M.R.O. 1—77,006—8-6-37.

(1) Number of pages 10

(2) Date of repair 25-5-62

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Public Works **DEPARTMENT.**

G.O. No.	333-D	Press / Mis.
46-4-165.		
Dated	28-2-	1862.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department, 28th February 1862.

No. 464. Read the following letter from Lieutenant-Colonel J. CARPENDALE, Acting Deputy Chief Engineer, Central Circle, to Lieutenant-Colonel W. H. HORSLEY, Chief Engineer and Secretary to Government, Public Works Department, dated Chepauk, 30th January 1862, No. 10,019:—

SIR,

1 Letter from the District Engineer North Canara, No. 161, dated 17th December 1861, with one copy of Captain Playfair's, Report of 8th November 1861.
1 Sketch.

1. With reference to Order of Government, No. 2,071, of 8th November last, calling for a report on the improvements effected by the Bombay Government to the road from Iddagungy east to Hoobly, I have the honor to forward for submission to Government Lieutenant-Colonel Walker's original report dated 17th December 1861, giving cover to one on the same subject from Captain Playfair of the Bombay Engineers to his Government.

2. The papers have been delayed in this Office for the preparation of an explanatory sketch map which now accompanies.

From Captain G. W. WALKER, District Engineer North Canara, to Lieutenant-Colonel A. J. M. BOILEAU, Deputy Chief Engineer, Central Circle, dated Camp Tulkybyle, 17th December 1861, No. 161.

SIR,

1. On receipt of Extract Proceedings of the Chief Engineer, No. 7,074, of 11th November, forwarding the Orders of Government, No. 2,071, of 8th November, that I should "report without delay on the improvements effected by the Bombay Government to the road from Iddagungy eastwards to Hoobly under the arrangement assented to in Government Order, 27th March last, No. 630," I had just made my arrangements for the trip which I am now completing, viz., from Beitkál up the northern approach, to Dharwar, by the Unshy Ghát, Súpa, and Hullial, returning by Yellapúr and the Kaiga line. As this route would take me so close to the road to be reported on, I thought I could not do better than modify my original intention sufficiently to admit of including its inspection with the other objects I had in view. Mr. Assistant Supervisor Fernandez, the Executive agent nearest at hand, was unfortunately laid up with fever, otherwise I should have saved time by deputing him for the purpose.

2. Another expedient, however, suggested itself, which was to request my brother Officers of the Bombay Engineers in charge of the works on the Bombay side (whom I had previously obliged by every information they wanted about North Canara works), to furnish the information required by the Madras Government. This, in a much more accurate and detailed form than a hasty run over the line would have qualified me to furnish, the kindness of my friends Captains Playfair and Baker has placed at my disposal in the shape of the accompanying report on the very subject, prepared by the former, who is Executive Engineer of Dharwar, for submission to his own Government. I have not therefore had occasion to extend my tour beyond Canara limits.

3. It is to be observed in the first place that the Bombay Government has not availed itself of the concession granted to it of the 21 miles of road from the frontier at Sungattikop (Kirwutty) to Iddagungy; for this simple reason, that it was already in an almost complete state, and perfectly available for wheeled carriages.

4. The operations of the Bombay Department of Public Works therefore, have been limited to the line from Sungattikop to Hoobly, 29 miles, and from Hoobly to Anigherry, 21 more (I believe); which 50 miles of road, it may well be gathered from Captain Playfair's report, were on the 1st May 1861, all but untouched. The subsequent progress made is detailed in his report. The existing traffic line from Anigherry to Hoobly is evidently an ordinary Cotton soil dry weather track. Of that between Hoobly and Kulghutghy, 17 miles, I have

private information that the journey in a light two-wheeled travelling coach, with a change of bullocks half-way, took eight hours in the month of November last, and that over the remaining distance of 12 miles to Sungattikop, no person who could avoid it would risk his goods and chattels in an ordinary bullock bandy.

5. The same conveyance, drawn by the same cattle, above alluded to, would traverse the 21 miles within Madras limits, from Sungattikop to Iddagungy, at the rate of 5 miles an hour; the only obstacles being three finished drains to which the embankments are incomplete, one bridge of 24 feet span half finished, and one drain of 12 feet span to be built this year, round all which temporary road-ways are made. Otherwise there is an uninterrupted highway, six to eight yards wide throughout, with a gravelled surface in general good repair.

