HERITAGE COUNCIL OF WESTERN AUSTRALIA

REGISTER OF HERITAGE PLACES
Supporting Information

PLEASE NOTE: This Assessment Documentation[1] is intended to provide sufficient information to consider the place for inclusion in the State Register. It is not intended to provide a complete record of the history of the place or its physical presentation.

10. THE PLACE

Figure 1: Mount Henry Bridge, viewed from the north, showing V-shaped original piers.

Mount Henry Bridge is the longest road bridge in Western Australia, being 660m in length with a deck width of 40m. This bridge provides the Kwinana Freeway with a vital crossing of the Canning River, linking Perth with its southern residential suburbs, the Kwinana industrial area, Mandurah and the Forrest Highway to the southwest region.[2] The first bridge (Mount Henry Bridge 1) was completed in 1982 to provide three lanes of traffic in both directions, and two below-deck principal shared paths for pedestrians and cyclists separating them from road traffic and providing some weather protection. The second bridge (Mount Henry Bridge 2), built to the west of the original bridge, was completed in 2007[3], Mount Henry Bridge 1 now carries the southbound traffic and the Perth to Mandurah rail lines. Mount Henry Bridge 2 now carries the northbound traffic lanes.

1 The documentation for this place is based on the heritage assessment completed by the Department of Planning, Lands and Heritage in October 2025, with amendments and/or additions by the Heritage Council and the Department.

2 Mt Henry Bridge – Engineering Heritage Marker Award Ceremony Program 2024, p3

3 Mt Henry Bridge – Engineering Heritage Marker Award Ceremony Program 2024, p3

11. DOCUMENTARY EVIDENCE

Early history of the area

The Djarlgarro Beelier (Canning River) - 'place of abundance'[4] - is of vital significance to the Whadjuk people, formerly being a source of food, water, and resources. At the time of colonisation, two Whadjuk (Noongar people of the Perth region) groups resided along the Canning River, the Beeloo and the Beelier. The Whadjuk land south of the Swan River and west of the Canning River to the coast is Beelier land. The land across the Canning River to the Helena River is Beeloo land. The Canning River was the border between these two groups and provided a route from the coastal plain to the hinterlands.[5]

The lives of Whadjuk Noongar people, and their connection to their traditional lands were severely compromised through expansion of European settlement.[6]

Mount Henry Bridge 1 (1982)

The north-south freeway system was designed by planner and civic designer, Professor Gordon Stephenson and Town Planner and Commissioner for Perth, John Alastair Hepburn, in 1955 as part of a plan to guide the long-term development of post-war Perth. A report on the plan notes that:

> In the 1950s Perth, capital city of Western Australia, stood on the cusp of major development which would transform it from a nineteenth-century European city to a modern commercial city dominated by international-style skyscrapers and surrounded by sprawling suburbs. Gordon Stephenson was engaged by the state government as consultant in 1953 to prepare a plan for the metropolitan area that would guide and shape this transformation.[7]

In the *Plan for the Metropolitan Region Perth (Perth and Fremantle)*, Stephenson and Hepburn discussed how the increase of population and activities in the Kwinana area was causing increased pressure on the Causeway and the urgent need for a 'further bridge over the Swan River at the Narrows, and a major road in a southerly direction'.[8] The report went on to indicate that the plan proposed 'the next part of the [new - presumably what is now Kwinana freeway] Highway crossing the Canning River over a bridge near Mount Henry'[9], suggesting that the idea for a road bridge near Mount Henry was already conceived more than 25 years ahead of it actually being built:

> A major effect of the Plan was to change the traditional alignment of the metropolitan region from west to east along the Swan River, to north and south. As a result, the Swan River which had been a major factor in Perth's geography and development for over 100 years, became a barrier to further growth. The most important road was a freeway running north-south to link the existing major centres of population with the growth areas which would develop north and south of the city.[10]

The 1980s saw the Main Roads Department adopt policies and processes to ensure environmental concerns were taken into account in planning for roads and

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4 Ecological water requirements for the Lower Canning River, Dept of Water, 2010. p.3

5 Aboriginal History (canning.wa.gov.au) at 21 June 2024.

6 Green, Broken Spears, pp. 186-188, as cited in the City of South Perth Local Heritage Inventory and Heritage List 2018, P.15.

7 Gregory, J, Stephenson and metropolitan planning in Perth , University of Western Australia, as cited in Town Planning Review January 2012.

