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MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.	1445	Press
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Dated	2. 6.	1953.
		18/4

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
2nd June 1874.*

No. 24. Read the following letter from Lieutenant-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, dated Madras, 5th May 1874, No. 265:—

I HAVE the honour to submit, for the information of Government, a report*
by the Deputy Consulting Engineer
upon the condition of the Carnatic

Company's line between Arconum and Conjeveram, which has been lately inspected by him. The Quarter Master General has been addressed regarding the shed alluded to in paragraph 10.

Note on an Inspection of the Open Line of the Carnatic Railway on the 23rd April 1874.

THE line is in good running order, but requires ballasting and lifting in a few places, and this is being done as fast as is possible with the small maintenance establishment employed. The services of the gangmen are utilized generally in all cases where extra work can be done by them; for instance, in taking out foundations for the protective works. The strictest economy in all departments is observed, as by this means only can the working expenses of this short line with its light traffic be made to bear a fair proportion to the receipts.

2. The wire fencing is in good order, but from the 15th mile up to Conjeveram the vegetable fencing is weak in many places, where aloes do not thrive. Owing, however, to the sterile nature of the country here, no cattle graze near the line, and cases of trespass seldom occur.

3. The minor protective works are well advanced; certain walls of strong section have in all cases being carried to depths of 4 and 5 feet below the flooring, so that there will be no probability of scour in future. The protective works at $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, $1\frac{1}{2}$, $2\frac{1}{2}$, $3\frac{1}{2}$, $4\frac{1}{2}$, $5\frac{1}{2}$, $6\frac{1}{2}$ and $7\frac{1}{2}$ miles are completed, and the remainder will be put in hand and finished before the May festival.

4. In the Pulloor bridge the pier wells which were broken away some time ago have been built up, hearted with concrete and grouted. The protective works to this bridge will be commenced on 1st May. The wells on both the up and down stream sides will be 14 feet deep, with curtain walls 5 feet high, and 1 foot of flooring, giving a total depth of 20 feet below river bed. The work has been let on contract, and the bricks are now ready, and the well curbs being constructed.

5. The arch of a 3 feet road culvert in the 11th mile having cracked and become unsafe, the weight has been taken off the arch by long beams resting on cross sleepers laid in the foundation level. It is proposed to remove the arch and substitute wooden girders, as has been done in a similar case in the 7th mile.

6. In the south abutment of the Cortelliar bridge where a good deal of scour took place in the floods of November 1872, a crack has occurred, but this has been watched carefully during the last three months and no further settlement has taken place. It is proposed to underpin the abutment by means of cross walls with the intermediate spaces filled in with concrete, and to build a curtain wall along the face of the abutment and wings to prevent further action on the foundations.

7. The stock of teak sleepers having become exhausted, it will be advisable to make further renewals with creosoted pine similar to those for the metre gauge; but if teak is used the cross section ($6\frac{1}{2} \times 3\frac{1}{2}$) should be increased, as the present sleepers, weighing only 45 lbs. each, make too light a road. I am informed that the half-round pine sleepers sent out for the Great Southern of India Railway Extension weigh between 70 and 80 lbs. each.

8. Portions of the wood-work in ten goods wagons are being renewed. Like the whole of the rolling stock in this line the bodies of these wagons are of composite construction, the under frames being of iron, and the other parts of teak. The flooring and sides are of deal, and as the

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*Proceedings of the Madras Government, Public Works Department,
2nd June 1874.*

wagons have been in use since 1864 these portions of the wood-work have quite worn out. The whole of the goods stock is required for the conveyance of passengers during the May festival. The wagons can be reduced to the metre gauge by shifting the axle pins, and although, owing to the diameter of the wheels not corresponding with those of the new stock ordered for the metre gauge, it will not be advisable to run them together, the present wagons can be utilized for ballasting purposes. In the coaching vehicles, it will probably be advisable to substitute the larger wheels.

9. The traffic from Conjeveram has fallen off largely, owing to the failure of crops having left no grain available for export. On the contrary food grains (chiefly raggy) are now being brought from Bangalore and the North-West Line. The bulk of the goods traffic is now from Arconum instead of from Conjeveram, and the passenger traffic which fluctuates with the goods also shows a falling off. I noticed large tracts of paddy abandoned along the line; the tanks are all dry and the small patches here and there which the ryots are endeavouring to bring to maturity are being irrigated from springs. The water-supply at Conjeveram is falling low, and the general health is said to be bad; unless rain fall soon, there will probably be a scarcity of water for persons attending the yearly festival at the end of next month.

10. A shed has been constructed of palmyra leaves near the Rest-house at Arconum within very short distance of the railway fence. The engines on this line burn wood, and although fitted with spark-catchers, we know that these do not always act perfectly. The shed would be easily ignited by a spark from an engine falling on it, and the Rest-house itself be placed in great danger. I would suggest that the Military Authorities be addressed with a view to the removal of this inflammable building.

MADRAS,
24th April 1874.

(Signed) W. H. COAKER, Lieutenant, R.E.,
Deputy Consulting Engineer for Railways.

No. 25.

