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FRONT COVER:

*A coupled set of O class trams headed by car 1105 at Collaroy bound for Manly,
circa 1920.*

D. O'BRIEN COLLECTION

BACK PAGE:

*O type tramcar 977 leads a coupled set bound for Narrabeen at the Ocean Beach
end of The Corso at Manly, between December 1913 and August 1914.*

"TOWN & COUNTRY JOURNAL" FROM V. SOLOMONS COLLECTION



*W2 564 was fitted with a single arm pantograph
for testing overhead wiring converted for panto-
graph operation. The car is seen with the panto-
graph in the raised position at the Metropolitan
Transport Authority's workshops at Preston.*

RICHARD JONES

THE MANLY TRAMWAYS — NSW 1903-1939

E. 1912-1914 THE NORTHERN EXTENSION TO NARRABEEN

By K. McCarthy

The previous parts of this series appeared in this journal in October 1979, December 1980, August 1981 and June 1983. This part deals with the electric tramway extensions in two stages to Narrabeen, depot expansion, and the abortive attempt to develop a general freight service.

The Narrabeen extension of 1913 was the closest point reached by the tramway to the original goal of Pittwater.

Further Extensions Towards Pittwater

During May 1905¹ a review was conducted of the possible routes and gradients for tramway construction beyond North Manly to Newport and Bayview at Pittwater; a distance of 12 and 13 miles respectively from Manly Pier.

The subsequent report stated that the Tramway Construction Committee recommended the construction of a tramway 3 miles from Brookvale towards Narrabeen which could be carried out for under £20,000, exclusive of rolling stock. The Warringah Shire Council would need to grade the side of the road away from the metalled surface for the tramway alignment.

The Committee recommended that the Minister for Works give the project favourable consideration as the service could be remunerative if fares of 1d. per mile were charged. Further extensions beyond the Collaroy-Narrabeen area to Bayview and Newport would require further evidence of traffic potential before this further work could be recommended.

In April 1911² the Minister for Works stipulated that the extension northwards from Brookvale would not proceed unless the Warringah Shire Council improved the tourist amenities at Narrabeen Lakes and were prepared to develop the area as a boating resort. These improvements had to include alterations to the lake entrance to enable free water flow from the sea and maintain sufficient levels to cover the mud flats.

First Sod Ceremony

The Advisory Board's recommendation for the tramway extension had been unanimous³ and on receiving the necessary guarantees from Warringah Council, Minister for Works Arthur Griffith attended the turning of the first sod ceremony on Saturday, 29 July, 1911.⁴

The ceremony was conducted at the side of Pittwater Road near the southern end of Collaroy

Beach. Councillor A Ralston, President of Warringah Shire, handed the spade to the Minister who was assisted by his five year old son Stuart in turning the first sod of earth. Colonel Ryrie MP, Dr Nash MLC, Dr Arthur MLA, Mrs Arthur, G Briner MLA and J McFarlane MLA all witnessed the ceremony.

Arthur Griffith commented that the tramway would be extended to Church Point on Pittwater in the near future and if his government was returned to power in the approaching elections, the land at the Long Reef headland would be resumed from the Salvation Army, the then owners, for the use of the people. He added that his government had recently resumed the Collaroy beachfront for public use and access.

Afternoon tea was served after the ceremony and Arthur Griffith received a presentation of the golden shovel and the ladies were given bouquets. The Minister remarked that he expected the extension northwards from Brookvale to pay its way, as the Manly to The Spit tramway was then paying twelve times the official estimates while the district was generally experiencing a boom type expansion.

Griffith's remark concerning the twelvefold increase to the estimated revenue on the Manly to The Spit electric tramway (opened in January 1911) caused some consternation in the Tramway Department. An archive minute⁵ recorded that the revenue at that stage was only 3½ times the estimate which had been made in 1907.

Colonel Ryrie, the Federal Minister of Parliament said that the proposal to locate the Royal Naval College at Mona Vale had been abandoned but a chance existed that some naval development would be undertaken at the Barrenjoey headland at the entrance to Broken Bay near Palm Beach.

Tramway Construction

The Public Works Department commenced work on the Narrabeen extension by day labour on 12 September, 1911.⁶ The first section consisting of 3 miles 50 chains of single track, however, was only to be constructed as far as Collaroy. The steepest grade amounted to 1 in 19, the sharpest curve 230 feet radius and the track was located as side of road reservation along Pittwater Road.

To keep the permanent way costs within the £20,000 limit it was planned to build the Brookvale to Narrabeen extension as a steam worked tramway. Electrification would have lifted the cost into the category requiring the scheme to be approved by the Public Works Committee.

The tramway extension was built for electric operation, the cost being kept within the £20,000 limitation by dividing the project into two parts and construction the section only as far as Collaroy Beach as a first stage.

The tramway extended beyond the track end at Brookvale terminus and proceeded to the village at Dee Why on the Down or western side of Pittwater Road. The track crossed that thoroughfare near Pacific Parade and proceeded along the shore of Dee Why lagoon and around the Long Reef headland on the eastern side of the roadway. The tramway again crossed the main road between what is now Birdwood Avenue and Alexander Street prior to terminating one block further north between Collaroy and Fielding Streets.

Passing loops were situated at Dee Why near Oaks Avenue and at Long Reef near Hay Street.

As far as can be ascertained a two road dead end terminus existed at Collaroy, with a facing crossover to assist shunting.

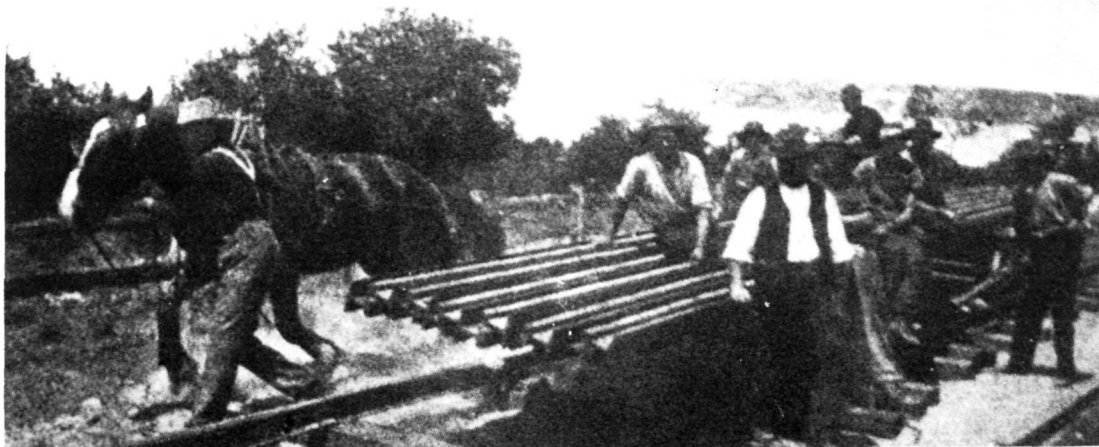
Proposed Steam Tram Operation

As the rail head approached the sea front at Dee Why during the summer of 1911-12, political pressure was exerted to have a temporary steam tram service beyond Brookvale. This proposal was rejected on 1 February, 1912 as Traffic Superintendent John Kneeshaw felt that no spare steam rolling stock was available and services could not be run for the public over a tramway still officially under construction.

The subject of steam trams being employed on the construction beyond Brookvale is a vexed question.⁷ During August 1911 a general review of steam tram rolling stock was made to ascertain which vehicles would be available for the opening of the Speers Point Tramway in Newcastle. Superintendent A. Herrmann revealed on 29 August, 1911 that former Manly steam tram motor 41A, then being used in Sydney to transfer electric rolling stock between the main and isolated North Sydney systems along connecting railway tracks, would be available for transfer back to Manly in order to haul construction trams.

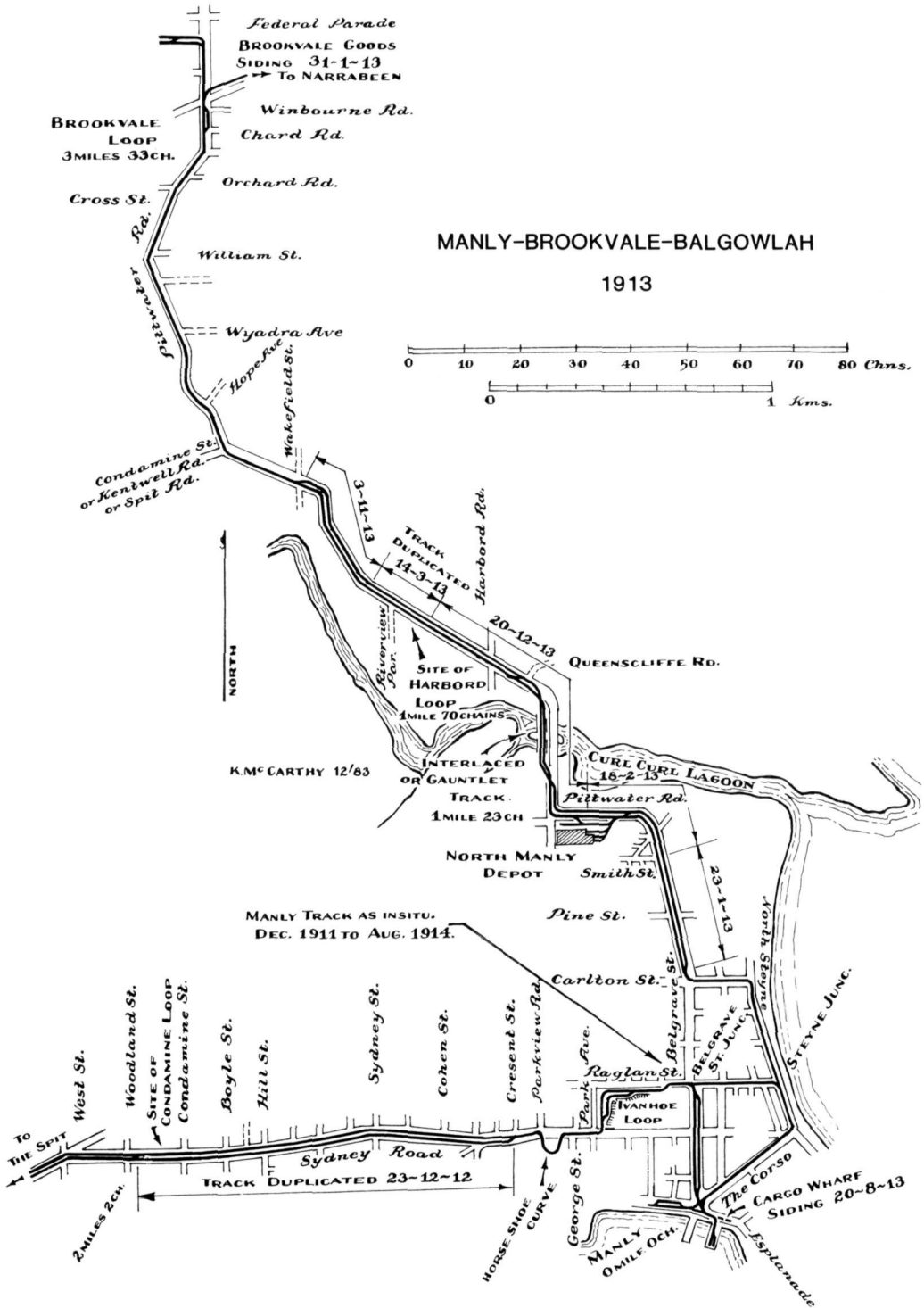
Due to the shortage of steam tramway motors, Herrmann suggested that the Narrabeen extension could be electrified concurrently with the track construction so that an electric ballast motor could be used to bring forward construction materials.

This suggestion was possibly adopted as motor 41A⁸ remained in Sydney until Sunday, 14



"Prince" the government horse pulling 6 tons of rails on a construction trolley up a 1 in 12 grade at Long Reef.

"SYDNEY MAIL" 6 MARCH, 1912



January, 1912 when it was transferred to Newcastle with fuel truck No. 66V to provide increased steam rolling stock for the Speers Point extension.

The total cost of the Brookvale to Collaroy extension, including rolling stock and a branch line and sidings to a goods yard at Brookvale amounted to £31,951-14s-8d.

Catenary Overhead Wires

The tramway beyond Brookvale was provided with catenary type overhead wiring. It is believed that this was done to enable 1200 volt DC traction current to be used beyond the 600 volt system which would change at Brookvale.⁹ "O" type tramcars 1277, 1278 and 1279 entered service on the main Sydney tramways during November and December 1913 equipped with dual 600/1200 volt equipment. These cars never operated on the Manly tramways nor was the higher voltage used there. During 1915, however, 1200 volt trials were conducted on the catenary equipped Ryde to Ryde Station tramway for a short period.

Opening at Collaroy

Following a successful trial under the direction of Mr. Hutchison, Chief Engineer of Railway and Tramway Construction in the Public Works

Department, the Collaroy extension was handed to the Tramway Department on 1 August 1912. Public operation commenced on Saturday morning 3 August when the first tram departed from North Manly Depot for Collaroy Beach at 6.22 am and the first through trip from Manly Pier left at 6.42 am.

