

## **Archaeological Investigations on the A66 at Temple Sowerby 2006-2007**

JOHN ZANT

### **Summary**

**I**N 2006-7, Oxford Archaeology North (OA North) undertook a programme of archaeological investigation in advance of modifications to the A66 at Temple Sowerby and Winderwath, Cumbria. Several small prehistoric sites were identified and investigated; these included flint scatters and a group of pits, one of which contained sherds of Bronze Age pottery. The A66 follows the route of the Stainmore Roman road and, during works to the east of Temple Sowerby, a well-preserved section of this was identified. Dating evidence was sparse, but a coin of Vespasian, minted in A.D. 71, was recovered from topsoil immediately above the road make-up. Temple Sowerby has medieval origins, and limited evidence for contemporary activity, including agriculture and refuse disposal, was encountered, though remains of the post-medieval and enclosure-period agricultural landscapes were more frequent.

### **Introduction**

In 2006, Oxford Archaeology North was commissioned by Skanska Construction UK Ltd to undertake a programme of archaeological works in mitigation of the construction of the A66 Temple Sowerby Bypass, and associated improvements to the existing road at Winderwath, Cumbria (Fig. 1). The route of the bypass lay south of the former road line, extending for 4.9km from Whinfall House (NY 589 287), west of Temple Sowerby, to Lowmoor Row (NY 625 260), south-east of the village. The archaeological works were the culmination of a series of assessments (Highways Agency, 2002), surveys and evaluations (GSB Prospection, 2002; OA North, 2005; OA North, 2008) designed to identify and then protect or record any archaeological remains along the route of the proposed road. Evidence for prehistoric activity in the vicinity includes a putative Bronze Age ring ditch and numerous stone and bronze tools (Highways Agency, 2002), whilst the current course of the A66 is held to follow that of the major trans-Pennine Roman road through the Stainmore Pass, between Scotch Corner in the east and the fort at Brougham in the west (Road 82, Margary, 1973). A Roman milestone remains extant close to where the old A66 and the bypass diverge to the south-east of Temple Sowerby, whilst 1km further is the site of Kirkby Thore Roman fort. Although Temple Sowerby may have early medieval origins, the form of the village and the surrounding fields indicate a strong post-Conquest influence, and many of the fields have aratral (reversed s-shaped) boundaries, typical of medieval agriculture, fossilised through later enclosure. Between 1228 and the Dissolution in 1538, the manor was held first by the Knights Templar, who lent their name to the village, and then by the Knights Hospitaller, from whom Spitals Farm takes its name (Batten, 1909). From 1543, the manor passed through a series of secular hands and the village remained small but relatively prosperous (Highways Agency, 2002).

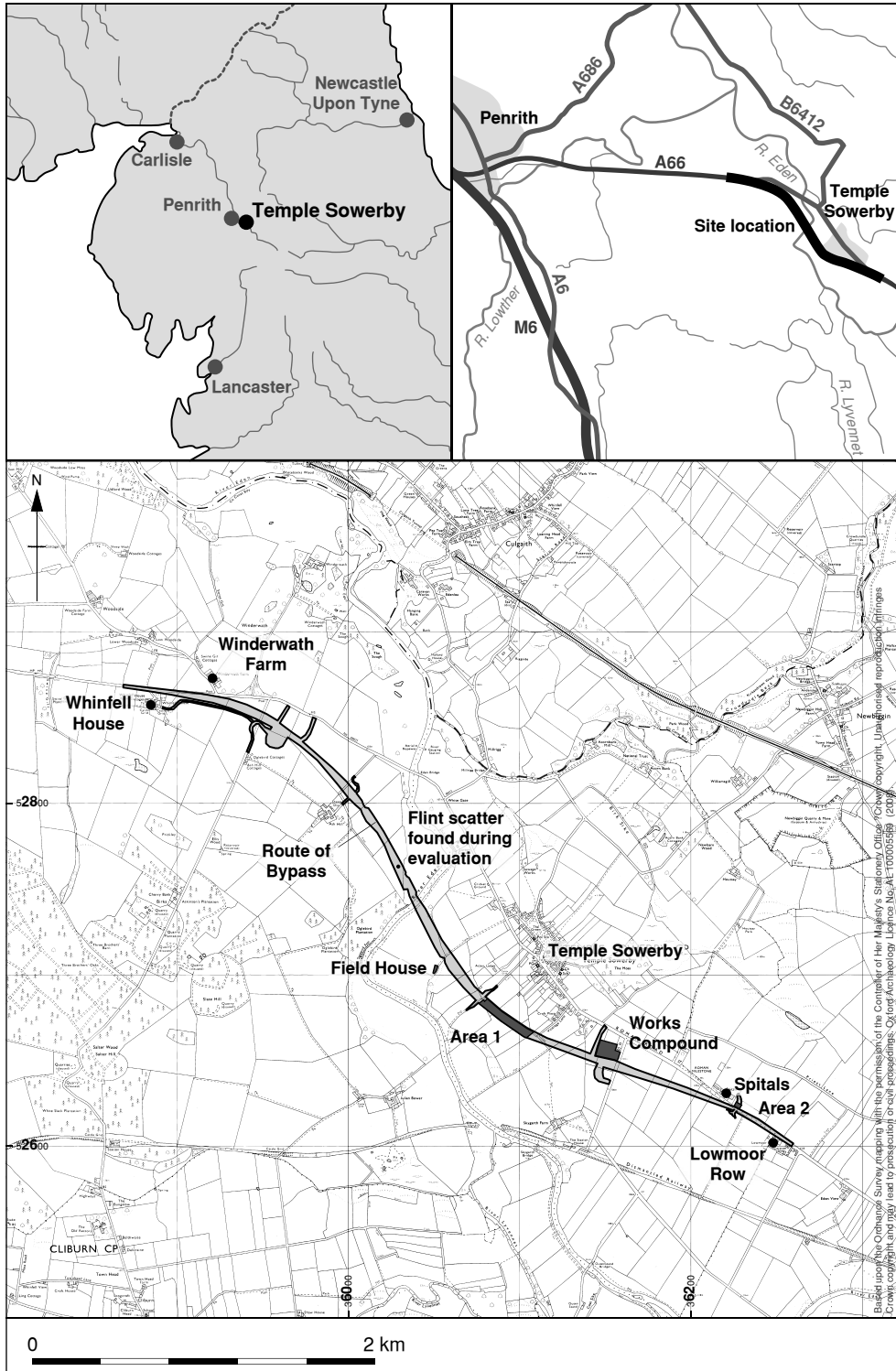


FIG. 1. The Temple Sowerby bypass and location of principal areas of archaeological investigation.

