

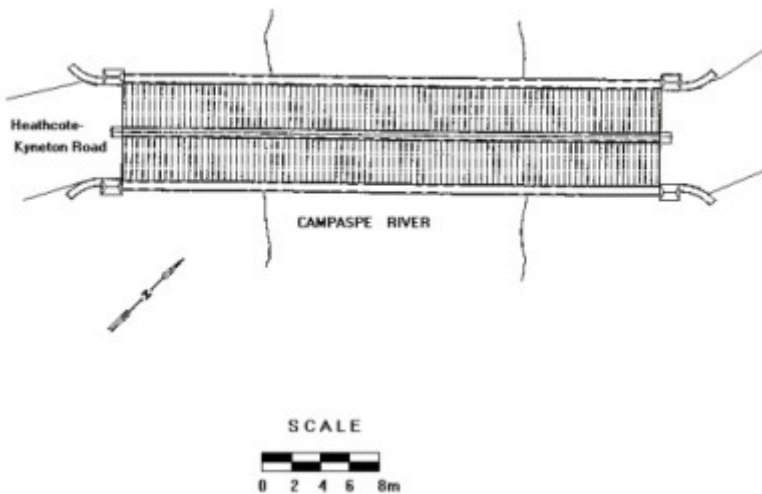
# REDESDALE BRIDGE



Redesdale Bridge aerial view



1 Redesdale Bridge  
redesdale end of bridge



Redesdale Bridge redesdale plan

## Location

HEATHCOTE-KYNETON ROAD REDESDALE AND HEATHCOTE-KYNETON ROAD MIA MIA, GREATER BENDIGO CITY, MITCHELL SHIRE

## Municipality

GREATER BENDIGO CITY

MITCHELL SHIRE

## Level of significance

Registered

## **Victorian Heritage Register (VHR) Number**

H1419

## **Heritage Overlay Numbers**

HO648

HO230

## **VHR Registration**

August 20, 1982

## **Amendment to Registration**

February 12, 1998

## **Heritage Listing**

Victorian Heritage Register

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## **Statement of Significance**

Last updated on - September 6, 1999

What is significant?

The Redesdale Bridge is a wrought iron and timber structure with bluestone abutments which was installed over the Campaspe River in January 1868, although the bridge actually bears the date 1867. In 1859, the "*Herald of the Morning*", a ship carrying a cargo including 350 tons of ironwork for the Hawthorn bridge, caught fire and was scuttled a quarter of a mile off the jetty at Sandridge. A Melbourne salvaging firm raised the ironwork from the bottom of the bay, but after details of an arranged sale to the government caused a scandal in Parliament, the material was sold privately to the Melbourne foundry Langlands & Co. Two hundred tons of it was sold to the goldfields shires of Mclvor and Metcalfe for only £1000. The bridge was designed by engineer TB Muntz and built by a contractor named Doran, and was completed late and considerably over budget at £6274. The bridge spans 45.7m across the river and has two roadways which are carried between three metal lattice girders in a through truss configuration. The design for the Hawthorn bridge had the deck supported over the trusses, and to stiffen the through truss configuration three sets of distinctive paired arches connect the trusses above the roadways. The roadway decking is constructed of longitudinally placed timbers on timber cross girders which rest on the lower chords of the trusses.

The Redesdale Bridge is substantially intact, with recent replacement of the timber crossbeams and decking and an increase in the height of the arch trusses. A recent collision with a truck necessitated repairs to the trusses and abutments.

How is it significant?

The Redesdale Bridge is of scientific (technological), historical and aesthetic significance to the State of Victoria.

The Redesdale Bridge is of scientific (technological) significance as a rare example of an iron lattice triple through truss bridge with stiffening paired arches. The bridge, imported from England, is one of the oldest surviving metal truss bridges in the State and is an important illustration of early iron bridge construction techniques.

