

(1) Number of pages _____

(2) Date of repair _____

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.	1264	Press
B.P. No.		Mis.
Dated	5-5-	1875 195

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
5th May 1875.*

No. 95. Read the following Proceedings of the Madras Government in the Political Department, dated 31st March 1875, No. 198:—

ABSTRACT.—*Travancore*.—Letter from the Resident, submitting extracts from a report from the Acting Chief Engineer on the continuation of the Peermade Ghaut road into the Cumbum Valley, Madura, communicated to the Public Works Department; and the Sirkar congratulated on the successful prosecution of the work.

No. 96. ORDER THEREON, 5th May 1875, No. 1,264.

CIVIL WORKS, No. 7.

ORDERED to be communicated to the District Engineer of Madura.

2. It will be observed with reference to Lieutenant-Colonel Roberts' letter recorded with G. O., No. 750, of 18th March 1874, that a fair weather road 12 to 14 feet wide with a limiting gradient of 1 in 20 has been completed between Peermade and the frontier. It is not stated however what point on the road has been taken as the terminus for each district; and the Resident will be requested, in the Political Department, to state whether the water shed mentioned in paragraph 10 of the letter above referred to has been accepted by the Chief Engineer of Travancore.

3. It is noted that it is intended to widen the road to from 14 to 16 feet, to metal it to a width of four yards when necessary, and to thoroughly bridge and drain it except at the Peryar where a jungaur will be maintained.

4. His Excellency the Governor in Council has no doubt that these proposals when carried out will effect every object in view, and trusts that the resources of the Travancore Government will permit of liberal annual allotments being made.

5. It would appear that the work on the British side is not in a satisfactory state, the small sums of Rupees 1,760 for maintenance of the ghaut road and 1,870 for special repairs sanctioned in G. O., No. 1,712, of 25th June 1874, not having been fully availed of; and the damages of last year being consequently imperfectly restored as stated in the Travancore Resident's letter. When the executive agency of the district shall have been made up to its full complement the District Engineer will be expected to arrange for the proper repair of the ghaut before it becomes unhealthy; and for working out the allotment of Rupees 5,000 in the current year's budget item No. 80.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Political Department.
District Engineer, Madura.

Exd. S. T. Austin.
Spare Copies

*Proceedings of the Madras Government, Political Department,
31st March 1875.*

Travancore.

No. 65. Read the following letter from G. A. BALLARD, Esq., Resident in Travancore and Cochin, to the Hon. W. HUDLESTON, Chief Secretary to Government, Fort St. George, dated Trevandrum, 19th March 1875, No. 38 :—

I have the honor to submit, for the information of Government, extracts from a report* from the Acting Chief Engineer, Travancore, on the continuation of the Peermade Ghaut road across

the hills to Goodaloor at the head of the Goodaloor Ghaut into the Cumbum Valley, Madura. The report is, I think, very satisfactory.

2. Few carts have as yet crossed from Madura. The ghaut on the British side, I believe, has been hardly trafficable by laden carts from the damage done last monsoon and the repair works that have been in progress; but when the through communication is thoroughly opened, I am confident a considerable cart traffic will rapidly establish itself.

EXTRACT from a letter from the Acting Chief Engineer, Travancore, to the Diwan of Travancore, No. R, dated 13th March 1875.

I have the honor to report the result of my inspection of the new road across the plateau from Peermade to the Goodaloor Frontier.

2. The road throughout the 24 miles, which is the distance between the two points mentioned, is now freely open for cart traffic, and has been so, by the report of the Assistant Supervisor, since November last. I learn that loaded carts have passed through in December.

3. The present width of the road may be generally taken at 14 feet in ordinary clay cuttings, and 12 feet in rock cuttings. The principal streams have had ramps cut down their banks for the passage of carts in and out during the fair weather; temporary jungaurs will be provided for their safe passage in times of flood. The Perriar, the only considerable or formidable stream crossing, will be worked throughout the year by means of a jungaur. Temporary and, in some cases, permanent culverts have been constructed to deal with the smaller cross drainage.

4. No metalling has in any instance been spread upon the present surface, and as some of the soil through which the road has been cut is of a very rotten and instable nature, traffic can only be maintained under present condition during fair weather. This bad soil is especially noticeable along the section from the Perriar to the frontier, and unquestionably this section of the road will have to be metalled throughout, the soil from Peermade to the Perriar is of a much stronger and stony character, and may stand the traffic of, say, ten or fifteen bandies a-day without being much affected. The difference in the soil of these two sections may be accounted for by the fact that the road from Peermade to the Perriar runs through a perfectly open district over hills covered with short grass and stones, while that from the Perriar eastward is generally through dense jungle, the product of rich and deep soil.

5. The expenditure upon this 24 miles of road has now reached Rupees 65,000 or thereabouts, being equivalent to an average rate of Rupees 2,300 per mile. To entirely complete the road will probably cost Rupees 60,000 more, so that in round numbers it may be said that the road will have been completed at a rate under Rupees 5,000 a mile. To render the road complete it is intended to widen the formation to a width of 16 feet in clay cuttings and 14 feet in rock cuttings; to metal a width of 12 feet where absolutely necessary with a layer of broken stone 4 inches in thickness; to construct dry stone parapet walls 2 feet in height along precipitous places, and to thoroughly bridge and drain the road throughout (with the exception of the Perriar above noted).

*Proceedings of the Madras Government, Political Department,
31st March 1875.*

6. Taking into consideration the difficulty of procuring labor, the high prices paid, (viz., 8, 9 and 10 C. Rupees for ordinary coolies) the comparatively high salaries paid to members of the temporary establishment chargeable to the works, the excessive rain which interrupts work so detrimentally to its economical execution, and lastly, the very heavy work in the shape of rock blasting and revetting that occurs in almost every mile, I think it will be acknowledged that the estimate is a most reasonable one.

