Public Works (1890) Department.

RAILWAY BRANCH.

G.O., No. 894-5 Rys

DATED 23rd June

1

[Despatch Abstract.]

English expenditure on the Villupuram-Guntakal State Railway. 1890-91. — Ordered that the Correspondence regarding the —, be forwarded to the Govt of India.

Forwarded

[P. W. Ry. L 760—25-9-99.]

Indexed.

BACK PAPERS.

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

FURTHER PAPERS.

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

No. 22 R. S.

GOVERNMENT OF INDIA.

PUBLIC WORKS DEPARTMENT.

RAILWAY *Stores*

All communications should be addressed to the Secretary.

LR 5/5/90 Transcribe etc &c

To

The Joint Secretary to the Government of Madras

Railway Branch Public Works Department.

Simla, the 26th April 1890.

Sir,

The Government of India being desirous of ascertaining, at as near an approximation as — possible, the English expenditure in connection with the Villupuram Guntakal Railway during 1890-91, I am directed to request the favour of being furnished, at an early date, with the following information.

(a) A statement and copy of all indents that have gone forward to England for the Villupuram Guntakal line up to date.

(b) A statement showing the amount of — payments that have been made on these indents up to 31st March 1890.

(c) A statement showing the probable amount of

29. ft. Secy. to Govt

P. W. C. No. 4234 Encl

of payments to be made on these indents during 1890-91

(d) The probable amount of indents that are likely to be forwarded later on and that can be complied with during 1890-91

2. I am to request that the approximate figures under (b) (c) and (d) may be wired at an early date and that in future copies of all indents forwarded to England for compliance may be supplied for the information of the Government of India.

I have the honour to be,

Sir,

Your most obedient servant,

Major, R. E.,

Under Secretary

Documents accompanying

Nil

C/ No. 2214 C dated 12th May 1890

Referred to the Consulting Engineer for Railways for compliance.

2. Attention is directed to paragraph 2 of this letter.

Rue Sab. Buckmaster Lt Col
Sec: Jamittary to Govt
P. W. D.

R. 12. 5. 90.

8/5/90. R 9.5.90

1890.

P. W. DEPARTMENT.

Current No. 4234

From The Govt of India

ENCLOS.—

No. 22 R. S.

Dated 26-4-1890

Received 6-5-"

SUBJECT.

Requesting certain information with regard to the English expenditure in connection with the Villupuram Guntakal Railway during 1890-91.

Sd/ H.C.I 8/5

DISPOSAL.

No. 2214 C dated 12th May 1890

Referred to the Chief Engineer for compliance.

2. Attention is directed to paragraph 2 of this letter.

/Sd/ R.R.S. Buckmaster
Sy: to Govt Lt Col
P. W. D.

despatched on 19th May 90.

TELEGRAM — Urgent / Ordinary / Deferred

From — To

E. R. — Wales. Simla.

Jam 22 RS 26th April B Sterling

309710 C 361608 D Nil.

Ss
19.5.90

Put up copy telegram & all the connected papers.

Sir, Put up.

Please say if we are to submit A. telegram with ref to its docket No 2214 C
which we have to complete E.R. records in this case 12-5-90
then send the docket to return the docket till it is
complete in all respects. further no fee is entitled to complete.
from A.
WPS 19/5-

way,

18 90

AS.

letter
beg to
& and Copy
& forward
in Simla
ete. Scales
ing the
ance Cess
31st March 90
ance
Sir.
Your most Obedt Servant
Walter J. Hooper
for Agent.

dd

No 799

South Indian Railway,

AGENT'S OFFICE,

TRICHINOPOLY, 5th June 1890

Depot C.

From

The AGENT,

SOUTH INDIAN RAILWAY,

To

The CONSULTING ENGINEER FOR RAILWAYS,

MADRAS.

Sir,

In Continuation of my letter No 690 dated 17th May 1890 I beg to forward herewith a Statement and Copy of all indents that have gone forward to England for the Villupuram Gudalur Kal State Railway up to date. Indent and a Statement showing the amount of payments that have been made on these indents up to 31st March/90

I am

Sir.

Your most Obedt Servant

Walter J. Hooper

for Agent.

