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MADRAS RECORD OFFICE

Government of Madras

Public Works. DEPARTMENT

G.O. No.	3069	Press
~~B.P. No.~~		Mis.
407-407A-408		
Dated	20-12-1873	~~195~~ .

Not to be folded or roughly handled

Read the following papers:—

No. 407. From J. OUCHTERLONY, Esq., to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated London, 15th August 1873.

I REGRET to have to trouble Government again on the subject of the Carcoor high road; but another coffee season is coming round and the condition of this road remains as great a stumbling block as ever.

2. I beg respectfully to refer to my former letters of the 25th January, 25th August, and 21st November 1871, to show the grievous injury that is inflicted on my interest as a cultivator by this road being kept closed against traffic for a portion of the (always short) working season of the year. Briefly to recapitulate: there is, *first*, the inability to engage tonnage whether under steam or canvas on this side, because of the uncertainty when coffee can be got ready on the Malabar coast for shipment; *second*, the imminent risk of injury to the coffee from overcrowding in the estate's stores owing to the only route of transport being closed; *third*, the loss of early opportunities of transit; *fourth*, the risk of the limited dry season on the Western Coast proving insufficient for the preparation of the coffee, and the resulting unequivocal injury from any part of this preparation being conducted during moist weather; *fifth*, the loss of early opportunites of shipping produce on the coast; *sixth*, the extreme risk of having to send a quantity of crop, at a very heavy expense, right across the Peninsula for shipment, owing to the advent of the monsoon closing traffic by sea on the Western Coast; and, *seventh*, loss of interest, possible deterioration in value, with divers other collateral evils; and these are no imaginary risks but what I know to be real from hard experience.

3. I am now informed that this year's impediments to the through traffic by the Carcoor high road are the non-construction of the bridge over the Cherupoya stream, and the falling down of some bridge on the other side of Mambat.

4. In respect of the first, I have indulged a blind confidence that this bridge was long since completed. In the Proceedings of Government of the 4th April 1872, that I had the honour to receive, I observed that, in a letter from the President of the Local Funds Board, dated Calicut, 23rd February 1872, an enhancement of the terms originally agreed upon with the contractor for this bridge had been assented to (paragraphs 1, 2, and 3) and sanctioned by Government (paragraph 2 of Order of 4th April 1872). Thus the question respecting the completion of the Cherupoya bridge remained, as stated in the original letter of the President of the Local Fund Board, dated 23rd January 1872, and which may be given in its following paragraphs:—

"(3.) The *pressing necessity* is the completion of the *Cherupoya* and Eddakurra bridges *before next coffee season.*

"(4.) The completion of the masonry work is *already provided for.*

"(6.) The plans and estimates are herewith submitted, and if now approved by Government there is *still time* to admit of the work being carried out *before the next carting season commences.*

"(7.) The iron would thus be landed before the end of May, floated to site and put up during the monsoon, and the bridges would be *ready for traffic in October.*"

5. It is possible that subsequent delays, owing to the necessitated amendment of the Contractor's estimate, may have prevented the iron superstructure for the bridge being got out prior to the monsoon of 1872; but it is difficult to understand how, with funds provided for the work (paragrahs 3 and 4 Government Order of 4th April 1872,) and with terms of contract agreed upon and an advance made (President Local Funds Board letter of 23rd February 1872, paragraph 1,) a period of 18 *months* should have elapsed without, apparently, anything being done.

6. In the letter from the Executive Engineer, Calicut, dated 1st February 1872, which accompanied the Proceedings of Government of the 4th April, he speaks (paragraph 6) of having erected a "temporary" bridge over the Cherupoya at a cost of Rupees 150, which was "opened" on the 18th December 1871 and "breached" at the end of April, thus showing, as this officer emphatically states, (paragraph 14) that the Carcoor high road in its unbridged state "can be only considered safely *open for cart traffic* 4½ *months in the year*!"

7. I humbly ask Government whether this is a state of things that should continue, and whether traffic along this high road is to be thus circumscribed, because, from whatever cause, the local authorities fail to grapple with the not very arduous work of making a bridge over a stream of 100 feet wide.

No. 437-13.

REFERRED to the Inspecting Engineer for Ports and Communications for report after personal inspection of the actual state of the road and bridges referred to, and their probable state by December next when the coffee crop will be traversing it.

(Signed) G. W. WALKER, Colonel, R.E.,
Secretary to Government, P.W.D.

No. 407A. From Lieutenant-Colonel W. T. F. FAREWELL, Inspecting Engineer for Ports and Communications, to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Chepauk, 12th November 1873, No. 361-21.

WITH reference to your endorsement on a letter from James Ouchterlony, Esq., dated 15th August 1873.

1 Letter from James Ouchterlony, Esq., dated London, August 15th, 1873, I have the honour to report that I have

1 Letter from the District Engineer, Malabar, No. 79, dated 11th August 1873.

closely inspected the whole of the line of road noticed therein, from Goodaloor in South-East Wynaad, *viâ* Nadagany, Carcoor Ghaut, Arcacode and Candoty to Calicut, and I now note, in detail, the condition I found it in.

2. From Goodaloor to Nadagany, at the head of the Carcoor Ghaut, a distance of eight miles, the road is in very good order, and the bridges and culverts appear to be substantially built. An estimate has been sanctioned for metalling the whole line, and 3½ miles of such portions as most needed it have been metalled.

