

Public Works (1899.) Department.

CONCERNS BOTH BRITISH INDIA
AND INDIAN STATES.

RAILWAY BRANCH.

G.O., No. 388 R₃.

DATED 7th April 1899.

[Despatch Abstract.]

Re - Survey of the alignment of the T. 2. Ry.
Ordered that a notice be published in the Fort
St George ~~Gazette~~ and Trinervelly St. Gazette
authorising the Engineer-in-Chief of the M. Ry.
T. 2. Ry., his assistants and employes, to enter
upon and survey lands in connection with
the _____ of the Resident in Travance & Cochin
requested to arrange for the publication of
a similar notice in the Travancore Gazette
for making surveys in the Travancore territory.

Indexed

BACK PAPERS.

FURTHER PAPERS.

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

RAILWAY.

Government {1899} of Madras.
PUBLIC WORKS.

Recd.

Enclosures

Regd.

{ 1899.

Spare copies

G.O., No. 263 Ry., 4th March 1899.

MARCH.

Travancore Line

Directing the Agent, South Indian Railway, to submit early an estimate of the cost of the re-survey and re-grading of the —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Railway.

Read again the following paper :—

G.O., Nos. 781-82 Ry., dated 6th June 1898.

Read also the following papers :—

From—The Secretary to the Government of India, Public Works Department.
To—The Joint Secretary to the Government of Madras, P.W. Dept., Ry. Branch.
Dated—31st January 1899, No. 012 R.C.

Despatch Travancore and Pamban lines gone home Rs. 15,000 is now sanctioned for re-survey ghât section. Letter follows.

Telegram from—The Consulting Engineer for Railways.
To—The Agent, South Indian Railway.
Dated—1st February 1899.

India has sanctioned Rs. 15,000 for the re-survey of the ghât section, Travancore line. Work can proceed at once. Letter follows.

Telegram from—The Joint Secy. to the Govt. of Madras, P.W. Dept., Ry. Branch.
To—The Secretary to the Government of India, Public Works Department.
Dated—Madras, 13th February 1899, No. 10 B.

Your wire 012 R.C. January 31st allotted Rs. 15,000 for ghât section Travancore Railway, but now reported that impossible to enter that section before May owing to malaria and Agent wants leave to utilise grant in re-locating north from Tinnevely and east from Quilon. Please sanction urgent.

Telegram from—The Secretary to the Government of India, P.W. Department.
To—The Joint Secretary to the Govt. of Madras, P.W. Dept., Railway Branch.
Dated—Calcutta, 16th February 1899, No. 013 R.P.

The allotted grant of 15,000 is left to your discretion subject to orders conveyed in letter of instruction No. 036 R.C., posted yesterday.

From—The Secretary to the Government of India, Public Works Department.
To—The Joint Secretary to the Govt. of Madras, P.W. Dept., Railway Branch.
Dated—Calcutta, 14th February 1899, No. 036 R.C.

In continuation of the Public Works Department telegram quoted in the margin, I am directed to forward herewith a copy of a note prepared in the office of the Public Works Department Secretariat on the project for the Tinnevely-Quilon Railway which was received with your letter No. 857 R., dated 13th December 1895, and to request that the resurvey of the portions of the line as recommended in that note may be carried out.

* Government of India, Public Works Department telegram, dated 31st January 1899.

2. At the same time I am to observe that it must be remembered that the Travancore Government desired that what is known as Valentine's route should be followed, and that therefore Ponalur and Kotarakara must be connected and the general alignment laid out by Mr. Shadbolt and approved by the Durbar should not be greatly altered between Shenakotta and Quilon.

3. I am to add that an allotment of Rs. 15,000 under the head "41. Miscellaneous Railway Expenditure" to cover the cost of the resurvey will be made in a separate communication. An estimate in the usual form should be submitted for formal sanction.

ENCLOSURE.

NOTE prepared in the Government of India, Public Works Department Secretariat, on the Tinnevely-Quilon Railway project.

The plans will probably need a good deal of revision, and the estimate appears low.

2. In regard to the plans—

- (1) A grade of 1 in 150 can be obtained as far as Shenakotta at very little additional expense, and when work is commenced, this should be done as the traffic in the Tinnevely-Shenakotta section is expected to be considerable.
- (2) Beyond Shenakotta the greater portion of the line has a ruling grade of 1 in 100, and this is suitable to the greater portion of the country traversed, and should be freely used.
- (3) On the ghât section the grade is 1 in 80, and this will cause the trains between Shenakotta and Quilon to be loaded not for the grade of 1 in 100 which is the ruling grade of the greater part of the distance, but for the ghât ruling grade of 1 in 80 with its curves of 573 feet radius. It follows, therefore, that unless an assisting engine is used on the ghâts the loads in the ruling grade of 1 in 100 cannot be worked over them; and it is plain that it is cheaper to use an assisting engine for 10 to 15 miles than to run two trains for the whole distance. If an assisting engine is used a grade may also with economy be used which will just admit of the train engine, together with the assisting engine, doing the work in the ghât grade which the train engine can do in the ruling grade. This would allow of a grade of about 1 in 60 being used in the ghâts, and this should be done as the comparatively level ground can be reached in a much shorter distance and a considerable length of the heavy ghât work avoided.
- (4) Very great economy would result from crossing and re-crossing the stream more frequently in the first 8 or 10 miles, as the bottom is rock and the waterway is never more than 60 to 80 feet; bridges should not cost more than from Rs. 5,000 to Rs. 6,000 each, whereas the deep rock-cuttings and tunnels must be necessarily extensive.

