punctuated by four entrances which was bordered internally by an upcast bank enclosing an internal area of 0.63 ha. The entrances were identified at the northern, eastern, southern and western extents of the enclosure with what is interpreted as a droveway bordering the principal eastern entrance. The south-western and eastern entrances were also flanked by parallel ditches which were probably banked and intended to aggrandize entry to the enclosure. A single, internal roundhouse structure was identified immediately adjacent to the eastern entrance. The presence of only a single, internal residence coupled with an external droveway and several smaller, internal feed pens suggests that the enclosure functioned as a large compound presumably associated with the keeping of livestock. The earliest radiocarbon date recovered from the enclosure was 19–129 cal A.D., whilst radiocarbon dating from the internal structures produced a date range of 256–413 cal A.D.

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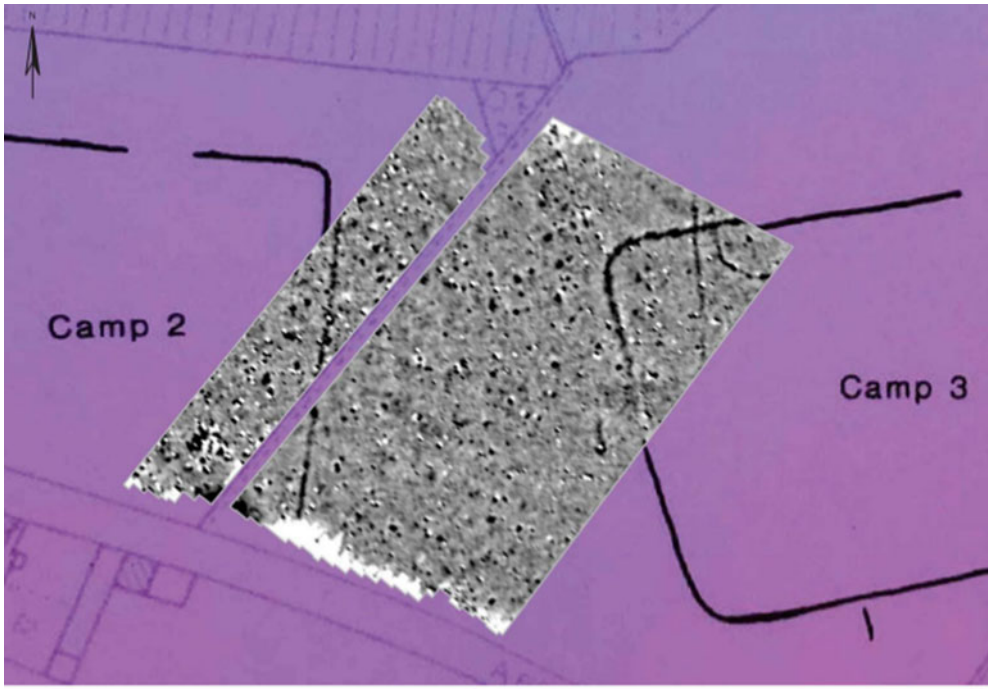


FIG. 10. Farnley Grange, West Lodge. Plan of geophysical survey results with aerial photograph cropmarks overlain, note the possible *titulus* outside the entrance of Camp 3. (© *Archaeological Research Services Ltd*)

The long-term occupation and maintenance of the stock enclosure at St George's may, therefore, be confidently assumed to span the Roman Iron Age and contrasts with a wider pattern of farmstead abandonment identifiable within the more southerly Iron Age enclosure settlements at Blagdon Park, East Brunton and West Brunton, which lie 13.7 km south of St George's in what may have been Brigantian territory.[46] The reuse of the St George's site together with the re-organisation of the late Iron Age farmstead 1.2 km away during the Roman Iron Age suggests that the arrival of the Roman military in the region prompted the reuse/re-organisation of some farmsteads whilst others were abandoned.[47]

(3) **Whittington**: 19 silver denarii, 1 dupondius and 1 copper-alloy brooch: probably Mark Antony (32–31 B.C.), 1; Vespasian (A.D. 69–79), 5; Domitian Caesar, 1; Titus (A.D. 79–81), 2; Domitian (A.D. 81–96), 1; uncertain Domitian or Nerva, 1 (= dupondius); Trajan (A.D. 98–117), 6; Antoninus Pius (A.D. 138–61); Diva Faustina I, 1; Marcus Aurelius Caesar, 1; Marcus Aurelius (A.D. 161–80), 1 (TRP XVII = A.D. 162–3). The hoard also contained an associated, incomplete trumpet brooch.[48]

[46] N. Hodgson, J. McKelvey and W. Muncaster, *The Iron Age on the Northumberland Coastal Plain: Excavations in Advance of Development 2002–2010* (2012).

[47] Excavations directed R. Lotherington for Archaeological Research Services Ltd on behalf of Linden Homes Ltd. Summary compiled by R. Lotherington. Dr C. Waddington sent information.

[48] Found in 2015 by I. Glendenning with a metal-detector. BM ref. 2015 T432; PAS ID: DUR-998D94. Mr R. Adby sent information.

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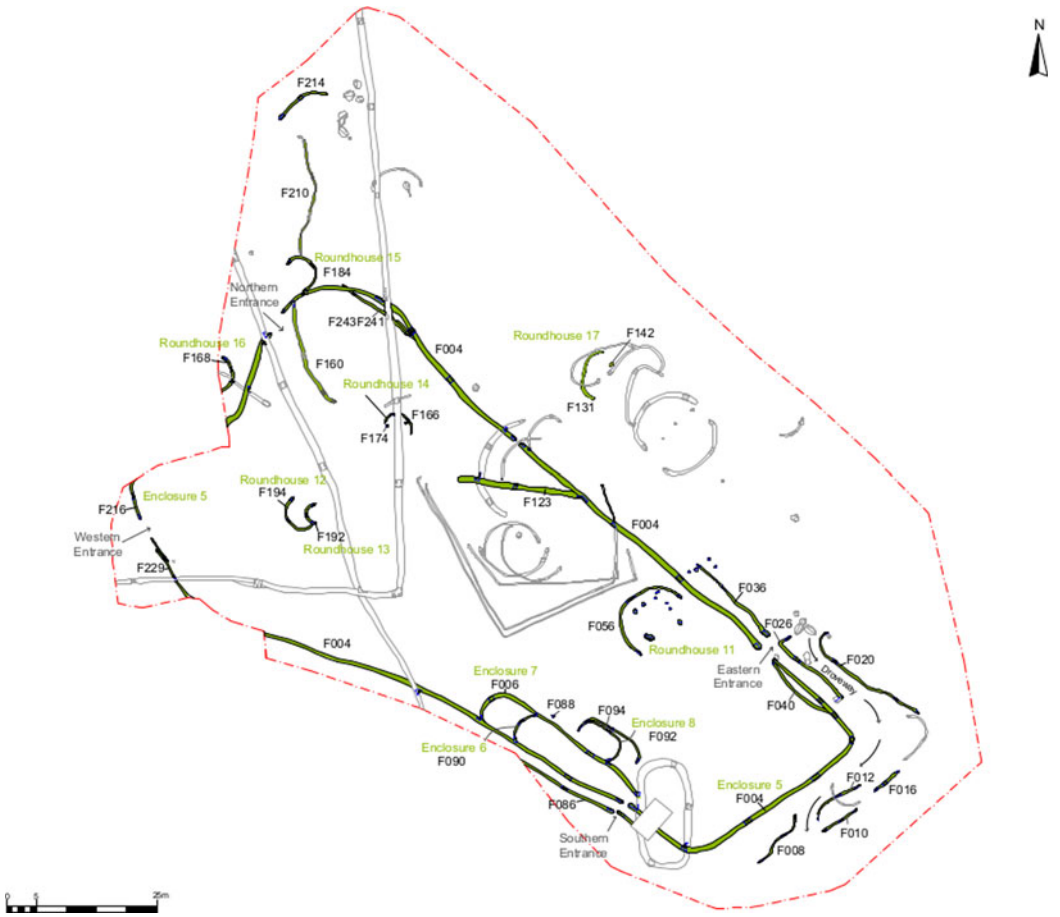


FIG. 11. St George's Hospital, Morpeth. Plan of Roman Iron Age features (highlighted in green). (© *Archaeological Research Services Ltd*)

NORTH TYNESIDE

(1) **Dinnington**: 1 gold aureus and 6 silver denarii: aureus: Vitellius (A.D. 69), 1; denarii: Antony (32–31 B.C.), 1; Vespasian (A.D. 69–79), 3; uncertain Flavian (A.D. 69–81), 1; Domitian (A.D. 81–96), 1.[49]

CUMBRIA

(1) **Ambleside to Old Penrith**, *a Roman road through the centre of the Lake District*: Pugmire proposed a Roman road over Dunmail Raise between Ambleside and Keswick pre Lidar evidence.[50] The modern evidence was fragmentary but now Lidar has added more evidence and

[49] Found in 2016 by J. Armstrong with a metal-detector. BM ref. 2016 T253; PAS ID: DUR-507D5B. R. Abdy sent information.

[50] M. Pugmire, 'The possible Roman road between Ambleside and the Keswick area; a discussion of the evidence and a consideration of the remains on the north slope of Dunmail Raise', *Transactions of the Cumberland and Westmorland*

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offered a logical destination.[51]

Heading north from Ambleside fort, the first real indication of a Roman type *agger* in the Lidar data is across Rothay Park heading NNE (NY 3728 0434). South of this there is a boundary and ditch that could indicate the course of the road back towards the fort. The alignment across Rothay Park indicates the road must have changed direction slightly at the crossing of Stock Ghyll. Beyond the ghyll there is a second length of about 400 m where a straight *agger* shows a little faintly heading this time NNW (NY 3724 0470). The road probably merges with the modern A593 road at NY 3719 0533.

It would seem possible that much of the modern A591 overlies the road passing Rydal and Grasmere, although the old road between these locations via How Top is more likely. Again, north of Grasmere there are a few short features in the Lidar data but nothing that could be considered certain. The next real clue is on the north side of Dunmail Raise approaching Wythburn and this is the *agger* that was spotted by Pugmire. Unfortunately, Lidar coverage does not extend over its full length but what does show is typical of a Roman road *agger*.

