

# BALLARAT TRAMWAY DEPOTS



The original depot

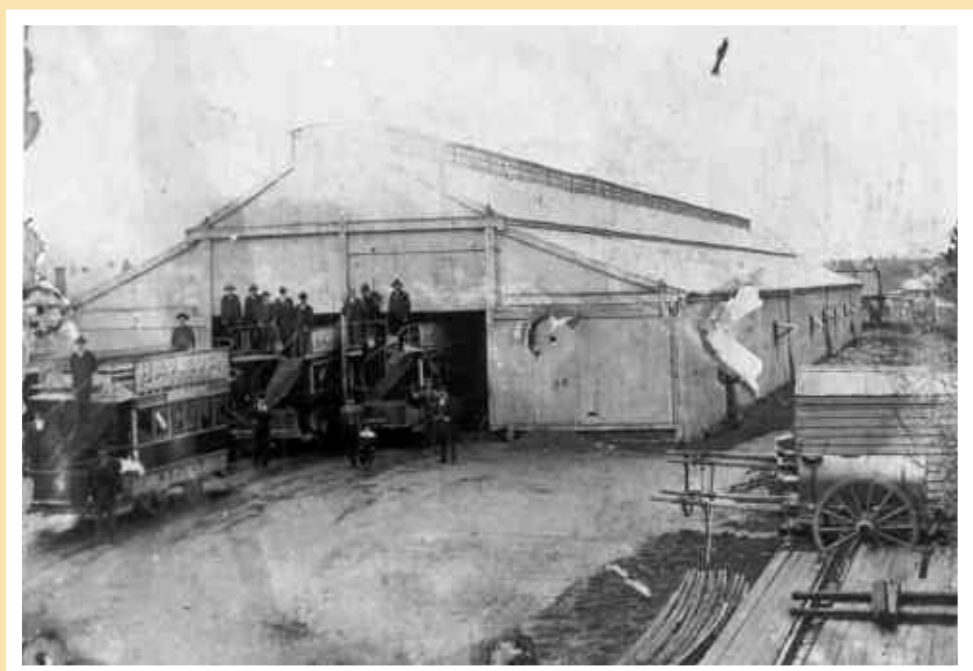
On a fine summer morning tram 40 is ready for service. Photo: Ben Parle, January 1954

## The original depot – 1887-1971

The first depot, located on the north side of Lake Wendouree near Forest Street, was built in 1887 for horse trams. It was modified for electric trams in 1905 and again in 1935. This is where the trams were given their daily maintenance, cleaned, repainted and overhauled.

The depot housed around 26 trams, with all the crews working from there or from the State Electricity Commission of Victoria's City Office in Sturt Street.

Following closure in 1971, it was demolished in 1972. There is now a set of housing units on the site.



Above: The horse tram depot, c.1905. Photo: BTM Collection

Right: Vin Dalton, SEC Depot worker, grinding wheels mid-1930s. Vin was a WW1 veteran who served in Gallipoli and the Western Front. Photo: State Electricity Commission of Victoria



Right: Museum volunteers installing a motor. Photo: Peter Waugh, April 2018

When the original Ballarat Tramway system closed in September 1971, the City of Ballarat provided the land in the South Gardens for a building to house six trams. Volunteers raised funds for the building, the tracks and power supply.

**The Ballarat Tramway Museum started operations in December 1974. In 1979 the depot was extended to provide service facilities and house more tramcars.**

**You are most welcome to inspect our tramcar fleet and displays.**

**If the doors aren't open, check our opening hours and contact details on [www.btm.org.au](http://www.btm.org.au)**



Museum's depot under construction. Photo: Ballarat Courier, July 1972



Track and electrical supply under construction. Photo: Bob Prentice, 8 April 1973

## The new depot – the Ballarat Tramway Museum



The Museum repairs, repaints and overhauls the equipment fitted to a tramcar. All work is done largely by volunteers.

The solar panels installed in 2014 power the Museum's entire tramway system.



The new depot

Tramcars on display in their new home. Photo: Warren Doubleday, December 1973

## Home to Australia's oldest operating tramcar



The city's first tram was Ballarat Tramway Co. Horse Tram No. 1 of 1887. Built in Adelaide by Duncan and Fraser, it is modelled on horse trams built in the USA and the UK. It was recovered in 1985 from a Ballarat East backyard where it had been used as a sleep out. The

Museum completely rebuilt the tramcar, re-using many of the original components. The tram re-entered service in November 1992 and is Australia's oldest operating tramcar normally operating on an annual basis.