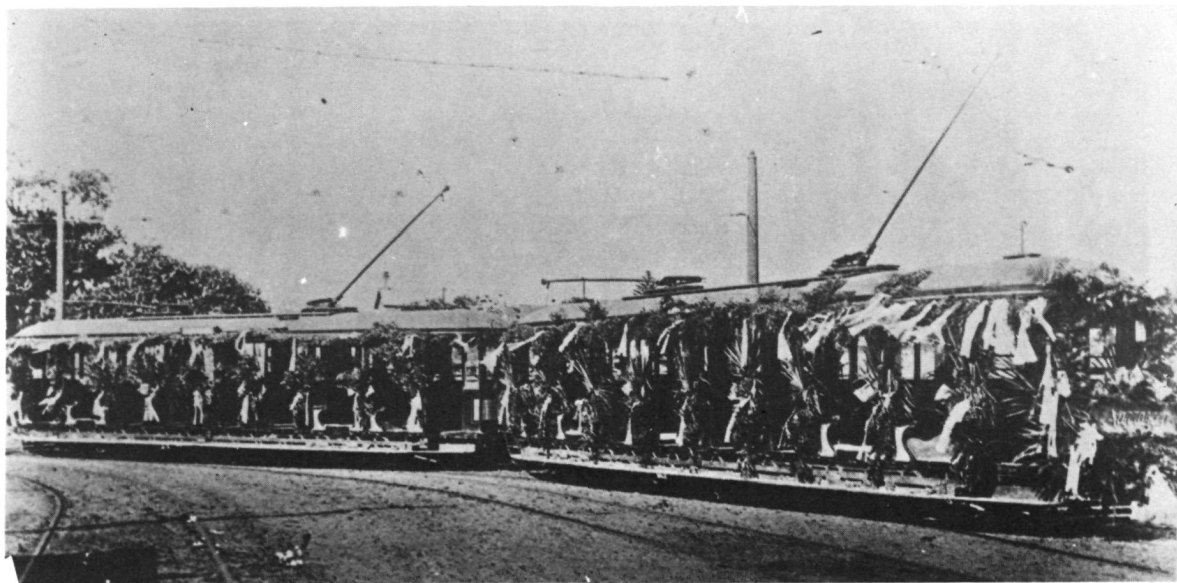
The official opening ceremony was conducted on that afternoon of 3 August 1912. The Minister for Works, Mr. Griffith, accompanied by the official party, departed from Manly Pier at 1.40 pm in tramcars especially decorated for the occasion. The party included Colonel Ryrie MP, J. Nobbs MLA, D. Levy MLA, Sir Allen Taylor Lord Mayor of Sydney, as well as representatives of the Manly, Warringah and Sydney councils.

Mrs. McGowen, the wife of the Premier, opened the tramway by cutting a ribbon stretched across the track with a pair of golden scissors. The ceremony of turning on the new water supply to the Collaroy district was performed at the same time. A hut at the new tramway terminus had been saturated with an inflammable fluid and the water supply was to be declared open as a fire hose connected to the mains hydrant extinguished the burning hut. This met with some problems. Due to low water pressure the hut was completely



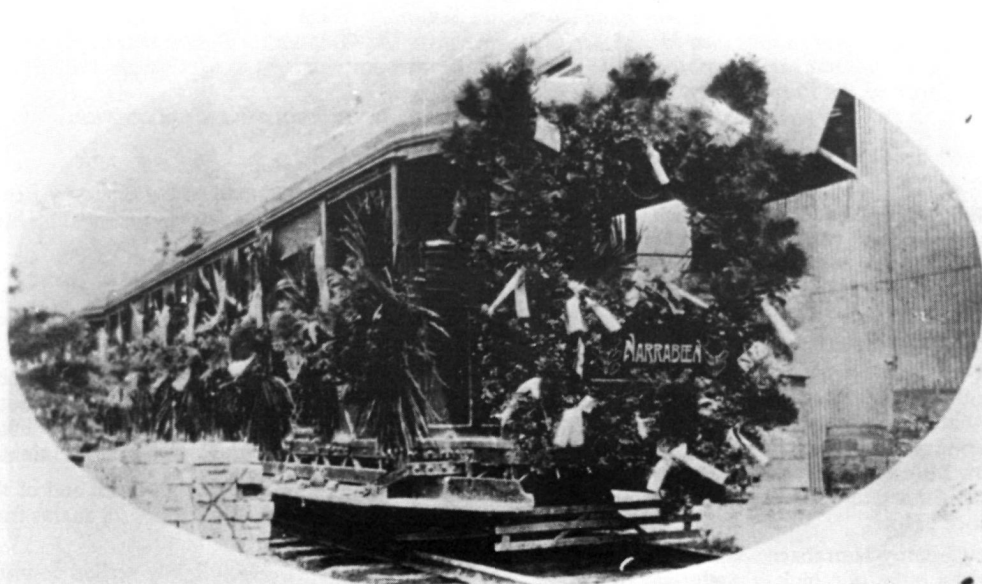
Ballast being broken and loaded on drays at Cables Hill Quarry at Dee Why during the construction of the Collaroy Tramway. This ballast was broken at 1/6d (15¢) per cubic yard.

"SYDNEY MAIL" 6 MARCH, 1912



Coupled set of O class tramcars in Manly Depot yard on Saturday, 3 August, 1912. These trams were decorated for the official opening ceremony at Collaroy Beach.

D. O'BRIEN COLLECTION



The decorated O type tramcars used for the opening of the Collaroy tramway at Manly Depot on Saturday, 3 August, 1912. The galvanised iron walls of the former steam tram shed can be seen at the right while brick stacks are in position for the depot extensions.

D. O'BRIEN COLLECTION



The ribbon cutting ceremony being performed from the driver's window of the decorated O cars at Collaroy Beach terminus, Saturday, 3 August, 1912. The caption on this photo states that Mrs. A. Griffith, the wife of the Minister for Public Works is carrying out the ceremony, while other press reports state that Mrs. McGowan, the wife of the Premier, performed the deed!

"TOWN & COUNTRY JOURNAL" FROM V. SOLOMONS COLLECTION

destroyed by fire before the water jet could be played on it!

This slight problem did not diminish the spirit of the celebrations. Mrs. McGowan received a diamond studded brooch from the Warringah Shire President, Councillor Hewes while Mrs. Arthur, the wife of the local Member of Parliament was presented with a handsome bracelet.

The government had resumed an area of 177 acres at Long Reef and the announcement was made that the local council would develop this tract as a public park. This was later named Griffith Park after the Minister for Works. The official functions concluded that afternoon with a banquet at Bacon's Narrabeen Hotel.

The Collaroy-Narrabeen water supply extension required 4 miles of 6 inch diameter wooden stave main to provide a 250 feet head of pressure. Had cast iron pipes been used, the project would have cost £3,100. The wooden pipes, manufactured by the Australian Wood Pipe Coy. Ltd. amounted to £2,400 and these were tested to a pressure one third greater than the normal load.

Operating Data

The single line sections on the Collaroy Beach extension were divided into the following Staff Sections:—

Brookvale to Dee Why Loop	No. 4
Dee Why Loop to Long Reef Loop . . .	No. 5
Long Reef Loop to Collaroy	No. 6

The running times from Manly were:—

To Harbord Loop	13 minutes
To Brookvale	21 minutes
To Dee Why	28 minutes
To Collaroy Beach	41 minutes

The extension pushed the northern end of the Manly Tramway system to 6 miles 58 chains from Manly Pier.

The tramway traversed lightly settled countryside and this is reflected in the small number of stopping places along the extension of 3.3 miles:—

Between Pine Avenue and Mitchell Road; Victoria Road; Manly Road and Pittwater Road intersection; about 4 chains from Redmond Road;

12 chains from where tramway enters Salvation Army property; Collaroy Street; Fielding Street terminus.

The fourth fare section of 1 mile 70 chains extended from Brookvale to South Creek Road near Dee Why, while the fifth section reached 1 mile 60 chains to the terminus. The through fare was 5d from Manly Pier.

Time Table

The base service to Collaroy from Manly was worked by two trams providing an hourly service, while additional cars enabled a 30 minute frequency to be provided as far as Brookvale throughout the day and evenings on Mondays to Fridays and on Saturday mornings. Due to the tram departures being governed by ferry arrivals this service was wasteful of rolling stock; the Brookvale tram stood at the terminus for 14 minutes while the Collaroy Beach cars waited 34 minutes at that location. Additional trips were provided initially in the afternoon peak period when two departures operated in two divisions.

After Saturday midday and throughout Sundays, a 30 minute frequency was provided between Manly and Collaroy while the Monday to Friday intervals applied on Sunday evenings.

Manly Terminus Changes

From Saturday, 3 August, 1912 trams to and from The Spit were altered on Saturdays and Sundays to approach and depart from Manly Pier

along Belgrave Street. This kept the single track along North Steyne and The Corso free for the heavy Collaroy Beach excursion traffic.

Duplication of the Manly to The Spit Tramway

65 chains of duplicated track was brought into use on The Spit tramway on 23 December, 1912 in time for the holiday traffic. This new track extended from Crescent Street, Fairlight, just west of the horseshoe curve, along Sydney Road to Condamine Loop at Balgowlah. Staff Section No. 3, which previously covered the single track section from Ivanhoe to Condamine Loops, was shortened to cover Ivanhoe Loop to Crescent Street.

The late Mr. Gledhill of the Manly Historical Society claimed that duplicate tracks in Belgrave Street between the western end of The Corso and Raglan Street were available for use from 26 February, 1912 and photos of that period seem to support that claim. Tramway Department records, however, state that this 17 chain length of duplication in Belgrave Street, Manly was not available for traffic until 23 January, 1913.

With the introduction of the new timetable on 10 February, 1913 trams arriving at Manly from The Spit only used the North Steyne and The Corso route between 11am and 4.30pm Mondays to Fridays. At other times the duplicated tracks in Belgrave Street were used for arrivals and departures.

Timetable commencing Saturday, 3rd August, 1912 — Brookvale Line to Collaroy Beach MONDAYS TO FRIDAYS

From Manly: For Brookvale: *6.22amw; *6.31w; 6.42w; 7.12; 7.42; 8.12; 8.44; 9.14; 9.44; 10.14; 10.44; 11.14; 11.44am; 12.14pm; 12.44; 1.14; 1.44; 2.14; 2.46; 3.12; 3.40; 4.07; 4.40; 5.08; 5.25; 5.55; 6.25; 6.37; 6.57; 7.14; 7.44; 8.14; 8.44; 9.14; 9.44; 10.14; 10.40; 11.08; ‡ 11.40pm; ‡ D12.10am.

For Collaroy Beach: *6.22amw; 6.42w; 7.42; 8.44; 9.44; 10.44; 11.44am; 12.44pm; 1.44; 2.46; 3.40; 4.40; 5.25; 6.25; 7.14; 8.14; 9.14; 10.14pm.

For Manly: From Collaroy Beach: 6.57am; 7.57; 8.59; 9.59; 10.59; 11.59am; 12.59pm; 1.59; 2.47; 3.42; 4.42; 5.40; 6.26; 7.29; 8.29; 9.29; 10.15; ‡ 11.10pm.

From Brookvale: *6.14amw; 6.47w; 7.17; 7.47; 8.17; 8.49; 9.19; 9.49; 10.19; 10.49; 11.19; 11.49am; 12.19pm; 12.49; 1.19; 1.49; 2.19; 2.41; 3.07; 3.35; 4.02; 4.35; 5.02; 5.30; 6.00; 6.29; 6.53; 7.18; 7.49; 8.19; 8.49; 9.19; 9.49; 10.19; 10.35; 11.03; ‡ 11.29; 11.43pm.