Between January 2006 and June 2007, three areas were targeted for detailed archaeological recording (Fig. 1): Area 1, to the south of Temple Sowerby; Area 2, the site of a proposed underpass to Spitals Farm; and the third area, that of the main works compound, in between. In addition, the uninvestigated earthwork remains of Field House, a probable post-medieval structure situated west of Temple Sowerby, were buried in February 2006 under archaeological supervision in order that they might be preserved *in situ*.

## Results

### *The works compound*

The removal of modern topsoil within the area of the works compound, which was c. 135m east to west by 95m north to south, revealed features of potential archaeological interest, dug into the natural subsoil. With the exception of a small pit of possibly recent date (112), within the northern part of the compound, most of the features were concentrated in a limited area towards the centre of the site, which measured c. 20 x 15m (Fig. 2). Probably the most archaeologically significant was an oval pit (104), of which only the western half survived (Fig. 3), the rest having been destroyed by a modern field drain. The pit was 2.03m north to south, at least 0.63m wide, and 0.26m deep, with a gently-rounded, U-shaped profile and a shallow lip on its southern edge. It was filled with dark brown silty sand containing numerous flecks of charcoal and medium-large stones (103); this yielded two sherds of Bronze Age pottery (p. 39) and charred material, including wheat (p. 42).

The remaining features of the cluster were all undated, and included a 2.1m diameter circular pit (106), and four smaller, shallow pits or hollows (107, 110, 113, 117; Fig. 2); all were filled with pale/mid-brown silty sand, similar in character to the natural subsoil. An isolated posthole of unknown date (102) was located west of this group, whilst further, undated, postholes were identified within an evaluation trench to the north-west of the compound, although they were too few to form any meaningful alignment.

Evaluation trenches immediately surrounding the works compound also revealed several elements of the post-medieval landscape, including a ditch, which was up to 2m wide, to the west of the compound. The meandering course of this feature suggested that it may have belonged to an earlier phase of land division, rather than to the more regimented, later post-medieval system of enclosure, an hypothesis corroborated by the presence of mid- to late eighteenth-century pottery in its upper fill. A second and rather less substantial linear feature was identified to the south of the compound. Its alignment was similar to that of the extant enclosure-period field boundaries nearby, suggesting that it may have been a robbed-out post-medieval wall foundation. Both features had been cut by two of a series of land drains aligned to the modern field boundaries, which in turn were transected on both roughly parallel and perpendicular alignments by a second network of drains, many of which had been packed with stones. Evidence of these drainage works was encountered throughout the fieldwork programme.

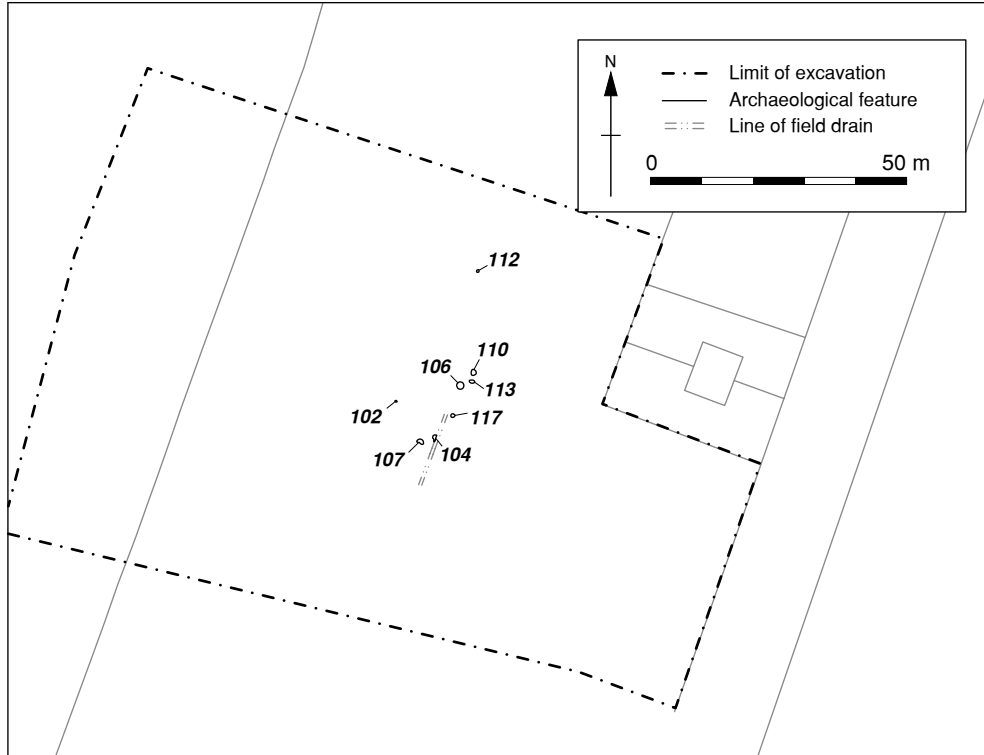


FIG. 2. Archaeological features located within the works compound.

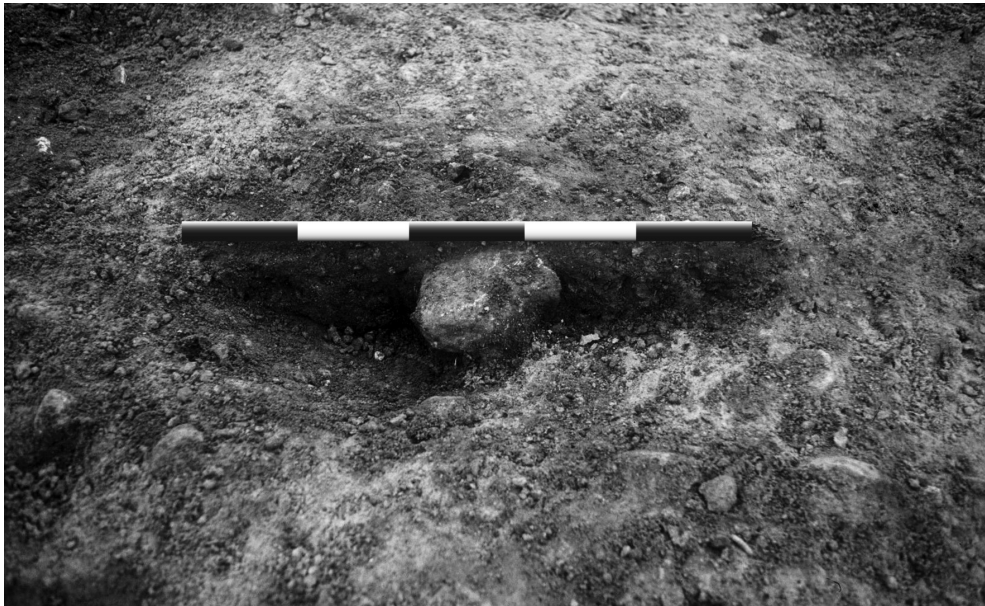


FIG. 3. South-facing section through Bronze Age pit 104, truncated to the east (right foreground; 0.5m scale).



