

Staveley & District History Society

Journal Spring 2021

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The views expressed in articles in this Journal are those of the individual authors and not necessarily those of the Society.

Cover photo: The Watermill in Ings, March 2021, after a year of stop-go trade. Note the flood defences and temporary Covid-safe exterior dining area.

The next issue of the *Journal* (No 52, the Summer 2021 issue) will be published about the 12th August 2021. All contributions (letters, articles, etc.) are welcome at any time but should be with the Editor by early July.

Roman road through Ings

1. Introduction.

After the Romans invaded Britain in AD43, it took them another 30 years or so to enter our area. A study published in 1980 *'Rome and the Brigantes'* edited by Keith Branigan puts ten Roman 'settlements', not villages as such but a *'scatter of farm sites on well-drained locations'*, in the area of Hugill, Staveley and Kentmere. A fort at Watercrock, Kendal was built in AD90 from which a road was built through Ings to the head of Windermere Lake and then through the hills to the Roman naval base at Ravenglass (Glannoventa) with forts at Ambleside (Galava) and Hardknott (Mediobogdum).

The exact line of the road through Ings is unknown but there are two published studies, the conclusions of which are summarised in Sections 2 and 3. The first suggests it would have crossed under Reston Scar passing through Ings near Raw Ghyll, thence on to St Anne's Farm at Grassgarth, to Broadgate Farm, then past the Iron Age settlement, probably inhabited, and High Borrans. The second study is the result of LIDAR data collected from an aeroplane scanning the ground with a laser which measures the height of the ground to a high degree of precision. This study favours a route along the valley through Ings which roughly follows the present line of the A591 as far as White House. The route leaves the A591 here bearing right in a north-westerly direction up the shallow valley to Misset Farm, about a 100 metres to the West of Broadgate. Passing through the farm, the route reaches the top of Misset Brow on the Moorhowe Road, thereafter roughly following the line of the road toward Troutbeck. The 'first Covid lockdown' in the Summer of 2020, provided the time and inclination to make our own survey SE and NW of Misset Farm. This is presented in Section 4. We are grateful to the farmer, James Walling, for allowing free access to his land.

2. Staveley to Broadgate

A Roman Road from Kendal to Ambleside. A field survey. Part I: Kendal to Broadgate. By J.S. ANDREWS, F.S.A.SCOT. AND J.A. ANDREWS, F.S.A.SCOT. Published in Transactions of Cumberland and Westmorland Antiquarian and Archaeological Society Vol 91, 1991

The authors used archaeological dowsing techniques to plot the route, claiming that their 'angle-rod' dowsing instruments give *"quite distinctive 'readings' for features such as Roman roads or forts (i.e. banks, ditches and/or stonework), compared to Medieval or later work, even where nothing remains visible on the surface"* and doing so *"even if the entire structure has long been ploughed out."*

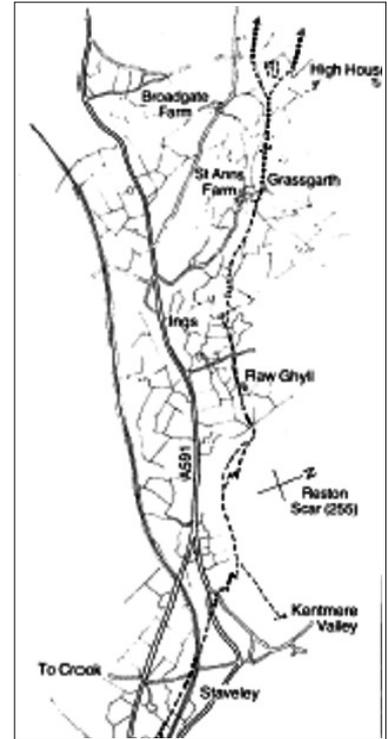
The route proposed in 1991 is shown in the diagram on the next page with a 'condensed' summary of the route extracted from the paper: *"The modern road coming in to Staveley from Crook is in a slight cutting where the Roman alignment crosses it, some 23 metres south of the railway bridge. The trace was further detected behind the nearest bungalow to the railway, and again north of the railway line. Here it cuts obliquely across the road called Beck Nook, from Nos. 47/48 to No. 24. The trace was further detected behind the nearest bungalow to the railway, and again north of the railway line. Here it cuts obliquely across the road called Beck Nook, from Nos. 47/48 to No. 24. Nothing of it is visible at any of these points. Crossing the footbridge over the River Gowan some 40 metres downstream of the Roman route, the writers*

eventually dowsed the trace emerging from under the old mill building. From here the trace angles under the modern road, heading towards the raised grass track high on the side of Reston Scar.

