

# BRUNEL'S OTHER BRIDGE NEWS

December 2021



Dear Supporter,

Welcome to our latest Newsletter ! Although activity has been disrupted considerably over the last two 'Covid years' we have made good progress. This Newsletter tells you what we have achieved, what we plan for 2022, and how you can help.

## **GOOD NEWS --- GRANT CONFIRMED!!**

Before the Covid-lockdown Bristol City's local Neighbourhood Partnership awarded BOB £25,000 as match-funding for a future Historic England grant for engineering-design work. This grant is very important to the Project and its term has been extended, so we look forward to progressing the consultancy alongside Historic England.

**Western Harbour Scheme** Brunel's Swivel Bridge is a unique example of Brunel's original, bold design, his first moving bridge incorporating some innovations, employed on his later bridges and copied by other engineers. The Bridge and the Replica Bridge beside it were important crossings and will again become so under the proposed Western Harbour development.

To represent the interests of the area's built heritage, over the last year Bristol Civic Society has established a new Western Harbour Group with active input from our volunteers.

Geoff has given talks to The Civic Society, at the AGM of Hotwells & Cliftonwood Community Association, an Aero Talk in north Bristol, and has led a Zoom walking tour of Cumberland Basin with Andrew Blayney of Underfall Yard.

Geoff published an article about the heritage of the Western Harbour in the autumn edition of the Civic Society newsletter *Civic Voice*.

**‘Harbour Hopes’** Last autumn Bristol City Council appointed consultants to carry out public engagement and consultation on the Mayor’s Western Harbour proposals. This is expected to lead to a Master Plan in 2022, further consultation and design, and delivery over a six-year period starting in 2026, subject to funding.



Our volunteers have been consulted about the future of the Swivel Bridge and many of our supporters have called for the restoration of BOB via the *Harbour Hopes* online map feedback.

Several of our volunteers have featured in the Create Centre exhibition, where further support has been received. For feedback so far see: <https://harbourhopes.co.uk/playback.pdf>.

**Flooding** Occasionally when there is a very high tide, the quay beside the Entrance Lock is just covered by flood-water. The frequency of flooding is expected to increase over the coming years, with additional inundation of Spike Island and parts of lower Hotwells becoming possibilities. The Council’s preferred option to alleviate flooding is to erect barriers along the edge of the River Avon and New Cut which can be progressively raised as average sea level rises in future decades. There are plans for a £200m scheme starting construction in 2025 subject to funding, which has significant implications for the Tongue, Entrance Lock, Brunel Lock (1844-9), and Replica Bridge (1875). For more information see: <https://democracy.bristol.gov.uk/documents/s57930/Appendix>

### **A new Database of Heritage Assets in Western Harbour**

With support from Bristol Civic Society, our volunteer John Willis has created a new database of heritage assets in the Western Harbour area. This is incredibly detailed, right down to individual lamp-posts, capstans and mooring pins, all easily accessed via maps.



Do please take a look at <https://bwhha.wordpress.com/>. Let us know of any corrections or additional information to add. Do please link the address to your own organization’s website, and publicise the database wherever you can.

Thank you for your hard work John

## Over the last year



Plate-thickness measurements have been carried out by our volunteer friends from the British Institute of Non-Destructive Testing using Ultra-Sonic test equipment. Subsequent tests using sophisticated Pulsed Eddy Current equipment were carried out courtesy of Baugh & Weedon.

Old hand-made wrought iron is a difficult material to test as it has a wood-like grain, but both trials were successful, and reported in the Institution's newsletter.

At the same time a borescope was used to investigate and photograph the insides of the balloon-top and triangular bottom tubes of both span beams. Many thanks to the teams for their time and loan of equipment.



## Our Achievements

Despite Covid restrictions we achieved four Volunteer workdays in 2020 and five this year.

Work continued repairing and reinstating the southern hydraulic ram in its pit following removal for inspection. Julian Beel made a new set of 10 inch long gland-bolts to replace the rusted originals, and David repaired a cracked casting, working in a very tight space in the pit.

We are keen to support the City in caring for the 'Tongue' (area between the Entrance Lock and Brunel's old lock) so members of our team have removed trees becoming established in Jessop's Lock walls, kept the weeds down generally, and repeatedly painted out graffiti.

**Video** Julian and Peter, members of the Bristol Film and Video Society, have again videoed each volunteer workday, and made short videos of progress that have proved popular. Julian is currently making a longer video setting out the history and importance of the historic industrial & maritime features in the area. The pre-view looks excellent so we look forward to seeing the final version in 2022.

## Volunteer Workdays 2022

Planned for the 3<sup>rd</sup> or 4<sup>th</sup> SATURDAY each month, but check the website for late changes. We start at 9.30am, and provide free tea and coffee, so why not bring a picnic lunch.

February	26 <sup>th</sup>	June	18 <sup>th</sup>	October	15 <sup>th</sup>
March	26 <sup>th</sup>	July	16 <sup>th</sup>		
April	16 <sup>th</sup>	August	20 <sup>th</sup>		
May	14 <sup>th</sup>	September	17 <sup>th</sup> (Provisional date)		

## Tasks planned for 2022

- Let an engineering consultancy contract to design repairs to the deck-plates.
- Investigate and record the hydraulic equipment below ground on the Tongue.
- Investigate how to release and re-tighten the southern top-tube tie-rods.
- Measure the twist on the bridge-deck, and the tail-wheel alignment.
- Carry out conservation on several localised severely rusting areas.
- Complete the installation of the south ram.
- Paint out graffiti on and around the Swivel Bridge.
- Control destructive vegetation on the 'Tongue'.
- Complete the video of the Western Harbour heritage.
- Prepare for the Project's tenth anniversary celebration in 2023.
- Continue to raise the profile of the Swivel Bridge and work towards its restoration.

### OUR AIMS

- To preserve and restore the structure to working condition for use as a pedestrian crossing over the Entrance Lock.
- To explain the significance, history, and technology of the structure in the context of the Floating Harbour and Brunel's other works.
- To develop the site's educational and amenity value for all.
- To inspire interest in engineering and technology amongst people of all ages

### WE NEED YOUR HELP.....

NO EXPERIENCE NEEDED - just turn up at the Bridge off Brunel Lock Road, BS1 6XS  
FREE PARKING! Don't worry if you are a newcomer....we are a really friendly lot !  
OR...Contact Geoff Wallis on [jandgwallis@gmail.com](mailto:jandgwallis@gmail.com), M: 0758-4060806

We acknowledge the continued support of:

- City Docks Engineer Thomas Pawley.
- Dominic Hewitt who administers our website, and Bristol IA Society who sponsor it.
- Nick Booker for leading on Facebook.
- The Avon Industrial Buildings Trust who hold our cash reserves & provide insurance..
- The Bristol Civic Society, Hotwells and Cliftonwood Community Association, Underfall Yard, the Piazza Project, and other supporting local organizations.

.....AND A BIG THANK YOU TO YOU OUR VOLUNTEERS for supporting us this year.

We wish each you a happy Christmas and safe 2022.

*Bob, John, Ian, David, The Julians, Charlie, Dominic, Peter, Chris and Geoff*

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