6. This letter shall be strictly confined within the limits of the subject on which I was ordered specially to report, to save further delay in its submission. The progress made with the road and traces west of Iddagungy to Beitkál, will be detailed in a later communication. I have not even had Captain Playfair's report copied, to save time while moving with a small camp and office; I shall therefore feel obliged by its return for record, when done with.

Report showing what has been done on the Bombay portion of the Hoobly and Sedasheghur road.

1. Major Hebbert some years ago, made a rough road, from Hoobly to the North Canara frontier at Sungáttikop to join on with the Madras road, viâ the Arbyle Ghât to Coompta, this line was not then thought of much importance. The grand route for traffic was by a good road, viâ Jurrns and Sircy, and the Arbyle line was only an alternative one (much expense was therefore not incurred thereon, the road making such as it was costing but Rupees 114 a mile).

2. Still it was found to offer so many advantages that Major Hebbert when preparing various projects for roads through this part of the country, proposed that a first class gravelled road, drained and bridged throughout, should be made in place of this mere clearance Public Works in India were at that time attracting great attention at home, and the Court of Directors at once accorded sanction to that portion of Major Hebbert's estimate that had reached them, viz., for the earthworks only, and at the same time gave it to be understood that the drains and bridges would be also sanctioned as soon as the documents connected both thereon arrived.

3. The before mentioned sanction for the earthworks was received in May 1857, and work at once vigorously commenced, only to be almost immediately afterwards stopped with Public Works generally on account of the Mutinies.

4. Time passed on, financial difficulties were great, and no money was forthcoming for this work, which on the 1st May 1861 was in the same state that it had been left in 1857, but at this time the question of opening up the Port of Sedasheghur as nearer to and in every way better suited, as a point of embarkation for Cotton of the Dharwar and neighbouring Districts had gained such ground, as to determine Government to put this road in hand again at once.

5. Some preliminary difficulties with regard to the Court of Directors having only sanctioned the earthworks and not positively the drains and bridges had to be removed, but on the 2nd May last I received a telegram authorizing their immediate commencement.

6. As in 1857, the road for the first five miles out of Hoobly had been commenced and considerable work done thereon, which was deteriorating, and in its unbridged and undrained state useless for traffic, I thought it most desirable to complete it at once; but this involved the construction of two bridges of some size, and the date, 2nd May, was somewhat late on which to begin the excavation for the foundations, in a sandy bed already saturated with water from recent storms, and liable to further floods at any moment; however, the road was of such importance as to be worth the risk, and I took the responsibility of success or failure on myself.

7. The foundations carried down to a considerable depth were got in with some difficulty, and the masonry work to the superstructure then proceeded with comparative ease, for although the rain was often incessant, and our work at times completely submerged little harm was done, and the bridges were completed with the exception of some work to the approaches by the date

I had fixed upon, 1st September, (they have since been entirely finished) each bridge has two spans of 30 or 120 feet of water-way in all, the construction, masonry piers and abutments with a very substantial trussed timber road-way.

8. At the same time the incomplete portion of the old earth embankments no inconsiderable quantity of work was finished, and the whole of the drains 25 in number built, so that on the opening of the season, through portion of nearly five miles out of Hoobly was available for traffic, at its *termina* it strikes the old track so that it can be brought into use at once.

9. While this part of the road was in progress at Hoobly, an entirely fresh portion was commenced within six miles of the Canara frontier at Davékope, here prisoners from the Dharwar jail were employed. The main reason for placing them at Davékope was the utter want of water at other places in the neighbourhood, the previous season had been a remarkably dry one, and water was scarce in all this part of the country.

10. After various difficulties, the principal of which was the *emeute* of the Chinese convicts, put down with a strong hand, the prisoners were comfortably hutted and commenced work. The monsoon was the heaviest that had been known for years, from the end of June the rain was literally incessant in the neighbourhood of Davékope, but wet or dry the prisoners worked on, and the result is a beautiful piece of road for nearly three miles in length running from their huts towards Sungattikop in one direction, and towards Davékope in the other.

11. When work was commenced, the amount available for the year for the whole road from Hoobly to Sungattikop was but Rupees 20,000, to which might be added a portion of the amount allowed (Rupees 25,000) for the Anigherry and Hoobly road, a continuation of the same line (see Budget items 31 and 36 of the Budget Part 2. B,), the work was therefore started on this basis of Rupees 45,000 in all from Anigherry to Sungattikop.

