THE STAFFORD BRANCH CANAL / RIVER SOW NAVIGATION

ST THOMAS’ (BASWICH) LOCK IN 1971

Researched and written by

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Introduction

The Stafford Branch Canal left the Staffordshire and Worcestershire Canal at Baswich, near St.Thomas’ Bridge (Bridge 101), opposite the site of the former Baswich Salt Works (now the Baswich Industrial Estate), and there was an elegant Roving Bridge at the junction.

There was then a small pound, about 100 feet long and 20 feet wide, with the towpath and Lock House on the left (west). The left side of the pound was mainly edged with sandstone blocks but was turf-sided on the right.

Beyond the Lock House, the pound narrowed and the channel led to a cast-iron trough aqueduct over the Deepmore Drain. A small wooden bridge carried the towpath alongside the aqueduct on the left. The aqueduct led directly into the Lock.

Below the Lock was a short channel which led to the River Sow. Boats would then turn left and follow the River Sow upstream; after a short distance, the towpath crossed the River Penk (on the left) at its confluence with the River Sow on what was probably known as the Ladder Bridge. After about a mile, boats would enter a short channel (to the left of the White Bridge); the channel was about 15 feet wide and 8 to 10 feet from the river, with the towpath in between, and led to a wharf just before Green Bridge in the centre of Stafford.

THE LOCK

The correct name is St.Thomas’ Lock or Baswich Lock. Colloquially it was sometimes called “Sow Lock”, “Stafford Lock” or “River Lock”. It was built between 1814 and 1816.

The Lock was built to the same dimensions as locks on the Staffordshire and Worcestershire Canal and had a nominal fall of 6 feet 6 inches but the actual amount depended on the river level.

The maximum size of narrowboats using the Branch was:

- **Length**: 72 feet 0 inches,
- **Width**: 6 feet 9 inches,
- **Draught**: varied from 3 feet 10 inches up to 5 feet 0 inches, depending on the amount of water in the River Sow, and
- **Headroom**: 8 feet 8 inches.
The Lock Gates

It is highly likely that the gates for St Thomas’ Lock were built by the Staffordshire and Worcestershire Canal Company, probably at their principal maintenance depot at Stourport – but possibly at the small yard at Penkridge Wharf which tended to carry out work on the northern section (Gailey to Great Haywood) until 1924/1926.\(^1\)

The lock gates were probably well maintained by the Canal Company, otherwise water would be lost from the main canal to the River Sow by leaky gates. This seemed to have been a major issue in the early years of the Branch Canal and was one of the reasons the Staffordshire and Worcestershire Canal Company took over the Lease in 1838.\(^c\)

Specific information about these Lock Gates (dimensions, design, weight etc.) has yet to be found.

Descending the Lock (from the Basin)
- Boats would go from the Basin into the cast-iron trough aqueduct and then directly enter the Lock.
- The single top gate would be closed.
- The bottom paddles would be opened.
- When the Lock was empty, the two bottom mitred-gates would be opened.
- Boats would leave the Lock and travel the short distance along the Branch Canal link with the River Sow before turning left onto the River Sow and on to Stafford.

Ascending the Lock (from the link with the River Sow)
- Boats would enter the lock from the Branch Canal link with the River Sow.
- The two bottom mitred-gates would then be closed.
- The top paddles would be opened. \([\text{At present, the actual paddle arrangement is not known. Were there two ground paddles and a gate paddle, a gate paddle and a single ground paddle or just two ground paddles?}]\)
- When the lock was full, the single top gate would be opened. The balance beam would most likely have been on the right (west) – on the tow path side.
- Boats would leave the Lock, pass directly into the cast-iron trough aqueduct and enter the Basin before going under the Roving Bridge and onto the Staffordshire & Worcestershire Canal main line.

Photographs of the Lock

After the waterway closed in the 1920s, it seems the Lock was infilled rather than being completely demolished in 1935; the trough aqueduct was removed at the same time, although the small wooden bridge alongside the aqueduct was retained for safety reasons. The Lock gates may possibly have been removed earlier. The brickwork of the Lock was intact in 1971 but by 1974 everything had been completely swept away during a spate of improvements to drainage along the Sow Valley.\(^b\)
There are no known pictures of the Lock when the navigation was open.

