

HERITAGE CITATION REPORT

Name	Gardiner Railway Signal Box and Switch House	
Address	287 Burke Road GLEN IRIS	Significance Level A2
Place Type	Signal Box, Equipment and Objects	
Citation Date	2013	



Gardiner switch house (left) and railway signal box (right)

Recommended VHR No HI No PS Yes
Heritage Protection

History and Historical Context

Thematic Context

Rail travel was introduced to Victoria in the 1850s by private companies including the Melbourne and Suburban Railway Company, which opened a line to St Kilda in 1857.[1] This line was extended to Brighton in 1859-60 by another company, the St Kilda and Brighton Railway Company via a loop line to Windsor. In 1860, the Melbourne and Suburban Railway Company opened another line through Richmond to South Yarra, Prahran and Windsor. The Victorian Government purchased the private railway lines in 1878 as part of a project to build a line through Oakleigh to Gippsland. The new Oakleigh line, which opened in 1879, ran through Malvern, Armadale, Toorak and Hawksburn to join the existing line at South Yarra.

The arrival of the Oakleigh railway line coincided with the beginning of a land boom that saw huge suburban growth. The population of the municipality of Prahran almost doubled in the decade to 1891 and there was considerable development in the western part of Malvern. Proximity to rail services was a major selling point used by real estate

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agents in all parts of Melbourne, and residential subdivisions close to the stations generally sold first.

Malvern Shire Council had campaigned for the Oakleigh railway line to take a route through Glen Iris valley, with the hope of stimulating development, but had to wait until 1890 for a line to serve the eastern part of the shire. The new Glen Iris line was built as a single track from Burnley to Oakleigh with stations at Heyington, Kooyong, Tooronga, Gardiner, Glen Iris and Darling. The Glen Iris line joined the new Outer Circle Line north of Waverley Road Station (located near present day East Malvern station, in what is now the Malvern Urban Forest). The Outer Circle Line had been built to link Gippsland with North Melbourne taking a route via the eastern fringes of Melbourne to bypass the city centre.

The Glen Iris line to Oakleigh opened in 1890, but the expected residential development it was to serve was stalled by the severe economic depression of the 1890s. As there was insufficient traffic to keep the railway viable at its eastern end, the line beyond Darling Station was closed in 1895. The ill fated Outer Circle line also closed in sections in the 1890s.

In 1911, the Railways Commissioners refused a request by Malvern Council to reopen the Darling to Oakleigh section of the Glen Iris line, and instead backed an extension to the line across Gardiners Creek to Glen Waverley (opened in 1926).

Apart from the extension of lines, one of the biggest projects undertaken by the Victorian Railways in the early twentieth century was the electrification of the suburban network. The line from Burnley to Darling Station was electrified in 1922.

Electrification of the rail network broadly coincided with the expansion of the electric tramways through Prahran and Malvern. In April 1915, the Prahran and Malvern Tramways Trust opened a new route along Commercial and Malvern Roads, terminating at Burke Road, south of Gardiner Railway Station.[2] This tram line was extended north along Burke Road to Camberwell Railway Station in December 1917.[3] By 1920, operation of the Prahran and Malvern Tramways Trust network, along with those of other private tramway companies, had been taken over by the newly formed Melbourne and Metropolitan Tramways Board (M&MTB).

Gardiner Railway Station

Gardiner Railway Station opened on 24 March 1890.[4] The station appears to have initially been a relatively simple affair with a single uncovered platform on the north side of the line. A 1905 MMBW Detail Plan shows two modest timber-framed station buildings halfway along the platform.[5] Gates at the Burke Road level crossing were manned by a gatekeeper, who resided in a timber cottage on the east side of the crossing.[6]

A signal box was built at Gardiner Railway Station c1917 [7] to coincide with the extension of the electric tram line over the Burke Road level crossing. The signal box was originally equipped with a 14 lever cam and tappet interlocking frame of standard Victorian Railways design.[8]

In 1922, the railway line through Gardiner was electrified.[9] Prior to the electrification of the suburban train system, tram/train level crossings had been relatively simple affairs with minimal safe working arrangements.[10] Electrification introduced the added complexity of intersecting overhead cables at different voltages - 1500V DC for the trains and 600V DC for the trams. To prevent tram motors from inadvertently receiving two and half times their normal voltage, elaborate measures were implemented to ensure that the correct voltage was always supplied to the wires over the crossings. The overhead wires for tram and rail were fixed at the same level to a rigid isolated framework - known as a 'tramway square'. Electrical current was interlocked to the position of the level crossing gates - when the gates were locked for trains the current was at 1500V. When the gates were open to road traffic, the tramway square was live with 600 DC. An indicator in the signal box would show either 'Railway' or 'Tramway' depending on the current.[11] It is understood that the equipment for changing the voltage was located in a switch house adjacent to the level crossing. The switch house at Gardiner railway station was presumably built in 1922 to coincide with the electrification of this section of railway line.

