

Public Works (1899) Department.

RAILWAY BRANCH.

G.O., No.	111 Ry
DATED	7th Sept 1899.

Includes Ex. No. 954 Ry. of 26/8/99

[Despatch Abstract.]
"The Railway of England"

Recording a ^{copy} from the Rail Dept
requesting Messrs Baker & Co. to supply
the Const. Engineer for Ry. & Roads, with a
copy of ———.

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

Railway.

Read the following paper :—

From—The Agent, South Indian Railway.
To—The Consulting Engineer for Railways.
Dated—Trichinopoly, 17th April 1899, No. 357.

ORDER—No. 490 Ry., dated 28th April 1899.

Ordered that the Final Issue of the Revenue Revised and Budget Estimates of the Mayavaram-Mutupet Railway for the years 1898-99 and 1899-1900, be forwarded to the Government of India.

[Here enter No. 491 Ry., dated April 28th 1899.]

(True Extract.)

FRANCIS J. E. SPRING,
Joint Secretary.

To the Agent, South Indian Railway.
„ Examiner, Guaranteed Railway Accounts, Madras.
„ Local and Municipal Department.
„ Financial Department.
„ Accountant-General, Madras.
„ Consulting Engineer for Railways.

FINAL ISSUE.

REVENUE PROVINCIAL BUDGET ESTIMATE.

PUBLIC WORKS DEPARTMENT.

PROVINCIAL RAILWAY REVENUE ACCOUNT.

XXVI.—STATE RAILWAYS (GROSS TRAFFIC RECEIPTS)

AND

38. STATE RAILWAYS (WORKING
EXPENSES).

REVISED AND BUDGET ESTIMATES

OF THE

MAYAVARAM-MUTUPET RAILWAY

FOR

1898-99 & 1899-1900.

MAYAVARAM-MUTUPET RAILWAY.

BUDGET ESTIMATE of Revenue and Expenditure for the year 1899-1900.

Heads.	Actuals in 1897-98.	Budget estimate, 1898-99.	Revised estimate, 1898-99.	Budget estimate, 1899-1900.
	RS.	RS.	RS.	RS.
RECEIPTS.				
<i>Earnings—</i>				
Coaching traffic earnings ...	1,82,452	1,86,000	1,77,000	1,90,000
Goods traffic earnings ...	73,672	72,000	60,000	68,000
Electric telegraph earnings ...	1,058	1,000	1,000	1,000
Steam-boat earnings ...	...	...	...	...
Sundries ...	1,190	1,000	2,000	1,000
Total, Earnings (I) ...	2,58,372	2,60,000	2,40,000	2,60,000
<i>Add decrease or deduct increase, in balances of suspense accounts as per Appendix A—</i>				
“Traffic Account” ...	...	...	...	...
“Foreign Railways” ...	...	...	...	...
Total, Receipts (II) ...	2,58,372	2,60,000	2,40,000	2,60,000
EXPENDITURE.				
<i>Working Expenses—</i>				
Maintenance of way, works and stations (abstract A) ...	29,908	31,000	26,000	27,400
Locomotive expenses (abstract B)...	48,626	54,000	54,300	53,400
Carriage and wagon expenses (abstract C) ...	14,793	14,000	14,500	13,800
Traffic expenses (abstract D) ...	23,532	25,000	23,600	23,900
General charges (“ E) ...	17,891	20,000	18,600	19,100
Steam-boat service (abstract F) ...	...	...	...	...
Special and miscellaneous ex- penditure (abstract G) ...	15,082	16,000	37,000	22,400
Rent of leased lines ...	...	...	...	...
Total, Working expenses (III) ...	1,49,832	1,60,000	1,74,000	1,60,000
Company's share of net revenue receipts payable under clause 60 of contract ...	...	...	...	...
Additional contribution to Provident fund ..	...	...	...	...
<i>Add increase, or deduct decrease, in balance of miscellaneous advance account, as per Appendix B ...</i>	...	...	...	...
<i>Deduct increase, or add decrease, in balance of “demands payable” as per Appendix B ...</i>	...	...	...	...
Net expenditure against Grant (IV) ...	1,49,832	1,60,000	1,74,000	1,60,000
Net earnings (I — III) ...	1,08,540	1,00,000	66,000	1,00,000
Net receipts (II — IV) ...	1,08,540	1,00,000	66,000	1,00,000

NOTE.—Abstracts and appendices not printed, as working expenses are charged in proportion to those of the South Indian Railway system, and there are no suspense accounts.

[illegible]

25.4.99

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1/5/98

G.O.	No.	Department.	Date.	G.O.	No.	Department.

~~16.1~~
~~26/4/99~~

State of the Capital Accounts of the Indian Guaranteed Railway Companies on the 31st March 1899.