## Sand on the rails

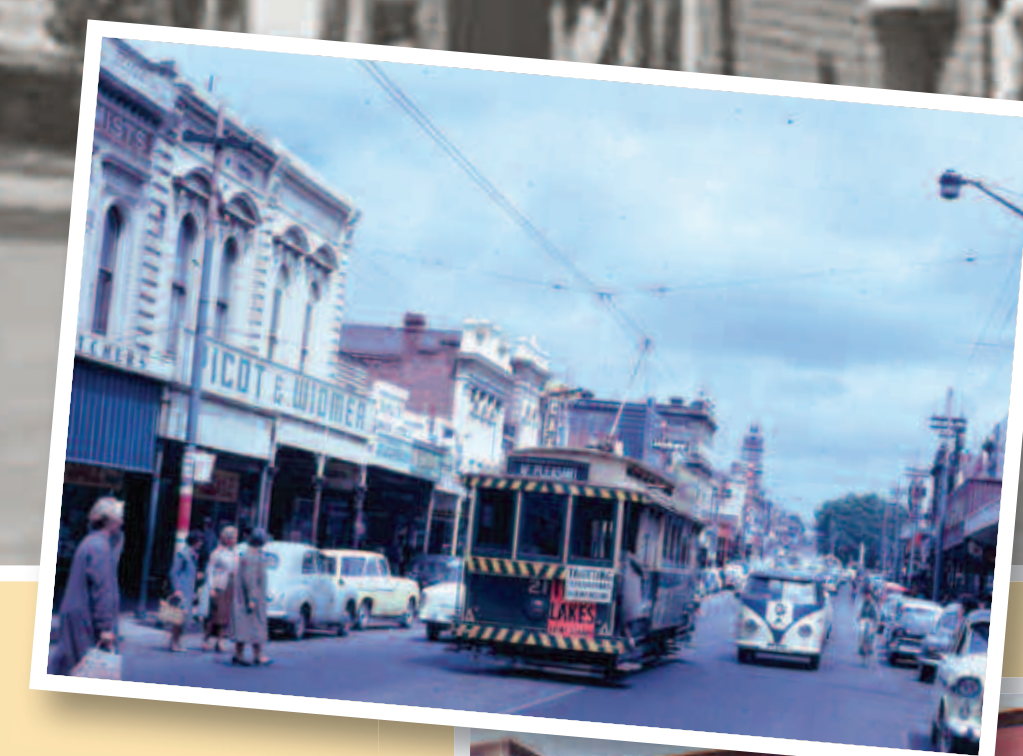
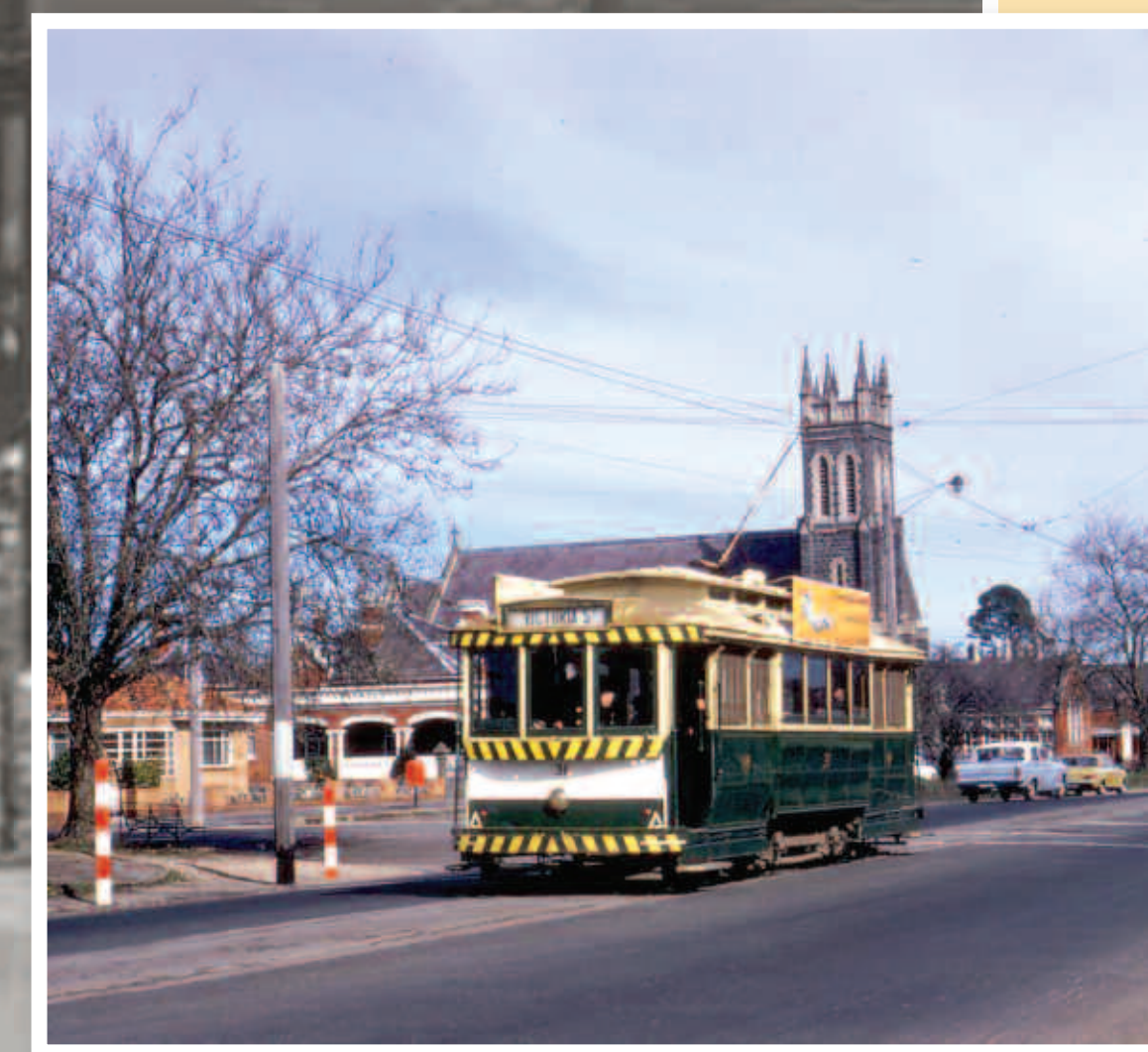
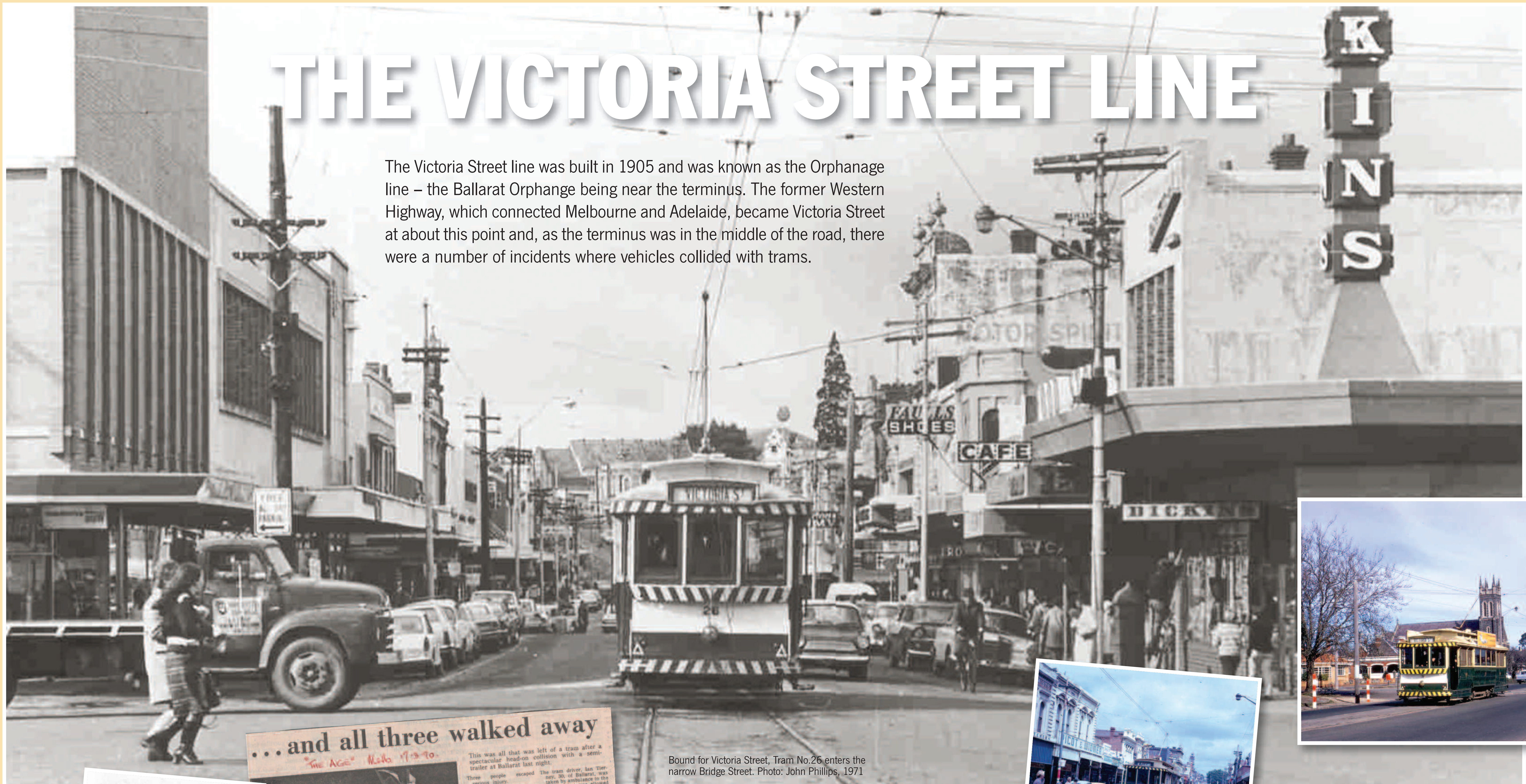
Look behind you. Do you see little sand piles lying around the rails? Why sand?



Sand provides traction to help prevent the steel wheels from sliding on the steel rails when starting or braking. Carried on board in a box on all tramcars, it is a very important material to ensure safety. The sand is applied by the driver. Today on modern trams it is applied automatically.

# THE VICTORIA STREET LINE

The Victoria Street line was built in 1905 and was known as the Orphanage line – the Ballarat Orphanage being near the terminus. The former Western Highway, which connected Melbourne and Adelaide, became Victoria Street at about this point and, as the terminus was in the middle of the road, there were a number of incidents where vehicles collided with trams.