2. What is therefore recommended is that before work is commenced—

- (1) The ruling grade to Shenakotta should be made 1 in 150.
- (2) The ruling grade of the remainder of the line should be 1 in 100, except in the ghât section.
- (3) That the ruling grade of the ghât section should be increased to 1 in 60 and that an assisting engine should be placed at Ariankaru station.
- (4) That the line should be carefully set out again in these conditions and that it should be borne in mind that a small bridge across the stream is less costly than a heavy rock-cutting or tunnel of any kind, especially if formation is kept about parallel to the flood level of the stream and about 6 or 8 feet above it.

3. By the freer use of 1 in 100 grades on the ordinary portion of the line and 1 in 60 in the ghâts, all tunnels, except the one at the top of the pass, can be avoided, and no time will be lost in commencing the construction of the line, as the first work to take in hand is the summit tunnel and the line up to it from Tinnevely, and upon this section very little re-alignment is needed.

Telegram from—The Consulting Engineer for Railways.
To—The Agent, South Indian Railway.
Dated—20th February 1899.

Full instructions from India about Travancore survey now received. You may utilize the survey grant Rs. 15,000 to best advantage as local conditions may permit remembering that Hill section probably requires entire realignment. Order issuing.

No. 263 Ry., 4TH MARCH 1899.

From—The Secretary to the Government of India, Public Works Department.
 To—The Joint Secretary to the Government of Madras, P.W. Dept., Ry. Branch.
 Dated—Calcutta, 16th February 1899, No. 0102-A/R.

In continuation of Public Works Department letter No. 036 R.C., dated 14th February 1899, I am directed to convey the sanction of the Government of India to a grant of Rs. 15,000 under the head "41. Miscellaneous Railway Expenditure" to meet outlay during the current official year on the Tinnevely-Quilon Railway survey.

Order—No. 230 Ry., dated 23rd February 1899.

Communicated to the Agent, South Indian Railway, for information.

ORDER—No. 263 Ry., dated 4th March 1899.

The Agent, South Indian Railway, will submit an early estimate of the cost of the re-survey and re-grading of the Travancore line now ordered. Meanwhile he will utilize the allotted grant, Rs. 15,000 for the current year, to the best advantage on the survey of those parts of the alignment which he may be able to undertake, and which may be approved by the Consulting Engineer for Railways.

2. A copy of the Government of India's letter, No. 036 R.C., and of its enclosure, will be furnished to the Agent for information and guidance.

(True Extract.)

FRANCIS J. E. SPRING,
 Joint Secretary.

To the Agent, South Indian Railway.

" Consulting Engineer for Railways.

" Examiner, Guaranteed Railway Accounts, Madras.

" Political Department.

URGENT.

No. 272

South Indian Railway Co., Ltd.

AGENT'S OFFICE,

Trichinopoly, 28th March 1899.

From

THE AGENT,

SOUTH INDIAN RAILWAY,

To

THE CONSULTING ENGINEER

FOR RAILWAYS,

MADRAS.

Sir,

With reference to Madras Government Order No. 263, Railway, dated 4th March 1899 regarding the re-survey of the alignment of the Tinnevely Quilon Railway, I have the honor to request that the required Notification under Sections 4 and 38 of the Land acquisition Act, No. 1 of 1894, be published in the Fort Saint George, and Tinnevely District, Gazettes.

The Travancore Dhurbar should also be moved to issue the necessary notice authorising the Engineer-in-Chief of the Madura-Pamban, and Tinnevely-Quilon Railways, his Assistants, employes and servants to enter upon the lands on the proposed alignment and to make surveys in the Travancore territory.

I have the honor to be
 Sir

Your most obedient servant

M. de Meunier
 for Agent.

M. de

Revenue Department

From the P.W.D (Rep)
Draft order on cos. 1646 of

Under
Secretary.

Para 1 of
the draft order con-
cerns the Rev Dept
and there seems no
objection to its being
counterinitialled.

SAW
31/3/99.

No objection

Me
1/4/99

To P.W.D Rep, Mrs Col no.
no. 92743-4-99.
P.W.D. No. 102

W. H. H.

This may come now

W. H. H.
5/4/99



From
The Agent,
South Indian Railway,
Trichinopoly.
To
The Consulting Engineer for
Railways,
Madras.
Dated
Received
No. 189
ENCLOSURE

Papers to be read in Proceedings:—

Again G.O., dated

4th March

1899, No. 263 Rg

Again G.O., dated

189 , No

Current No.

1646

of 1899, dated 29th March, from

Agent S.Rg

" "

" 189 , "

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" 189 , "

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No 388 Rg of 7/4/99

ORDER.

The following notification to be published in the Fort St. George and Tinnevely District Gazette:

Whereas it has been decided by ^{H. of the Govt. Councils} the Government of Fort St. George to make a re-survey of the alignment of the Tinnevely-Arular Railway traversing the Tinnevely District & the District State of Travancore & Cochin is hereby given to all whom it may concern that in exercise of the powers conferred by Sections 4 and 38 of the

Land Acquisition Act of
1894, His Excellency the Go-
vernor in Council has author-
ized the Engineer-in-Chief
of the Madras-Panbani
and Trivendrum-Dindur
Railways, his assistants
and employees, for the time
being engaged on the under-
taking to enter upon and
survey lands and do all
other acts required for the
proper execution of their
work as provided or
specified in the Land
Sections, in the Trivendrum District

said

District

2. The Resident in
Travancore & Cochin
will be requested to arrange
for the publication of a
similar notification in the
Travancore Gazette for
that portion of the proposed
line lying in the Travancore
territory.

Despatched on 27/4/88

To
The Revenue &
Political Depts for C.I.

29.3.99

To The Agent, P.N.
" Commr of P.N.
" Revenue Dept
" Resident in Travancore
& Cochin
" Collector of Trivendrum
" Capt of Ordnance for
publication of the
notification in Part II
of the Govt. Gazette