NAME OF COMPANY.	Amounts authorized to be raised.					Amounts received from the several Companies.										Amounts withdrawn by the several Companies.			Estimated Amount withdrawn in India, subsequent to date of latest Returns.	Total Amount withdrawn, including that estimated in previous Column.	Estimated Balance of Account with Company.	
	Share Capital.	Capital not bearing Interest.	Debentures.	Debenture Stock.	Total.	Share Capital.			Capital not bearing Interest.	Debentures.		Debenture Stock.		Total.	In England to the above Date.	In India to the Dates specified below.		At Credit.			At Debit.	
						Subscribed in England.	Subscribed in India.	Total.		Amount of Debentures.	Cash received.	Stock represented.	Cash received.			Date.	Amount.					
Bombay, Baroda, and Central India Railway - - -	£ 7,550,300	£ 31,051	£ 2,317,400	£ -	£ 9,898,751	£ 7,528,628	£ 21,672	£ 7,550,300	£ 31,051	£ 2,317,400	£ 2,314,080	-	-	£ 9,895,431	£ 7,801,448	31st Dec. 1898 -	£ 2,329,096	£ 80,000	£ 10,050,544	-	£ 155,113	
Great Indian Peninsula Railway -	20,000,000	293,449	2,970,900	2,701,450	26,216,070	19,503,103	496,597	20,000,000	293,449	2,970,900	2,963,507	2,701,450	2,475,559	25,982,786	20,392,902	" " "	5,603,057	*200,000	25,903,723	79,063	-	
Ditto, ditto, Extensions -	-	271	250,000	-		-	-	271	250,000	250,000	-	-	70,665		" " "	22,099	15,000					
Madras Railway - - -	10,257,630	12,039	898,000	-	11,267,669	10,257,630	-	10,257,630	12,039	898,000	893,219	-	-	11,261,888	7,249,599	" " "	3,989,239	*60,000	11,220,578	41,310	-	
Ditto, Extensions -	-	-	100,000	-		-	-	-	-	100,000	99,000	-	-		9,030	" " "	17,710	15,000				
TOTAL - - -	37,807,930	336,810	6,536,300	2,701,450	47,382,490	37,289,361	518,569	37,807,930	336,810	6,536,300	6,519,806	2,701,450	2,475,559	47,140,105	35,523,644	-	11,961,201	*310,000 Net Debit - -	47,174,845	120,373	155,113	
																				34,740		

* It is estimated that, on receipt of advices from India regarding transfers, which are several months in arrear of advices of cash transactions, transfers of expenditure to Revenue Account will have exceeded the withdrawals to this extent.

Capital Transactions IN ENGLAND in respect of the under-mentioned State Railways to the 31st March 1899.

NAME OF COMPANY.	Amounts received from the several Companies.					Advances made to the several Companies from Money raised under Act 51 Vict., ch. 5.	Total Receipts in England from the several Companies, and Advances under Act 51 Vict. ch. 5.	Payments made in England to the several Companies for Expenditure.
	Share Capital.	Debenture Capital.		Capital not bearing Interest.	Total.			
		Amount of Capital.	Cash received.					
	£	£	£	£	£	£	£	£
Assam-Bengal Railway - -	1,500,000	800,000	797,750	15,385	2,313,135	—	2,313,135	1,009,337
*Bengal Central Railway - -	500,000	—	—	—	500,000	500,000	1,000,000	849,712
Bengal-Nagpur Railway - -	3,000,000	1,625,000	1,624,875	8,150	4,633,025	2,760,000	7,393,025	2,596,573
Ditto, ditto, Extensions -	—	1,375,000	1,370,625	10,445	1,381,070	—	1,381,070	1,227,688
Burma Railways - - -	1,836,462	—	—	—	1,836,462	—	1,836,462	326,913
Indian Midland Railway - -	3,000,000	2,904,100	2,891,600	5,812	5,897,412	1,345,000	7,242,412	2,503,380
Ditto, ditto, Extensions -	—	250,000	250,000	711	250,711	—	250,711	239,259
Rehilkund and Kumaon Railway -	—	—	—	—	—	—	—	110,084
Southern Mahratta Railway - -	3,491,540	1,043,100	1,042,350	30,923	4,564,813	2,129,900	6,694,713	1,841,175
Ditto, ditto, Mysore Railway -	—	1,200,000	1,200,000	24,000	1,224,000	—	1,224,000	133,687

... Railway Company.
dated 2nd March 1882, No. 68, Financial.

* Although for convenience classed as Advances, the equivalent of Rs. 24,00,000 was advanced to the Company on account of the Lucknow Railway Company.

to India, dated 2nd March 1892, No. 68, Financial.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Railway.

Read again the following paper:—

G.O., No. 335 Ry., dated 25th March 1899.

Read also the following paper:—

SHORANUR-COCHIN RAILWAY.

INSPECTION REPORT BY MR. FRANCIS J. E. SPRING, CONSULTING ENGINEER
FOR RAILWAYS, MADRAS.

