PE.6 ATTACHMENT 2



Level 3, 124 Exhibition Street [GPO Box 2634, Melbourne 3001] Melbourne, Victoria 3000

> enquires@gjmheritage.com +61 (03) 9115 6566 gjmheritage.com

> > ABN: 62 348 237 636 ARBV: 16044



Figure 1: Bunjil Creek Bridge & Channel (GJM Heritage, March 2020)

DATE: 1 April 2020 FILE: 2020-013 Please note: This assessment uses the term 'channel' to describe the bluestone lined component of the Bunjil Creek. We note that other terms can be used to describe this type of drainage infrastructure, including culvert, open culvert and drain.

BUNJIL CREEK BRIDGE & CHANNEL, HAMILTON STREET, GISBORNE

Place type: Drainage infrastructure	Architect: N/A
Construction Date: 1874	Builder: Messrs R Bodkin and R Sutherland
Recommendation: Include in the Heritage Overlay	Extent of Overlay: Refer to the plan at Figure 17

Historical Themes

The place illustrates the following themes as outlined in *Victoria's Framework of Historical Themes*:

- 3 Connecting Victorians by Transport and Communications
 - 3.1 Establishing pathways

Locality History

The following is based on the locality history from the *Macedon Ranges Cultural Heritage and Landscape Study* (TBA Planners et al., 1994, Vol 3:135; see 1994 study for earlier sources) and the Heritage Alliance, *Macedon Ranges Shire Review of Heritage Precincts and Places*, 2007.

Situated on the southern bank of Jacksons Creek, the town of Gisborne stands at the junction of three early pastoral runs. After the discovery of gold in Bendigo and Castlemaine, Gisborne developed as a convenient stopping place between Melbourne and the goldfields and in 1851 a township plan was laid out by government surveyor Robert Hoddle. A small settlement had already developed prior to this, centred around a border police outpost established in 1840 by Henry Fyshe Gisborne and the nearby hotel, the 'Bush Inn' built shortly after. By the end of the 1850s, a school, court house, mechanics institute and two churches had been constructed in this township (Vic Places).

With the formation of the Gisborne Road District in 1860, Gisborne became a centre of municipal government and in 1871 the Shire of Gisborne was formed. The main northern railway line from Melbourne to Bendigo was completed in 1862 however it by-passed the developing town of Gisborne, following an easier gradient along the ridgeline a number of kilometres to the north of the town. With the establishment of the Gisborne Railway Station on this line in the early 1860s, a secondary settlement developed closer to the railway line. Named New Gisborne, this separate township developed along Station Road which linked the railway station with the township of Gisborne to the south.

The population of Gisborne fluctuated, with minor growth at the turn of the century followed by minor contraction in the early twentieth century. The opening of the Melbourne Airport at Tullamarine and the associated Tullamarine Freeway in 1970, along with the upgrading of the Calder Highway at the same time, substantially impacted on the township as it allowed easier access to Melbourne. Gisborne was transformed into a commuter township with the population tripling over the next twenty-five years (Vic Places).

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Place History

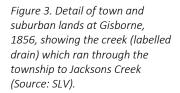
The following is based on the place history from Unearthed Heritage, *Historical Archaeological Due Diligence Report for the Bunjil Creek Bridge – Melbourne Road and Kilmore Road, Gisborne*, 2019.

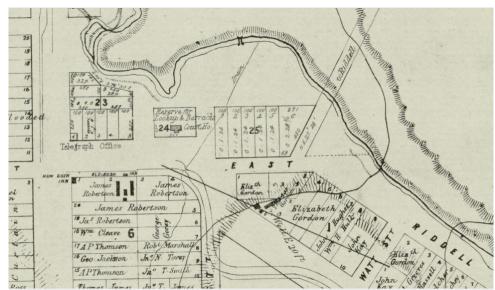
The township plan of Gisborne, laid out by Robert Hoddle in 1851, was a rectangular grid of streets located south of the 'Western Arm of the Salt Water River' (Jacksons Creek). The main road from Melbourne approached the grid-like town at an angle from the south-east and continued in a westerly direction along Hamilton Street. It then continued in a northerly direction along Aitken Street, crossing Jacksons Creek at Gisborne, and led to the goldfields beyond (Figure 2). In response to a substantial increase in goldfields traffic through Gisborne, this angled intersection had been modified into a curved roadway by 1856, similar to the present street alignment.

