

BRINDLEY'S BRAINWAVES

A DISCOVERY TRAIL OF STOURPORT-ON-SEVERN CANAL BASINS



INTRODUCTION

James Brindley was the pioneering canal engineer during the heady days when England's canal system was quickly developing to meet the new needs of industry and population growth. He had lots of excellent ideas for canals, their routes, locks and basins.

In 1766, the proprietors of the Staffordshire & Worcestershire Canal Company received parliamentary assent 'for making and maintaining a navigable Cut or Canal, from the River Severn, between Bewdley and Titton Brook, in the county of Worcester, to cross the River Trent, near Heywood Mill'. They appointed

Brindley to supervise its construction. He chose the route from its junction with the Trent & Mersey Canal at Great Haywood near Rugeley to a place near the village of Lower Mitton, called Stourmouth, where the River Stour joined the River Severn. He also decided on the layout of the main basins, wharfs and locks.

Keeping a track of the work

The canal is 46 miles (73km) long and needs 43 locks to cope with rise and fall of the landscape. The canal company employed John Baker of Wolverhampton as Clerk of Works in overall charge of building the waterway, but his Under-clerk, John Fennyhouse Green, took responsibility for the day-to-day work. He has left us a fascinating collection of Day Books that record how the canal was built. These are mirrored, after 240 years, by the Day Book compiled by Rob Colbourne, an artist commissioned by British Waterways to document the Basins.



Trail Markers
This is an example of the Trail Markers on site. Please note that not all the numbers on the Trail are marked on site with a marker. You can dip in or out of the Trail route, or follow the numbers from start to finish.

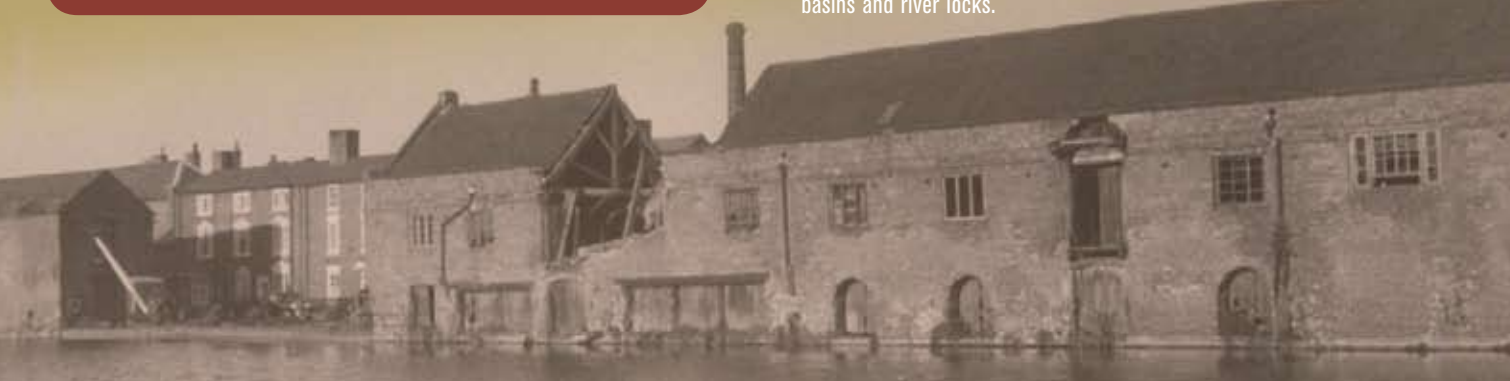


The Entrepreneur – Isaac Pratt 1

Isaac Pratt was a prominent figure in the 18th century world of canals. He came from Henwick in Worcestershire and built a wharf, named after him, exactly 200 chains up the Staffordshire and Worcestershire Canal (S&WC) from here. A chain measures 22 yards (about 20m) and so Pratt's Wharf is 2½ miles away. He then built a connection to the River Stour, via a lock, so that iron and coal could be transhipped to Wilden Iron Works. Specialist crews were needed to navigate the difficult waters of the Stour. You can still see remnants of the link between the waterways.

The Long Room 2

The basins at Stourport-on-Severn, when it was at its peak, in the late 1700s boasted three times as many buildings as you can see today. The bricks below your feet here formed the floor of the Long Room, or Long Warehouse, that stood here until it was demolished in the 1950s. The bricks were handmade from local clay and are a bit smaller than modern bricks. The two-storey Long Room was one of the earliest and most imposing of the buildings at the port. It was 70 feet (21m) long, with a steep roof, many loading bay doors and two hoists to lift goods to and from the upper floor.