### Area 1

The removal of the modern topsoil within Area 1, which was up to 350m north-west to south-east, by 32-44m wide, revealed a number of features dug into the natural subsoil (Fig. 4). A relatively large linear feature (132) was traced for approximately 70m on a north-north-west to south-south-east alignment across the north-western end of the site, extending beyond the excavation in both directions. A section across the feature showed it to be approximately 12m wide and 0.5m deep, with a quite steep eastern edge, a shallow, sloping western edge, and a flat base. Filled with deposits of clean, greyish sand and silt, it was probably a palaeochannel associated with an ancient course of the River Eden, for although today the river lies over 250m to the west, it is likely to have shifted its position considerably over time. Interestingly, the line of the palaeochannel appears to be fossilised within a series of north-north-west to south-south-east-aligned field boundaries between the village and the present course of the river (Fig. 1).

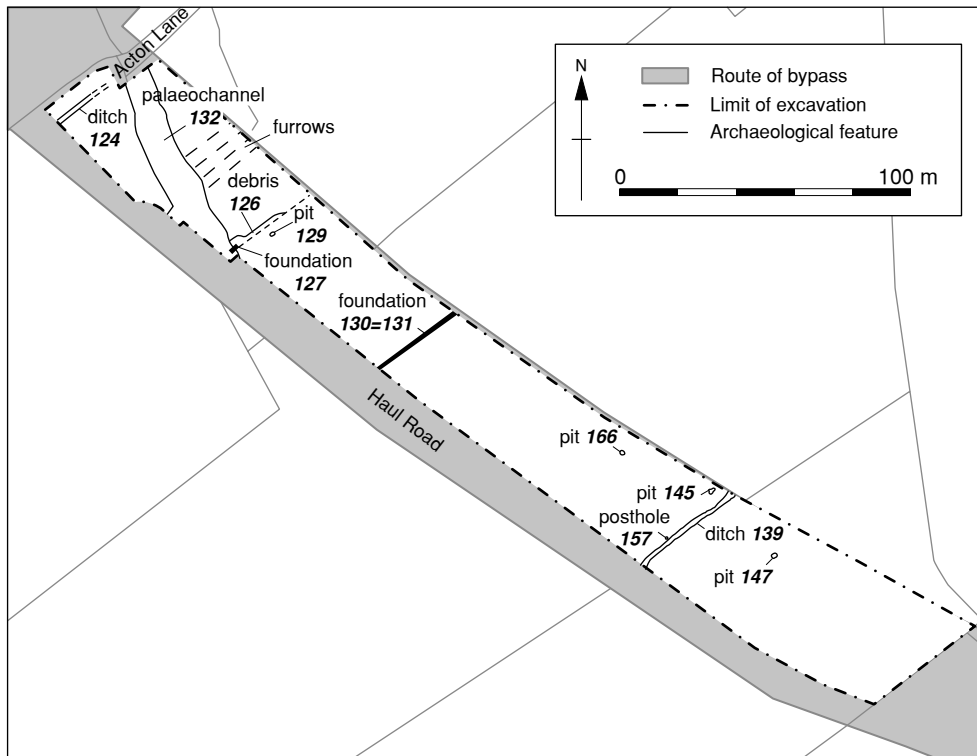


FIG. 4. Archaeological features located within Area 1.

A few other features of note were found in the northern part of Area 1. The most northerly, ditch 124, was 1.7m wide and 0.1m deep, and seems to have been associated with the southern edge of Acton Lane, which runs south-west from Temple Sowerby towards the river (Fig. 1). Four, parallel, furrows ran on a similar north-east to south-

west alignment as the adjacent field boundaries and ditch 124, and were preserved rather intermittently, although traces of corresponding ridges had been apparent prior to the topsoil strip. Probably the earliest feature, dated by a single sherd of fifteenth- to early seventeenth-century Silverdale ware (p. 40), was 1.8m wide and 0.25m deep oval pit 129, 15m east of palaeochannel 132. Nearby foundation 127 was aligned north-east to south-west and comprised a flat-bottomed trench, 1.85m wide and 0.23m deep, and a sherd of twelfth- to thirteenth-century pottery was recovered from its fill of river cobbles and sub-angular stones. Spatial considerations suggested that the trench cut the eastern edge of the palaeochannel. Two further twelfth- to fourteenth-century sherds, together with a fragment of late post-medieval (nineteenth-century or later) pottery, came from a loose collapse/demolition spread of cobbles and large sandstone fragments (126) on the north-west side of the foundation.

Part of a second wall foundation (130 = 131), similar to 127 and sharing the same alignment, was recorded 78m to the south-east, extending across the full width of the area investigated (Fig. 4). It was notable that the alignment of these foundations was shared by many of the field walls in the vicinity, suggesting that the buried features represented either the remains of demolished late post-medieval (nineteenth- to twentieth-century) field boundaries, or formed part of an earlier arrangement of land division that was superseded by later walls on much the same alignment. Whilst it is possible that they represented walls that were demolished in relatively recent times in order to increase field sizes to facilitate modern agricultural practices, neither is shown as an extant boundary on Ordnance Survey maps of the period 1863-1920 (O.S. 1863; 1879; 1900; 1916; 1920). This indicates that they had been demolished by 1863, or were constructed and subsequently removed in the period after 1920.

At the south-eastern end of Area 1, the principal feature was a north-east to south-west-aligned ditch (139), up to 2.3m wide and 0.2m deep (Fig. 4). Although no artefacts were recovered from this feature, it can be correlated with a recently demolished boundary wall, which is absent from the 1920 and preceding editions of the Ordnance Survey map, but is shown on the 1990 edition (O.S. 1990).

Three of the four other features (145, 147/1593, 166) were shallow, oval pits filled with pale brown sandy silts. All were *c.* 2-2.5m long, 1.4-1.55m wide, and 0.3-0.45m deep. Pit 147/1593 was of particular significance as a thirteenth- to fourteenth-century jug handle was recovered from its lower fill (p. 40). The others contained no dating evidence, but a prehistoric flint flake (Site Object Record Number (O.R.) 3194; p. 41) was recovered from the base of the topsoil directly above pit 166. The remaining feature (157) was an undated sub-circular posthole, 0.8m in diameter and 0.63m deep, containing large packing stones.

### *Area 2*

Evaluation of the proposed route of the road adjacent to Spitals Farm revealed the remains of the Roman road from Brougham to Kirkby Thore. Consequently, all archaeological deposits were excavated within the footprint of the proposed underpass, an area up to 23m north to south by 19.5m east to west (Fig. 5).