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The railway line from Kooyong to Gardiner was duplicated in 1955 and the station was subsequently rebuilt.[12] All of the early station buildings were demolished apart from the c1917 signal box and c1922 switch house.

[1] Unless otherwise noted, the history of railways in Stonnington is drawn from the *Stonnington Thematic Environmental History*, pp. 65-67. Context Pty Ltd, 2006.

[2] Stonnington Local History Catalogue. Reg. No. MH 14082.

[3] Stonnington Local History Catalogue. Reg. No. MH 14082.

[4] *Argus*, 13 March 1890.

[5] MMBW Plan No.60, Dated February 1905. State Library of Victoria.

[6] Stonnington Local History Catalogue. Reg. No. MH 2686.

[7] www.vicsig.net/index.php?page=infrastructure&box=Gardiner

[8] www.vicsig.net/index.php?page=infrastructure&box=Gardiner

[9] Russell Jones, 'Tramway level crossings in Victoria', www.hawthorntramdepot.org.au/papers/lvlcross.htm

[10] Russell Jones, 'Tramway level crossings in Victoria', www.hawthorntramdepot.org.au/papers/lvlcross.htm

[11] Russell Jones, 'Tramway level crossings in Victoria', www.hawthorntramdepot.org.au/papers/lvlcross.htm

[12] Vincent Adams Winter *VR and VicRail: 1962 - 1983*. p. 106.

Description

Physical Description

The signal box at Gardiner Railway Station is located at the eastern end of platform 2, overlooking the Burke Road level crossing. It was built to a standard Victorian Railway design consisting of a one-and-a-half-storey timber-framed building with a gable roof and an WC attached to the west side. External walls have weatherboard panels set between stop-chamfered timber posts. The roof has corrugated iron cladding (painted oxide red) and stop-chamfered bargeboards, with finials since removed. Timber-framed windows form a horizontal band along the south and east elevations providing the signalman with a clear view of the Burke Road level crossing. The windows on the east elevation are shaded by a narrow corrugated iron awning mounted on timber brackets. There are also two four-pane timber framed windows on the south elevation of the lower level.

The signal box exterior appears to remain in good original condition apart from some comparatively minor alterations, including the removal of the gable end screen from the east elevation and the removal of the turned timber gable finials. A metal chimney on the north side of the signal box has also been removed. The upper two panes on the signal box windows have been painted over and an air-conditioning unit has been mounted on the south elevation. The timber ramp that connects the signal box to the platform also appears to be modern.

The interior of the signal box was not inspected but it is understood to retain the original lever frame (ie levers and associated mechanisms used to operate the signalling, boom gates and to switch power between the trains and trams).

The switch house is located on the south side of the level crossing, opposite the signal box. Built c1922, the switch house is a modest red brick building with a late Edwardian architectural character. It has a gabled terracotta tiled roof with scroll finials, exposed rafters at the eaves and a monitor roof ventilator. The south elevation contains a V-jointed timber board door. The east and west elevations each have a pair of six-pane timber-framed windows with figured glass. The south elevation facing the railway line is blank apart from a series of terracotta floor vents.

The switch house appears to remain substantially intact externally apart from overpainting of brickwork on the east elevation and cables running through a damaged terracotta vent on the north elevation.

The signal box and switch house apart, the environs of the Burke Road level crossing have been greatly changed in recent decades as a consequence of road widening, the installation of modern boom gates and the construction of the South Eastern Arterial Road (Monash Freeway).

Comparative Analysis

Timber signal boxes of this general type were once commonplace throughout the Victorian Railways network but many have been demolished with the advent of modern centralised signalling and automated level crossings. The Gardiner signal box and the matching signal box at Kooyong Railway Station are the only extant examples in the City of Stonnington. They are also the only early signal boxes to survive on the Glen Waverley Line (from Burnley to its terminus). The signal box at Darling Station (on the same line) was commissioned in 1928,[1] but the present building is an unprepossessing structure that seems to have been very heavily altered in the post war period.

Outside of the City of Stonnington, similar signal boxes survive at the Showgrounds junction (1888), Spotswood (1912), Riversdale (1916), Sandringham (1915) and Ramsden Street, Clifton Hill (c1901). The Spotswood and Sandringham signal boxes are protected by site-specific heritage overlay controls. Decommissioned timber signal boxes at Jewell, Brunswick and Moreland dating from the late 1880s and early 1890s are protected as part of the Upfield Railway heritage overlay precinct (HO180). The Gardiner signal box compares well with the Sandringham example in terms of its external intactness and integrity. The Spotswood signal box is less intact and was damaged by fire in 2009. The Upfield line signal boxes are earlier than the Gardiner Signal box but are not as intact, nor are they operational.