SATURDAYS

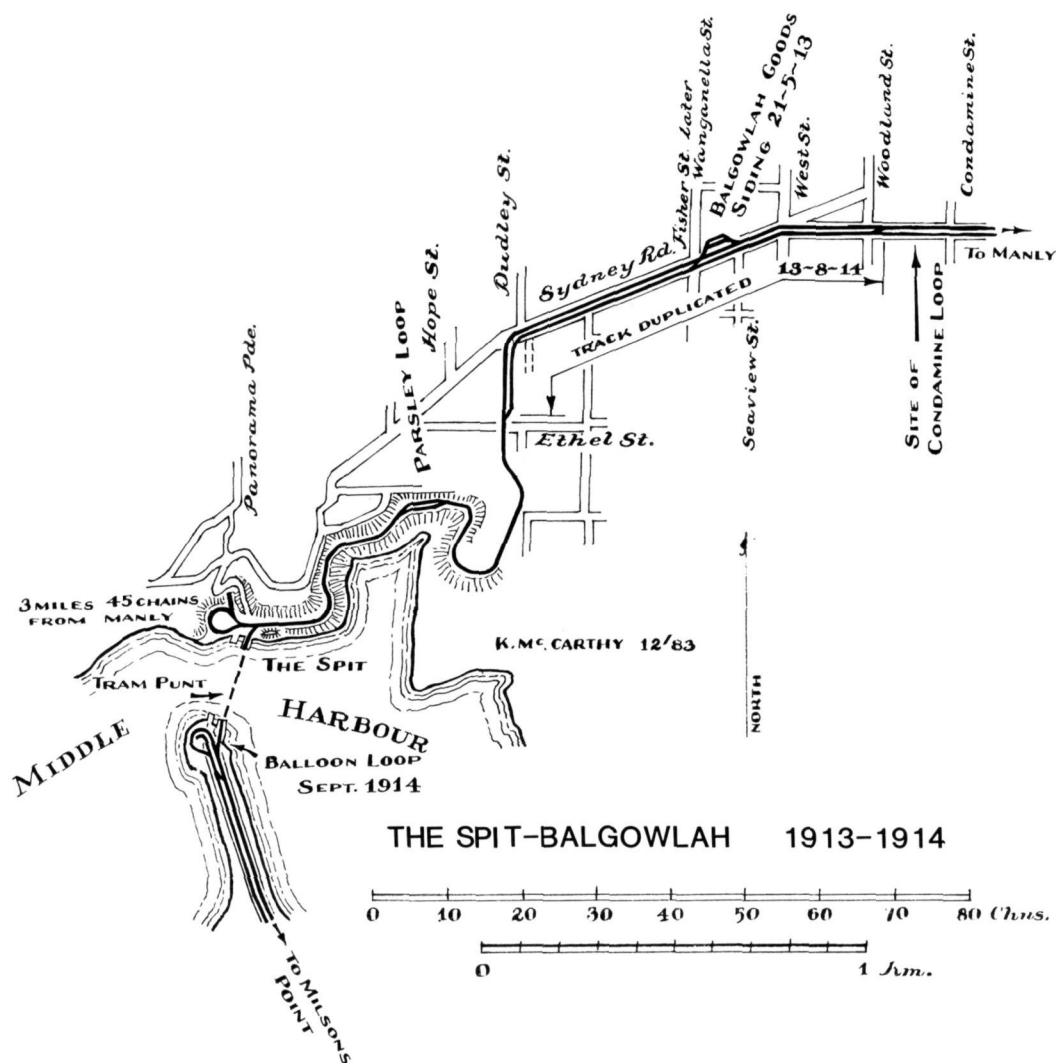
From Manly: For Brookvale: Same as Mondays to Fridays to:— 12.14pm; 12.54; 1.10; 1.40; 2.10; 2.40; 3.10; 3.40; 4.10; 4.38; 5.07; 5.36; 5.56; 6.26; 6.58; 7.24; 7.44; 8.14; 8.44; 9.14; 9.44; 10.14; 10.40; 11.50; ‡ 11.40pm; ‡ D12.10am.

For Collaroy Beach: Same as Monday to Friday to:— 11.44am; 12.54pm; 1.40; 2.10; 2.40; 3.10; 3.40; 4.10; 4.38; 5.07; 5.36; 6.36; 6.58; 7.44; 8.14; 8.44; 9.14; 10.14pm.

For Manly: From Collaroy Beach: Same as Monday to Friday to:— 11.59am; 12.55pm; 1.55; 2.25; 2.55; 3.25; 4.11; 4.41; 5.11; 5.41; 6.27; 6.59; 7.29; 7.50; 8.29; 8.59; 9.27; 10.15; ‡ 11.10.

From Brookvale: Same as Monday to Friday to:— 12.49pm; 1.15; 1.45; 2.15; 2.45; 3.15; 3.45; 4.05; 4.31; 5.01; 5.33; 6.01; 6.31; 6.52; 7.19; 7.49; 8.19; 8.49; 9.19; 9.49; 10.19; 10.35; 11.03; ‡ 11.29; 11.45pm.

Notes:— * From North Manly Depot. ‡ To North Manly Depot. w = Workmen's fares. D = All night fares.



Service Frequencies

When The Spit to Manly tramway opened for service in 1911 the basic frequency was a 30 minute one employing two trams. On Saturday afternoon and throughout the day on Sundays four trams were in traffic providing a 15 minute service crossing at all intermediate loops.

From 11 May, 1913 the winter timetable between Manly and The Spit introduced a 30 minute service on Sunday mornings.

From 5 October, 1913 the summer traffic offering along the new Collaroy tramway required a 15 minute frequency from Manly Pier on Saturday afternoons and throughout Sundays. This timetable required trams to cross at all intermediate loops along the 6 miles 58 chains of single track.

The following running times applied:—

Manly Pier to:	
North Manly	6 min
Harbord Loop	14 min
Brookvale Loop	21 min
Dee Why Loop	29 min
Long Reef Loop	37 min
Collaroy Beach	42 min
Collaroy Beach to:	
Long Reef Loop	6 min
Dee Why Loop	13 min
Brookvale Loop	20 min
Harbord Loop	28 min
North Manly	35 min
Manly Pier	42 min

By November 1913 the peak period services had improved on the Manly to The Spit route when a

third tram was introduced in the morning service to provide a 20 minute frequency. During the afternoon peak period extra trams provided a 15 minute service from Manly to Condamine Street, Balgowlah and from Manly to Brookvale.

Duplication of the Collaroy Line

Portions of the Collaroy tramway were duplicated during 1913:

213 Januray, 1913

Carlton Street to Smith Street along Belgrave Street North 22 chains

18 February, 1913

Smith Street to Manly Depot 20 chains

14 March, 1913

Harbord Loop towards Brookvale (near Western Avenue) 5 chains

3 November, 1913

Near Western Avenue to Manly Sub-station (near Wakefield Street) 12 chains

20 December, 1913

Manly Depot to Harbord Loop 52 chains

This last named section included the two wooden bridges over North Manly (Curl Curl

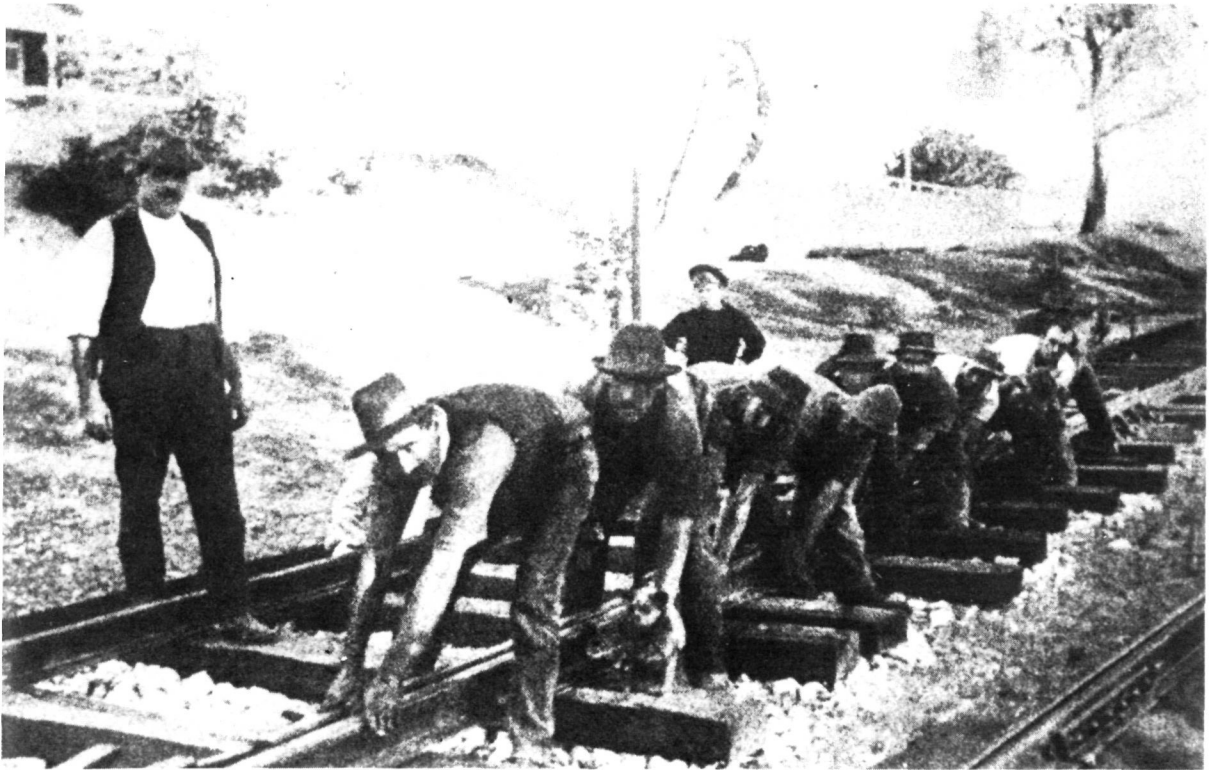
Lagoon. To avoid the cost of duplicating these structures, which were upstream from and parallel to the road bridge, interlaced or gauntlet tracks were constructed over the bridges protected by a staff section.

Collaroy to Narrabeen Extension

Work commenced on the final section of the Brookvale to Narrabeen tramway, that northwards from Collaroy Beach, on 18 August, 1913. This amounted to 1 mile 26 chains of single track which amounted to £13,720, a cost which included a goods depot and siding at Narrabeen.¹¹

The steepest grade on the extension was 1 in 20 and the minimum track radius 660 feet. Catenary type overhead was erected, matching the plant between Brookvale and Collaroy. The tramway was constructed by Public Works day labour and was handed over to the Tramway Department on 4 December, 1913 following a successful running trial.

This new tramway opened for traffic without ceremony on Monday, 8 December, 1913. State elections and a referendum had been conducted on



Tracklaying on the Collaroy to Narrabeen tramway extension.

"SYDNEY MAIL" 19 NOVEMBER, 1913

6 December so the politicians were too busy at the hustings to make a major event of this tramway inauguration.

It seems that the Narrabeen line extended from the western or Down road of the double track Collaroy terminus and an intermediate crossing loop was situated at Ramsay Street known as Pacific Loop. The Narrabeen terminus stood at the southern end of the lagoon bridge and consisted of a two road siding and crossover. The second track at Collaroy remained as a siding but the staff sections were rearranged as follows¹²:—

Long Reef Loop to Pacific Loop	No. 6
Pacific Loop to Narrabeen	No. 7

Pacific Loop was renamed Ramsay Loop on 15 September, 1917.

The extension from Collaroy to Narrabeen was covered by the sixth fare section from Manly.

Regular service to Narrabeen was covered by extending the Collaroy runs. Additional trams

were not required due to the former long standing time at Collaroy terminus.

When a 15 minute service operated trams passed on all loops:—

Manly to

North Manly Depot	6 min.
Harbord Road	14 min.
Brookvale Loop	21 min.
Dee Why Loop	29 min.
Long Reef Loop	37 min.
Pacific Loop	44 min.
Narrabeen	50 min.

