



The Bellcord

Journal of the Melbourne Tram Museum

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Front cover

E class 6008 in St Georges Rd, North Fitzroy crossing Holden St on Route 11 to Victoria Harbour Docklands (2021).

The shops on the western side of St Georges Rd were built on the site of the North Fitzroy cable car shed. (See article on page 3.)

Photo: Geoff Brown

Museum News

Museum to reopen on 27 March

We are delighted to announce that the museum will reopen on Saturday 27 March 2021, from 11 am to 4 pm, with last admission at 3 pm.

It has been just over a year since our last open day, and we are very excited to welcome visitors back. The museum has implemented a COVIDSafe Plan that describes how it will operate with community restrictions and the safety processes required to allow the public to enter.

The date of the open day is subject to no further lockdowns being announced. If this occurs, our open day will be postponed until further notice. Announcements will be posted on our website and on social media.

If all goes well, we anticipate that as from April, we will return to regular open days on the second and fourth Saturday each month.

From our collection

The museum has recently received a large donation of tickets from a keen collector. The donation is primarily focused on the Travelcards and Metcards that replaced individual tram and rail tickets during the early 1980s. The collection includes many tickets produced to advertise special events, charities and numerous other topics.



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Holden Street's Forgotten Tram Works



ABOVE: E class 6058 in St Georges Rd, North Fitzroy passing Barkly St on route 11 to West Preston (2021).

The houses to the right and the shops behind the tram were built on the site of the North Fitzroy cable car shed and yard.

(See earlier photos of this corner on pages 11 and 15.)

Photo: Geoff Brown

As modern E class trams glide past these shops in St Georges Rd, North Fitzroy, few travellers would appreciate the tramway history of this site. Only the substation in Holden St might catch the eye of some.

From the mid 1880s, this block between Holden St and Barkly St played a notable role in the development of Melbourne's famous tramway network – first as a busy cable car shed (depot) and then as the birthplace of Melbourne's W class trams.

But by 1940, the land had been sold leaving little to mark its history.

With the help of tramway documents, land titles and newspapers from those years, this article pieces together some of this site's forgotten past.

RIGHT: Holden St tramway substation located 40 metres west of St Georges Rd (2021).

This site was once the southern section of the Holden St car building works.

Photo: Geoff Brown



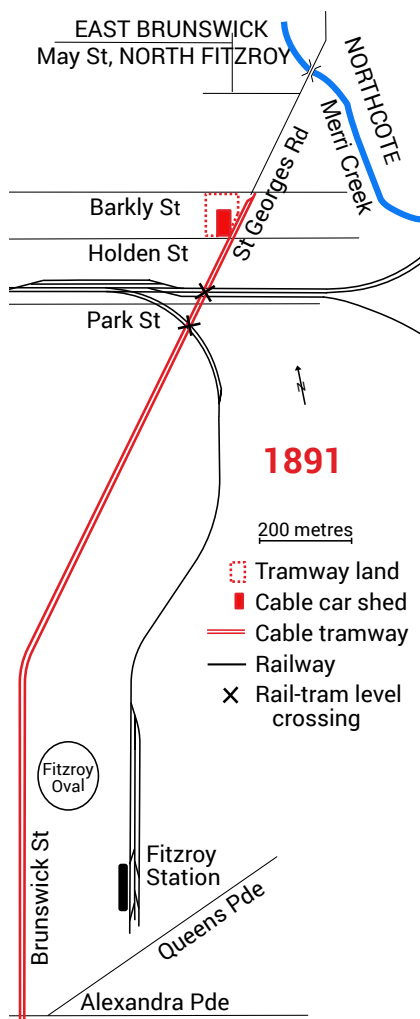
RIGHT: A cable tram in Collins St bound for North Fitzroy (c1909).

Photo: State Library Victoria



BELOW: North Fitzroy in 1891 showing the recently constructed tramway and railway lines and bridge across the Merri Creek.

Source: MMBW and VR maps, written references



Part 1: North Fitzroy cable car shed (1886-1930)

The decision to locate a cable car shed on the land between Holden St and Barkly St was influenced by the area’s early history.

Melbourne’s need for fresh water led to the construction of the Yan Yean Reservoir and connecting pipeline to Melbourne between 1854 and 1857. The pipeline travelled southward through Preston and Northcote, then southwesterly through Fitzroy.

A track, later named St Georges Rd, developed alongside the pipeline in Preston and Northcote and above the pipeline through Fitzroy. Fortunately the original and subsequent pipelines were located under the sides of St Georges Rd through Fitzroy, allowing for the future excavation of cable tram tunnels and pits in the centre of the road.

From those early years, the area south of the Merri Creek became a desirable place to build a home. The land lay within the Borough of Brunswick but the growing population saw their business and transport needs would be better served by the City of Fitzroy. So they petitioned a change to the municipal boundaries.

In 1881 the City of Fitzroy’s northern boundary was adjusted 600 metres northward from Park St to the Merri Creek and May St. As if to celebrate this change, the Fitzroy section of Brunswick Rd was renamed Holden St after the (then) mayor and long time councillor, James Holden.

Tramways and railways

During the early 1880s, proposals for a tramway network and railway expansion were exciting Melbourne. When the decision was taken to build a cable tram network, many Fitzroy city councillors were enthusiastic about this new form of public transport for their municipality.

This was understandable as Fitzroy had a financial stake in the enterprise as a member of the Melbourne Tramways Trust. Many councillors also saw that it would advantage their constituents, including those in the new

RIGHT: Looking northward along Brunswick St, Fitzroy from Gertrude St (c1900).

Photo: State Library Victoria



northern ward. Another benefit would be that the tramway would take on some financial responsibility for road maintenance along its routes.

The same enthusiasm was not generated by the various railway proposals for Fitzroy. A number of councillors characterised these as land grabs by the newly formed government railways.

Cable tramway

Once appointed as the tramway operator, the Melbourne Tramway and Omnibus Company (MTOC) decided that its second of 17 cable tram lines would be built via Brunswick St and St Georges Rd to North Fitzroy.

The terminus would be located just south of the new municipal boundary along the Merri Creek. Most future cable lines would also terminate near municipal boundaries, if the maximum length of the cable would allow it.