8 Plan for the Metropolitan Region Perth, Perth and Fremantle, G Stephenson and JA Hepburn, 1955, p.116

9 Plan for the Metropolitan Region Perth, Perth and Fremantle, G Stephenson and JA Hepburn, 1955, p.117

10 Swan and Canning Rivers Bridges – Australian Engineering Week Tour 2012, p.12

bridges.[11] Mount Henry Bridge 1 (1982) was designed to minimise the visual impact on the river and allow maximum use by water traffic. The design allowed for separate bicycle and pedestrian footways to be cantilevered immediately below the traffic bridge on each side, and the retention of a wide strip of foreshore with its native flora.[12]

The original 1982 bridge was one of the last major bridges in WA designed in-house by Main Roads engineers.[13] Engineers in the Bridge Section of Main Roads Western Australia (MRWA) were given the opportunity to come up with preliminary designs. Of the 13 submissions, nine were chosen for further development. The local authorities and Professor Gordon Stephenson, who was the consultant architect for the project, ultimately decided on John Gilbert Marsh's design, which Stephenson later helped refine:

> The chosen design, a nine-span prestressed concrete structure, was selected because it offered the least visual obstruction to the broad expanse of the river and surrounding landscape and allowed maximum use of the river by boats and water-skiers. The two-cell single box structure allowed the use of a simple pier system, which enhanced the appearance of the bridge. A footbridge/cycleway was provided below the roadway level, remote from traffic and offering shade in summer and protection from rain in winter.[14]

In an oral history interview with Engineering Heritage in 2009, Marsh believed that his design was chosen, 'because I put the footways underneath the deck instead of on the deck.'[15] Marsh further noted that 'Geoff Smith who was leading the design team, came up with narrowing down the piers all the way, with very heavy reinforcing… to make it safer for river crafts.'

Marsh joined Main Roads directly from university commencing with the Bridge Branch. His most significant project was the design and construction, between 1947 and 1952, of the two steel and concrete composite bridges over the Swan River at the Causeway.[16] In 1954, with government approval for the construction of a bridge over the Swan River at the Narrows, Marsh designed and supervised the reclamation work for the northern and southern approaches and undertook liaison with the overseas consultants appointed to design the Narrows Bridge.[17] John Gilbert Marsh effectively held the position of Bridge Engineer in Main Roads for 28 years, from 1957 up to his retirement in 1985. He was promoted to Assistant Chief Engineer Investigation and Design in 1965.[18]

Mount Henry Bridge 1 demonstrated engineering and technical innovation in using a construction method not previously used in Western Australia, and never used again since:[19]

> Another first for Western Australian bridges was the construction method of cable-stayed truss and formwork, using the permanent structure rather than temporary piles for support, implemented in building the Mount Henry Bridge. The bridge comprised

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11 Edmonds, The Vital Link, 1997, pp.353-357 , as cited in A Thematic History of Bridges of the Metropolitan Region WA, Clare Menck, Main Roads 2019, WA. p.139

12 A Thematic History of Bridges of the Metropolitan Region WA, Clare Menck, Main Roads 2019, WA. p109

13 Nomination of Design &Construction of Mt Henry Bridge for an Engineering Heritage Marker 2023. p5

14 Main Roads WA Annual Report 1978/79 p.45, as cited in *The Vital Link*: *A History of Main Roads WA 1926 – 1996*. Leigh Edmonds, 1997, p.287

15 Interview with John Gilbert Marsh in 2009 / - PDF 275.0 KB p.37-38, at 26 August 2009

16 John Gilbert Marsh - Engineering Heritage Australia at 28 August 2025

17 Ibid at 28 August 2025

18 John Gilbert Marsh - Engineering Heritage Australia at 28 August 2025

19 Nomination of Design &Construction of Mt Henry Bridge for an Engineering Heritage Marker 2023. p.7

242 twin-cell concrete deck units and 16 diaphragm units, pre-fabricated on site then lifted into position by a gantry crane and held in place by pre-stressed cables. As each segment was pressed into place and stressed, the truss and gantry crane would move to the next pier, giving the appearance of the bridge growing out over the river from the south bank.[20]

The bridge design introduced, for the first time in WA, the novel concept of cantilevered pedestrian walkways and cycleways, underneath the bridge deck on both sides, thus ensuring complete separation of vehicle and pedestrian traffic.

Clough and Son

The contract to build Mount Henry Bridge 1 (1982) was won by J O Clough & Son which proposed a new construction method that had not been used previously in Western Australia.[21]

The Western Australian building company was formed in 1919 as Clough Brothers, named after its founding brothers, John and Bill Clough. John's son, Harold, joined the family business, and in 1955, the company was renamed to J O Clough & Son. That year, the company was awarded its first major project, the National Mutual Building, Perth's first high-rise and major project after WWII.[22]

In 1957, the Department of Main Roads WA invited tenders for the Narrows Bridge and Clough & Son, (in partnership with Danish firm Christiani and Neilson) was awarded its first major civil project at £1.5 million.[23]