The angle at which Brow Lane is crossed was interpreted as the commencement of a series of zig-zags up onto Reston Scar. Having continued a short way into what are now private gardens, the route turns hard right and its trace was found angling back towards the middle of the same field, above Brow Lane. The zig-zag route then heads toward the north-west corner of the field.

The route now turns west, and after passing under the north-west corner of this top field, is still made use of by farm vehicles as it climbs to a natural shelf skirting round the face of Reston Scar, more or less on the 175 metre contour. From Reston summit, this alignment is quite apparent. The trace descends slightly to a steeply sloping part of the Scar face now covered by fallen scree.

The route is now crossed by two stone walls, the second marking the boundary between lands of Low House, Ings, and High Reston Farm. Immediately over the boundary wall at OS 457989, the route heads north-west at an elevation which it will more or less hold as far as Allen Knott. It fords the first of two becks, just north of a prominent boulder, the bedrock in the first beck bearing signs of having been hammered level, then briefly northwards to cross the second, deeper-cut beck, before settling on a westerly course where it is crossed by the wall at OS 456989. Beyond this wall, the levelled alignment can be seen heading directly for the barns at Raw Ghyll farm, a grassy bank clearly marking the revetting on its south side. This banking is visible from the A591, in the second field east of Raw Ghyll.



West of Raw Ghyll, the Roman foundation is used by the present farm lane heading due west. Near the farm the underground water pipe feeding the Manchester supply from Windermere crosses Raw Ghyll lane, and therefore the Roman road. It was noted that in a number of areas along the route under discussion, pipeline engineers, electricity engineers, and Roman surveyors from time to time, have selected the very same sequences of contours and straight sight-lines for their work. Where the east-west lane from Raw Ghyll is crossed by a north/south lane at OS451990, a levelling can be seen to the north where the agger plunged down to the beck tumbling down from beyond Low House. The east/west lane remains on the alignment for a further 200 metres, at which point the lane terminates in a field gateway. Beyond this the course curves slightly to the right, and was next traced crossing the lane to Hugill Hall at OS 445992. To the south-south-east, a flattened area skirting round the slope of the field betrays its track. At OS 443995 the agger was again observed as a rise in the footings of a stone wall, on the north side of which a farm track has been constructed by removing topsoil (and the stones and gravel of the Roman road).

The dowsed trace was followed quite firmly on to Grassgarth. Here it appears to have zig-zagged sharply down a steep rocky dip towards St. Ann's Farm, crossing the farm lane immediately south of the barn. The route from here leads downhill, maintaining a generally north-north-westerly course, and then rises again towards High House Lane, which it meets approximately 400 metres north of Broadgate Farm. At this point, the writers detected a divergence of traces, each crossing the lane which runs from Broadgate Farm to High House. The two routes run virtually parallel and between 300 and 350 metres apart, until they pass either side of Allen Knott, perhaps indicating the process known as 'centuriation'. The more southern route was traced (occasionally visible) from High House Lane both visually and by dowsing, beyond Allen Knott, and downwards to ford the Trout Beck at OS 409020, now on its way to Ambleside."

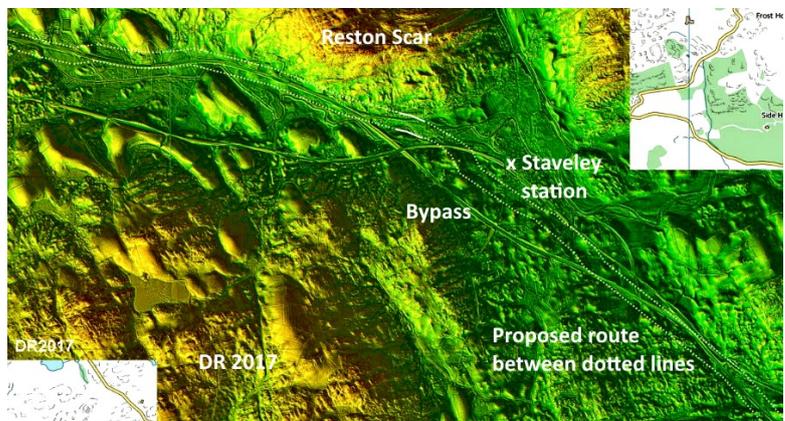
3. David Ratledge 3D LIDAR imaging studies