Leaving Madras on April 9th, I arrived on the 11th at the Cochin Residency at Bālgātti near Ernacolum, across the backwater from British Cochin Port. The next two days were spent with the Resident and, at a Conference attended by that gentleman, the Diwan of Cochin and myself, arrangements were formulated in regard to the provision of funds for the building of the railway and other essential preliminaries. The proceedings of the Conference are recorded on a separate Note. They will reach Government in due course. Meanwhile the chief features of the Durbar's proposals are as follows:—

- (a) The Shoranur-Cochin Railway to be a cheap metre gauge railway for slow speeds.
- (b) The railway to be built entirely at the cost of the Cochin Durbar.
- (c) The Madras Railway Company to be asked to name terms for making and working it.
- (d) It will be controlled, if the Government of India has no objection, entirely by the Madras Government.
- (e) Government will be addressed by the Durbar in the Political Department in regard to the question of land traversed by the Railway in Travancore State.

2. A survey has been made under the orders of the Madras Railway Company, and an estimate based on that survey is now under preparation. The permission of the Government of India has been received to the first thirty miles being gone on with. On the present occasion I inspected as much of the alignment adopted by the Madras Railway Company's surveyors as I was able conveniently to get on to, namely, the northern forty and the southern ten miles. The thirteen miles between Shalakudi and Alwaye I did not inspect.

3. If I can convey an impression of the physical features of the country traversed, it will be comparatively easy to indicate the general characteristics of the faults of the very faulty survey. Hills running up to some thousands of feet in altitude lie more or less along the coast but from 15 to 25 miles back from it. Spurs from these hills run down and far out into the comparatively low coast belt. Between the hills and the coast there is a remarkable series of lagoons, channels and backwaters, communicating in places with the sea over sand bars of more or less importance, and filled with water less or more salt according as the fresh water of the rivers from the neighbouring hills more or less prevails over the salt water flowing in from the sea. For miles at a time these backwaters, parallel to the coast, are only a few hundred feet wide, but at

places they spread out into great lakes. They are the highways of the country and carry an immense traffic. They are connected up at their north end with Tirur station of the Madras Railway by a series of canals in a more or less inefficient state, according to the season: and at the other end they extend far southwards into Travancore. Although for many miles at a time these backwaters are only separated from the sea by a barrier of sand like those fringing the Palikāt and Chikā lakes on the East Coast, yet they frequently pass for miles between banks of hard moorum and laterite. This brings me to the principal physical features of the part of the country traversed by the railway. It has everywhere a skeleton of laterite and granitic gneiss, and the hollows between the laterite ribs are more or less filled in level, a few feet above the sea, by the denuded debris of ages, so that the effect is exactly as if one took a perfectly level clay plain like that of the Ganges valley and covered it all over in a most irregular manner with split-sausage shaped ridges of moorum and laterite, sometimes isolated like islands, sometimes long, complicated, winding or star-shaped, and sometimes trending away up to the east to join the hills. Whether a surveyor's line can or cannot be carried so as to avoid most of these ridges depends a good deal on the size and the lie of them. Sometimes they can be avoided with a little curving; more often it is possible to use them for the purpose of lifting the gradient out of the low-lying and expensive rice lands; but sometimes there is nothing for it but to dash boldly through them where they are thinnest because there is no circumventing them. These moorum and laterite "split-sausages", as using a culinary metaphor I may appropriately name them, are densely covered with groves of cocoa-nut, jak, mango and other fruit and shade trees; and amongst the trees scattered about, not in streets but in isolated homesteads, are the houses of the people. The country which looks deserted except where the cultivators are swarming in the fields, is densely populated, large tracts carrying over 1000 people to the square mile; but very little of all this is seen until one penetrates amongst the groves on the laterite ridges. In certain places where the hills, of which the laterite ridges are the low-lying spurs, are not more than a mile or two away, notably in the northern four or five miles of the line, the steering of a route through the rough ground is not such an easy feat, and it is necessary to curve continuously with a view to the avoidance, I will not say of heavy work, for there is not much of that, but of unnecessary undulations in the grades.

4. I hope that the above description of the peculiar physical features of the country will make it easy to understand the principal defects in the Madras Railway Company's survey. The first idea to grasp is that had money been unlimited and had a 1 in 300 or flatter grade been the limiting grade, a line might pretty well be struck straight across country anywhere, without anything very wonderful in banks or cuttings. But if banks and cuttings are to average less than 10 feet, and to seldom exceed 25—a thing to be greatly desired when it is understood that the object which His Highness the Rajah has in view is to obtain a railway to his capital for the sum of 50 lakhs—, it is perfectly obvious that pretty steep grades must be used and that money is well spent on careful detailed survey. The chief fault of the survey is its long straight lines through a kind of country in which, if it were in England, an Engineer would be curving pretty well all the time. This means not only a great deal of heavy and useless work, but, worse, dips in the grade which, with a little care and but little detour, might well have been avoided. For instance in places one finds a 20-ft. bank for a quarter or half a mile where if the straight had been abandoned by the surveyor and the line slewed a few yards to one side a 2-ft. bank or 2-ft. cutting might perfectly well have been got. It looks as if the surveyors had followed a flag until they knocked up against something big enough to stop them, and then turned off, but did not like to waste half a day's work by going back a few chains to find the best turn-off place. Then intersection points are conveniently made on high clean hills whence a view may be obtained, and the awkwardness of a curve in the deepest part of a cutting is ignored. And so on and so on.