ORDER THEREON, 2nd June 1874, No. 1,445.

RAILWAY, No. 6.

ORDERED to be recorded.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Consulting Engineer for Railways.

Exd. E. C. Shunker.

Spare Copies

Gobt. of {1874} Madras.
PUBLIC WORKS.

To

THE CONSULTING ENGINEER

FOR RAILWAYS.

Dated June 2nd.

Recd.

Encl.

G. O., 2nd June 1874, No. 1,445.

JUNE.

Nos. 24-25

Inspection Report (Railway).—The Inspection Report of the Deputy Consulting Engineer for Railways upon the condition of the Carnatic Company's line between Arcunum and Conjeveram, recorded.

5-3
Note on an inspection of the open line of the Carnatic Railway, on the 23rd April 1874.

1. The line is in good running order, but requires ballasting and lifting in a few places, and this is being done as fast as is possible with the small maintenance establishment employed. The services of the gangmen are utilised generally in all cases where extra work can be done by them: for instance, in taking out foundations for the protective works. The strictest economy in all departments is observed, as by this means only can the working expenses of this short line with its light traffic be made to bear a fair proportion to the receipts.

2. The wire fencing is in good order, but from the 15th mile upto Conjeveram the vegetable fencing is weak in many places, where aloes do not thrive. Owing, however, to the sterile nature of the country here, no cattle graze near

near the line, and cases of trespass seldom occur.

3. The minor protective works are well advanced: certain walls of strong section have in all cases being carried to depths of 4 and 5 feet below the flooring, so that there will be no probability of scour in future. The protective works at $\frac{9}{14}$, $\frac{1}{14}$, $\frac{1}{18}$, $\frac{2}{12}$, $\frac{3}{1}$, $\frac{5}{12}$, $\frac{5}{15}$, $\frac{6}{10}$ and $\frac{11}{15}$ miles are completed, and the remainder will be put in hand and finished before the May festival.

4. In the Pulloor bridge the pier wells which were broken away some time ago, have been built up, hearted with concrete and grouted. The protective works to this bridge will be commenced on 1st May. The wells on both the up and down stream sides will be 14 feet deep, with certain walls 5 feet high, and 1 foot of flooring, giving a total depth of 20 ft. below river bed. The work has been let on contract, and the bricks are now ready, and the well curbs being constructed.

5. The arch of a 3 feet road culvert in the 11th mile having cracked and become unsafe, the weight has been taken off the arch by long beams resting on cross sleepers laid in the foundation level. It is proposed to remove the arch and substitute wooden girders, as has been done in a similar case in the 7th mile.

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8. Portions of the wood work in 10 goods wagons are being renewed. Like the whole of the rolling stock in this line the bodies of these wagons are of composite construction, the under frames being of iron, and the other parts of teak. The flooring and sides are of deal, and as the wagons have been in use since 1864, these portions of the wood work have quite worn out. The whole of the goods stock is required for the conveyance of passengers during the May festival. The wagons can be reduced to the metre gauge by shifting the axle pins, and although, owing to the diameter of the wheels not

not corresponding with those of the new stock ordered for the metre gauge, it will not be advisable to run them together, the present wagons can be utilised for ballasting purposes. In the coaching vehicles, it will probably be advisable to substitute the larger wheels.

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Madras
26 April 1874

(True copy)

Lt. Col. W. H. Barker Lt. R.E.
Dy. Cons. Eng. for Rlys.

Manthorpe

Madras
5 May 1874

Lt. Col. R.E.
Cons. Eng. for Railways

Railway Department.

CONSULTING ENGINEER'S OFFICE.

No.

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,

* dated
23rd April 1874.

I have the honour to submit, for the information of Government, a report by the Deputy Consulting Engineer upon the condition of the locomotive company's line between Arcorum and Conjeeveram, which has been lately inspected by him. The Quarter Master General has been addressed regarding the shed alluded to in paragraph 10.

Madras
5 May 1874

I have the honour to be
Your most ^{Sir} obedient servant
Manthorpe Lt. Col. R.E.
Cons. Eng. for Railways

Pub: Works 1874 Dept.
No: 2702.
RAILWAY DEPARTMENT.

From
The Consulting Engineer
for Railways,
To
The Secretary to Government,
P. W. Department,
Fort Saint George.

Dated 5 } May 1874.
Recd. 6 }
Endos. 1.
No. 265

Submitting
inspection report of
Dy. Cons. Eng. upon
the condition of the
Cann. Co's line be-
tween Arcorum &
Conferance
With an order

To
En: Mr. C.
of Capt. depts 1874/74.

10/11/74

1445-
ordered to be recorded.

Amn.

21-25.

Recd 9/5/74. Retd - 12/5/74
Recd to Retd 6 Dec 7/74

2702

Govt. of M.S.B. Madras.
PUBLIC WORKS.

The Chief Engineer.

Dated

Encl. 1.

Recd.

2 June 1874. No 1665

Nos. 24-25.

Inspection Report (Railway)

The Inspection Report
made by Com. J. C. for
Railways upon the
condition of the
Company line between
Arcotum & Conformation
records -