

Archaeologists working ahead of construction on Carlisle's new CNDR (Carlisle North development Route) bypass back in 2009 thought that their biggest problem would be finding a way of minimising its impact on the remains of the Roman Wall. The new road crosses the Wall where it runs alongside the south bank of the River Eden here. What the archaeologists didn't realise was that they were about to stumble upon one of the largest assemblages of prehistoric remains in the North West!

Members of the Appleby Archaeology Group were enthralled by Fraser Brown's account of the excavation when they met to hear his talk on 9th April. Fraser is a project manager with Oxford Archaeology North and had been employed to supervise the investigation and recording of any archaeological remains which might be endangered by the development of the road.

It was quickly established that remains of the Roman wall to the south of the river had already been largely destroyed by natural movement of the river banks. The archaeologists were, however, able to recover valuable information about successive phases in the construction of the wall. This had been built initially from turf before being replaced with a more permanent stone structure.

Having dealt with the issue of the Roman wall, attention now switched to the north bank of the Eden where aerial surveys had shown crop marks indicating the possibility of even earlier remains. Investigation revealed massive ditches which suggested that these might have been henge monuments - a class of earthworks which are generally recognised nowadays as prehistoric meeting sites.

This was unexpected and extremely interesting. But the archaeologists now experienced a major shock which in turn looked as if it might compromise the entire road development programme.

On the gravel terraces below the tentative henge monuments, just where a massive embankment leading to the northern end of the new bridge would have to be constructed, trial excavations turned up a scatter of worked flint remains. Initial investigations, working in very muddy conditions failed to produce further enlightenment. However, when returning the following day after overnight rain, the archaeologists were stunned to find a fine crop of some 300 flint fragments winking in the early morning sun. The rain had washed the mud off! These were microliths - a type of flint tool associated with mesolithic occupation which, in this country, dates back to the period between 9000 and 4000BC. After further examination Fraser had to tell the CNDR development team that this was a site of massive archaeological importance and that it was going to require comprehensive evaluation.

In retrospect it is a tribute to all concerned that the CNDR ever got built since several factors now combined to create the engineering equivalent of a perfect storm. On the one hand the archaeologists had a site which would eventually turn out to contain a wealth of information spanning the entire period of Carlisle's early history from the mesolithic to the early medieval period. On the other hand the engineers had to find a way of accommodating a potential construction delay that might be measured in months. Naturally this would have severe implication for the financing of the project and, to make matters worse, this was occurring at the height of the "credit crunch". Finally, you may remember that the autumn of 2009 also saw the devastating flooding which tested Carlisle's new flood defences to the limit and caused huge damage down the west Cumbria coast - not the best time to be conducting a forensic archaeological investigation on a flood plain.

Nevertheless, finance was found and agreement was reached allowing the archaeologists a seven month window to complete their work. Before long, seventy professional archaeologists were poring over the site, which was now operating on an industrial scale. Techniques imported from Holland were employed to pressure-wash barrow-load of silt and recover the remains. Ponds and lagoons were constructed to cope with the over-spill. Six archaeologists worked for 10 hours a day recovering tiny fragments of flint with tweezers from the dried residue. In the end around 300,000 lithic items were painstakingly recorded.

It was now clear that the site had been occupied over an extended period by a group of nomadic early Cumbrians who had constructed hearths and homes here and who had used materials brought from a wide area stretching from the Isle of Arran to the north, the Pennines to the east and the Langdales to the south to construct tools and weapons.

But as work continued it became apparent that the site had still more to tell us. Working back towards the Eden, the archaeologists now found themselves excavating biological remains preserved in the silt of abandoned river channels. Among the debris of ancient beaver lodges lay worked timbers and structures dating back to the neolithic period - the time when the first farmers were beginning to settle in Cumbria. A wealth of pollen, charcoal and seed remains were recovered which will provide a treasure trove for post-archaeological investigators. But a variety of human artifacts, discarded or deposited, also lay here - polished axe heads and the rubbing stones used to produce them, arrow heads and pottery remains. Chief among the finds was a pair mysterious wooden tridents, almost 2m in length. Examples of these have been seen elsewhere (eg at Ehenside tarn) but their purpose is unknown. Radio-carbon tests have dated these to the fourth millennium BC.

No doubt much more information will be available once post-excavation work is complete but it is already clear that the CNDR excavation has enabled us to take a major step forward in developing our knowledge of the early occupation of Cumbria. Someday we can look forward to seeing a display of the material covered at Tullie House museum but meanwhile we can also enjoy the benefit of driving round the wonderful new road, safe in the knowledge that its construction has not been at the cost of the destruction of priceless information.

Fraser was enthusiastically thanked for his inspiring talk. The next meeting of Apparch will be held on Wednesday, 15th May in Appleby Market Hall, when Alastair Robertson will be talking about Whitley Castle, the Roman fort near Alston.