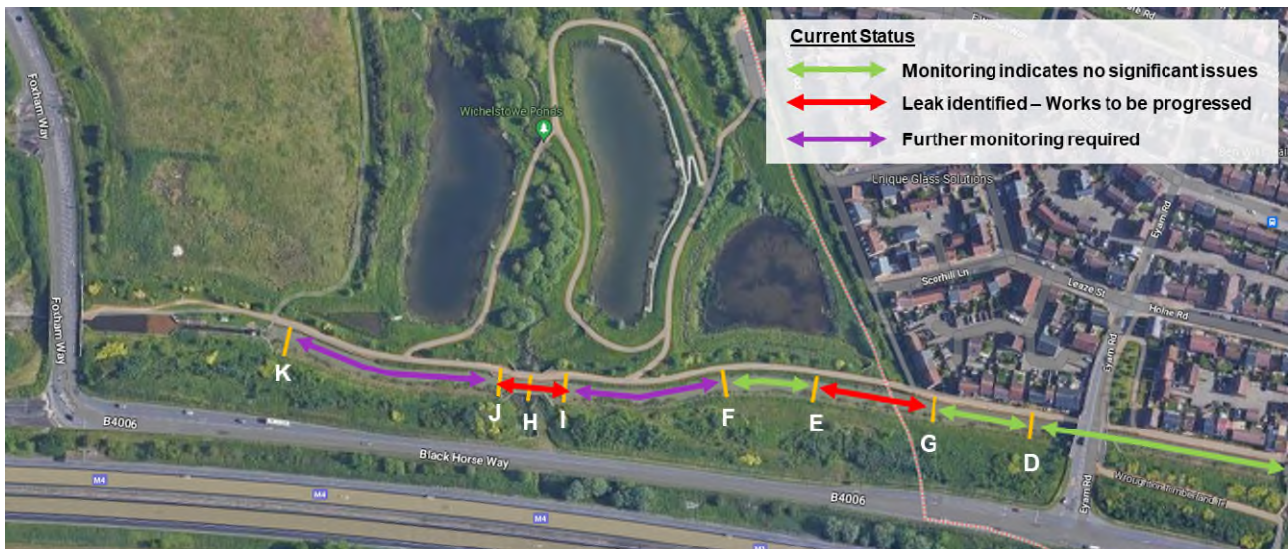


East Wichel Canal – March 2023 Update

This note provides an update on the works to detect and fix leaks within the East Wichel canal. Previous updates can be found at the following link <https://www.wichelstowe.co.uk/news/east-wichel-canal---spring-2023.aspx>

During 2022 a number of leaks were detected and repaired. Monitoring continued over the winter in order to assess the effectiveness of the repairs and identify what further works are required. Now that the weather is improving it is possible for the contractor to commence the next phase of works which is described below.

The plan below shows the current status of each section of canal with each of the dividing clay bunds allocated a letter. The areas where further works have been identified are described further below.



1) Section E to G

A number of fixes have already been completed in this section, with a leak in the base and through the southern bank repaired. The electronic monitoring of water levels, along with further test pits dug to the south of the canal, have demonstrated that water is no longer leaking from these locations.



It is however clear that this section is still leaking, with water levels noticeably lower than other sections.

Further investigation, including trial pits, has therefore been completed focussed on the north east of the section where no previous remedial works have been undertaken.

This investigation has indicated that water is leaking through the northern bank at the bridge structure and underneath the towpath. Working with the contractor and civil engineers a number of options have been explored to address the issue.

It has been concluded that the most robust solution is to empty this section of canal, dig a trench along the towpath in the affected section, and pour concrete behind the canal wall to form a barrier. In order to complete these works a section of the towpath will need to be closed to allow the trench to be dug and filled. All efforts will be made to minimise the disruption and access to properties fronting the canal will be maintained at all times, either from the east or west.

Following the completion of the works in this section the canal will be refilled and monitored for a period of circa 4 weeks. If the monitoring indicates the fix has been successful bunds D, G and E will be removed.



2) Bunds I to J – Western Aquaduct

Previous monitoring and works in the area of the aquaduct have indicated leakage from both banks. Section I to H has experienced the greatest water loss, with this section emptying completely in June 2022. Works to the southern bank have improved the situation but water levels remain lower than adjacent sections.



It has therefore been concluded further works to the northern bank are required, with the steel sheet piles sealed from within the canal. The same fixes will also be applied to the western section J to H.

As above these works will require the closure of the towpath for a period during the works.

3) Further Monitoring (F to I and J to K)

There are two further sections of the canal where insufficient data has been collected to date to determine whether they effectively hold water or not. As a final step of this phase of work one further bund will be installed close to the lock to allow water levels to be monitored free of the impact caused by leakage through the lock gates or overpumping from the lower section. The electronic sensors placed in the canal will then monitor the levels.

4) Timescales & Towpath Closures

The next stage of works are due to start during week commencing 20th March and are likely to take in the region of three months to complete. The works will initially focus on section E-G and then move onto the Western Aquaduct (I to J).

As set out above there will be periods where some sections of the towpath will need to be closed to the public to facilitate the works. The length of closures will be minimised as far as possible with access retained

where pedestrians can safely pass the works. Access to properties fronting the canal will be maintained from the east at all times.

5) Further Queries

If you have any queries about the works, please feel free to contact us at eleake@swindon.gov.uk or via Twitter or Instagram @wichelstowenews.