The next feature visible in the Lidar data is near Thirlspot Farm (NY 3176 1803) where 600 to 700 m of a straight length of *agger* is visible.[52] Projecting this alignment south it would merge with the A591. However, projecting it northwards it is aligned with the B5322 through St John's in the Vale. Supporting this is a short length of *agger* near Fornside east of the B5322 (NY 3198 2061).

Taken individually these locations probably would not count as concrete evidence for a Roman road. However, collectively they present a much stronger case but perhaps not yet totally convincing unless a connection could be established to another certain length of Roman road and a destination determined.

Lidar revealed a Roman road between Troutbeck and Threlkeld, confirming a suggestion by T. M. Allan,[53] but west of Threlkeld there was nothing visible. Allan had projected the alignment westwards from the east of Threlkeld through Keswick, but the Lidar provided no supporting evidence for this. The Lidar confirmed the road only as far as Station Road, Threlkeld, but this would allow a turn SSW there, on a course coinciding with the modern road (B5322) into St John's in the Vale. The initial stretch of the modern road into the vale is very straight for around 700 m before another slight turn to almost due south. Through the confines of the vale there is not much scope for variation in the road course so it is reasonable to conclude that the Roman and modern roads would probably coincide for most of this length. However, just south of Mire House the modern road drifts off to one side and a short length of *agger* is visible on the ground in the adjoining field, west of the B5322 (NY 3161 2365).

The obvious conclusion is that the road from Ambleside, last detected in the southern section of St John's in the Vale, best fits as part of a Roman road from Ambleside to Troutbeck and beyond. From Troutbeck there is the known Roman road to Old Penrith,[54] which also shows up very clearly in the available Lidar data. The known road from Troutbeck to Old Penrith always seemed to make little sense on its own but when considered as part of a route from Ambleside it is perfectly logical (FIG. 12).[55]

Antiquarian and Archaeological Society 3rd series 4 (2004), 105–22, includes a comprehensive review of the evidence going back to Horsley in 1732.

[51] Thanks are due to the late Hugh Toller, who was probably the first to realise how it all fitted together.

[52] First noted by Bryn Gethin.

[53] T.M. Allan, *The Roman Route across the Northern Lake District from Brougham to Moresby* (1994).

[54] R.L. Bellhouse, 'The Roman road from Old Penrith to Keswick, and beyond', *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society* 2nd series 54 (1954), 17–27.

[55] Analysis by D. Ratledge who sent information.

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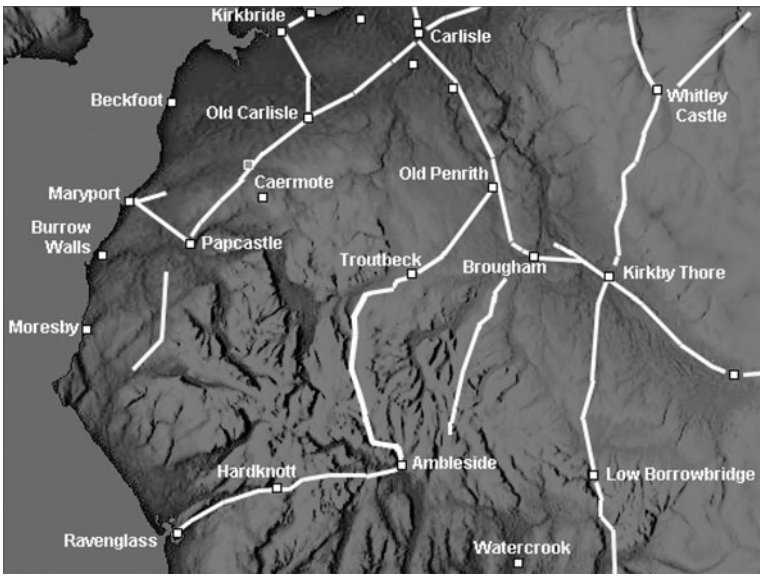


FIG. 12. Central Cumbria showing the route of the road from Ambleside to Old Penrith via Troutbeck. (*OS OpenData mapping - Contains OS data © Crown copyright*)

(2) **Eskdale**, *Roman road from Ravenglass into Eskdale*: seventy years on from Richmond's work on the course of this road his conclusions still stand.[56] However the two extremities of the road, west from Ambleside and east from Ravenglass eluded him. Recently, as part of the 'Romans in Ravenglass' project, the road in the vicinity of Ravenglass fort was found.[57] Lidar also shows this clearly and has revealed the probable course of the road up Eskdale to within about two miles of Hardknott fort, where the Lidar coverage ends.

Prior to the 'Romans in Ravenglass' project, it was generally believed that this road emanated from the fort's east gate. The project found that it actually lay around 150 m north of the fort. In addition, Lidar indicates that there was possibly another road branching from this one towards the bath-house and fort (FIG. 13). The route from the fort environs is very clear and again across Muncaster Chase (SD 1030 9685).

From Muncaster Chase the road largely follows the modern track/footpath with just a few deviations such as at Birks Coppice (SD 1281 9848). This course passes the site of the Muncaster kilns. It finally leaves the track just west of Muncaster Head and crosses Forge Hills (SD 1432 9931). Here movements of the river Esk over the centuries have changed the landscape. The river has formed a wide meander which has eroded much of the river bank taking all traces of the road with it.

Beyond the eroded section east of Forge Hills, the *agger* reappears in the Lidar data near The Green (SD 1482 9972). It joins the modern road at SD 1499 9986 and from here eastwards there are no visible deviations away from this road all the way to where the Lidar coverage ends near the

[56] I.A. Richmond, 'The Roman road from Ambleside to Ravenglass', *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society* 2nd series 49 (1949), 17–27.

[57] K. Hunter-Mann, *Romans in Ravenglass, Community Archaeology Project Excavation Report 2013–15*, ArcHeritage 2015. http://iadb.co.uk/d3e0L4l3/Ravenglass%20final%20report%202013_15%20V3.pdf

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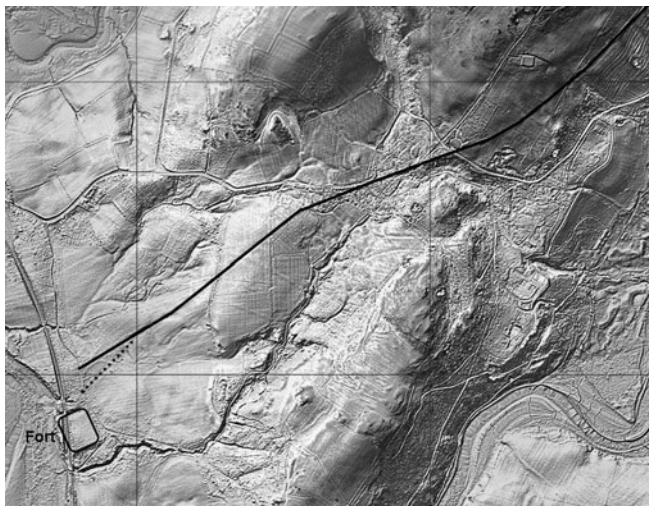


FIG. 13. Lidar image showing the course of the Roman road from Ravenglass to Ambleside heading into Eskdale. The alignment of the road is well north of the fort rather than heading for its east gate. A possible branch road is visible running towards the bath-house (dotted). (© *The Environment Agency*)

Woolpack Inn. It is more than likely therefore that the modern road here follows its Roman predecessor just as Richmond surmised 70 years ago.[58]

(3) **Kirkbride fort**, *possible western extremity of the fort* (NY 2295 5732): Kirkbride is a difficult site and it appears from the Lidar data as if there has been much activity after the construction of the initial fort. This confuses the situation and makes interpretation very difficult as most of the visible features seem unrelated to the fort as recorded by Richardson and Bellhouse.[59] Overlaying their plan on the Lidar data, a best fit allowed the probable north-western corner of the fort to be identified (FIG. 14).

Its orientation would fit well but was further west than Richardson and Bellhouse had surmised. They had thought the fort's west rampart must have been 'obliterated' by the church but this Lidar evidence shows it could well have been further west. This would make the fort considerably larger — around 190 m east–west over the ramparts.

Bellhouse's excavated east ditch of the fort also shows in the Lidar image, albeit very faintly. No trace of the southern side of the fort was discernible.[60]

(4) **Netherby** (*Castra Exploratorum*), *Netherby Hall* (NY 3965 7163): the fort, which is known to lie approximately beneath Netherby Hall, was, according to antiquarian accounts, accompanied by a bath-house, a temple, a sizeable civilian settlement and perhaps wharves on the bank of the river Esk, with inscriptions and other finds suggesting that occupation of the site spanned at least the late first to mid-third centuries. However, twentieth-century investigators concluded that no surface remains survived to indicate the exact form and extent of the fort, leaving the location and condition of the other features even more insecurely understood. In 2014, in response to a request from the new owner of Netherby Hall, a series of trial-trenches were excavated around

[58] Analysis by D. Ratledge who sent information.

[59] R.L. Bellhouse and G.G.S. Richardson, 'The Trajanic fort at Kirkbride: the terminus of the Stanegate frontier', *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society* 3rd series 82 (1982), 35–50.

[60] Analysis by D. Ratledge who sent information.

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FIG. 14. Lidar image of Kirkbride Roman fort with Richardson and Bellhouse's (1982) fort plan overlain. The possible north-west corner of the fort is visible as is a probable Roman road. (© *The Environment Agency*)

the northern end of the stable block.[61] One of these revealed a military ditch, containing Roman pottery. In 2015, follow-up analytical field survey[62] demonstrated that sections of one or perhaps two defensive perimeters can be traced as degraded earthworks, mostly surviving within the ornamental woodland of the Hall's eighteenth-century designed landscape. The better-defined features suggest that, despite the sophistication implied by antiquarian descriptions, the military base itself was, presumably at a relatively late date in its use, a fortlet of only *c*. 0.3 ha, probably square in plan. Lidar imagery, in conjunction with analysis of historic maps and rapid field survey, has allowed identification of the probable site of the bath-house, which was carefully recorded when exposed by stone robbers in 1732, but then lost, even though its site was mapped by General Roy in the 1750s. A few other features of potentially Roman date were identified. Fluxgate gradiometry and electrical resistance surveys were also carried out on the site of the fort and elsewhere, but unfortunately the results did not provide clear evidence for features of Roman date.[63]

(5) **Netherby area**, *Roman roads in the vicinity of Netherby, near Longtown*: most maps of Roman roads, including the Ordnance Survey Roman Britain map,[64] show Netherby at the end of a spur off the main road to Scotland via Birrens. In addition, the course of the road approaching Netherby was somewhat doubtful. However, the Lidar data have shown not just the Roman road approaching Netherby but it continuing northwards to the Scottish border where it appeared to

[61] By Gerry Martin.
[62] By the Department of Archaeology University of York. Directed by Al Oswald and Helen Goodchild.
[63] A report on the non-invasive investigations has been lodged with the Archaeology Data Service. Excavations by Gerry Martin continue. A. Oswald sent information.
[64] *Ordnance Survey Historical Map and Guide, Roman Britain* (Map), 5th edition, (2001).

