No 477 Read the following letter from Major C J SMITH, R E, Officiating Consulting Engineer for Railways, to Major-General G W WALKER, R E, Secretary to Government, Public Works Department, dated Madras, 8th October 1875, No 557 —

I HAVE the honor to submit, for the sanction of the Government of India, estimates, amounting to Rupees 9,01,847,* of the cost of the new system of permanent-way proposed to be adopted over girder bridges on the Madras Railway in accordance with the recommendations of Sir John Hawkshaw, the Company's Consulting Engineer, in his report, dated 20th April 1875, embodied in the Proceedings of Government, under date 25th June 1875, No 1,776

1 Book of Estimates, South-West Line
1 Do of do North-West Line
1 Summary of Estimates
1 Statement showing comparative cost of old and new permanent-ways
2 Plans, Nos 2 and 3

	Rs
* Capital	5,79,919
Revenue.	3,21,928
Total	9,01,847

2 The present system of permanent-way over all girder bridges on the Madras Railway consists of the ordinary double-headed rail laid in chairs, and carried by wooden cross sleepers fastened by dog bolts to the upper flange of the iron girders For these cross sleepers it is proposed to substitute longitudinal baulks carried by iron cross girders rivetted to the main girders In all openings of 30 feet and upwards flat-bottomed steel rails will be spiked to the baulks, and an improved hand railing on both sides is also provided for. In the smaller openings the ordinary rails laid in chairs will be retained, and no fencing is considered necessary The cross girders are spaced at 4 feet from centre to centre, and the baulks are provided with wrought iron tie-rods at every 8 feet

3 In the estimates allowance is made for strengthening the bracing frames of the girders in three bridges on the South-West Line and in four bridges on the North-West Line The whole of the above arrangements are shown on the two plans herewith forwarded The large bridges over the Cheyaur, Paupugnee, Chitravutty, and Pennair are omitted in the list, as the cost of the improved permanent-way will be included in the estimates for the reconstruction or permanent restoration of these works

4 A statement enclosed shows the cost of the present roadway over girder bridges to be Rupees 13-5-2 per foot run, as against Rupees 32-5-7 for the new system, the latter giving an excess of Rupees 19 per lineal foot of bridge In the small openings the increased cost will be nearly Rupees 15 per lineal foot of water-way provided

5 The amount which has been charged to revenue in each case represents the cost of the present roadway, the difference between that and the total cost of the new work being charged to Capital in accordance with paragraph 17 of Sir Charles Woods' despatch, No 17, dated 9th March 1864, in other words the cost of the improvement is charged to Capital The Revenue portion of the estimates will have to be credited with the value of the old materials which will be set free by the new work, but it is not possible at present to ascertain these amounts with any degree of accuracy A correct account will be kept as the materials become available and other works will be debited with their value from time to time as they are used up The teak cross sleepers will be used for points and crossings and over arched bridges to replace the

present wooden sleepers as they decay Such of the planking as is suitable will be used again

6 From the papers embodied in the Proceedings of Government referred to in paragraph 1, it would appear that the Secretary of State approves generally of the measures proposed for strengthening the bridges, and for the improvement of the roadway over them, sanction having been given for the purchase of a certain proportion of the iron work required for the purpose

7 Funds are available for the Revenue portion of the expenditure on such of the above works as will be undertaken during the current official year from Schedule G of the Budget for 1875-76, and the Capital portion (except in the case of the Huggry bridge) will be charged to "Stores" The expenditure on the Huggry bridge will be met from Schedule B, "Unforeseen requirements" The sanction will lapse at the end of the eighth quarter after receipt

8 It is requested that the estimates may be returned, as copies of them have not been kept in this office

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No 478 ORDER THEREON, 28th October 1875, No 3,057

RAILWAY, No 43

ORDERED that these estimates be submitted for the sanction of the Government of India

(Here enter No 3,058, dated 28th October 1875)

(True Extract)

Major-General, R E,
Secretary to Government

To the Consulting Engineer for Railways

PUBLIC WORKS DEPARTMENT,
FORT ST GEORGE, *28th October* 1875.

No. 479 No 3,058

FROM

MAJOR-GENERAL G W WALKER, R E,
Secretary to the Government of Madras,
Public Works Department,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
Public Works Department

RAILWAY, No 44

No 2,678 of 17th September 1875
" 2,800 of 29th " "

SIR,—In continuation of my letters quoted in the margin, I am directed to transmit herewith plans and estimates, amounting to Rs 9,01,847, for improved permanent-way over girder bridges on the Madras Railway The proposals have been based on the recommendation of Sir John Hawkshaw, the Company's Consulting Engineer in England As will be seen from the papers printed with Proceedings of Government, No 1,776, 25th January 1875, copy of which accompanied my letter, No 23, of 3rd September 1875, the Secretary of State has concurred generally in the improvements suggested, and sanctioned the provision of a portion of the iron work required

2 The Capital portion of the expenditure amounts to Rupees 5,79,919, and it is proposed to charge Rupees 3,21,925 to Revenue, calculated on the principles approved by Sir C Wood in 1864 *

* Despatch No 8 of 9th March.

