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MADRAS RECORD OFFICE

Government of Madras

Public works. DEPARTMENT

G.O. No. 2991 ~~Press~~

~~B.P. No.~~ Mis.

455. 56.

Dated 20-6-1874 ~~195~~ .

Not to be folded or roughly handled

Railway Department. CONSULTING ENGINEER'S OFFICE.

No. 5-81

From

LIEUT.-COLONEL J. H. M. SHAW STEWART, R.E.,

Consulting Engineer for Railways,

To

COLONEL G. W. WALKER, R.E.,

Secretary to Government,

Public Works Department.

Fort Saint George.

SIR,

I have the honour to report, for the information of Government, that I accompanied the Chief Engineer of the South Indian Railway upon an inspection of the works in progress on the Southern Extension, from Trichinopoly to Tinnevelly and Tuticorin. The inspection was made during August and September; and, with the

the exception of the erection of the station buildings and the laying of permanent way material, the work is everywhere so far advanced that it will probably be satisfac=tory if the results now attained are stated briefly and in general terms.

2. The earthwork through=out the line may be said to be finished. Here and there are small gaps, where bridges are in progress, and many of the station yards still require to be raised; but practi=cally this part of the work may be considered as completed. For about three-fourths of the entire line, the side-slopes have been efficiently protected with turfing, small aloes, mainel grass or creepers, according to the nature of the soils; and vegetable fencing has been provided along a similar distance. The weather during this year has been extremely unfavourable to the growth of turfing or of vegetable fences over the whole of the Southern Extension. For the last four months there has been unusually heavy rain in the districts round Madras, especially in North and South Arcot and Chingleput; but to the South of the Cauvery the

Country

country has suffered greatly from drought, the effects of which are to be seen along the line of railway, especially through the Tinnevelly district.

3. The bridges throughout the Extension are well advanced towards completion. The masonry in them amounts in all to about 60,000 cubic yards; and of this, on the 31st August, not 7 per cent still remained to be built. Most of the large bridges are finished, and ready to receive their girders. The most

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most backward is the bridge of twelve 70 feet openings over the Vyppar river at Pattoor. Here unexpected difficulties have been experienced in carrying some of the foundations down to a hard stratum; and in the case of the north abutment and one of the piers it has been found necessary to make use of wells. The minor bridges and culverts may be said to be finished.

4. A large number of the girders, including most of the

the smaller ones, have been distributed over the line in carts, and of these the greater part are now in position. If there were a prospect of the rolling-stock being ready for use at an early date, it would probably be right to incur the expense of carting the larger girders also to their bridges; but as no good object would be served by completing the road months before the rolling-stock can be provided, it has been wisely determined to economise in

the item of carriage, and to work the large girders forward by rail as far as possible from each end of the line.

5. The station buildings were begun long after the other masonry works, and they are, of course, not so far advanced. The following table gives the proportion finished up to the end of August:—

Stations	No of cubic yards of Masonry to be done at August 1874.	
	Finished	Remaining to be done
Trichinopoly	1524	3490
Collatoor	185	294
Manapara	230	249
Yellangacoorchy	0	479
Vada Madura	25	454

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material have now been laid along the line. At the north end the rails are nearly complete between Swichenapolz and Dwidiguel, a distance of about 60 miles; and at the south end they are laid from Jutecorin towards Meniachee, a distance of nearly 20 miles. To the north and south of the town of Medias rails have been laid for about 15 miles, and for about 5 miles near Salor.

As in the case of the girders, the permanent way material might have been carted to its destination before now, as there had been no probability of the rolling-stock being soon available; but under the circumstances the Chief Engineer is anxious to send the material forward by rail as far as possible, making use of each successive length as it is laid.

7. The only metre gauge rolling-stock which is yet available consists of two locomotives and some ballast wagons. The locomotives were built for a South American Company, and then offered to the South Indian Railway

Railway Board. They were
set up at Negapatam, and taken
to Trichinopoly on trucks by the
broad gauge line. One is
now employed at Trichinopoly
in ballasting the line, and
conveying girders, &c., towards
Dindigul and Madura.
The other was sent direct to
Madura by road, and is
employed there on similar work.
They seem powerful engines, and
well adapted for working heavy
traffic.