5. Mr. Stoney, the Chief Engineer of the Madras Railway, who had nothing to do with the survey, was with me during the inspection; needless to say he quite sees its numerous faults, and how to correct them, as well as I do, and he will now proceed to have them set right. I need only therefore describe a few of the most typical and characteristic of them here.

6. A class of error which occurs very frequently is too low grading when a higher formation would be economical as substituting cheap bank for expensive cutting. It is not so much that cutting should be led to bank, for that is difficult to secure in a country where earthwork will be done for the most part with petty basket labour, but that the minimum of cost is got when due regard is had to the fact that the rates for cuttings are high and many of them are bottomed in rock, while the rate for bank is low. There was an idea of minimizing the area of rice land to be taken up, but that can perfectly well be provided for by arranging to promptly give back all land outside a strip say 10 feet at each side of the slopes of all banks and cuttings. If land is wanted for future repairs or diversions it can always be got in a Native State with the minimum of red tape. Amongst the numerous places where this *office-fault*, as distinguished from field-fault, has been committed I need only mention, as typical, the following chainages 19-23, 59-5, 69-76, 79, 83-88, all on the first section.

7. The second type of fault is illustrated on the long 2 mile straight line between chainage 6 and 17 of first section. Here for an actual net ascent of 33 feet in a length of 9,000, there are dips of grade of 27 feet which I believe to be avoidable, necessitating 1 in 80 where perhaps with a bit of curving in 150 might be got or at least 1 in 100. The country here is on the flank of a series of moorum and rock spurs from a high ridge and it is perfectly adapted for the picking of the best line with the aid of cross sections down the spurs and down the valley. Yet so far as I can ascertain, no such sections were ever made and a straight line was adopted in place of five or six reverse 1,000 feet curves.

8. A notable instance of the class of fault just referred to is to be found at chainage 64, where a 50-ft. cutting can apparently be easily avoided. Here too there are no cross sections, while it is just such a place as demands that the line through it should be deliberately located on the cross sections with the aid of drawing-office curves. A skilled surveyor may light upon the best line through such a place on the first or second shot by "following the flag", but this casual method of work has certainly not resulted, on this occasion, in the best line being found, or anything like it.

9. Another instance is at Alwaye town, where, between the river crossing, chainage 710, and chainage 790, the line climbs to what seems to me to be a quite unnecessary height of 20 feet, and at the same time not only goes away from the town, but makes it necessary to put the railway station on a most inconvenient and unsuitable site. The line ought apparently to curve sharp off to the west on crossing the bridge and between 710 and 790 to find its way through the low ground near the town so as if possible to avoid rising altogether, and anyhow to rise as little as may be. On the line so found a half mile of straight ought if possible to be found for the railway station, in the low ground between the town and the ridge where the present line runs, and as near the river as possible. Here again I must see evidence in the form of intelligent cross sectioning that the surveyor has not merely followed the flag.

10. South of Alwaye, at chainages 830-890 and 900-1,000, the section can obviously be greatly improved by the use of curving instead of the long straight lines that have been adopted. In the former place a very little slewing will bring the line on high and dry land in light bank or cutting instead of in high bank through paddy fields. At the latter place, the best line must be laid down with office curves on the plan when the latter has been covered with proper cross sections taken off the present line as a base.

11. The next class of faults is where following the straight has led the alignment either close past a ridge which with a little curving might well have been availed of to lighten the bank, or deep into an island, as it were, of moorum which might easily have been circumvented by curving with a view to lighten work. Instances of such places are numerous between Kurumali bridge and Trichur station, near 41-46 and 37-40 of section II, and 56-57 and 44 of section I. Mr. Stoney fully understands what I mean and will doubtless pass the necessary orders.

12. The site of the station at the important town of Trichur has not been well selected. It was necessary to bring it up to the Kokala navigable canal which gives access to all the backwaters. But the whole alignment ought, apparently, to be kept some 800 feet to the east, so as to be on the moorum instead of down in deep water

in the paddy land. I have marked on the map a considerable area of ground which should be fully surveyed and cross-sectioned so as to show how best the station may be located so as, while avoiding important houses of the town, to be well placed engineeringly and conveniently situated for business. There seems to be no use in crossing the Kokala canal by a bridge. It can stop at the railway, and be widened out into a suitable basin so as to connect with the railway sidings, and the present canal goods shed must then be moved. Indeed it may well be utilized at the joint wharf of the canal and railway.