<http://www.twithr.co.uk/cumbria/cumbriapages.html>

The following text and pictures are extracted with kind permission of the author from his website 'Travelling with the Romans, Romans in Britannia', and in particular from the sub-section 'Roman roads in Cumbria'. He writes: *"Although there are still some big gaps in our knowledge of Cumbria's Roman roads the last few years have seen great strides in completing the picture. The reason for this has been the advent of Lidar. Lidar data is collected from an aeroplane scanning the ground with laser beams of light which measures the height of the ground to incredible precision. In this country its primary purpose has been for flood defence but it has opened a fantastic window of discovery for archaeology.*

I have shown the route dotted on the location plan but in reality its route is now pretty definite. Only around Staveley is it currently evading detection. Topography dictates they would have not have followed a purely direct road but gone via the Staveley valley and the evidence we now have confirms this. Probably the most

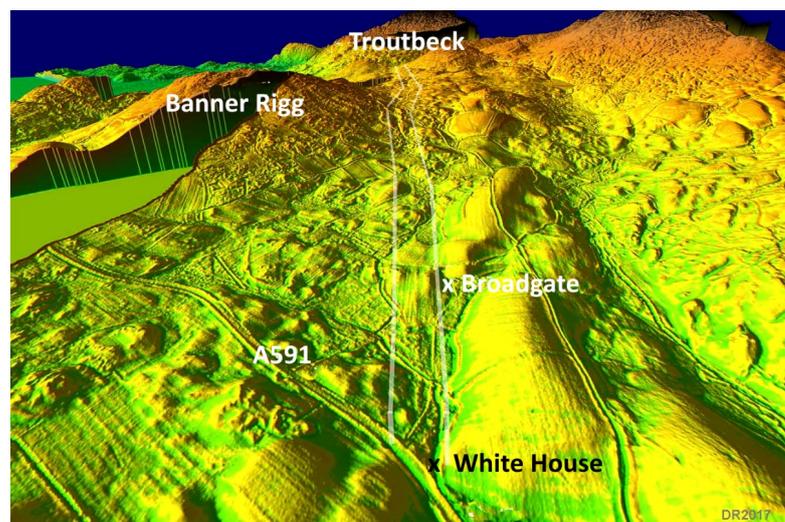
recent attempts to trace the road were by Arthur Thornton (C&WAAS 1989) and JS & JA Andrews (C&WAAS 1991&92), the latter using the (controversial?) technique of dowsing. For the former there were some Lidar traces but not ones I would consider as sufficiently convincing. Regarding the Andrews route(s) - they found many variations - and, because I was very sceptical of dowsing, I did my searching of Lidar data before re-consulting their articles. The route I independently found from Kendal to Staveley is very similar (but not identical) to what they suggested. Beyond Staveley the routes diverge and their suggestion taking it over the sides slopes of Reston Scar appears somewhat implausible.



LIDAR image - Staveley: Not a lot of evidence across Staveley but the Roman line must be close to the former A591. Note: an underground pipeline across Staveley provides several false clues!