The images on the *Britain from Above* website of the Baswich site, taken in August 1951, are not clear enough to show what, if anything, of the Lock remained, although the wooden bridge over the Deepmore Drain is visible.\(^d\)

The only known pictures of the Lock are five photographs taken by *Staffordshire County Council Archaeological & Historic Buildings Survey* which were deposited at the William Salt Library and Staffordshire Record Office in 1971. They show the remains of the Lock chamber and various features. I suspect these photographs were taken when the Lock site was unearthed prior to demolition when the Rivers Sow and Penk were realigned.

Looking at these photographs, I think the Lock chamber seems most similar to that of Sandon Lock on the Trent & Mersey Canal.

The photograph below shows the approach to the entrance of the aqueduct from the Basin in 1968. The Lock, of course, is out of view on the other side.

(1) Approaching the entrance to the Aqueduct from the Basin (1968)
© Courtesy of Peter Freakley Collection (Staffordshire & Worcestershire Canal Society)

The brickwork shows the walls of the Basin. The towpath and towpath bridge are on the left. The space to the right of the bridge is where the aqueduct was. Beyond, the aqueduct then led directly into the Lock – a most unusual arrangement on the canal system.

The next photograph shows the view from the other side, looking back towards the Basin.
(2) Remains of the Lock showing view from the north (looking south) (1971) © “Reproduced by permission of the Trustees of the William Salt Library, Stafford”.

The picture shows the entrance to the Lock (from the Branch Canal link with the River Sow) in the foreground, looking south towards the Canal Basin, which is beyond.

The towpath is on the right and the footbridge carries the towpath over the Deepmore Drain. It looks as though there maybe be something like ribbed metal sheeting over the Drain?

The site of the Lock House is on the right, behind the bushes.

The next photograph shows the View from the south.
(3) View of lock chamber from the south (looking north) (1971)
© “Reproduced with the permission of Staffordshire and Stoke on Trent Archive Service”.

This view shows the remains of the lock chamber looking towards the tail of the lock (which would then lead to the channel heading to the River Sow and Stafford). The brickwork of the east wall is on the right.

The next photograph shows the View from the south east.
This picture shows the brickwork of the west wall of the lock chamber, looking towards the tail of the lock on the right (which would then lead to the channel heading to the River Sow and Stafford). The towpath would be on the left (west).

The next photograph shows the View from the south west.
The site of the lock gates from the south west (looking north east) (1971)
© "Reproduced by permission of the Trustees of the William Salt Library, Stafford".

The picture shows the brickwork on the east side of the lock chamber and the site of the bottom gates.

The next photograph shows a View from the west.
(6) Showing the south end of the lock chamber looking from the west (1971)
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The picture shows part of the cill at the head of the lock chamber (centre right), with
part of the brickwork of the east wall (centre left). The view is from the west looking
south east.

The next photograph is one of several taken of the Baswich site in June 1971 by the
late Alan T. Smith.

It seems to show the approach to the entrance of the Lock leading from the River
Sow. It was probably taken a few months before the Lock site was unearthed prior
to demolition when the Rivers Sow and Penk were realigned, as shown in the
previous five photographs.
Approaching the entrance to the Lock looking east (June 1971)
© Courtesy of the late Alan T. Smith MBE

Looking towards the Lock along the route of the Branch Canal leading from the River Sow. A closer view is shown below in the next picture.

A closer view of the entrance to the Lock in the foreground (to the right of centre). The distinctive rails of the footbridge over the Deepmore Drain are visible. The Salt Works is in the background.
References

(b2) ibid. Pages 42 and 43.
(c) Staffordshire and Worcestershire Canal Company Minutes: various entries.
(d) See Photographs of the Stafford Branch Canal at Baswich (St Thomas’) in 1951 by David Jones. www.stafford-riverway-link.co.uk/History.html.

Photographs

(2) WSL: C/P/65/6/1/30/5: (Topog – Stafford 269D) (SRO 186/71).
(3) SRO: 184/71.
(4) WSL: C/P/65/6/1/30/7: (Topog - Stafford 269B) (SRO185/71).
(5) WSL: C/P/65/6/1/30/6: (Topog - Stafford 269C) (SRO187/71).
(6) WSL: C/P/65/6/1/30/6: (Topog - Stafford 269A) (SRO188/71).
(7) & (8) The image was taken from a slide copied by Norman Cooper from the original, courtesy of Alan T.Smith MBE. (Ref: SRL Committee Meeting 10 March 2005.) Alan was a well-known West Midlands waterways campaigner involved with the Staffordshire & Worcestershire Canal Society, Dudley Canal Trust and Stourbridge Navigation Trust from the 1960s; he died in 2012.

Key: WSL = William Salt Library, Stafford.
SRO = Staffordshire Record Office, Stafford.

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