13. An important and quasi-political matter is the anxiety of the Chief of Edapilly, a fief of Travancore, that the line should pass if possible entirely outside his estate instead of right through the middle of it. The Engineer was directed to enquire into this, but he surveyed round to the south and east where the diversion would be of excessive length, instead of round to the north and west where the diversion would apparently be short. A traverse should now be run round the approximate boundary, on the west and north, of the Edapilly Chief's estate. The survey should also show the family temples which the Chief desires should not be separated from his residence by the railway line. On receipt of this information I shall be in a position to pass orders as to the route to be adopted.

14. I am not satisfied that the question of the site for the Cochin terminus (at Ernaculum) has been gone into with sufficient care. A detail survey of the whole neighbourhood is required showing the property likely to be affected if the line is carried back of the jail and down to the face of the navigable backwater south of the jail. It is obviously of the utmost importance that the railway should so terminate as to suit the convenience of traffic on the backwater, as well as that of Cochin trade with which the future success of the railway is so intimately bound up.

15. Almost everywhere along the line good granitic gneiss is to be found within reasonable distance. This has not been much quarried heretofore, for laterite blocks have usually been found quite good enough for the public road bridges of the State. It will therefore probably be found necessary to go to Bellary and Hyderabad for quarrymen accustomed to work it. At Bezvada this stone had been cut out with rows of wedges at great expense, and but sparingly used in temples and important structures, until my gangs of Bellary Waddahs showed the Telugus how to burn it off cheaply, and now the Godavari bridge piers are being built from the same quarries as were used for that over the Kistna. There is any quantity of good laterite, mixed of course with bad, and when picked with judgment it is quite good enough for culverts.

16. There will be no great difficulty about the major bridges, nearly everywhere river channels and flood marks are very well defined. I saw borings going on at the Alwaye river, and the man in charge was stopping the boring on getting to the end of his piping instead of getting more piping and only stopping when he got either to 60 feet in sand or to something else fit to found on. *Let Stoney proceed with orders.*

17. The excellent tiles, of the quality well known as Mangalore tiles, made in factories all over the country seem to indicate that very good bricks can be got in any quantity. From what I hear, however, nobody in these parts knows how to make bricks cheaply, and no wonder when one sees what the rainfall is and how it is distributed throughout the seasons.

18. It is the intention of the Durbar to enter at once on extensive forest operations with a view to securing the necessary 150,000 sleepers within the next couple of years. There would appear to be lots of timber of the limited number of species known in this part of India to be suitable for sleepers. The Durbar would also be wise to get out timber for all the structures for which it will be wanted. They can doubtless in due time receive a list from the railway men, but meanwhile trees might be cut, e.g., teak, irru, irumbakam, *mesua ferrea*, &c., and logs might be floated down to convenient centres and properly seasoned. The Durbar would also be well advised to get a stock of fuel for locomotive purposes. The Locomotive Department of the Madras Railway could advise the Durbar Forest officers about this, just as the Engineer can advise him in regard to sleepers and timber for carpentry.

19. I understand that lime is everywhere plentiful, from the shells of the sea-shore which form the universal source of lime for building along this coast.

No.	Date.

No.	Date.

RAILWAY CONSTRUCTION.

J.B.M.

ABSTRACT D.

Traffic Expenses.

Particulars.	Actuals in 1897-98	Budget Estimate, 1898-99	Revised Estimate, 1898-99	Budget Estimate, 1899-1900
	Rs.	Rs.	Rs.	Rs.
I. Salaries, Wages, &c.—				
(a) General Superintendence ...				
(b) Station Staff ...				
(c) Train Staff ...				
II. Fuel, Lighting, Water & General Stores				
III. Clothing ...				
IV. Printing, Stationery & Tickets ...				
V. Charges for delivery & collection of goods, &c. ...				
VI. Miscellaneous Expenses ...				
VII. Payments to other Lines* ...				
VIII. Unclassified Expenditure ...				
Total ...				
Deduct—Stores returned to stock ...				
Total ...				
Deduct—Proportion chargeable to Mayavaram Mutupet Railway ...				
Total ...				
Deduct—Proportion chargeable to Pondicherry Railway ...				
Total ...				
Deduct—Proportion chargeable to Peralam Karikal Railway ...				
Proportionate cost of working expenses payable to South Indian Railway	23532	25000	23600	23900
Total ...	23532	25000	23600	23900

* Eg. Traffic Expenses at joint stations.

ABSTRACT E.

General Charges.