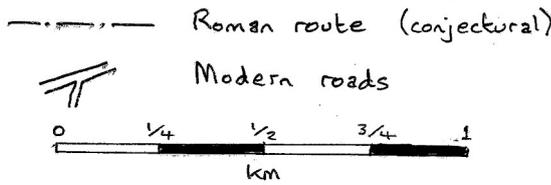
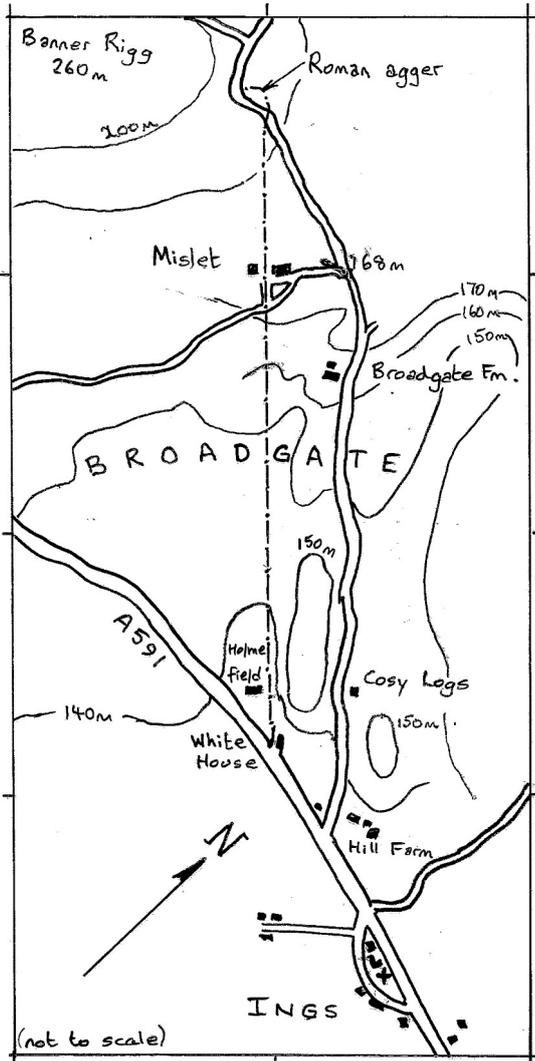
Lidar Image – Broadgate: This stretch heading past the west of Broadgate came as a complete surprise to me. I had always assumed that the modern country lane from Ings over Misset Brow was probably the line so this alignment of what appears to be classic Roman alignments was a shock.

Just beyond Misset there is a prominent stretch of agger in the field to the east of Misset Brow.



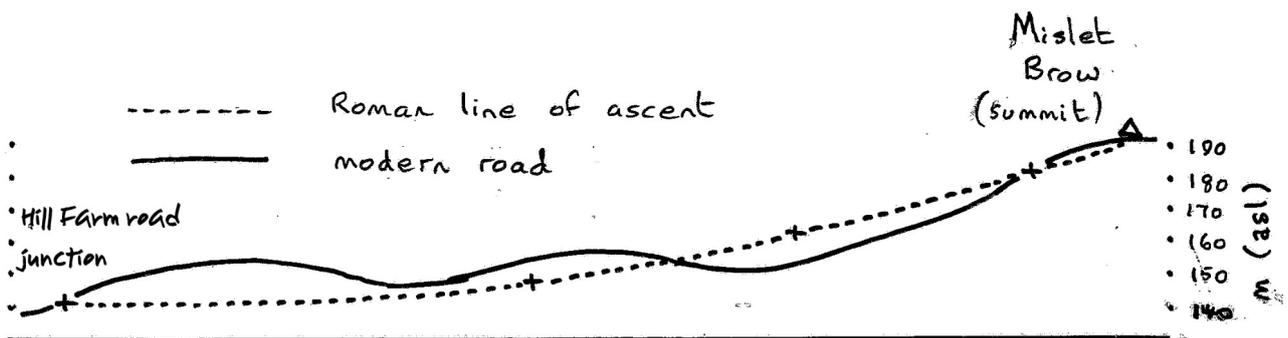
Broadgate to Troutbeck: Beyond Misset Brow, the Lidar alignment merges in with the modern lane (Moorhowe Road) and heads towards the Troutbeck valley. The route is cleverly chosen to go through the pass between Allen Knott and the nameless high ground north of Moorhowe Road in a very direct alignment."