16

REGISTER
No 745
FILE
No

PW Enc 3
5684/90

No 857

South Indian Railway,

AGENT'S OFFICE,

TRICHINOPOLY, 14th June 1890.

From

The AGENT,
SOUTH INDIAN RAILWAY,

To

The CONSULTING ENGINEER FOR RAILWAYS,
MADRAS.

Sir,

I beg to inform you that I have to-day wired you thus in reply to your telegram of yesterday regarding 6. Statement of probable amount of payments to be made on indents 1890-91 in connection with Villupuram Jimbakal State Railway

"Your 498. I wired you on 17 ultimo "that C was 361608. We cannot give any "detail of this".

I am,
Sir,
Your most obedient Servant
William Betts.
Agent

Subparas.

From

THE AGENT,
South Indian Railway,
Trichinopoly.

To

THE CONSULTING ENGINEER FOR
RAILWAYS,
Madras.

Papers
Dated 5 June 1890.
Received 16.6.90
Noted
No. 754
ENCLOSURE.

REGIST
No. 798
FILE
No.

Pw
56

From

The Agent,

South Indian Railway,

Trichinopoly.

To

The Consulting Engineer for

Railways,

Madras.

Papers

Dated 4 July 1890.

Received 16.6.90

Abstract No. 857

Enclosure.

Form No. 1.

Public Works Department.

Office of Consulting Engineer for Railways,

Madras, 16th June 1890.

Letter from the Agent, South Indian Railway, No: 799, dated 5th June 1890, with enclosures.

——Do——Do—No: 857 dated 14th June 1890.

No. 422

~~Government.~~

Submitted. for transmission to the Government of India, with reference to para. 1 of its No: 22 R. S. dated 26th April 1890, embodied in P. W. docket No: 2214C, dated 12th May last (herewith returned)

2. The Agent, South Indian Railway, states that he is unable to give any details of the statement called for under sub para.

sub-para. (c) of the above letter from the Government of India, and that no students are likely to be forwarded later on, which can be complied with during 1890-91.

A.D.G. Shelley Capt. R.E.
for Offg. Surveyor for Rys

P.W Cur. 5.684.

Form No. 3.

memo No. 2214 C dy 12.6.90

From

THE CONSULTING ENGINEER
FOR RAILWAYS,
MADRAS,

No. 422

Dated 16th
Received 17th } June 1890

No. of Enclosures. 23.

Subject.

Submitting for transmission to the Govt. of India letters from the Agent, South Indian Railway regarding the English expenditure in connection with the V. & J. Railway during 1890-91.

R 26.6.90.

old. 17/6.
Mem. 19/6. R 20-6-90

B

No. 894 R.

PUBLIC WORKS DEPARTMENT,
RAILWAY BRANCH.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

UNDER date the 23rd June 90.

READ the following

P. W. D. Endorsement No. 2214 C dy 12th May 90

Telegram to the Govt. of India P. W. Deptt. — " — " — dy 19th do —

Endorsement from the Consg Engr for Rys — " — " — 422 dy 16th June 1890

Ordered to be forwarded to the Govt. of India with reference to its letter No. 22 R. S. dated 26th April 1890 and in continuation of P. W. D. telegram dated 19th May 1890.

Jus 19/6/90

No. 895 R dy 23rd June 1890

Forwarded.

Queen
19.6.90 W for R

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Railway.

Read the following paper :—

From the Consulting Engineer for Railways, dated Madras, 11th June 1890, No. 403.

From the Agent, South Indian Railway, to the Consulting Engineer for Railways, dated Trichinopoly, 9th June 1890, No. 819.

For the information of Government I forward, herewith, a copy of the Chief Engineer's reply to a portion of the note by the Consulting Engineer to the Government of India for State Railways, dated 6th January 1890, on the Villupuram-Guntakal State Railway.

ENCLOSURE.

From the Chief Engineer, South Indian Railway, to the Agent, South Indian Railway, dated Trichinopoly, 5th June 1890, No. V.G. 233/870.

[Your letter No. 2161/120 of 6th February 1890, and enclosures.]

Waterways.—At the time when the rules referred to by the Consulting Engineer to the Government of India were issued there was considerable discussion as to the most suitable formula to serve as a standard of comparison for small water-shed areas of from about 5 square miles and under, Colonel Dicken's formula in use for the larger being considered to give generally too small results for such smaller areas.

