

7. Heritage

- 7.1 In considering the impact of the restoration upon heritage, our prime consideration is the heritage value of navigational structures, as these will need to be renovated or replaced as part of restoration. For the most part, the canal will sit in the footprint of the original canal, and thus wider heritage and archaeological conditions are not an issue. However, there is a brief consideration of the impact of the canal restoration diverts from the original route, and also of canal side structures that are not affected by the restoration works per se, but will benefit from the restoration.

NAVIGATION WORKS

- 7.2 A full audit of the heritage value of the navigation works is presented in Appendix X. The engineering section contains a schedule of all canal structures, and the reader should refer to this for detailed reference.
- 7.3 In the main the canal restoration will affect canal structures, notably the 25 locks, 52 bridges and 4 aqueducts that once served the route. In addition there are some canal side structures that will have their setting altered; two of these are of especial value, these being the warehouse at Newport and the Flax Mill at Shrewsbury.

Taking each type of structure in turn:

Locks

- 7.4 Of the original 25 locks, only nine survive largely undamaged and visible, a further 15 are buried, and one has been converted to a dry dock. Three locks will be redundant in the proposals as the canal may be diverted at these locations.
- 7.5 The two locks on the Shrewsbury Canal section are of particular interest as they had guillotine gates at the bottom. These will become the only original Shrewsbury canal locks on the navigable system (there were once eleven) and in view of the uniqueness of the design efforts should be made to restore them, plus (as an heritage feature) the locks that remain on the un-navigable Trench Arm, to as near original condition as possible. At present the engineering solution for the canal favours mitre gates throughout but an exception will be made at this location and guillotine bottom gates will be fitted to the existing two locks. In addition, observant users will notice the locks are longer than average.
- 7.6 If the option to bypass Long Lane is chosen one of these, Eyton Lower, will be bypassed by the diversion, and thus can be preserved in its existing state; careful consideration of the new lock will be needed, as it would devalue the canal for this to be a perfectly normal lock, but exact replicas are not necessarily good practice as they spoil interpretation. It may be appropriate to build a modern lock (e.g. in reinforced concrete) fitted as per the Shrewsbury Canal with a guillotine gate.
- 7.7 The other 23 locks were a standard design by Telford and unsurprisingly are very similar to the locks on the Shropshire Union Main line, although the Newport locks never appear to have had double top gates unlike the main line locks. To maximise the heritage value of these locks, the remaining examples of furniture should be used
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to guide design of new lock gear. Where the buried locks have been partially demolished, efforts should be made to recover the stone or find suitable matching replacements. One infilled lock is not being reused and may provide a source of stone for others.

Bridges

- 7.8 By and large the restoration is sympathetic to surviving bridges as it is the road over them, not the canal, which will have a deleterious effect on them. Of the original 63 bridges 20 survived, nearly all of them between Norbury and Newport; of these 20, five are no longer required by the proposal and they may become either local features or could be relocated to the restored canal where bridges are missing, although historic structures will only be suitable for footbridges in this case.
- 7.9 There is one bridge of outstanding significance; B9, a skew bridge near Meretown, has a skew in excess of 45 degrees, i.e. it is less than 45 degrees from the line of the channel. The curved coursework in the arch is in excellent condition. While no register is kept of such items, it must surely be one of the most skewed bridges ever built (the most skewed was on the Hereford and Gloucester Canal, with a 60 degree skew) and will probably be the most skewed arch bridge on the canal system upon restoration.
- 7.10 The roving bridge 22a which still exists was also built on a skew as was the destroyed bridge 50, but were both under 30 degrees. The interest of these bridges is due to their rarity, and their development as canal architecture evolved. The keystone arch does not lend itself to crossings at anything other than 90 degrees to the channel, as the load is transmitted by the masonry courses (also at ninety degrees to the channel) to the springs or foundations. To twist a bridge such the arch sides are parallel to the canal but the structure is at say 60 degrees to the channel requires the courses to be carefully laid. If they were simply to follow the line of the bridge a lateral load would result and the bridge would quickly collapse. Thus the courses are twisted in the opposite direction to the skew. Over time engineers were able to push this further and further, and B9 is an extreme example. With the development of flat decked bridges, the art was lost as these can easily accommodate almost any angle of skew.

Aqueducts

- 7.11 Of the four aqueducts, only two survive, and these have suffered very different fates. The Aqueducts at Kynnersley and Roddington (A2 and A4) have been demolished. The former in particular is a sad loss, having been a fine example of Telford's finesse with small cast iron aqueducts and ashlar masonry (as per the Shropshire Union Canal over the A5 at Stretton Aqueduct.)
- 7.12 Of the other two, both have considerable heritage value. The Aqueduct at Meretown over the Meese is an unusual structure, carrying the adjacent road as well, and being so low over the river that the three arches take the form of siphons. The canal does not narrow over it, and when restored the user may be unaware they are on an aqueduct. It is, in many ways, an oversized culvert. It is difficult to determine whether it is of local or national significance as information on similar structures elsewhere is scarce: nevertheless, it *is* an outstanding example and also a local monument to

Thomas Telford. The location of this aqueduct next to the skew bridge makes this location one of the most interesting on the canal for the archaeologist.

