and Metropolitan Tolowaya Board 9/5/5

MANAGER

28th November,

1.

HIEF ENGINEER

ROLLING STOCK, BRUNSWICK CONVERSION.

Re your memo, of the 17th ultimo. Including the additione truck cars recently put on the Camberwell and Coburg routes,
lowing for the Brunswick conversion but excluding any proon for development between now and the completion of the
conversion, we require an additional 48 bogie cars. Any number
short of this means the use of single truck cars. For the
Brunswick conversion, a full complement of new cars would be good
psychology in view of the campaign against electrification. We
could transfer bogies from other routes, but this course will be
subject to criticism and objection from the districts affected.
In the emergency, however, we will do this.

Militional care would be made available at the rate of

ADM/CW. (W)

MANAGER

dais for the cross seats was pointed out. The weight and cost too

9/5/7

### Melbourne and Metropolitan Tramways Board

CHIEF ENGINEER'S DEPARTMENT

In reply please quote E/

October 17th 22193\_4

MEMO FROM THE CHIEF ENGINEER

TO.

THE MANAGER.

#### ROLLING STOCK - BRUNSWICK CONVERSION.

Following on our discussion in connection with the above, the Board has now approved of the building of 40 new cars of the type agreed upon. As it takes some time to get into production it would be impossible to have all these cars completed before the end of next year without going to some special expense. On the other hand, it appears desirable to have the conversion sufficiently advanced by this time next year to admit of the running of the cars from Flemington into Elizabeth Street.

If the conversion is to be completed by next November it will be necessary to draw upon the existing stocks for supplying the deficiency, and to run single truck cars in the routes on which they can be used until bogie cars are made available.

of bogie cars you could do with for all services.

Additional cars would be made available at the rate of about 3 or 4 a month.

CHIEF ENGINEER

( who hay hay)

# MELBOURNE AND METROPOLITAN TRAMWAYS BOARD.

These wars out into production without possulting tout 3rd Sept., 1934.

#### ROLLING STOCK FOR BRUNSWICK CONVERSION.

Further discussed with the Chief Engineer the subject of new rolling stock and impressed upon him, the need of lower steps, free circulating space, at least one additional front door under the control of the motorman mso that unloading and loading at the zones would be facilitated. Also suggested that the equipment should provide for more rapid acceleration and suitable braking. With the problems facing us, improved rolling stock, higher rate of speed were the surest means of holding traffic and meeting the economic difficulties with which the undertaking was faced.

Whilst expressing the view that the ideal car was still to be designed, and that a compromise was necessary, we should, on Brunswick, make a special effort to demonstrate to all and sundry that under electrification a service vehicle can be produced which would be equal to, if not superior to any other form of street transportation available to the public.

Whilst side seats provided ample space at peak periods and offered advantages over the cross seats, the public today was showing a preference for the cross seat, and we should, therefore, provide this type. The best arrangement was the seat facing the direction of motion, but as the Chief Engineer had difficulty in housing the wheels, back to back seats would be accepted, although it was not thought ideal. Cost plays an important part in the whole matter. Every suggestion for improvement is met with an estimate of cost which usually rules it out of consideration.

When the "Y" cars were put in service, the disadvantage of a dais for the cross seats was pointed out. The weight and cost too practically ruled out any further consideration of this type which, if properly studied and developed would prove suitable for our Melbourne climate. As almost every suggestion made invariably met with obstructive tactics or was slow timed, had come to the conclusion that it was a waste of effort to seek change. Instances quoted to him were the narrow entrances of the first "W" type cars

Workshops continued to turn these out long after their unsuitability for traffic had been pointed out. The same applied to the beach type cars. These were put into production without consulting traffic. Another example was the buses and so on.

Your report of the Phys inst, was considered its was

retolived that the construction of the term of the true arraws to created

23955 be proceeded with. Lane along the contract

The state of the s

the second of the second of the animals.

the and doors should be

The state of the second second

The state of the s

The tree of time to be be required by

The state of the second of the

DE L'ANGERT DE LA COMPANIE SENT L'EN L'ENGERNISTINE LE DITAIN EN LA COMPANIE DE L

the bank the standard less than the standard of the standard o

The one and the Figure of the place programs, by a conse

ser the standard the time of more, however, many

can describe on the tree executions and the

red that the cost settle for As as as

COPY ONLY. MEMO. TO CHIEF ENGINEER.

## ROLLING STOCK, BRUNSWICK CONVERSION.

Your report of the 28th inst. was considered. It was resolved that the construction of 16 cars of the type shown in drawing R3956 be proceeded with. Letter should be proposed for the ent with

there at the sade with a view to facilitating the loading at autory anese is an Dily and other points of congention. I subsit herealth

tes surists contant which have been prepared accordingly. 31/8/34. for Barbeer prefers that anrived "A",

This dealer provides seats for 52 passengers and good standing and circulating apace/the smis. The outside step heighte would be se on the Wal der. It the body were mounted on 26" wanter, CHIEF ENGINEER TO CHAIRMAN

28th August, 1934.