The bridge is of historical significance as a river crossing on the important route that linked the goldfields centres of Kyneton and Heathcote, for its connection with the Hawthorn Bridge and associated ship fire and parliamentary scandal.

The bridge is of aesthetic significance as one of the most visually distinctive bridges in Victoria, located above a broad and deep river valley.

## Permit Exemptions

### General Exemptions:

General exemptions apply to all places and objects included in the Victorian Heritage Register (VHR). General exemptions have been designed to allow everyday activities, maintenance and changes to your property, which don't harm its cultural heritage significance, to proceed without the need to obtain approvals under the Heritage Act 2017.

**Places of worship:** In some circumstances, you can alter a place of worship to accommodate religious practices without a permit, but you must [notify](#) the Executive Director of Heritage Victoria before you start the works or activities at least 20 business days before the works or activities are to commence.

**Subdivision/consolidation:** Permit exemptions exist for some subdivisions and consolidations. If the subdivision or consolidation is in accordance with a planning permit granted under Part 4 of the *Planning and Environment Act 1987* and the application for the planning permit was referred to the Executive Director of Heritage Victoria as a determining referral authority, a permit is not required.

Specific exemptions may also apply to your registered place or object. If applicable, these are listed below. Specific exemptions are tailored to the conservation and management needs of an individual registered place or object and set out works and activities that are exempt from the requirements of a permit. Specific exemptions prevail if they conflict with general exemptions.

Find out more about heritage permit exemptions [here](#).

### Specific Exemptions:

#### EXEMPTIONS FROM PERMITS:

(Classes of works or activities which may be undertaken without a permit under Part 4 of the Heritage Act 1995)

No permit required for routine maintenance of the Redesdale Bridge.

No permit required to replace like with like on the Redesdale Bridge.

Construction dates	1867,
Heritage Act Categories	Registered place,
Other Names	Mia Mia (Redesdale) Bridge, Mia Mia Bridge, Redesdale Bridge,
Hermes Number	968
Property Number	

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## History

Contextual History:History of Place:

The bridge that was in January 1868 officially christened 'The Redesdale Bridge' is one of Victoria's most fascinating road bridges, both in terms of its unique structure and of its unusual history.

Prior to the construction of this unusually ornate bridge for such a remote rural site, the Campaspe River crossing on the main Kyneton-Heathcote gold-era road had been what was described in 1868 as an 'exceedingly dangerous' open ford crossing. It was not uncommon for the mails between Kyneton and Heathcote to be held up for a day or more waiting for floodwaters to subside. The combined shires of Mclvor and Metcalfe, on whose mutual boundary the crossing lay, was relieved to receive a State Public Works Department Grant of three thousand pounds towards the solution of this formidable bridging problem.

The combined shires considered themselves even more fortunate to have been able to purchase the main wrought-iron bridge materials, weighing approximately 200 tons, for the remarkable discount price of £1,000. This 'bargain' arose out of some very unusual circumstances. The wrought-iron truss components of the Redesdale Bridge were a portion of a larger consignment of materials intended for bridging the Yarra River at Hawthorn. The ship *Herald of the Morning*, while engaged in carrying this large bridge to Melbourne as deck cargo in 1859, caught fire in Hobson's Bay before it could be unloaded, and was scuttled to extinguish the fire. That original consignment of British wrought-iron bridge materials weighed some 350 tons, and together with its erection cranes had cost £10,500, so the sinking of *Herald of the Morning* represented a disaster for Melbourne's metropolitan bridge scene. The contractors for the new road bridge at Hawthorn were allowed an extension of time to import another similar bridge from Britain.

A Melbourne salvage-contracting firm, Ingles and Gresham, had then raised the bridge from the bottom of Hobson's Bay, and brought it into Sandridge (Port Melbourne). While the salvage firm was negotiating with the Victorian Government to pay some £6,000 for the salvaged materials, Ingles made the serious mistake of offering Victoria's Inspector General of Public Works, Thomas Higginbotham, a two and half per cent commission on the agreed price. A parliamentary row ensued, the negotiations were voided, and the salvage firm was erased from the Government's list of approved contractors.