8. The temporary posts
on which the telegraph wire was
erected

erected two years ago have not
yet been replaced by more sub-
stantial and durable ones.
The inconvenience and delay
caused by the interruptions
arising from the insecure state
of the wire have been frequently
brought to notice; and, as a
matter of course, these inter-
ruptions become more frequent
every month. With great
care and watchfulness, it is
now scarcely possible to keep
telegraphic communication
open from day to day; several
posts being broken or blown
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down during almost every night.
To the south of Madeira the
interruptions are almost constant,
and Engineering messages have
as a rule to be sent round
by Negapatam and Trincomalee.
Now that the Directors of
the Company have come to terms
with the Government regarding
the ownership of the wires, it
is to be hoped that the line of
telegraph will soon be placed
in an efficient state.

9. The generally excellent character of the masonry along

along the Southern Extension has been more than once brought to the notice of Government; and, where all are good, it is perhaps invidious to specify particular works; but I think it right to mention the bridge over the Vygaz near Madura, as a very fine specimen of workmanship. The large bridge in District X and the bridge over the Chittaur in District XII also deserve special mention: but the standard of the masonry over the whole line is high.

10. It is not altogether easy to name a date for the opening of the line. There can be no doubt that time has already been lost owing to the late date at which the rails, sleepers, girders, and rolling-stock, have been received from England. If these were

available even now in sufficient quantity, there would in my opinion be nothing to prevent the opening of the whole line, or the greater part of it, from the 1st January 1875. In any case, I trust that the portions between Trichinopoly and Madura, and between Tinnevelly and Tuticorin, will be open to the public during the first half of 1875.

I have the honor to be
Sir
Your most obedient servant

Lt Colonel R.E.

Town Engineer for Railways.

Fort Saint George
1st Sept 1874.

Madras
29th Septr 1874.

Rly Dept Letter No. 581.
Dated 29th Septr 1874.
Rec'd 1st October 1874.

From
The Consulting Engineer
for Railways,

To
The Secretary to Government,
P. W. Department,
Fort Saint George.

No. 581.

Sir,

I have the honor to forward herewith a Report on the works of the Southern Extension of the South of India Railway, which I have inspected during the months of August and September.

2. I would particularly invite attention to the last paragraph of the Report, from which it will be observed that the only obstacle to the opening of the line for traffic by the 1st January 1875 is the want of iron-work from England, and that, under present circumstances, only detached sections are expected to be ready some time during the first half of 1875.

I have the honor to be
Sir
Your most obedient servant

Lt Colonel R.E.

Town Engineer for Railways.

Rly Dept Letter No. 581.
Dated 29th Septr 1874.
Rec'd 5th Oct 1874.

P. W. Dept Letter No. 6126
Dated 9th Oct 1874.
Railway Department.

RAILWAY DEPARTMENT.

No. 6 of 1874.

TO THE MOST HONORABLE THE MARQUIS OF SALISBURY,
SECRETARY OF STATE FOR INDIA.

My Lord Marquis,—Adverting to your Lordship's despatch of the 30th April 1874, No. 4, and in continuation of the papers on the subject of delay in opening the Southern Extension of the South of India Railway, which accompanied our despatch No. 3, dated 13th March 1874, we have the honor to transmit herewith, for your Lordship's information, a further Report on the works submitted by our Consulting Engineer after an inspection during the months of August and September. We would particularly invite attention to the last paragraph of the Report, from which it will be observed that the only obstacle to the opening of the line for traffic by the 1st January 1875 is the want of iron-work from England, and that, under present circumstances, only detached sections are expected to be ready some time during the first half of 1875.

Procs. of Govt., dated 20th Oct. 1874, No. 2,991.