**...and all three walked away**  
*The Age, Melbourne, 17.9.70.*

This was all that was left of a tram after a spectacular head-on collision with a semi-trailer at Ballarat last night.  
 Three people escaped serious injury. The tram was thrown from the rails, and splintered when it landed on its side.  
 The semi-trailer driver, Ronald Cox, about 20, and the only tram passenger, Mrs. M. Manshew, 28, both of Ballarat, were treated at Ballarat Base Hospital for cuts.  
 An eye-witness, Mr. Wayne Calaby, of Thompson Street, Ballarat, said: "The tram broke into pieces. It is a wonder no one was killed."

Bound for Victoria Street, Tram No.26 enters the narrow Bridge Street. Photo: John Phillips, 1971



Left: Turning the pole on a tram at the terminus was a risky job on the then Western Highway from Melbourne. Photo: Peter Bruce, 1970



Above: The worst accident occurred on the night of 16 September 1970 when a semi trailer collided with Tram No.20 and literally destroyed it. Fortunately there were only minor injuries as reported in The Age newspaper the following day.



Above: Victoria Street before the days of traffic lights and school crossings. Photo: Keith Caldwell, 1963



Above: Just before the Victoria Street terminus, the tramway and two pedestrian bridges passed over the former Buninyong rail line. Photo: Andrew Cook, August 1971

Above, left: Bridge Street was the principal shopping street in the 1960s. Photo: N.J. Simons Collection, November 1962

Above, right: Outward bound with St Alipius Church in the background. Photo: Graeme Cleak, 1971

# BALLARAT TRAMWAY TRAM TYPES



Tram No.12, an example of the Straight Floor Tram type. Photos: (top) BTM Collection and (bottom) David Critchley.

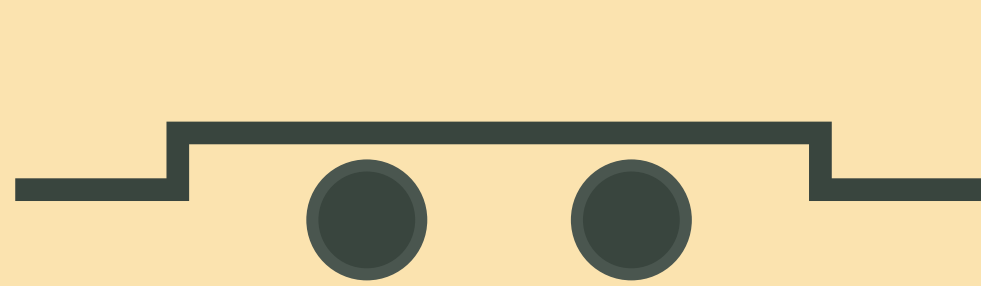


Top: Tram No.32 heading north along Albert Street, Sebastopol, crosses Morgan Street West. Photo: Andrew Cook, September 1971

Bottom: The wheel arrangement underneath a four-wheel tram using a Brill 21E (USA) truck. Photo: MMTB Official



Straight Floor Tram type



Drop End Tram type

## Straight Floor Tram (four wheels, two motors)

An example of the straight floor tram is No.12, a combination tram with open and closed passenger areas. The centre part was built in Sydney in 1892 as a cable tram trailer. Converted in Ballarat to an electric tram in 1905, it has high entry steps.



Tram No.8, an example of the Straight Floor Tram type, is used for track cleaning and rail head scrubbing. It carries its own water and is fitted with an electric pump. Photo: BTM Collection

## Drop End Tram (four wheels, two motors)

This type has lower ends to enable easier boarding. Examples are:

No.14 – modified by closing in the ends to give better passenger accommodation and to enable “one-man-operation”.

No.26 – open Californian combination – a USA design.

## SOME TECHNICAL DETAILS for the Museum's trams:

**Track Gauge: 1435mm (4'8½")**

**Braking System: Compressed air and hand**

**Power Collection: From the overhead wire, trolley wheel and pole**

**Operating Voltage: 600V DC**

(400 x 1.5V batteries laid end to end)

## OUR ELECTRIC TRAMCAR BODIES were built by:

- **Duncan & Fraser of Adelaide** (eg. Trams 12, 18, and 40);
- **Meadowbank of Sydney** (eg. Tram 14);
- **Melbourne and Metropolitan Tramways Board, Preston Workshops** (eg. Trams 8 and 939).

## Operating the tram

To enable a tram to move and stop, the driver has a **controller key** to unlock the controller (accelerator) and a **brake valve handle** to operate the air brakes. Both the controller key and the brake valve handle are removed by the driver when leaving the tram to ensure that it can't be operated without a crew.



Controller

Controller key

Brake valve handle

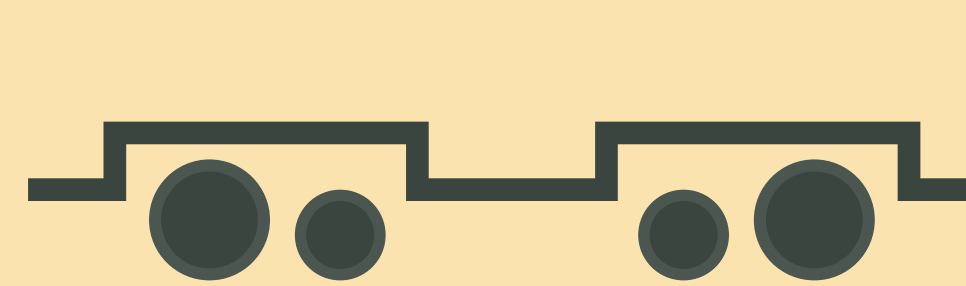
Brake wheel

(It's not a steering wheel!)



Top: The Brill model 22E (USA) bogie is a complex arrangement of braking levers and springs. Photo: MMTB Official

Bottom: Tram No.40, an example of the Drop End & Centre Tram type. Photo: Ben Parle, January 1954



Drop End & Centre Tram type

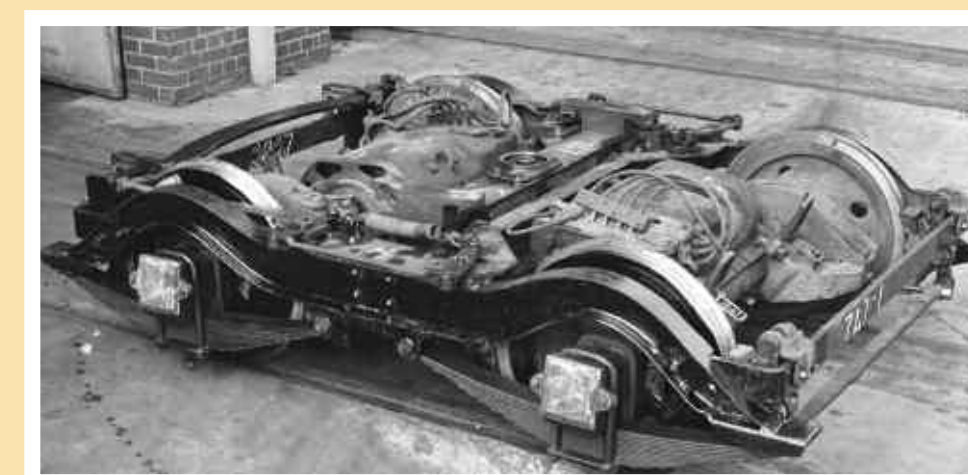
## Drop End & Centre Tram (eight wheels, two motors)

All the entry points to the tramcar have lowered ends. The wheel sets are known as Maximum Traction type or Brill 22E.

Each bogie or truck has one large motor and driving wheel and one small wheel. An example is tram No.40.

