

(1) Number of pages _____

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MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.	1049	Press
B.P. No.		Mis. →
Dated	15-4-	6875 195.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
15th April 1875.*

No. 394. Read the following letter from Major C. H. LUARD, R.E., Officiating Under Secretary to the Government of India, Public Works Department, (Railway,) to Colonel G. W. WALKER, R.E., Secretary to the Government of Madras, Public Works Department, (Railway,) dated Fort William, 20th March 1875, No. 779 R. :—

I AM directed to acknowledge the receipt of your letter, No. 2,581, dated 10th September 1874, forwarding papers and statements relative to the comparative advantages of wooden and iron sleeper roads on the Madras Railway.

2. After due consideration of this question the Government of India are disposed to treat it in a different manner from that in which it has been treated by the Consulting Engineer, Colonel Shaw-Stewart, or by Mr. Going, the Acting Chief Engineer. The question should, it is thought, be treated from a purely financial point of view, without any reference to capital or revenue expenditure, *i. e.*, all payments whether in first cost, interest or renewals is regarded as a portion of the money spent on the sleeping.

3. Taking the figures as they have been supplied by the Chief Engineer, the first cost to start with per mile is for wooden sleepers Rupees 7,536, and for iron Rupees 16,120. Supposing wood to last 12 years, the renewals will average per year 1/12th of the cost, *viz.*, Rupees 628 per annum. Supposing the iron sleepers to last 24 years, the renewals will cost 1/24th of the first outlay, *viz.*, Rupees 671 per annum ; but from this must be deducted 1/24th of the old iron, or $\frac{140 \times 30}{24} = 175$, leaving a balance of Rupees 496 for renewals.

4. Supposing again the life of iron sleepers to be 50 years, the renewals will cost 1/50th of the first cost = Rupees 326, less 1/50th of the cost of old iron, or $\frac{140 \times 30}{50} = 84$, leaving a balance of Rupees 238 per annum for renewals.

5. It now remains to add the interest and renewals to the first cost to find a new sum with which the next year is commenced.

6. The following statement shows the proposed mode of calculating the comparative cost year by year :—

	Wooden Sleepers, life 12 years.	IRON SLEEPERS.	
		Life 24 years.	Life 50 years.
	RS.	RS.	RS.
Original cost	7,536	16,120	16,120
Interest	377	806	806
Renewals	628	496	238
First year	8,541	17,422	17,164
Interest	427	871	858
Renewals	628	496	238
Second year	9,596	18,789	18,260
Interest	480	939	913
Renewals	628	496	238
Third year	10,704	20,224	19,411
Total, 12th year ..	23,530	36,846	32,734
Total, 24th year ..	52,551	74,068	62,574

Proceedings of the Madras Government, Public Works Department,
15th April 1875.

PROCEEDINGS of the MADRAS GOVERNMENT.

Under date the

Read the following:—

7. Thus the result is in favor of the use of wooden sleepers. The Government of India is, therefore, of opinion that wooden sleepers should be used.

No. 395.

ORDER THEREON, 15th April 1875, No. 1,049.

RAILWAY, No. 48.

COMMUNICATED to the Consulting Engineer for Railways, with reference to G. O., No. 2,580, dated 10th September 1874.

2. The method of calculation now adopted by the Government of India is simple in character, and, in the opinion of His Excellency the Governor in Council, correct in principle. It conclusively proves the superiority of a wooden sleeper road from a financial point of view.

(True Extract.)

Colonel, R.E.,

Secretary to Government.

Letter from the Govt of India P.W.D. (Railway) } (H.L. No. 779 R d/20 Mar/75)
G.O. no: 1049 of 15th April 1875

Communicated to the Consulting Engineer for Railways with reference to G.O. No. 2580 dated 10 Sept 1874

The method of calculation now adopted by the Government of India is simple in character, and, in the opinion of His Excellency the Governor in Council, ^{correct} ~~not incorrect~~ in its principle. It conclusively proves the superiority of a wooden sleeper road from a financial point of view.

C.M.W.

Engineer for Ry. P
Dated - 27-4-75

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Govt. of Madras.

PUBLIC WORKS.

To

Chief Engineer
of Railways -

Dated

Recd.

Encl.

G. O. 15 April 1875, No. 1049

Nos. 394-395

Iron sleeper roads on the Madras

Railway - Letter from the
Chief Engineer expressing
opinion that wooden sleepers
should ~~not~~^{be} used in pre-
ference to —, and to the
Committee for Railways.