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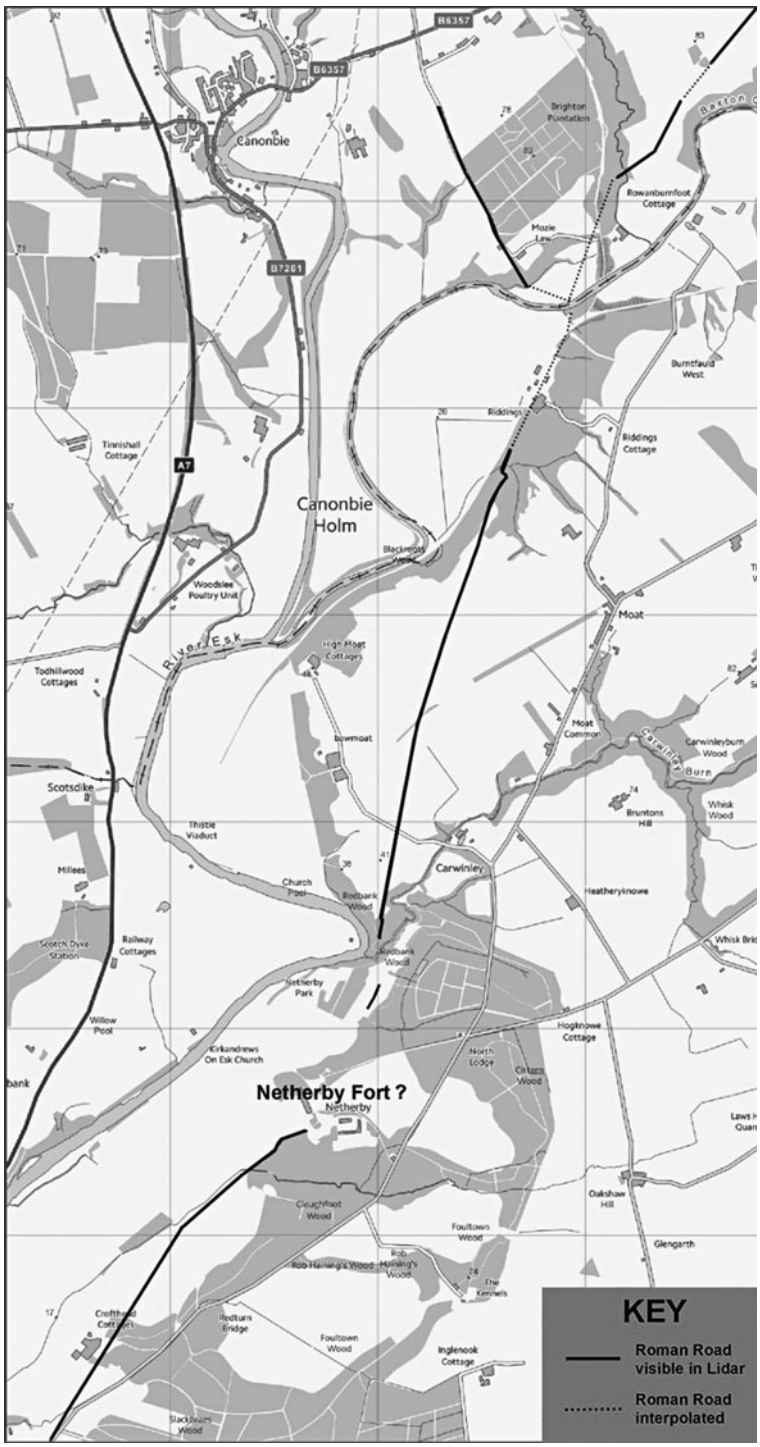


FIG. 15. The Roman roads south and north of the site of Netherby fort. North of Liddel Water there are signs that the road forked with one branch heading up Eskdale and the other heading up Liddesdale. (*OS OpenData mapping - Contains OS data © Crown copyright*)

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fork — one branch heading north-west towards Broomholm and a second probably continuing up Liddesdale on its northern bank.

The *agger* of the road approaching Netherby from the south is extremely clear diverging from the modern road at Crofthead (NY 3852 7017) just north of Longtown. It makes a slight turn about halfway across Netherby Park (NY 3906 7104) to begin its approach to what must be the location of the fort, although the exact location remains unknown (FIG. 15).

The road reappears again north of the fort site near Red Bank (NY 4011 7300) heading towards Riddings Farm. This course takes it just to the east of the site of Liddel Strength motte and bailey (NY 4090 7449). Beyond Riddings Farm the Lidar evidence is somewhat patchy but the road is clearly making for a crossing of Liddel Water just west of Liddel Viaduct on the disused railway (NY 4090 7549).

After crossing the river, now in Scotland, there are clear indications of two probable routes. One is heading up Eskdale passing the Roman camp near Claygate with Broomholm fort its likely objective. The second road appears to continue up Liddesdale (NY 4166 7673) to an unknown destination.[65]

Just south of Longtown, Lidar also shows clearly the road from Birrens heading to Roost Ford (NY 3667 6676) as surmised by Margary.[66] He thought it would have been destroyed by the MOD munitions site but surprisingly its course is still traceable as far as Springfield (NY 3346 6796).[67]

(6) **Old Carlisle to Kirkbride Roman road**: Margary postulated that the very direct modern road via Oulton could represent its course, i.e. a route on the west side of the river Wampool.[68] However Lidar revealed that there was indeed a Roman road linking the two forts but that it crosses onto the east side of the river.

The route is in two alignments with a change of direction around the half-way point just north of Moorside, in the vicinity of NY 261 517. The first (southern) alignment begins outside the east gate of the Old Carlisle fort and heads over Highmoor in a northerly direction. The Lidar evidence is then somewhat fragmentary passing Wigton. Its course here is a little subjective and a route via Stony Banks is one possibility.

Beyond Wigton there is a particularly prominent *agger* visible in the Lidar data (NY 2587 4983) heading towards Moorside and parts of the modern road to Moorside probably overlie it here. After the crest at Moorside the second (northern) alignment begins.

By contrast this stretch is remarkably clear and certain. It is almost a single alignment all the way to the fort with only the slightest of deviations just to the west of Biglands. This shows up especially clearly in the oblique Lidar image and was perhaps to negotiate the small hill there (FIG. 16).

There are some indications that the road could have continued to Bowness, including a possible road passing the north-west corner of Kirkbride fort (FIG. 14) and again just to the east of Whitrigg House there are signs of an *agger* (NY 2311 5829). However, beyond Whitrigg House the modern road would probably overlie it.[69]

(7) **Sedbergh**, *Burrow to Low Borrowbridge Roman road in the vicinity of the river Rawthey*: the Roman road from Burrow in Lunedale (or Lonsdale) to Low Borrowbridge is well attested[70] apart from a small section to the west of Sedbergh across the valley of the river Rawthey. Lidar has now provided some clear indications as to its probable course (FIG. 17). The first stretch visible is west

[65] Currently Lidar data for Scotland are not freely available.
[66] I.D. Margary, *Roman Roads in Britain* (1973), 456.
[67] Analysis by D. Ratledge who sent information.
[68] I.D. Margary, *Roman Roads in Britain* (1973), 452.
[69] Analysis by D. Ratledge who sent information.
[70] I.D. Margary, *Roman Roads in Britain* (1973), 381.

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FIG. 16. Oblique Lidar image showing the *agger* of the Roman road from Old Carlisle to Kirkbride from the first crossing of the river Wampool towards Kirkbride fort. (© *The Environment Agency*)

of Jordan Lane centred on SD 6341 9013. Here Jordan Lane was obviously moved off the Roman line to accommodate the building of the railway.

North of the river Rawthey, east of Hebblethwaites, a length of *agger* is visible (SD 6370 9146) which matches the Jordan Lane alignment. The final stretch visible is north of the A684 and extends the previous alignment before making a slight turn to the north. It is centred on SD 6380 9215.[71]

(8) **Temple Sowerby**, *Kirkby Thore to Brougham and Kirkby Thore to Old Penrith Roman roads*: the road from Kirkby Thore to Brougham is well recorded but when a milestone was discovered at Langwathby[72] the likelihood of a direct road to Old Penrith bypassing Brougham became almost certain. This would be in all probability the route of Antonine Itinerary *Iter* II but its course was unknown. A search of the Lidar data on the west side of the river Eden near Temple Sowerby revealed not the anticipated branch road off the (known) road to Brougham but a crossroads (NY 5971 2859). Site visits and further inspection of the Lidar data indicated a triangular (hypotenuse) road bypassing the crossroads on its north-eastern side which almost certainly was the start of a previously unknown road to Old Penrith. In addition, there were clear signs of a second road through Temple Sowerby (NY 6139 2690) and two crossings of the river Eden (FIG. 18).

[71] Analysis by D. Ratledge who sent information.

[72] B.J.N. Edwards and D.C.A. Shotter, 'A newly-discovered Roman milestone from Langwathby, Cumbria', *Contrebis* 29 (2004), 6–8.