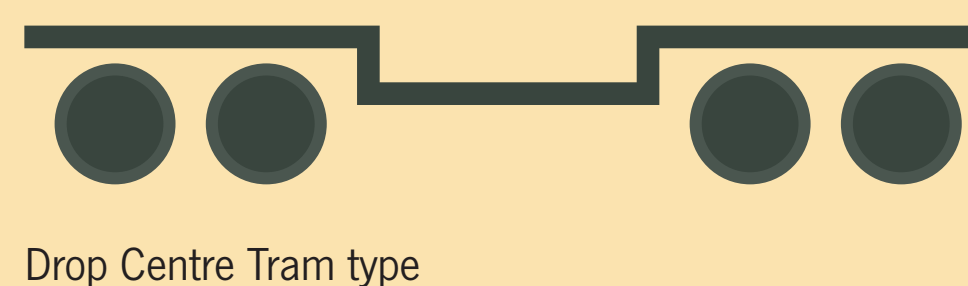


Driver's cabin with the controller key and brake handle removed for safety. Photo: BTM Collection



Top: Topmill Postcard. Photo: R. Gilbert, August 2009

Bottom: Typical of an equal size wheel and two motor truck is the Melbourne and Metropolitan Tramways Board No. 15 truck. Photo: MMTB Official



Drop Centre Tram type

## Drop Centre Tram (eight wheels, four motors)

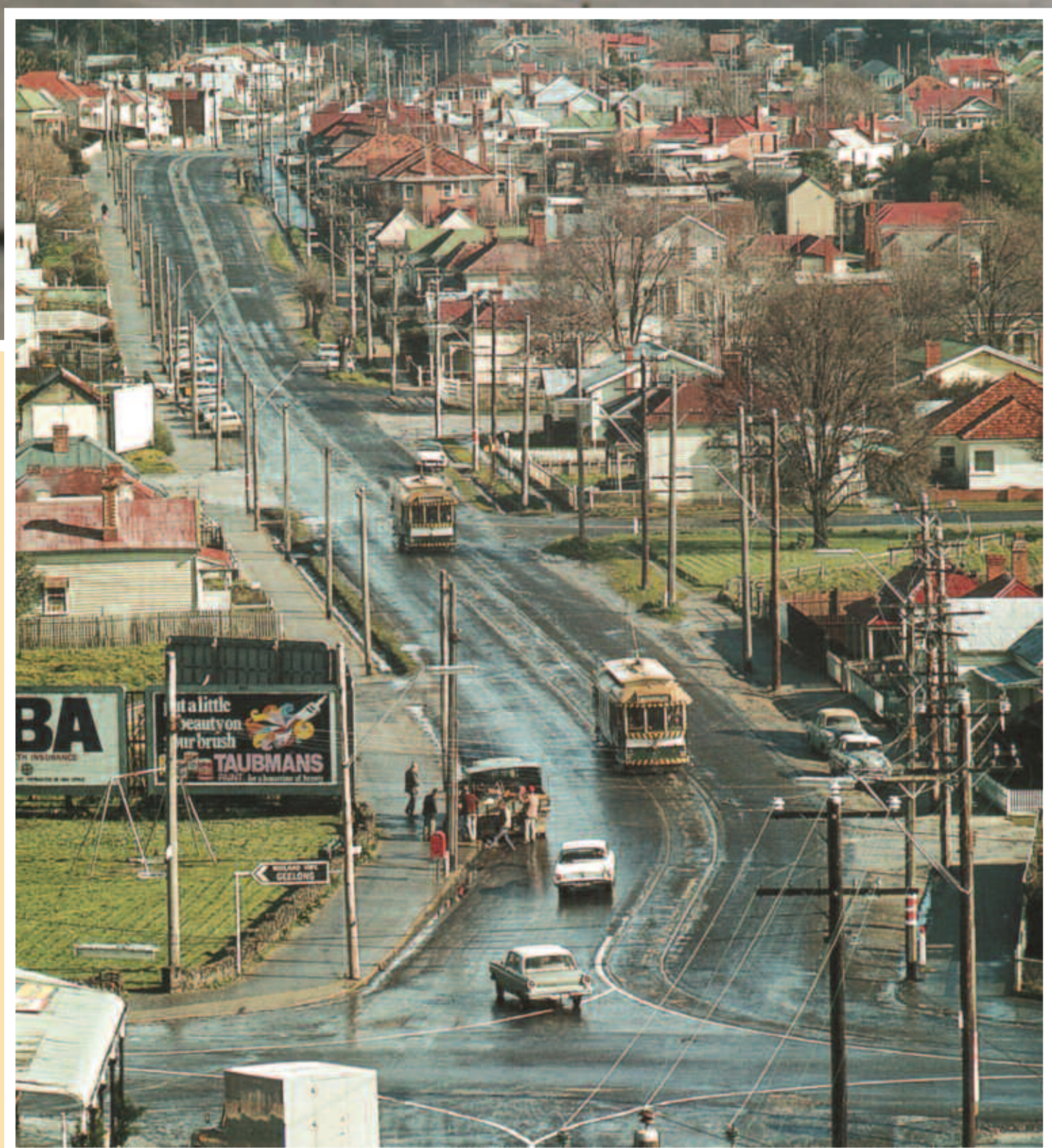
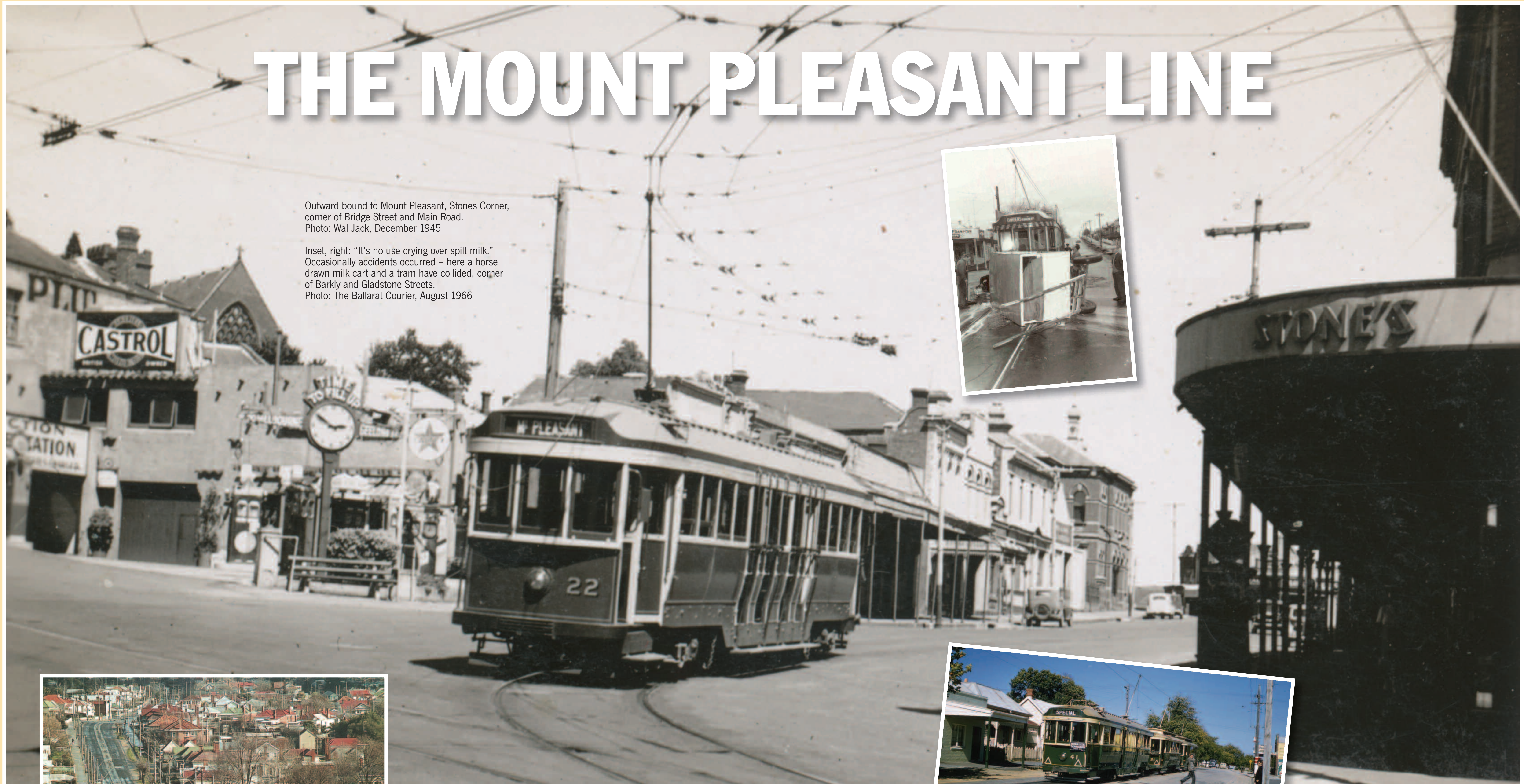
Known as an equal wheel bogie tram (all wheels are the same size) the centre section is lowered to enable easier entry. Each bogie is fitted with two motors.