The stratigraphically earliest deposit in this area was a buried soil horizon (1891 = 1896) that lay directly above the natural sandy subsoil (Fig. 6). This comprised a layer of fine, dark brown or grey-brown sandy silt, up to 0.5m thick but generally rather thinner, containing only a few small pebbles and sandstone fragments. Horizon 1891 = 1896 was generally overlain by Roman road 1901, but it was also observed in evaluation trenches immediately north and south of the main site, where no trace of the road was found. In these areas, it was overlain by patchy deposits of pale orange-brown sandy silt, that were in turn sealed by modern topsoil.

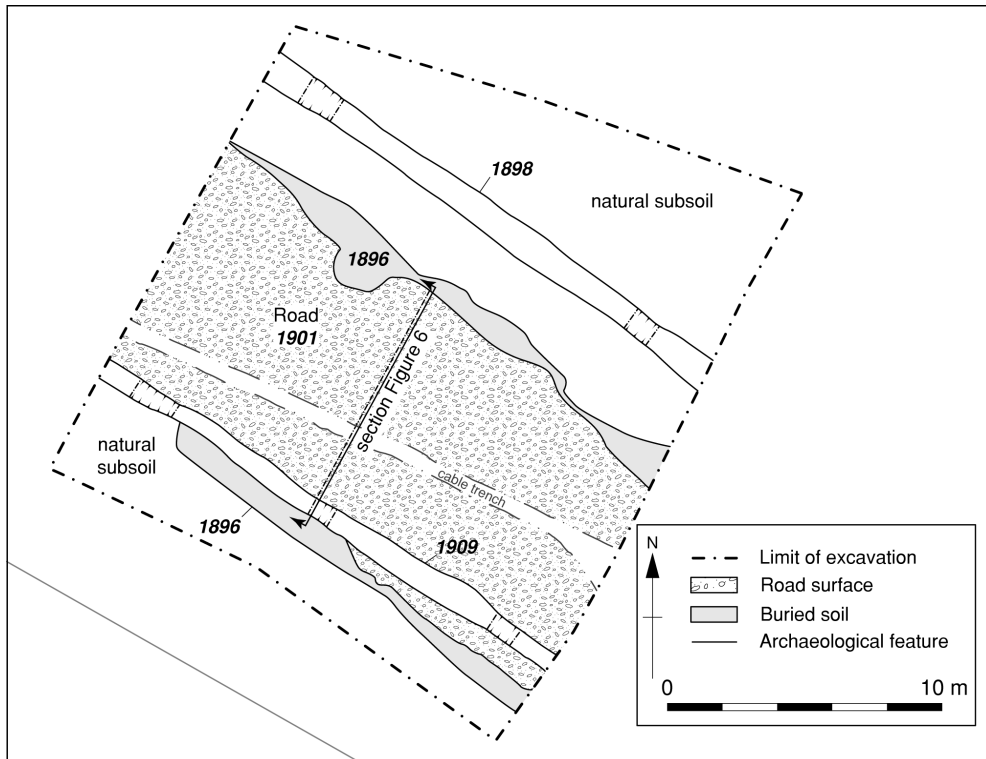


FIG. 5. Area 2, Roman road 1901.

Road 1901 was traced on a north-west to south-east alignment across the full width of the excavated area (Figs. 5 and 7), and was up to 9.5m wide, although it is possible that post-Roman cultivation had disturbed its edges (particularly the northern, upslope, edge) and that it had originally been wider. Conversely, it is possible that prolonged use, and perhaps also later ploughing, caused the make-up deposits to spread out, creating the impression that the road was wider than it actually was when built. The basal component of the road, laid directly onto the buried soil horizon, comprised a deposit of small to medium-sized sub-angular sandstone fragments (averaging 60 x 50 x 40mm), mixed with a little dark grey sandy silt. Generally, the stones in the northern part were smaller than those to the south, some of which were up to 250 x 250 x 170mm. The depth of this road make-up also seems to have increased from

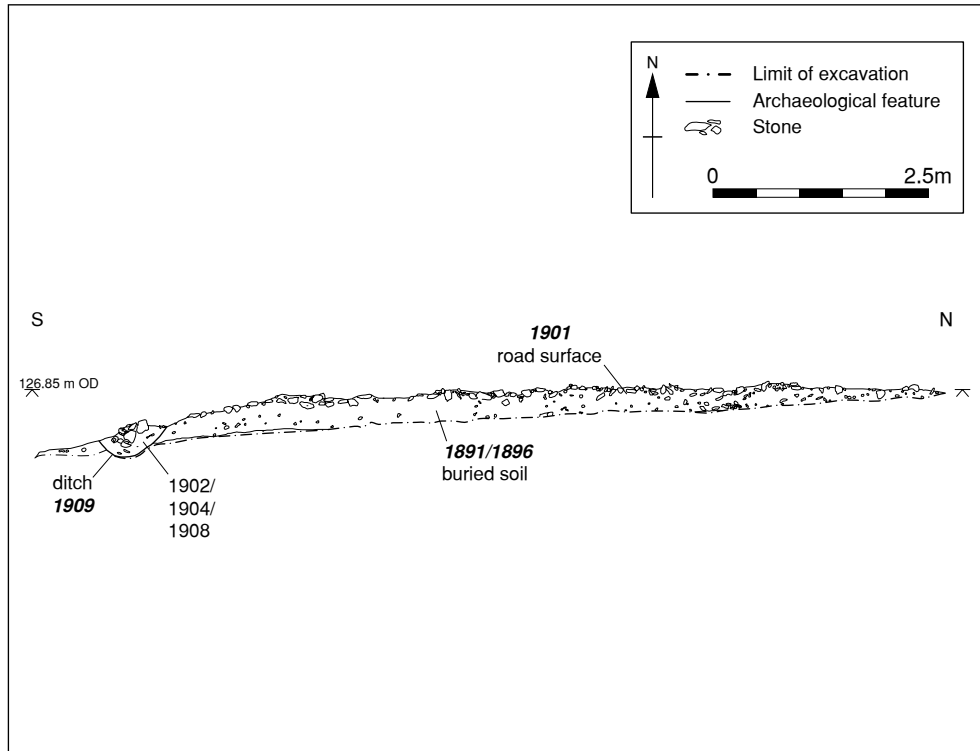


FIG. 6. East-facing section across Roman road 1901 and underlying soil deposit 1891 = 1896.

south to north, down the natural slope, from as little as 50mm at its northern edge to *c.*0.2m on the south. This was probably due in part to the fact that the upslope edge of the road was more vulnerable to the effects of post-Roman agricultural activity than the rest. However, it may also have been a deliberate feature of the road construction, the deeper make-up on the south compensating for the natural slope from the north.