2. Almost immediately after the issue of the rules above referred to, I withdrew and modified them in the light of further study of the country and rainfall, the result being that waterway allowances between Pakala and Guntakal are for the most part calculated to pass 3 inches of rainfall per hour off areas of half a square mile and under, and 2 inches rainfall per hour off areas of one square mile and under, the allowances above one square mile and up to five square miles being represented by a line running from 2 inches at one square mile into five square miles on the Dicken's formula curve.

3. So far from ignoring the nature of the drainage areas as alleged by the Consulting Engineer every waterway, large and small, on the line has been looked into by myself and dealt with separately in consultation with the Engineers of the respective districts and divisions; and wherever the size and conformation of the drainage areas, or any local circumstances, peculiarities or other available data seemed to demand it, the waterway allowances have as far as possible been adopted to these local conditions.

4. I view formula simply as empirical aids requiring to be checked by careful investigation of such local conditions, formulæ in their turn being themselves outside checks when intelligently used, as for instance where the conditions are approximately the same the waterways may reasonably be expected to bear some fixed relation to their respective catchment basins.

5. With reference to allowing Superintending Engineer to settle matters on the ground with the Executive Engineers, I have done this and wish to do so as far as possible, consistent with being kept fully informed of what is being done within the lines laid down for general guidance. In the matter of waterways I have insisted upon everything coming up to me for confirmation, as I had sufficient grounds for adopting this course.

6. *Alignment.*—Most of the rectifications of alignment were suggested by Deputy Chief Engineer Mr. Spalding, who first went over the line with orders to examine and report on this. The longest and most important alteration was however suggested to me by Executive Engineer Mr. W. Michell, with whom and Colonel C. J. Smith I went over, inspected, approved it and gave orders for the survey and section of the deviation. When Mr. O'Callaghan passed up in December I was awaiting data from Mr. Michell to enable final orders to be given to him on points raised when Colonel Smith and I were on the ground, so that I was waiting on Mr. Michell, not Mr. Michell on me.

7. The alignment was in some places unsettled because investigations ordered by me after inspecting the ground were being carried out in the hope of securing important improvements. In some cases the original alignment proved the best attainable, in others substantial improvements both in line and in cost were secured.

8. These investigations were the more readily entered upon that it seemed inexpedient to urge on the construction of the northern portion of the line so long as sufficient labor was not obtainable to push the works between Villupuram and Tirupati, the latter being that portion of the Villupuram-Guntakal State Railway on which it is hoped to secure the most favorable returns from traffic and which ou ght therefore to be opened to the public as soon as possible.

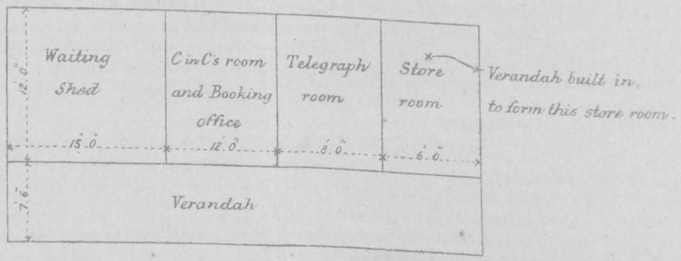
9. With reference to two of the principal bridges reported as practically untouched between Chittoor and Pakala, I presume this refers to the Poiney and Putalput bridges. When the Consulting Engineer (Madras) and I went over the line in July, I found that the Engineers were about to start work on these bridges, but the sandy beds of the rivers were waterlogged owing to freshes. In the case of the Poiney, two engines and pumps were quite unable to keep down the water in even one foundation pit. The rainy season was approaching, and I at once ordered all foundation work to be stopped in these rivers until after the rains should be over in December or January. This resulted in a large saving of money; the bridges are now both practically complete and ready for girders long before plate-laying has been able to reach them.

10. On the length between Pakala and Dharmavaram the sites for some of the large bridges were not quite settled because after inspecting the sites selected for the original project I was not satisfied that the best had been secured and I awaited plans, sections and other data to enable this to be decided. All the bridges are now begun, some are well in hand, and there is no fear of any of them delaying the opening of the line.