This style, popular in Australia and NZ, formed the basis of the W class in Melbourne. Whilst the Museum has several examples, this style was not operated in Ballarat by the State Electricity Commission of Victoria.

# THE MOUNT PLEASANT LINE

Outward bound to Mount Pleasant, Stones Corner, corner of Bridge Street and Main Road.  
Photo: Wal Jack, December 1945

Inset, right: "It's no use crying over spilt milk."  
Occasionally accidents occurred – here a horse drawn milk cart and a tram have collided, corner of Barkly and Gladstone Streets.  
Photo: The Ballarat Courier, August 1966



Above: Image from "Melbourne's marvellous trams" showing the turn into Barkly Street from Main Road. Photo: Bill McNiven, 1971



Above: The Mount Pleasant line had one crossing loop at Grant Street where trams could pass each other. Photo: Peter Bruce, 1970

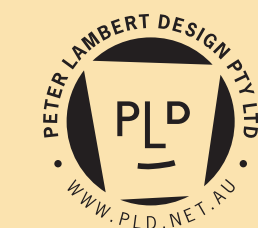


Above: Cars give way to alighting passengers, corner of Barkly and Gladstone Streets. Photo: Peter Bruce, 1970

Above, right: Special trams hired for the Australian Electric Traction Association at the Mount Pleasant terminus, corner of Cobden and Barkly Streets. Photo: Ben Parle, April 1958

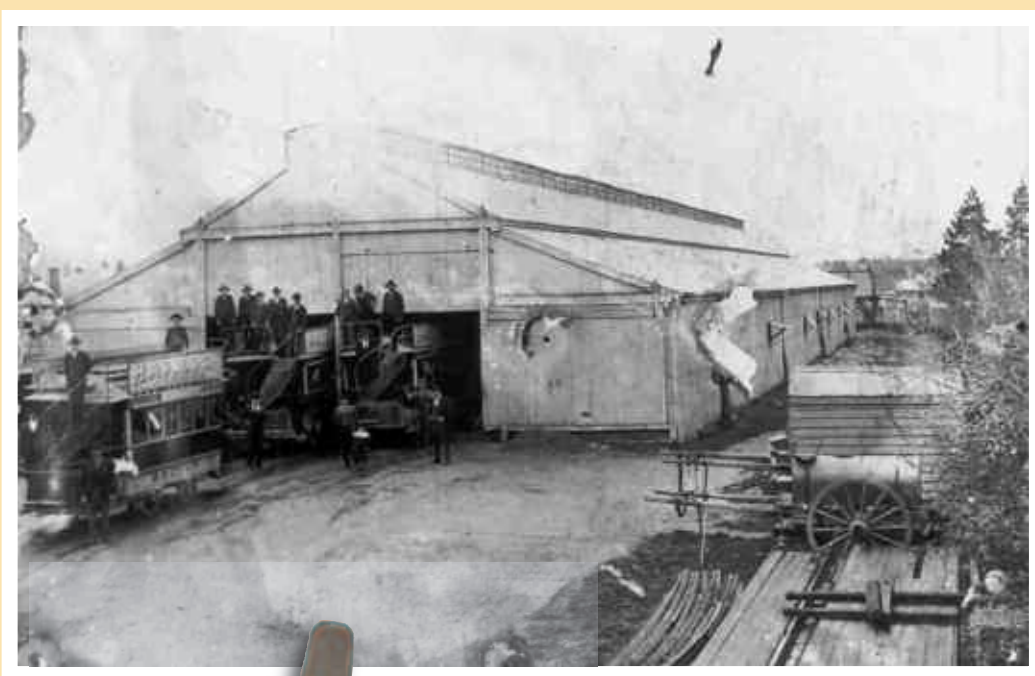


Above: Turning the pole at the terminus was a time honoured practice. Photo: Tony Smith, 1971



# BALLARAT TRAMWAY BEGINNINGS

Right: The horse tram depot, possibly at the time of the start of the conversion to electric trams, c.1905. Photo: BTM Collection



Below: A young tram crew poses on the steps of Tram No.10; one of the original Ballarat Electric Trams, c.1905. Photo: BTM Collection



Left: Depot employees were given a pass to identify themselves for free travel. Photo: BTM Collection

Right: Depot workers and the depot dog; late 1930s. Photo: Jim Morgan



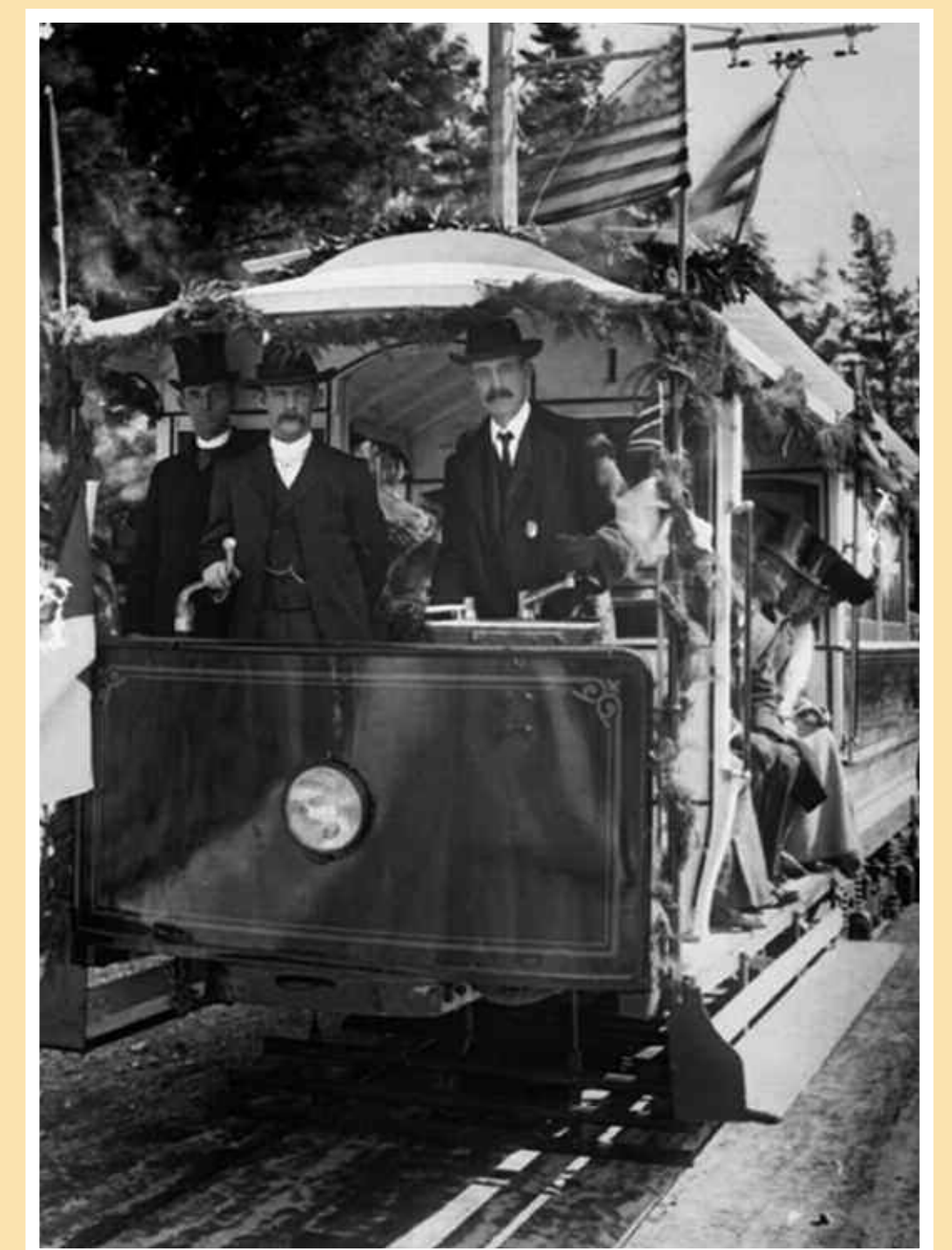
Trams operated commercially in Ballarat from 1887 through to 1971 – first with horse-drawn trams, then with electrically powered trams.