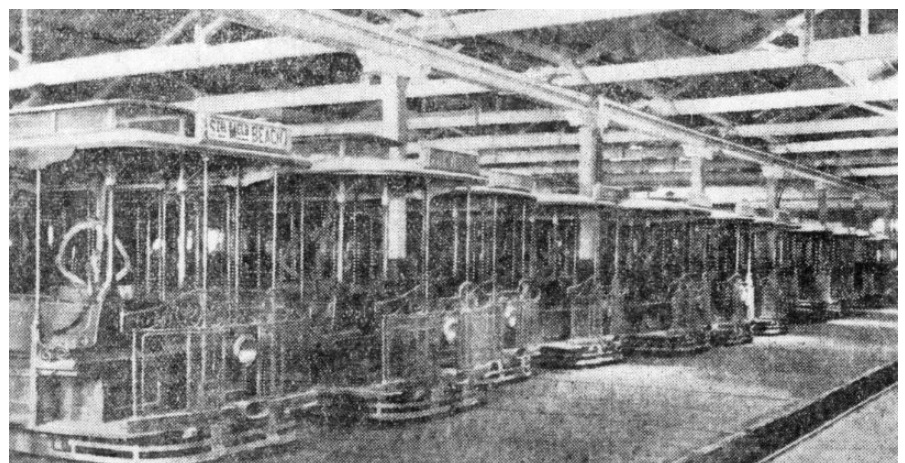
At the time of the line's construction, only a footbridge crossed the Merri Creek at St Georges Rd. But this was soon to change. A new road bridge opened in August 1886 and the cable line opened two months later in October 1886.

St Georges Rd soon became a busy thoroughfare, favoured by many over the steep hill in High St, Northcote to the east.

RIGHT: Cable dummies stabled inside the North Fitzroy car shed. The traverser track can be seen at right.

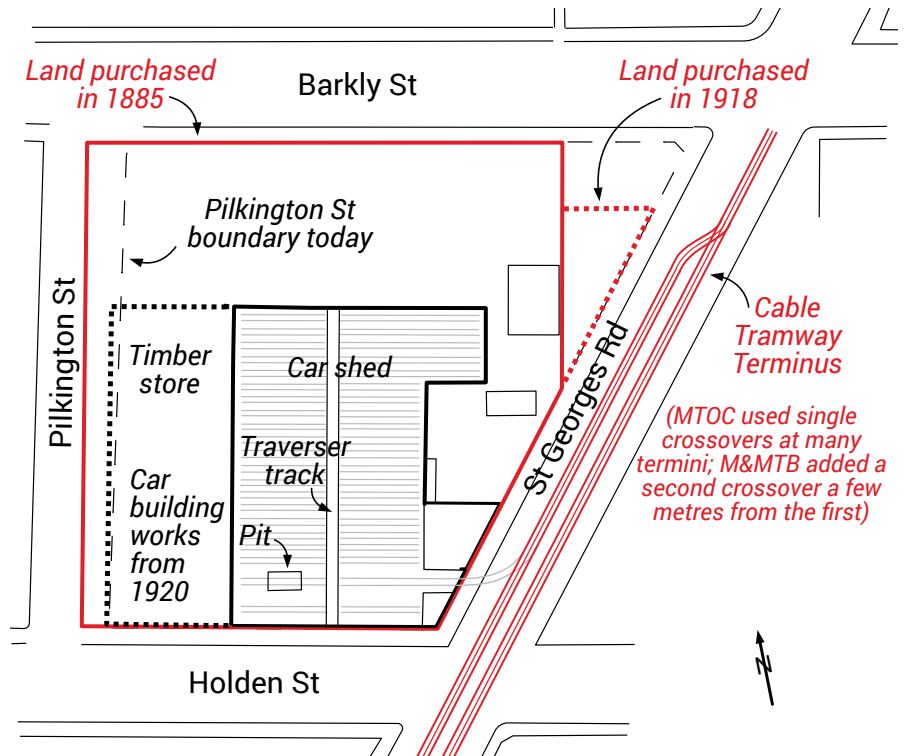
The destination sign on the closest tram shows 'Sth Melb Beach' as North Fitzroy trams were through-routed via Market St, Queens Bridge and City Rd at that time.

*Photo: The Herald,
27 September 1929*



RIGHT: Reconstructed site plan of tramway land (1885 -1920).

Source: Certificate of Title, MMBW & M&MTB plans, written references

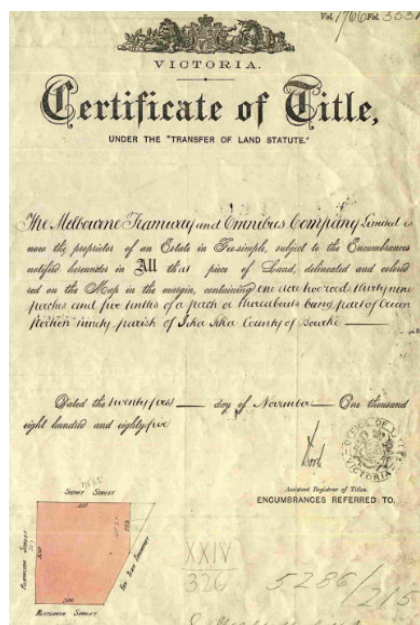


BELOW: Certificate of Title, dated 21 November 1885, for land purchased by the MTOC.

The site diagram on the title labels the streets that border the property with the original names. Three of these streets had been renamed by 1885.

The Yan Yean Tramway referenced on the diagram was an early horse powered freight tramway used in the construction of the Yan Yean Reservoir and pipeline in the 1850s.

Source: Public Records Office Victoria



Car shed

Car sheds (depots) were usually built at the suburban terminus of each line. This facilitated conductors leaving the tram to pay-in their takings at the end of each round trip. In November 1885, the MTOC was able to purchase vacant land at the corner of Holden St and St Georges Rd for a car shed.

While this location would soon require trams to negotiate two railway level crossings immediately to its south, the tramway preceded the railway by two years and the inevitable objections by the railways were avoided.

Railway opposition to tramway level crossings is detailed in Russell Jones’s article, [Tramway Level Crossings in Victoria](#), on the museum website.