A small creek ran towards Jacksons Creek in a south-easterly direction across this main traffic route at this intersection. In the early 1850s a crossing was formed across this shallow waterway by placing large stones on the creek bed, in an effort to prevent 'the wheels of vehicles from sinking in the mud' (*The Argus*, 16 March 1852:2). This creek, labelled a 'drain' on an 1856 plan (Figure 3), is now known as Bunjil Creek.



Figure 2. Detail of Town and Suburbs of Gisborne, no. 52, undated, showing original town layout. (Source: SLV, Maps Collection from Unearthed Heritage, Historical Archaeological Due Diligence Report for the Bunjil Creek Bridge – Melbourne Road and Kilmore Road, Gisborne, 2019)





With the formation of the Gisborne Road District in 1860, the Gisborne township became a centre of municipal government and in October that year the council discussed the need for road bridges in Gisborne, including one over the small creek at the intersection of Hamilton Street and the road from Melbourne (Gisborne Council, Minute Records, 1860-62). Funding was obtained for the Hamilton Street crossing and in May 1861 tenders were called for 'improvements in Hamilton and Calthorpe Streets, including the extension of the bridge over Fisher's Creek' (*The Argus*, 25 May 1861:8), presumably the Hamilton Street crossing. Council accepted John Collier's tender of £556 for the construction of a timber bridge in early June (Gisborne Council, Minute Records, 1860-62) and construction was completed by October 1861 (*The Argus*, 15 October 1861:7).

Major flooding in Victoria in 1870, caused widespread damage to the central and northern regions of the State, particularly in the Campaspe, Goulburn, Murray and Ovens Rivers catchment areas. This prompted a state-wide review of bridge design and resulted in the replacement of many timber bridges with more durable structures, using a combination of masonry substructure and an iron or timber superstructure and deck (Chambers, *National Trust Timber Bridges Study*).

The small creek crossing the main approach to Gisborne experienced severe flooding at this time and properties adjacent to this 'channel under the bridge on the main road in front of the Courthouse' were affected as debris carried by floodwaters accumulated underneath the Hamilton Street Bridge. This caused the creek to break its banks and inundate surrounding areas (*The Bacchus Marsh Express*, 17 September 1870:3). The Hamilton Street Bridge itself suffered damage, necessitating a series of repairs by James Keily in early 1871 (*The Bacchus Marsh Express*, 22 April 1871:3 & 1 July 1871:3).

In 1872, the Gisborne Council responded to this severe flooding incident by investigating the management and control of waterways to prevent future damage to the Gisborne township. In December that year the Council Engineer presented a report recommending the widening of the bed of the creek in Hamilton Street to allow increased water flow and the reconstruction and extension of the Hamilton Street Bridge. He proposed that the bridge be reconstructed – to twice the width of the existing timber bridge – with masonry retaining wall abutments and central pier wall, and a timber superstructure and decking and also recommended that up to 5.1/2 chains (110 metres) of the creek on the upstream side of the bridge be walled on both sides and pitched on the creek bed (*The Bacchus Marsh Express*, 28 December 1872:2).