**Ballarat was the second Victorian city to have an electric tram network. It opened on 8 August 1905, a year before Melbourne's network.**



Above: The body of Tram No.10 was used as a sleepout in the Warrenheip area. Photo: Wal Jack, 1940s

Top: Sturt and Lydiard Streets, from "Ballarat Views", Baxter & Stubbs, Print, Ballarat, c.1905.



Above: Ballarat was the second Victorian city with an electric tram network; opened 8 August 1905, a year before Melbourne. Photo: BTM Collection

## The Original Tram Depot

About 250m further along Wendouree Parade was the Ballarat Tram Depot; from 1887 to 1971. Built by the Ballarat Tramway Co Ltd on a large site, it included paddocks for the horses, worker cottages and a church, that still stands. It was cheaply converted to an electric tram depot by the Liverpool UK based Electric Supply Company of Victoria in 1905. This company had built a lavish depot at Bendigo (still in use) but ran out of money when it came to Ballarat.

The State Electricity Commission of Victoria acquired the Ballarat tram system, under sufferance in 1934. They refurbished the building, installed new maintenance equipment, improved worker facilities and even built a tennis court. The building was demolished in 1972; as the Ballarat Tramway Museum moved six trams to its South Gardens Depot.



**AUCTION ON JUNE 17**  
Edgar Bartrop Pty Ltd. will auction the Wendouree parade tramways depot on behalf of the State Electricity Commission on June 17. The auction is shaping as one of the biggest ever held in Ballarat, as the large allotment is in the city's most prestigious residential area. Housing blocks sold there about 15 months ago brought \$11,000. Plans to auction the site on June 17 replace proposals to build a group housing scheme comprising 16 units.

Above, right: Ballarat Tramways Employees in front of the depot. Photo: Williams Studio, August 1971

Above, left: Stan Lakey, Depot Foreman, closes the gate to the depot for the last time. Photo: Ballarat Courier, 9 October 1971

Left: Notice of Auction, the Ballarat Courier, 1971

Right: Before the last tram had left, demolition was well underway. Photo: Eldon Hogan, 18 July 1972



1971 – the final year

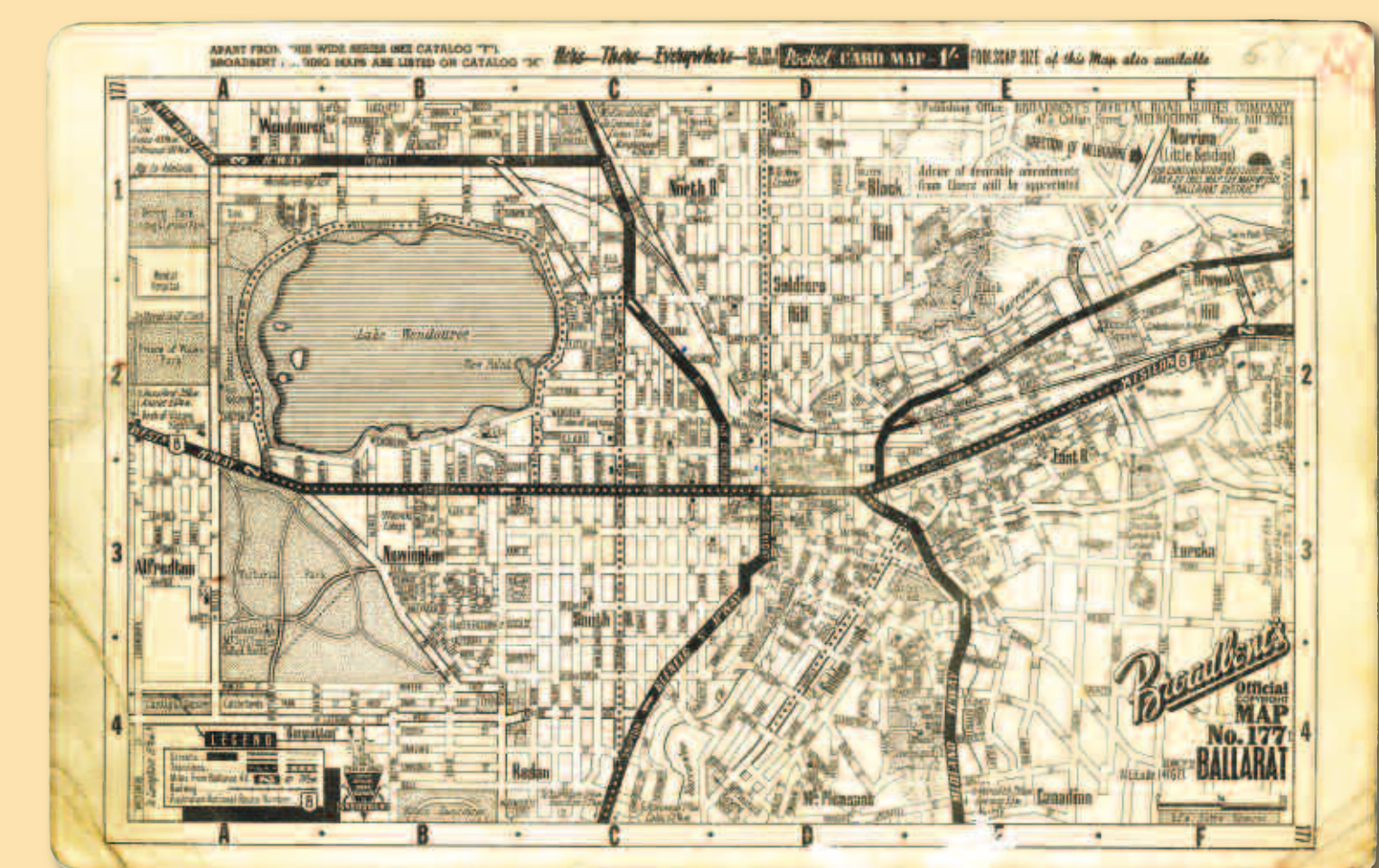


## ESCo Trams

When the Electric Supply Co. of Victoria electrified the horse tram system, old cable trams of the early 1890s were purchased from Sydney. They were placed on new underframes with electric motors and the roof extended at either end.

