

Civil Engineering works on the River Derwent at Darley Abbey

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The floods of 2007 and 2008 on the Derwent at Darley have scoured the river banks removing deposited silt and exposing substantial civil engineering works. These extend from the Handyside GNR Bridge through to below the weirs at Darley Abbey in the west bank together with some other features in the east bank on Darley Playing Fields.

The level of the river was reduced in the nineteen-seventies to save costs on the construction of the inner ring road bridge. The canal weir just below St Mary's Bridge was removed lowering the level to such an extent that it was necessary to fit wooden steps at the Derby Rowing Club riverside access point to cater for a drop of about a metre or so.

Because of the nineteen-seventy's work and as a result of recent flooding the exposure of the civil engineering work and the wall shown on my photographs has come under notice. Photograph 1, taken on 29 January 2008, shows what seems to be a dry stone wall extending for some distance on the east bank south of the brook outfall.



This is the wall that has been exposed due to the scouring effect of the recent floods. Photograph taken 29/01/2008



Photograph 2 taken on 4 March 2008 shows the vegetation already taking over.

This will eventually displace many of the stones and destroy the wall as has happened immediately south of these remains.

Photograph 3 taken on 07/03/2008 shows tree roots spreading throughout the stonework north of the brook outfall.



The tree will eventually become too large and too heavy causing it to topple into the river taking the remains of the stonework with it.

Turning to the west bank my photographs show details of (1) the wooden piles, (2) the metal retaining bars complete with square heads and washer plates and (3) the stonework. Engineering historians tell me that hexagon heads came into common use in the early nineteenth century and square heads may be indicative of the seventeenth and eighteenth century.



(1) Wooden piles



(2) Metal bar



(3) Stonework

This leads to the question of when the works were carried out. The Derby Canal was completed around 1796 and it is doubtful that the work could have been carried out after that date because the river would have been between one metre and one and a half metres higher due to the St Mary's Bridge Weir. It is possible that this work was in conjunction with the introduction of the canal but I have not seen any reference to this in any historical document.

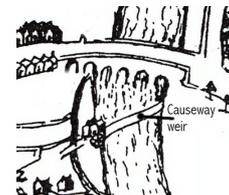


Previous to the construction of the St Mary's Bridge canal weir there existed the Causeway weir, (Picture left), and the river above it would have been higher than today making such work more difficult but not impossible.

In regard to the causeway weir Alfred W Richardson records on page 73 of his book, **Citizens Derby**, the following.

“WHEN Henry of Richmond, descendant of John o' Gaunt and therefore Lancastrian, defeated and slew Richard III, the last of the Yorkist kings, at the Battle of Bosworth, the civil war was over. Henry VII governed so wisely that the wasted country rapidly recovered. Activity was noticeable in Derby. A new weir was built in the river for the benefit of the water-mills. The causeway on the banks was repaired”.

Henry VII ruled from AD 1485 to AD 1509 and the causeway weir is seen on the 1610 map by John Speed although by this time there is only one mill. Richardson correctly speaks of the “mills” in the plural and the two mills he alludes to were washed away in the great flood of AD 1587 along with part of old St Mary's Bridge.



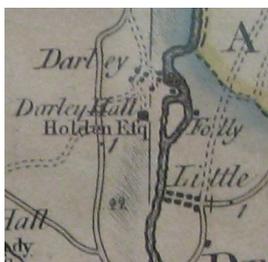
A possible date for the works on the river is the year AD 1638 when Sir Cornelius Vermuyden was recommended by Charles I who wrote to Derby corporation asking for Vermuyden to be accommodated as **"with his partners, has undertaken a work very acceptable to the King about the lead works at Wirksworth, and to make the river of Derwent to be navigable till it fall into the Trent"**.

The famous Derby engineer, George Sorocold, produced plans for making the river navigable on which two unsuccessful Bills were promoted in AD 1695 and AD 1698. The fact that they were unsuccessful suggests that no work was carried out at this time. In AD 1699 George Sorocold again surveyed the river for a Bill introduced in AD 1700, which failed, but an Act was passed in AD 1701. In AD 1702 George Sorocold produced plans for the Bill proposing four new cuts and nine locks on the Derbyshire Derwent with a fall of 50 feet. Given the nature of the ironwork retaining the walling it is possible that some work could have been done at these dates.

The river south of Derby was finally made navigable under an Act of AD 1720 and fully opened for the 10 miles up to Derby from the Trent in AD 1721. This is the source of the comment on the East Prospect by S & N Buck of AD 1728 and their picture shows the boats being hauled to the wharf. I discovered the remains of the

pound lock on the cut north of the five arches railway bridge and alerted the County Archaeologist to it in 2006. Traffic on the Derwent Navigation ceased about AD 1795 and it was bought by the Derby Canal Company.

Another reason for the works to have been carried out could be the eighteenth century fad of creating park landscapes. This was being done at Markeaton and Kedleston so it may be feasible to suggest that Mr Holden was doing the same at Darley.



My extract from P P Burdett's County Map shows the nature of the river at that time was quite different than today.

The flower meadow at Darley Park was then a large Holm.

This may also be a clue to the river bank work dating back to the twelfth century abbey of St Mary.

Roll D33 on page 191 of the **Cartulary of Darley Abbey**, edited by Reginald R Darlington, mentions Robert de Bedford and tells of a mill pool and sluice near Little Chester in a date range of AD 1254 to AD 1258. This is in all probability related to entry B30 of c. 1263 AD on Page 122, which states, **“Grant by William son of Joseph of Breadsall to the canons of licence to maintain their mill pool on the Derwent and to repair it with wood or stone as often as they wish or consider it expedient to do so, but they shall not raise it higher than it was on 2nd March 1240. The canons are to make and maintain a 24 foot sluice in addition to the old one.”** The likelihood of building work on the Derwent at this time is confirmed on page 106 in entry A66 which refers to Ralf son of Robert Fatteneye and explains that Ralf undertook to remove the structure at end of his toft extending into the Derwent to the harm of the canons mill pool. This is dated to 21/09/1279. If this was the reason for the Folly gaining its name then it is possible that the aforementioned mill pool and sluice were in the vicinity of the Folly which was interfering with the river levels. Perhaps the channel produced to form the Holm was part of the river engineering carried out by the canons to create their mill pool.

Whatever the reasons behind the various engineering works on the river there can be no doubt that they should be subjected to an archaeological investigation in the very near future because there is in danger of them being destroyed by the actions of the river and the rapid growth of the vegetation.

The features described herein represent an important part of the history of Derby and need to be identified, dated and fully documented for posterity. An attempt to preserve as much as possible should also be made.

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