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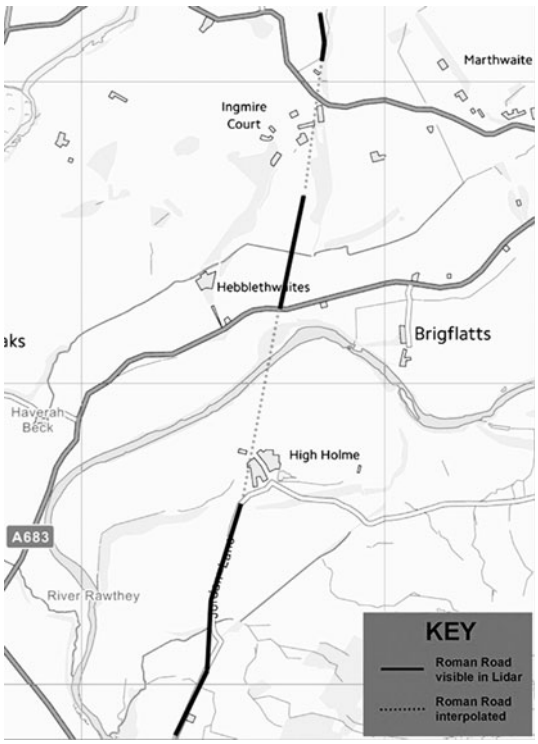


FIG. 17. The probable course of the Roman road west of Sedbergh revealed using Lidar. (*OS OpenData mapping - Contains OS data © Crown copyright*)

Both the road to Brougham and that of the newly discovered one to Old Penrith were clearly set out from the northern crossing, which must therefore have been the earlier of the two. The later southern crossing is located at an ideal bridging point where sandstone outcrops. The route and direction from the southern crossing up to the Brougham road and on to the Old Penrith road is the shortest practical route to join up with roads from the earlier northern crossing. This would mean that the 'crossroads' never actually functioned as such but reflects the existence of two phases or roads.

The route of the Old Penrith road from the northern crossing using the 'hypotenuse' road links up in a direct line with two pieces of Lidar-derived evidence (NY 5880 2955 and NY 5797 3006) and heads undoubtedly to Udford on the river Eamont. North of the river Eamont this alignment continues up Udford road. This road has all the classic hallmarks of a Roman road and it is surprising this has not been considered as Roman before. Beyond the Udford road there is no Lidar data but the Antonine Itinerary *Iter* II gives a distance of 13 (Roman) miles for Kirkby Thore to Old Penrith. This distance fits perfectly if this alignment continued reasonably directly.[73]

COUNTY DURHAM

(1) **Binchester** (*Vinovia*) (NZ 2102 3134): a follow-on project to the major excavation of 2009–15 saw the investigation of an area to the rear of the mausolea discovered by Time Team in 2007.[74]

[73] Analysis by D. Ratledge who sent information.

[74] For previous work see *Britannia* 41 (2010), 361; 42 (2011), 346; 43 (2012), 296–7; 44 (2013), 291–2; 45 (2014), 328–31; 46 (2015), 296–7; 47 (2016), 304–6. For the Time Team project see *Durham Archaeological Journal* 19 (2014), 23–32.

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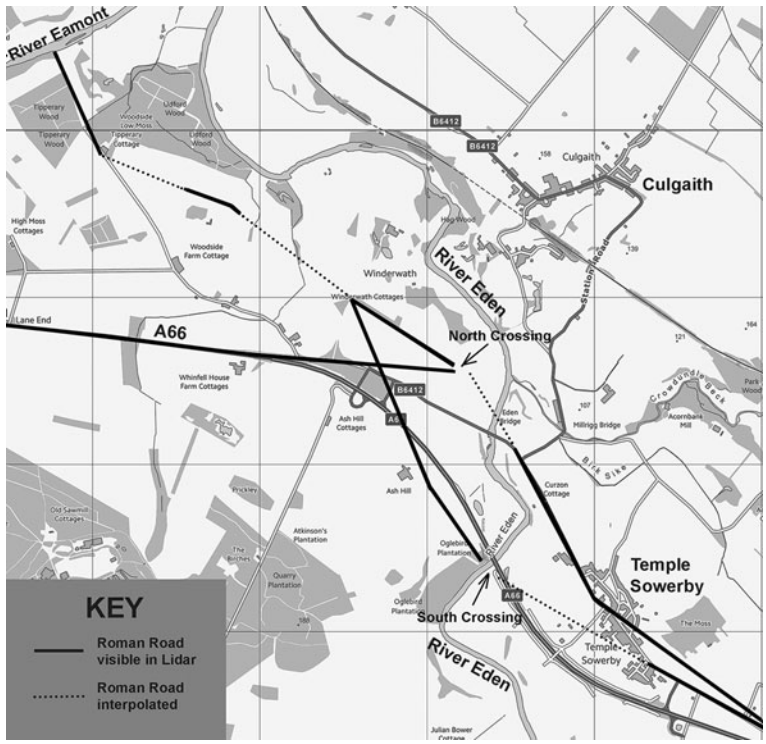


FIG. 18. The complex of Roman roads revealed by Lidar near Temple Sowerby. The chronology is best explained by the northern crossing of the river Eden being the first with the southern one a later development, possibly for a bridge. Note this map predates Temple Sowerby bypass. (*OS OpenData mapping - Contains OS data © Crown copyright*)

The excavation, located approximately 100 m ESE of the east corner of the fort sampled part of a ditched enclosure within which thirteen inhumation burials were investigated. The majority were simple cut graves. One produced a fragment of a late Roman gold and garnet necklace while another included a horse's head. Initial appraisal of the dating evidence suggests this part of the cemetery was in use in the fourth century. Further work is planned for 2017.[75]

(2) **Chester-le-Street** (*Concangis*), *Lindisfarne Avenue* (NZ 2763 5114): continued investigations in the gardens of properties on the east side of Lindisfarne Avenue revealed further details of the regimental bath-building including a doorway giving access from what was probably the *frigidarium* via a short flight of steps down to a possible exercise-yard (*palaestra*). A plan of the remains of hypocausted chambers uncovered in 1856 to the south of the current investigations and long thought to have been lost was reported by Mr George Muirhead as being lodged in the Northumberland County Records Office from which copies were obtained.[76]

[75] Excavation, with a mixed undergraduate and volunteer workforce, was organised by Archaeological Services Durham University and directed by P. Carne, M. Church and S. Semple. Dr D. Mason sent information.

[76] For previous work see *Britannia* 47 (2016), 306. Also, *Archaeology County Durham* 12 (2017), 30–8. Dr D. Mason sent information.

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(3) **Layton**: 18 silver denarii: Domitian (A.D. 81–96), 2; Trajan (A.D. 98–117), 3; Hadrian (A.D. 117–38), 3; Sabina, 1; Antoninus Pius (A.D. 138–61), 1; emperor illegible, 8.[77]

(4) **West Chilton** (NZ 2860 3064): excavations in advance of housing development uncovered the remains of a Romano-British settlement covering an area of at least 7 ha. Trackways separated ditched enclosures some of which contained timber roundhouses and their stone replacements. Pottery ranged in date from the late Iron Age to the second century A.D. A notable aspect of the work was the recovery of no less than thirteen quernstones and nine larger millstones raising the possibility that the inhabitants of the settlement were engaged in intensive cereal farming and processing (for the military market?).[78]

NORTH YORKSHIRE

(1) **Aldborough** (*Isurium Brigantum*) (SE 4045 6640): as part of the continuing programme of research into the Roman town,[79] a 5 by 2 m hand-dug trench was opened over part of a courtyard building investigated by Eckroyd Smith in the nineteenth century which contained the mosaics currently displayed by English Heritage.[80] The trench was located to intersect three rooms recorded by Eckroyd Smith whose plan was shown to be remarkably accurate.

Three walls were revealed (FIG. 19): Wall 1 running east–west, dividing Room 1 from Room 2. There was not space to fully excavate Room 1, so the levels in this area remain in the Victorian backfill layer. On the north side of Wall 1 the masonry is more visible, and shows evidence of the floor level: the footings extend 0.03–0.04 m from the upper levels and a layer of mortar was present. The southern face of the wall shows evidence for a series of vertical recesses as indicated on the Eckroyd Smith plan.[81] Although not excavated, these clearly represent vertical flues designed to carry hot air up the inner face of the walls. Wall 2 runs north of and parallel to Wall 1 and was bonded with Wall 3 which runs north–south through the trench and is clearly contemporaneous. Wall 3 is characterised by two openings below floor level that form part of a channelled hypocaust within Room 2.

In the broader context of the Eckroyd Smith plan and the ground penetrating radar results in this area, these structures and rooms can now be interpreted in more detail. They form the north-west corner of a large town-house. Eckroyd Smith's plan shows the north-west corner of a large courtyard surrounded by a portico which appears to have fronted onto the principal north–south street of the Roman town (modern day Front Street).[82]

(2) **Aldborough** (*Isurium Brigantum*), *Museum House, Front Street* (SE 4048 6616): the monitoring of the machine excavated foundations recorded a single large 'foundation' pad built from irregularly shaped pieces of stone set directly on top of the underlying natural geology. The pad was formed from two layers of stone, a lower one of local, coarse red sandstone and an upper one of large sandstone blocks. No other associated features could be seen within the limits of the foundation trench, although the backfill of the earlier sewage trench nearby did contain some redeposited red sandstone blocks some of which had lime mortar on one surface.

[77] Found in 2014–15 by M. Kane, K. Hollinshead, T. Peach, C. Hogarth, P. Gill jnr and A. Thwaites with metal-detectors. BM ref. 2015 T720; PAS ID: DUR-3A6B13. R. Abdy sent information.

[78] Initial work by Archaeological Services Durham University followed by Vindomora Solutions Ltd, both for Gleeson Homes. Dr D. Mason sent information.

[79] See *Britannia* 43 (2012), 287; 44 (2013), 292–3; 45 (2014), 331–2; 46 (2015), 297–9 for previous work.

[80] H. Eckroyd Smith, *Reliquiae Isurianae: the Remains of Roman Isurium, now Aldborough, near Boroughbridge, Yorkshire* (1852).

[81] H. Eckroyd Smith, *Reliquiae Isurianae: the Remains of Roman Isurium, now Aldborough, near Boroughbridge, Yorkshire* (1852), pl. XV.

[82] Excavations were undertaken by kind permission of the owner Andrew Lawson Tancred. The work was directed by Dr R. Ferraby and Professor M. Millett for the University of Cambridge. Professor Millett sent information.

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FIG. 19. Aldborough. Trench viewed from the south-west looking north-east showing excavated walls.