Particulars.	Actuals in 1897-98	Budget Estimate, 1898-99	Revised Estimate, 1898-99	Budget Estimate, 1899-1900
	Rs.	Rs.	Rs.	Rs.
I. General Administration ...				
II. Salaries of Indian Management, inclu- ding offices ...				
(1) Controlling office ...				
(2) Audit ...				
(3) Accounts ...				
(4) Paymaster's ...				
(5) Store Department ...				
(6) Medical ...				
(7) Rents of Buildings & Lands...				
(8) Furniture, fittings & other miscellaneous expenses ...				
(9) Printing & stationery ...				
(10) Medicine and contributions to hospitals ...				
III. Police ...				
IV. Advertising ...				
V. Electric Telegraph ...				
VI. Clearing Accounts with other Lines ..				
VII. Unclassified Expenditure ...				
Total ...				
Deduct—Stores returned to stock ...				
Total ...				
Deduct—Proportion chargeable to Mayavaram Mutupet Railway ...				
Total ...				
Deduct—Proportion chargeable to Pondicherry Railway ...				
Total ...				
Deduct—Proportion chargeable to Peralam Karikal Railway ...				
Proportionate cost of working expenses payable to South Indian Railway	17891	20000	18600	19100
Total ...	17891	20000	18600	19100

ABSTRACT F.

Steam-boat Service. *N.I.*

Particulars.	Actuals in 1897-98	Budget Estimate, 1898-99	Revised Estimate, 1898-99	Budget Estimate, 1899-1900
	Rs.	Rs.	Rs.	Rs.
I. Working Vessels				
II. Repairs				
III. Fuel				
IV. Miscellaneous Stores				
V. Steam Traffic Agencies				
VI. New Minor Works				
VII. Miscellaneous Expenditure				
Total				
Deduct—Proportion chargeable to Mayavaram Mutupet Railway				
Total				
Deduct—Proportion chargeable to Pondicherry Railway				
Total				
Deduct—Proportion chargeable to Peralam Karikal Railway				
Total				

ABSTRACT G.

Special and Miscellaneous Expenditure.

Particulars.	Actuals in 1897-98	Budget Estimate, 1898-99	Revised Estimate, 1898-99	Budget Estimate, 1899-1900
	Rs.	Rs.	Rs.	Rs.
I. Law Charges				
II. Compensation				
III. Rates and Taxes (including Municipal water rates)				
IV. Payments to other lines <i>Hire of rolling stock at 5% of earnings</i> <i>Rent of claphams jointly occupied</i> <i>Prizes for station Gardens, &c.</i>	12,919	13,000	12,000	13,000
			22,000	6,000
VI. Contribution to Provident Institution				
VII. Miscellaneous <i>Proportionate cost of working expenses payable to South Indian Railway</i>	2,163	3,000	3,000	3,400
Total				
Deduct—Proportion chargeable to Mayavaram Mutupet Railway				
Total				
Deduct—Proportion chargeable to Pondicherry Railway				
Total				
Deduct—Proportion chargeable to Peralam Karikal Railway				
Total				
Total	15,082	16,000	37,000	22,400

APPENDIX A.

Fluctuations in balances of suspense Accounts affecting Revenue. — Nil

Particulars.	Balance at beginning of year	Balance at close of year	Difference.	
			Increase.	Decrease.
Traffic Account.—	Rs.	Rs.	Rs.	Rs.
Actuals in 1897-98 ...				
Budget Estimate, 1898-99 ...				
Revised Estimate, 1898-99 ...				
Budget Estimate, 1899-1900.				
Foreign Railways.—				
Actuals in 1897-98..				
Budget Estimate, 1898-99 ...				
Revised Estimate, 1898-99 ...				
Budget Estimate 1899-1900 ...				

APPENDIX B.

Fluctuations in balances of suspense Accounts under Expenditure affecting grant. — Nil

Particulars.	Balance at beginning of year	Balance at close of year	Difference.	
			Increase.	Decrease.
	Rs.	Rs.	Rs.	Rs.
Miscellaneous Advances.—				
Actuals in 1897-98 ...				
Budget Estimate, 1898-99 ...				
Revised Estimate, 1898-99 ...				
Budget Estimate, 1899-1900 ...				
Demands Payable.—				
Actuals in 1897-98 ...				
Budget Estimate, 1898-99 ...				
Revised Estimate, 1898-99 ...				
Budget Estimate, 1899-1900 ...				

2007	139
11	14-90

URGENT.

No. 357

South Indian Railway Co., Ltd.,

AGENT'S OFFICE,

TRICHINOPOLY, 17th April 1899.

From

A_g
The AGENT,

SOUTH INDIAN RAILWAY,

To

The CONSULTING ENGINEER FOR RAILWAYS,

MADRAS.

Sir,

4 corr. 5

With reference to Government Order No. 387 Ry. dated 7th April 1899 I have the honor to forward herewith the final issue of the Revenue Revised and Budget Estimates of the Mayavaram-Mutupet Railway for 1898-99 and 1899-1900.