- 7.13 The Longdon on Tern Aqueduct is an altogether different proposition, and is arguably of international importance. It is not the world's first cast iron aqueduct, but the only predecessor, in Derby, was on a much smaller scale and was scrapped in the 1970's. Longdon was the first cast iron aqueduct with intermediate supports (the Derby example being a short, single span) and developed the technology that led to Pontcysyllte and many other cast iron aqueducts around the country; it is also the forerunner to the modern steel troughs being used in canal restoration. The Longdon Aqueduct is part of a spectrum of development that includes the Iron Bridge, The Flax Mill, and the world's first iron boat (which sailed on the Severn near Ironbridge).
- 7.14 In its current form the aqueduct presents a conundrum: the aqueduct is dry with the approach embankments demolished, and thus it is out of context as there is no canal to carry. Nevertheless, it is very interesting to the dedicated historian in this state, as it is possible to walk in the trough itself and examine the ironwork at close quarters. However, to the general public, the structure has lost its meaning. Thus we have recommended that the aqueduct be rewatered and reused, even though it will need to be bypassed in the restoration process. However, an extensive study of the aqueduct should be made before restoration, to record the structure as it is now, with especial reference to those elements that will be hidden from view once the aqueduct is rewatered.

Canal side buildings

- 7.15 There are three groups of canal side buildings that are of especial interest. These are:
- ◆ The warehouse at Newport
 - ◆ The buildings at Wappenshall
 - ◆ The Flax Mill in Shrewsbury

Taking each in turn:

Warehouse at Newport

- 7.16 The wooden warehouse at Newport dates back to the time of the construction of the canal. It is an unusual example as most wooden structures were later replaced by masonry ones, or abandoned and demolished, thus it is probably of national importance and is also an unusual example of low key, small scale warehousing. There appears to be some local ambivalence to the structure, which is understandable as it is painted black and has no windows at all. Nevertheless any attempt to bring the building into use needs to respect its current form, and while some modifications may be necessary or desirable, suggestions such as replacing one end with glass should be resisted. There was once a second warehouse, but this was in a dilapidated state in the late sixties and was being vandalised. The U.D.C. therefore presented it to the new Ironbridge Gorge Museum where it was rebuilt and repaired as the present carpenter's shop at Blist's Hill. may be possible to replace this other warehouse, and that building could have significant departures to make it more user friendly, leaving the existing structure to serve uses that respect its form.
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Buildings at Wappenshall

- 7.17 This group of buildings is not only interesting in their own right but also occupies an almost unique place in canal history: Wappenshall was the junction between the tub boat system of the old Shropshire canals and the standard canal system of the English Midlands. The only comparable location in Britain is at Helebridge Wharf on the Bude Canal, where the barge canal section meets the tub boat system leading to Cornish interior. As such Wappenshall junction is of national importance, and its heritage value must be respected.
- 7.18 The buildings themselves form an interesting group, with one arm of the canal passing under one building and a lane passing through the same building over the canal. Unfortunately, the buildings are suffering the effects of neglect and recent repairs have only served to secure rather than repair the buildings.
- 7.19 It is understood that a proposal for conversion to housing has been submitted by the present owner of the buildings, to which members of the local community and the Trust have submitted strong objections on the grounds of loss of heritage. This historic location should be open to the public and become a local attraction, not made the preserve of those who live there. Such a conversion would also render the arm of the canal through the building unusable; as it is unlikely the residents would welcome boats through here, and would prevent the public seeing details of the interior. In addition, these were wharf buildings, in which human activity would interact with canal and surroundings; residential use would not result in the area being active in this way.

The Flax Mill in Shrewsbury

- 7.20 The Flax Mill is not a canal building as such; it was served by the canal but not otherwise related to its operation. However it is located alongside the probable proposed terminus in Shrewsbury.
- 7.21 The Flax Mill was the first iron framed building in the world and the significance of this development can not be overstated. Until the development of iron frames, buildings were restricted to a maximum of five storeys, as above this the weight of the walls then became too heavy for the lower courses of brick to bear. The development of the iron (later steel) frame meant that the limit of construction was almost literally the sky, as the concept is still the basis of the modern skyscraper. Only the reluctance of people to walk up stairs held up the construction of tall buildings after this, once the elevator was invented the full potential of iron frames could be realised.
- 7.22 The main role of this building is to give a focus to the canal in Shrewsbury; plans for development of the Flax Mill are likely to progress regardless of the plans for the canal, but both have something to offer the other. The canal can give the Flax Mill a fine setting in which its potential can be fulfilled, the Flax Mill offers a focus for a terminal or mooring basin in Shrewsbury itself.

Deviation from the original line

- 7.23 There are locations where the restoration must leave the line of the original canal. This does not have an impact on canal heritage as such; in most cases the original line has little heritage value anyway. However, the canal will then pass through
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ground that may have been undisturbed for centuries, and thus has the potential to disturb sites of archaeological interest. In view of this, it is recommended that an archaeological impact assessment is carried out on these diversions, and that a watching brief is maintained during construction.