Two small body sherds of Roman greyware and a fragment of *tegula* were recovered from the topsoil during the monitoring. Although there were no other features observed in association with the pad, it is assumed that it was the stone base to support a large post for a building. However, its location in relation to, and just outside of, the Roman town wall is puzzling.[83]

(3) **Catterton**: 24 silver siliquae: A.D. 355–60, 5 (1 Lyon, 4 Arles); A.D. 360–3, 9 (2 Lyon, 6 Arles, 1 uncertain); A.D. 364–7, 7 (2 Rome, 3 Lyon, 1 Antioch, 1 uncertain); A.D. 367–75, 3 (Trier).[84]

(4) **Little Smeaton**: 7 silver siliquae: Constantius II (A.D. 337–61), 3 (2 Lyon, 1 Arles); Julian Augustus (A.D. 360–3), 4 (1 Trier, 2 Lyon, 1 Arles).[85]

(5) **Norton-on-Derwent**, *Brooklyn House* (SE 7930 7086): as part of a phased investigation of the site an open-area excavation was undertaken on some 1,400 square metres. This was a follow up to an earlier evaluation and geophysical survey which had recorded the remains of a small Romano-British field-system. The 2016 excavation and subsequent watching-brief investigated the remains of *c*. 10 robbed-out stone buildings, a Roman road and a potential mausoleum. Whilst the role of the majority of the buildings awaits the analysis of the finds assemblage, one of the buildings was found to contain a stone-built flue and was probably used for either malting or corn-drying. The watching-brief recorded the remains of six of the stone buildings

[83] Excavations funded by N. Kirkwood Esq and directed by J. Buglass for JB Archaeology Ltd. J. Buglass sent information.

[84] Found in 2016 by K. Sellers and A. Wilks with metal-detectors. BM ref. 2016 T711; PAS ID: YORYM-7E2168. R. Abdy sent information.

[85] Found in *c*. 1988 by H. and P. Kelly with metal-detectors. Original find (1997) = 1 solidus, 8 miliarenses, 169 regular siliquae and 6 irregular siliquae to A.D. 375. BM ref. 2014 T975 (addenda to 1997 find); PAS ID: SWYOR-309C12. R. Abdy sent information.

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orientated gable end onto the adjacent Roman road,[86] a section of which was also excavated and appears to have had a central 'lane divider' running along its mid-line. Initial assessment of the buildings indicates that many of them had been built on a large scale with well-constructed stepped stone foundations. The walls survived up to five courses high and to within 0.25 m of modern ground level. Some of these buildings are currently thought to have been warehouses, possibly with shops facing onto the adjacent road. So far it has only been possible to excavate one whole building which was 14 m long and 5 m wide (FIG. 20). The remains of the other buildings encountered suggest that one of them was probably around 8 m wide.



FIG. 20. Norton-on-Derwent, Brooklyn House. 14 by 5 m building under excavation, looking north-east.

In addition to the buildings the most striking feature of the site was the vast amount of pottery and animal bone recovered. To date there are approximately 20,000 sherds of pottery with an equally large amount of well-preserved animal bone. This huge amount of material appears to have come from a mid- to late fourth-century rubbish dump that had spread over the stone buildings, which in turn currently appear to have been built over at least part of a second-century cemetery.[87]

(6) **Overton**: 37 silver/base silver denarii: Domitian Caesar under Vespasian (A.D. 69–79), 1; Titus (A.D. 79–81), 1; Domitian (A.D. 81–96), 1; Trajan (A.D. 98–117), 3; Hadrian (A.D. 117–38), 4;

[86] I.D. Margary, *Roman Roads in Britain* (1973), 421, road 81a.

[87] Excavations for North Yorkshire County Council were directed by J. Phillips and J. Buglass for JB Archaeology Ltd. J. Buglass sent information.

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Antoninus Pius (A.D. 138–61), 3; Diva Faustina I, 4; Marcus Aurelius (A.D. 161–80), 1; Divus Antoninus, 1; Lucilla, 3; Commodus (A.D. 180–93), 3; Septimius Severus (Wars of the Succession A.D. 193–7), 1; Caracalla Caesar, 1; Clodius Albinus Caesar, 1; Septimius Severus (joint reign), 5; Caracalla (joint reign), 2; Julia Domna, 2. 37 fragments of Nene Valley ware pottery were recovered with the coins.[88]

EAST RIDING OF YORKSHIRE

(1) **Beverley**: 100 radiates: Gallienus and Salonina (A.D. 260–8), 15; Claudius II (A.D. 269–70), 12; Quintillus (A.D. 270), 1; Postumus (A.D. 260–9), 3; Victorinus (A.D. 269–71), 16; Tetricus I and II (A.D. 271–4), 47; irregular, 2; uncertain, 4.[89]

(2) **Garton**: 16 silver denarii: Republic, 2; Antony (32–31 B.C.), 1; Tiberius (A.D. 14–37), 1; Vitellius (A.D. 69), 1; Vespasian (A.D. 69–79), 7; Domitian Caesar, 1; Titus (A.D. 79–81), 2; uncertain Flavian, 1.[90]

WAKEFIELD

(1) **North Elmsall**: 9 sestertii and 1 dupondius/as. Sestertii: Trajan (A.D. 98–117), 6; Hadrian (A.D. 117–38), 2; emperor illegible, 1. Dupondius/as: Hadrian (A.D. 117–38), 1.[91]

BARNSLEY

(1) **Dearne South**: 4 silver denarii: Domitian (A.D. 81–96), 1; Trajan (A.D. 98–117), 1; Hadrian (A.D. 117–38), 1; Marcus Aurelius (A.D. 161–80), 1.[92]

(2) **Worsbrough**: 3 silver denarii: Nerva (A.D. 96–8), 1; Hadrian (A.D. 117–38), 2. Perhaps a dozen more denarii were recovered over some years but as they came up so sporadically the finder did not realise they were part of a hoard and they were not kept. Another finder recovered a denarius of Sabina on the same spot, but likewise did not retain it.[93]

DONCASTER

(1) **Doncaster**, *Rossington Inland Port Borrow Pit 2* (SK 58600 99200): a watching-brief recorded further information regarding a known late Iron Age to Romano-British field-system.[94] Four ditches were investigated but no datable artefacts were retrieved, though a fragment of heron bone was recovered. A piece of waterlogged roundwood recovered from a basal fill returned a radiocarbon date of 60 cal B.C.–A.D. 70 cal.[95] The ditches were proven to be contemporary, suggesting a system of planned land division. Palaeo-environmental remains suggest a waterlogged grassland environment with woody scrub nearby suggesting a pastoral economy.[96]

[88] Found in 2016 by A. Riddell with a metal-detector. BM ref. 2016 T765; PAS ID: YORYM-BE3F22. R. Abdy sent information.

[89] Found in 2015 by A. Stewart with a metal-detector. BM ref. 2015 T569 (addenda to 2013 T543); PAS ID: YORYM-BZFF07. Original find was 642 radiates to A.D. 282 (PAS ID: YORYM-858AC1). R. Abdy sent information.

[90] Found in 2015–16 by P. King with a metal-detector. BM refs 2016 T55, 2016 T790, 2016 T927; PAS IDs: LANCUM-E3BE5C, LANCUM-CE56B1 and PUBLIC-084958. R. Abdy sent information.

[91] Found in 2015 by S. Rough, N. Doyle, S. Leckey, M. Brookfield and I. North with metal-detectors. BM ref. 2015 T658; PAS ID: SWYOR-15B0A4. R. Abdy sent information.

[92] Found by J. Barrass with a metal-detector. BM ref. 2015 T855; PAS ID: SWYOR-0C79EF. R. Abdy sent information.

[93] Found in 2015 by N. Watson with a metal-detector. Earlier finds 2009–14. BM ref. 2014 T905; PAS ID: SWYOR-EFCB7A. R. Abdy sent information.

[94] See *Britannia* 47 (2016), 309–10 for previous work.

[95] UBA-31831, 2006±28 BP.

[96] Directed by P. Daniel for Wessex Archaeology on behalf of CgMs Consulting. P. Bradley sent information.

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(2) **Doncaster Common**: 8 silver denarii: Mark Antony (32–31 B.C.), 1; Vespasian (A.D. 69–79), 1; Trajan (A.D. 98–117), 1; Hadrian (A.D. 117–38), 3; Antoninus Pius (A.D. 138–61) for Faustina II, 2; Marcus Aurelius (A.D. 161–80) for Faustina II (d. A.D. 176), 2. Total now stands at 404 denarii to A.D. 176 and 24 sherds of their Roman coarseware pottery container.[97]

(3) **Scawsby**, *land off Barnsley Road* (SE 52860 05560): 44 trial-trenches targeting geophysical anomalies were excavated across 16 ha of land, ahead of the construction of a new motorway service station. The presence of field ditches confined to freely draining limestone areas and absent from wetter, more clayey ground was demonstrated. The finds assemblage consisted largely of animal bone, with a single sherd of pottery of probable later prehistoric date. Based on the field-system's form and the regional context, a late Iron Age to Romano-British date is considered likely. Sparse palaeo-environmental remains suggest arable agricultural activity.[98]

(4) **Tickhill I**: 5 silver denarii: Domitian (A.D. 81–96), 1; Hadrian (A.D. 117–38), 4. The original find was one denarius of Commodus (A.D. 180–92) for Crispina, and one illegible sestertius of an Antonine empress (*c.* A.D. 138–82), and a copper-alloy ('bow and fantail' type) brooch.[99]

(5) **Tickhill II**: 1 copper-alloy radiate and 5 copper-alloy nummi: radiate: Victorinus (A.D. 269–71), 1; nummi: A.D. 318–24, 1 (mint illegible); A.D. 335–7, 1 (Trier); A.D. 348–54, 3 (2 mints illegible, 1 irregular).[100]

(6) **Tickhill III**: 1 barbarous radiate and 55 copper-alloy nummi (+ 1 stray nummus). Nummi: A.D. 323–4 Vot X/XX within wreath, 1 (mint uncertain); A.D. 330–5 Gloria Exercitus (2 standards), 53 (24 Trier; 5 Lyon; 3 Arles; 21 uncertain); A.D. 335–7 Gloria Exercitus (1 standard), 1 (Lyon). Stray nummus of A.D. 348–54 (fallen horseman type) in very worn condition recovered from same findspot.[101]

SHEFFIELD

(1) **Whirlow Hall Farm** (SK 3123 8318): further work added significant new information.[102] An extension to the geophysical survey identified the site of a probable Roman signal station. These anomalies were subsequently tested by evaluation trenching. Charred wood dating samples from each of the two timber construction slots produced virtually identical radiocarbon determinations that date the site to the late first to early second centuries A.D. It has a square shape with an entrance on its eastern side. The construction slots are interpreted as the foundations for a timber-framed box rampart. An arcing linear ditch anomaly appears to run below the signal station and this is thought to relate to earlier, probable Iron Age, farming activity. The site commands exceptional vistas with a direct line of sight eastwards to the Roman fort at Templeborough which lay on the south side of the river Don and south of the extensive linear earthworks collectively known as the 'Roman Ridge' which link the marshlands of the

[97] Found in 2013 by K. Notley with a metal-detector. BM ref. 2015 T156 (addenda to 2012 T191 and 2005 T418); PAS ID: SWYOR-0A6163. R. Abdy sent information.