The Recorder – John Fennyhouse Green 3a 3b

In April 1768, both the River Stour and the River Severn flooded badly and this cast doubt on Brindley's decision to locate the port at the Stour's mouth. By late October, Brindley had still not settled where the canal would join the River Severn and John Fennyhouse Green, Under-clerk of Works, was directed to 'go down to the Stour's Mouth and observe where the Canal might be brought to the Severn'. Green's Day Books give us the only detailed account of the construction of the canal basins. In his entry for 1 November 1768, Green records his visit to 'Mr Price's at Stour's Mouth' (now the Angel Inn) to assess the potential of his land as the location for the port. He was looking for a piece of land that was both broad enough to accommodate what is now the Upper Main Basin and which sat 'high enough out of flood's way'.

John Acton, the church warden at Lower Mitton, owned a stubble field of about five acres (2ha) and lying above Mr Wilson Roberts' meadow that ran along the River Severn. On 2 November, Green discussed his observations with James Brindley and Sir Edward Littleton, Chairman of the canal company, at Acton's field. 'Mr Brindley...fixed on going thro' Mr Acton's Stubble field above Mr Price's House for making of a Basin and building warehouses et on it.' Later that day, the party agreed where the cut to the River Severn should be and, as a result, the location of the canal basins and river locks.

The text you see here, on stainless steel, reflects the sky in the same way that water does, and refers to Green's vision of a stubble field and a meadow as canal basins. It records his Day Book entry with Brindley's instruction to Green to measure (or survey) the stubble field.

The text on sandstone is the title Green gave to his subsequent survey drawing of John Acton's stubble field, completed on 19 January 1769. The shadows cast by early afternoon sun make the text much clearer and mirror the time of day when Green and Brindley took their key decisions.

The Light Run – Coal for Electricity 4

Artist Rob Colbourne writes: There was also mention of the 'Light Run', so called because Stourport's power station was known as 'Stourport Light'. It brought coal into the Lichfield Basin from various collieries including Bagderidge in the early 20th century. Up to 30 boats a day from all over the West Midlands carried coal to Stourport and this traffic was crucial to the survival of the canal and the wharfingers – the owners of the wharfs. The Shropshire, Worcestershire and Staffordshire Electric Power Company owned most of the boats but some deliveries were made by the T S Elements company which always used horses or mules to haul their boats.



BUILDINGS AND OTHER STRUCTURES

Built for success that didn't last

If Brindley, Baker and Green, with many hundreds of craftsmen and labourers, built the canal, the canal built Stourport, the 'pioneer town of the canal age'. They gave Stourmouth a new name and it's probably the only place now named after two rivers. It grew quickly into a bustling port, serviced by the canal and river and, in turn, servicing the needs of boatmen, the warehouse owners and carriers.

Much of Stourport-on-Severn's Georgian architecture has survived from the late 1700s while other towns have been much altered by redevelopment. The reason was simple: Stourport's key role in linking the Black Country with the River Severn navigation was stolen by a newer canal, the Worcester & Birmingham, which provided a shorter route less affected by vagaries in the Severn's summer water level. So Stourport declined – but left a legacy of buildings and other structures that stand as testament to many entrepreneurs and a lot of hard work. It's a great place to explore.



Park With Care – The Trow Mooring Place 5

At this south-eastern corner of the Upper Basin, the dock wall was carefully built to receive the rounded end of a Severn Trow which could then moor snugly by the wharf. The trows varied a bit in design, but they were all flat-bottomed and carried masts and sails for use on the wider stretches of the river. They were nearly 60 feet (about 18m) long and could carry between 40 and 100 tons of cargo, depending what it comprised. Many brought coal from the Forest of Dean. The word 'trow' comes from 'trough', meaning a hollowed-out vessel.

A Tell-tale – The Tump 6

Rob Colbourne writes: There used to be a clay 'tump' in the Upper Basin that trows skirted around. Nine inches (230mm) below the waterline meant the level was about right. When the top of the tump revealed itself, the water was dropping and the impending danger of boats running aground was lifted by compensating the Upper Basin with water from the Engine Basin. The tump's modern equivalent is the SCADA system (it means Supervisory Control and Data Acquisition) which operates red warning lights to indicate low water levels.



The upper barge lock uses nearly 95,000 gallons (360,000 litres) each time it is used and this drains the Upper Basin by one inch (25 mm) each time. Over a busy day, the basin's level could drop more quickly than the weirs could compensate, hence the need for a steam pumping engine (see No.19).