Windscreens were not provided on Ballarat's trams until 1913 after complaints from ladies who were forced to stand on the front platform in the rain whilst paying their fares.

By the 1930s these trams were falling apart and were replaced with second-hand trams from Melbourne and Adelaide. The replacement trams of the First World War era were of a much heavier build and are still in service today with the Museum.



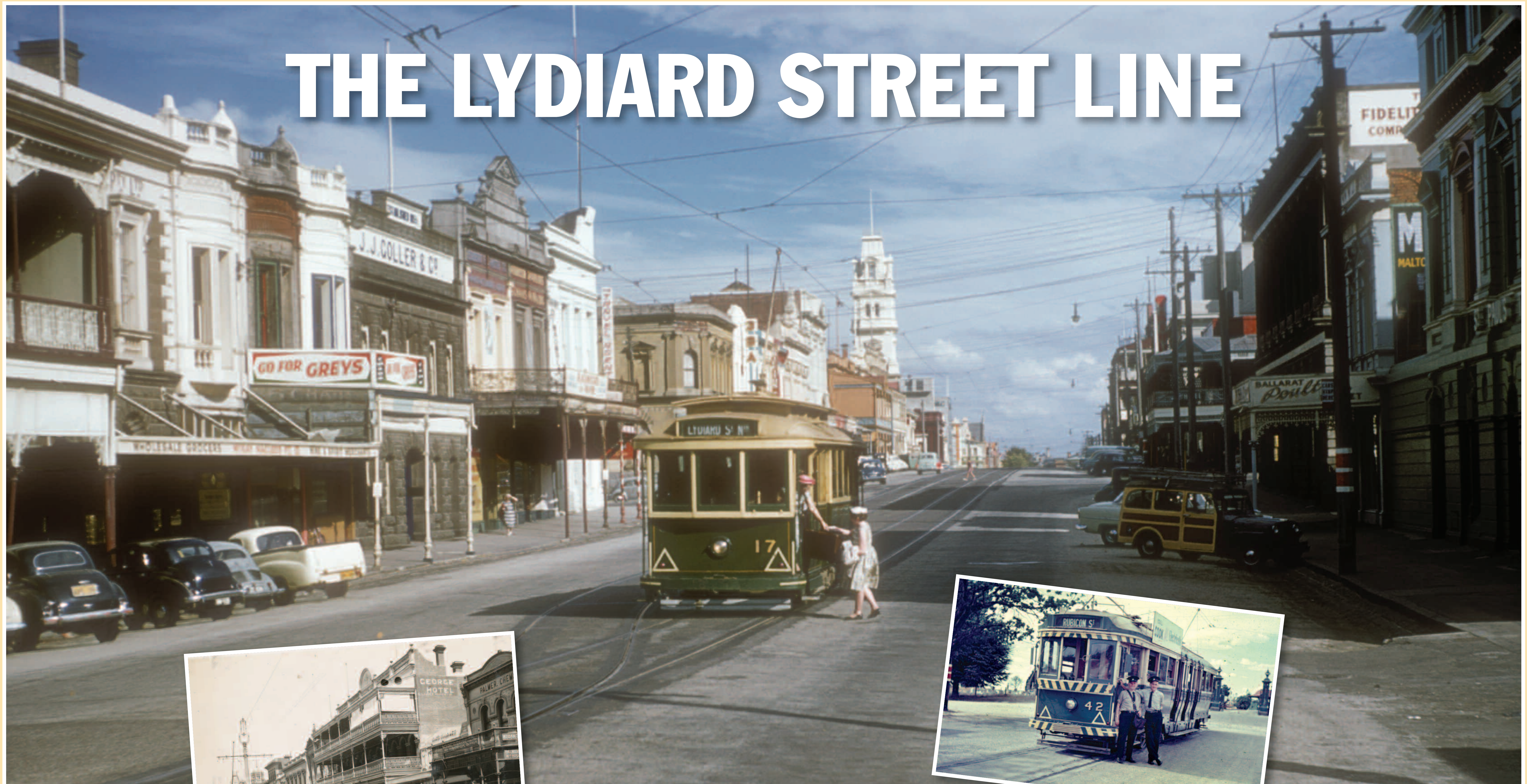
Left: Broadbent's Official Copyright Map No.177, showing Ballarat's tram routes, n.d. (pre 1966). The full extent of the system included Norman Street to the north and the Royal Mail in Sebastopol to the south. Photo: BTM Collection



Public Record Office Victoria



# THE LYDIARD STREET LINE



Above: Passing the Provincial Hotel, opposite the Ballarat Railway Station. Photo: Dick Jones, March 1969

Right: Tram No.42 passes the Railways Institute building. Photo: Travis Jeffrey, c1962



Above: A special Vintage train waits at Ballarat Railway Station, viewed from the station over-bridge. Photo: Dick Jones, October 1969

Top: Lydiard Street showing George Hotel, Ballarat. Postcard: Valentine Series, c1930, BTM Collection

Main image: Tram No.17 setting down passengers at Market Street. Photo: Ben Parle, April 1958

Above: Waiting at the Lydiard Street terminus, opposite the Ballarat General Cemetery. Photo: Travis Jeffrey, 1962

Left: Turning from Sturt Street into Lydiard Street North, past the former Post Office, this tram was advertising the meeting from which the Ballarat Tramway Museum was formed. It was a bleak day for a bleak event; the forthcoming closure of the SEC system. Photo: Chris Phillips, March 1971



Public Record Office Victoria



# BALLARAT TRAMWAY CONDUCTORS



Top: Arm badge of a horse tram conductor. Photo: BTM Collection  
 Above: Dave Kellett's ticket punch in the Museum's collection. Photo: BTM Collection  
 Above, right: SEC Conductor Archie Viccars during the 1950s. Photo: BTM Collection  
 Right: A weekly ticket when there was time to go home for lunch. Photo: BTM Collection

## Connies

Apart from selling tickets, each conductor was expected to dust the horse tram's seats and windows before each trip, check passengers were safely seated and call out street names. Hours were long and pay was low. During the 1890's conductors were paid 14 shillings per week, half that of a Melbourne cable tram conductor.

Cash collected was balanced against the tickets sold. If you were short, it was taken out of your wages or you were sacked for being incompetent. If you were over, it was kept by the Company.

There were no ticket machines on trams in Ballarat. The Museum still issues traditional tickets.

## Dave Kellett (1923-2008)

### Conductor, Driver and Inspector

Dave commenced as a conductor with the State Electricity Commission in 1949 after returning from service in the Second World War. Although badly injured following a collision with a semi-trailer whilst driving in 1954, he worked through until the tramway system closed, in 1971.

"People used to rely on trams, some trams were so full we used to have fun trying to get fares."

Above left: Conductor Kellett preparing for work after freshly ironing his shirt. Photo: G. Kellett, early 1950s

Right: Ballarat Tramways longest serving employee Robert Haines looking very authoritative. Photo: BTM Collection



St Aidans Drive (North Gardens Reserve) entry

Top: Tram No.43 passes the gate pillars to arrive in the Gardens area. The 1887 Jubilee Church and Mount Warrenheip can be seen in the background. Photo: Andrew Cook, September 1971

Right: This area was prone to flash flooding. Here Tram No.41 makes a bow wave during the last days of SEC operations. Photo: Charles Craig, August 1971



## St Aidans

This location is named after the once nearby St Aidans Theological College. The area was prone to flash flooding, though this usually didn't affect the operation of the trams.

When the gardens were created in 1857 they were fenced and gated. The gate pillars have moved to allow for the road to be widened, the last time was in 2003. The former gatehouse has been relocated to centre of the Gardens.