The Gardiner Railway Station signal box and switch house are also rare examples of infrastructure associated with a tramway square. The Burke Road level crossing, opposite Gardiner Railway Station, has one of only four operational tramway squares metropolitan Melbourne. The other tramway squares occur at level crossings adjacent to the Kooyong, Riversdale, and Glenhuntly railway stations. Kooyong retains a type C1 signal box and switch house matching those at Gardiner station. The Riversdale crossing also has a type C1 signal box but it is less intact than the Gardiner signal box. The switch house at Riversdale is a utilitarian corrugated iron clad building unlike the somewhat more architecturally prepossessing red brick switch houses at Gardiner and Kooyong. The tram/train crossing at Glenhuntly Station has been modernised and no longer has its original signal box and switch house.

[1] www.vicsig.net/index.php?page=infrastructure&box=Darling

Statement of Significance

Relevant themes from the City of Stonnington Environmental History are indicated by TEH.

What is Significant?

The signal box at Gardiner Railway Station is a gable roofed timber framed building erected c1917 to a standard Victorian Railways design. It was built to control the Burke Road level crossing at time when the electric tram line was extended along Burke Road by the Prahran and Malvern Tramways Trust.

The switch house at Gardiner Railway Station is a modest red brick building with a gabled terracotta tiled roof. It was built c1922 when this section of the railway line was electrified. The switch house is understood to contain electrical equipment needed for the operation of the tramway square at the Burke Road level crossing.

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

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- The external form, materials and detailing of the signal box and switch house as originally built.
- The high level of intactness of the buildings to their original design.
- The freestanding form of the buildings and their modest scale.
- The siting of the buildings adjacent to the Gardiner Railway station and the Burke Road level crossing, and their close proximity to one another.
- Unimpeded views to the buildings from Burke Road.
- The limited presence of modern signage on the buildings and in their immediate curtilage.

Modern fabric, including signage and fencing in the curtilage of the buildings, does not contribute to the significance of the place.

How is it significant?

The signal box and switch house at Gardiner Railway Station are of local historical, architectural and technological significance to the City of Stonnington.

Why is it significant?

The signal box is historically significant as evidence of the impact of the extension of the electric tram network through the municipality in the 1910s (TEH 4.5.2 Prahran-Malvern Tramways Trust, Criterion A). The switch house is historically significant for its association with the electrification of the suburban rail network (TEH 4.4.3 Twentieth century improvements, Criterion A).

The signal box is architecturally significant as a substantially intact example of an early twentieth century Victorian railways building (Criterion D). Along with the adjacent switch house, the signal box provides rare evidence of the early character of the Glen Waverley line prior to its duplication in the 1950s and the associated modernisation of all station buildings. The signal box and switch house, and the matching signal box and switch house at Gardiner, are the only pre-World War II railway buildings known to survive on this line (with the possible exception of an altered c1928 signal box at Darling Railway Station) (Criterion B).

The Gardiner Railway Station signal box is technologically significant for its ability to demonstrate early twentieth century safe working practices at level crossings. The signal box and switch house are of added technological significance as infrastructure controlling one of only four tramway squares remaining in metropolitan Melbourne (Criterion B, F).

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Recommendations 2013

External Paint Controls	No
Internal Alteration Controls	No
Tree Controls	No
Fences & Outbuildings	No
Prohibited Uses May Be Permitted	No
Incorporated Plan	-
Aboriginal Heritage Place	No

Other Recommendations

It is recommended that the signal box and switch house at Gardiner Railway Station be added to the schedule of the Heritage Overlay under the City of Stonnington Planning Scheme. The extent of the heritage overlay should provide a nominal 2 metre curtilage around each building. In the event that the Burke Road level crossing is removed to provide grade separation, a comprehensive archival recording of the switch house and signal box should be made (including photography, measured drawings and video recording) prior to any works being undertaken. The buildings should be retained and relocated within the station environs [if this can be achieved in a sensible and sensitive manner] as an alternative to demolition. It is preferred that the early lever frame and associated equipment be retained within the signal box (although this would not be mandated by an internal alteration control). If this cannot be achieved, Museum Victoria or a dedicated railway museum should be approached to see if they are interested in acquiring the lever frame

This information is provided for guidance only and does not supersede official documents, particularly the planning scheme. Planning controls should be verified by checking the relevant municipal planning scheme.