The purchased land excluded a triangular portion at the northeast corner of the block, some of which was purchased in 1918 by the interim Tramway Board. Eventually a narrow section of the land along the western boundary was given over to widen Pilkington St.

A contract to build the car shed was awarded to Mr W Raddin on 27 October 1885, four weeks before the land purchase was finalised. Three years later a second contract for a new shed was awarded to an unnamed builder. Perhaps these two contracts are the origins of the car shed and the timber store referred to in some documents.

The internal layout of the car shed in the above site plan is taken from a 1920 M&MTB drawing, although this probably dates from 1886 as similar layouts were used in other MTOC car sheds.

RIGHT: Passenger numbers and headways for selected cable lines on Tuesday 25 October 1910.

Source: Royal Commission Report (1911)

Line	Daily Passengers	Max trams required	Average peak headway
Brunswick	25,718	51	1 min
North Fitzroy	11,086	20	3 min
West Melbourne	1,837	4	8.5 min

Cable trams entered the shed via a single track. Each was manually pushed onto the centrally located traverser and pushed northward to an allocated road either side of the traverser, as shown in the photograph on page 5. Washing and maintenance of trams was undertaken at the southern end near the pit.

Patronage

The North Fitzroy cable tram appears to have been well patronised for its 45 years of operation. The car shed was in continuous use until 1930, when the line was converted to electric traction.

The table above provides the daily passenger numbers and peak period headways of the North Fitzroy line as well as those of the highest and lowest patronised lines. The MTOC ran 17 cable tram lines but did not disclose the patronage figures of individual lines. These details were provided for the 1910-11 Royal Commission and were based on data from Tuesday 25 October 1910.

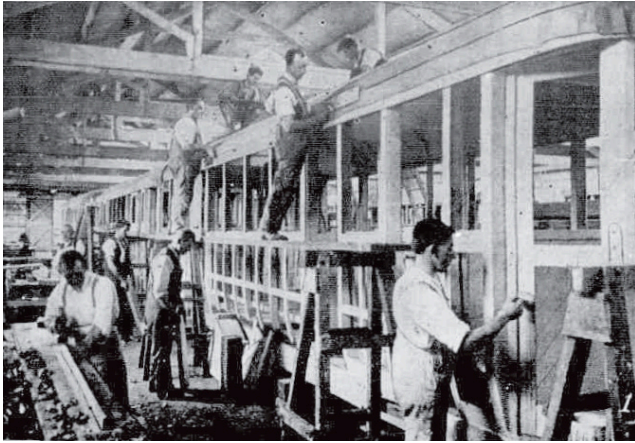
The construction of the Inner Circle, Fitzroy and Whittlesea rail lines was completed in 1888 and 1889, two to three years after the tramway commenced. By contrast, these lines were poorly patronised from the first years. The Fitzroy line closed to passenger traffic after just four years but continued as a goods line until its full closure in 1981.

Part 2: Holden Street car building works (1920-1926)

By 1920 Melbourne's ageing cable tram network was straining under the load of a growing population. The task of modernising and extending the tram network was handed to the new Melbourne and Metropolitan Tramways Board (M&MTB). This task would bring some major challenges – one being the need to rapidly enlarge its fleet of electric trams.

The Board would soon estimate that it required nearly 60 extra electric trams per year for the next 15 years. However, it did not have the in-house manufacturing capacity to satisfy this demand.

The Nicholson St cable tram factory/workshops in North Fitzroy was cramped and unsuitable for electric tram construction. Likewise, the municipal tramway depots it was acquiring had limited space. Construction of their tram bodies had been outsourced to private companies with only the electrical and mechanical equipment installed at their depots.



ABOVE: Tradesmen assemble and paint new Q class trams inside the Holden St car building works (1923).

Photos: The Australasian, 20 January 1923

How many trams?

In 1922, the M&MTB publicised its calculations for determining the number of new electric trams required within 15 years.

By 1937 the electric tram network was expected to cover 145 miles (233 km). At 6.3 cars per route mile, 915 cars would be required. By adding another 10% for spares and deducting the 201 trams in service or under construction, this calculation showed an extra 805 trams would be needed.

The annual passenger count was predicted to rise from 210 million to 383 million by 1937. Allowing for each tram carrying 360,000 passengers per year, 1070 trams would be required. By deducting current electric trams and cable cars, this calculation showed an extra 825 trams would be needed.

Both calculations indicated the need for just under 60 new electric trams per year.

(The Argus, 4 July 1922)

An additional construction workshop was required as soon as possible – the timber store on Holden St at the rear of the North Fitzroy cable car shed became the short term solution.

Advantages of site

The Board's choice of the Holden St site presented several advantages. It was on land already owned by the M&MTB and it was located at the southern terminus of the new electric line to East and West Preston which passed the Preston Depot. (Note: Preston Depot was renamed Thornbury Depot in 1955.) It was also in the vicinity of the Nicholson St cable tram factory/workshops and its workforce.

Work began quickly. The Board's 1920-21 annual report recorded that an erecting shop for new tramcars was in operation using the existing timber store. The site was referred to as the Holden St car building works.

A year later, the Board's 1921-22 annual report noted:

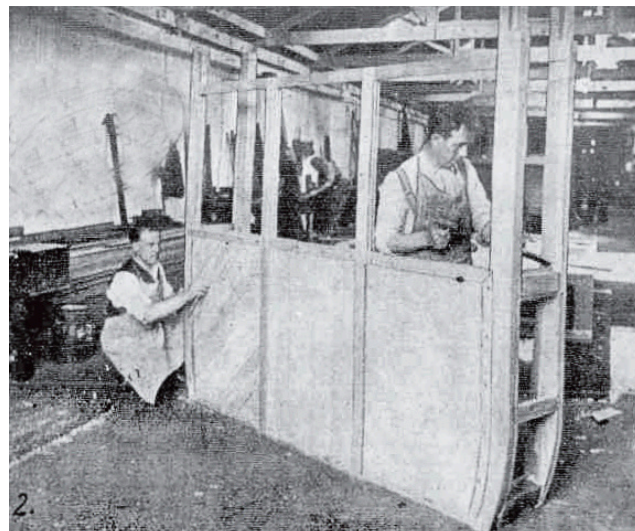
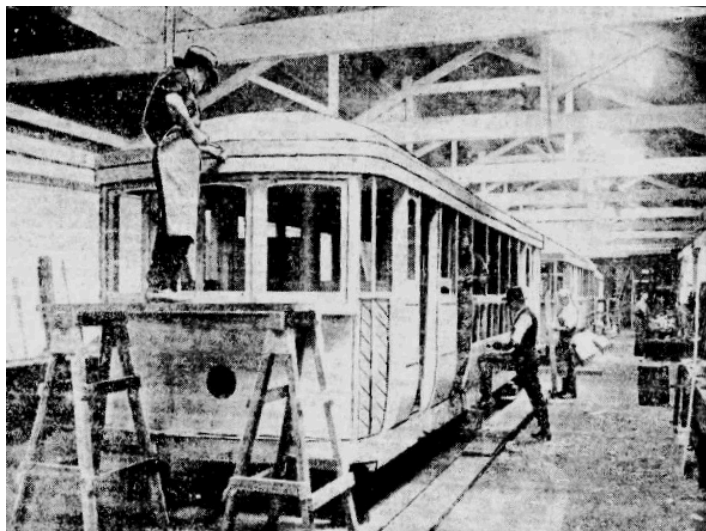
The car building works in Holden Street, Fitzroy have been extended, and the building of rolling stock is being pushed on as rapidly as possible. ... Three straight sill combination car bodies have been constructed ... and nine more are in the course of construction. The machining of materials for 12 additional bodies has been commenced.

The rolling stock referred to were the 24 single-truck Q class electric trams numbered 139-150 and 190-201. These were modelled on the K and R class cars built by James Moore and Sons for the Prahran and Malvern Tramways Trust and the Fitzroy, Northcote and Preston Tramways Trust.

The Q class cars were being constructed and put into service while the Board finalised its design for Melbourne's new higher capacity bogie tram, the W class.

Site layout

There are few details or photographs of the cable car shed and car building works. However, newspapers, street plans and title deeds have provided some information. As indicated in the reconstructed site plan on page 6, the car building works was located to the west of the car shed.



ABOVE: Tradesmen assemble new Q class trams inside the Holden St car building works (1923).

*Photos: The Argus, 16 January 1923
The Australasian, 20 January 1923*

The car building works was perhaps 60 metres in length and 18 metres in width. This allowed for the installation of two tram roads (tracks) with space either side of each road for the car builders, their equipment and materials.

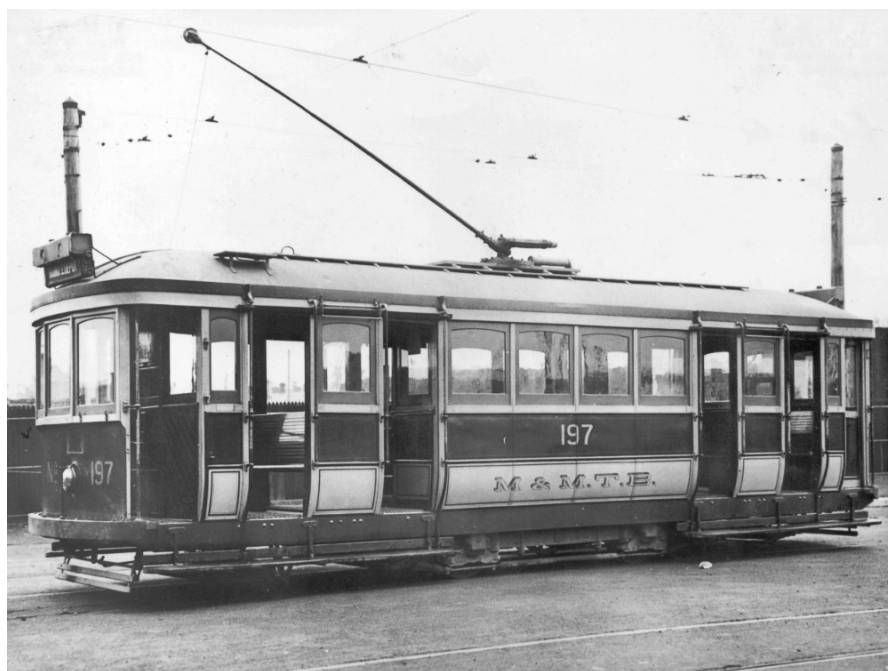
The full length of the shed would have permitted four single truck or three W class cars end to end on each road, but space at one end was likely occupied by equipment and amenities. The tram bodies sat on a form of workshop wheels and were moved along the roads by a tractor.

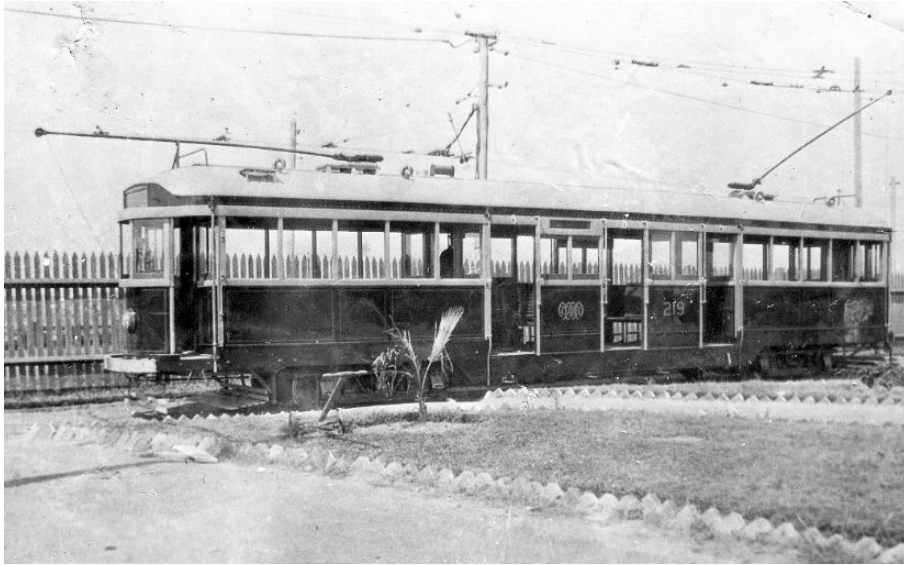
The pitched roof was low as can be seen in the accompanying photos of cars under construction. This was limiting for a car building works as there was no ability to lift car bodies for the installation of electrical gear and bogies. Even the fitting of trolley poles may have been difficult.