12. It was afterwards however found that so anxious was the Government to complete the work as soon as possible, that considerable additional sums would be granted—there came the question of labor, at Hoobly all the spare labor was employed under the European Subordinate in charge of that portion, and the one in charge at Davékope had to look elsewhere; with difficulty he procured a scanty supply; at that time so heavy was the rain that a new difficulty supervened, they refused to put pick in ground in such weather, however as breaks occurred they did set to work, and by the 1st November had a considerable quantity of work to show.

13. Having thus described the operations on the two separate divisions of the Hoobly and Sungattikop road during and immediately after the rains, it now remains to speak of the Hoobly and Anigherry portion for the same period.

14. The main line of supply for cotton to Hoobly is viâ Anigherry, and it runs entirely through the black Cotton soil, the old native track of course may be said to be impassable during and immediately after heavy rain, but it can be traversed after a little sunshine, and in the dry season soon becomes pretty smooth and easy. The mere fact of the black soil, therefore, was not the great impediment to communication with Hoobly, but three nullahs or rivers respectively at Buddrapoor, Nalowdee and Seergoopee intersected the road, and after rain, even before the regular monsoon, seriously impeded traffic; of all these by far the most formidable was the Benihal, its bed is of the most treacherous mud, there are traditions of its having once in a time swallowed up an elephant, and the stories of the difficulties experienced in passing it are rife in the Collectorate, often when a break in the monsoon would otherwise have afforded a chance for carts pushing through to Hoobly this river stopped the way.

15. So much was the difficulty caused by this nullah experienced by the people, that they subscribed largely for throwing bridges across it on two places, the one on the Dharwar road does not require further mention here, but the one so built by me on the Anigherry road, being on the direct line of the new road, has saved the necessity for the one provided for in the project. Shortly after (also by private subscriptions) I had built the bridge at Nalowdee, so that for the new road only that at Buddrapoor has to be constructed; for it, during the rains all the timbers were cut and prepared, they are now being carted to the site, and thus the last remaining bridge between Hoobly and Anigherry will be completed by the end of the year or early in January.

16. With regard to the road work itself, the only feasible way of making a really good road in the black plains, is to raise it considerably above the face of the country; gravel is obtained with difficulty and at great expense, and therefore the body of such embankment must be of the black soil itself. Such a nucleus is now being thrown up, to an average height of two feet; it was with the other work commenced during the rains, and I have great hopes of completing the rough bank between Hoobly and Seergoopee before the end of the present year, to complete the whole bank between Anigherry and Hoobly before the next rains, and also to build many of the drains required therein; it being useless to metal or rather gravel this bank before it has at least received a partial consolidation from the rains it is proposed to allow it to weather till, say, the middle of next rains, and then cover it to about one-half feet in depth by the gravel which will have then been collected for the purpose; this gravelling will be thus partially consolidated by the latter portion of the monsoon and a good road opened for traffic on this portion by the cold weather of next year; but I am anticipating, to return to what *has* been done, which I now collect in the form of a résumé.

17. Résumé of work performed from the commencement on the 2nd May 1861 to the 1st November 1861, the greater portion being executed during heavy rain:—

From Seergoopee (*i. e.* between Anigherry and Hoobly) to Hoobly,

$4\frac{1}{2}$* miles of black earth embankment thrown up.

2 Drains completed,
2 Do. nearly so,
1 Do. commenced.
} this work only just commenced.

Buddrapoor bridge—all the timber prepared, piles cut, planks sawn, wood work fitted, &c., and a part carried to the site, to be finished this year or in January of the next.

* To be added to this is 1 mile made in 1857, which gives $5\frac{1}{2}$ in all.

Note.—Bridges at Seergoopee and Nalowdee previously built by subscription.

From Hoobly towards Sungattikop nearly five miles of road open for traffic. On this since 2nd May, two bridges, each 60 feet water-way, have been built, and 25 drains, with considerable eathworks.

Continuing on, nearly 2 miles of embankment has been thrown up and the drains on it are in progress, thus 7 miles of the road immediately at Hoobly will be opened this year.

From Kulghutghy towards Sungattikop nearly 6 miles of road has been made, of which more than 2 miles has been finished and drained complete and can be travelled over, besides this a great deal has been done in the way of burning charcoal, collecting stone for bridges, &c.

	RS.
The total expenditure from the 2nd May to the 1st November on the whole road has been...	27,066
Adding to which the previous expenditure in 1857	11,908
The total amount spent up to the above date is... ...	38,974

18. Having thus shown what has been done during what is not generally considered the working season, I will now proceed to consider the prospects of the new road from Hoobly to Sungattikop, and Hoobly to Anigherry, as regards completion and being available for the traffic to Sedasheghur.