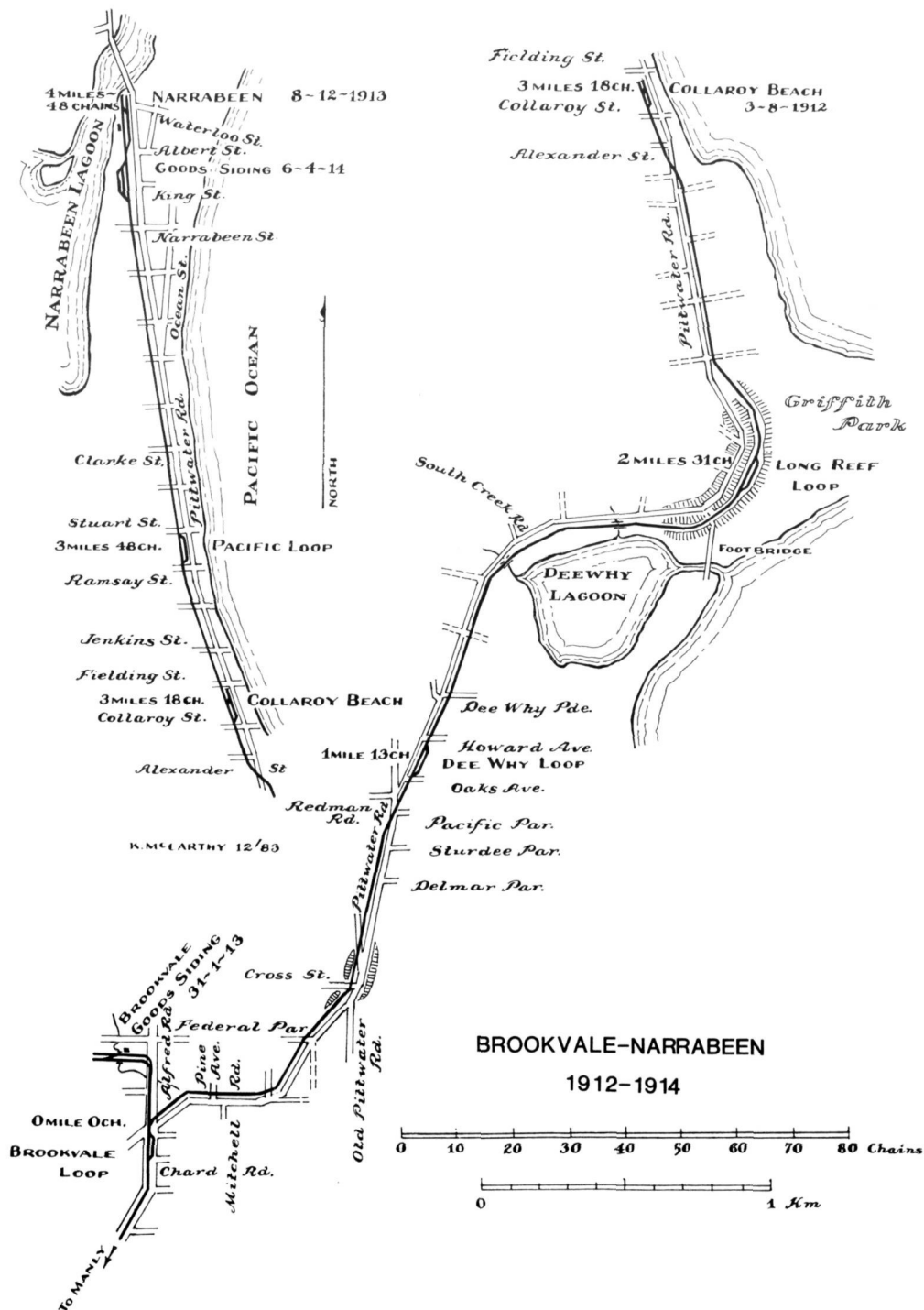
Narrabeen to

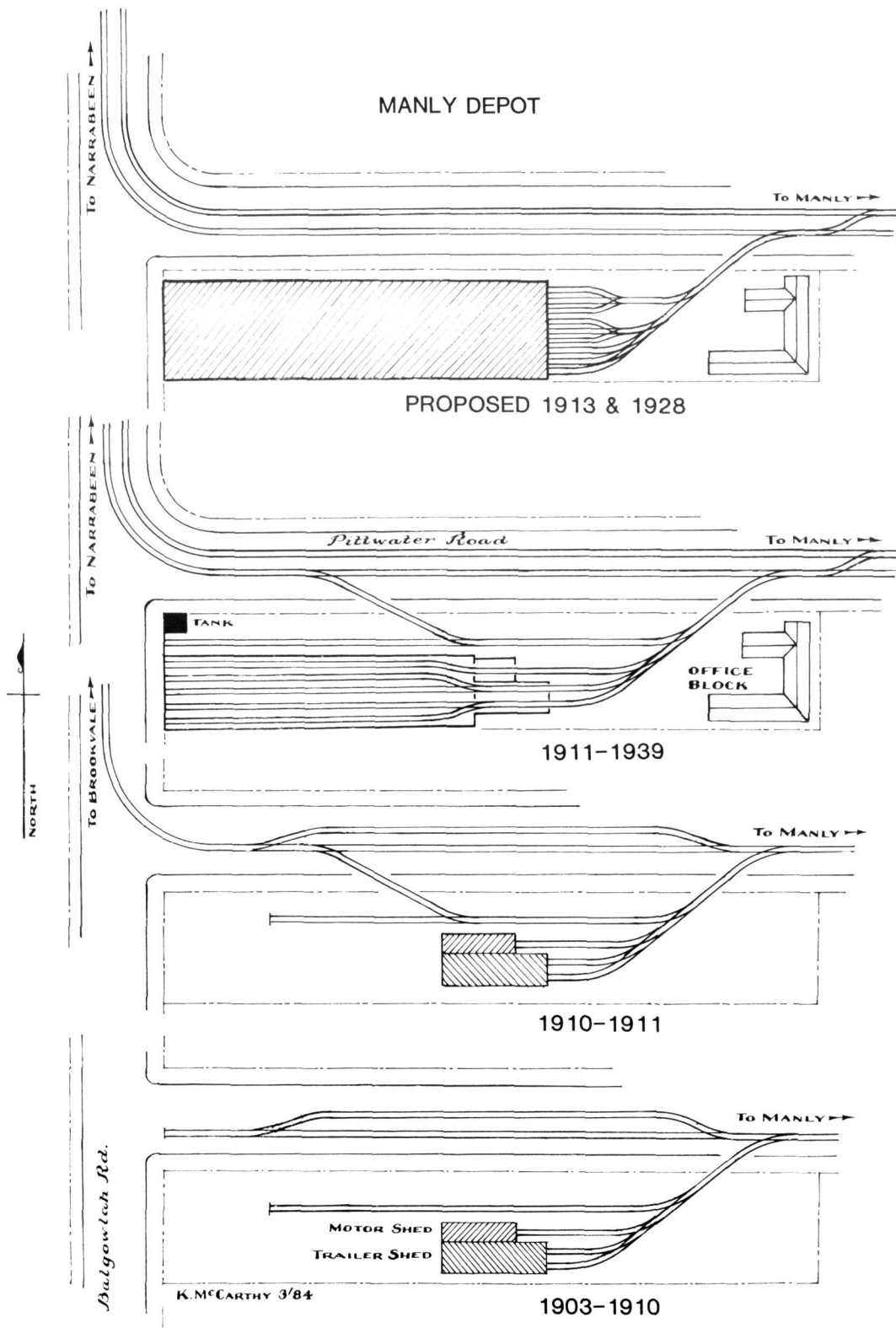
Pacific Loop	6 min.
Long Reef Loop	14 min.
Dee Why Loop	21 min.
Brookvale Loop	28 min.
Harbord Road	36 min.
North Manly	43 min.
Manly Pier	50 min.



Butt welding the rails on the Collaroy to Narrabeen tramway extension by the Company which holds the Australian patent of the Thermit system.

"SYDNEY MAIL" 19 NOVEMBER, 1913





When a 30 minute service was provided tram times were:—

Manly to

Harbord Road	12 min.
Brookvale Loop	21 min.
Dee Why Loop	28 min.
Narrabeen	49 min.

Narrabeen to

Dee Why Loop	21 min.
Brookvale Loop	28 min.
Harbord Road	37 min.
Manly Pier	49 min.

Further Duplications on The Spit to Manly Tramway

On Thursday, 13 August, 1914 a further duplication of The Spit line was brought into use. This was 61 chains between Condamine Street, Balgowlah and Ethel Street, at the top of the steep descent to The Spit. A crossover was provided near Condamine Street (at Woodland Street), Balgowlah. The long duplicated track which now extended from Crescent Street to Ethel Street enabled 10 minute service to operate between Manly and The Spit when required.

Manly Depot Extensions

The original depot buildings at North Manly (the location had been renamed from Curl Curl during October 1908) consisted of a single track steam motor shed capable of housing four engines and a two road shed to accommodate six trailer cars.¹³

During 1911 the covered accommodation was increased to house 27 electric trams. The roof members, steel joists and cast iron columns for the project were ordered from R. Scrutton under two contracts; number 1 for £722-4s-2d on 13 April, 1911 and number 2 on 13 July, 1911 for £322-14s-4d. The contract stipulated a delivery time of four weeks but the Annual Report for 30 June, 1911 announced, somewhat prematurely, that the depot extensions had been completed by that date.

The new depot building covered an area of approximately 95m x 19m with a 15m x 15m brick tower which housed the water sprinkler tank added in 1920. Portion of the wooden framed corrugated iron-clad steam shed was retained. The electric trams passed through the tunnel-like steam sheds to reach the newer bright five road brick and steel building.

O type tramcars approaching Manly Pier in The Corso. The leading set shows "Collaroy" on the destination sign which helps date the photo in the 1912-13 period.

V. SOLOMONS COLLECTION



Although plans and estimates were prepared during 1913 to demolish the former steam shed and extend the brick and steel structure to house 51 cars, this was never performed. The project was again investigated during 1928 but the steam shed was retained as an annex to the larger building into the bus era of the early 1940's. The steel and brick portion erected in 1911 still stands on the depot site, along with the office buildings erected in 1913.

Goods Sidings

The Port Jackson and Manly Steamship Company operated a cargo service between Sydney and Manly as well as the lucrative passenger operations. A cargo wharf was located at Manly to the east of and parallel to the passenger pier.

As the tramway tapped the "hinterland" of the Manly district three goods sidings were constructed from which trams could carry freight to the Manly cargo wharf for transhipment to Sydney and also for the receipt of goods.¹⁴

Brookvale Goods Depot

The Brookvale goods yard was situated at the corner of Federal Parade and Alfred Road reached by a 12 chain branch line from the Brookvale terminus. The branch and sidings consisted of 19 chains of track and construction commenced by Public Works day labour on 6 July, 1912. The line was completed and handed to the Tramway Department for traffic on 31 January, 1913. The steepest grade was 1 in 24.1 and the sharpest curve 68 ft. radius.

Balgowlah Goods Siding

The Balgowlah goods siding was situated parallel to Sydney Road between Fisher (later Wanganella) Street and Rickard Street. This facility, which amounted to 8 chains of track, was constructed also by Public Works day labour from 9 November, 1912 and completed on 21 May, 1913. The steepest grade was 1 in 18.45, the sharpest curve 52 ft. radius.

From 14 August, 1914 a water tank was available in this yard to replenish street water sprinkler trams while the facility was later developed as the perway and pole store sidings for the Manly tramway system.

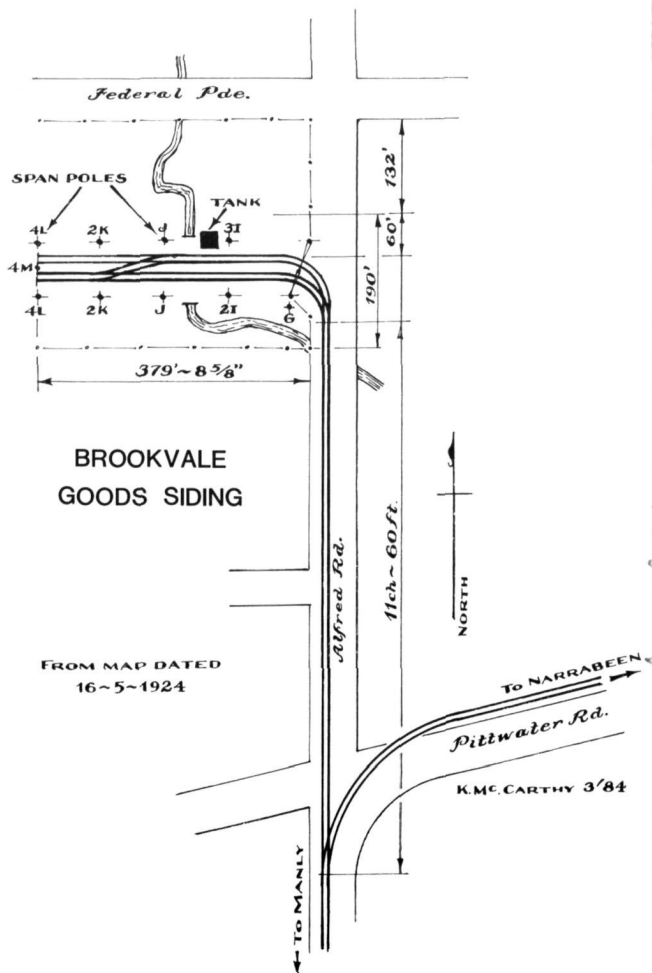
Narrabeen Goods Siding

The third goods siding on the Manly tramways was situated on the western or down side of the main Narrabeen tramway just south of the terminus. The sidings amounted to 17 chains of track with a ruling grade of 1 in 22.75 and the sharpest curve 100 ft. radius. Construction work by Public Works day labour commenced on 24 November, 1913 and the completed facilities