The roof frame of the car building works looks similar to that of the adjacent cable car shed depicted on page 5.

RIGHT: Q class 197 at South Melbourne Depot (1925).

*Official M&MTB photograph,
Ron Scholten collection*





ABOVE: W class 219, the first W to be constructed, in the Preston Depot yard (1923). Note the longer trolley poles.

Correction: In the September 2019 edition of The Bellcord, the location of the photo above was mistakenly listed as the Holden St works.

*Official M&MTB photograph,
Public Records Office Victoria*

Building W class trams

The design of Melbourne's W class tramcar was the work of the Board's chief engineer, T P Strickland. His career with the M&MTB and his design work of the W class tram are outlined in Russell Jones's article, [T P Strickland: Designer of the W class tram](#), on the museum's website.

The construction of the first two W class cars, later numbered 219 and 220, was undertaken at the Holden St car building works. In late 1922 as the design was being finalised, a new heavy steel plated chassis was constructed. It was wider than previous chassis with heavy welded and riveted bolsters to accommodate the new bogies.

One or perhaps two sets of bogies with 40 hp motors were imported from New York and a licence obtained to manufacture copies for use in Melbourne. After a couple of months of experimentation on the new chassis to give the correct placement of the bolsters, a second chassis was constructed.

The bodywork for the first car was completed by May 1923. Painting and installation of electrical equipment was undertaken either at the Holden St works or Preston Depot. A shipment of trolley poles and bases from the USA was delayed until September 1923, so 219 was initially fitted with a set of longer trolley poles. These became available when two Birney cars were fitted with bow collectors for the Power St, Hawthorn shuttle service.

Track connection

Before the car building works was directly connected to the electric track in St Georges Rd, tram transfers to Preston Depot and other locations were often undertaken using a rubber-tyred road trailer pulled by horses.

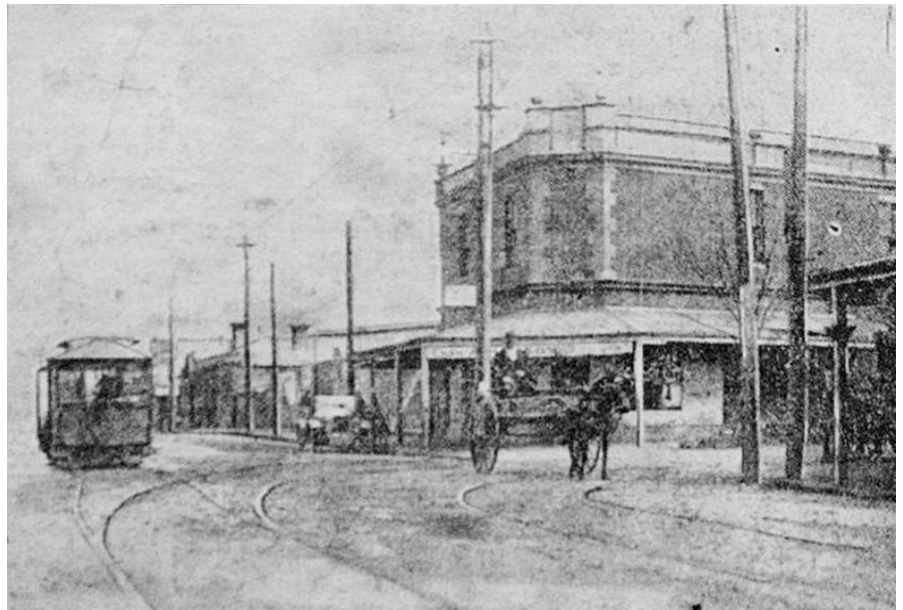
Then in the Board's 1922-23 annual report, it was noted:

Arrangements are being made to install track work which will facilitate the removal of cars to the Preston Depot, where the painting and electrical equipping will be carried out.

RIGHT: A cable tram at the Barkly St terminus in St Georges Rd, North Fitzroy and the newly extended electric tracks into Barkly St (September 1923).

Note the track connection from the cable track to the electric track. The wall and chimney of the car shed can be seen beyond the tram.

*Photo: The Argus,
18 September 1923*



This connection was made in September 1923 as illustrated in the photograph above. Both tracks of the Preston electric tram terminus were extended into Barkly St and then to the car building works. No layout diagram of this track has been located.

BELOW: Two W class cars during construction under the low roof of the Holden St works (1924-26).

*Official M&MTB photograph,
Public Records Office Victoria*



The first 200 W class cars

Road testing of 219 began on St Georges Rd to ensure that all features and specifications were correct and to instruct senior drivers in this new type of tram. Car 220 was completed in October 1923 and both cars were transferred to Malvern Depot over the 1923-24 summer holiday period for service on the Glen Iris line.

The Holden St works then commenced construction of the chassis and bodywork for the next ten trams built to the same pattern. While references quote slightly different figures, it appears that the first 30 W class cars (numbered 219-248) were fully constructed at Holden St car building works.

Holden St was then involved in the full or partial construction of an additional 30 or so bodies in the 300 series, some of which were completed at the newly opened Preston Workshops. The precise details are unclear.

Holden St's output could not meet Melbourne's need for new trams. So the Board advertised in Victoria and interstate for private companies to tender for the manufacture of over half of its first order of 200 W class trams.

RIGHT: W class trams under construction at the new Preston Workshops (November 1926).

*Official M&MTB photograph,
Mal Rowe collection*



At a time of high unemployment, this brought outcries in the press and parliament to keep local jobs for local men. The contracts were awarded to James Moore and Sons of City Rd, South Melbourne and Holden Motor Body Builders of Port Rd, Woodville, South Australia. However, the details of this outsourcing are a story for another time.

Transition to Preston Workshops

While early tram construction work was underway, the Board took an important step to increase its manufacturing capacity. In 1923 it purchased a 16 acre (6.5 hectare) site at the northeast corner of St Georges Rd and Miller St in Preston, opposite the Preston Depot.

Between 1924 and 1928 the extensive Preston Workshops were constructed. As each building was completed, it was brought into use.