The Council Engineer prepared plans for the proposed reconstruction of the Hamilton Street Bridge and creek channelling works and tenders were called in October 1873 (*The Bacchus Marsh Express*, 18 October 1873:4). The tender submitted by Messrs R Bodkin and Robert Sutherland for £1,068 was accepted by Council in January 1874 (*The Bacchus Marsh Express, 24 January 1874:3*). Construction works commenced shortly thereafter and the combined masonry and timber bridge, and associated masonry channel, was completed by September 1874 (*The Bacchus Marsh Express, 5* September 1874:4). The timber recovered from the deconstruction of the former bridge was provided to the Gisborne Mechanic's Institute and the Municipal Council for reuse in other local works (*The Bacchus Marsh Express, 16* May 1874:3).

Only minor repairs were made to the Hamilton Street Bridge in the next forty years, including the replacement of timber superstructure elements (*The Bacchus Marsh Express* 14 March 1885:3 & *The Bacchus Marsh Express* 11 October 1890:7). In early 1918, it was reported that drivers descending the hill leading into Gisborne from Melbourne should take care as, 'The small bridge at the foot of the hill leading into the township, is undergoing reconstruction and only a narrow space will be available for traffic' (*The Herald*, 21 January 1918:6). This reconstruction work appears to have involved the replacement of the timber superstructure and deck components with a reinforced concrete slab deck, headstocks (which transfer the load from deck to piers) and kerbing. It also appears that the bridge deck was slightly raised and/or levelled with the installation of extended precast concrete column sections along the top of the existing masonry abutments and central pier.

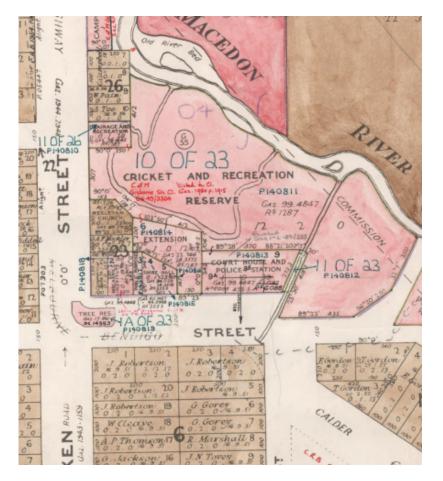
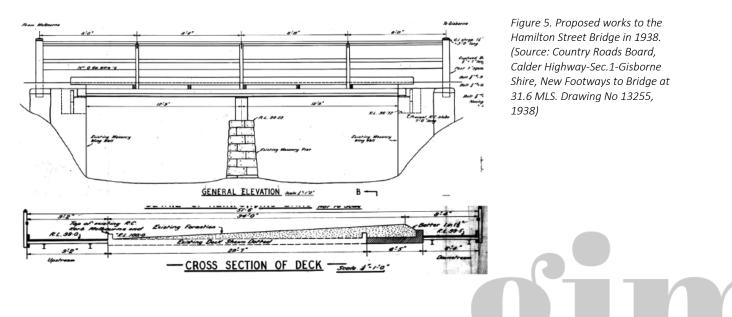


Figure 4. Detail of Township of Gisborne 5320, VPRS 16171,19 Aug 1929, showing the position of the creek and bridge on the main route through the town (Source: PROV).

In 1938, the Victorian Country Roads Board carried out further alteration works to the Hamilton Street Bridge to support increased motor vehicle traffic requirements. The concrete deck was widened by 6'5" (1.96 metres) on the downstream side and two pedestrian footways were installed; a 6'4" (1.93 m) wide footway along the downstream side of the bridge and a 9'2" (2.8 m) wide footway along the upstream side (Figure 5). These were supported by short precast concrete columns fixed on top of the masonry abutments and piers. The bridge appears to have remained primarily in this structural form since.

The creek has recently been renamed Bunjil Creek and the bridge is known as the Bunjil Creek Bridge.



Description

The Bunjil Creek Bridge is a concrete and bluestone road bridge situated on Hamilton Road, Gisborne. It spans approximately 7.8 metres over the Bunjil Creek, is approximately 10.1 metres in length and accommodates one lane of traffic in each direction with footpaths either side.