### ROLLING STOCK - BRUNSWICK CONVERSION

When I discussed with the Manager the question of the additional rolling stock required for the Brunswick conversion he asked that preliminary sketches should be prepared for the car with doors at the ends with a view to facilitating the loading at safety zones in the City and other points of congestion. I submit herewith the outline designs which have been prepared accordingly. Of these the Manager prefers that marked "A".

This design provides seats for 52 passengers and good at standing and circulating space/the ends. The outside step heights would be as on the W-4 car. If the body were mounted on 26" wheels, there would be a flush door throughout, while if 33" wheels were used there would be the usual step at the bulkhead.

The Manager proposes that the end doors should be operated by hand in order to save the expense of door engines.

This body would cost £200 more than that which is now being built for placing on the maximum traction trucks.

Drawing R-3956 shows this type of body, with seats altered to suit equal wheel bogies.

This type of body is in production. For the programme of replacing the old maximum traction bodies we ordered material for 20 of the 39 bodies required for the change. If we stop the change-over programme this stock will keep us going until further orders can be filled. On the other hand, the construction of a new type could not be started for six months, as it will be necessary to prepare new detail drawings, and to obtain the material. I therefore recommend that the Board approve of the construction of 16 cars of the type shown on Drawing R.3956.

If, for the balance of the stock required, it is desired to depart from the standard "W" type of body, consideration might be given to a car of the tourist or "Y" type, provided that upon investigation it is considered that the cost will not be materially in excess of that of the type marked "A". This point is now being investigated.

CHIEF ENGINEER.

219

MANAGER

27th July,

1.

CHIEF ENGINEER.

#### BRUNSWICK ROLLING STOCK.

In reply to your memo. of the 16th instant: There are 5 cars from Coburg Depot which do one trip only at peaks. We have planned to discontinue these after the electrification of the Brunswick line on the assumption that the North Coburg through passengers will find it more convenient to use the Brunswick service. If experience does not warrant the cut, a partial restoration would follow, and this must be kept in mind.

Due allowance was made for the reduction in the estimate of the number of additional cars required for the Brunswick conversion/

ADM/CW.

Cor

MANAGER

## Melbourne and Metropolitan Tramways Board 2895.

CHIEF ENGINEER'S DEPARTMENT

| In | reply | please | quote | EX | 7241. |
|----|-------|--------|-------|----|-------|
|----|-------|--------|-------|----|-------|

July 166h 193.4.

MEMO FROM THE CHIEF ENGINEER TO THE MANAGER.

#### BRUNSWICK CONVERSION - ROLLING STOCK.

In your reply of the 3rd inst. to mine of the 19th ult. it is not stated what reduction, if any, is to be made in the number of cars in Lygon Street. Such reduction will materially affect the immediate substation position, also the number of new cars to be built prior to the start of the conversion.

MANAGER

3rd July, me, 1934.

CHIEF ENGINEER.

BRUNSWICK CONVERSION - ROLLING STOCK, a will be required

BRINGFICK CONVERSION - ROLLING STOCK.

It is estimated that 40 additional cars, including spares, will be required for the Brunswick conversion, i.e. on the assumption that neither the North Melbourne nor the West Melbourne line will be electrified. the new cars required will number

If the traffic continues to improve, further additions to the rolling stock will be required for general purposes.

The number of cars in Elizabeth Street between Flinders Street and Flemington Road at peak periods will approximate 18, and between Moreland Road and Flemington Road 30. Allowance will, of course, have to be made for the banking up which takes place in emergencies on race days and for traffic congestion over which we have no controlors in Missbeth Street between Flinders Street and

Montaines Road at peak periods will approximate .... and between

ADM/CW. made for the banking up which takes place in americancise

of and Flemington Road ..... Allegance will, of course MANAGER

COME DO CONTROL. INCINCIPINATE OF THE PROPERTY OF THE PARTY OF THE PAR

28745

MELBOURNE AND METROPOLITAN TRAMWAYS BOARD.

CHIEF ENGINEER

19th June, 1934.

BRUNSWICK CONVERSION - ROLLING STOCK.

It is estimated that Howard will be required for the Brunswick Conversion ele on the Assumption that Reather the Morth melbourns nor the Melbourns and allocation of the present surplus of cars to meet the growth and sensition additions to the service which are planned, the new cars required will number

g Form 287

## Melbourne and Metropolitan Tramways Board

CHIEF ENGINEER'S DEPARTMENT

in reply please quote E/

June 19th 1934.

MEMO FROM THE CHIEF ENGINEER TO THE MANAGER.

#### BRUNSWICK CONVERSION - ROLLING STOCK.

Referring to the Board's decision to proceed with the conversion of Brunswick, will you please let me know how many additional cars we would require for this route, bearing in mind that we already have a surplus of bogie cars.

I prefer that the number of equipments to be ordered at once be kept as low as possible in order that we may not be committed to too serious an expenditure in respect of variations from our standard.

In order that I may be in a position to determine the division of the loading on the substations, can you please let me know what will be the spacing of cars from Flinders St. to Flemington Rd., and thence to Moreland Rd: also what reduction, if any, there will be in the number of cars in Lygon St.

CHIEF ENGINEER.