In 1925 with the opening of the paintshop, the painting of completed bodies from Holden St and James Moore and Sons in South Melbourne was assigned to Preston Workshops. In 1926 *The Argus* reported:

Rapid progress is being made towards the completion of the new tramway workshops at Preston. Practically all the wood working plant from the Fitzroy (Holden St) workshops has now been transferred to Preston and one of the heaviest car building programs yet attempted is now under way.

Many new electric services will shortly be begun and dozens of new cars are being constructed to provide the services. Many old cars from various parts of the electric system are also in the shops for reconditioning. The erection of a large timber seasoning and storage shed, the largest addition to the equipment at Preston, is well advanced. (*The Argus*, 13 May 1926)

Once Preston's bodyshop, engineering shop and foundry were completed by 1926, equipment from Holden St works was transferred to Preston Workshops and the Holden St works was closed.

Disused

The North Fitzroy car shed and cable tram continued operating for a further four years before closing in July 1930. The line was then converted to electric traction and opened in October 1930.

After the closure of the cable tram line, the Holden St site lay disused, apart from the construction of a tramway substation built on the southwest corner of the block. The Board minutes of 19 June 1930 recorded the decision for its construction:

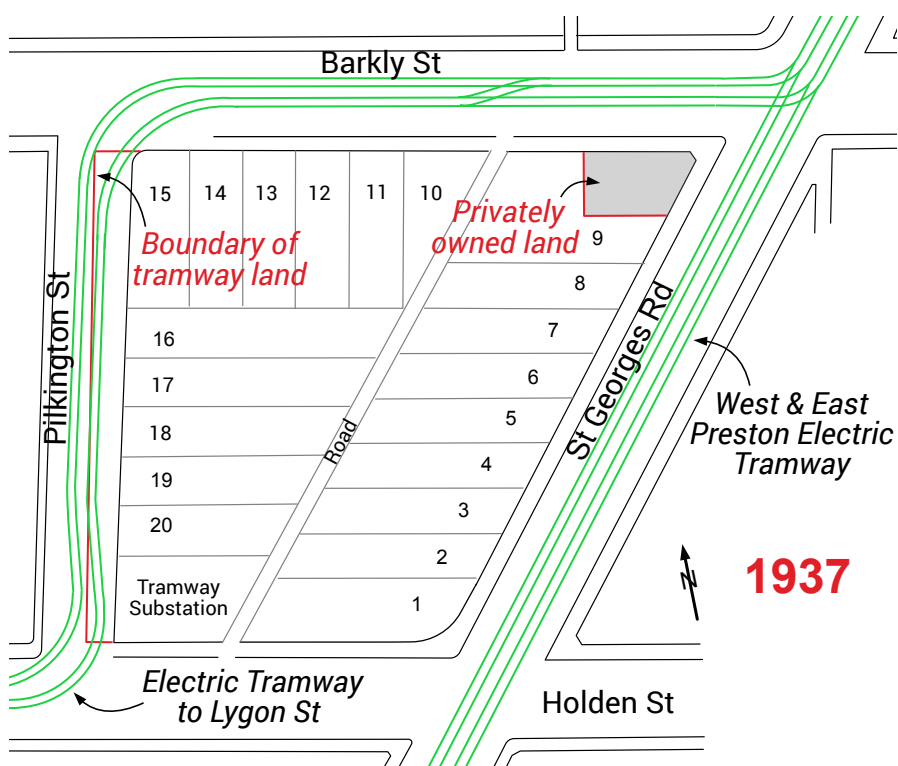
Rectifier Substation Holden Street, Fitzroy – Chief Engineer 7th June, submitting plan showing alterations necessary to the Fitzroy Depot building for housing the plant of the Holden Street Substation. The estimated cost being £450. Recommending the work be carried out by day labour. Recommendation that same be approved.

The substation came online in time to power the new electric line. The Holden St-Brunswick Rd electric line that had opened in 1925 appears to have been powered from another source.

Part 3: Land sale (1937 and 1940)

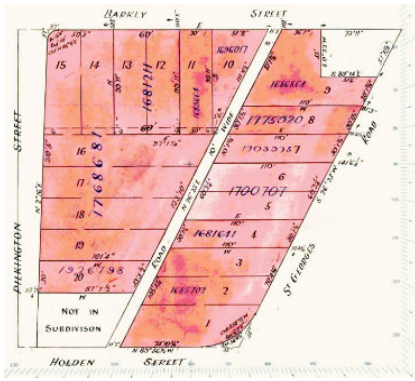
In 1937 the Board subdivided most of its land, except for a narrow strip along the western boundary which had been given over to the widening of Pilkington St. Such subdivision of land before its sale was uncommon, as most of the Board's surplus land was sold as a single lot.

The subdivided blocks were auctioned in 1937 and 1940 for commercial and residential development.



RIGHT: Reconstructed site plan showing land subdivision and track details (1937).

Source: Certificate of Title,
M&MTB drawing,
Rob Green collection



ABOVE: The site plan from the Board's Certificate of Title dated 24 November 1937, recording the new subdivision.

Source: Public Records Office
Victoria

Results of a first auction appeared in *The Argus*, 20 December 1937.

A portion of the subdivision of the site of the old cable tramway depot at the corner of St Georges Rd and Barkly St, North Fitzroy was offered at auction on Saturday afternoon.

Five of the nine allotments in St Georges Rd, between Holden St and Barkly St, sold at from £8/10/- to £14 a foot. Each block was about 30ft by 110ft. In Barkly St the four lots, 30ft by 100ft, which were offered, brought £7/10/- a foot. Sales of the nine allotments amounted to £2,700. The auctioneers were J G Membrey and Co, of Queen St.

(Note: 'a foot' meant a square foot, roughly 30 cm x 30 cm.)

Results of a second auction appeared in *The Herald*, 13 March 1940.

A big attendance was attracted by the auction of seven allotments at North Fitzroy by J. G. Membrey and Co. Again bidding was very keen and the lots sold for an aggregate of £2085.

Prices paid were: Barkly St, £10 and £11/10/- a foot; and Pilkington St, £9 to £10/10/- a foot.

Retail shops were built on the St Georges Rd allotments and villa units along the other streets. All remain today.

