REDESDALE BRIDGE

Redesdale Bridge aerial view

1 Redesdale Bridge
redesdale end of bridge

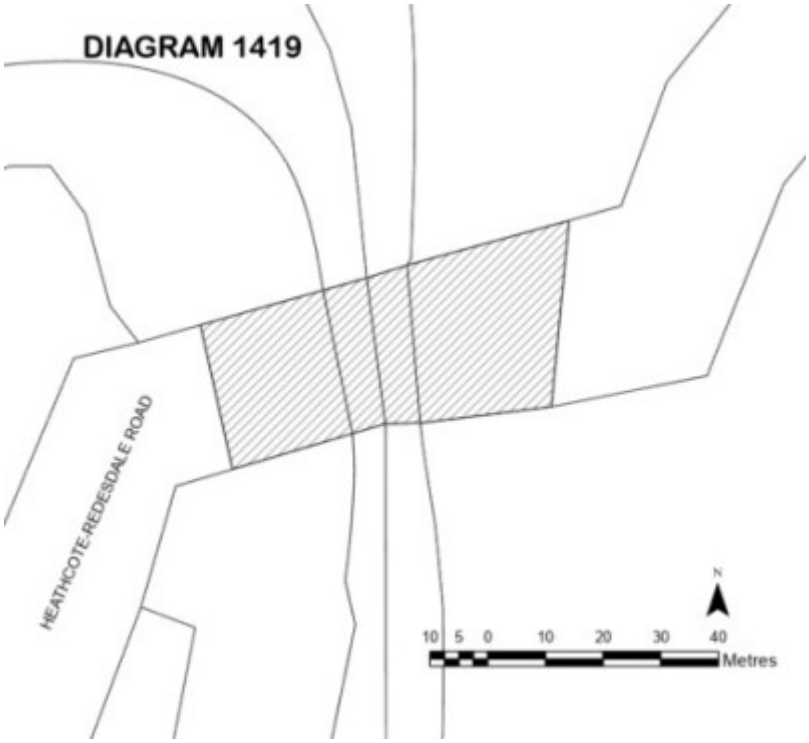

DIAGRAM 1419

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

April 17, 2025

Heritage Listing

Victorian Heritage Register

Statement of Significance

Last updated on - April 22, 2025

What is significant?

The Redesdale Bridge (also known as the Mia Mia Bridge), a wrought iron and timber structure with bluestone abutments. The bridge was designed by Thomas Bingham Muntz and constructed in January 1868.

How is it significant?

The Redesdale Bridge is of historical and technological significance to the State of Victoria. It satisfies the following criterion for inclusion in the Victorian Heritage Register:
Criterion A Importance to the course, or pattern, of Victoria's cultural history.
Criterion F Importance in demonstrating a high degree of creative or technical achievement at a particular period.

Why is it significant?

The Redesdale Bridge is historically significant as a crossing over the Campaspe River on an important route that linked the nineteenth century townships of Kyneton and Heathcote. The ironwork was imported from England on the Herald of the Morning and intended for a new bridge over the Yarra River at Hawthorn. This vessel and its cargo sank in Hobsons Bay in 1859, and the ironwork was subsequently retrieved and became part of the Redesdale Bridge.
(Criterion A)

The Redesdale Bridge is technically significant as an uncommon example of an iron lattice triple through-truss bridge with paired arches. The bridge is one of the oldest surviving metal truss bridges in the State and is an important demonstration of early iron bridge construction techniques. Constructed of iron and masonry, at a time when most bridges were timber, it survived the devastating floods of 1870 which swept across Victoria, destroying many weaker bridges. The bridge is one of the most distinctive bridges in Victoria, located above a broad and deep river valley
(Criterion F)

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:

The works and activities below are not considered to cause harm to the cultural heritage significance of the Redesdale Bridgesubject to the following guidelines and conditions:

Guidelines

1. Where there is an inconsistency between permit exemptions specific to the registered place or object ('specific exemptions') established in accordance with either section 49(3) or section 92(3) of the Act and general exemptions established in accordance with section 92(1) of the Act specific exemptions will prevail to the extent of any inconsistency.
2. In specific exemptions, words have the same meaning as in the Act, unless otherwise indicated. Where there is an inconsistency between specific exemptions and the Act, the Act will prevail to the extent of any inconsistency.