This deposit was overlain by the vestigial remains of the road surface itself, which had been almost completely removed, perhaps as a result of heavy wear during its lifetime (though no evidence for rutting or repair was noted) and the effects of subsequent agricultural activity. Where surviving, the surface comprised a 70mm thick highly compacted layer of small, sub-rounded and sub-angular stones. Traces of a kerb of larger stones defining the southern edge of the road were also recorded (Fig. 8), although this had been destroyed over the greater part of the excavated area. No finds were recovered from the make-up of the road, but a moderately worn *as* of A.D. 71 (O.R. 1001; p. 41) and a copper-alloy pin head of probable Roman date (O.R. 1002; p. 41) came from the modern topsoil that had become mixed with the disturbed cobbling on the northern edge of the road.

Its southern edge was cut by a U-profiled ditch (1909), up to 0.85m wide and 0.7m deep (Figs. 5 and 6). This was filled with a fine, dark grey clay-sand (1902/1904/1908),



FIG. 7. Roman road 1901, looking south-east towards the modern A66.

containing some cobbles and stone fragments, presumably derived from the road surface itself. Although this feature ran broadly parallel, it did not share precisely the same alignment, and clearly post-dated the road make-up. A second ditch, up to 1.2m wide and 0.3m deep (1898), was also recorded, some 3m north of the surviving northern edge of the road (Fig. 5). Both 1898 and 1909 were undated, but were considered during the excavation to be post-Roman in date. Whilst this interpretation may be correct, the possibility that they actually represented the truncated remains of Roman (if not necessarily the original) roadside ditches (or, in the case of 1898, possibly a boundary ditch north of the road) cannot be completely discounted. If this were so, it would suggest that, on the northern (upslope) edge of the road, even allowing for a berm, the edge had been completely removed by post-Roman agricultural activity. The southern ditch (1909) obviously cut the road make-up, but it could conceivably have been a replacement for an earlier ditch further to the south, beyond the excavation. Allowing for truncation of the northern edge of the road, the distance between the inner edge of the two ditches was 11.55m. This equates to 39 Roman feet (*pedes Monetales*), taking the *pes Monetalis* (*p. M.*) as 0.29617m (Walthew, 2005), or very nearly one-third of an *actus* (120 *p. M.*). Since there is good archaeological evidence for the regular use of the *actus*, and fractions thereof, in the laying-out of forts, camps and other military sites in Roman Britain (Richardson, 2000), this observation may be significant.



Fig. 8. Remains of kerb defining the southern edge of Roman road 1901, cut by ditch 1909.

Elsewhere in Area 2, few other remains of archaeological significance were recorded. Some shallow linear features, most probably plough furrows of indeterminate (but probably fairly recent) date, were observed in several of the evaluation trenches, but were not recorded during the excavation. All cut the natural subsoil, and were filled with pale brown sandy soils. The majority were aligned roughly north-west to south-east, broadly parallel to both the Roman road and nearby modern field boundaries. Over the whole of the excavated area, all earlier deposits were either directly overlain by modern topsoil *c.*0.15-0.4m thick, or by an intermittent but often quite thick deposit of pale to mid-grey or brown silty sand up to 0.6m deep, which can probably be interpreted as post-medieval agricultural soil.

### **Artefactual and environmental evidence**

#### *The Prehistoric Pottery*, by Carol Allen

Two sherds of pottery (Fig. 9.1), together weighing 52g, were recovered from fill 103 of pit 104, in the works compound (Fig. 2). The sherds are from the same pot, and may have been conjoining, but the edges are friable and no longer fit together. A small part of the rim survives, which is bevelled internally and flat; its size and thickness (10mm) suggests that it derives from a fairly large vessel. There is no decoration on the sherds, although evidence of finger-moulding is apparent on both the interior and exterior.

The fabric is unoxidised and grey throughout, and contains a moderate amount (10-19 per cent) of coarse (1-3mm) white, soft tempering material. The Temple Sowerby site lies in an area of Permo-Triassic sandstones, and within these deposits are beds of gypsum, which lie at shallow depths (Taylor *et al.*, 1971). The white material in the sherds may well be gypsum, but thin-sectioning would be required to confirm this. It does seem probable, however, that the pottery was made from material obtained locally.

As little of the vessel survives, identification cannot be certain, but the sherds are most likely to be from a straight-sided jar-shaped pot or urn of the early to middle Bronze Age (Gibson, 2002; Needham, 1996), *c.*1700-1300 cal B.C. It is possible that the vessel was an undecorated Collared Urn (Longworth, 1984), although the exterior finish is rather uneven for this type. Rather than representing redeposited material that had been disposed of casually, the sherds are only slightly abraded, and may have been deliberately placed in the pit.

#### *Other Pottery*, by Christine Howard-Davis

Two extremely abraded Romano-British sherds in a soft, orange oxidised fabric came from modern deposits in Area 1, whilst a third was recovered from an evaluation trench within Area 2. Their poor condition suggests that they might have travelled some distance from their original place of deposition.

The 16 medieval sherds are mostly fairly small and abraded, suggesting that they are likely to have reached the site in manure which incorporated refuse from the

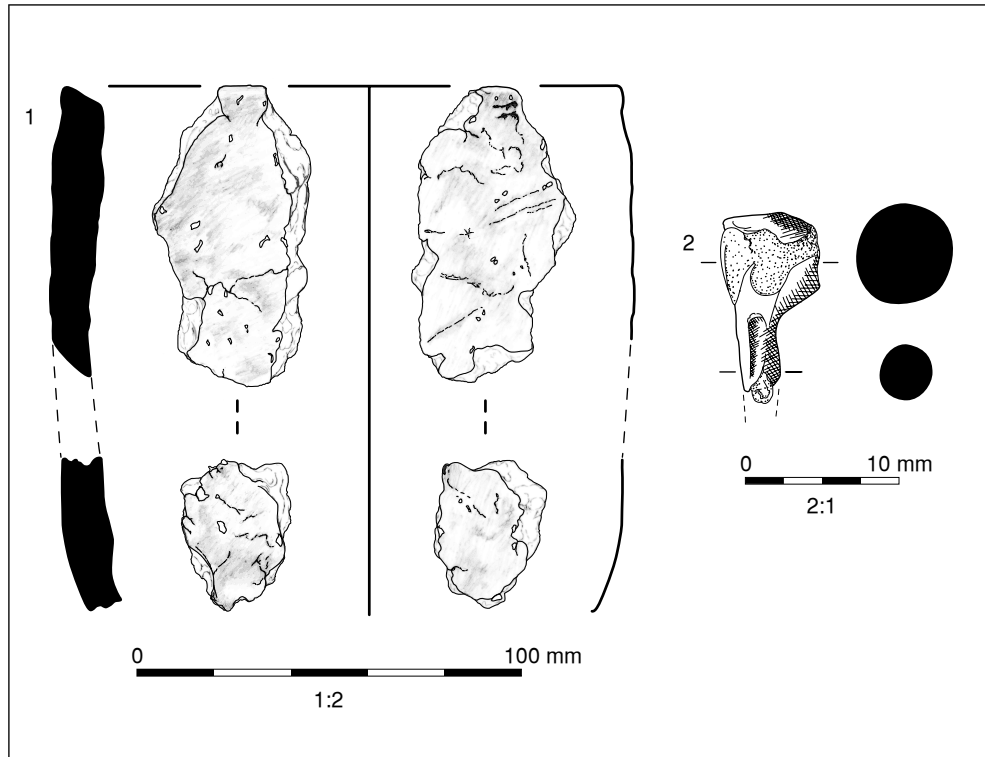


FIG. 9. Bronze Age pottery from pit 104 and copper-alloy pin head (O.R.1002) from Area 2.