The company was involved in the development and opening up of the Pilbara region in the late 1960s[24] and went on to secure construction projects for resources companies including Hamersley Iron and Woodside, and national and international civil construction contracts between the 1960s to 1980s. Clough's work on the *Mount Henry Bridge* won the company the Institute of Engineers of Australia 'Western Australian Engineering Award' for 1981.[25]

Clough was awarded the contract to design and build the first stage of the Graham Farmer Freeway in 1996.[26]

In 1998, Clough listed on the Australian Securities Exchange. However, by 2022, the company was in financial distress and was taken over by WeBuild.[27]

Mount Henry Bridge 2 (2007)

In 2005, construction work commenced on Mount Henry Bridge 2 as part of the widening of the Kwinana Freeway and to accommodate a two-way rail line between the opposing traffic lanes from the Perth central business district to Mandurah. The

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20 Edmonds, The Vital Link, 1997, p.89, as cited in A Thematic History of Bridges of the Metropolitan Region WA, Clare Menck, Main Roads 2019, WA. p.195.

21 Edmonds, The Vital Link, 1997, p.289; Information provided by Engineering Heritage WA in March 2026 suggests this was the first use of the method globally.

22 Who We Are - Clough at 16 September 2025

23 Who We Are - Clough at 16 September 2025

24 In Memory of Harold Clough - Clough at 16 September 2025

25 Mount Henry Bridge - Clough at 18 September 2025

26 Who We Are - Clough at 17 November 2025

27 Clough - Engineering Heritage Australia at 16 September 2025

new bridge was designed to retain the key features of the first bridge and allow the two bridges to appear as one, even though they overlap without touching.[28]

The new 15-metre-wide bridge, designed by GHD Pty Ltd and Wyche Consulting, with input from Parry and Rosenthal Architects, was constructed by Leighton Contractors to the west of Mount Henry Bridge 1. Although the original brief developed by Main Roads was to widen the original bridge, the Leighton-led consortium provided an alternative solution with just one new bridge on the western side.[29] The railway was built on the western side of the original Mount Henry Bridge 1. The new bridge was opened to traffic in January 2006 and the Mandurah Railway Line commenced operation in late-2007.[30]

The project won high acclaim in the construction industry and was the recipient of the following:

- 2006 National Master Builders Association of WA Award for Excellence in Construction[31]
- 2007 National Cement Concrete and Aggregates Australia (CCAA) Public Domain Commendation for Bridges[32]
- 2007 National CCAA Public Domain Commendation for Sustainable Design.[33]

By constructing the 2007 bridge on the western side of the existing bridge, encroachment onto the adjacent and environmentally significant Mount Henry Bush Reserve was eliminated. The impact on the approach area at the abutments and river foreshores was also minimised.[34]

[35]

In 2025 *Mount Henry Bridge* continues to be used for its original purpose, with all elements including the pedestrian walkways, still in use.

12. PHYSICAL EVIDENCE

Mount Henry Bridge is situated mainly within the City of South Perth, with a small portion on the south bank within the City of Melville. It carries the Kwinana Freeway and Mandurah railway line over the Canning River between the Mount Henry Peninsula, Salter Point and the suburb of Mount Pleasant.

The nine-span, pre-stressed concrete bridge was constructed segmentally, using a balanced cantilever construction method. The bridge carries three lanes of traffic in each direction and has a separate bicycle and pedestrian bridge cantilevered, on both sides. Two railway lines travelling in opposite directions to Canning Bridge station (north) and Bull Creek Station (south) are located between the opposing traffic lanes of the Kwinana Freeway. Within the bridge structure there are also two

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28 SPt 2 Mount Henry Bridge (Cat B) at 17 November 2025

29 Information provided by Engineering Heritage WA, March 2026.

30 SPt 2 Mount Henry Bridge (Cat B) (southperth.wa.gov.au)

31 Mount Henry Bridge, Salter Point - Parry and Rosenthal Architects at 30 September 2025

32 Mount Henry Bridge, Salter Point - Parry and Rosenthal Architects at 30 September 2025

33 Mount Henry Bridge, Salter Point - Parry and Rosenthal Architects at 30 September 2025

34 Mount Henry Bridge, Salter Point - Parry and Rosenthal Architects at 30 September 2025

35 Nomination of Design & Construction of Mt Henry Bridge for an Engineering Heritage Marker 2023. p.6

sewerage mains, a gas main, telecommunications and electrical mains, drainage, and water and electrical facilities for the bridge itself.[36]

In a bid to minimise the impact on the riverside environment, the bridges were sensitively designed and built, allowing for the retention of a wide strip of the foreshores of Mount Henry and Mount Pleasant, with their good spread of *Nuytsia Floribunda* (Western Australian Christmas Tree) and the large and very old paperbarks in that area.[37]