The bridge substructure is constructed of coursed bluestone side abutments and central pier. The superstructure comprises a reinforced concrete slab deck and supporting concrete headstock. The footpaths on either side are supported on short precast concrete columns which extend above the bluestone abutments and central pier.

A channel associated with the bridge structure has bluestone retaining walls which line both sides of the creek upstream (south) of the bridge and bluestone pitching along the creek bed, extending from underneath the bridge for a distance to the south.



Figure 6. Aerial view showing the location of the Bunjil Creek Bridge (red) and associated channel (yellow) (Source: Nearmaps, December 2019).



Figure 7. Approach to the Bunjil Creek Bridge from the south. (Source: Google Maps May 2018)







Figure 8. Detail of the north side of the Bunjil Creek Bridge from the north, showing the 1874 substructure and modifications (Source: GJM Heritage, March 2020)

Figure 9. Detail of the Bunjil Creek Bridge and Channel, showing the extension made to the south side of the bridge in 1938. (Source: GJM Heritage, March 2020)

Figure 10. The extensive bluestone-lined channel which runs south of the Bunjil Creek Bridge (Source: GJM Heritage, March 2020)

Integrity/Intactness

The bluestone substructure of the Bunjil Creek Bridge and the bluestone channel remain highly intact and retain much of the original fabric, form and detail from construction in 1874. This includes bridge abutments and central pier and channel linings under the bridge and extending upstream to the south. The superstructure of the bridge has been extensively modified and replaced with a reinforced concrete deck in 1938. Parts of the

bluestone substructure have been modified to enable the insertion of later supporting structure. Later stormwater drains, inserted in the bluestone substructure, enter the creek channel in the vicinity of the bridge.

While the bridge and channel have undergone modification, particularly the superstructure, the ability to understand and appreciate the place as an example of a nineteenth century bridge and channel remains clear. The place is of high integrity.

Comparisons

The Bunjil Creek Bridge and Channel in Gisborne is a fine, intact and representative example of nineteenth century drainage infrastructure in a rural township.

A number of small bridges, bridge abutments and channels remain in the Shire of Macedon Ranges, including many from the late nineteenth century. These were commonly of bluestone construction. Examples of these are included in the Heritage Overlay of the Macedon Ranges Planning Scheme, including a number that were identified as part of the D Bick et al, *Kyneton Conservation Heritage Study* (1990). These include:

- Stone Bridge Abutments and Piers, Hodges Bridge, Boundary Road, Edgecombe (at Campaspe River crossing) (HO2)
- Bluestone Road Bridge Abutments, Central Road, Kyneton South (HO47)
- Bluestone Culvert Abutments, Central Road, Tylden (no image) (HO48)
- Bluestone Abutments and small Timber Bridge over Creek, Kyneton East Road (Trio Road), near Carlsruhe (no image) (HO123)
- Bluestone Culvert Abutments over Limbricks Creek, Morris Lane, Pipers Creek (HO183)
- Bluestone Angled Road Bridge Abutments, intersection Mowbrays and Garth Roads, Carlsruhe (poor image in citation) (HO189)
- Manning's Bridge, Springhill Road, Spring Hill (over Coliban River) (HO232)
- Road bridge Abutments and Rivetted Railings over Post Office Creek, Wedge Street, Kyneton (HO234).





Figures 11 & 12. (L) Stone Bridge Abutments and Piers, Hodges Bridge, Boundary Road, Edgecombe (HO20), Note: 20th century timber deck and balustrade) (R) Bluestone Road Bridge Abutments, Central Road, Kyneton South (HO47) (Source: D Bick et al, Kyneton Conservation Heritage Study, vol 6, 1990)





Figures 13 & 14. Bluestone (L) Culvert Abutments over Limbricks Creek, Morris Lane, Pipers Creek (HO183) (R) Manning's Bridge, Springhill Road, Spring Hill, 19th century substructure with later road deck (HO232) (Source: D Bick et al, Kyneton Conservation Heritage Study, vol 7, 1990)