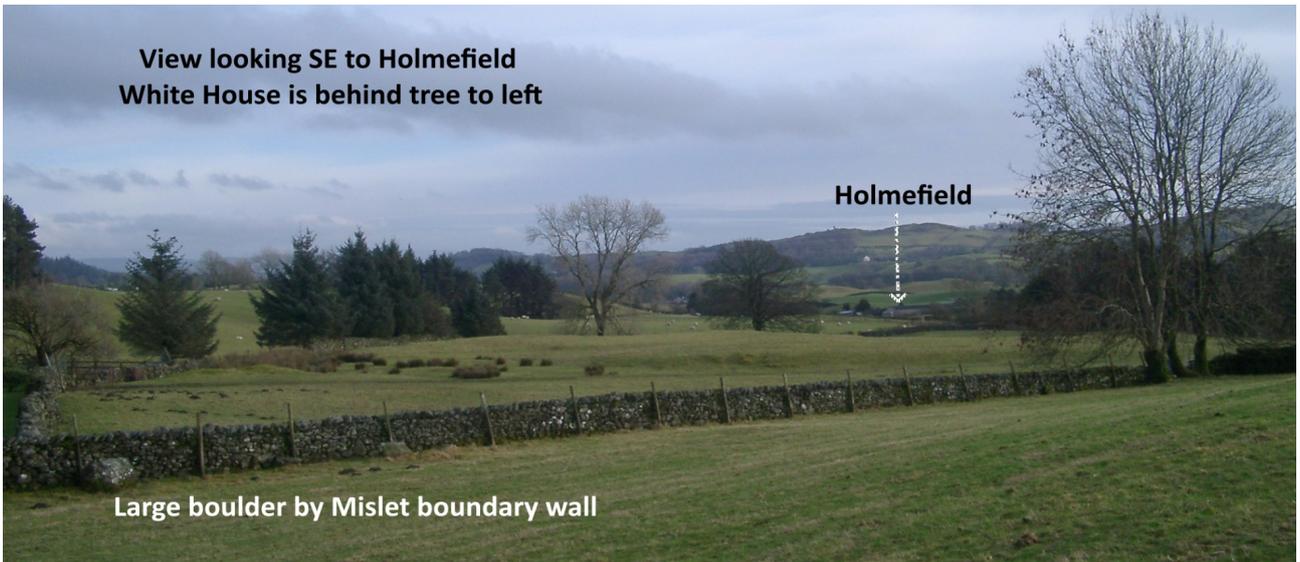
4. A 2020 Lockdown investigation around Misset Farm



The authors brought to this investigation a number of skills. Peter has experience of Roman Archaeology. He is a fellow of the Royal Geographical Society with a special interest in landscape morphology and how that has shaped land use over history. John has no relevant professional training, but, like Peter, is a hill-walker, experience which is relevant in that Roman Surveyors would have made life as easy as possible for the Centurions walking to Ravenglass from Kendal. Like David Ratledge, we agree that a route involving Reston Scar is unlikely and that the easiest and most straightforward route to the top of the Moor Howe Road is that proposed in his LIDAR studies. We accept too that the main road between Staveley and Ings is long since likely to have covered over any evidence of a Roman road. With this in mind we confined our 'study' to the section from White House to the top of Misset Brow. Heading out of Ings towards Windermere, White House is the last house on the right, at the end of the long straight as it begins to bear left toward Banner Rigg. At White House, there is a clear view of Misset Farm near the head of a shallow valley. Just beyond, in trees, is the top of Misset Brow.

The present Moor Howe road, in contrast, is both tortuous and hilly. The change in elevation between the junction of the Moor Howe road and the A591 (128m) and the top of Misset Brow (206m) is almost 80m. Unlike the gentle increase in elevation between the two points afforded by the conjectured Roman Road, the Moor Howe road reaches the summit in a series of short but steep hills, descents and plateaus.





It loses about 12m of height down to the lane to High House, just beyond Broadgate, elevation which has to be regained. In order to reach the same point using the modern road there is a total ascent of 110m, over 30m greater than the putative Roman Road.