Mount Henry Bridge comprises two side-by-side structures…

> … which overlap without touching, designed and built in separate eras over 20 years apart. Both are conventional post-tensioned concrete box structures but designed and built by contrastingly and innovatively different methods unique to their eras. The first bridge was one of the last major concrete bridges in Australia built using the falsework supported segmental box construction technique. This involved using temporary falsework supported on the permanent pile caps and by a cable-stayed tower which also served to handle the individual 110 tonne segments. The use of expensive mid-span temporary support piers was thus able to be avoided.
>
> The second bridge was designed and built using the incremental launch technique. For this method, the use of temporary piers could not be avoided, but their size and cost were minimised to carry mainly vertical loading with complex bracing to cater for lateral loads.
>
> The original bridge was also strengthened to upgrade its capacity to support rail traffic.[38]

The bridge extends almost three times further below the water level than above. Its piers are supported on 42m piles driven to solid foundation material well below the riverbed (see Figure 2). At the time of its construction, *Mount Henry Bridge* was, and still is, the longest road bridge in Western Australia.

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36 Swan & Canning Rivers Bridges – Australian Engineering Week Tour 2012, p.13

37 Nomination of Design &Construction of Mt Henry Bridge for an Engineering Heritage Marker 2023. p.3

38 Nomination of Design &Construction of Mt Henry Bridge for an Engineering Heritage Marker 2023. p.3

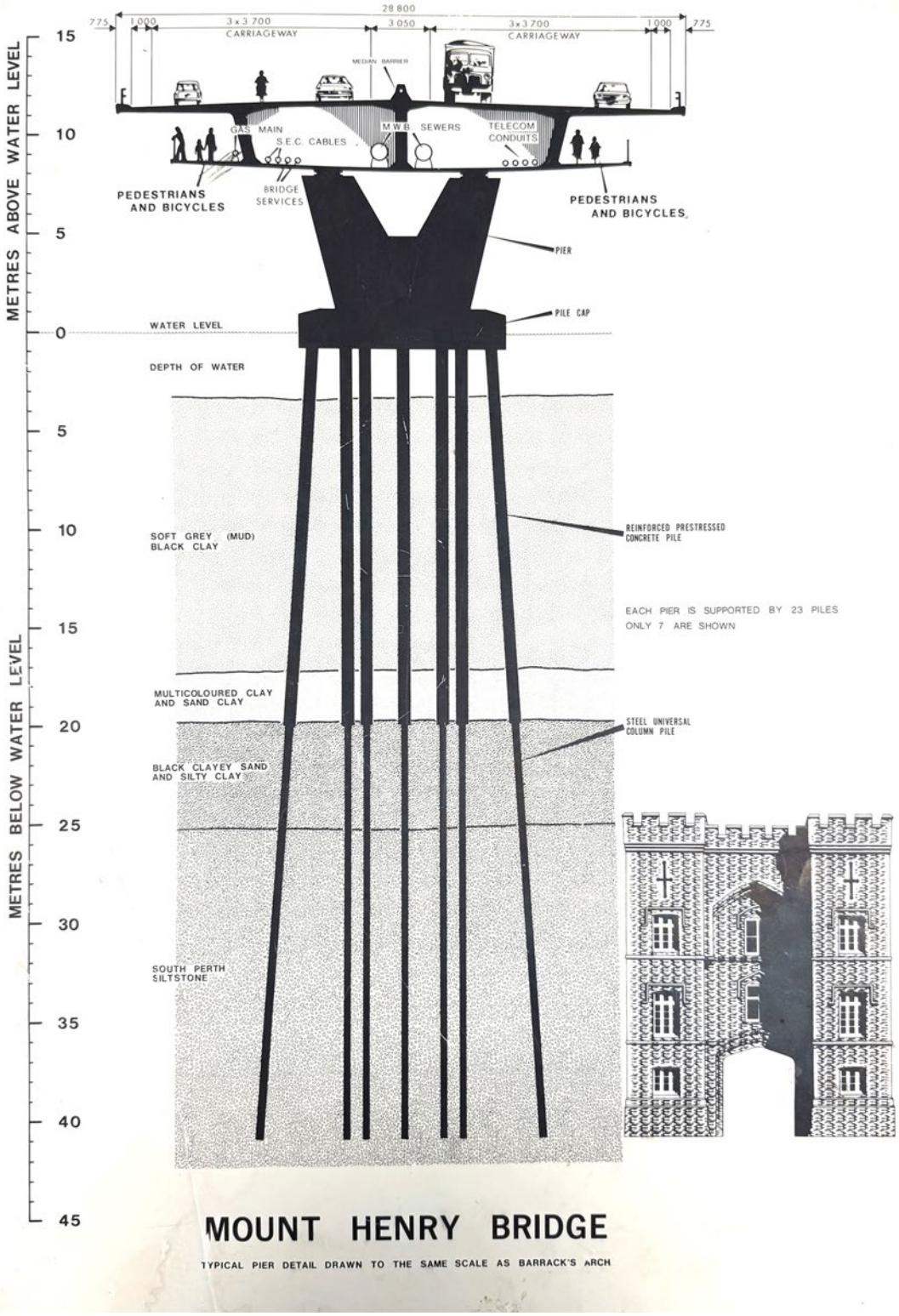

Figure 2: Engineering sketch of Mount Henry Bridge 1 (1982) courtesy of Main Roads WA, showing depth of piles driven into the riverbed, and using Barracks Arch as scale.[39]