Few tramway remnants

Few features of the site's tramway history remain, apart from the substation, feeder cables and steel poles in Barkly St, Pilkington St and Holden St.

However, out of the public eye, there is another remnant to be found. Several short lengths of cable tram track including a slot beam lie embedded in concrete on the site.

How this came to be here and its connection to the cable car shed are not known. But it is an interesting footnote to the tramway history of the site.

RIGHT: Several short lengths of cable tram track with slot beam embedded in concrete at the Holden St site in North Fitzroy (2020).

Photo: Brian Weedon



Acknowledgements

Our thanks to Norm Cross for the use of his research into W class trams, which he has undertaken over many years. Also, our thanks to Rob Green for his research material on the Holden St site.

Geoff Brown, Brian Weedon and Warren Doubleday

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M&MTB land titles, Public Records Office Victoria

M&MTB track maps

Newspapers (as noted), National Library Australia

North Fitzroy to Merri signal diagram, Victorian Railways

Royal Commission on the Railway and Tramway Systems of Melbourne and Suburbs (1911)

Sands and McDougall directories, State Library Victoria

RIGHT: S class 160 waits in Barkly St before its shuttle trip to Lygon St via Pilkington St, Holden St and Brunswick Rd.

West Preston bound W2 class 455 passes by in St Georges Rd (November 1941).

Photo: Wal Jack



Next edition: Holden Street's Lost Line

In 1925 as the manufacturing work at Holden St was being taken over by Preston Workshops, the M&MTB opened a new tramline along Holden St and Brunswick Rd between St Georges Rd and Lygon St, East Brunswick.

It began as an integral link in Melbourne's expanding tramway network, but by 1930 it had lost its strategic importance and fell into slow decline. The line survived in varying forms until 1976.

The history of the lost Holden St line will feature in the next edition of *The Bellcord*.

The Best Student Job in Melbourne



ABOVE: Kew Depot track fan and running shed (1975).

Photo: Ron Scholten

BELOW: M&MTB Head Office at 616 Little Collins St.

Photo: M&MTB Annual Report (1937)



When I was attending my first year at Monash University as a science student in the very late 1960s, word came to me that the best holiday job around was as a tram conductor. The Melbourne and Metropolitan Tramways Board (M&MTB) and the union welcomed student 'connies' on full pay, including penalties for extra shifts.

Many of the full-time conductors were parents of school age children and the uni students made it possible for them to take their annual leave over the main summer holidays. The Board was doubly happy because staffing was then easier to manage over the rest of the year.

Some older students became drivers, but I was only 17 years old at the end of my first year at Monash and one had to be 20 to drive.

Winning the role and starting work

The first step was to acquire this coveted role. That involved queuing up outside the M&MTB headquarters in Little Collins St near Spencer St early on a chilly spring morning.

I arrived on the first train from Blackburn at about 5 am but I was well down the queue – about number 30 as I recall. However, I was successful and was assigned to Kew Depot. It was not my preferred option of Camberwell, but was the next best for me.

It was made clear to me that Major General Risson, the chairman of the M&MTB, ran a clean-shaven army and that I would report for duty minus my student facial hair, well groomed and with 'shortish' hair. I figured this regular shedding of my Monash persona was a worthy sacrifice for the road out of student destitution.



ABOVE: W2 class 532 bound for North Balwyn passing trackwork on High St, Kew (1978).

Photo: David Featherstone

Kew Depot Routes

Route 42: City – Mont Albert, now extended at both ends as route 109

Route 48: City – North Balwyn which ran along Flinders St and Spencer St

Route 79: North Richmond – St Kilda Beach

I duly reported for uniform fitting and classroom training over a couple of days in late November and then commenced work as a trainee at Kew. Training involved a week or so on the trams under the supervision of an experienced conductor. Then I was on my own.

A tram system biding time

The tram fleet was all W class back then. There had been no investment in new rolling stock since the W7 class in 1955-56, and virtually no new lines since those years. Tram systems had been ripped up elsewhere at a rapid rate, but Melbourne's trams soldiered on.

My recollection is that the affection Melbourne now holds for its tram network was not so evident then. There was a widely held view that trams were an anachronism that slowed the traffic.

This was not an unreasonable view as private car ownership had increased greatly through the 1950s and 1960s. Peak-hour 'clearways' that removed parked cars from main roads had not yet arrived and tram termini were also the cause of traffic congestion. Also few tram stops outside the city centre offered safety zones for passengers.

Flexibility with shifts and extra pay

As already noted, student conductors were paid the full adult rates of pay, including penalties. Most of the time I was able to work six days a week, with full overtime pay. We soon learnt that the regulars were keen to swap certain kinds of shifts.

Broken shifts, with four hours off over lunch time, were problematic for many of the staff with families, but not such an issue for us – and they paid extra. Women were often keen to switch from evening to morning shifts. I was a typical young night owl so avoiding 5.20 am starts was fine.

As well as the mid-November to February uni holiday period for three summers, I was also able to work during the two term holidays each year.



RIGHT: Trams running in to Kew Depot (1978).

Photo: Trevor Triplov

RIGHT: W2 class 249 on Chapel St, Prahran bound for North Richmond (c1965).

Photo: Ian Saxon collection



The union

An important lesson for us was the role of the union, then rather grandly called the Australian Tramway and Motor Omnibus Employees' Association. We were required to join – and indeed were welcomed. But we soon learnt what membership required.

Only a few weeks into my first summer at Kew, there was a major dispute. On the day of a stop work meeting, a driver disobeyed union orders and continued to drive his tram into the city instead of into his depot at the end of the morning peak.

The depot involved was Glenhuntly and so the four Glenhuntly routes were declared black – no tram could travel over these tracks. This included the Princes Bridge to Prahran route (route 77) that shared much of Kew's route 79 along Church St and Chapel St. I was rostered part of that week on route 79 and so found myself on strike and stood down!

The loss of pay was rather disappointing for a poor student but certainly could not be avoided. After several days the matter was resolved, in part by promoting the driver concerned to inspector. Then services returned to normal.

We university students thus learnt about solidarity, though those of us from Monash Uni were already portrayed in the media and by government as radical student 'commies'. Monash students were leading players in the anti-conscription and anti-Vietnam War movement of those years.

