

P R A H R A N - M A L V E R N T R A M W A Y S T R U S T .

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M e m o by Chairman giving a comparison between Original and Revised estimates of Messrs. NOYES BROS.  
in regard to proposed tramways.  
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ORIGINAL ESTIMATE - 28th. May 1906.

REVISED ESTIMATE - 29th June 1907

Permanent Way	(inclusive of engineering charges)	£37800	Do	Exclusive of engineering charges	£31700
Overhead construction	do	5500	Do		5580
Feeder cable	do	1680	Do		2240
Power house and plant	do	£10780		(Converter of plant do	£2750
Car shed offices and equipment	do	<u>1740</u>		{Car shed office do	9750
				equipment)	<u>7000</u>
Rolling Stock	Do	13860	do	do	12240
Contingencies	do	2000	-	-	*-
		<u>£76260</u>		Engineering charges	<u>161330</u>
					3070
					<u>164400</u>
(Alteration of sewer manholes and					
Add (watermains	::	5500			4600
(Contribution to regrading	::	15000			15000
		<u>£94760</u>			<u>£82000</u>
	Original estimate	94760	*		
	Revised estimate	82000		(Note 2½% on the average is	
		<u>£12760</u>		included in each of the above	
	Saving			items for contingencies).	

*Statement  
W.B.*

The following is a statement in regard to the amount of £22000 required as shown on the foregoing principal items in the Revised estimates made under page there should be added a further sum of £1000 for interest on borrowed moneys during construction and say a further sum of £2000 for unforeseen contingencies and the reimbursement to the Prahran and Malvern Councils of the preliminary costs, charges and expenses incurred prior to the formation of the Trust making the total sum required to be borrowed although there has been a fall in the price of copper £28500.

In view of the large cost of the tramway involved in the original estimates Messrs. Noyes Bros. were asked by the Conference Committee of the two Councils to report whether any and what savings could be effected by dispensing with a power house and purchasing power from the Electric Traction and Lighting Coy. Ltd. instead. In August 1906 Messrs. Noyes Bros. reported that by dispensing with a power house and purchasing the necessary Current required a converter station only would be necessary. The price of the current so purchased would be 1.47 d ( d.c. ) per unit as against 1.91d if generated the Trust while the saving by having a converter station as against the cost of a power house would be £7480.

On account of the proposal to regrade the railway and having obtained from the Board of Works an accurate estimate of the cost of the alteration to manholes and water-mains they revised their original estimates up to that date and showed that the following saving could be effected.

TABLE II

(a) On Power house ..	£7480
(b) Alteration of watermains and &c.	900
(c) Reduction on item not been ascertained contingencies.	1000
(d) Reduced allowance for supervision and level ) crossing on cost to be	1620
	<u>£11000</u>

Commissioners and the Councils represented on the Trust to pay £13000 for regrading the Aradale Railway line  
Note - The present estimates show a further reduction on this amount of £1760.

The following is a statement in regard to the principal items in the Revised estimates made under the several headings.

Permanent Way (after adding £1586 its proportion of engineering charges).	£4500
Overhead Construction - Saving	£ 120

The saving on this item is small for although there has been a fall in the price of copper there has been an increase in the price of steel poles due to an increase in duty of 10%. The price of the poles forms a large per centage of the whole, while the value of copper involved is only £560.

Converter Plant - Car Shed and Office Equipment - Saving .. .. .	£3570
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These items have to be taken together in order to compare them with the items, Power House and Car Sheds, Offices and equipment in original estimate. The saving here is mainly due to dispensing with power house - Vide Table II.

Rolling Stock - Saving .. .. .	£1320
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This is due partly to a reduction in the price of the cars estimated upon and partly to dispensing with Road Sprinkler (the cost of latter in the former estimate being £800).

As shown above the total reduction under the revised estimates is £12760.

At the date of preparing the original estimates the approximate cost of alteration of water mains and telegraph and telephone wires had not been ascertained but was subsequently found to be £4600. Also an arrangement has since been come to between the Railways Commissioners and the Councils represented on the Trust to pay £13000 for regrading the Armadale Railway line

so as to provide for the tramway crossing the railway on a bridge, the Railway being lowered. Of this sum £5000 has to be raised by the Trust on account of the Municipalities but the two Municipalities concerned have to pay to the Trust the interest and sinking fund payable in respect of this sum.

As the estimate of cost of construction above given does not provide for the interest on the monies borrowed during construction either in the original or revised estimates Messrs Moyes Bros recommend that £1000 be added to the total construction cost to cover this item. Although  $2\frac{1}{2}\%$  on the average has been added for contingencies in respect of the various items enumerated in the revised estimates Messrs. Moyes Bros suggest that a further sum of £2000 be added for general expenses and contingencies and reimbursement of monies expended by the Councils prior to the formation of the Trust and so provide for the borrowing of a round sum of £85000. At the same time unless something very unforeseen happens they are of opinion that their revised estimate of £64400 will be found ample to cover actual cost of construction and probably save the bulk of the  $2\frac{1}{2}\%$  included therein for contingencies (approximately £1600). Leaving out the special charges such as alteration of water mains £4600 wood blocking in Prahran £4160 and the £13000 to be borrowed as a contribution towards regrading the Railway, the estimated cost of the Tramway is £60220 or £9070 per mile for 6.64 miles single track. The final cost of the Brighton and St. Kilda Electric Railway including rolling stock, was for 5.13 miles of single track £52,939 or £10320 per mile. (Vide the following table).

Permanent way etc.	£ 13000
Rolling Stock	£ 52939
Total cost per mile single track	£ 10320

T A B L E     I I I .

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 PRAHRAN AND MALVERN TRUST TRAMWAY.  
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Cost of permanent way, overhead construction			
converter station and plant (exclusive			
of wood blocking in Prahran) Car Sheds,			
and Offices	..	..	£47980
Rolling Stock	..	..	12240
T o t a l			£60220

Cost per mile single track

Permanent way &c.	..	..	£ 7228
Rolling Stock	..	..	1840
Total cost per mile of single track			£ 9070

ST. KILDA AND BRIGHTON ELECTRIC RAILWAY  
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Cost of permanent way over-head construction			
power house and plant, Car Sheds and			
Offices	..	..	£38929
Rolling Stock	..	..	14306
T o t a l			£52935

Cost per mile of single track.

Permanent way &c.	..	..	£ 7530
Rolling Stock	..	..	2790
Total cost per mile single track			£10320
Excess per mile			£ 1250