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(2) Date of repair \_\_\_\_\_

(3) Initials of the Referencer \_\_\_\_\_

# MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 2478

55-56

Press  
Mis.

Dated 3-9-1866.

Not to be folded or roughly handled

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*Proceedings of the Madras Government, Public Works Department,  
3rd September 1866.*

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No. 55. Read the following Endorsement of the Acting Consulting Engineer for Railways, dated Madras, 22nd August 1866, No. 356 :—

Read the following letter from the Agent Great Southern of India Railway, to the Consulting Engineer for Railways, dated Negapatam, 20th August 1866, No. 2,117.

1. Your letter No. 200, of the 8th instant, was forwarded to the Chief Engineer, and I now attach hereto copy of his reply.
2. Your letter No. 144, of the 4th June last, was also communicated to the Engineering Department. I concur with the Chief Engineer in his opinion that it is undesirable to erect Semaphore signals at every station on this Railway. We do not run night trains, and we have worked the line safely for nearly six years without Semaphores. The introduction of a new mode of working would, in my opinion, considering the class of men upon whom we should have to depend, be more fraught with danger than with safety to the travelling public, and I would strongly recommend you not to incur this risk by calling upon Government to insist upon the erection of Semaphore signals. Your predecessors on the three occasions of their inspecting the line prior to its opening to Trivalore, Tanjore, and Trichinopoly respectively, agreed to our present mode of working.
3. I think with you that the ballasting should be completed, and the station buildings further advanced before the line is opened for public traffic, arrangements will therefore be made to push forward the work. As I understand from the Chief Engineer that the line as far as Caroor is likely to be ready about a fortnight after the date upon which the work previously alluded to can be finished, I consider it will be better to wait until that time, before opening any portion of the Extension. As we have no turn-table at Lallapetta, the engines (in the event of our opening as far as that place only) would have to run tender first in one direction, and this, with passenger trains, is objectionable.

—

From the Chief Engineer, to the Agent, dated 17th August 1866, No. 862.

1. Your No. 4,420 enclosing a copy of Consulting Engineer's letter to you, No. 200 of the 8th instant.
2. I thought it had been understood by the Consulting Engineer, that it was intended to complete the fencing before the proposed opening for public traffic, as well as to put on such a proportion of ballast, (nine inches depth of the twelve inches) in places that were unballasted, this would render the line as safe for the public as if the full quantity was put on. The station buildings also, though at the time of Consulting Engineer's visit unfinished, were to be roofed and to be made fit for use. It is quite possible for this to be done by the 1st proximo.
3. Paragraph 2, last part. I do not agree with the Consulting Engineer that Semaphore signals are essential to the safety of the public at every station; on the contrary, I am of the opinion that if the rails at a station can be seen for a certain distance before arriving at the station, there is less danger in depending upon the Engine Driver *looking out*, than in running the risk of Semaphore signals being neglected or improperly worked. I think I am not singular in this opinion. Instances of accident from improper working of signals are constantly occurring upon Railways in England, that at the Welwyn tunnel a short time ago is one.
4. I think this is a matter worthy of much consideration.
5. Paragraph 4. The Consulting Engineer must have misunderstood a remark of mine on this subject. I said it was intended to finish the *platform walls* with steps. Not the whole platform.

*Proceedings of the Madras Government, Public Works Department,  
3rd September 1866.*

The steps I speak of are for the convenience of Railway servants alone, none others being allowed to walk over the rails ; this I conceive there can be no objection to on the part of the Consulting Engineer.

1. Submitted to Government with reference to G. O. of the 20th instant, No. 2,617.

2. It will be seen from the last paragraph of his letter, that the Agent does not now propose to open for public traffic any portion of the Extension until the line is ready as far as Caroor ; and, in coming to this conclusion, I think Mr. Betts has acted wisely.