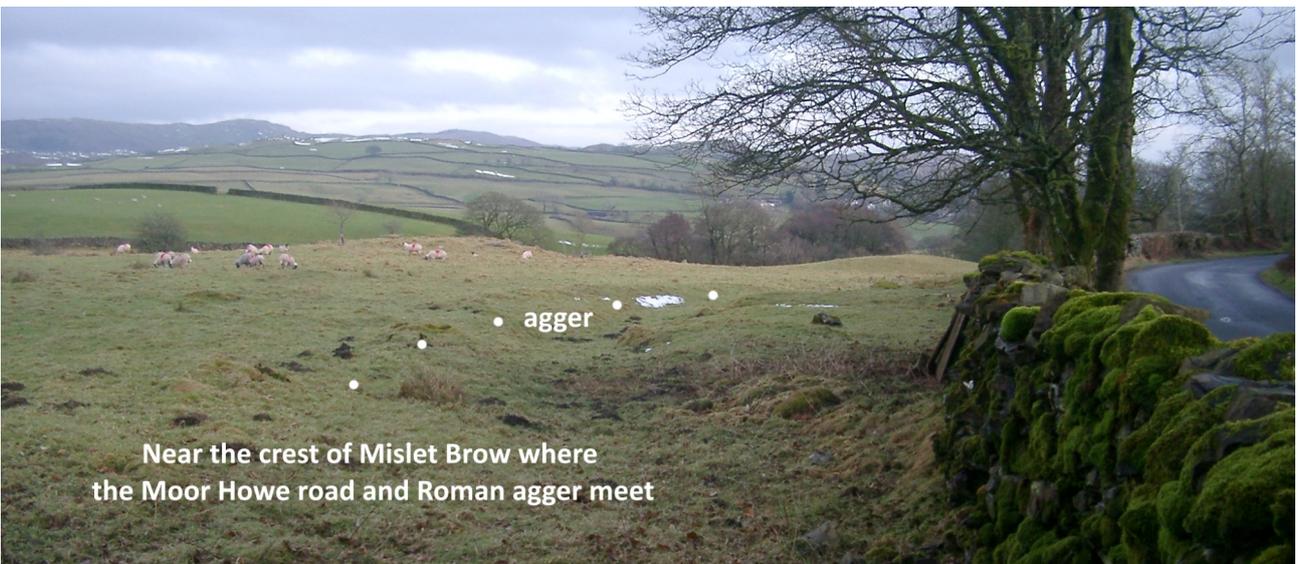
The ‘path of least resistance’ passes between the farm buildings at Misset, thence through a small wood and across a gently sloping field.

In the field to the East of the Moor Howe Road, just before the summit of Misset Brow there is a very well defined agger. Indeed, when





we first showed an interest in the investigation, James Walling took pains to ask what this feature was. He said that it had continued lower down the same field but had been levelled when the Thirlmere pipeline was built. In the Summer of 2020, we were unaware that David Ratledge had reached the same conclusion about the feature.



5. Conclusions

It's clear that both David Ratledge and the authors of this article favour a route for the Roman Road from Staveley through Ings which doesn't involve the side of Reston Scar. The LIDAR evidence, supported by the natural topographical evidence is compelling. The existence of some isolated features in the landscape such as the possible milestone and agger add weight. We are hopeful that David will lead a Summer Walk here if circumstances permit!

Peter Burgess and John Hiley

Note: An agger (Latin) is an ancient Roman embankment or any artificial elevation. The most common agger was the ridge or embankment on which Roman roads were built to give the proper draining base. The agger was constructed by excavating the line of the road, building a firm foundation, refilling and compressing the soil, adding more soil from digging drainage ditches or fosses on one or both sides of the road, then surfacing with graded layers of stone and cobbles. The material used to build the aggers was dug from lateral ditches. The course of a Roman road can often be traced today by the distinctive line of the agger across the landscape.

Ulthwaite Corn Mill

During research and survey work for the paper on the history of Ullthwaite (SDHS Journal Issue 50) it became clear that the weir which diverted water to the corn mill had been altered in the 22 years between that shown on the Corn Rent map of 1836 and that shown on the first edition of the Ordnance Survey (O.S.) 1:2500 scale map of 1858. In this latter map the weir is shown at an acute angle to the river flow whereas its early form was at right angles to the flow – the shortest length and cheapest alignment. The impressive weir (access only on private land) can be seen in the photograph below, with much of its 32m original length clearly visible. From an engineering point of view there can be only one reason for this change of design. By increasing the length to double that of the original, a much lesser depth of water is needed over the crest for a given flow into the leat than with the shorter length. This change would have enabled better control of the diverted flow and greatly reduced the risk of flooding the mill. But why was such a measure required after around 500 years since its first construction?