Figure 15. Road Bridge Abutments and Rivetted Railings over Post Office Creek, Wedge Street, Kyneton (HO234) (Source: D Bick et al, Kyneton Conservation Heritage Study, vol 5, 1990)

A further example is:

• HO5 Bluestone Abutments to Road bridge over Creek, Barker Street, Malmsbury (north of Raleigh Street)



Figure 16. Bluestone Abutments to Road Bridge over Creek, Barker Street, Malmsbury (HO5) (Source: Google Maps, March 2010)

Bunjil Creek Bridge retains sufficient integrity to clearly demonstrate the characteristics of early drainage infrastructure in a rural township. Like the places listed above, the Bunjil Creek Bridge illustrates the early and ongoing need for such infrastructure in rural townships in the Macedon Ranges Shire and is directly comparable to the places listed above. It displays a range of similar characteristics and retains a similar amount of original fabric to examples such as Manning's Bridge, Springhill Road, Spring Hill (HO232).

There appears to be no direct comparisons of the bluestone-lined channel included in the Heritage Overlay of the Macedon Ranges Planning Scheme.

Assessment Against Criteria

Following is an assessment of the place against the recognised heritage criteria set out in *Planning Practice Note 1: Applying the Heritage Overlay* (August 2018).

Criterion A: Importance to the course or pattern of our cultural or natural history

Bunjil Creek Bridge and Channel is illustrative of essential nineteenth century drainage infrastructure in a rural township. Situated on the route to the Victorian goldfields, a crossing was first established at this location in the 1850s, and the present bridge and associated channel provided a safer and more permanent crossing in 1874. The bridge and channel have served as an essential part of the local drainage network from the 1870s.

Criterion D: Importance in demonstrating the principal characteristics of a class of cultural or natural places or environments (representativeness)

Bunjil Creek Bridge and Channel is a fine and representative example of late nineteenth century infrastructure in a rural township. It displays typical features of a road bridge and channel from this period in Gisborne and across Victoria more broadly, including coursed bluestone side abutments and central pier, and coursed bluestone retaining walls and pitching to the creek bed for a distance upstream (south) of the bridge. Despite alterations made to the bridge superstructure, the Bunjil Creek Bridge and Channel clearly demonstrate the principal characteristics of late nineteenth century rural drainage infrastructure.

Criterion E: Importance in exhibiting particular aesthetic characteristics (aesthetic significance)

The bluestone substructure of the Bunjil Creek Bridge and the extensive bluestone retaining walls and pitched creek bed of the associated channel presents a picturesque setting in close proximity to the centre of the Gisborne township.

Grading and Recommendations

It is recommended that the place be included in the Heritage Overlay of the Macedon Ranges Planning Scheme as a locally significant heritage place.

Recommendations for the Schedule to the Heritage Overlay (Clause 43.01) in the Macedon Ranges Planning Scheme:

External Paint Controls?	No
Internal Alteration Controls?	No
Tree Controls?	No
Outbuildings or Fences not exempt under Clause 43.01-3?	
Prohibited Uses Permitted?	
Aboriginal Heritage Place?	No



Extent of the Recommended Heritage Overlay

To the extent indicated by the blue polygon on the aerial below. The extent includes the bluestone-lined channel and the Bunjil Creek Bridge (comprising bluestone sub-structure and more recent concrete deck).



Figure 17. Recommended Extent of Heritage Overlay (Source: Nearmap, December 2019)



References

Unearthed Heritage, Historical Archaeological Due Diligence Report for the Bunjil Creek Bridge – Melbourne Road and Kilmore Road, Gisborne, 2019.

D Bick et al, Kyneton Conservation Heritage Study, 1990.

TBA Planners et al, Macedon Ranges Cultural Heritage and Landscape Study, 1994, Vol 3:135

Heritage Alliance, Macedon Ranges Shire Review of Heritage Precincts and Places, 2007.

The Argus, 16 March 1852, p 2.