The pioneer Melbourne foundry of Langlands and Co. then purchased the salvaged bridge materials for £2,000, and spent several hundred pounds in repairing or modifying bridge sections. However, there seems to have been no obvious market for the 350 tons of bridge materials, and the Langlands Foundry ended up selling 200 tons of it to the combined rural shires for £1,000, and disposing of the remainder at 'scrap iron' rates. That 200 tons of wrought-iron bridge materials had originally been priced at around £6,000, so the goldfields shires were pleased with their purchase.

However, by the time that the bridge was operational, it had cost the Mclvor and Metcalfe Shires more than £6,274, not counting the cost of gravelling its road approaches. This figure included the £3,000 provided by Victoria's Public Works Department as a main-road subsidy. Although the bridge had taken over three times the original estimated time to construct, and had run considerably over budget, the shires never-the-less felt pleased with their 'bargain' bridge. The contractor's name was Doran, the Clerk of Works was named Parbett, and the engineer supervising bridge construction was T. B. Muntz.

On 23 January 1868 'a numerous party' assembled at the Campaspe River crossing near Redesdale, to celebrate the official opening of the grand new bridge. Foremost among the visiting dignitaries to witness the great occasion was the Hon. John Macgregor, Minister for Mines, who was accompanied by Messrs Christopherson and Shakespeare of Victoria's Department of Water Supply. Henry Langlands of the noted Melbourne foundry was present, as were various municipal dignitaries including the mayors of Castlemaine, Heathcote and Taradale. Mr Cock, President of Mclvor Shire presided, and Mrs J. B. Morris broke a bottle of champagne across the bridge's iron ribs 'in a very ladylike and appropriate manner', before formally declaring 'The Redesdale Bridge' open for road traffic.

Also prominent among local parliamentary members present in January 1868, was Sir William Henry Fancourt Mitchell MLC, who 'wore his other hat' as President of Glenlyon Shire. Mitchell had been Victoria's Chief Commissioner of Police in 1851-5, Postmaster-General in 1857-8, and Minister for Railways in 1861-3. A pioneering district squatter whose lands had once taken in the bridge site, he reminisced that in his first year of

settlement in the area 'a severe fight' had taken place between local Aboriginal warriors and a group of white settlers, in the immediate vicinity of the bridge site. Not surprisingly, Mitchell recounted that 'the blacks were beaten and peace restored to the district'. Since Mitchell had first taken over Barfold Station from W. H. Yaldwyn in April 1841, the memorable but one-sided battle with the Aborigines presumably occurred at about that time. It was left to Henry Langlands of Melbourne to toast the contractor and the engineer for the bridge-construction project. When members of the official party moved off the bridge site, their place was rapidly taken by an assemblage of locals resplendent in the appropriate finery for the occasion of a grand ball, which then livened up the timber bridge deck until the early hours of the next morning.

Some locals had reservations about their rural councillors having expended so much of rate-payers' hard-earned funds on the Redesdale Bridge. The editor of the Kyneton Guardian, while somewhat begrudgingly admitting the 'bargain' aspect of the purchase of bridge materials, pointed out that construction had run way over the proposed time, and that it had also gone well over budget. Furthermore: 'the traffic on the cross-country road on which it is erected, is rather too limited to make it apparent that the great expenditure on that place was a judicious application of so much of the limited resources of either council'. The said editor hoped to see the day when the bridge became well-used, but commented that 'this can never be the case till the other portions of the road are made passable'. The Kyneton-Heathcote main road apparently needed a good deal more money spending on it before the bridge could fully serve its purpose. Even the immediate road approaches to the new bridge apparently required extensive metalling to make them passable for vehicles in wet weather.

