

TEXT 1

Barham Koondrook Bridge restoration – 2012 to 2018
 Barham Koondrook Bridge, built in 1904, is one of the oldest lift span bridges on the Murray River. It is listed on the NSW and Victorian State Heritage register and must be retained for its heritage value.

Roads and Maritime Services began restoring the historic lift span bridge in April 2012. The work involved repairing the mechanical components on the lift span and replacing the NSW approach span.

The next stages of work involved replacing the NSW and Victorian bridge abutments, approach spans and piers, replacing the two timber 'de Burgh' truss spans and deck, and painting and mechanical upgrade of the lift span towers.

The project was also extended to include a new pedestrian footway, lighting, repairing corrosion on the lift span and pier, installing new bearings on lift span piers and installing a modern and reliable electrical and hydraulic lift span control system, including a modern access ladder. The bridge was strengthened to carry heavier 68 tonne B-double trucks.

Before this work began, traffic and pedestrians were moved onto a temporary bridge in May 2017, which was used for the duration of the work. The Mabey Compact 200 was owned by Roads and Maritime and allowed for a more efficient work program, reduced safety risks, reduced traffic control and much less disruption and delays to the community.

Work on the existing bridge then started by Roads and Maritime's own bridge maintenance crews which included bridge carpenters, truck drivers, labourers, supervisors and engineers. However there was a huge amount of work in the few years prior including environmental assessment, cutting and shaping the timber trusses off site in Wagga Wagga, constructing the road approaches to the temporary bridge and installing the temporary bridge by launching it across the river from the Victorian side.

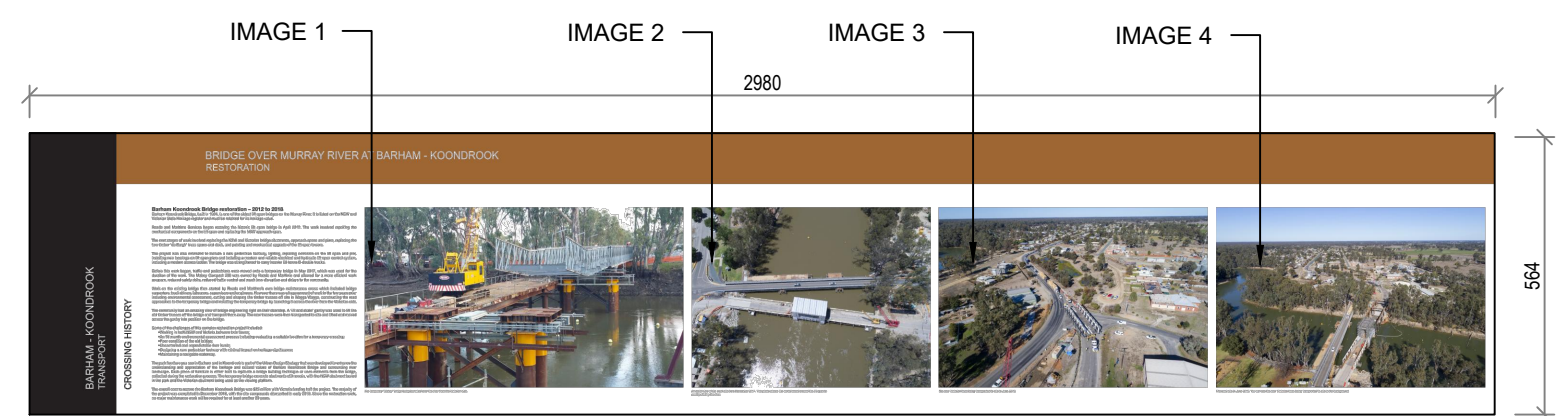
The community had an amazing view of bridge engineering right on their doorstep. A 'lift and skate' gantry was used to lift the old timber trusses off the bridge and transport them away. The new trusses were then transported to site and lifted and moved across the gantry into position on the bridge.

Some of the challenges of this complex restoration project included:

- Working in both NSW and Victoria between twin towns;
- An 18 month environmental assessment process including evaluating a suitable location for a temporary crossing;
- Poor condition of the old bridge;
- Uncontrolled and unpredictable river levels;
- Designing a new pedestrian footway with minimal impact on heritage significance;
- Maintaining a navigable waterway.

The park furniture you see in Barham and in Koondrook is part of the Urban Design Strategy that was developed to enhance the understanding and appreciation of the heritage and cultural values of Barham Koondrook Bridge and surrounding river landscape. Each piece of furniture is either built to replicate a bridge building technique or uses elements from the bridge, collected during the restoration process. The temporary bridge concrete abutments still remain, with the NSW abutment buried in the park and the Victorian abutment being used as the viewing platform.

The overall cost to restore the Barham Koondrook Bridge was \$25 million with Victoria funding half the project. The majority of the project was completed in December 2018, with the site compounds dismantled in early 2019. Since the restoration work, no major maintenance work will be required for at least another 20 years.



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 LD-102
DETAIL
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- NOTES**
1. TO BE INSTALLED ON INFORMATION SHELTER AS DETAILED IN LD-404
 2. IMAGES AND TEXT ARE SUBJECT TO CHANGE

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SCALES

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ROADS AND MARITIME SERVICES

BARHAM-KOONDROOK BRIDGE
 LANDSCAPE DESIGN & HERITAGE INTERPRETATION
 HERITAGE INTERPRETATION DETAILS
 INFORMATION SHELTER ARTWORK IV

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