19. Although I shall show that there is every probability that the new line of road from Hoobly to Sungattikop will be open throughout before the next rains, still I beg that it may be held in mind that such an opening, is neither of vital or even material consequence to the success of Sedasheghur as a Port, or to our communications therewith. We have already a road, bad it is true in parts but sill a serviceable road (as has been proved over and over again) through our Districts; on from Sungattikop a very fair road leads through the Madras Districts to Idagungy, the point where the Kaiga Ghát line turns off, and as soon as that Ghát is ready, Sedasheghur is opened up, till then it is sealed to us.

Between Hoobly and Sungattikop the work to be done is as follows:—

15 Miles of road to be completely made.
6 Miles already partially completed, to be finished.
Drains of which a good many are in hand, to be completed for the above 21 miles.

The great difficulty to overcome is the scarcity of labor; this never procurable in any in these Districts, is now scarcer than ever. I myself am employing a good deal on rks almost as important as this road, the demand for cart drivers to take the cotton to has taken away numbers, and the impetus given to agriculture owing to the great and osperity of the country has increased the usual demand from that source. The Railways listant have probably also absorbed their quota. The causes are various, but the fact is hat labor in any quantity is not obtainable, not that I have a mere handful employed. 1st November, excluding the prisoners, I mustered coolies, men, women dren, with the prisoners, I had in all and of other labour, bricklayers, cartmen, a grand total of but I want many more.

. On recently arriving at Hoobly on my tour, I found the coolies leaving and about to ıy works, owing to greater inducements being held out to them elsewhere. I have been l sorely against my will to raise the rate for an able bodied man to 3 Annas per diem, of that of $2\frac{1}{2}$ Annas previously ruling, this may attract more people to the work, I have ıgers out in every direction. Mr. Gordon the Assistant Collector is on the look out for ıd I have taken every step I can think of to fill up my weak muster rolls. As a last resource directed that if 200 men for whom some months ago a messenger was sent to the Goa cts for work on the Tenaí Ghát, are procurable, and if they can be induced to come so far from their homes as Davékope, they are at once to be sent there. I shall not relax in my s, and what can be done to get more labor shall be done.

23. For skilled labor we are better off, and for the completion of three of the bridges which ot of great magnitude I feel pretty confident the largest, that at Dastikope, very lofty having entre arch of 50 feet span with two side ones of 30 feet each, will give trouble. The rains have nted its commencement till lately, the foundations are now being excavated and the work be prosecuted as rapidly as possible. The nullah can be crossed all the year except in very y rains when the floods are out. The old road has good approaches down to it, so its non- pletion will not much affect the traffic. I have thought also in case the arches cannot be pleted in time of making a temporary road with the timbers of the centres which are now g prepared.

24. I had written thus far on the 8th November when the delay caused by a reference to ffice for some information with regard to the expenditure, gave me an opportunity of again ing the works along the whole line of road, and on this day, the 12th, having just returned efrom I am able to speak more cheerfully of the prospects of the final completion of the bly and Sungattikop portion before the rains of the present year.

25. On arriving at Davékope I found my messenger to the Tenaí Ghát had been success- the party from Goa which had just arrived there, were at once sent on, and I had the pleasure eing on the break towards Sungattikop 250 wiry little fellows just setting to work. These with the assistance of a few Lumanys (*Gipsies*) already at work there will enable me to plete the road from Davékope to the frontier, if all goes well, by the end of January next.

26. Between the Birtee nullah and Davékope there is already a good deal of work done, of that piece also being completed in time there is little fear, it includes two bridges ectively over the Bheem and Tote Surroos for which a good deal of material has been collect- and which will now be pushed on vigorously.

27. I also found the foundations of the large bridge at the Birtee nullah dug down nearly the full depth, the hard stratum on which the work is to be finished showing itself here there.

28. I have before shown that 7 miles in all at the Hoobly end will be ready in December this year (5 miles being already open for traffic); this brings us to Chelumttee where a small bridge is required; on from this to Ooginkeree is pegged out, and of its completion there is no doubt.

29. From this description, with a glance at the rough sketch, it will be seen that there is a piece of the road lying between Ooginkeree and the Birtee nullah at present untouched though lined out and only requiring labor. Now I have recently understood that some Wuddurs and others are procurable in the Jaghire of Sirhuttee and Lukmeshwer, for these Mr. Gordon has been kind enough to write explaining the good wages to be obtained on my works, and I have also asked Major Anderson the Assistant Political Agent to publish a similar notification. I have great hopes of a supply from this source, which will put the whole road on a fair footing of good progress. I have also, seeing the successful result already obtained there, sent a messenger again to the Goa territories to try and obtain 150 additional hands. I may mention that my first messenger states that he found the Railway Agents there offering 4 Annas a day; and it was only the comparative proximity of my Districts to their homes that decided the party I have, to come to me at less wages in preference.

