

Conservation Treatment Report – 6th July 2023

Waterwheel Frames

Description: The cast iron water wheel frames required immediate attention to rectify the lack of support, security and safety due to the rotten oak axle and wedges. See page 3 of the Initial Conservation Assessment report dated 3rd June 2023 for further information.

Significance: The waterwheel is an original and integral component of the mill, both practically and visually.

Condition: See page 3 of the Initial Conservation Assessment report for further detail.

Aim: To provide a temporary (12-24 month) solution to rectify the lack of support and security to the waterwheel frames. At a later date, the wheel can be rebuilt with soleplates and floats to provide the designed support and security.

Method: The two wheel frames were each brought as close as possible to the vertical plane. No stress or unnecessary force was applied to the venerable cast iron assemblies. Four-inch square, treated softwood timbers were cut to length to suit the distance between the two wheel frames. The timbers were secured at relevant intervals using black ratchet straps of the appropriate load rating. Black straps were selected to soften the visual appearance. The two frame assemblies were then essentially secured together. A ratchet strap was placed through the rear of the frames and secured to the RSJ at the rear of the penstock to secure the whole assembly.

Result: Successful treatment. The wheel frames are now secure and stable and posing no safety risk.



Figure 1: Before



Figure 2: Before





Figure 3: Before

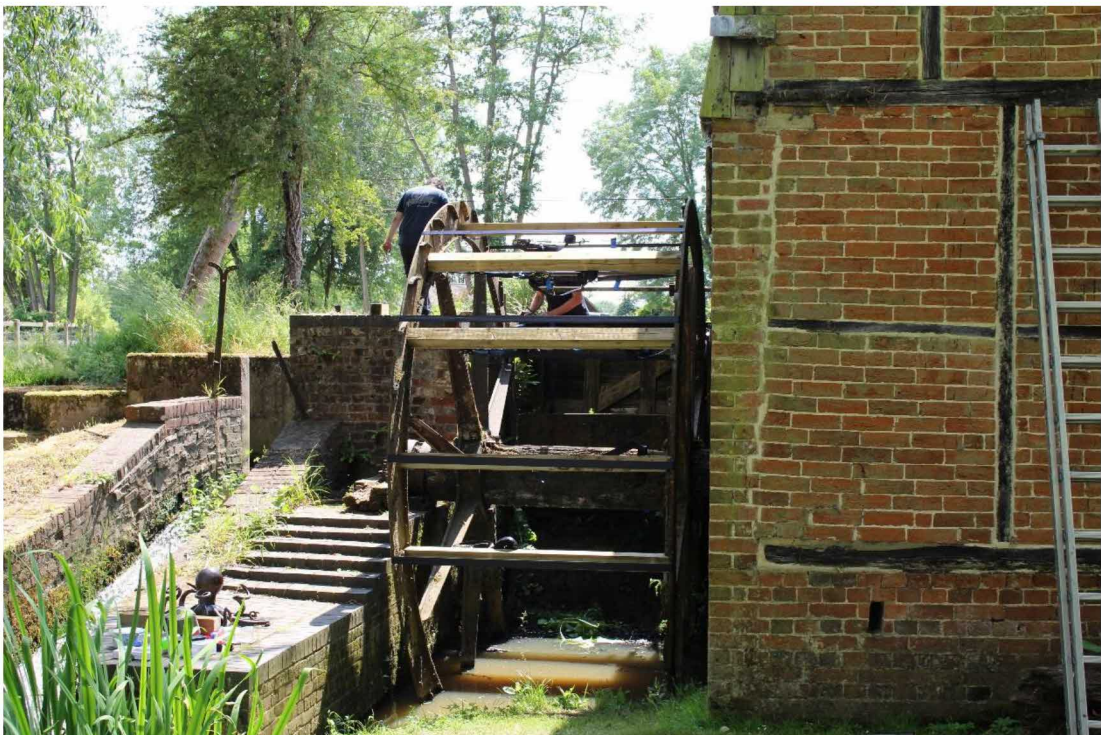


Figure 4: During

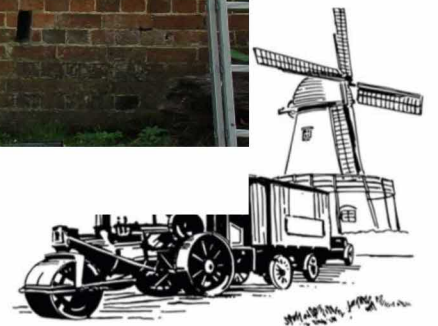




Figure 5: After



Figure 6: After