[98] Directed by O. Batchelor for Wessex Archaeology on behalf of Arup. P. Bradley sent information.

[99] Found in 2015 by P. Millington with a metal-detector. BM ref. 2015 T201 (addenda to 2012 T896a); 2012 T896a and b were originally treated as one case but are now more clearly Tickhill I and II due to subsequent finds; PAS ID: SWYOR-6F5A37. R. Abdy sent information.

[100] Found in 2016 by P. Millington with a metal-detector. BM ref. 2016 T719, addenda to 2012 T896b; PAS ID: SWYOR-8102FD (original find = SWYOR-74BE41). A further 6 nummi had previously been found in the area and have been recorded as pre-treasure case material: SWYOR-82D4C3, SWYOR-61AF17, SWYOR-82A371, SWYOR-8282E8, SWYOR-826661, SWYOR-8253DD. Total now stands at 70 copper-alloy coins and the remains of their greyware pottery container. R. Abdy sent information.

[101] Found in 2015 by D. Boulton and M. Angus with metal-detectors. BM ref. 2015 T956; PAS ID: SWYOR-5669FC. R. Abdy sent information.

[102] See *Britannia* 45 (2014), 338 and C. Waddington, 'Discovery and excavation of a Roman estate centre at Whirlow, south-west Sheffield', *Forum. The Journal of CBA Yorkshire* 1 (2012), 43–52 for previous work.

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Humberhead Levels with the river Don in the centre of Sheffield. Taken together a case can now be made for the pre-Flavian Roman frontier following the Don as far as Sheffield where it then follows its main tributary, the Sheaf, all the way to its own well-defined tributary known as the Limb Brook, before possibly extending via *Navio* (Brough-on-Noe) across the Pennines to the Cheshire Plain.

The excavations at the rectilinear enclosure, or estate centre, which also lies on the northern side of the Limb Valley frontier 1 km south-east of the signal station, produced further information on the phasing and dating of the occupation of this site. The site appears to be mid- to late Iron Age in origin before being levelled and rebuilt in a Roman style in the late first century to early second century A.D. and being occupied into the late third century to early fourth century. Evidence for metal-working was discovered on the site allowing for the suggestion that the site may have had a role as a processing site for lead and other minerals leaving the Peak District on their way to export from the riverine fort at Templeborough. A rich ceramic assemblage was recovered from the site together with a stone column base, quernstones and glass fragments. Other features included pits, post-holes and the foundations of a stone-founded rectangular building (FIG. 21).



FIG. 21. Whirlow Hall Farm. Aerial view of the 2016 excavations on the rectilinear enclosure with the west entrance causeway under excavation by the 2 m ranging pole and the stone wall of a stone-founded rectangular building visible centre left. (© *Archaeological Research Services Ltd*)

Both sites appear to have been constructed during the Flavian period which suggests that during the pre-Flavian period they both lay on the north, Brigantian, side of the frontier. The estate centre may provide an important window onto the impact of the Roman military on the Brigantian

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peoples living in the frontier zone and the way in which Brigantia was absorbed into the Roman Empire.[103]

LANCASHIRE

(1) **Garstang–Lancaster**, *Walton-le-Dale to Lancaster Roman road*: further work has allowed the route of the road from Garstang to Lancaster to be identified.[104] It had long been suspected that Fowler Hill Lane at Cabus, north of Garstang, marked the road's course and Lidar has confirmed this. The determination of the route from Garstang to this point led to the realisation that the west gate-post of the Turnpike Cottage at Cabus (SD 4907 4668) was in fact a Roman milestone. It is of typical format with a square base and cylindrical top (FIG. 22).



FIG. 22. Walton-le-Dale to Lancaster Roman road. The probable Roman milestone at Cabus, opposite Turnpike Cottage.

At Cabus crossroads the *agger* becomes visible both on the ground and in Lidar imagery (SD 4845 4831). Beyond the canal, Kiln Trees Lane marks the approximate course but this has been so worn away by traffic over the centuries that it is now a hollow way.

Lidar shows the line of the road crossing Forton Hall Farm and road foundation stones are clearly visible in the hedge bottom (SD 4771 5022). There is faint Lidar evidence that the route headed towards the river Cocker bridge and onto Main Street, Cockerham (FIG. 23).

[103] Excavations by Archaeological Research Services Ltd and the Time Travellers community archaeology group were directed by Dr C. Waddington. The work was funded by the Heritage Lottery Fund. Dr Waddington sent information.
[104] See *Britannia* 46 (2015), 303; 47 (2016), 314–15 for previous work.

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The line through Cockerham is more than likely overlaid by the modern road so proof is difficult. Projecting the alignment discovered south from Lancaster (see later) would indicate that the Roman road must turn off the modern road and head for Lancaster somewhere near Broad Gate — perhaps a significant name. However, about 300 m to the east of Main Street is a glacial striation running north–south which could have provided an alternative route here. On balance though the modern road through Cockerham seems the much more likely route and would perhaps have given a connection with the sea in Roman times.

After the turn for Lancaster, possibly just south of Broad Gate (SD 4636 5316), then the next visible *agger* is in the woods at Thurnham Roman Catholic Church (SD 4661 5433). It is in remarkable condition, around 7 m wide and 0.75 m high in the centre. There are more intermittent traces through the woods and where the road exits there is a visible spread of stones confirming the line. When the Glasson Dock Canal was constructed the river Conder was diverted into a straight new course and either side of its channel is evidence of the stones from the road having been piled up on each bank. The old river meander is also discernible in the Lidar plot and is most likely where the Roman bridge would have been (SD 4671 5487).

The evidence for the Ashton section is extremely strong. The Lidar image (FIG. 24) shows the road very clearly and is convincing enough on its own. In addition, in the field 'adjoining the canal' at Ashton was found a milestone dedicated to the emperor Philippus.[105] This recorded a distance of 3 MP (*mille passum*), obviously from Lancaster. This fits this route for the road but not that of the previously assumed route east of Burrow Heights. In addition, just north of this spot, when excavating the canal in 1794, the collection of sculptured stones from a probable mausoleum was unearthed.[106] The findspot was given as in the pasture '... on the east side of the canal and the south side of the lane leading from Broken Back Bridge'. The road alignment passes through the findspot field.

Heading into Lancaster the remains of the road have been found at the Royal Lancaster Infirmary and the line is not to the fort but along Penny Street and Cheapside. This was confirmed in 2005 with the discovery of the road on a development site just north of the canal at Aldcliffe.[107]

(2) **Kellbrook**: 8 silver denarii: Vitellius (A.D. 69), 2; Vespasian (A.D. 69–79), 1; Domitian (A.D. 81–96), 2; Trajan (A.D. 98–117), 2; Diva Faustina I under Antoninus Pius (A.D. 141–61), 1. A ninth silver coin from the findspot was also submitted, but as a clipped siliqua (late fourth century) is likely stray to the denarius hoard.[108]

CHESHIRE

(1) **Wrenbury**, *land at Cholmondley Road* (SJ 59016 47726): a metal-detecting survey over 8.8 ha found a bow brooch dating to the first to second centuries A.D. A Romano-British settlement is known within 150 m from the findspot.[109]

NORTH LINCOLNSHIRE

(1) **East Halton and North Killingholme**, *Able Humber Port* (TA 1512 2013; TA 1635 1886; TA 1700 1734; TA 1590 1945): over the course of three years Allen Archaeology undertook a series of evaluations and large-scale excavations in an area along the southern bank of the Humber

[105] *RIB* I 2270.

[106] W.T. Watkin, *Roman Lancashire* (1883), 180–1; B. Edwards 'The Burrow Roman sculptures', in P. Iles and D. Shotter (eds), *Lancaster's Roman Cemeteries* (2009), 103–7.

[107] P. Iles and D. Shotter (eds), *Lancaster's Roman Cemeteries* (2009), 49–87.

[108] Found in 2016 by A. Lawson with a metal-detector. BM ref. 2016 T142; PAS ID: LANCUM-C7EF68. R. Abdy sent information.

[109] Volunteers supervised by M. Took and H. Holbrook of Wessex Archaeology for CgMs Consulting. P. Bradley sent information.