adjacent village; indeed, the larger part of this very small assemblage was recovered from those trenches closest to the southern edge of the village (Area 1). The earliest fabrics include a dark red gritty ware (one sherd from the make-up of wall 127 and a second from its tumble, 126), similar to those known from Carlisle and dated there to the twelfth to thirteenth centuries (McCarthy and Brooks, 1988). Three unstratified sherds in a less gritty buff fabric (including a rim fragment of a small cooking jar) have a similar or slightly later date range.

Incompletely reduced and late medieval fully reduced fabrics, all glazed, are also present. The former, which can be broadly dated to the thirteenth or fourteenth centuries, are represented by four sherds from Area 1: one from the debris (126) of wall 127; a jug/cistern handle from pit 147/1593; and the remainder unstratified. The finer, fully reduced fabric is reminiscent of Silverdale ware, and can be attributed to the fifteenth to early seventeenth centuries, though in some areas this fabric survived into the eighteenth century (White, 1977). One such sherd was recovered from the fill of pit 129 and another six, mostly from Area 1, including a jug handle, were unstratified.

The remainder of the pottery can be dated to the late eighteenth or nineteenth century. The assemblage comprises 110 sherds from a range of kitchen and tablewares,



although the later eighteenth-century material is clearly of better quality than that deposited subsequently, and includes a fragment of (probably) Chinese porcelain. A large proportion of the material was unstratified, whilst the majority of the remainder appeared to have been secondarily deposited within backfill or structural make-up; little or none is likely to relate to primary refuse disposal. No particular concentrations of sherds were noted, and it seems probable that, like the medieval pottery, the material found its way into the local topsoil deposits through the spreading of midden material within manure.

*The Roman Coin*, by David Shotter

A Roman copper-alloy coin (O.R. 1001) came from modern topsoil that had become mixed with what remained of the cobbling on the disturbed northern edge of Roman road 1901 in Area 2. It is conceivable that it derived from the make-up of the road itself, but the poor condition of the road's northern edge meant that this could not be proven.

The coin is a moderately worn *as* of Vespasian (*RIC* II (Vespasian), 497 (Mattingly *et al.*, 1923-84)), minted in A.D. 71.

Obv.: [IMP CAES VESPASIAN AVG CO]S III.

Rev.: Eagle on globe SC.

The provenance of the coin means that it cannot be used to date any of the Roman deposits recorded on the site, although it is perhaps likely to have been lost, either during road construction or by a traveller, in the late first or earlier second century A.D.

*Other Artefacts*, by Christine Howard-Davis

A single prehistoric flint flake (O.R. 3194) was recovered from topsoil directly overlying pit 166 in Area 1. It has some cortex attached and, though it cannot be closely dated, a neolithic or early Bronze Age date seems probable. A further 12 fragments of flint were found during the evaluation phase, including four from the topsoil in Area 1; these comprise three small blades and a larger, utilised flake, all of possible late mesolithic-early neolithic date. The remaining eight flints came from a small concentration west of the River Eden (Fig. 1) and comprise small and irregular flakes with some cortex attached, tentatively interpreted as flint-working debitage. Both assemblages are suggestive of prehistoric activity in the area, though no other evidence for prehistoric occupation was recorded in these locations.

Additionally, a copper-alloy pin head (O.R. 1002) came from topsoil overlying the surface of Roman road 1901 in Area 2. It is poorly preserved and fragmentary, comprising the rounded head of the pin and a very short segment of the shaft (Fig. 9.2). A Roman date seems appropriate, and it is unlikely to have moved far from the original place of loss.

Small amounts of ironwork, clay tobacco pipe, ceramic building material, and glass were also recovered. With the exception of a single, unstratified tobacco pipe bowl of

seventeenth-century date, they are all likely to date to the nineteenth and twentieth centuries.

*Charred and Waterlogged Plant Remains and Pollen*, by Sandra Bonsall, Denise Druce, Elizabeth Huckerby and Lucy Verrill

A 17-litre environmental bulk sample from pit 104, together with four ten-litre samples from securely stratified contexts associated with the Roman road, were assessed for charred and waterlogged plant remains; it was hoped that these would yield information about the former environment and economy of the sites and their surroundings. The samples associated with the Roman road were taken from various depths within buried soil 1896 beneath the road (Fig. 6), with another two samples from fills 1902 and 1904 of apparent roadside ditch 1909. Four 10mm<sup>3</sup> sub-samples from a soil monolith taken through buried soil 1896 were also assessed for pollen.

The bulk samples were hand-floated and the flots collected on a 250 micron mesh and air dried. They were then scanned with a Leica MZ60 stereo microscope, and the plant material was provisionally identified and recorded. The sub-samples from 1896 were prepared for pollen analysis using a standard chemical procedure (method B of Berglund and Ralska-Jasiewiczowa, 1986). The slides were examined at a magnification of 400x (1000x for critical examination) by ten equally-spaced traverses across at least two slides, to reduce the possible effects of differential dispersal on the slide (Brooks and Thomas, 1967).

Although small assemblages of waterlogged seeds were recovered from all the bulk samples, these were judged to be comparatively modern (perhaps redeposited as a result of ploughing or bioturbation through the intermittently preserved road surface), since the well-drained nature of the site made it very unlikely that ancient waterlogged material would have survived into modern times. Furthermore, although some woody seeds, such as those of blackberry and elderberry, can occasionally survive in dry conditions, none of the specimens recovered from the site were of this kind. However, three of the four sub-samples from buried soil 1896, together with that from ditch fill 1902, also contained a few charred grains of oats (*Avena* sp.) and/or wheat (*Triticum* sp.), which may represent genuinely ancient material. Pollen was preserved in three of the four sub-samples from deposit 1896, but concentrations were too low for analysis. Charred remains from pit 104 included wheat and fragments of hazelnut (*Corylus avellana*), together with a large quantity of charcoal, mostly oak (*Quercus*), but with lesser amounts of alder (*Alnus glutinosa*) and hazel/alder (*Corylus avellana/A. glutinosa*).