In retrospect, any impartial observer today would have to concede that councillors of the adjoining shires of Metcalfe and McIvor in that long-departed era of gold-fever, had indeed struck a bargain in their purchase of the materials for this very long-lived road bridge. The Redesdale Bridge stands today as an impressive monument to Britain's Industrial Revolution, built in a remote corner of the British Empire that once thrived on gold.

The bridge has been subject to little modification since its construction. In 1997, after consultation with the National Trust and a permit from Heritage Victoria, the arches were raised a small amount to protect them from high vehicles, a new timber deck provided, together with additional bracing underneath the deck to make the structure more rigid. Improvements to the bridge approaches around that time probably enabled greater speeds, and a collision in early 1999 seriously damaged the trusses and the bluestone parapets. VicRoads intends to repair the bridge sympathetically, retrieving masonry that was knocked into the gorge, and rivetting rather than welding the damaged truss.

## **Assessment Against Criteria**

### **Criterion A.**

The historical importance, association with or relationship to Victoria's history of the place or object.

It is a monument to the British industrial revolution, situated in a remote location of the former British Empire, made necessary and possible by the colony's gold wealth.

It is the second lattice-girder truss bridge to have been built in Victoria, and the first in rural Victoria. It is the more intact of these two early bridges.

It has a distinctive history, its metal trusses having been originally intended for the Hawthorn Bridge, but replaced for this purpose when the ship on which they were imported caught fire in 1859, and was scuttled in Hobsons Bay. When salvaged they were subject of a Parliamentary controversy before being modified and used as through trusses at the Redesdale Bridge in 1868-69.

The bridge was on a mail-road which linked the early gold townships of Kyneton and Heathcote.

The site of the bridge was said at the opening to have been the immediately adjacent to the scene of a significant battle between the local Aboriginal people and early European settlers.

### **Criterion B.**

The importance of a place or object in demonstrating rarity or uniqueness.

The tall triple wrought-iron metal through-trusses of the bridge, linked by custom designed overhead arches, are

unique in Victoria, and a particularly attractive design. This is complemented by its formidable bluestone abutments and parapets.

Its single long span, high above the deep and wide Campaspe River valley, is both statistically and visually notable, and unique among the few colonial metal truss bridges in Victoria, which have intermediate masonry piers.

Its surviving longitudinal timber deck, once common in colonial metal span bridges, is now rare.

#### Criterion C.

The place or object's potential to educate, illustrate or provide further scientific investigation in relation to Victoria's cultural heritage.

The bridge is an important and educational example of the adaptation of nineteenth century international bridge building techniques for local circumstances.

It has some significant associations with the nineteenth century history of transport, regional development, flooding, and engineering infrastructure in Victoria.

#### Criterion D.

The importance of a place or object in exhibiting the principal characteristics or the representative nature of a place or object as part of a class or type of places or objects.

The bridge is an outstanding and intact example of the construction of bridges of composite materials - iron, stone masonry and timber - in Victoria, especially after the devastating 1870 floods, which emphasised the need to raise abutments (masonry), and create longer spans (metal trusses and girders) on key crossings. The timber decks were an integral part of these bridges, being sufficiently strong, and economical.

It is an outstanding example of a through truss wrought-iron girder bridge, and the most intact of Victoria's few early examples.

#### Criterion E.

The importance of a place or object in exhibiting good design or aesthetic characteristics and/or in exhibiting a richness, diversity or unusual integration of features.

The design of the bridge is unique in Victoria, an example of local adaptation of current international technology to local conditions, utilising local materials (bluestone and hardwood), modified trusses, and customised overhead arches. The design was also visually distinctive and attractive.

#### Criterion F.

The importance of a place or object in demonstrating or being associated with scientific or technical innovations or achievements.

The bridge represents a considerable engineering achievement. Its customised design was successful, the bridge having been in use, with minimal modification, since 1868.

#### Criterion G.

The importance of a place or object in demonstrating social or cultural associations.