I have the honor to be
Sir

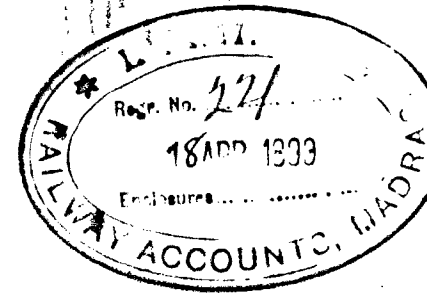
Your most obedient servant

M. Spalding.
Acting Agent.

1 Enclosure herewith

M. S.

OFFICE OF THE CONSULTING ENGINEER FOR RAILWAYS,
Madras, 18th April 1899.



No. 1229

OFFICE NOTE.

Letter from the Agent, South Indian Railway, No. 357,
dated 17th April 1899, forwarded to the Examiner of Railway
Accounts for favor of remarks.

18/4/99

a.
B.

for E. R.

Drafts for India

EXAMINER'S REPLY.

Checked and returned.

The Revised & Budget estimates
(Final Issue) have been correctly
prepared for the amounts sanc-
tioned by the Govt. of India.

The title page has been put up
by this office.

The Schedules and appendices
need not be printed, see
foot note.

JGT 21st 99
E.R.
21.4.99
402

From
THE AGENT,
South Indian Railway,
Madras.
To
THE CONSULTING ENGINEER FOR
RAILWAYS,
Madras.
Dated
Received
No.
ENCLOSURE.

Papers to be read in Proceedings:—

Again G.O., dated 189 , No.
 Again G.O., dated 189 , No.
 E/M Current No. 2007 of 1899, dated 18-4-99, from A. S. D.
 " " " 189 , " " "
 " " " 189 , " " "

ORDER.

No 490 Dtd 28/4/99

Ordered that the Final
 Revenue
 of the proposed and length
 estimates of the M.M.R. for
 the years 1898-99 and 1899-00
 be forwarded to the Govt

To The Agent S. & R.
 " Examiner of Accounts of India.
 " Local & Municipal
 " Financial Dept
 " Accountant General
 " Com. Secy for Rly

A. S. No 491 Dtd 28 April/99

The Secretary
 to the Govt of India
 S. D.

With reference to Govt
 of India Resolution No. 14-A
 of 21st March 1899, I am
 directed to forward here
 with the Final sum of
 revenue
 the proposed and length
 estimates of the M.M.R. for
 the

9/5/99

[illegible]

G.O.	No.	Department.	Date.

The Com. Ingr. for Regs ✓ How much
" Financial Dept ✓
" Examiner, P. W. accept ✓ How
much.

DR
25.8.99 -

BACK PAPERS.

G.O.	No.	Department.	Date.

[G. 53]

25-3-99.

Financial Department



PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following paper:—

Proceedings of the Public Works Department, Railway Branch, No. 934 Ry., dated 26th August 1899.

O R D N R.:-R.No.1148, dated 31st August 1899.

Messrs Baker and Co. will be requested to supply the Consulting Engineer for Railways, Madras, with a copy of "The Railway of England" by Mr. W.H. Ackworth, New Edition published by Messrs Murray, London.

(True Extract)

J. M.

for Chief Secretary.

K.P.A.
2.9.99

To

Messrs Baker and Co.

The Accountant-General.

.. Public Works Department (Railway Branch) ✓

FURTHER PAPERS.

G.O.	No.	Department.	Date.

1974 Dec. 11/11

PT 12 12 12

Received from the Consulting Engineer for Railways, Madras, a copy of "The Railway of England" by Mr. W.H. Ackworth, New Edition published by Messrs Murray, London.

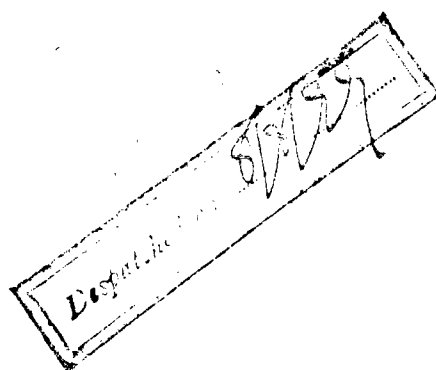
be accorded to the rate of
Salary now proposed.

Jd
1/8/99

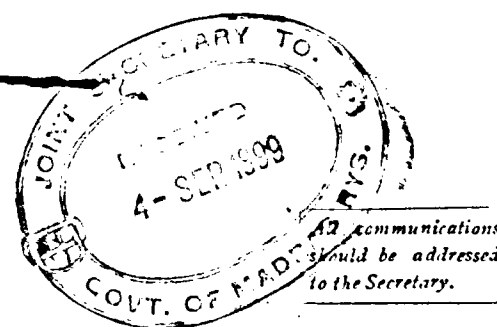
FMS
1/8

Documents accompanying.