BRIDGES, BASINS, WEIRS AND WHARFS

Building the Stourport Basin

There are few canal ports as complex as Stourport with its many basins lined by wharfs, its locks crossed by bridges and its water controlled by weirs. In its heyday, it was a hive of activity with many men and women working on the boats and in the warehouses or providing every kind of support services. The trades and professions in the 1841 Census included boat builder, lawyer, sail maker, victualler and carrier. By 1871, you could add housekeeper, carpenter's apprentice, scholar, dressmaker, butcher's boy, bricklayer, weaver, pattern stamper, iron moulder, maltster and governess. Most of the original infrastructure is still in place even if lots of the buildings have gone.

BRINDLEY'S ISLAND

When the narrow locks (and dry dock) were built in 1782, they created an island bounded by the Severn and by the Lower Basin and the barge locks. It's named after the canal's great engineer although he was long dead by the time the island was formed.



Whispers and Brays 7 – The Donkey Arch

Carriers used donkeys at Stourport for pulling carts and carrying small loads. Boys would lead them to and from their stables through the 'Donkey Arch' (the right hand opening) in front of you.

Artist Rob Colbourne writes: They told me about the arch and the shed at the back for the donkeys that used to work around the basins, a ghost that whispered and hid in wardrobes and of the magic of the Tontine, with stories of prisoners kept in its cellars, ready to be shipped to Worcester Gaol. The donkey's stables lay behind the Severnside Cottages that run down towards the river. One of the cottages was a lock-keeper's home.

Down by the Riverside – Towpath and Steps 8

Major improvements were made to the towpath along the Severn in 1804 allowing horses to pull boats up and down the river. Up to that time, boats were hauled by men.



The level of the River Severn varies considerably during the year and so several sets of steps were built down from the towpath to cope with boats moored alongside when the river level was lower than normal.

FINDING OUT MORE

Websites
www.stourporttown.co.uk, www.swcs.org.uk, www.mystourport.co.uk, www.unlocking-stourports-past.co.uk, www.waterscape.com

Multimedia
English Heritage has recently published 'Stourport-on-Severn, Pioneer Town of the Canal Age', which is available from local bookshops and online. John Fennyhouse Green's Day Books are held on microfilm by both Worcestershire and Staffordshire Record Offices. Albert Mogg, a local film-maker, has directed a number of documentaries which provide a very interesting history of Stourport Canal Basins including specific buildings. For details please visit www.stourporttown.co.uk

Front Cover: 'Brindley in Bed' by Alison Palmer

Alison Palmer was commissioned by British Waterways to interpret Stourport Canal Basins through photography. To access the complete set of photographs as well as Rob Colbourne's journal, the Soundwalk by Liminal and other arts commissions, please visit the Stourport Canal Basins webpage at www.stourporttown.co.uk

British Waterways, West Midlands Waterway Unit: 01827 252000

This leaflet is available in alternative formats upon request.

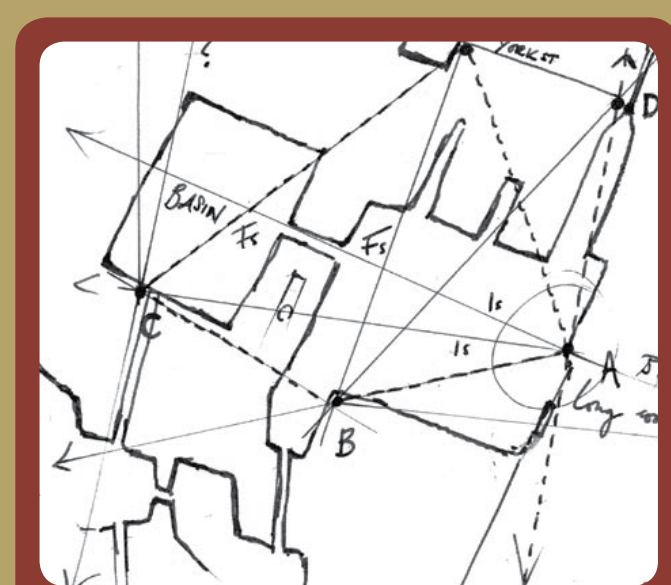


Thanks to the Stourport-on-Severn Civic Society for the use of the historic photographs. Leaflet written by British Waterways, Michael Glen and artists David Patten and Rob Colbourne.



Brindley's Junction – Meeting the Severn 9

On Wednesday 2nd November 1768, James Brindley made his most crucial decision – where to connect the proposed inland port to the River Severn. Brindley had decided earlier that day to locate the basin and warehousing on John Acton's stubble field so his decision to connect the S&WC to the River Severn at this point meant abandoning his plan of a month earlier to make the junction at the mouth of the Stour.



In his Day Book, John Fennyhouse Green, Under Clerk of Works, records: '...was with Mr Brindley and Mr Baker at the falling sands when Mr Brindley directed the Lock to be built in the River where the Rock Corner unto the bottom of it'