3. Nothing in specific exemptions obviates the responsibility of a proponent to obtain the consent of the owner of the registered place or object, or if the registered place or object is situated on Crown Land the land manager as defined in the *Crown Land (Reserves) Act 1978*, prior to undertaking works or activities in accordance with specific exemptions.
4. If a Cultural Heritage Management Plan in accordance with the *Aboriginal Heritage Act 2006* is required for works covered by specific exemptions, specific exemptions will apply only if the Cultural Heritage Management Plan has been approved prior to works or activities commencing. Where there is an inconsistency between specific exemptions and a Cultural Heritage Management Plan for the relevant works and activities, Heritage Victoria must be contacted for advice on the appropriate approval pathway.
5. Specific exemptions do not constitute approvals, authorisations or exemptions under any other legislation, Local Government, State Government or Commonwealth Government requirements, including but not limited to the *Planning and Environment Act 1987*, the *Aboriginal Heritage Act 2006*, and the *Environment Protection and Biodiversity Conservation Act 1999* (Cth). Nothing in this declaration exempts owners or their agents from the responsibility to obtain relevant planning, building or environmental approvals from the responsible authority where applicable.
6. Care should be taken when working with heritage buildings and objects, as historic fabric may contain dangerous and poisonous materials (for example lead paint and asbestos). Appropriate personal protective equipment should be worn at all times. If you are unsure, seek advice from a qualified heritage architect, heritage consultant or local Council heritage advisor.
7. The presence of unsafe materials (for example asbestos, lead paint etc) at a registered place or object does not automatically exempt remedial works or activities in accordance with this category. Approvals under Part 5 of the Act must be obtained to undertake works or activities that are not expressly exempted by the below specific exemptions.
8. All works should be informed by a Conservation Management Plan prepared for the place or object. The Executive Director is not bound by any Conservation Management Plan and permits still must be obtained for works suggested in any Conservation Management Plan.

Conditions

1. All works or activities permitted under specific exemptions must be planned and carried out in a manner which prevents harm to the registered place or object. Harm includes moving, removing or damaging any part of the registered place or object that contributes to its cultural heritage significance.
2. If during the carrying out of works or activities in accordance with specific exemptions original or previously hidden or inaccessible details of the registered place are revealed relating to its cultural heritage significance, including but not limited to historical archaeological remains, such as features, deposits or artefacts, then works must cease and Heritage Victoria notified as soon as possible.
3. If during the carrying out of works or activities in accordance with specific exemptions any Aboriginal cultural heritage is discovered or exposed at any time, all works must cease and the Secretary (as defined in the *Aboriginal Heritage Act 2006*) must be contacted immediately to ascertain requirements under the *Aboriginal Heritage Act 2006*.
4. If during the carrying out of works or activities in accordance with specific exemptions any munitions or other potentially explosive artefacts are discovered, Victoria Police is to be immediately alerted and the site is to be immediately cleared of all personnel.
5. If during the carrying out of works or activities in accordance with specific exemptions any suspected human remains are found the works or activities must cease. The remains must be left in place and protected from harm or damage. Victoria Police and the State Coroner's Office must be notified immediately. If there are reasonable grounds to believe that the remains are Aboriginal, the State Emergency Control Centre must be immediately notified on 1300 888 544, and, as required under s.17(3)(b) of the *Aboriginal Heritage Act 2006*, all details about the location and nature of the human remains must be provided to the Aboriginal Heritage Council (as defined in the *Aboriginal Heritage Act 2006)*.

Exempt works and activities

Redesdale Bridge structure
1. Repair and maintenance of masonry components including, cleaning, grouting and repointing. Cleaning must not involve abrasive sandblasting but may use low pressure washing with water to a maximum of 300 psi on the surface being cleaned. Grouting and repointing must avoid the use of cement.
2. Repair and maintenance of iron and steel components and associated fixings on a like for like basis.