## Discussion

### *The Prehistoric Period*

Prior to the archaeological works associated with the bypass, prehistoric activity in the vicinity of Temple Sowerby was represented by a number of casual discoveries of neolithic and Bronze Age artefacts, including stone and bronze axes (Highways Agency, 2002). The discovery within the works compound of pit 104, containing two fragments of early-middle Bronze Age pottery, a few charred cereal grains, and large

quantities of charcoal, together with the recovery of two small assemblages of flints, one from Area 1, the other to the west of the River Eden (Fig. 1), provides further evidence for prehistoric occupation, but sheds little additional light on the precise character of this activity. Although the evidence from Bronze Age pit 104 is sparse, even the few wheat grains are significant, given the rarity in the North-West of such remains within a settlement context, as opposed to funerary sites (Hall and Huntley, 2007), or more indirect evidence from pollen samples (Heawood and Huckerby, 2002). Those few charred cereal grains (oats and wheat) from the buried soil beneath the Roman road in Area 2 also provide tentative evidence for pre-Roman cereal cultivation, and possibly grain processing or the burning of stubble, perhaps unsurprising given the quality of agricultural land in the area (Higham and Jones, 1985).

### *The Roman Period*

At the time of the Roman invasion of southern Britain in A.D. 43, much of what is now northern England lay within the territory of the Brigantes, a large tribe, or possibly tribal confederation, whose queen, Cartimandua, seems to have entered into a treaty with Rome within a few years of the invasion (Hanson and Campbell, 1986, 73). During the civil wars that followed the death of the emperor Nero in A.D. 69, however, Cartimandua was ousted by a tribal faction hostile to Rome, and had to be rescued by Roman troops (Shotter, 2000a). In the resulting war, the Brigantes were defeated and their territory occupied, and it seems highly probable that the ancient communication route across Stainmore would have been utilised by the Roman army during these campaigns (Shotter, 2000b). Dendrochronological dating has demonstrated that the fort at Carlisle was founded in the autumn/winter of A.D. 72-3 (Caruana, 1992), whilst the series of Roman marching camps across Stainmore, including the well-preserved example at Rey Cross, on the summit of the pass (Welfare and Swan, 1995, 57-60), are also seemingly of Flavian date and were most probably established during the conquest period (Shotter, 2000b; 2004). The Stainmore road itself (Road 82, Margary, 1973) was probably built by the military in the years immediately following the initial Roman occupation, a time when the army was consolidating its hold on the North through the construction of an extensive network of forts and roads. The moderately worn coin of A.D. 71, from directly above the road, could conceivably have been lost (or otherwise deposited) as it was being built, though it might equally have been lost by a traveller at any time during the late first-early second century A.D.

The road, as it survived, was composed of locally sourced river cobbles that had presumably been transported no great distance. Its construction appeared broadly similar to other excavated Roman roads in Cumbria, such as that linking the forts at Brougham and Old Penrith (LUAU, 1994; Martin and Reeves, 2001), and the road leading east from the fort at Old Carlisle (Miller and McPhillips, 2005). The former was constructed of compacted pebbles and cobbles, and was 8-10m wide, comparable to the road in Area 2; at Frenchfield, immediately north of Brougham, three phases of road surfacing, with a combined thickness of approximately 0.65m, were evident (Martin and Reeves 2001). At Old Carlisle, the road comprised a surface of rammed gravel 5.2m wide (Miller and McPhillips, 2005), built, as was the norm for such roads in Britain (Margary, 1973), on a low embankment (*agger*). No trace of an *agger*

survived within the excavated area at Temple Sowerby and, on other Roman routes in the region, survival of the *agger* is frequently intermittent (e.g. Allan, 1994; Graystone, 2002), being highly dependent upon subsequent land-use regimes.

Throughout history, Stainmore has served, and continues to serve, as one of the most important communication routes across the Pennines. During the Roman period it formed part of a major route linking the legionary fortress at York with Carlisle and the western end of Hadrian's Wall (Welfare and Swan, 1995). As such, it is included in *Iter II* of the Antonine Itinerary (Rivet and Smith, 1981), a listing of routes along the roads of the Roman Empire, which was probably compiled during the first quarter of the third century (Rivet and Smith, 1981; Shotter, 1994). The road is therefore likely to have seen heavy use, and would presumably have occasionally required resurfacing or repair. The section of the road excavated was too poorly preserved for any trace of such activities to be evident, although the fact that the southern edge of the cobbling was cut by a possible later roadside ditch (1909) suggests that it was refurbished on at least one occasion after its initial construction.

#### *Subsequent Activity*

The programme of work revealed only fragmentary evidence for human activity in the centuries post-dating the Roman period, and such remains can be discussed only in the most general terms. Whilst there is likely to have been early medieval activity in the area, albeit on a small scale, only post-Conquest remains were identified. Positioned some way to the south-west of Temple Sowerby, the road easement is likely to be beyond the limit of individual toft boundaries and the more intense occupation activity that these contained; several fragments of medieval pottery were recovered from Area 1, closest to the village, and are likely to have derived from the manuring of infields. There are certainly traces of aratral earthworks preserved in the surrounding field boundaries, whilst the area of ridge and furrow recorded at the northern end of Area 1 may again date to this period. Occasional activity of a more intense nature is attested by pits 147/1593 and 129, but cannot be defined closely. From the modern enclosed landscape, it seems possible that the medieval fields may at first have been defined to the west by a boundary aligned on the palaeochannel identified within Area 1. This palaeochannel appears to have remained as a feature within the landscape, and could have acted as a natural division which separated arable land from the common meadowland adjacent to the Eden, which was itself enclosed in more recent times.

Finds datable to the first few centuries of the post-medieval period were sparse, but there are hints of land division that may be contemporary, including the ditch identified close to the works compound, which is likely to have been backfilled or silted-up around the time when much of the surrounding landscape was subjected to regimented enclosure for arable. The Enclosure Act for Temple Sowerby dates to 1774 and, by 1840, the tithe survey records that 96 per cent of the land was cultivated (Whyte, 2003); several of the linear features identified across Area 1 would appear to pertain to this enclosure activity. Archaeological evidence for attempts to improve agricultural productivity through the installation of land drains was common, with the

majority made from local materials rather than utilising the ceramic drains that were prevalent from the mid-nineteenth century onwards. Whilst there are seventeenth-century accounts of these simple drains (Blythe, 1652), the stratigraphic evidence and alignments of those identified within the bypass easement would suggest they accompanied the process of late eighteenth-century enclosure, a time when agricultural improvement schemes were adopted more widely in Cumberland and Westmorland (Keates, 2002).

*Oxford Archaeology North*

### **Acknowledgements**

The programme of archaeological investigation on the A66 Temple Sowerby Bypass was greatly facilitated by support and assistance from numerous people. Thanks are due to Skanska Construction UK Ltd, and in particular Gordon Grey, for commissioning and supporting the work, and to Paul Garner and Mike Pedley for logistical support. Jonathan Dempsey of Jacobs Engineering UK Ltd (formerly Jacobs Babtie), the client's archaeological consultants, is also thanked for his support and enthusiasm.