Church St & Chapel St then and now

Route 79 was altered in peak hours and on Saturday mornings to terminate at Brighton Rd as route 78. Those peak hours were quite different from route 78 today. There were still large industrial enterprises in Richmond south of Swan St and to a lesser extent across the river in South Yarra.

Trams left North Richmond at four or five minute intervals with a good number of passengers and by Bridge Rd, just six stops along, they were



ABOVE: Membership badge of the Australian Tramway and Motor Omnibus Employees' Association.

ABOVE: W6 class 982 at St Kilda Beach terminus waiting to depart for North Richmond (1976).

Photo: David Featherstone



fully loaded with factory workers for these enterprises. The onboard chatter was in multiple languages.

At shift changeover times, many trams short-shunted at Toorak Rd or Windsor to return to North Richmond. The industrial buildings have now been recycled as, or replaced by, office parks and apartment complexes and the area has resumed the earlier name of Cremorne.

Passenger demographics

When I worked on the Mont Albert and North Balwyn routes, peak commuter loadings were disproportionately female. I think this arose because it was still uncommon for younger working women, single or newly married, to own their own cars. Whereas for young men, a car had become a highly desired possession. And, of course, most women commuters were young and paid less.



ABOVE: Conductor's ticket wallet and punch (1975).

Photo: John Wayman

Ticketing

The fare system involved sections of about one mile (1.6 km) in length with passengers charged for the number of sections travelled. There were eight sections on the Mont Albert route, seven on North Balwyn and six on Prahran to St Kilda Beach.

Tickets had the section numbers printed along each long edge and there were separate adult and concession tickets.

The conductor punched all tickets at the number of the section in which the passenger boarded. For travel in the CBD only, there was a special city section ticket that did not require punching, to reduce ticketing delays in the city centre.

Trams in bunches

Scheduled short shunting was common across Melbourne tram routes in my years. This was a source of frustration to motorists and crews, when vehicles came right up close to trams that were trying to reverse.

RIGHT: W2 class 490 at Harp Rd, East Kew running in after the evening peak (1963).

Photo: Richard Youl



In my time at Kew, every second tram on the Mont Albert line terminated at Deepdene (route 45) during the day and Balwyn (route 44) in the peak. On the North Balwyn line there was a short working to Richmond (route 28).

A regular problem was the failure to maintain even headways between the city-bound services from the outer termini and those that short-shunted.

In the early 1970s, daytime headways to Mont Albert were reduced from twelve minutes to eight minutes, with the Deepdene short working shortened to Victoria Bridge (today's route 12 terminus) with four minute headways.

If anything, this exacerbated the problem as the inbound lightly loaded shorter run trams frequently came up close behind the much busier trams from Mont Albert.

An enjoyable learning experience

I enjoyed my time at Kew. I felt I was doing real work and being well rewarded.

Fortunately, there were no major accidents on my watch, though there were a fair number of very sudden stops as we travelled along the reserved track in Victoria Pde. There were no traffic lights at most of the crossovers in Victoria Pde back then and motor vehicles would cause minor bingles and passengers to fall inside the tram.

It was good part-time student income. The interactions with the public were never dull, and on the whole we were treated well and made welcome by the full time staff. Starting work at just 17 years of age, I learnt much about real life, both from my depot colleagues and from the many and varied people I met every day.

*Greg Noonan
Museum member*

This description of Headway Recorders appeared in the official bulletin of the M&MTB, 'Tramway Topics', in September 1949.

It described an early form of Automatic Vehicle Monitoring (AVM) that was trialled in Melbourne in that year.

The M&MTB was allocated a limited number of two-way radios in time for the 1956 Olympic Games. However, it did not commence the rollout of AVM to its trams and buses until the late 1970s.

The appointment of Robert Risson as chairman in October 1949 and the Board's need to catch up with deferred capital expenditure after years of austerity were likely reasons for the deferral of headway recorders.

A summary of Melbourne's AVM system appeared in the [December 2019](#) edition of 'The Bellcord'.

*Warren Doubleday
Collections Manager*



ABOVE: M&MTB District Inspector using a car two-way radio to speak with Radio Centre staff at Head Office (1957).

*Official M&MTB photograph,
Melbourne Tram Museum collection*

Headway Recorders

An extract from 'Tramway Topics', September 1949

One of the ideas brought home from the United States by the Board's engineer, Mr. H. H. Bell, Jnr, (son of the then chairman) was the headway recorder. This device when used in conjunction with two-way radio between Head Office and patrolling motor cars, enables traffic interruptions to be spotted almost as soon as they occur. Then effective steps can be taken to deal with the trouble in a fraction of the time used by following the practices of 50 years.

Our Designing and Communications Engineer, Mr. Colin Steele, has with remarkable ingenuity improved, as we think, on the American apparatus and the set he has fabricated has been demonstrated successfully.

The movement of trams in Riversdale Rd was conveyed over the existing telephone line from Hawthorn Depot into Head Office and exhibited on the chart by pen and ink. After giving a completely satisfactory display to the members of the Board, the decoder and recorder were transferred to Kew, where they were demonstrated for the information of the traffic staff.

Plans for the use of the instruments for trams coming into Flinders St from Kew and Hawthorn, as a start, are for the moment being held up through inability to procure the necessary motor cars and radio equipment.

Operation

As the name implies, the recorder checks trams at predetermined points through contacts placed on the trolley wires. As soon as a tram passes under a contact point, a signal is transmitted to Head Office, where the pen and ink recorder marks the movement on the chart.

So long as cars are running to time the orderly flow of the vehicles is there on the chart for all to see. If there is a traffic holdup, then the gap on the chart increases gradually, indicating to the officer in charge, even if a bell did not ring or if the glowing of a red light did not direct his attention to the matter, that there was a traffic lag in the vicinity of the contact.

It would then be for the officer to take action. Calling up the Inspector in charge of the area concerned by radio, he would instruct him to proceed to the scene of the stoppage. The result being that the official would be able to deal with the trouble many minutes earlier than he could do so under present conditions, thus minimising the interruption to the service.

This idea of maintaining an even flow of traffic and of being able to take almost within seconds action to restore normal running is making great headway in the United States.

All the lines in West Philadelphia have now been equipped with recorders, and the necessary work for the extension of the system to all the other major tram routes of the Philadelphian system is now in progress.