The bridge is said to be situated at the site of a significant, but not generally known, battle between Aboriginal and European people (in about 1841).

#### Criterion H.

Any other matter which the Council considers relevant to the demonstration of cultural heritage significance.

It is one of the most visually distinctive bridges in Victoria, not only for its unique design, but for its rugged and visually impressive setting. Its formidable bluestone masonry, long single span, attractive iron arches, and impressive wrought-iron triple-through-trusses are sited high above a broad and deep river valley, without intermediary masonry piers.

Later version (August 1999)

Criterion A.

The historical importance, association with or relationship to Victoria's history of the place or object.

The bridge is a very rare surviving example of the response to the great state-wide flood phenomenon of 1870, which devastated traditional timber bridges at many crossings, including Darlington.

It is significant for its association with the adjacent Elephant Bridge Hotel, which was named after the previous bridge at the crossing. The imposing form of the bluestone hotel is highlighted by its isolated setting, and with the remains of the bridge, portrays a striking and now-rare image of the relationship between rural hotels and bridges in the pioneering era of horse and bullock cart transport. The hotel and bridge, isolated from any township, comprise a significant cultural landscape. The hotel also hosted the grand official opening of the bridge.

Criterion B.

The importance of a place or object in demonstrating rarity or uniqueness.

The cast iron panels in the masonry walls are rare, the only other known example being those at Ellerslie

The Darlington cast iron panels are considerably more ornate than this only other example.

Criterion C.

The place or object's potential to educate, illustrate or provide further scientific investigation in relation to Victoria's cultural heritage.

Criterion D.

The importance of a place or object in exhibiting the principal characteristics or the representative nature of a place or object as part of a class or type of places or objects.

With the Ellerslie Bridge, the masonry abutments and dwarf piers represent the largest examples of now rare composite masonry-timber bridges in Victoria.

Criterion E.

The importance of a place or object in exhibiting good design or aesthetic characteristics and/or in exhibiting a richness, diversity or unusual integration of features.

The bridge is a critical representation of the nineteenth century Victorian compromise of European bridge-building tradition and local materials and economies, forged particularly as the destructive potential of highly variable local streams became known.

The fine panels, criticised as an unnecessary extravagance in 1871, were justified by the designer as being purely utilitarian, as they were more economical than a wholly masonry parapet wall.

Criterion F.

The importance of a place or object in demonstrating or being associated with scientific or technical innovations or achievements.

Criterion G.

The importance of a place or object in demonstrating social or cultural associations.

The old Darlington Bridge was an historically exceptional bridge for having been designed by an engineer-architect. Andrew Kerr, its designer, also designed the Ellerslie Bridge upon which the Darlington Bridge was modelled, and numerous Warrnambool buildings, including St John's Presbyterian Church, one of the most architecturally eminent Presbyterian churches in Victoria.

Criterion H.

Any other matter which the Council considers relevant to the demonstration of cultural heritage significance

## **Extent of Registration**

### NOTICE OF REGISTRATION

As Executive Director for the purpose of the Heritage Act, I give notice under Section 46 that the Victorian Heritage Register is amended in that the Heritage Register Number 1419 is now described in the category as a Heritage Place:

Mia Mia Bridge, Kyneton-Heathcote Road, Redesdale, Mt Alexander Shire Council.

### EXTENT

1. To the extent of the entire bridge known as the Mia Mia Bridge including associated walls and abutments as shown in Diagram 601959 held by the Executive Director of the Heritage Council..

Dated 5 February 1998

RAY TONKIN

Executive Director

[*Victoria Government Gazette* No. G6 12 February 1998 p.352]

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*This place/object may be included in the Victorian Heritage Register pursuant to the Heritage Act 2017. Check the Victorian Heritage Database, selecting 'Heritage Victoria' as the place source.*

*For further details about Heritage Overlay places, contact the relevant local council or go to Planning Schemes Online <http://planningschemes.dpcd.vic.gov.au/>*