39 Edmonds, The Vital Link, 1997, p.288

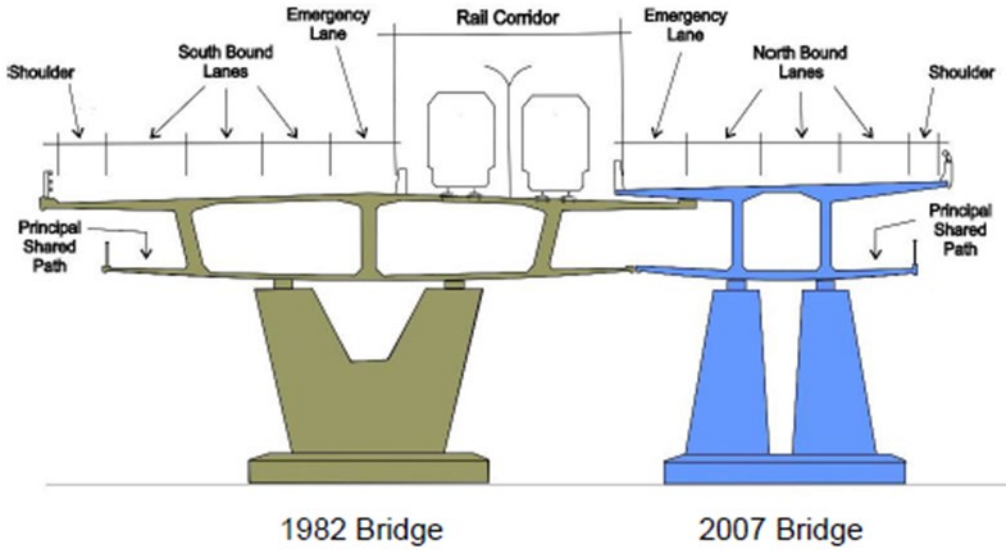

Figure 3: Cross section of *Mount Henry Bridge*, showing the juxtaposition of the new and original structures, and the addition of the railway lines. Mt Henry Bridge – Engineering Heritage Marker Award Ceremony Program 2024, p.4.

Figure 4: *Mount Henry Bridge* showing north and south bound lanes of traffic and rail lines in the centre.[40]

Figure 5: View from below bridge, west side, showing the 2007 bridge's double-column piers.[41]

Figure 6: *Mount Henry Bridge*, from west side, showing shared pedestrian and cycle footway, cantilevered under the road bridge.

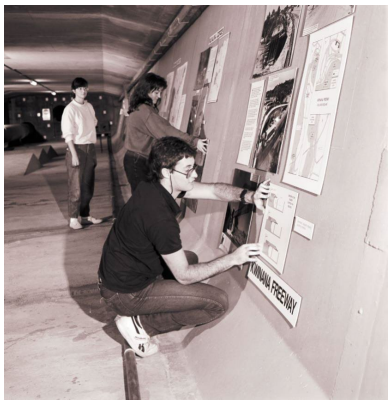

Figure 7: Inside the generous central utilities and maintenance void in *Mount Henry Bridge*.[42]

40 Photograph from Main Roads WA traffic report site on X, at 11 September 2025

41 Google Streetview at 10 September 2024

42 Photograph courtesy of Main Roads WA

Figure 8: Original *Mount Henry Bridge* under construction.[43]

Condition

The bridge is in good operational condition and well maintained as a Main Roads WA infrastructure asset.

13. COMPARATIVE INFORMATION/THEMATIC ANALYSIS

Thematic Analysis

There are two thematic histories relevant to the consideration of this place:

- Thematic History of Western Australia[44] (WA Thematic)
- *Thematic History of Bridges of the Metropolitan Region WA* (Bridges Thematic – Metropolitan Region)[45]

WA Thematic

As an important element of infrastructure for the Perth metropolitan area, *Mount Henry Bridge* reflects the following State themes in the WA Thematic:

Infrastructure – Transport and Communications

- 1843: First major government-built bridge opens (original Causeway across Swan River at Perth)
- 1862: Decade of convict labour has produced 239 bridges, 543 culverts, 550 miles of road; Governor Hampton arrives and increases convict public works.