3. Repainting and surface treatment to preserve iron components in a like for like manner, including preparations before treatment, which may include low pressure sandblasting to a maximum of 130 psi to remove and capture old paint.
4. Repair, maintenance or replacement of timber components such as the running deck, cross decking, and associated fixings on a like for like basis.
5. Repair and upgrade of drainage and signage. East and west approaches to the Bridge
6. Routine maintenance and other minor upgrades within the existing road formation that constitute the east and west approaches to the bridge, but excluding the bridge structure itself. This includes:
a) Repair, maintenance and upgrade of drainage, signage, and street furniture e.g. bollards, guideposts.
b) Repair and maintenance of road pavement, road shoulders, line marking and kerbing.
c) Installation, maintenance, removal and upgrade of safety barriers.

Trees and vegetation

7. Pruning, lopping or removal of trees and vegetation where permitted in accordance with other laws.
8. Mowing and weed control.

Emergency works

9. Emergency works required to immediately secure the site and prevent any further damage to property or injury to the public. This specific exemption does not apply to nonemergency rehabilitation and reconstruction following an incident or event.

Theme

3. Connecting Victorians by transport and communications

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

History

Prior to the construction of the Redesdale Bridge in 1868, there was an open ford crossing over the Campaspe River. Located on the main Kyneton-Heathcote gold rush-era road, the ford was notoriously difficult to cross and described in 1868 as ‘at times very dangerous’. After heavy rainfall, it was not uncommon for the mail between Kyneton and Heathcote to be delayed for a day or more as the floodwaters subsided. The combined shires of McIvor and Metcalfe, on whose mutual boundary the crossing lay, received a State Public Works Department Grant of £3000 towards the construction of a durable bridge.

The wrought iron materials for the bridge were salvaged from the *Herald of the Morning* shipwreck. The ship had been reported to be carrying ironwork intended for a bridge over the Yarra River in the Melbourne suburb of Hawthorn before it caught fire and was sunk in Hobson’s Bay. The ironwork was later recovered and sold at auction to the combined shires of McIvor and Metcalfe. They bought 200 tons of salvaged iron work and constructed the bridge to a design by Thomas Bingham Muntz, engineer to the Metcalfe Board. The bridge was located in a steep and difficult site, with angled approaches and incorporating three wrought iron lattice girders supported by bluestone piers and abutments. The curved wrought iron arches over the two lanes are both structural and aesthetic, providing lateral stability to the lattice-girders and contributing to the striking impression of the bridge.

At the time, the bridge was built so that the roadway would be five feet above that of the highest known flood level. The bridge was completed in 1868, although bears the date 1867. Costing £6274, the expense was split three ways between the state government, and the shires of McIvor and Metcalfe. The project was considerably over budget, and construction took three times as long as the original estimate.

The bridge has been subject to little modification since its construction in 1868. In 1997, the arches were raised by a small amount to protect them from tall vehicles. A new timber deck was provided, together with additional bracing underneath the deck to make the structure more rigid.

The Redesdale Bridge (also known as the Mia Mia Bridge) is still used as a road bridge for vehicles today. It provides a connection over the Campaspe River between the communities of Redesdale and Mia Mia.

Selected bibliography

The Argus. "Friday, September 21, 1866." September 21, 1866. http://nla.gov.au/nla.news-article5773959.

Vines, Gary & Ken McInnes. *Metal Road Bridges in Victoria.* On behalf of the National Trust of Australia (Victoria) with funding from VicRoads and Heritage Victoria, 2003 (revised August 2010).

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 theRedesdale 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 asssociations 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 extravagence 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

Heritage Act 2017

NOTICE OF REGISTRATION

As Executive Director for the purpose of the **Heritage Act 2017**, I give notice under section 53 that the Victorian Heritage Register is amended by modifying a place in the Heritage Register:

Number: H1419

Category: Registered Place
Place: Redesdale Bridge
Location: Heathcote-Kyneton Road, Redesdale and Heathcote-Kyneton Road, Mia Mia
Municipality: City of Greater Bendigo

All of the place shown hatched on Diagram 1419 encompassing all of Crown Allotments 2046 and 2045 Parish of Redesdale and all of Crown Allotments 2049 and 2050 Parish of Spring Plains

17 April 2025
STEVEN AVERY
Executive Director
[Government Gazette G16 17 April 2025]