We have the honor to be,
My Lord Marquis,
Your Lordship's most obedient,
humble servants,

Ootacamund,
21st October 1874.

Exd. S. T. Austin.

OOTACAMUND.

RAILWAY DEPARTMENT.

Letter to the Most Honorable the Marquis of Salisbury, Secretary of State for India.

Dated 21st October
No. 5 of 1874.

TRANSMITTING a further Report submitted by the Consulting Engineer for Railways on the works in progress on the Southern Extension of the South of India Railway, and inviting attention to the last paragraph of the Report regarding the want of iron-work from England for the opening of the whole line.

S.R.D.

To The Right Honorable
the Secy: of State
for India -

My Lord Marquis

Adverting to your
Lordship's despatch
of the 30th April 1874,
No 4, and its contents
tion of the Papers on
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that under present circumstances only detached sections are expected to be ready sometime during the first half of 1875.

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Crews

Railway Department.

Letter to the Most Honorable
the Marquis of Salisbury
Secretary of State for India

Dated 21st October
No. 5 of 1874

Recd & Copy sent for
Overland Mail on the
3rd Nov 1874.

Copy sent to Govt of India
on the 5th Nov 1874.

Transmitting a further re-
port submitted by the Cons:
Engr for Railways on the
works in progress on the
Ln of extension of the South of
India Ry and inviting
attention to the last para-graph
of the Report regarding the
want of iron work from
England for the opening of the
whole line -

17 enclosures
Cash 16/10/74 Rcd 15/10/74

Proceedings of the Madras Govt
Read the following:-

2991

From,

The Cons Engineer
for Railways

(M- E. Dis 581 & 29th Sept 1874)

The Consulting
Engineer reports in this
letter the results of his
inspection of the works
in progress on the Sou-
thern Extension of the
South of India Railway
during the months of
August and September.
At this period the earth
works throughout the
line were practically
completed, and the turfing
and fencing of three-fourths
of

of the entire length has also been finished. Unusual drought the effects of which are visible along the line of Railway is stated to have recently prevailed in the Districts south of the Canvery, while on the other hand the country to the north through which the northern extension runs has been visited with abundant rains.

His Excellency in Council received with satisfaction the testimony of the Consulting Engineer to the superior quality of the masonry in the bridges. The

masonry work is stated to be almost all complete, less than 4 per cent remaining to be done; and most of the large bridges are ready to receive their girders. These, however, as well as permanent way materials, are being distributed and laid at leisure as it is not considered necessary to have the line completed long before the Rolling Stock can be procured. The only narrow gauge stock yet available consists of two locomotives and some ballast

wagons which are being utilized on the work.

It is observed with reference to para 8 that the construction of the permanent telegraph is still under reference to the Secretary of State.

The Consg Engineer considers that if all the iron work from England had even at the date of his report been received there would be nothing to prevent the line being ready for traffic by the 1st January 1876.

Whereas under present circumstances only the portions between Sriperumbudur and Chingleput and between Tinnevelly and Tuticorin are expected to be ready some time during the first half of 1875. His Excellency the Governor in Council much regrets that it has been found practicable to arrange at home for the supply of iron work keeping pace with the requirements of work in India. In their letter recorded with G.O. No. 1257. dated 11th May, the Directors state that every endeavour

endeavour will be made to complete the supply remaining due forwarded. The Consulting Engineer for Railways will report the quantities of materials still due supplied.

These Proceedings will be forwarded for the information of the Secretary of State for India in continuation of previous correspondence.

Gwin

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To Consulting Engr for Rys.
& Copies despd 29/10/74.

455-456

Cir 8/10/74

Rly Lrs to England 0/21
October 5 of 1874

6126

Govt. of {1874 Madras.

PUBLIC WORKS.

To

The Chief Engr for Rlys.

Dated

Recd. Encl

G. 20 Octr 1874. No 991

Nos. 455-456.

Extension of the South of India Rly

Passing orders on the Report of the Consg Engr for Railways containing the results of his inspection of the works in progress on the Southern extension of the South of India Railway —