For OA North, the watching brief on the works compound site and the excavation of Area 1 were undertaken by Christina Robinson, Andy Bates, Jeremy Bradley and Rebekah Pressler. All the fieldwork in Area 2 was supervised by Andy Bates, assisted by Kathryn Levey, Jason Clarke, Andrew Frudd and Richard Colebrook. The environmental sampling was undertaken by Denise Druce, with assistance from Sandra Bonsall, and the project was managed by Alan Lupton. The drawings were prepared by Anne Stewardson and Marie Rowland, whilst the publication text was edited by Rachel Newman and Stephen Rowland.

Full details of all the data recovered from the site are recorded in the project archive, deposited with the Penrith Museum; copies of the reports have been submitted to the Cumbria Historic Environment Record, Kendal.

### **Bibliography**

- Allan, M., 1994, *The Roman Route across the Northern Lake District. Brougham to Moresby* (Lancaster).
- Batten, H. H., 1909, 'Acorn Bank, Temple Sowerby', *CWZ*, ix, 161-165.
- Berglund, B. E. and Ralska-Jasiewiczowa, M., 1986, 'Pollen Analysis and Pollen Diagrams', in Berglund, B. E., (ed.), *Handbook of Holocene Palaeoecology and Palaeohydrology* (Chichester), 455-484.
- Blythe, W., 1652, *The English Improver* (London).
- Brooks, D. and Thomas, K. W., 1967, 'The Distribution of Pollen Grains on Microscope Slides: The Non-Randomness of the Distribution', *Pollen et Spores*, 9, 621-629.
- Caruana, I. D., 1992, 'Carlisle: Excavation of a Section of the Annexe Ditch of the First Flavian Fort, 1990', *Britannia*, 23, 45-109.
- Gibson, A., 2002, *Prehistoric Pottery in Britain and Ireland* (Stroud).
- Graystone, P., 2002, *Walking Roman Roads in Lonsdale and the Eden Valley* (Lancaster).
- GSB Prospection, 2002, 'A66 Temple Sowerby, Cumbria, Geophysical Survey', unpublished report.
- Hall, A. R. and Huntley, J. P., 2007, *A Review of the Evidence for Macrofossil Plant Remains from Archaeological Deposits in Northern England*, English Heritage Research Department Report Series 87 (London).
- Hanson, W. S. and Campbell, D. B., 1986, 'The Brigantes: From Clientage to Conquest', *Britannia*, 17, 73-89.

- Heawood, R. and Huckerby, E., 2002, 'Excavation of a Burnt Mound at Sparrowmire Farm, Kendal', *CW3*, ii, 29-49.
- Higham, N. J., and Jones, G. D. B., 1985, *The Carvetii* (Gloucester).
- Highways Agency, 2002, 'A66 Temple Sowerby Bypass and Improvements at Winderwath, Environmental Statement, Volumes 1 and 2', unpublished report.
- Keates, T., 2002, 'Field Drainage Techniques and their Development in Cumbria', *The Cumbrian Industrialist*, 4, 35-51.
- Lancaster University Archaeological Unit (LUAU), 1994, 'Carleton, Penrith, Cumbria: Archaeological Evaluation', unpublished report.
- Longworth, I. H., 1984, *Collared Urns of the Bronze Age in Great Britain and Ireland* (Cambridge).
- Margary, I. D., 1973, *Roman Roads in Britain*, 3rd edn. (London).
- Martin, G. and Reeves, J., 2001, 'Report on an Archaeological Investigation on Land between the A66 and Frenchfield Farm, Penrith, Cumbria', Carlisle Archaeology Ltd, unpublished report.
- Mattingly, H., Sydenham, E. A. and Sutherland, C. H. V. (eds.), 1923-84, *Roman Imperial Coinage* (London).
- McCarthy, M. R. and Brooks, C. M., 1988, *Medieval Pottery in Britain, A.D. 900-1600* (Leicester).
- Miller, I. and McPhillips, S., 2005, 'The Roman Settlement at Old Carlisle', *CW3*, v, 25-30.
- Needham, S., 1996, 'Chronology and Periodisation in the British Bronze Age', *Acta Archaeologica*, 67, 121-140.
- OA North, 2005, 'A66 Temple Sowerby Bypass and Improvements at Winderwath: Topographic Survey, Evaluation and Watching Brief Report', unpublished report.
- OA North, 2008, 'A66 Temple Sowerby Bypass and Improvements at Winderwath. Phase 2 Archaeological Works; Post-excavation Assessment', unpublished report.
- Ordnance Survey, 1863, 1:10,560 map, 1st edn., Westmorland Sheet IV.
- Ordnance Survey, 1879, 1:2500 map, 1st edn., Westmorland Sheet IV.16.
- Ordnance Survey, 1900, 1:10,560 map, 2nd edn., Westmorland Sheet IV.S.E.
- Ordnance Survey, 1916, 1:2500 map, 3rd edn., Westmorland Sheet IV.16.
- Ordnance Survey, 1920, 1:10,560 map, 3rd edn., Westmorland Sheet IV.S.E.
- Ordnance Survey, 1990, 1:10,000 map, Cumbria Sheet NY62 N.W.
- Richardson, A., 2000, 'The Numerical Basis of Roman Camps', *Oxford Journal of Archaeology*, 19, 425-437.
- Rivet, A. L. F. and Smith, C., 1981, *The Place-names of Roman Britain*, 2nd edn. (London).
- Shotter, D. C. A., 1994, 'Roads, Maps and Place-names', in P. Graystone, *Walking Roman Roads in East Cumbria* (Lancaster), 1-11.
- Shotter, D. C. A., 2000a, 'The Roman Conquest of the North West', *CW2*, c, 33-53.
- Shotter, D. C. A., 2000b, 'Petillius Cerialis in Northern Britain', *Northern History*, 36, 189-198.
- Shotter, D. C. A., 2004, *Romans and Britons in North West England*, 3rd edn. (Lancaster).
- Taylor, B. J., Burgess, I. C., Land, D. H., Mills, D. A. C., Smith, D. B. and Warren, P. T., 1971, *British Regional Geology: Northern Britain*, H.M.S.O. (London).
- Walthew, C. V., 2005, 'Modular Planning in First Century A.D. Romano-British Auxiliary Forts', *Britannia*, 36, 271-310.
- Welfare, H. and Swan, V., 1995, *Roman Camps in England: The Field Archaeology*, H.M.S.O. (London).
- White, A. J., 1977, 'Silverdale', in P. J. Davey (ed.), *Medieval Pottery from Excavations in the North West*, (Liverpool), 102-103.
- Whyte, I., 2003, *Transforming Fell and Valley. Landscape and Parliamentary Enclosure in North West England* (Lancaster).