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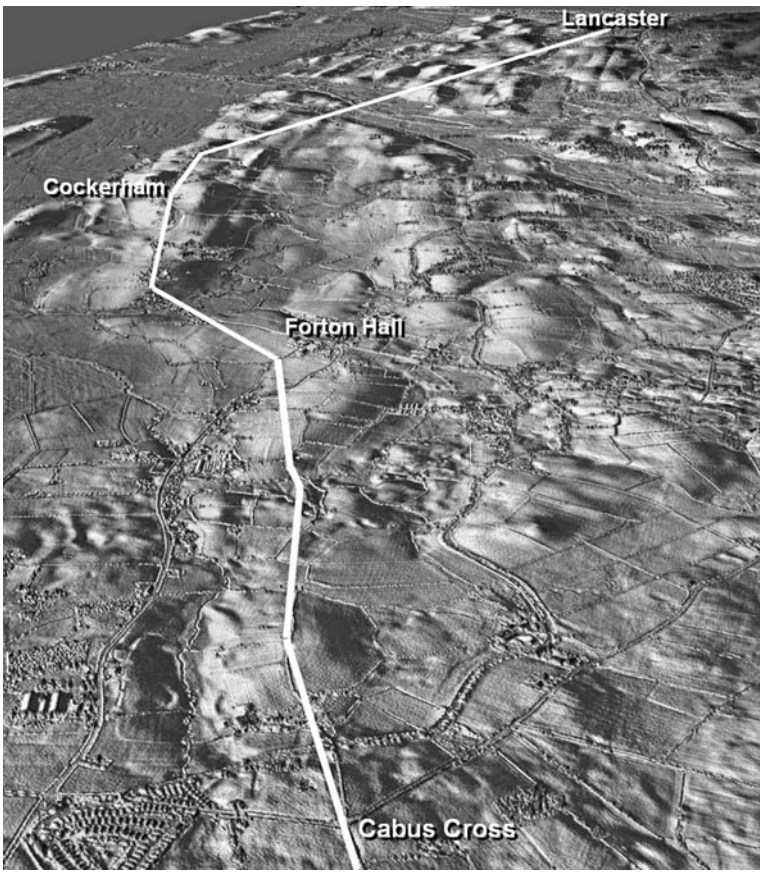


FIG. 23. Walton-le-Dale to Lancaster Roman road. Oblique Lidar image of the route of the Roman road from Cabus crossroads via Cockerham to Lancaster. A probable Roman milestone was found at Forton Hall and has been re-erected at Forton crossroads about 200 m from the line of the Roman road. (© *The Environment Agency*)

Estuary as a condition of planning consent for the construction of manufacturing and logistics facilities to support the offshore wind industry.

The work commenced in 2012 with a programme of evaluation trenching, auger survey, fieldwalking and earthwork survey. A second phase of work comprised open area excavations, further evaluation trenching, test-pitting and photographic survey of structures associated with a World War 2 barrage balloon complex.

An area totalling 12 ha, across 11 sites, was stripped and hand excavated to reveal a series of small, isolated middle Iron Age enclosures followed by a more complex pattern of late Iron Age enclosures and open settlements that extended across a large area of the Humber foreshore. Many of the large earthworks constructed during the later Iron Age were later used to form part of an extensive Romano-British field-system. This was associated with much larger, estate-like settlements that included aisled buildings, grain stores, metal-working areas and much more. Tens of thousands of pottery sherds were recovered together with a late Iron Age sword, a rare early Romano-British oak ladder and many finely detailed objects such as carved bone, coins and glass bangles.[110]

[110] Fieldwork was supervised by C. Casswell for Allen Archaeology Ltd on behalf of Abel UK. N. Powers sent information.

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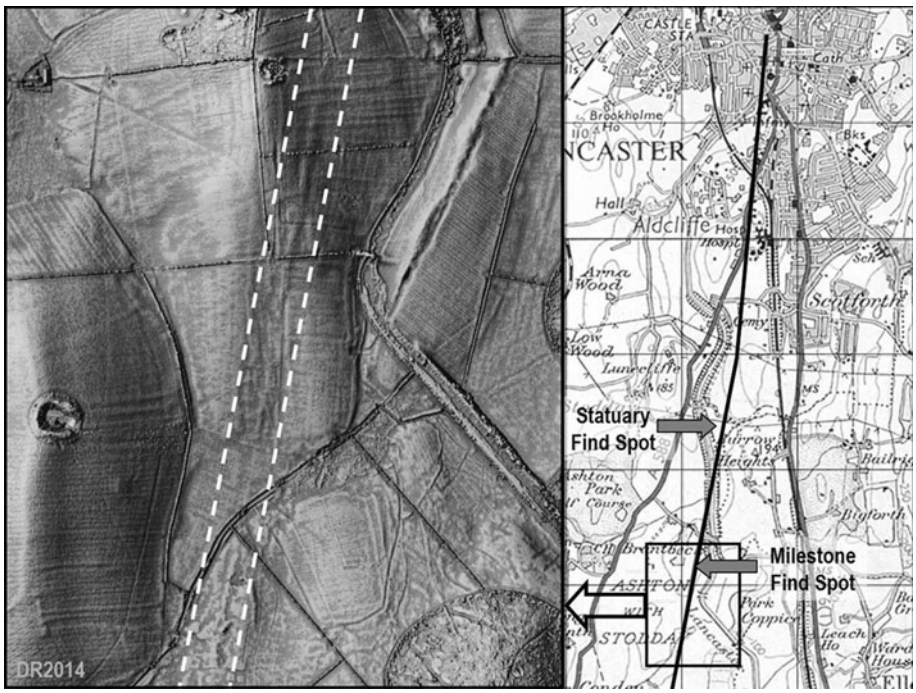


FIG. 24. Walton-le-Dale to Lancaster Roman road. Left: Lidar image of the Roman road at Ashton. Right: map showing the probable route of the Roman road into Lancaster and its position relative to the milestone and statuary findspots. (Lidar: © *The Environment Agency*; Map: *OS OpenData mapping - Contains OS data © Crown copyright*)

LINCOLNSHIRE

(1) **Baston**, *Chesham Drive* (TF 1164 1373): located adjacent to a known Iron Age field-system an evaluation revealed the continuation of an Iron Age boundary ditch previously known from work to the west, the top fills of which produced Roman pottery, including fragments of later second- to third-century date. A single ditch excavated to the east of this feature also produced Roman material, perhaps suggesting a shift of occupation to the eastern half of the site during the Roman period.[111]

(2) **Bourne**, *St Peter's Road* (TF 0934 2002): a programme of archaeological monitoring and recording was undertaken during the construction of a new dwelling. The site lay immediately adjacent to the medieval earthwork remains of Bourne Castle. A single fragment of Roman greyware was recovered, although the piece was residual.[112]

(3) **Grantham**, *Gonerby Moor* (SK 8864 4102): archaeological evaluation revealed features of prehistoric date and two ditches dated to the Roman period, one of which produced pottery probably dating to the mid- to late first century A.D. A further ten ditches and two pits remain undated due to lack of artefactual evidence.[113]

[111] Supervised by J. Smith for Archaeological Project Services on behalf of Larkfleet Homes. A. Beeby sent information.
[112] Supervised by C. Moulis for Archaeological Project Services on behalf of Mr A. Popple. A. Beeby sent information.
[113] Supervised by J. Smith for Archaeological Project Services on behalf of Moor Bio Energy. A. Beeby sent information.

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(4) **Grantham**, *Spittlegate Level* (SK 9242 3349): a scheme of archaeological monitoring and recording was undertaken during water mains replacement work in advance of the construction of the Grantham Southern Relief Road. The site lay near to the small Roman town at Saltersford. The monitoring revealed a single north–south-aligned ditch which produced pottery dating to the second century A.D.[114]

(5) **Horncastle**, *Churchill Avenue* (TF 2592 6880): an open area archaeological excavation was carried out within an area of known archaeological remains on the outskirts of Horncastle, a short distance to the south of the Roman town.

The investigation revealed a densely packed network of linear ditches, trackways and enclosures. The features are most likely connected to agricultural activity, including both arable cultivation and animal husbandry. Whilst there is no direct evidence of settlement on the site, there is some evidence of low-level industrial activity, with hammerscale, iron slag and lead melt noted within some of the environmental samples. A large assemblage of Roman period finds was recovered including pottery, brick and roofing-tile, coins, metalwork, human and animal bone, glass and quernstones.

Three broad phases of occupation have been identified, dating from the late first century A.D. to the later fourth or early fifth century.

Phase 1: during the early Roman period, late first to early/mid-second century, the site appears to have been used as farmland with the landscape characterised by a pattern of small fields and paddocks. The nature of occupation during this early phase is not well understood, but the presence of a small quantity of high-status pottery types may indicate a connection with the Roman military or Romano-British elites.

Phase 2: around the middle of the second century, the network of enclosures and gullies seems to have been replaced by a system of larger fields and tracks. Two isolated inhumations of this date were revealed towards the north and east sides of the excavation area.

Phase 3: subsequently, possibly after a short period of abandonment, the third phase of occupation, from the later third to later fourth or early fifth century, saw an intensification of activity on the site. During this phase the system of trackways between the fields was still in use, with earlier lines now well-defined with ditches and one area receiving a metalled surface. There was also extensive recutting of the ditches previously in use during Phase 2, as well as a broad expansion of the ditch system. This final phase also included two lime kilns, possibly suggesting the land was used for crops, with the lime used to improve the land. The purpose of a series of enclosures recorded within this phase is uncertain, although they are presumed to be related to agricultural management activity, perhaps related to animal husbandry. Pottery and coin evidence suggests intensive activity on the site well into the later fourth century and possibly beyond. A notable quantity of the latest pottery from this phase is likely to have been produced in Lincoln indicating the city was a major source of supply up until the end of the Roman period.[115]

(6) **Lea**, *land off Gainsborough Road* (SK 8330 8619): an archaeological evaluation in advance of a proposed residential development on a site where geophysical survey had identified a number of possible linear features and enclosures. Twelve 50 m trenches were targeted on areas of potential archaeological interest identified by the geophysical survey. Seven of the trenches were devoid of archaeological features. The remaining trenches identified a small number of linear features, some of which produced a small assemblage of locally produced Roman pottery. This activity was

[114] Supervised by M. Peachey for Archaeological Project Services on behalf of Lincolnshire County Council. A. Beeby sent information.

[115] Supervised by M. Peachey for Archaeological Project Services on behalf of Geda Construction. A. Beeby sent information.

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focused around Trenches 3 and 4 towards the western side of the site. The earliest activity comprised a ditch producing a small group of Roman pottery in Trench 3. Two other ditches in this trench, although undated, may be contemporary, given their shared alignment, profile and fills. The Roman pottery assemblage was very similar in appearance to the products of nearby kilns known at Lea and Knaith. The generally low density of finds recovered from the features suggests they were likely to be boundary features for fields or stock enclosures. A further complex of ditches was recorded in Trench 4, although these were largely undated, with one ditch containing a single sherd of Roman pottery, which is insufficient to make any firm conclusions about the date or nature of this activity.[116]

(7) **Legsby**: 3 Roman silver denarii: Antoninus Pius (A.D. 138–61), 2; Diva Faustina I, 1.[117]

(8) **Lincoln**, *Sarah Swift Building, Brayford Wharf East* (SK 9735 7093): a programme of archaeological investigation was undertaken in response to a redevelopment scheme. During monitoring works significant archaeological remains were encountered, leading to a second excavation area being opened in the southern part of the development site.