Infrastructure - Development of Settlements and Services

- 1890 – 1903: Government provides extensive infrastructure support, including money spent on expanding roads/ bridges/civic amenities.
- 1955: Stephen-Hepburn Plan for Metropolitan Perth released. Guides development of Perth for remainder of century.

43 Photograph courtesy of Main Roads WA

44 'A Thematic History of Western Australia' (incl. Framework Spreadsheet & Narratives). Prepared for the Heritage Council of WA by Clare Menck, Historian, June 2018.

45 'A Thematic History of Bridges of the Metropolitan Region WA' (incl. Report & Analysis Spreadsheet). Prepared for Main Roads WA. Clare Menck, Historian, Dec 2019.

- 1959: *Metropolitan Regional Town Planning Act* formally implements 1955 Stephenson-Hepburn plan.
- 1959: Opening of Narrows Bridge rapidly increases suburban development south of the river.
- 1990: *Metroplan* introduced, stressing greater urban consolidation of metropolitan Perth, higher density housing at inner-city and regional centres especially focused on public transport hubs, flexibility in zoning, 'Green Street' design for new suburbs; largely guides Perth development for at least 20 years.

The key events and phases identified within these two themes focus on the initial developments of key infrastructure for Western Australia, including the establishment of the first Causeway Bridge in 1843 and expansion of the Perth railway network, including the evolution of trains to electric power.

The construction of *Mount Henry Bridge* in the 1980s and 2000s reflects the ongoing operations and maintenance of the established network of roads and railways, rather than demonstrate a new key phase in transport or communications in Western Australia at either time.

Bridges Thematic

The Bridges Thematic - Metropolitan Region considers bridges against 10 'Key Stories' that reference the history of Western Australia. The following is a brief analysis of *Mount Henry Bridge* against some of the more prominent stories.

Suburbs

- Perth suburbs experienced rapid growth in the 1950s, driven by population growth from the post-WWII boom and migration. Transport routes were critical to supporting this suburban expansion, facilitated by the car.[46]
- Widespread car ownership and improved roads allowed people to live further from the city centre.[47]
- From the 1970s, the north-south freeway, of which Mount Henry Bridge is now a part, became the basis of suburban expansion, consolidated by the addition of suburban railways in the 1990s.

Town planning

- The paper *Gordon Stephenson, planner and civic designer* [48] notes that:

  > Metropolitan planning was part of the zeitgeist of post-war Australia, Perth was on the cusp of major development, the town planning movement had wielded considerable influence in the city over the previous 50 years, so there was a broad understanding of its importance.

- Planner and urban designer Gordon Stephenson, together with John Alastair Hepburn, Town Planner and Commissioner for Perth, developed the *1955 Stephenson-Hepburn Plan*, which fundamentally shifted the city's main artery from an east-west rail link to a north-south freeway.

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46 Urban Development Institute of Australia WA, as cited in Tracing Perth's suburban history | The West Australian at 15 September 2025.

47 Urban Development Institute of Australia WA, as cited in Tracing Perth's suburban history | The West Australian at 16 September 2025

48 *Stephenson and metropolitan planning in Perth*, University of Western Australia, as cited in Town Planning Review January 2012.

- The plan guided the *1963 Metropolitan Region Scheme*, which saw Perth expand rapidly during the 1960s and 1970s mineral boom and laid the groundwork for the car-based culture that still dominates today.

Landmark

- The Swan-Canning River system contributes to the community's sense of place and visitors' lasting impressions of the capital city. Bridges like M*ount Henry Bridge*, in highly visible locations, become landmarks.

Excellence/innovation

- The innovation in design and construction of *Mount Henry Bridge* has been outlined earlier. In 2024, the bridge was awarded an Engineering Heritage Marker by Engineers Australia. The award recognises 'engineering items of heritage significance',[49] acknowledging the 'innovative design and construction of the 1982 and 2007 bridges'.[50]

Industrial development

- The Kwinana Industrial Area was established in the 1950s and grew through the 1960s to accommodate the development of major resource processing industries in WA.[51] The mineral boom of the 1960s triggered major development and rapid population increase for which Perth was not well prepared.[52]
- Main Roads was aware of the importance of its new roads to support industrial development. *Mount Henry Bridge* was built as part of the southbound freeway to link Kwinana industries to the city.