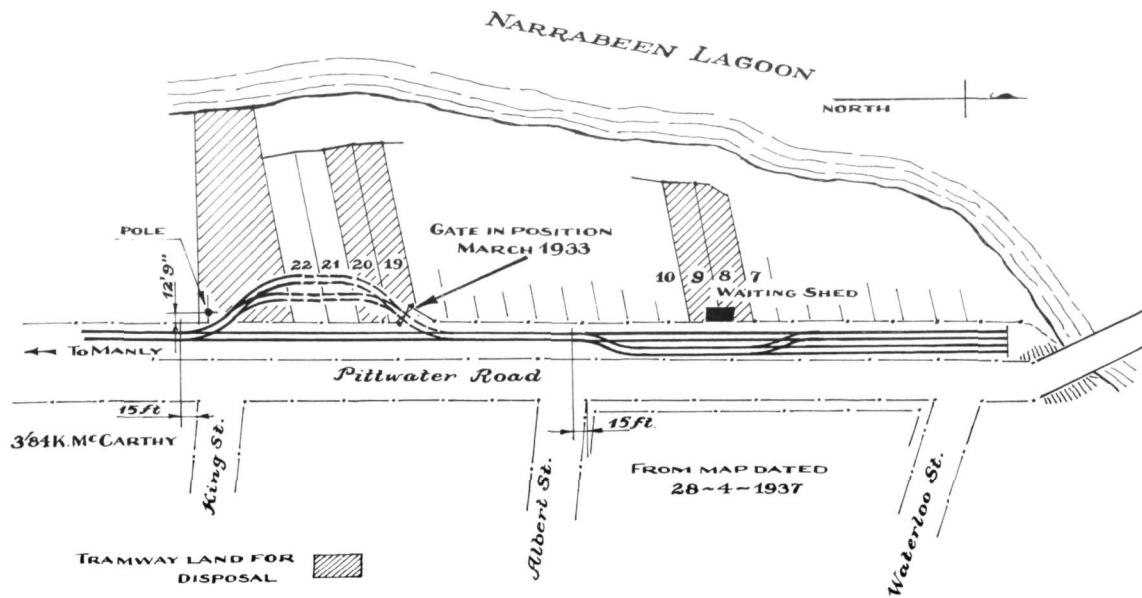
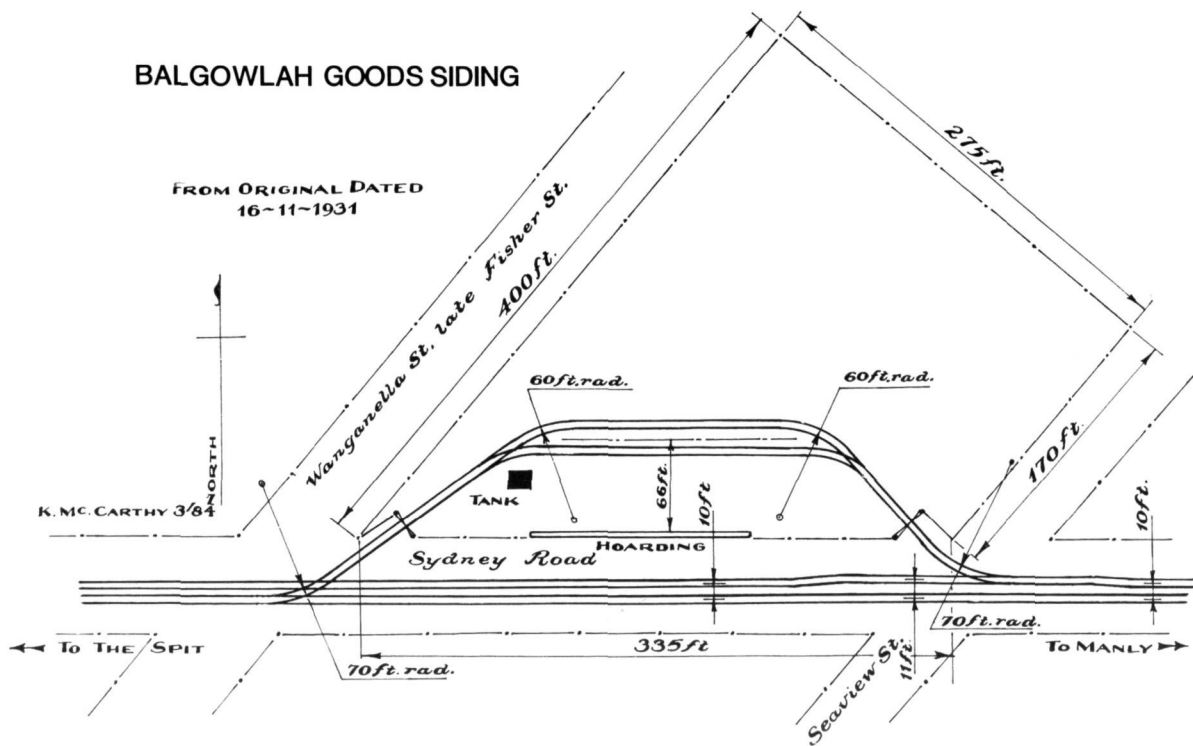


A two section ticket from the Narrabeen tramway, believed issued between August 1912 with the opening of the Collaroy extension and April 1914, when the introduction of "S" series Sunday surcharged tickets saw the withdrawal of the "D" daily series.

V. SOLOMONS COLLECTION



BALGOWLAH GOODS SIDING



NARRABEEN TERMINUS & GOODS SIDING



O cars 1331 and 1102 with breakdown emergency tram (ex C type) 125s at the eastern end of Manly car shed. This photo possibly dates from early October 1939 just after the closure of the Manly tramway. The depressing former steam tram shed and the contrast of the larger brick and steel electric depot beyond are clearly seen.

LATE C.R.G. FIELD PHOTO, REV. C. THOMAS COLLECTION

handed to the Tramway Department on 6 April, 1914.

Manly Cargo Wharf Siding

In the "Daily Telegraph" of 31 July, 1911 the Minister for Works, Mr. Griffith suggested at the first sod ceremony of the Collaroy tramway that the Port Jackson and Manly Steamship Coy. should allow tramway rails to be constructed on the Manly cargo wharf. This would enable the steamers to deliver construction materials directly to the tramcars and so hasten the project.

The branch onto the cargo wharf was made from the "eastern" siding at Manly Pier. This goods siding was used for the first time on 20 August, 1913.

A map dated 5 February, 1913 shows the cargo siding as a two road dead end, while contemporary operating instructions mention the provision of a traverser or transfer table at the end of the jetty. A later map of 1925 reveals that the cargo wharf siding consisted of a single track dead end. The siding rails and traverser were possibly removed by

that time to make room for a second goods shed on the cargo wharf.

Unfortunately the goods service never developed as the P.J. & M.S.S. Coy. would not permit tramway freight cars to stand on the cargo wharf siding as this blocked the free flow of vehicular traffic on the jetty.

In November 1910 Noyes Brothers wanted to carry the sub-station battery from Manly Wharf to North Manly sub-station by tram, but Superintendent John Kneeshaw replied that even if tramway goods trucks were available road cartage would be required over the short distance from the wharf to the tramway as a siding had not been constructed at that stage.

On 9 and 10 April, 1912, for example, during the construction of the Brookvale to Collaroy tramway a "motor" (U type electric ballast tram) and "trucks" (SV type ballast trailers) were used by the Tramway Engineer to haul road metal from the cargo pier to the rail head. It is not recorded if a temporary siding was constructed onto the cargo wharf for these deliveries, or if road vehicles

shuttled from the ship's side to the "eastern" tramway siding.

* * *

The next part of the story of the Manly Tramway System will deal with the closure of The Corso and North Steyne tracks, the major alterations to the Manly Pier terminus, the sub-station system and the proposed extension to the Newport-Bayview district on Pittwater. The early rolling stock changes will be listed, but unfortunately full details of the electric trams attached to North Manly Depot are not available for the period 1912 to 1922.

The writer again thanks Rev. C. Thomas and Messrs. D. Keenan, R. Willson, D. O'Brien, V. Solomons, K. Magor, C. Woodside, D. Greenwald and the late P. Gledhill and C. C. Singleton for the assistance given in the preparation of this series.

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12. A list of "facing points" published on 14-1-1916 reveals that the "down" track through Collaroy had two facing points entitled "Collaroy A" and "Collaroy B". This possibly indicates that the siding was fitted with a right hand turnout facing traffic from Manly and a facing crossover. The reason for this layout at what was expected to be a terminus for a short duration is unknown.
13. Transport Correspondence: 8/1546 "Drainage Schemes and Road Widening at North Manly" Tramway Register 11/6937.
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O car 807 is the rear vehicle in a coupled set at Manly Pier about to depart for The Spit. These trams are standing on the cargo pier track at East Esplanade. The photo dates from the 1913-14 period.

V. SOLOMONS COLLECTION

HERE AND THERE

NEWS ITEMS OF INTEREST FROM ALL OVER

Rockhampton

During August the Purrey Steam Tram Restoration Committee received a grant of \$13,600 from the Queensland Bi-Centenary Authority. It is hoped that a further CEP grant may be obtained to engage the services of a boilermaker and a fitter for the later stages of the project.

By late October the steel had been obtained for the main frame side plates and it was planned to commence cutting these members to shape during November. Some frustrating decisions had to be made at that stage. Detailed drawings and a working engine unit had been obtained for the Queensland Railway Purrey cars, which were similar to the street tramway vehicles. Although the overall dimensions of the railway units were similar to the trams and could carry the standard tramway toastrack body, the wheel base of the railway vehicles was 8ft while the tramcars were nearer 6ft 6in (2m).

The 8ft wheel base chassis would offer no complications while working on the QGR railway tracks in Denison Street but if the Council decided to eventually reopen the outer end of one of the former tram routes problems would be encountered traversing such sharp curves as those in Agnes and Ward Streets at "The Range" and the 40ft radius balloon loop at The Gardens.

At the end of October an archives search had found the original tracings of many Rockhampton Tramway drawings so it was hoped at that stage that the detailed tramway power car diagrams would be located to enable the street tramcar vehicle to be reconstructed.

Over the years the nine Rockhampton power cars were rebuilt to such an extent that each one developed an individual appearance which made photo recognition easy. This, however, has created some problems in the restoration programme as it will be difficult to mate, for instance, the apron or



The completed body of Melbourne A class car 242 arriving at Preston Workshops from the Comeng plant at Dandenong on 22 October, 1984.

RICHARD JONES

dash plates of power car 15 (later 9) with the body of car 3!

This project has rekindled much interest in the Rockhampton Tramways. Not only have many photos come to light but minor items such as seats, destination boards, etc. have emerged from treasured hiding places.

The engineering plant of Purrey constructed over 200 steam tram cars between 1887 and 1925. This reconstructed power car in Rockhampton, which will be joined by a matching trailer, will be the only example of that French firm's products when it is completed in 1988.

Glenelg Tramway News

Work is now well under way on the relaying of tram tracks in King William Street, Adelaide. Negotiations between the STA and the Adelaide City Council have extended over eighteen months. In fact the \$500,000 upgrading commenced on Sunday, 23 September, 1984 without Council permission. State Transport Authority Chairman Mr. J. D. Rump stated that the tracks were in such poor condition that reconstruction could no longer be delayed. Mr. Rump expressed concern that the delay could affect the route of the annual Christmas pageant. (The procession ran along the western side of King William Street South, instead of down the centre.)

The new tracks are laid in mass concrete and are placed further apart than previously. This is to allow for a planned median strip, which may also see the return of ornate centre poles to carry the overhead wiring. The concrete relay is slightly higher than the surrounding road surface to allow for improved drainage.

The reconstruction appears to be progressing at a much faster rate than the mass concrete relay carried out in Jetty Road, Glenelg during 1982. Relaying of the down track was completed in October 1984.

Trams overhauled in recent years have had their numbers painted in the middle of the end aprons between the two headlights. This is similar to position of the numbers originally displayed when the cars entered service in 1929. The apron numbers are now being repositioned under the right-hand headlight to accommodate centrally placed traffic warning signs. These "safety" signs warn motorists that it is an offence to pass a stationary tram at a speed of more than 10km/ph.

As part of the Greening of Adelaide programme, some 4000 trees are being planted along the tramline reservation. The plantings are also a South Australian Jubilee 150 project for 1986.

Maylands Horse Tram Depot

The former horse tram depot at Maylands, which was used for many years by the MTT as a per way depot, has been converted into home units. The building, which has a National Trust classification, was sold by the STA in 1980 (See *TW* Dec 1980).

Twelve single bedroom terrace style units and six family units are included in the \$1 million redevelopment. The bluestone barn retains its original wood ceiling beams. The building was designed by Colonial Architect Edmund Wright in 1882.

The State Minister of Community Affairs, Mr Crafter, stated at the official opening: "The new development preserves our heritage and provides public housing at the same time."

Newspapers Change Tune

A recent editorial in the "Adelaide News" relating to a new southern suburban road stated:

"South Australian Governments, regardless of party, have a history of thoroughly bad transport decisions.

"From abandonment of the suburban tram network to closure of the Willunga Railway line, it has been a case of decide in haste, repent at leisure...."

An editorial in the 'Advertiser' on 10 June 1978, the day before the Centenary of Street Transport celebrations, stated under the heading 'The trams we've missed':

"Everybody now deplores the passing of the trams. But at the time, just after the war, it seemed like a salute to progress."

What a pity the media did not hold these views in the mid 1950s!



Melbourne A class car 234 in service on route 42 to Mont Albert on 22 October, 1984.

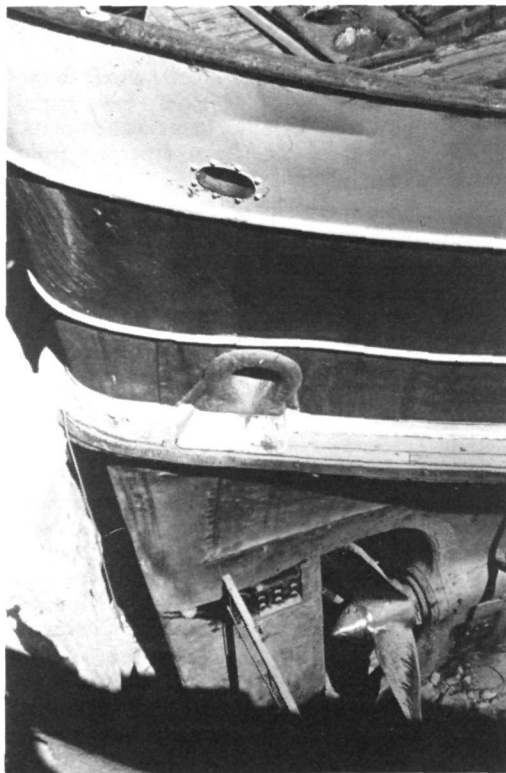
RICHARD JONES

South Steyne

The former Manly ferry *South Steyne* is undergoing an extensive refit at the yards of the Ballina Slipway and Engineering Company on the Richmond River at Ballina on the NSW north coast. However the slip there is not long enough and she was towed about 30 km up river to former Public Works Department dry dock at Rileys Hill, near Broadwater, on 16 March, 1984. This dry dock was not, until recently, long enough to accept the *South Steyne's* 220ft (67m) length. During the last weeks of February several thousand tonnes of rock were blasted out to lengthen the dock. The ferry was placed in position with only a metre to spare when the dock gates closed behind her.

The former Port Jackson & Manly Steamship Co. flagship was scheduled to be moved back to Ballina on a king tide about 25 October. It will spend another six months at the wharf in Ballina being fitted out. It will then steam to Newcastle where most of the electrical work will be undertaken. On completion it is planned to base the ferry in Sydney and to operate charters and cruises, etc.