3. It will also be seen that both the Agent and the Chief Engineer are of opinion that danger will result from the introduction of Semaphore signals at the stations upon the Great Southern of India Railway. I do not share their apprehensions. Mr. Betts urges, as a reason for not introducing Semaphores, that night trains are not run ; but the fact is that these signals are only used during

\* *Vide* Section VII., Railway Rules and Regulations. the day, and would be useless at night,\* when colored lamps are employed instead.

The circumstance of the line having been worked safely for nearly six years without Semaphores may be deemed fortunate, but can scarcely be quoted as an argument against their use. It is not clear why on the Great Southern, more than on any other Railway, in India or elsewhere, there should be a difficulty in the way of introducing Semaphores, and of training men to work them carefully and properly ; nor is it clear why the provision of an additional safeguard against danger should, as the Chief Engineer seems to fear, actually increase the risk of danger. It will in any case be the duty

*Vide* Section XIII., Clause 4, Railway Rules and Regulations. of the Engine Driver to keep a sharp look out ahead ; and it should be borne

in mind not only that some of the stations upon the line are, owing to curves and cuttings, invisible at a short distance, but that mists and fogs are apt to cling to the ground, and to prevent any signal not sufficiently elevated from being of use. In several cases too, when it is dangerous for an engine to advance, the danger is invisible to the Engine Driver, and can be communicated to him only by signals. But it is scarcely necessary for me to urge more in support of a system which has been adopted so universally, and the advantages of which are admitted upon all hands. The case of the Welwyn tunnel accident, cited by Mr. Dibblee as an instance where Semaphores failed to prevent danger, is not in point, as it is a standing order of the Board of Trade that all tunnels should be protected by the Electric Telegraph.

4. The fact is that it was originally intended to provide every station upon the Great Southern of India Railway with Semaphore signals, and that the necessary stores were actually shipped on board the "Bellona," which vessel was lost at sea during the early part of 1861. No steps seem to have been taken to procure signals in lieu of those lost, although Lieutenant-Colonel Johnston, when reporting on the Letter No. 33, *Vide* G. O. No. 545, 24th July 1861. 12th July 1866, upon the proposed opening of the line from Negapatam to Trivalore, seems to have been under the impression that a fresh supply was expected, and recommended that, pending their

*Proceedings of the Madras Government, Public Works Department,  
3rd September 1866.*

arrival, the trains should be run under the protection of hand signals, and of the station Telegraph.

\* No. 2,617.

5. The Order\* of Government quoted at the head of these observations has been communicated to the Agent.

(Signed) J. H. M. SHAW STEWART, Major, R. E.,  
*Acting Consq. Engr. for Railways.*

No. 56. ORDER THEREON, 3rd September 1866, No. 2,798.

RAILWAY, No. 3.

The Government quite agree with the Consulting Engineer that the freedom from accident with which the Great

Southern of India Railway has hitherto been worked, without the aid of Semaphores, is a fortunate circumstance, but cannot be adduced as an argument for dispensing with the use of those signals, and the Agent will accordingly be instructed to take measures for establishing them as speedily as possible.

(True Extract.)

(Signed) CHARLES A. ORR, Colonel, R. E.,  
*Secretary to Government.*

To the Consulting Engineer for Railways.

Exd. S. T. Augustin.

No. 2117

GREAT SOUTHERN OF INDIA RAILWAY.

AGENT'S OFFICE,

NEGAPATAM. 20th August 1868

From

THE AGENT

Great Southern of India Railway,

To

The Consulting Engineer for Railways  
Madras.

SIR,

Your letter N. 208 of the 5th Instant was forwarded to the Chief Engineer and I now attach hereto copy of his reply.

2. Your letter N. 144 of the 1st June last was also communicated to the Engineering Department. I concur with the Chief Engineer in his opinion that it is undesirable to erect Semaphore signals at every station on this Railway. We do not run night trains, and we have worked the line safely for nearly six years without Semaphores. The introduction of a new mode of working would in my opinion, considering the class of men upon whom we should have to depend, be more fraught with danger than with safety to the travelling public, and I would strongly recommend you not to incur this risk by calling upon Government to insist upon the erection of Semaphore signals. Your predecessors on the three occasions of their

their inspecting the line prior to its opening  
to Himalaya Jangore and Mithimaphy respectively  
in accordance with our present mode of working.