Freight import/export

- Moving freight is one of the main purposes of major roads in the metropolitan region. Freight routes link import-export hubs with industrial areas, bringing raw materials to manufacturers and transporting products for export or sale.
- The deep-water port at Kwinana allowed the handling of large bulk cargo ships, and was well placed for exporting and importing activities, especially to South East Asia.[53] Cockburn Sound became the 'outer harbour' for the Fremantle Port Authority.[54]

Sport/recreation

- Western Australian culture highly values outdoor, often water-oriented recreation, relying on excellent public access. The Lower Canning is one of the most heavily used sections of the Swan and Canning River system,[55] with recreational activities including powerboating, waterskiing, sailing,

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49 EHRP_2024Guidelines_Complete_v01.pdf at 16 January 2026

50 EHRP_2024Guidelines_Complete_v01.pdf at 16 January 2026

51 Kwinana-Industrial-Area_BR_2015.pdf at 23 September 2025

52 Gregory, J, Stephenson and metropolitan planning in Perth, University of Western Australia, as cited in Town Planning Review January 2012.

53 Kwinana-Industrial-Area_BR_2015.pdf at 23 September 2025

54 History - Kwinana Industries Council at 23 September 2025

55 *Draft Lower Canning River Management Plan 1994,* N Siemon for Swan River Trust, Chairman's foreword.

rowing, fishing, prawning and swimming. *Mount Henry Bridge* was designed to 'have the least visual impact on the river and allow maximum use by water traffic'.[56]

- From the 1980s, Main Roads worked to improve pedestrian and cycling infrastructure, later consolidated as the Principal Shared Path network (PSP), of which the bridge is an integral part.

Comparative Analysis

The original, and current, use of *Mount Henry Bridge*, as a significant bridge across a major river in metropolitan Perth, is comparable to the following places on the State Register:

- P3631 *Causeway Bridges* (RHP): Represents a continuous point of crossing between the eastern and western shores of the Swan River, traditionally for Aboriginal people and then for European settlers. Originally built in 1843, it is part of an important road link in the history of Western Australia connecting Perth with the southern suburbs and providing access to inland areas. The place is highly valued by the community in providing a link over the river for pedestrians, cyclists and vehicle transport and access to the adjacent recreational areas. The current 1959 Causeway Bridges consists of the first bridges in Western Australia constructed of steel and reinforced concrete materials, using advanced principles of structural analysis to produce efficient structures of lasting durability.
- P4795 *Narrows Bridge* (RHP): Built in 1959, it is the first physical manifestation of the Hepburn and Stephenson plan, which contributed to the development of the freeway road systems in the State and the Perth Metropolitan Region Scheme from the 1950s. The pre-stressed concrete structure is representative of innovative engineering technology and method developed in the 1950s.
- P16178 *Canning Bridge* (RHP): Canning Bridge eastbound (1937) and Canning Bridge westbound (1958) is rare as an intact, substantial timber bridge comprising two adjacent structures built at different times. It represents the changing transport system in Perth from its origins as a ferry crossing, original 1849 bridge, to part of the first road link between the port of Fremantle and the City of Perth. It has long been a site of recreational activities.
- P4027 *Fremantle Traffic Bridge and Ferry Capstan Base* (RHP): The 1939 timber, concrete and steel bridge (the fourth iteration, built in this location[57]) is located at a site which has been a river crossing point since 1866, where the Swan River transitions to Fremantle Harbour. The four-lane vehicle and pedestrian traffic bridge is currently (in 2025) being replaced with a new road, cycling and pedestrian bridge, on the existing alignment. It is due for completion in 2026. The 1939 bridge will eventually be demolished.

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56 A Thematic History of Bridges of the Metropolitan Region WA, Clare Menck, Main Roads 2019, WA. p109

57 Swan River Crossings | Main Roads Western Australia at 23 September 2025

Conclusion

Mount Henry Bridge was an expression of the optimism and momentum of the 1980s in Perth. It was conceptually part of the Stephenson-Hepburn post-war vision to support the city's growth and development by shifting the main artery from an east-west orientation to a north-south alignment to allow for the development of the north and south metropolitan areas and beyond.

As the longest road bridge in Western Australia, *Mount Henry Bridge* is rare as one of the last major bridges designed in-house by Main Roads Department engineers and recognised for its innovative design to ensure the safety of pedestrians and cyclists, while minimising its impact on the landscape. It is also notable for its ground-breaking construction method that had never previously been used in Australia and has never been used again since.

The bridge is representative of the significant concrete bridges that started emerging in Perth from the 1950s.

14. FURTHER RESEARCH

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APPENDIX 1 - ASSESSMENT OF CULTURAL HERITAGE SIGNIFICANCE

This section identifies the cultural heritage values of the place. Values that make a strong contribution to the place's cultural heritage significance are also included in the Statement of Cultural Heritage Significance above. In determining cultural heritage significance, the Heritage Council has had regard to the factors in section 38 of the *Heritage Act 2018* (see **Appendix 2**). Cultural heritage significance means aesthetic, historic, scientific, social or spiritual value for individuals or groups within Western Australia.