Incidentally the ferry has been longer in dry dock than planned because the hull work turned out to be more extensive than anticipated. The vessel is being repaired to Lloyd's standards.



Below: The "South Steyne" in the dry dock at Rileys Hill on 29 August, 1984.

Above: It was a tight fit! The bow of the ferry is almost touching the rock wall at the end of the dock. The vessel is double-ended and has a propeller at each end.

BOTH PHOTOS: DALE BUDD





Above: The 2ft gauge Davenport locomotive (B/n 1517 of 1914) in Terralong Street, Kiama during the 125th anniversary parade on 29 September, 1984.

KEN McCARTHY

Davenport Locomotive Returns to Kiama

The 2ft gauge Davenport locomotive (1517 of 1914) returned to Kiama on Saturday, 29 September for the town's 125 years as a municipality celebrations. This locomotive, which was restored by and now operates on the museum tracks of the Illawarra Light Railway Museum Society, was mounted on a low loader road vehicle and displayed in steam in a parade along Terralong Street . . . a thoroughfare along which this engine operated hauling gravel trams from 1914 until 1941.

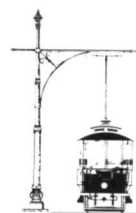
The Kiama 125 Years Committee and the quarry firm of Cleary Brothers made this interesting return of the locomotive to its original working location possible.

Below: The State Rail Authority of NSW Abattoir branch line closed with the introduction of a new suburban timetable on 12 November. Here the last scheduled service, the 4.05pm ex Abattoir platform operated by railmotor CPH 18 in charge of Guard Wayne Clohessy (left) and Driver Dave Boyd, is seen two minutes before departure on Friday, 9 November, 1984.

RICHARD JONES



LOFTUS . . .



South Pacific Electric Railway

New Site.

The main activity is still the trackwork but, with the points leading to Roads 1,2 and 3 virtually complete, work will soon commence on the points leading to Road 4 and the construction of the diamond crossing where the track to Road 4 crosses the triangle track.

Work is currently being carried out on the completion of the curved leg of the triangle, with check rails now being prepared and installed.

The main line track has now been extended from the future site of the former Railway Square waiting shed to the triangle points, and welding and grinding of these points is now well advanced. The wharf point levers obtained from AIS at Port

Kembla will be fitted to these points and to the points at the other end of the triangle connection on the depot ladder track, the latter already having been installed. This should assist in preventing unauthorised operating of the points by visitors and others once we are operating at the new site.

The drainage pipes have now been completed and trench across the front of the depot filled in.

Old Site.

Further re-gauging of the depot special work and the installation of tie bars was necessary, following a minor derailment early in September, on a special hiring day. Hopefully, this will be the last occasion on which this work will be required.



Drainage works in progress across the front of the new depot building.

BOB COWING



The future main line looking south towards the site of the waiting shed. The pointwork for the triangle connecting the Up main line to the depot trackwork is in the foreground.

BOB COWING



On the western side of the new site the depot ladder track pointwork is in the foreground while the curve leading to the Up main line swings off to the left. The line straight ahead will be extended south to meet the main line and form the triangle.

BOB COWING

The restoration and repainting of our W2 392 is nearing completion and it is now proposed to return the car to traffic on Member's Day, 8 December. Through the efforts of Ian Hanson and some other members, replacements have been provided for all of the original metal interior signs which were removed several years ago and replaced with stick-on notices. The only plates yet to be replaced are the Jas. Moore builder's plates and it is possible that these will materialise prior to December. 392 may hold the record for the fastest restoration of any of our trams to date.

L/P 154 will be next in line for attention from Bill Parkinson's "flying squad". This car has been out of service for major body restoration for many years, with most of the work being carried out by Vic Solomons and Chris Jacobs. However, work at the new site and other commitments has meant that the completion of the restoration has been considerably delayed. With the 20th anniversary of the commencement of electric services at the Museum approaching, 154, which inaugurated the service in March 1965 is to be completed in time for the event.

Exchange of Equipment.

During September, the Museum received a request from the Perth Electric Tramway Society to exchange a number of trolley wheels and heads from their Ballarat trams for the trolley shoes and heads removed from the poles of 392 when they

were replaced by trolley wheels. As this exchange was beneficial to both Societies, the swap was arranged. The PETS intend equipping its fleet of Perth, Ballarat and Melbourne trams with trolley bus trolley shoes as standard.

Model Railway Exhibition.

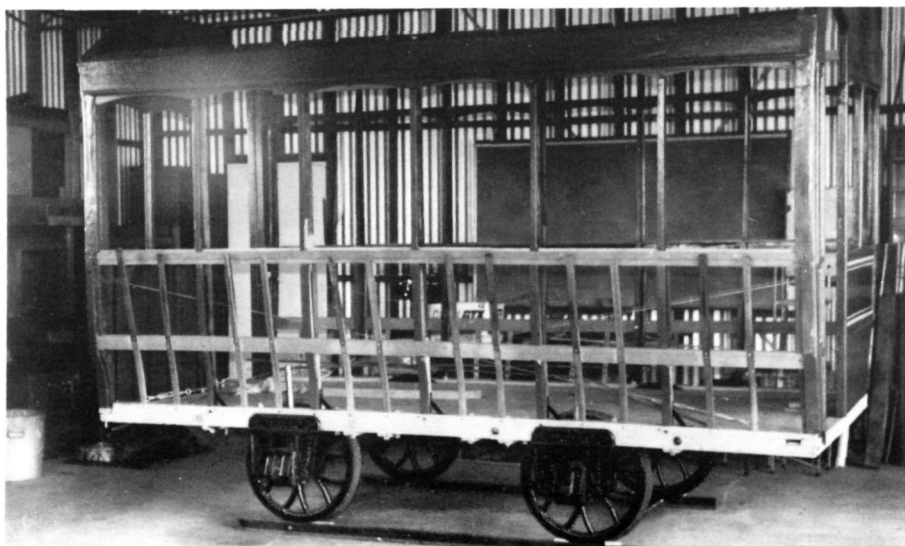
Once again the Society participated in the AMRA Model Railway Exhibition, which, for the first time, was held at Liverpool instead of the RAS Showground, the venue of previous years.

The move to the suburbs did not seem to affect the patronage, as the Exhibition appeared to be very well attended. Our usual stand, featuring the display boards and photographs, plus the signal box bookshop, was well patronised and good takings were recorded for the three days of the Labor Day Weekend, 29-30 September and 1 October.

Cable Trailer No 23

Work has progressed at a satisfactory pace on the restoration of this tramcar at Warrawong High School as a Participation and Equity Scheme Project.

By early November both main body sills had been stressed by the completion of the "queen post" truss system and the sills brought to a level condition. Waterproof ply was fitted to both sides of the saloon body during October while metal cover strips and the long side waist rails were fastened to the sides.

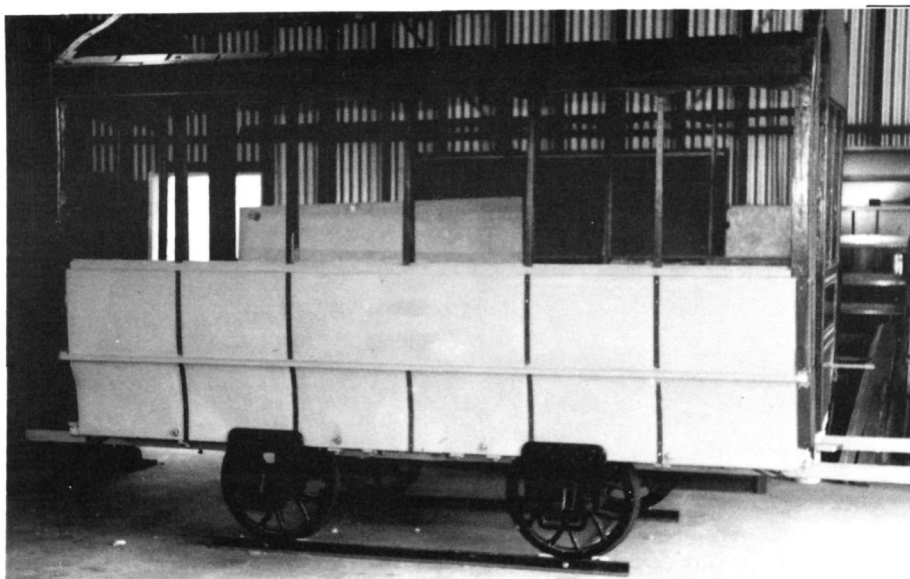


The King Street cable trailer 23. This shows the stage reached in the body restoration by early August, 1984.

KEN McCARTHY

Work then proceeded on to the completion and final fastening of the upper letter boards and weather rails to complete the restoration of the saloon body.

Below: Construction progress on the King Street trailer by mid October, 1984. KEN McCARTHY



BALLARAT . . .



Ballarat Tramway Preservation Society

Annual General Meeting.

Ballarat's notorious weather turned out fine for the AGM on 14 October. An election was held for the six ordinary Board positions, but the office-bearers were returned unopposed. The 1984-85 Board is as follows:

<i>President</i>	F Hanrahan
<i>Ballarat</i>	
<i>Vice-President</i>	L Doull
<i>Melbourne</i>	
<i>Vice-President</i>	P Winspur
<i>Secretary</i>	R Gilbert
<i>Treasurer</i>	C Dean
<i>Ordinary</i>	A Bradley, S Butler, G Jordan,
<i>Board</i>	P McDonald, A Mitchell,
<i>Members</i>	G Wood

After the meeting W3 661 and single trucker No. 18 were run as specials for members. No. 18,

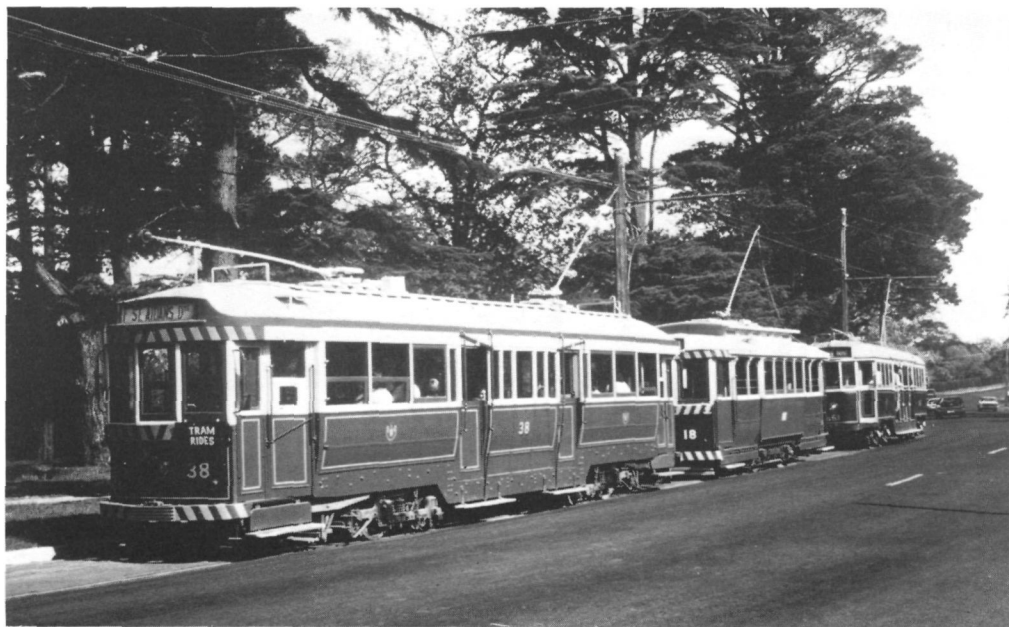
complete with temporary paper numbering, was the centre of interest, as this tram has only run a few trials since its return from Victory Park in 1982.

No. 18

The reglazing of this car, necessary after damage to windows by the weather and vandalism at Victory Park, is now complete. The seat bases have been reinstalled in the saloon, complete with new vinyl coverings as the old coverings were in a bad state of repair. Exterior painting has been completed and only needs the application of the gold lining, numbers and monograms.

No. 26

Cast iron seat brackets have been received, and these will be installed on the dropend seating. Our



Three trams were on the street at one time on the day of the Annual General Meeting. Pictured at Carlton Street terminus are the service car No. 38 and the two special, Nos. 18 and W3 661.

ALAN BRADLEY

thanks go to the Bendigo Trust who supplied the patterns for the seat brackets.

The fascia strip on the side of the tram above the windows has been removed from one side due to its poor condition. The side panels are also being removed.

The bulkheads between the saloon and drop-ends contain a glazed pocket for the sliding door on one side and a fixed window on the other. During work on No. 26 it was discovered that the fixed windows were originally built as drop windows but were converted to the fixed type during the SEC years. The two windows concerned are to be reconverted back to the drop style.

Maximum Traction Trucks.

After the closure of the Ballarat system in 1971, the Brill 22E maximum traction trucks from cars 35 and 42 went to Perth but the Perth Electric

Tramway Society have found the trucks do not suit their reconstruction and operational programme. The PETS agreed to exchange the two sets of trucks, with one set going to the BTPS and the other to the TMSV, for sets of W2 bogies. Ballarat's pair was transported from Perth by the Western Australian transport firm of Sadlier's. They arrived in Ballarat in July and are now stored at Miller Bros., who are currently working on the trucks from car 40.