3. I think with you that the Ballasting  
should be completed, and the station buildings  
further advanced before the line is opened for  
public traffic, arrangements will therefore be  
made to push forward the work. As I understand  
from the Chief Engineer that the line  
as far as Caran is likely to be ready about a  
fortnight after the date upon which the work  
provisionally allotted to him be finished, I consider  
it will be better to wait until that time before  
opening any portion of the extension. As we  
have no turn-table at Lallapetta, the Engine (in  
the event of our opening as far as that place only)  
would have to run tender first in one direction  
and then, with passenger trains, in the other.

I have the honor to be,

Sir,

Yours Most Obedient Servant

Frederick B. ...

Attest

17/3/03/10

Handwritten notes and signatures at the bottom left of the page, including names like "The Hon. Secy to Govt" and "The Hon. Secy to the Board".

From Chief Engineer to Govt. No 862. 17th August 1884  
My dear Sir.

Your No 4420 enclosing a copy of Con-  
sulting Engineer's letter to you No 200 of the 8th Inst.

I thought it had been understood by the  
Consulting Engineer, that it was intended, to complete  
the paving before the proposed opening for public  
traffic as well as to put on such a proportion of  
ballast, (9" depth of the 12") in places that were  
unballasted, this would render the line as safe  
for the public as if the full quantity was put on.  
The station buildings also, tho' at the time of Con-  
sulting Engineer's visit unfinished, were later roofed  
and so the made fit for use. It is quite possible  
for this to be done by the 1st proximo.

Para two last part. I do not agree  
with the Consulting Engineer that Semaphore signals  
are essential to the safety of the public at every  
station, on the contrary I am of the opinion that  
if the rails at a station can be seen for a  
certain distance before arriving at the station,  
there is less danger in depending upon the Engine  
driver looking out, than in running the risk of  
Semaphore signals being neglected or improperly worked.  
I think I am not singular in this opinion. Instances  
of accidents from improper working of signals are  
constantly occurring upon Railways in England, that  
at the Welwyn Tunnel a short <sup>time</sup> ago is one.

I think this is a matter worthy of  
much consideration.

Para 4. The Consulting Engineer  
must have misunderstood a remark of mine on  
this subject. I said it was intended to finish  
the Platform walls with steps. Not the whole  
platform

Handwritten notes and signatures at the bottom right of the page.

platform, the steps I speak of are for the convenience of Railway servants alone, none others being allowed to walk over the Rails, thus ensuring there can be no objection, to any the part of the Consulting Engineer.

Gantrah,  
Signed Fred. L. Dibbles  
Chief Engineer.

True Copy

William H. Betts.

Agent

MS 3485/100

No 356.

Submitted to Government with reference to L.O. of the 20<sup>th</sup> instant. No 2614.

It will be seen from the last para. of his letter, that the Agent does not now propose to open for public traffic any portion of the extension until the line is ready as far as Carrot; and, in coming to this conclusion, I think Mr Betts has acted wisely.

It will also be seen that both the Agent and the Chief Engineer are of opinion that danger will result from the introduction of Semaphore Signals at the Stations upon the Great Southern of India Railway. I do not share their apprehensions. Mr Betts urges, as a reason for not introducing Semaphores, that night trains are not run; but the fact is that these Signals are only used during the day, and would be useless at night, when colored Lamps are employed instead. The circumstance of the line having been worked safely for nearly six years without Semaphores may be deemed fortunate.