It is considered that the place warrants inclusion in the State Register against the following factors relevant to cultural heritage significance:

(A) Historic Value - evolution or pattern WA history

The place is associated with the growth and development of the Perth metropolitan area in the latter part of the 20th century, commencing with the 1955 Stephenson-Hepburn Plan and the subsequent 1963 Metropolitan Region Scheme.

The bridge is part of the government's infrastructure program for the building of extensive road and rail systems to support Perth's rapidly growing population and industry in the post-WWII era.

The place is a vital component of the Kwinana Freeway, a major transport artery linking the Perth CBD with the south metropolitan region of Perth, (including the industrial precinct around Kwinana), and the major tourist and wine-growing regions of the south-west of the state.

(B) Rarity

Mount Henry Bridge 1 (1982) is rare as one of the last major bridges designed in-house by Main Roads Department engineers.

The bridge is also rare for its unique holistic approach and innovative construction and design including the separating of pedestrians and cyclists from vehicles via a principle shared path below the traffic bridge, and the efforts to minimise the bridge's environmental impact on the river and surrounding foreshores.

(C) Scientific Value

Factor not relevant to this place.

(D) Representativeness

Mount Henry Bridge 1 (1982) is representative of the significant concrete bridges across major waterways that started emerging in Perth from the 1950s.

(E) Social or Spiritual Value

The place has social value as a prominent landmark, being part of the Swan-Canning River system that contributes to the community's sense of place.

The place is highly valued by the engineering community for its innovative design and construction as evidenced by it being awarded numerous industry awards.

(F)[58] Aesthetic Value

The original Mount Henry Bridge 1's elegant and simple form was designed to minimise the visual impact on the river and be well integrated into the landscape.

Mount Henry Bridge 2 is a thoughtfully expressed and seamless extension to the original bridge, with its piers complementing, rather than mimicking, the original piers.

(G) Historic Value - person, group or organisation

Mount Henry Bridge 1 (1982) was one of the last major bridges designed in-house by Main Roads Department. It was designed by bridge engineer John Gilbert Marsh who was a key member of the bridge team for nearly three decades.

Mount Henry Bridge 1 (1982) was built by construction company, Clough and Son, one of WA's earliest building companies, established in 1919.

The place marks the successfully collaboration of design and construction between Main Roads Department and Clough and Son, which is recognised through multiple industry awards.

(H) Aesthetic/Scientific Value - creative or technical achievement

Mount Henry Bridge 1 (1982) demonstrates engineering and technical innovation in its use of a construction method which minimised the need for complex and expensive mid-span temporary piers which had not previously been used in Western Australia.

The place has aesthetic and scientific value for its innovative design including the cantilevered pedestrian walkways and cycleways under the bridge deck on each side which separates vehicle and pedestrian traffic.

(I) Any other characteristic it may have that in the opinion of the Council is relevant to the assessment of cultural heritage significance.

Factor not relevant to this place.

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58 For consistency, all references to architectural style are taken from Apperly, R., Irving, R., Reynolds, P. *A Pictorial Guide to Identifying Australian Architecture. Styles and Terms from 1788 to the Present,* Angus and Robertson, North Ryde, 1989.
For consistency, all references to garden and landscape types and styles are taken from Ramsay, J. *Parks, Gardens and Special Trees: A Classification and Assessment Method for the Register of the National Estate,* Australian Government Publishing Service, Canberra, 1991, with additional reference to Richards, O. *Theoretical Framework for Designed Landscapes in WA*, unpublished report, 1997.

APPENDIX 2 – FACTORS S.38 HERITAGE ACT 2018

In determining cultural heritage significance, the Heritage Council must have regard to the factors in section 38 of the *Heritage Act 2018*. These factors, and their equivalent values are listed below. Cultural heritage significance means aesthetic, historic, scientific, social or spiritual value for individuals or groups within Western Australia.

(A) Importance in demonstrating the evolution or pattern of Western Australia's history - Historic Value

(B) Importance in demonstrating rare, uncommon or endangered aspects of Western Australia's heritage – Rarity Value

(C) Potential to yield information that will contribute to an understanding of Western Australia's history – Scientific Value

(D) Its importance in demonstrating the characteristics of a broader class of places - Representativeness

(E) Any strong or special meaning it may have for any group or community because of social, cultural or spiritual associations – Social or Spiritual Value

(F) Its importance in exhibiting particular aesthetic characteristics valued by any group or community – Aesthetic Value

(G) Any special association it may have with the life or work of a person, group or organisation of importance in Western Australia's history - Historic Value

(H) Its importance in demonstrating a high degree of creative or technical achievement – Aesthetic/Scientific Value