Vale Bill Jessup.

Members were saddened by the death of Bill Jessup on 8 November following a lengthy illness. Bill was one of the Society's Foundation Members and was on the Board of Management for several years. It was largely due to Bill's enthusiasm that the public meeting was held in June 1971 which led to the formation of the Ballarat Tramway Preservation Society.



BYLANDS . . .



Tramway Museum Society of Victoria

Tramcar News.

L 101: As reported in the last issue, further work has been completed for the swapping of motors and wheelsets from the No. 1 trucks to the 77Es. Both sets of trucks are lined up on the same track with the MV 101 motors now removed from the No. 1 trucks and the 77E trucks partially dismantled. Andy Hall hopes to make the exchange of wheelsets within the next few weeks.

W2 331: The CEP workers have removed the flaking paint, applied red-lead primer and undercoat, and have begun to supply the green and ivory tinted enamel top coats.

Annual General Meeting.

The meeting was held during the evening of Friday 9 November at Boxhill, with postal voting being conducted during the month prior to the meeting.

The results of the elections were:

Chairman Keith Kings
Deputy Chairman Jim Dowel

The other Office Bearers and Directors are:

Secretary *Max Nicholson
Treasurer *Rod Atkins
‡Andy Hall
‡Len Miller
‡Hamish Haugh
‡Tony Sell

General Manager Bob Prentice

* One year to serve

‡ Elected for two years

Cable Trams

During the Melbourne Show Day holiday, the Late Alf Twentyman's cable trams were moved from Northcote to Bylands. A full report of this event will appear in a future issue of Trolley Wire.

Isolating Transformer.

The isolating transformer became defective during the early part of the afternoon of the Melbourne Cup Day holiday, Tuesday 6 November. Throughout the morning, after power had been turned on, small internal rumblings noises could be heard. The system failed with a loud explosion, with the outer casing of the transformer bulging outward.

An in-depth on-the-spot examination by Barry Brooks and Bob Prentice disclosed that no fault can be attributed to any person of team regarding this problem.

Further investigations are under way to find the cause of the failure.

New Toilets.

Recently the new toilet block arrived from the manufacturer in Bendigo. Members are tending to the internal work, the main one being the erection of an internal dividing wall.



Cable trams share the road with horse-drawn and motorised vehicles in this Swanston Street scene. At least eleven cable car sets are visible in this picture.
BOB PRENTICE COLLECTION



ST. KILDA . . .



Australian Electric Transport Museum

Dropcentre 264

Progress continues on the restoration of F1 264. Motorman's platforms and window sills have been constructed from new timbers and new blackwood upright posts have been fitted to the cabins. Much of the electrical wiring has now been completed. Underframe and underfloor areas have been painted to provide cleanliness for servicing while the dropcentre chassis and associated timberwork is being prepared for the new floor.

Restoration has now reached the stage where many hands may be used. The restoration team has compiled a "to do" list which enables other members to become involved in the reconstruction of the car. A copy of the list has been attached to the tram and members can select a task to their liking or within their capabilities. Interested members have already tackled some of the tasks. The list includes:—

- * preparation and installation of flooring
- * installation of new metal sheet side panels
- * scraping and sanding driving compartments, doors and saloon windows.

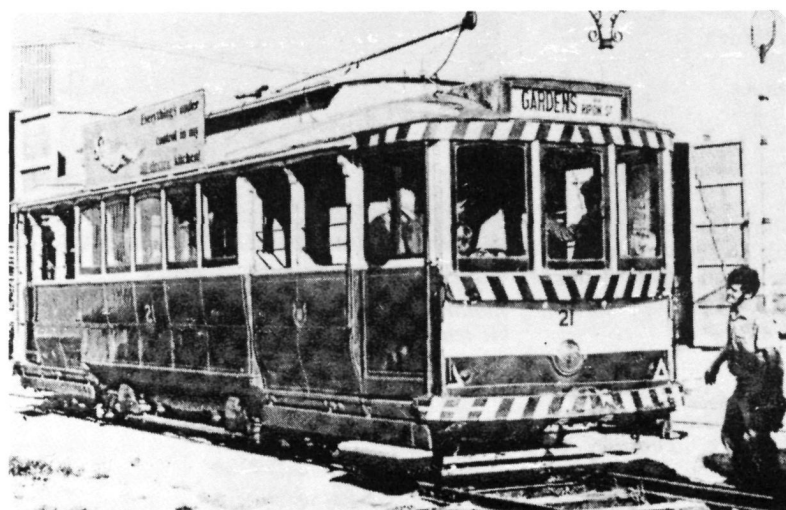
Meanwhile, the restoration team continues its work.

Car 21

While much attention has been given to the refurbishment and return to traffic of car No.1 in its 75th anniversary year, it has almost been forgotten that sister tram, Ballarat 21 is also 75 years old.

Ballarat 21 was built originally as Adelaide A type No. 10. As one of the initial tram fleet it entered service in March 1909 although it is not clear if No 10 took part in the inaugural celebrations. A total of 14 trams formed the inaugural procession but some of these were the B type toastrack cars. Car 10 does, however, appear in photos of the then new 24-road Hackney Depot in 1909. Cars 1 to 24 were lined up at the front of each of the 24 roads for publicity purposes.

In 1936 car 10, along with A type cars 69 and 92, was sold to the State Electricity Commission of Victoria for use in Ballarat. These trams were renumbered 21, 23 and 22 respectively. Car 10 was sold without a truck so an air brake fitted truck



Ballarat car 21 undergoes testing at St. Kilda on New Year's Day, 1972.

JOHN HOFFMAN

was built for it in Ballarat. (Adelaide single truckers retained their magnetic track brakes and handbrakes until final withdrawal in 1954). The body was reconstructed in 1938 for Ballarat-style one-man operation. The end compartments were enclosed with panelling to waist level and included waist-height doors. The drop-end cross bench seats were removed and replaced by small longitudinal seats by the side panels. The ten reversible saloon seats were also replaced by longitudinal seating. In 1945 two 65hp General Electric 201 motors, driven by GE K36J controllers, were fitted, making No 21 the most powerful single truck car in Australia. Car 21 continued to operate until 18 September, 1971 (the day prior to the closure of the tramways) and was on display at St. Kilda the following week!

Car 21 retains its 1960s Ballarat tramways green livery with the original varnished interior painted pale pink and lime. Unlike most SEC four-wheelers, 21 has five saloon windows instead of the usual four. This tram played a vital role in the early operational years of the AETM. Although it has yet to be refurbished, it provides an interesting comparison with sister car No. 1. Its 75th anniversary has not been overlooked.

Life Member.

The AETM recently bestowed Life Membership upon member Blair Howell. Blair recently retired from the State Transport Authority after 46 years service. He joined the Municipal Tramways Trust as an apprentice electrical fitter at Hackney

Depot in 1938. From 1961 he was the Foreman at City Depot. It was in this capacity that he gave invaluable assistance to the Museum and his experience and knowledge was freely passed on to members on many occasions. Blair's confidence in our museum operations played a vital part in enabling the Museum's trams to operate on the Glenelg line in 1978, 1979 and 1982. Also, two Glenelg trams are now stabled (and available for museum traffic) at St. Kilda.

Other News

The erection of trolley troughing over Road 8 in the new depot has been completed. The overhead wire has been installed and is functional although a suitable frog for Roads 7 and 8 is still required.

C type car 186 has been transferred to the main depot. As this tram is not operational and restoration is still some time away, it is being used as a paint and varnish shop. This partly overcomes storage problems in the workshop area. Car 1 has taken the place of 186 in the new depot.

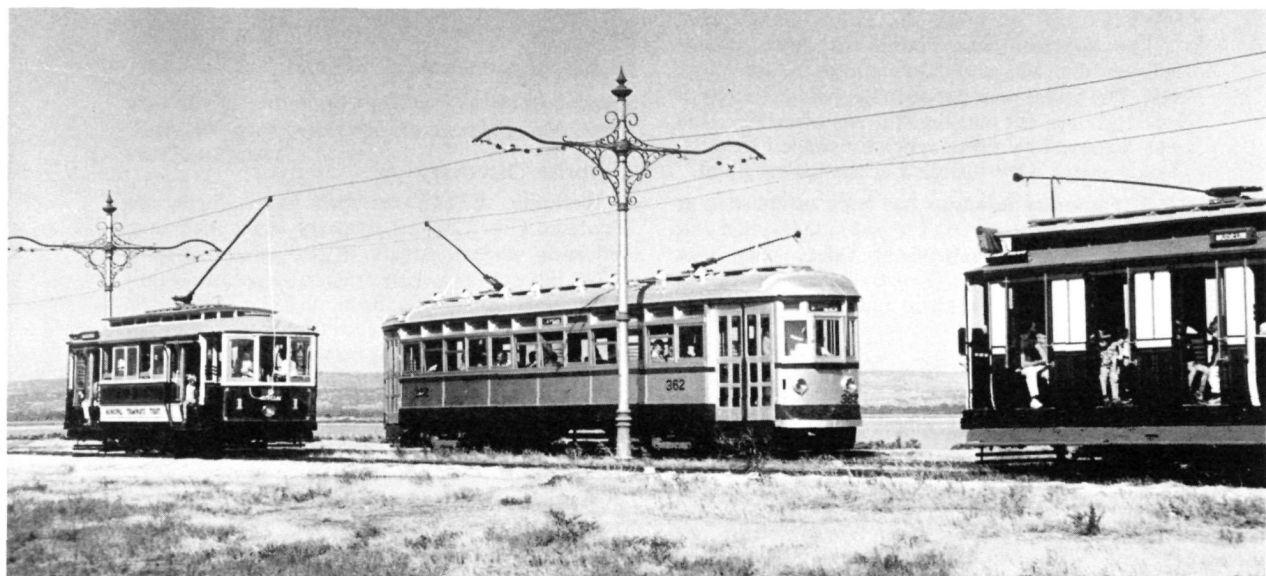
The sleeper replacement programme in the tree reserve near Samphire Road has been completed. A small store shed has been erected in the new per way yard near the main line.

Ian Seymour has once again completed his half-yearly brake check and compressor overhaul of operational trams.

The body of car 42 has been lifted of its Brussels truck to enable final adjustments to be made to the truck.

A1 and D192 pass Glenelg tram H362 at Mangrove Loop on their return journey to the Museum. Similar ornate centre poles to these ex King William Street poles may be returning to the Glenelg tram line.

IAN HAMMOND



FERNY GROVE . .



Brisbane Tramway Museum Society

Election of Office Bearers for 1985

At the Annual General Meeting of the Brisbane Tramway Museum Society, held in November, the following were elected:

<i>President</i>	Tim Atherton
<i>Vice-Presidents</i>	Peter Burden, Mick Topp
<i>Secretary</i>	Tony Gilmartin
<i>Treasurer</i>	Glen Thorley
<i>Councillor</i>	Troy Thomas

Permanent Way

Mid October saw the completion of 19 metres of track laid in mass concrete. This stretch completes the branch line to the depots and workshops. The next project is to complete the perway to the old terminus. This track had been temporarily laid some years before, but more recently it was removed; partly because grooved rail had been used unnecessarily and partly because the junction of the main line and the depot branch was faulty. Removal of the old track enabled the road base to be properly widened and levelled.

The construction of the curve proved to be quite difficult, owing to the fact that the curve runs uphill, and we were determined to eliminate the problems we had with the old curve. Initial test runs over the track in a number of trams established that they roll effortlessly through the curve.

The concrete was poured in three stages; between the rails, and then eighteen inches either side. The initial pour between the rails had to have track grooves cut into the still-wet concrete. This was achieved by using specially shaped trowels. Track drains were installed at the lowest point.

A temporary terminus has been established at the curve, with the ground to one side levelled and grassed, and an ex-Brisbane safety zone sign concreted in place. The new track was christened on 28 September, and since mid October has been regularly used.

Tram Maintenance

Workshop staff have repaired a number of trams' airbrakes. Dropcentres 300 and 386 have been attended to, and more recently, FM554 has had its massive single cylinder's leather bucket replaced with a neoprene one. Handbrakes on a number of cars have been thoroughly cleaned and greased. 277 has had new brake shoes fitted to the drive-wheels of the No. 1 end.



Work commences on the concreting of the new track. Note the concrete buns supporting the rails.

TIM ATHERTON

Surprise Discovery

Recently, BTMS members were inspecting Brisbane City Council property when their eyes fell upon some strangely shaped pieces of steel. Close inspection revealed their true nature — they were two top chords from a Brill 21E truck. Readers of *Trolley Wire* will be aware that the BTMS has had two side frames for a 21E truck constructed by a local technical college, so these new acquisitions are a god-send and we are well on the way to completing an entire truck.

Restoration

Work in this department has been quiet owing to heavy trackwork commitment, although one more exterior side panel of 341 has been undercoated and puttied.