30. I conclude this report by stating that in the belief that I am carrying out the wishes of the Government in doing so, I am pushing on the road work without feeling restricted to the expenditure of a certain portion of the estimated sum only. I am already very liberally supplied with money, but in case more may be required this year I trust it may be granted. Should there be any difficulty in procuring it from the Reserve Fund or other sources I believe I can show a saving in other items of my Budget grant, which may be well applied to this work. I will in case more money is likely to be needed, make a timely application.

31. The charge of the road work at the end of this month will be distributed as follows: —

Captain Baker—In charge of the convicts at Davékope (throwing up some heavy embankments in rice land, and finishing off the piece of road in the neighbourhood of these chuppers), and also of the piece of road between Davékope and the frontier at Sungattikop.

Mr. Mulligan, Assistant Supervisor—Between Davékope and the Birtee nullah including the Tote and Bheman Surroo bridges.

Mr. Stubbs, Assistant Supervisor—The Birtee nullah bridge, and the road on to Oogengherre.

Mr. Fawcett—The small bridge at Chelmuttee, the road from Oogingerre to Hoobly and from Hoobly to Anigherry, the latter portion, being simple embanking in an easy country, enables him to superintend a larger portion than the others, he is also assisted by a Surveyor; and the Buddrapoor bridge is being built by the Carpenter Maistry of my office under my own direct supervision.

32. Captain Baker is of course only employed as a temporary measure, hanging on until the transfer question is decided, he can leave without inconvenience at a moment's notice; but I should feel more at ease and confident with regard to the early completion of the work were I assured that the others, including Mr. Stubbs (at present under orders to join Captain Baker if the transfer takes place), could remain without being changed for others till June next at any rate.

Camp Hoobly,
8th November 1861.

(True Copy.)

(Signed) J. W. PLAYFAIR, Captain,

No. 465.

ORDER THEREON, 28th February 1862, No. 333d.

Ordered to be recorded.

(Signed) W. H. HORSLEY, Lieut.-Colonel,
Secretary to Government.

78

Deputy Chief Engineer's Office
Central Circle
Chepauk.
30th January 1862.

No. 10019.

From
Lieutenant Colonel J. Carpendale
Acting Deputy Chief Engineer &c.

To
Lieutenant Colonel W. H. Horsley
Chief Engineer and Secretary
to Government P.W.D.

Public.

Sir,

With reference to order of Govern-
ment No. 2071 of 8th November last calling
for a Report on the improvements effected by
the Bombay Government to the road from Soldal-
gungy East to Hoobly I have the honor to forward
for submission to Government Lieutenant
Colonel Walker's original Report dated 17th December
1861. giving cover to one on the same subject
from Captain Playfair of the Bombay
Engineers to his Government.

2. The papers have been delayed
in this Office for the preparation of an
explanatory

explanatory Sketch Map which now accompanies.

Deputy Chief
Engrs Office
Central Circle
Shahpur
30th January 1862.

I have the honor to be
Sir
Your Most Obedient Servant
H Garrendale Lt Col
Actng Dy Chief Engr 6 C.

To
Lieutenant Colonel W. A. Horsley
Chief Engineer and Secretary
to Government P. W. D.

8 Mar

Rec.d Quarto 1/h No 253-254
of 8 Nov.r 108-109
Copy sent to Lt.Col.to Engr.
D/ 10 June No.111 of 67

(1)

P.W. 1862 Dehradun
Rec.d of Govt. for Feby.

No 256

From

Lieut.t Col. J. Carpendale
Actg Dy Chief Engr. CC

To

Lieut.t Col. W. F. Stanley
Chief Engr. & Secretary
to Government N.W.P.

Dated 30th January 1862.
Rec.d 2/ Feby

Encl. 2
No 10

With reference to order of Government No. 2071 dated 8th Nov.r last calling for a Report on the improvements effected by the Bombay Government in the Road from Adalaj to Kalol forwards annual Report from Lt. Col. [illegible] beginning Cover to me on the subject from Captain [illegible] Engr.s

Recorded.

First Class
28 Feby/62

No 464 & 465

10 Feby 62