OXFORD PRESERVATION TRUST

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Oxford Rewley Road Railway Swing Bridge: *Communicating the value of a redundant industrial relic.*

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In a time of sustainable development, when new planning policies are increasingly calling for every structure to have a purpose, the plight of redundant industrial relics is becoming more prominent. In this climate there is a growing need for restoration projects involving industrial structures that cannot easily provide viable economic regeneration opportunities to investigate a wider range of values and to find ways to communicate their importance effectively to the public.

One such structure is the Oxford Rewley Road Railway Swing Bridge. While the bridge does not look like much in its current state, it is in fact a Scheduled Ancient Monument and holds significant heritage value. Nestled within a modern housing estate alongside the Sheepwash Channel, a busy navigable waterway that cuts between the Thames and the Oxford Canal, these values are not easily distinguishable. The restoration of this structure is currently being undertaken by the Oxford Preservation Trust, an organisation that is all too aware that in the current climate this restoration project must go far beyond the remit of mere physical restoration. The Trust recognises the need to find a way to interpret and communicate the unique values associated with this structure to a wider public in order to secure its on-going preservation and allow it to effectively tell its story.

The Oxford Rewley Road Swing Bridge is the last physical reminder of the now non-existent London Birmingham Railway (LBR) backed Buckinghamshire Railway line (later by the London Midland Scottish Railway (LMS)). Designed in 1850 by Robert Stephenson it was an ingenious, cost effective method of allowing the Buckinghamshire Railway to enter Oxford over the Sheepwash Channel. The bridge is mounted on a substantial cast iron turntable comprising a bed of sixteen cast iron rollers and an upper cast iron track assembly (GW Conservation 2011, 3). Motion is derived from a series of toothed cast-iron gears or pinions from two cast iron windlass mechanisms which allowed the bridge to be turned by hand (RPS 2003, 13). The over deck and fixed approach spans have undergone several subsequent periods of modernisation in the late 19th Century and again in the 1940's (RPS 2003, 10).

Surprisingly, however, the turntable mechanism survives intact from the bridge's original period of construction.

The bridge was constructed at a time of great railway expansion. Brunel and Stephenson, working for the Great Western Railway (GWR) and the LBR controlled Buckinghamshire Railway respectively, were battling to be the first to provide a rail link to Oxford. The Buckinghamshire Railway, for which Stephenson worked, was part of a wider strategy by LBR to block the GWR aspirations to reach the industrial heartlands of Birmingham and Wolverhampton (RPS 2003, 9). While the LBR's plans to block the GWR were unsuccessful it did result in the amalgamation of the LBR and a number of other concerns into the London & North Western Railway (LNWR), a conclusion that indirectly resulted in the eventual demise of Brunel's broad gauge railway and a series of events that put Oxford at the centre of an epic battle for railway dominance (RPS 2003, 9).

The LBR/LNWR backed Buckinghamshire Railway was also historically connected to the Great Exhibition, held at Crystal Palace in Hyde Park in 1851. Not only did the railway line open in time to transport passengers to this momentous event, but the station was also constructed by the engineers Fox and Henderson, to the same design as their most famous endeavour - Crystal Palace (RPS 2003, 9). Due to the loss of Crystal Palace by fire in 1936 and the decision to move the Rewley Road Station from its position opposite the current GWR station on Rewley Road to the Buckinghamshire Railway museum in Quainton in 1999, the Oxford Swing Bridge is now the only piece of this important connection between Oxford and the Great Exhibition to remain in situ.

Considering it as one of only two scheduled Swing Bridges in England, the last significant hand–operated main-line rail Swing Bridge in existence in Britain, and given its association with Robert Stephenson the historical value of this structure cannot be disputed. However, this dilapidated structure has a much wider role to play than merely the evidence directly connected to its physical fabric. A role that will only be realised if it is restored in-situ. The Swing Bridge has a direct connection to the changing transportation history of Oxford and its surrounds. Transportation developments in the 18th century, with the construction of the Oxford Canal in 1790 and the coming of the railway, had a significant impact on the size and structure of Oxford as a city. These improvements to the transportation system saw Oxford's population grow from under 12,000 in 1801 to over 49,000 by 1901 (Bond 2010, 106) and had a direct impact on the urban landscape of the City. The Swing Bridge is able to provide a visual aid in the story of these changes and relates directly to the people whose lives it affected.

From a social perspective the bridge tells the story of those individuals that constructed it and were employed to physically turn it, as well as their families who may have worked on the railways, lived in railway owned properties or used the lines for both commercial and leisure activities. The stories of these individuals are woven into the very fabric of the structure and these collective memories create a social value that cannot be maintained if the bridge is removed from its original position or left to decay beyond recognition. But its redundant remains are also significant for their ability to provide shape and understanding to our ever changing world. The bridge is not only the last remaining hand-operated railway bridge in the country, but it also provides a much needed visual reminder of the path that this, now absent, railway line once took. Today, the area of Rewley Road is a densely packed residential area, but only a few decades ago it was an area bustling with railway and related industrial activity, a history that has almost entirely disappeared. The importance of the Swing Bridge as the final tenable link to this part of Oxford's past must not be forgotten.

The opportunity to restore the Swing Bridge came about due to plans by Chiltern Railways for 'Project Evergreen 3', proposing to construct a new railway between Bicester and Oxford. When plans emerged in 2010 the Trust argued that Chiltern Railways' plans for a new and enlarged bridge structure on the modern railway line, which runs alongside this historic structure, could have a detrimental impact on the setting and integrity of the Swing Bridge. Understanding the importance of upgrading the modern railway line, but with the fate of the Swing Bridge at the forefront of their argument, successful agreement was reached with Chiltern Railways that will see the company support plans for the restoration project both financially and in kind.

The Trust acknowledges that in order to accomplish the task of bringing this redundant industrial structure back to life it must fully examine the variety and significance of the values attached to it and use this information to provide a framework for its preservation and interpretation. The Trust is keen for this restoration project to focus on more than just the physical restoration of the bridge itself, but also to incorporate a wider remit of public engagement and education. The Trust has, with the help of volunteers, been keeping the site of the Swing Bridge clear for some years, in an attempt to minimise further deterioration, and this volunteer involvement will continue into the main restoration project. The inclusion of volunteer assistance within the project will be extremely important and, of course, interesting to those individuals that have a keen interest in railways, engineering, heritage and history, but what about everyone else? A series of lectures and forums that investigate the social and local implications of the Railway and the Oxford Rewley Road Swing Bridge are planned. This will encourage a wider understanding of the impact and values associated

with the bridge, ranging from the historical importance of the structure itself, to the stories of the individuals whose lives were shaped by the events of this turbulent and exciting period in Oxford's history, and a better understanding of the growth of transportation and industry in the City. Working with local experts, the project will bring the structure alive for those who may not be interested in the nuts and bolts of its historic fabric, but instead can relate to the stories it has to tell of the people connected with it and the impact it had on the development of Oxford.

This approach aims to balance the lack of viable economic benefit that this structure can offer with a well understood set of heritage values. After restoration the Bridge will continue to be used for educational purposes, both by the Trust and the wider community and, if successful, will transform this otherwise misunderstood and currently aesthetically unappealing structure into something that is properly appreciated at both a local and national level.

References:

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