## The Two Bottle Box



Some drivers occasionally used them to hold other non-essential items as well – thus earning it the 'two bottle box' nickname.

This was in the days before zero blood alcohol.

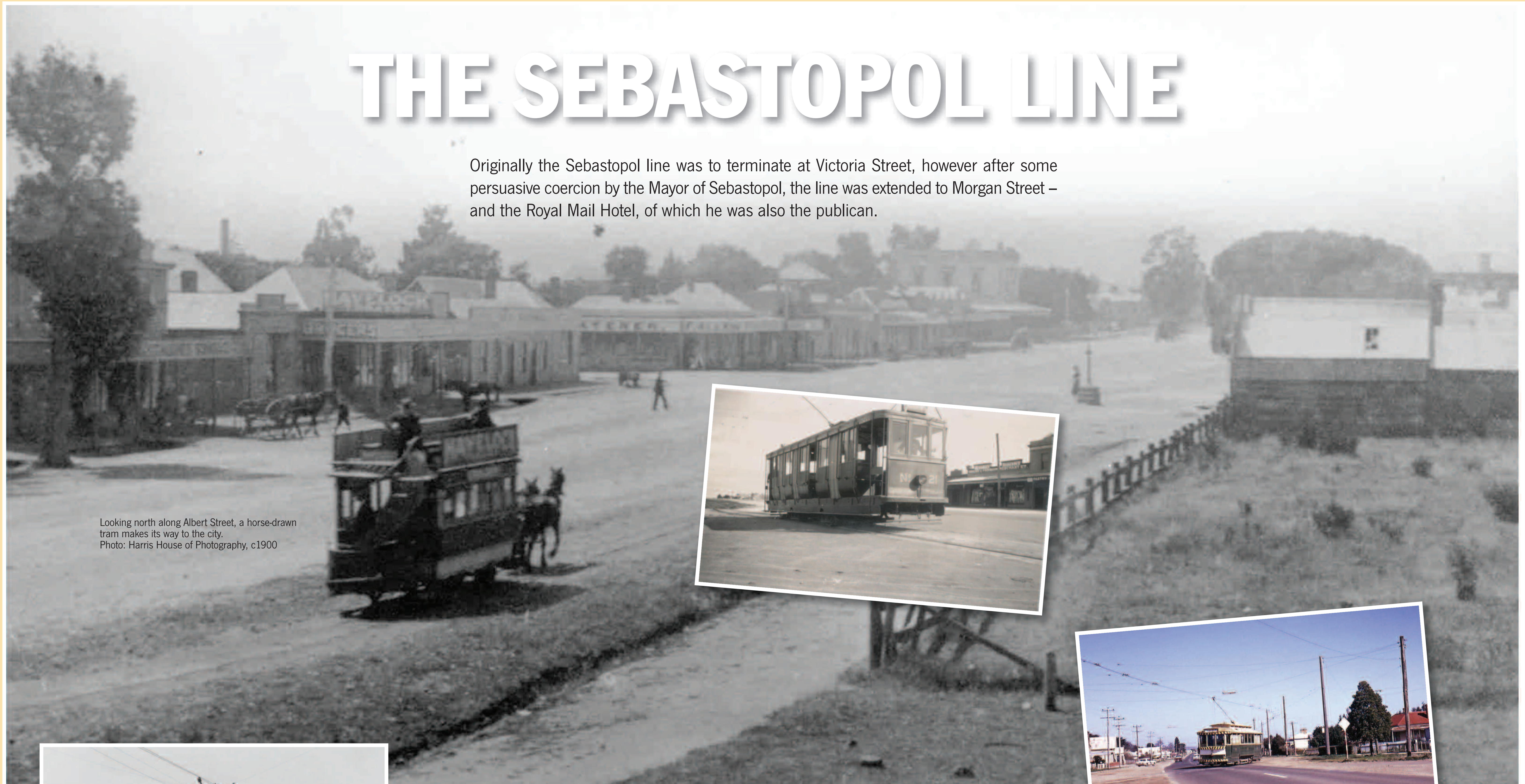
When operating a tram in the one-man mode, drivers were issued with a large tin – a connie box – to hold ticket wallets, spare tickets and other equipment.



Public Record Office Victoria

# THE SEBASTOPOL LINE

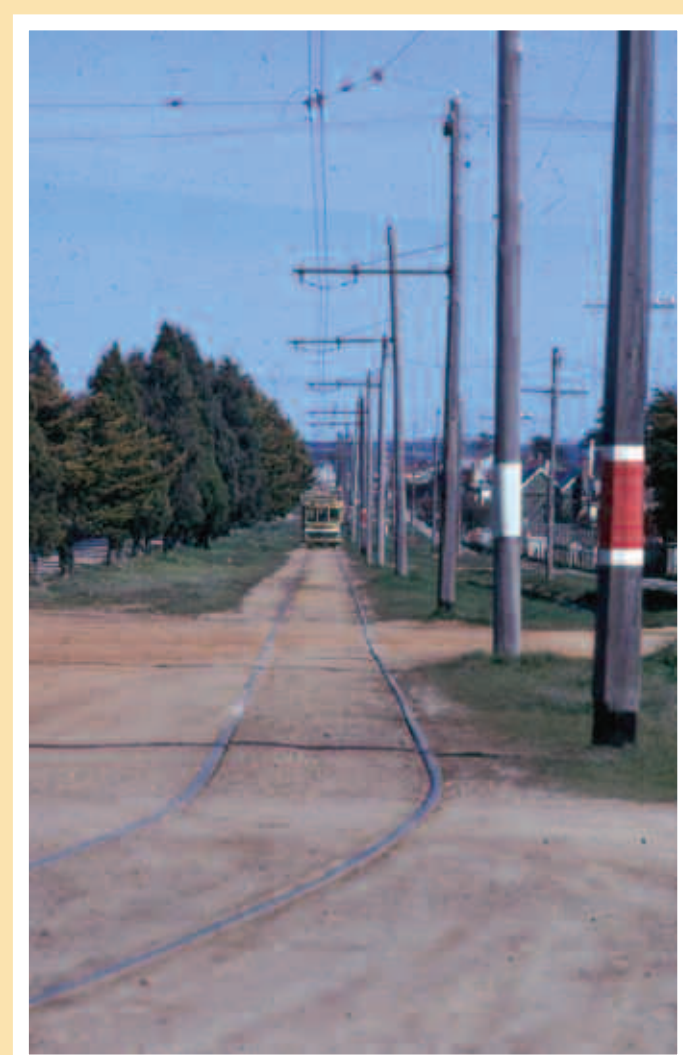
Originally the Sebastopol line was to terminate at Victoria Street, however after some persuasive coercion by the Mayor of Sebastopol, the line was extended to Morgan Street – and the Royal Mail Hotel, of which he was also the publican.



Looking north along Albert Street, a horse-drawn tram makes its way to the city.  
Photo: Harris House of Photography, c1900



Above: The Sebastopol terminus – a favourite stop and watering hole for some Tramway employees. Photo: Chris Phillips, 1970



Above: The Sebastopol line ran along one side of Albert Street, then just a two lane local road. Photo: Mark Plummer, September 1971



Above: Nearing the end of its trip from Lydiard Street North. Photo: Tony Smith, 1971



Inset, above: One of the "Sebastopol" tramcars built to service this line in 1913 at Victoria Street. Photo: Wal Jack, March 1935



Above: Shortly before the terminus, the tram crossed from one side of the road to the other. Once upon a time there was a weighbridge in the way. The line to Sebastopol ran along the side of Albert Street, then just a two lane local road. It is now a four lane highway. Photos: Andrew Cook, April 1971.