7. The detailed estimate is now being prepared and will be submitted in a few days. In round numbers, however, it may be said that the whole project will be accomplished for 1½ lakh of Rupees.

8. I have adopted a width of 16 feet in ordinary ground for the roadway, under the belief that this width will be ample for many years to come for the requirements of traffic.

9. If at any time traffic so increase that it be found desirable to bridge the Perriar, I may here note that such a structure could be erected with considerable ease and at a comparatively small cost. I would roughly estimate a Warren girder bridge to cost Rupees 50,000.

15. The Budget allotment of Rupees 10,000 for this road work for the current year having now been expended, I have generally suspended work along the line. There are, however, some revetment walls which are in course of erection, which it is necessary should be completed; to effect this and adjust outstanding accounts will probably require another Rupees 2,000, which sum, I trust, will be sanctioned over and above the allotment. It is to be hoped that Government will see fit to spare a more liberal allotment during the ensuing year when the most necessary items of metalling and permanent cross drainage may be taken in hand.

18. The work done both as to cost and quality is most creditable to Mr. Sinclair, and I would therefore recommend that the *bonus* may be disbursed to him.

19. In conclusion, I have great satisfaction in being able to report so favorably on the work already done. Great care has been exercised not only to attain good and stable work, but to do so at as small a cost as possible. Great difficulties have had to be contended against, and they have been satisfactorily overcome.

20. I can also speak with satisfaction of the alignment and tracing of the road, considering the extraordinarily broken and undulating nature of the plateau, the line has been most successfully laid down. And I think the Department has just cause to be proud of the work.

21. To give an idea of the broken character of the country I note the following as the distance by road between Peermade, the Perriar and the Frontier, compared with the direct line measured as the crow flies:—

	Direct line.	By road.
From Peermade to the Perriar ...	8 miles 2,160 feet.	14 miles 2,180 feet.
From the Perriar to the Frontier...	6 " 870 "	9 " 3,100 "
Total ...	14 miles 3,030 feet	24 miles.

or an increment of a little less than 9½ miles or about 60 per cent. against the road. Notes as to the various elevations and depressions crossed by the line have already been given by Mr. Barton in a previous report, and it is unnecessary therefore for me to refer to this. The limiting gradient is generally 1 in 20 throughout.

(True Extract.)

(Signed) G. A. BALLARD,
Resident.

No. 66.
Communicated to the Department Public Works.
ORDER THEREON, 31st March 1875, No. 193.

*Proceedings of the Madras Government, Political Department,
31st March 1875.*

2. The Governor in Council congratulates the Sirkar on the successful prosecution of the work which he doubts not will prove highly beneficial to the people affected.

(True Extract.)

Chief Secretary

To the Public Works Department.
" Revenue Department.
" Resident in Travancore and Cochin.

Public works department

Proceedings of the Madras Government.

Read the following

Pro: of Gov: Politicab sph. H.R. J. O. No 198 date 30 March 1895

G.O no 1264 d/5th May/75

Order to be communicated
to the District Engineer of the

It will be observed
with reference to the Call

Robert's letter persisted
with G.O. no yet of it heard

1894, that a fair weather
road 12 to 24 feet wide

with a smiling forehead
off in 20, has been ~~gone~~

pledged between Permian
and the frontier. This

not stated however what
point on the road lay

been taken as the terminus

the President will be

requested

4.6.15 c/pmt/175 no 385

" 18.9mnd " K 359
K 110

Heinrich 1857 26. Jan 1858

Wk: Langs memo 637
16 Aug 1875

Q.C. 257 June 174 10526 1349

28 Sept 1974 No 221

181 March 174 bp 571892
" 810 July 16. 3 No 1834492

Mr. 1875 8000
No. 2323.

Govt. of 1875.

POLITICAL

THE PUBLIC WORKS DEPARTMENT,

100

42

10-11-11

三

100

G.O., 31st March 1875, No. 108.

INDEX.
Nos. 65-66.

Extracts from a report from the Acting Chief Engineer on the continuation of the Fernalde Chert road into the Cimarron Valley, Maryland, contributed to the Public Works Department; and the Survey conducted on the successful preservation of the work.

4

Ch. No. 1266. 5-5-95.

requested in the Political
Department to state
whether the works then
mentioned in para 10 of
the letter above referred
to have been accepted
by the ^{Chief} Engineer of Travancore.

It is noted that it is
intended to widen the
road to from 14 to 16 feet
to meet it to a width
of 12 yards when necessary
and to thoroughly bridge
and drain it, except
at the Puzha where
a sump will be
maintained.

This is all the Gov.
in Council has no doubt
that these proposals
when carried out will
effect every aspect in
view; and trusts that
the

50
resources of the Travancore
Government will permit
liberal annual allotment
being made ~~to the~~
~~aid~~

It would appear that
the work on the right
side is not in a satis-
factory state. The small
sum of Rs 1760 for main-
tenance of the Puzha
Road & 1870 for special
repairs sanctioned in
G.O. No 1712 of 25 June 17,
not having been fully
availed of; and the
damages of last year
being consequently im-
perfectly restored as
stated ⁱⁿ by the Travancore
Resident's letter. When the
executive agency of the
District State have been
made up to its full

2323

Govt. of (1875) Madras.

PUBLIC WORKS.

20

The Public Dept.

Dated

Recd.

Expd.

G. O. 5 May 1875. 1264

No. 95-96

Travancore - Passing orders
on the President's letter sub-
mitting extracts from a
report of the Acting Chief
Engineer, on the continuation
of the Peermade Ghaut road
into the Cinnamun valley,
Madura.