Will  
be and  
ons -

fortunate, but can scarcely be quoted as an argument  
against their use. It is not clear why on the Great  
Southern, more than on any other railway, in India  
or elsewhere, there should be a difficulty in the way of  
introducing Semaphores, and of training men to work  
them carefully and properly; nor is it clear why the  
provision of an additional safeguard against danger  
should, as the Chief Engineer seems to fear, actually in-  
crease the risk of danger. It will in any case be  
the duty of the Engine driver to keep a sharp look out  
ahead; and it should be borne in mind not only that  
some of the Stations upon the line are, owing to curves  
and cuttings, invisible at a short distance, but that  
mists and fogs are apt to cling to the ground, and to  
prevent any signal not sufficiently elevated from being  
of use. In several cases too, when it is dangerous  
for an Engine to advance, the danger is invisible to the  
Engine Driver, and can be communicated to him only  
by signals. But it is scarcely necessary for me to urge  
more in support of a system which has been adopted  
so universally, and the advantages of which are  
admitted upon all hands. The case of the  
Welwyn Tunnel accident, cited by Mr. Dibblee

vide Section XIII  
Clause 4. Railway  
Rules & Regulations

Letter 1838. vide  
G.O. 4545. 24  
July 1861.

1861

5  
as an instance where Semaphores failed to prevent  
danger, is not in point, as it is a standing order  
of the Board of Trade that all tunnels should be  
protected by the Electric Telegraph.

4 The fact is that it was originally  
intended to provide every Station upon the Great Southern  
of India Railway with Semaphore Signals, and that  
the necessary stores were actually shipped on board the  
"Bellona", which vessel was lost at sea during the early  
part of 1861.

No steps seem to have been taken  
to procure signals in lieu of those lost, although Sir  
Colonel Johnston, when reporting on the 12 July 1861,  
upon the proposed opening of the line from Negapalam  
to Tiruvallur, seems to have been under the impression  
that a fresh supply was expected, and recommended  
that, pending their arrival, the trains should be run  
under the protection of hand signals, and of the  
Station Telegraph.

The order of Government quoted at the  
head of these observations has been communicated  
to the

And

to the Agent -

Madras -  
25 August 1888  
Main Street Mayn R.R.  
Acting Consulting Engineer Railways

To

The Secretary to Government  
S.P. Works  
Fort Saint George

to the Agent -

*Manikavathur M. R.*

Madras  
22 Aug 1866

*22/1866*  
No. of Govt. Order  
RAILWAY DEPARTMENT

From

The Consgr. Engineer for Railways,

To

The Secretary to Government,  
P. W. Dept.

Dated *22<sup>nd</sup>*  
Received *22<sup>nd</sup>* August 1866.

No. 256.

Enclosures, No. 2

*Observations on  
a letter from the Agent  
Traffic Manager of the  
G. & S. Ry. forwarding  
recommendations from the  
Chief Engineer, regarding  
the erection of semaphore  
signals &c.*

*22798-20 Sept/66*

*2798*

Public Works Department.

*3485*

*2798*

PROCEEDINGS of the MADRAS GOVERNMENT  
Under date the 22<sup>nd</sup> Sept/66  
Read the following

*The Consgr. Engineer for  
Railways.* (Here enter No. 356 dated 22<sup>nd</sup> Aug/66)

The Government quite agree with the Consulting Engineer that the freedom from accident with which the Great Southern of India Railway has hitherto been rewarded, without the aid of Semaphores, is a fortunate circumstance but cannot be adduced as an argument for dispensing with the use of those signals.

*W. R.*

and the Agent will  
accordingly be in-  
structed to take mea-  
sures for establish-  
ing them as speedily  
as possible -

*W. L.*

5  
3 The Consulting Engineer  
for Railways  
Sept 11/87  
13  
2

P. W. 1867. Department.

*Proc. of Govt. for September*  
No. 2770

PROCEEDINGS OF GOVERNMENT *of the 1867*

Dated *3 Sept 67*

*Instructions  
issued for the early  
Establishment of Sem.  
phones on the Great  
Southern of India Rail-  
way.*

*155-56*