The Argus, 25 May 1861, p 8.

The Argus, 15 October 1861, p 7.

The Bacchus Marsh Express, 17 September 1870, p 3.

The Bacchus Marsh Express, 22 April 1871, p 3.

The Bacchus Marsh Express, 1 July 1871, p 3.

The Bacchus Marsh Express, 28 December 1872, p 2.

The Bacchus Marsh Express, 18 October 1873, p 4.

The Bacchus Marsh Express, 24 January 1874, p 3.

The Bacchus Marsh Express, 5 September 1874, p 4.

The Bacchus Marsh Express, 16 May 1874, p 3.

The Bacchus Marsh Express, 14 March 1885, p 3.

The Bacchus Marsh Express, 11 October 1890, p 7.

The Herald, 21 January 1918, p 6.

Gisborne Council minute records, 1860-62, as quoted in Unearthed Heritage, *Historical Archaeological Due Diligence Report for the Bunjil Creek Bridge – Melbourne Road and Kilmore Road, Gisborne*, 2019.

Town and Suburbs of Gisborne, No 52, undated, showing original town layout. (Source: SLV, Maps Collection from Unearthed Heritage, *Historical Archaeological Due Diligence Report for the Bunjil Creek Bridge – Melbourne Road and Kilmore Road, Gisborne*, 2019

Detail of Town and suburban lands at Gisborne, 1856, showing the creek (labelled drain) which ran through the township to Jacksons Creek, State Library Victoria.

Undated Gisborne Township Plan 5320, Public Records Office Victoria.

Proposed works to the Hamilton Street Bridge, Country Roads Board, Calder Highway-Sec.1-Gisborne Shire, New Footways to Bridge at 31.6 MLS. Drawing No 13255, 1938.

D Chambers, *Historical Overview of Timber Bridges in Victoria*, 2002. (National Trust Timber Bridges Study).

Victorian Places, 'Gisborne', http://www.victorianplaces.com.au/gisborne>, accessed Mar 2020.

Bunjil Creek Bridge & Channel Statement of Significance, April 2020

Heritage place: Bunjil Creek Bridge & Channel, Hamilton Street, Gisborne PS ref no.: HO351



What is significant?

The Bunjil Creek Bridge and Channel, Hamilton Street, Gisborne, constructed in 1874.

Elements that contribute to the significance of the place include (but are not limited to):

- The bridge and channel's form, materials and detailing from the 1874 phase of construction
- The bridge and channel's high level of integrity to its original design.

Later alterations and additions, including the concrete bridge deck and modifications made to the substructure, are not significant.

How is it significant?

The Bunjil Creek Bridge and Channel is of local historical, representative and aesthetic significance to the Shire of Macedon Ranges.

Why is it significant?

Bunjil Creek Bridge and Channel is illustrative of essential nineteenth century drainage infrastructure in a rural township. Situated on the route to the Victorian goldfields, a crossing was first established at this location in the 1850s, and the present bridge and associated channel provided a safer and more permanent crossing in 1874. The bridge and channel have served as an essential part of the local drainage network from the 1870s (Criterion A).

Bunjil Creek Bridge and Channel is a fine and representative example of late nineteenth century infrastructure in a rural township. It displays typical features of a road bridge and channel from this period in Gisborne and across Victoria more broadly, including coursed bluestone side abutments and central pier, and coursed bluestone retaining walls and pitching to the creek bed for a distance upstream (south) of the bridge. Despite alterations made to the bridge superstructure, the Bunjil Creek Bridge and Channel clearly demonstrate the principal characteristics of late nineteenth century rural drainage infrastructure (Criterion D).

The bluestone substructure of the Bunjil Creek Bridge and the extensive bluestone retaining walls and pitched creek bed of the associated channel present a picturesque setting in close proximity to the centre of the Gisborne township (Criterion E).

Primary source:

Bunjil Creek and Channel Heritage Assessment, GJM Heritage, April 2020