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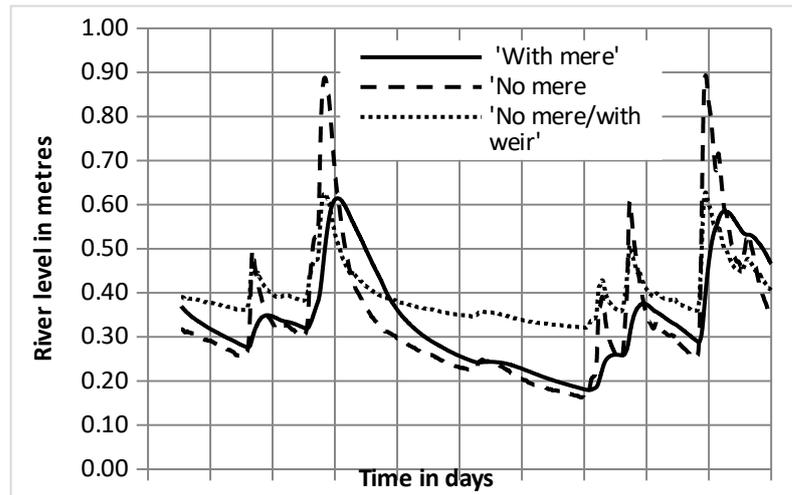
By building a weir in the river a measure of control of the volume of water to be diverted is made, but when the point of diversion is itself already positioned close to the outlet of a large body of impounded water - in this case the more than one kilometer long 'original' mere of the Kent only just upstream - the large body of water automatically attenuates the incoming flood waters from the steep slopes of the valley above. Thus there is little need to provide against flooding of a leat except in extreme conditions above 'bank full' flows, making construction of the diverting weir simple and cheap.

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At a date that has not yet been reliably established, but taken to have been just before the Corn Rent map was produced, the mere was drained by deepening its outlet so that it lost its attenuating capacity and became a simple narrow channel as shown on the Corn Rent map and early O.S maps. The effects of this loss of retention can be shown very clearly by calculation. A graphical representation of this can be seen above (using actual flow records in the river in a typical wet Autumn). The solid line shows the water levels in the river with the mere in place and in 'dashed' line the effect of removing it – the result is clear and with bigger flows even more marked making the difference between not overflowing the banks and flooding. A long weir

would thus enable much better control of the frequent high flows from heavy mountain rain and their rapid run-off, which the loss of the mere had caused. This effect is shown by the dotted line on the graph. The fact that at low flows the water level is higher over the weir than in the river is immaterial as it is still below ‘bank full’. (Note: The weir level is arbitrary on this graph and would, in practice, have been higher. It is shown here only to show, by comparison, the relative attenuating effect.)

Even a long weir would have had little effect for very big floods, but in daily operation, for normal heavy rain as shown on the graph, it would have been essential to mitigate the effects of removal of the mere and much cheaper than trying to prevent the leat from flooding the mill. The weir only impounds a limited volume and abstracts so little that downstream the river would have continued to present the much higher levels of flooding shown by the solid line.



The effect of retention by the mere also benefited the low flow condition. Although this is not so clear on the graph, which is calibrated to show depth rather than flow rate, the low points can be seen as being lower with the dashed line of ‘no mere’ compared with the solid line. It is thus not surprising to find that within a short time support had grown amongst a good many mill owners in Staveley for action to better control the river because of the increased incidence of flooding and low water flows. This eventually led to the passing of the ‘*Act for Making & Maintaining Reservoirs in the Parish of Kendal*’ in 1845. Pursuant to this Act, the construction of the reservoir at Kentmere Head followed, with completion of the works in 1851, albeit taking much longer to construct and costing much more than budgeted. The dam impounded a similar amount of water to the mere and would have, to some extent, mitigated the effects of removal of the mere. It was far too far upstream in the catchment, however, to ever have achieved the full overall desired effect. Technology changed fast in the 19th century and by the time the reservoir was completed the use of alternative power for most of the Staveley mills had already taken place. For the corn mill, though, its own new weir would have been in operation well beforehand, thus extending its potential life. Eventually it also would be doomed by the industrialization of the supply of grain and its milling, but that so much of the weir has survived is a great tribute to this piece of inspired engineering.

Renovation of the bell tower at St Anne's Church, Ings

St Anne's Church, Ings, has three bells made in 1743 in York. It is believed that, from the evident lack of wear, they have hardly ever been heard. The treble bell is swung-chimed (not rung) on a Sunday morning.