The earliest activity encountered during these archaeological investigations dates to the mid- to late second century A.D., during the time of the Roman *colonia*, and relates to the reclamation and consolidation on the eastern bank of the river Witham. A cemetery was encountered in Excavation Area B and it is likely it occupied this space for much of the third and fourth centuries. There was no evidence for activity on the site immediately following the end of the Roman period. The site was reoccupied in the late Saxon period, although remains were limited to episodes of pitting and robbing activity. Significant deposits of made ground lain down during this time indicate that, as had been the practice in the Roman period, the site was used as a dumping ground.

Prior to this work there had been no indications of a cemetery in this area. Despite the known significance of the *colonia*, a remarkably small amount of evidence for burial exists. A deposit of burnt bone most likely to represent the mixing of cremated remains from funerary deposits, or a nearby pyre site, with domestic waste materials, was uncovered, alongside eleven inhumations, seven of whom were neonatal. Disarticulated bone found almost certainly originates from another, disturbed adult grave and indicates the probable presence of further graves. It is suggested that the burials represent an area within a larger burial ground which was specifically set aside for the burial of young children. The use of a *tegula* as a grave covering suggests that the infants had formal burials. The only adult inhumation had been buried prone and a further infant had been decapitated.

The project has enhanced our understanding of the Wigford area on the eastern bank of the river Witham. The results demonstrate the effective management of city waste to enable the reclamation of land south of the Roman city and its subsequent, and concurrent, use as a cemetery.[118]

(9) **Lincoln**, *Lincoln Cathedral Connected*: a programme of archaeological evaluation by trial-trenching and monitoring and recording of geotechnical test-pits took place at Lincoln Cathedral. The works lie within an area of high archaeological potential within the footprint of the Scheduled Ancient Monument of Lincoln Roman *Colonia*[119] and within Lincoln Conservation Area 1. Five evaluation trenches were archaeologically investigated, and eight geotechnical test-pits and two California Bearing Ratio (CBR) test-pits were archaeologically monitored to the north and west of the cathedral. At the West Front a single trench (TP9)

[116] Fieldwork was supervised by A. Chapman and M. Piirainen for Allen Archaeology Ltd on behalf of Grace Machin Planning and Property. N. Powers sent information.
[117] Found in 2015 by J. Nugent with a metal-detector. BM ref. 2015 T921; PAS ID: LIN-D99504.
[118] Fieldwork was supervised by C. Casswell and M. Jarvis for Allen Archaeology Ltd on behalf of the University of Lincoln. N. Powers sent information.
[119] National Heritage List for England 1003569.

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identified a surface of possible Roman date, as well as a possible robber trench or large pit containing a massive slab of limestone. A small quantity of Roman pottery was recovered within geotechnical test-pits.[120]

(10) **Linwood**: 17 base metal nummi: A.D. 307–17, 1 (London); A.D. 317–24, 1 (London); A.D. 324–30, 3 (1 London, 1 Siscia, 1 uncertain.); A.D. 330–35, 12 (8 Trier, 1 Lyon, 1 Arles, 1 Siscia, 1 uncertain).[121]

(11) **Riseholme**: 33 copper-alloy nummi: A.D. 330–5, 4 (3 Trier, 1 Rome); A.D. 337–41, 1 (Trier); A.D. 341–8, 3 (Trier); A.D. 353–5, 24 (2 Trier, 1 Lyon, 1 uncertain, 20 irregular); A.D. 388–93, 1 (Aquileia). Pot sherds were found with the coins.[122]

(12) **Sleaford**, *Old Place* (TF 0756 4584): a community excavation was undertaken by Old Sleaford Heritage Group in 2015.[123] Previous investigations in the immediate area, which is known as 'Old Sleaford', have recovered evidence of a late Iron Age mint and the settlement may have been a regional capital for the local tribe, the Corieltauvi. During the Roman period the site continued as a Roman small town.[124]

In addition to medieval and post-medieval features and structures, the excavations identified a sequence of layers, up to 1 m thick, which produced large quantities of Roman pottery, along with animal bone, shell and evidence of iron-smithing. Much of the pottery from these deposits is of later Roman date. A particularly notable find from here was a base sherd from a strainer in Roman greyware, which has the letters A–M of the Latin alphabet cut into the body, just above the base. The layers possibly originate as midden deposits from the nearby roadside settlement. A stone-lined well was recorded underneath these layers but was not excavated.

(13) **Stainfield**: 2 Iron Age gold scyphate staters attributed to the Corieltauvi (1.45 g, 1.44 g). Deposited *c*. 60 B.C. or later.[125]

(14) **Washingborough**, *Lincoln Eastern Bypass* (centred: Area G TF 0033 7061; Area H TF 0036 7053): the ongoing excavation of a multi-period site has located two areas of Roman period occupation to the north (Area G) and south (Area H) of the Lincoln to Sleaford railway line. In the Roman period, there was a complex of masonry buildings in Area H, extending beyond the railway embankment into the southern, drier part of Area G. Quantities of roof and box-flue tiles were associated with these remains. There were ancillary structures, pottery and lime kilns, stone-lined wells and quarry pits nearby, as well as a number of burials, two of which contained complete pottery jars. The buildings were set in an agricultural landscape of ditched field-systems, some of which are still to be investigated. Very large assemblages of ceramics include stamped samian ware and mortaria. Small finds include an aureus of Vespasian.[126]

(15) **Weston**, *Pinfold Lane* (TF 2900 2492): an archaeological evaluation on a site close to the centre of the medieval village, in an area known to have been utilised for salt-making activities during the Roman period. Trial-trenches revealed an east–west-oriented palaeochannel, which

[120] Supervised by Mark Allen for Allen Archaeology on behalf of Lincoln Cathedral Connected/Corporate Body of Lincoln Cathedral. N. Powers sent information.

[121] Found in 2015 by F. Rawling, G. Tinsley, J. Nugent, K. Rigg, M. Rawding, S. Parker, D. Lonsdale and F. Edwards with metal-detectors. BM ref. 2015 T802; PAS ID: LIN-A44216. R. Abdy sent information.

[122] Found in 2016 by K. Kelway with a metal-detector. BM ref. 2016 T356; PAS ID: LIN-86184B. R. Abdy sent information.

[123] Supervised by D. Trimble for Archaeological Project Services. A. Beeby sent information.

[124] S.M. Elsdon, *Old Sleaford Revealed* (1997), 2–7.

[125] Found in 2016 by C. Kettleborough with a metal-detector. BM ref. 2016 T1032; PAS ID: LIN-FD23DC. R Abdy sent information.

[126] Excavations were directed by R. Lopez and managed by C. Taylor for Network Archaeology on behalf of Carillion Construction, with funding from Lincolnshire County Council and the Department of Transport. R. Moore sent information.

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had been reduced to two defunct creeks by the early medieval period. A pattern of three parallel, north–south-oriented ditches was also revealed. Although analysis showed these features to date to the eleventh to twelfth centuries, one of them produced residual pottery of Roman date.[127]

pete.wilson331@btinternet.com doi:10.1017/S0068113X17000411

5. THE MIDLANDS

By ALICE LYONS

NOTTINGHAMSHIRE

(1) **Worksop**, *Gateford North* (SK 5767 8232): a watching-brief, evaluation and excavation recorded two parallel trackway ditches which terminated at a small group of enclosures. The earliest activity was a field-system of late Iron Age or early Roman date that was remodelled during the first to second centuries with the addition of a trackway leading to a pair of sub-square enclosures. One of these enclosures contained a post-built structure dating to the mid-first to second century, as well as pits and a probable corn-drier. The remains were maintained and remodelled through the second to fourth centuries.[128]

DERBYSHIRE

(1) **Barlborough**: 6 silver denarii: one each of Republic (M•BAEBI•Q•F, 137 B.C.), Mark Antony (32–1 B.C.), Domitian (A.D. 81–96), Trajan (A.D. 98–117) and Hadrian (A.D. 117–38; PP on obv. A.D. 128). Date of deposition *c.* A.D. 128.[129]

STAFFORDSHIRE

(1) **Barlaston I**: hoard of 1 AE denarius and 2,014 radiates. Denarius: Gallienus (sole reign) (A.D. 260–8), 1. Radiates extend from joint reign of Valerian and Gallienus (A.D. 253–60) to Probus (A.D. 276–82; last coin of Bastien series 2, A.D. 276). Found in the remains of a Roman globular urn composed of a finely sorted greyware fabric. Date of deposition *c.* A.D. 276.[130]

(2) **Eccleshall**: hoard of 25 radiates, extending from Gallienus (sole reign) (A.D. 260–8) to Probus (A.D. 276–82). Date of deposition *c.* A.D. 281.[131]

(3) **Fradley and Streethay I and II**: 10 silver denarii to A.D. 4 from 2016 T9: 8 of the Republic and 2 of Augustus (31 B.C.–A.D. 14). 2 silver denarii to A.D. 124 from 2016 T2, 1 each of the Republic and Hadrian (A.D. 117–38). As 2016 T9 forms a recognisable early denarius hoard, the two cases were treated as separate deposits; it is possible, however, that the Republican

[127] Supervised by J. Snee for Archaeological Project Services on behalf of Broadgate Homes. A. Beeby sent information.
[128] Work by P. Boyer and J. Streatfield-James, Cotswold Archaeology. J. Cook sent information.
[129] Found in 2015 by Mr I. North, with a metal-detector. PAS ID: SWYOR-9A0FFD. R. Abdy sent information.
[130] Found in 2015 by Mr Steve Squire, with a metal-detector. PAS ID: WMID-225242. An iron tool and lead bloom also recovered were not diagnostically Roman. More recent find Barlaston II (2016 T459) is still under investigation. R. Abdy sent information.
[131] Found in 2015 by Messrs Jordan and Karl Forrester, Craig Shaw and Mark Hall, with metal-detectors. PAS ID: WMID-D2475E; WMID-D20A30; WMID-E41073; WMID-D1A958; WMID-D2217D; WMID-D1C7D8; WMID-BE51E8; WMID-BE2716. R. Abdy sent information.

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