3. Paragraph 5 of the Consulting Engineer's letter explains that the credits to Revenue on account of old materials cannot at present be ascertained, but that a separate account will be kept, and adjustments made as the materials become available Paragraph 7 indicates the source from which funds can be provided I am to invite attention to paragraph 8.

I have the honor to be,
Sir,
Your most obedient servant,

Major-General, R E,
Secretary to Government.

Exd W J Lewis

Spare Copies

funds are available for the
Revenue portion of the expenditure on such
of the above works as will be undertaken
during the current official year from
Schedule C of the Budget for 1875-76, and
the Capital portion (except in the case of
the Kuggri bridge) will be charged to
Stores. The expenditure on the
Kuggri bridge will be met from
Schedule B. Inspection Requirements.
The sanction will lapse at the end of the
eighth quarter after receipt.

It is requested that the
estimates may be returned, as copies of
them have not been kept in this office.

I have the honour to be
Sir
Your Most obedt Servant
[illegible] R.E. Captain
for Offg. Com: Engineer for
Railways.

M.R.O. 1—10,006—23-2-50

P. W. D.

Proceedings of the Madras Government,

Under date the 28th Oct 1875.

Read the following :—

Ordered that these Estimates be submitted for the Sanction of the Government of India

(M. E.) No. 3058 of 28 Oct 75

To No 3058
The Secretary to the Govt. of India

Sir

In continuation of my letters, quoted in the margin, I am directed to transmit

+ 2678 of 17 Sept. 1875.
2800 — 29 — —

Consulting-Engineer for Railways.

G.O. Final Ry 15 Oct 64
P.W.G.O. 28 June 72 No 233
" " 10 Sept " No 1194 1420
" " 7 Feby 73 No 1346 1361
" " 19 March " No 1461 1462
" " 2nd April " No 728 743
" " 13 Augt " No 2114 2118
" " 28 Augt 1871 No 3624 363
" " 6 Feby 1875 No 954 976 997
" " 12 March 75 No 312 313
" " 21 May 75 No 387 388
" " 25 June " No 508 509
" " 28 June 72 No 1194 1206
" " 28 " — 1875 No 512 653 746
" " 17 Sept " No 386 387 388
" " 29 Sept " No 628 629 631
10 July 75 299 301

P. W. 1875

No. 6414

Mr Consulting Engineer for Railways

To

The Secretary to Govt P. W. Department Fort St George

Dated 8 November October 1875

G.O. No 557

Submitting for the sanction of the Govt of India plans and estimates for the cost of the new system of permanent way proposed to be adopted over girder bridges on the Madras Railway

No 477

Cir 22-10-75
Sent 10 Oct 9-10-75

transmit herewith plans and estimates, amounting to Rs 9,01,847, for improved permanent-way over girder bridges on the Madras Railway. The proposals have been based on the recommendation of Sir John Hawkshaw, the Company's Consulting Engineer in England. As will be seen from the papers printed with Proceedings of Government, No 1776, 25th January, 1875, copy of which accompanied my letter No 23 of 3d Sept. 1875, the Secretary of State has concurred generally in the improvements suggested, and sanctioned the provision of a portion of the iron work required.

The Capital portion of the expenditure amounts to Rs. 5,79,919 and it is proposed to charge Rs. 3,21,925 to Revenue, calculated on the principles approved by Sir C. Wood in +1864.

Paragraph 5 of the Consulting Engineer's letter explains that the credits to Revenues on account of old materials, cannot at present be ascertained, but that a separate account will be kept, and adjustments made as the materials become available.

Paragraph 7 indicates the source from which Funds can be provided.

+ Despatch No. 8 of 9 March.

I

I am to invite attention to para. 8.

65c 3 previous Nos
& 65c 3 3058 with
4 Schedules & 2
Plans despd -
9- 11- 75-

Govt. of India.

PUBLIC WORKS.

To Consulting Engineer for
Railways

Dated 9th November 1875.

Received 11th

Read

Entd

Published

G. O. 28th Nov 1875, No. 3857-58.

Nos. 477-478
479

New system of permanent
way proposed & the adopted
on Girder Bridges on the
Tirupur Railway. Ordered
that the Estimates of the
Cost of the — be submitted
to the sanction of the