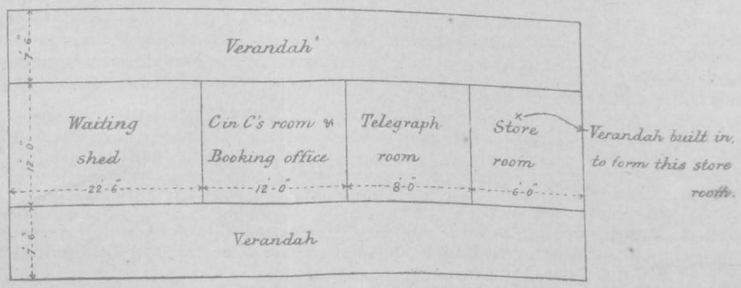
11. *Stations.*—With reference to stations the intention was and is to follow our usual plan of providing permanent buildings only to such towns and villages as are certain to require this accommodation and of providing trial stations without platforms and with temporary buildings (mud walls and thatch) only of the most modest dimensions and cost wherever the prospects of traffic are doubtful.

12. Plans showing the accommodation proposed were submitted to Sir Charles Elliott and the Director-General of Railways when they visited Trichinopoly towards the end of last year, and I understood that the proposals were considered suitable and reasonable. They were based on the experience of a great many years working in this part of the country, and I do not think that any one can accuse the South Indian Railway Company of extravagance in the style or extent of their station accommodation.

13. For fourth-class stations there were three small rooms and a third-class waiting-shed provided thus :—



For third-class stations the third-class waiting-shed was enlarged from 15 feet by 12 feet to 22½ feet by 12 feet, and a verandah was added to the back as well as the front of the building thus :—



14. *Permanent-way.*—In the list of standard dimensions ordered by the Government of India to be adopted on the Villupuram-Guntakal State Railway, it is stated that 2,112 sleepers to the mile are to be laid. This number is arrived at by allowing 12 sleepers to a 30-feet rail. The rails supplied for the Villupuram-Guntakal State Railway are only 24-feet long. If 10 sleepers are laid to each 24-feet rail, the resulting number per mile is 2,200 or 88 sleepers per mile more than stated in the list above referred to; if 9 sleepers to the 24-feet rail are laid, the number per mile is 1,980 or 132 sleepers less per mile than ordered by the Government of India. The subject was discussed by the Consulting Engineer (Madras) and myself with the Director-General of Railways when he was in Trichinopoly in November last, and it was decided that 10 sleepers to the 24-feet rail should be laid, and this is being carried out. I am of opinion, considering the lightness of the permanent-way, the steep gradients (1 in 100), and numerous curves on a great length of the line, that 10 sleepers to the 24-feet rail will conduce to safety and economy in maintenance.

15. When the Consulting Engineer to the Government of India started on his inspection I much regretted being unable to accompany him over the line. I had just returned from a considerable absence on inspection over the same ground, and my presence was much required at head-quarters. When I read his inspection report this regret was intensified because I felt that had I accompanied Mr. O'Callaghan I would have been able to satisfy him that our views were identical in essentials, and to have explained several matters about which he appears not to have received the detailed explanation and information I would myself have given had I been present.

Submitted to Government with reference to its Proceedings No. 181 R., dated 4th February 1890.

ORDER—dated 17th June 1890, No. 840 R., Public Works.

Ordered to be forwarded to the Government of India with reference to its letter No. 78 R.C., dated 21st January 1890.

(Here enter No. 841 R., dated 17th June 1890.)

(True Extract.)

(Signed) SIDNEY SMITH, Major, R.E.,
Under Secy. to Govt., P.W.D.,
Railway Branch.

To the Consulting Engineer for Railways.

Exd. J. Moses.
Spare Copies

RAILWAY.

Govt. of {1890} Madras.

PUBLIC WORKS.

Dated June, 17th.

Recd. *Encl.*

G.O., 17th June 1890, No. 840 R.

JUNE.

22 26 R 25/9/91

22 X

Put up with papers
Art & Rly
J1425 30-10-91

Villupuram-Guntakal State Railway

Ordered that the reply of the Chief Engineer, South Indian Railway, to certain points in the note by the Consulting Engineer to the Government of India on the — be forwarded to that Government.