Copy of this letter No 8578
with its enclos. 903 of 26/7/99



2/8/99



No.1623 R.E.

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
RAILWAY ESTABLISHMENTS.

Print

To

The Joint Secretary to the Government of Madras,
Public Works Department, Railway Branch.

Simla, the 25th August 1899.

Sir,

With reference to your letter No.877 Railway dated 8th August 1899, I am directed to communicate the sanction of the Government of India, to the retention on the termination of his agreement of Mr.W.Ward, Locomotive Draftsman, Madras Railway on a salary of Rs.270/- per mensem rising to Rs.300/- per mensem after two years approved service, as approved by the Board in paragraph 12 of their letter No.999 dated ^M 30th June 1899.

I have the honour to be,

Sir,

Your most obedient servant,

G. B. D. Walker

Under Secy. to the Govt. of India.

Documents accompanying -

Nil.

D.D.B.

Public Works (1899) Department.

A/B
Letter from *Am. No. 8578* at *8.7.85* *Railway*
" *614* *2224* at *11.7.85* *3.9* *Current No. 1119*
" *from* *8578* at *26.7.88*
" *903*
" *on* *876-7* *Rd* at *8.8.88*
Letter from *the Govt of India* *1623 Rd* *25.8.88*

From the Govt of India.

Order -

No. 1003 *Dated 7/8/89*
Communicated

No. 1623 Rd.

To the Agent & Manager
Moras Railway Company

Dated 25th August 1889.

Received *4th Sept 89*

Registered — do —

Enclosures

Spare copies

JWS
R
4/9/89

SUBJECT.

Mr W. Ward, Loco: Draftman
Moras Railway.

Sanctioning the retention on
the termination of his agreement
of — on a salary of Rs
270-300 as approved by
the Board.

To Mr in D. No.
C.P.
E.P.

Papers to be read in Proceedings:—

Again G.O., dated

189 , No.

Again G.O., dated

189 , No.

E/C Current No. 1724 of 1899, dated 4-4-99, from A. D. D. D.

" " " 189 , " " "

" " " 189 , " " "

ORDER.

No. 484. Dated 28/4/99
 Ordered that the Chief
 Auditor note in the Capital
 and Revenue Accounts
 of the South Indian Railway
 for the half year ended the
 31st Decr. 1898, be forwarded
 to the Govt of India and the
 Secretary of State in contin-
 uation of P.O. No. 352 R. 28th
 March 1899.

To The Agent S. M. & Co.
 & Examiners, P. O. R. 28th
 & Cans. Engrs for R. 28th

21/5/99.
 S. M. & Co.

H. S. No. 485 R. 28th April 1899.

Forwarded.

H. S. No. 484 R. 28th April 1899.

The Rt. Hon. the Secy of State
 for India.

In continuation of
 our despatch No. 352 R. 28th March
 1899.

Dated
 Received

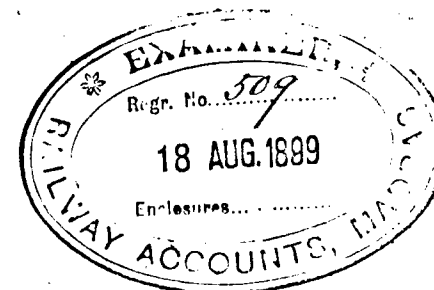
No.

ENCLOSURE.

From
 THE AGENT,
 South Indian Railway,
 Trichinopoly.

To
 THE CONSULTING ENGINEER FOR
 RAILWAYS,
 Madras.

OFFICE OF THE CONSULTING ENGINEER FOR RAILWAYS,

Madras, 17th August 1899.

No. 2593

OFFICE NOTE.

Letter from the Agent, South Indian Railway, No. 837, dated 16th August 1899, forwarded to the Examiner of Railway Accounts for check as to allocation and length provision.

17/8/99

for E. R.

EXAMINER'S REPLY.

The estimate is correct as to allocation.

Although ordinarily within the powers of sanction of the Local Government, the amount of the estimate being within the limit of Rs 25,000, the estimate requires the sanction of the Govt of India as it forms part of a project exceeding Rs 25,000 (vide para 269 page 16 of Special Orders Manual Correction Slip No. 56 of 1895).

Funds to the extent proposed to be spent during the current official year on Capital accounts have been certified to by G. R. Trichy.

M. R.

cc for C R

To E. R. for orders

AR 25.8.99. What project number is this? Refer please.

ER. Please see ARs 26/8/99. Note attached for 1899.

65/1/1899
Please find out
1899

To
THE CONSULTING ENGINEER FOR
RAILWAYS,
Madras.

From
THE AGENT,
South Indian Railway,
Trichinopoly.

Dated
Received
No.
ENCLOSURE.