



**SIGNIFICANCE:** A steel girder and trestle railway bridge and embankment taking the Melbourne - Ballarat railway over Ironbark Road; it replaced the 1887 timber bridge in 1930. There are some components of this bridge surviving amongst the remnant native vegetation of the vicinity.

The bridge has local historical significance in enabling the railway's crucial influence on development of the region. Its architectural significance derives from its achievement as engineering.

**INTACTNESS:** Apparently excellent.

**CONDITIONS & THREATS:** Good. Some graffiti.

**HISTORY:** The Bacchus Marsh to Ballan section of the Melbourne-Ballarat railway was constructed in 1887-89 by a private contractor, Horace Bastings.<sup>1</sup> Work commenced on the seventeen mile (27.5 km) section in September 1887. The bridges and earthworks were completed by May 1889, with the final section, "the big cutting" [ref: 44] completed eight months later.<sup>2</sup> The Victorian government had taken over the contract on October 26 1889.<sup>3</sup>

The completion of this section was a major feat of engineering skill, requiring the construction of twenty-six bridges and thirty-three culverts, and the excavation of 1.6 million cubic yards (1,223,360 m<sup>3</sup>) of earth, over half of the track was on a gradient of one in forty-eight.<sup>4</sup> The bridges alone required 15,700 lineal feet (4,785m) of piles as all but one, the Werribee River (Melton Reservoir?) Viaduct, were constructed of timber. This bridge, and the bridge over Balliang-Bacchus Marsh Road (ref: 40) were rebuilt in fabricated steel in June 1936.<sup>5</sup>

**VISUAL DESCRIPTION:** Beyond the Ingleston Bank, the Bacchus Marsh to Ballarat Railway takes a more conventional form with a few shallow cuttings. The only engineering problem here is the bridge and cutting on the saddle above Werribee Gorge. Here the railway runs through a small cutting and over a fabricated steel trestle bridge which crosses Ironbark Road.

The bridge consists of two parallel massive steel rsj girders supporting the railway tracks between earth embankments. These are supported by two trestles. East trestle is formed from 4 corner 'legs' supported by three levels of vertical and diagonal bracing. The legs are set in reinforced concrete pedestal pad footings. Connections are bolts.

The east side of the bridge is approached by a particularly high (and long) embankment which has single track line (further east is double track). West of the bridge is much she-oak (*Casuarina*) remnant vegetation. The embankments at both ends of the bridge have remnants of the timber trestle posts of the earlier bridge (c1880). On the eastern side there are remaining cross beams between the posts, also.

**COMPARATIVE ANALYSIS:** The Balliang - Bacchus Marsh Road rail bridge (refer: 40) is almost identical, but this bridge (ref: 47) has more remnants of the earlier timber bridge remaining. The railworks are comparable to each of the other light construction lines in Victoria eg. Gippsland, North Eastern etc, but locally significant.

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<sup>1</sup> Moore and Oomes, *Bacchus Marsh: A Pictorial Chronicle*, p.51.

<sup>2</sup> King and Dooley, *The Golden Steam of Ballarat*, p.19. Harrigan, *Victorian Railways to '62*.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

<sup>5</sup> *Sun*, 1 June 1936.

**BACCHUS MARSH HERITAGE STUDY.**

Ref: 47

Richard Peterson Architect &amp; Conservation Consultant. Daniel Catrice Historian 1994.

<b><u>NAME:</u></b> Railway Viaduct, Bridge and Embankment.		
<b><u>ADDRESS:</u></b> Ironbark Road.		
<b><u>TITLE DETAILS:</u></b>		
<b><u>USE:</u></b> Railway bridge and Embankment.		
<b><u>SIGNIFICANT DATE:</u></b> 1887-89	<b><u>CONSTRUCTION DATE:</u></b> 1930	<b><u>SOURCE:</u></b> 1
<b><u>BUILDER:</u></b> Victorian Railways		<b><u>SOURCE:</u></b> 5
<b><u>CRITERIA:</u></b> H7, Ar1.	<b><u>HISTORIC THEME:</u></b> Transport.	
<b><u>DESCRIPTION:</u></b>		
<b><u>MATERIALS:</u></b>	<b><u>STRUCTURE:</u></b> Steel frame	
<b><u>CONDITION:</u></b> Good	<b><u>INTACTNESS:</u></b> Good	<b><u>THREATS:</u></b> -
<b><u>SIGNIFICANT INTACT ELEMENTS:</u></b>		
MATERIALS. FORM.		
ENGINEERING STRUCTURE.		
REMNANT VEGETATION.		
<b><u>SIGNIFICANCE:</u></b>		
<b><u>TYPE:</u></b> HISTORICAL. ARCHITECTURAL		
<b><u>LEVEL:</u></b> LOCAL.		
<b><u>DESIGNATION EXISTING:</u></b> Nil		
<b><u>RECOMMENDED CONTROL:</u></b> PLANNING SCHEME.		
<b><u>MAP NO:</u></b> R1.05 <b><u>SURVEY:</u></b> RP, GV. <b><u>DATE:</u></b> 2.1.94 <b><u>NEGS:</u></b> 3.19-24/1013		