BELL	Diameter	Weight /cwt (estimated)	Date	Founder	Nominal Frequency	Note ± cents
Treble	27 $\frac{5}{8}$ ins	4.0 cwt	1743	Edward II Seller York	1276 Hz	Eb(3) + 43**
Sec- ond	29 $\frac{5}{8}$ ins	5.0 cwt	1743	Edward II Seller York	1104 Hz	Db(3) - 6
Tenor	33 $\frac{1}{8}$ ins	6.5 cwt	1743	Edward II Seller York	980.5 Hz	B(2) -12

*The bells strike the notes of Eb, Db and B though the treble is sharp by 43/100ths** of a semitone. The tone intervals are that of three blind mice.*

Table thanks to Ron East, Carlisle Cathedral Bell Captain.

The last time the bells were rung properly was in late 2009. Bell experts had recommended then that the bells were not rung full circle without structural work to the bell frame. However, with some other necessary renovation to the tower and support of the bell level floor, repairs to the three bell wheels and renewal of some fittings and bell-ropes, they might be chimed very successfully. Work was carried out in 2020 to accomplish this.

The Bell Tower

St Anne's Church Bell Tower has four levels and a parapet roof surrounded by a 2ft high parapet wall. The four levels are:

Ground Floor: Porch with main entrance to Church, and fixed ladder to:

1st Floor: Bell ringing chamber – sometimes referred to as the West Gallery. One can look out over the nave from an opening window. Fixed ladder to:

2nd Floor: The joists/ceiling support the bell frame above. Fixed ladder to:

3rd Floor: The three bells in the original oak bell frame sitting on the bell level floor.

Renovation work June 2020.

The bulk of the work was carried out by N Gillett and Son Ltd, specialist craftsmen from Wesham near Preston. A number of volunteers helped pick off cement render, prepare 'holes' in the walls for the new joists, lift heavy joists, re-plaster, re-paint and clean-up. There have been many donations in kind and of decorating materials.

1. The first level floor / porch ceiling had three rotten joists where they met the North and South walls. These have been replaced as has half the floor / ceiling. The porch has been repainted.



2. New lighting has been installed to each of the four levels. There is a new wall-light with IR detector in the porch and new flood-lighting for each of the three levels above.

3. Cement mortar has been picked off the 1st floor bell ringing chamber walls allowing the lime-mortar pointed walls to dry out.

4. The 2nd level floor has been rebuilt. Before the work, only a 'half-floor' existed. It was unsafe. A new floor joist was fitted so that a complete floor could be added. Without this, the work to fit the two new joists above could not have happened, temporary support being required from below during that work. The new floor also has a removal trap-door should the bells ever need to be removed for maintenance.

5. The bell level floor rests on timber floor joists running N-S across the tower. The ends are supported in the tower walls and by a deteriorated 150mm x 150mm oak log beam which runs E-W across the tower. The rusted steel joist above the window in the West wall was removed, and new concrete padstones inserted. The bell level floor is now supported by two new 300mm deep x150mm wide timber joists either side of the existing log beam, set 1m apart.



6. The open slate louvres in the bell chamber had little protection from rain blowing in, with consequent deleterious effect on masonry and timber. New gale-breaker plastic mesh and corvid-proof steel mesh has been fitted.

7. Repair work in the bell-chamber itself consisted of:

- Repair of tenor bell headstock. A new section was jointed into the damaged headstock. It was remarkable that bolts on the corroded ½" diam steel staples were loosened and reused, a testament to soaking with WD40 for a month!

- The bell wheels were all in a poor state of repair and were removed from site and refurbished. Each wheel had to be returned in three sections to allow access through the roof access door. They were then reassembled in situ.
- New bell stays were made and fitted.
- New bell-ropes installed, the sallies being coloured red, white and green in commemoration of the Bateman Italian connection.

The renovation was successfully completed in late November 2020. A celebratory event was held on Thursday 10th December. Carlisle Cathedral bell captain Ron East presided over the inaugural peal with two young bell-ringers, out of school with special permission for the occasion. Both Radio Cumbria and a Border TV sent reporters to cover the event. Rounding off proceedings, Ron East gave a talk on the History of Bells and Bell-ringing to the Ings Bateman Club. It is a real pleasure to hear all three bells sounding. You are very welcome to come and ring them yourself!

John Hiley