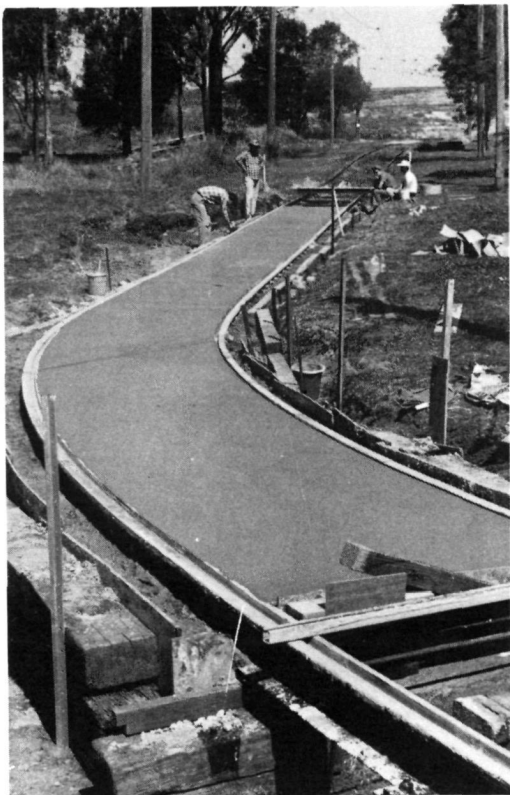
The first pour of the new track. Note at this stage the track grooves have not been cut into the concrete as it is still too wet.

TIM ATHERTON



Concrete pouring continues on the curve leading to the terminus.

TIM ATHERTON



Left and below: The first pour has been completed and the grooves cleaned out on the curve and cut in on the straight section.

TIM ATHERTON

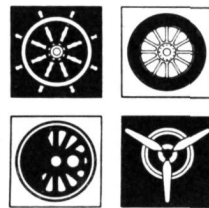


The Museum's Panther prototype bus 10 stands at the line's future terminus in the park behind the Ferny Grove site.

PETER BURDEN

GLENORCHY . . .

Tasmanian Transport Museum Society



The Museum has now been open to the public for nine months and over 2000 persons have visited the site. After the hectic pre-opening period we have now settled into the routine of development, restoration and operating the entrance kiosk.

Train rides are offered to the public on the first and third Sunday afternoons each month. Diesel rail cars operate on the first Sunday while steam locomotive C22 usually operates on the third Sunday.

Steam Technology Building

With the hanging of two roller doors and completion of roof flashing, the only remaining tasks are the installation of highlight windows at the rear of the building and painting of the exterior walls to blend with the adjoining building.

Although some large exhibits are installed, a

committee has been formed to select and place on display items which show the various applications of steam in both transport and industry.

Carriage Sheds

Plans have now been prepared for a building which will provide shelter for most of the Museum's collection of railway passenger carriages. Once approved by the local council, fabrication of the steel frame will commence. It had been hoped that construction could be undertaken by CEP employees but delays in obtaining approval for an application may result in the construction being carried out by the Society with some professional assistance. During September a portion of the perimeter fence of the Museum was moved inward to allow site preparation to be carried out.



Ex Tasmanian Government Railways locomotives M5, Q5 and H1 on display at the TTMS Museum at Glenorchy.

D. H. JONES

Roundhouse Area

With the completion of all tracks in the roundhouse area the larger steam locomotives have now been placed in their permanent location providing a pleasing appearance. All tracks are occupied with an assortment of rolling stock but the appearance will be more like a locomotive roundhouse when the carriages are located within the new carriage shed.

Restoration

Recovering the roof of carriage AAL10 with canvas is now under way and should be completed by the end of October.

The century-old former Tasmanian Main Line carriage A17 will have new seating installed to complete its restoration. Like the original seating, red velvet will be used as a covering. The material has been donated by a Hobart theatre after use as a stage curtain.

A start is being made on the restoration of the body of Launceston tram No 13. Only minor work has been carried out on the old body since its acquisition in 1974. Though a long-term project because of its indoor location, work can proceed irrespective of weather conditions.

Locomotive C22

During August and September, the locomotive has been out of service undergoing its annual inspection. This involved removal of the steam dome for a visual inspection of the boiler interior. No deterioration has been noted since the last inspection and subject to a steam test the locomotive should receive a certificate for a further twelve months.

The opportunity was taken while the locomotive was unserviceable to remove the rear driving wheels to renew the bearing thrust blocks.

Locomotive Mt Lyell No 2

A subject receiving consideration has been a proposal to reopen part of the former Mt Lyell railway between Queenstown and Straham on Tasmania's west coast. The Tasmanian Government has funded a feasibility study and has offered five million dollars towards the project.

The Society has been asked its reaction to making available its Abt locomotive (Mt Lyell No 2 — Dubs 1896) for service on a reopened railway. Although the Society has yet to make a decision it has stated that it will retain ownership.

NEWCASTLE VISITS PORT KEMBLA



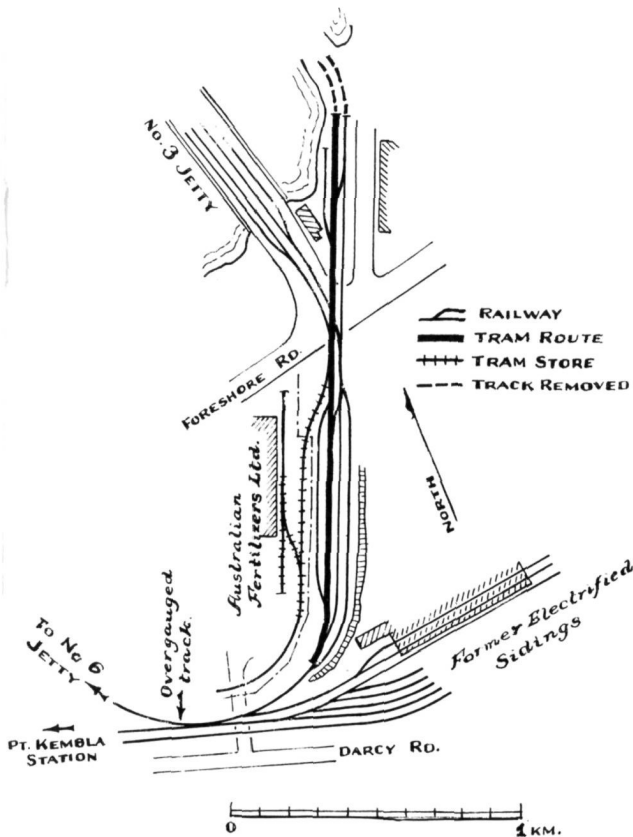
Following the successful appearance of the W2 tramcar on the former Abattoir branch railway at Mayfield West (Warabrook) during the Labour Day weekend in 1983, the Newcastle Tramway Museum staged a similar operation on the same weekend in October 1984.

This year reconstructed Sydney R1 car 1995 operated at Port Kembla along a route almost 1 km in length southwards from Number 3 jetty towards Port Kembla railway station.

This was part of the annual "Put Into Port" festival held each year at Port Kembla. The major activity is the billycart derby along the main steeply graded shopping thoroughfare, Wentworth Street, on the Monday public holiday. This year, as is usual, around 12,000 people attended that function. Two other major events were the opening of the partially restored Allowrie Battery, a major fortification on the main headland constructed during World War II, and the tramcar operation.

This year marked the 100th anniversary of the first development of the port of Port Kembla and the tram operation was to publicise the proposed Industrial Museum. Standard gauge tramcars converted to steeple cab locos shunted the Darcy Road sidings and adjacent factories from 1927 until 1956 so Port Kembla has some tramway tradition albeit only in the industrial field.

It was also planned to operate the Port Kembla museum car W2 560 but a possible complication prevented this. Late on Friday afternoon, 28 September, the State Rail Authority directed that the \$2m insurance on the tramway operation be increased to \$3. This request was made around 3.30 pm and it was felt that if the tram operation could not proceed then it would be best to limit the problems to one tram stored at Number 3 jetty rather than two! A similar problem emerged around noon during the Heritage Week Friday in April 1983 on the day prior to the SPER buses



PORT KEMBLA TRAM
OPERATION.

operating in Wollongong . . . but this latest challenge emerged at 3.30 pm!

The insurance problem was settled just after 4.30 pm at a time too late to have W2 560 join R1 1995.

R1 1995 was unloaded from the low loader which had carried it from Sydney around 3 pm in a heavy rain squall. By 3.45 pm the motor generator set mounted on a former R type bogie had been coupled to 1995 and the rectifier box connected enabling running test to commence.

On Saturday morning SRA perway officials observed the track tests of 1995 and approved operations over a 1 km distance. The running approval was along a route of almost 3 km to number 6 jetty, but a set of points almost 2" over gauge near Port Kembla Station prevented the entire route being traversed.

These tests were concluded around 9.30 am and at 10 am on Saturday, 29 September, 1984 the first fare paying passengers departed on 1995; the first fare paying passengers carried on the car since 25 February, 1961, when that tramcar was the last to leave Sydney streets.

Saturday was a bleak and windy day. Some 30mm of snow had fallen at Goulburn overnight and the wind from the Southern Tablelands was bitter. During the afternoon the Coastal Patrol Station at Port Kembla registered an 87 knot wind blast which illustrates the wild conditions on what is usually the start of the summer surfing season.



R1 1995 arriving at Foreshore Road, Port Kembla on 28 September after its journey from Sydney.

KEN MCCARTHY

The weather showed a slight improvement on Sunday, 30 September with an increase in patronage. On Monday, 1 October the tramcar made most trips with all seats filled and by the end of traffic at 3.15 pm a total of almost 1,500 passengers had been carried.

R1 1995 was then shunted into a security siding at the Australian Fertilizer Plant where it was covered by tarpaulins prior to being transferred to cover storage in a local bond store.

R1 1995 was a shed on a farm near Moss Vale just 18 months prior to this event. Stan Shorte, Chairman of the Newcastle Tramway Museum directed the restoration using trucks, motors, brake and electrical gear from W2 637. Considering the lack of running trials prior to reaching Port Kembla the tram functioned well. A small wiring problem to one controller prevented the use of first notch, but otherwise the restoration is a credit to those involved in the project in bringing this historic car "back from the dead".

The Port Kembla Museum Project Committee is grateful to the Newcastle Tramway Museum for transporting this tramcar southwards and manning the operation and to the Port Kembla Chamber of Commerce for financing the generator unit. The SRA executive is thanked for approving the operation while the Port Kembla perway crew under the direction of "Basil" is also thanked for their assistance and supervision during the operation. Bill Rennex of Port Kembla organised the transportation of the trailer bogie and generator, while Brambles donated the heavy duty cranes involved in the unloading of the tramcar. The generosity of Ron Cooper in providing diesel fuel for the motor generator set and Carl Brial of Australian Fertilizers for storing the tramcar is also appreciated.

Cleary Brothers are thanked for transporting the tramcar into the store site after the Labour Day operation.



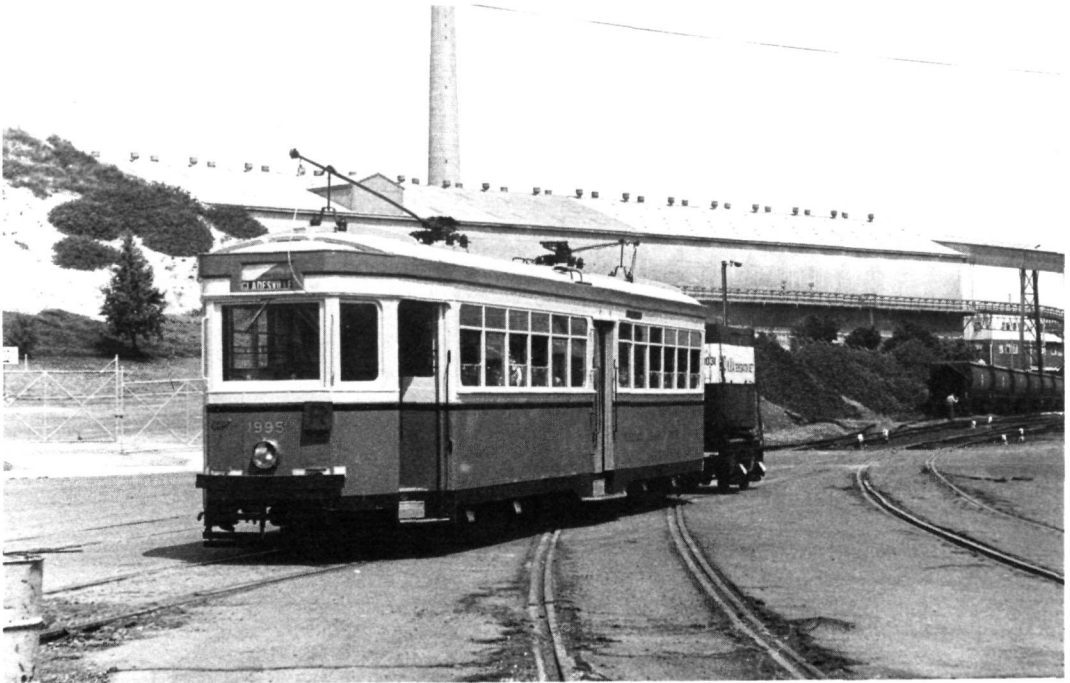
R1 1995 stands near the northern terminus of its operations at Port Kembla on the night of 28 September, 1984.

KEN McCARTHY



Passengers leaving the tram at the north end terminus at Port Kembla on 1 October, 1984.

KEN MCCARTHY



Car 1995 at the Foreshore Road crossing near No. 3 Jetty on 29 September. The car has had the identification "Newcastle Tramway Museum" placed on the right-hand side panel.

KEN MCCARTHY



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