3. The Carcoor Ghaut, 10½ miles in length, is in very fair order; it is not metalled, nor do I think, under the present condition of the traffic on the ghaut,

such as necessary. I observed the almost total absence of drains on the ghaut, as also that should the traffic be found to increase (Ford) will require to be widened in some places.

4. From the foot of the ghaut to the Eddakurra river, four miles, the road is in capital order; where necessary good river shingle and gravel have been used for the road surface. Over the Eddakurra river, a handsome iron lattice girder bridge of 97 feet clear span has just been constructed; the work appeared to me to reflect great credit on the contractor who built it (L. Maylor, Esq., M.S.M.E.); the approaches and asphalte flooring of the bridge are to be put in hand immediately, and the bridge will in all probability be opened for traffic before the end of November; the slight crack in the brickwork of the wing wall of the right abutment, noticed in my report, No. 204, dated 20th December 1871, shows no signs of increase. I pointed out to the District Engineer the advisability of plastering the abutment and wings to height of at least 8 feet from the bed of the river with Portland cement and the remainder with good hydraulic mortar.

5. From the bridge to the bungalow, about half a mile, the surface of the road is very good, and the bungalow itself in very fair order.

6. From Eddakurra to Nellumboor bungalow, a distance of eight miles, the road is excellent; four of the newly stone-covered road drains in this section require to be rebuilt; these are now, however, strongly, though temporarily, covered and are open to traffic; the District Engineer pointed out to me that the timber trusses of the Nellumboor bridge of four bays of 60 feet each on the 6th mile of this section require additional iron straps, which he proposes to fix immediately he receives sanction to the estimate he has already submitted for providing the same; the bridge is in good order, while the chuttrum and bungalow are both thoroughly water-tight.

7. To the Cherupoya river, a distance of two miles, the road is very good; the bridge over this river is still unfinished; its present condition is, both abutments of brick in mortar completed, the central pier completed to a height of 12 feet above the bed of the river, the brickwork looked close, and the material good, but bond has been indifferently kept; this river is to be spanned by two iron warren girders which, it is understood, have arrived at Calicut; the masonry of the central pier however will be too green to allow of their being put up much before February next; in the meantime the District Engineer promises that a substantial temporary bridge shall be constructed over the river by the middle of November. However I advise that a jungar be also kept at the bridge site, in order that should any accident happen to the temporary bridge the traffic may not be seriously impeded.

8. To the Mambat river, a distance of three miles, the road is very good; this river is spanned by a single arch of 25 feet span. The arch is of brick, and when I last inspected the bridge the arch and laterite abutments were intact, though the laterite wing-walls showed slight cracks; I regret now to have to notice that this bridge shows signs of being much shattered, the right abutment has cracked seriously and a portion of it up-stream collapsed, the wing-walls and arch are cracked, and the arch evidently has sunk; on examining the portion of the work that has fallen, the

front course showe... that subsequent bond, all the stones were laid as stretchers; both the stone and ...ctor's estimates were bad; the District Engineer proposes to have the injured abutments ...ot out pri...up and underpinned immediately, adding an inv... flooring with a loaded arch 10 feet above to resist the thrust of the made earth (some 23 feet in height) behind the abutments and wing walls, and, I believe, if this work is carried out at once, the bridge will be saved; the stream it crosses is a very inconsiderable one, most of the water being backwater from the freshes of the Nellumboor river, which is close to it.

9. One mile further on is the Eringeethodu bridge, the destruction of which was reported in my letter printed with G. O., No. 625, of the 25th February 1873; the river is now spanned by a substantial temporary bridge, which has been already severely tested and has been long open to traffic; an estimate for permanently reconstructing this bridge is now before the Local Fund Board. The whole of the remaining five miles of the road from Mambat to Eddawanah, with its minor bridges and drains, is in very good order.

10. Close to Eddawanah on the first mile towards Areacode, the Eddawanah stream is spanned by a laterite arch of 25 feet span; this bridge, in 1871, I reported to be intact; the right abutment is now cracked, and much of the mortar washed out of the masonry joints close to the bed of the river. I deem it necessary, for the safety of the structure, that the bridge should be provided with a floor in the shape of an invert and furnished with a good apron. At the third mile from this bridge the Purrowanahtodu is spanned by timber lattice girders of 46 feet span; the superstructare is in good order, but the laterite abutments are cracked and the scour that has taken place in the bed of the river points to the necessity of constructing a flooring to the bridge, and I believe the safety of the structure would be greatly increased by the addition of two small timber-covered land bays of 15 feet span on either side of the abutments, which would tend to reduce the, at present, very great thrust of the approach embankments (at least 30 feet in height) behind the abutments.

11. Three miles further on a small laterite arched bridge of 12 feet span has collapsed entirely, and a strong temporary bridge has been constructed in its stead; the destruction of this bridge may also be mainly attributed to the want of flooring, the right abutment appears to have been undermined, gave way, and took the arch with it.

12. In all the bridges reported as injured the mortar in the masonry joints close to the bed of the streams, has been scoured out, and thus the laterite stones becoming thoroughly saturated have simply been unable to bear the super-incumbent weight of masonry, and crushed. In 1871, when reporting on these bridges, I noted that the laterite obtainable in the vicinity of the road was a most unreliable material, and I recommended for the better preservation of the stone, etc, etc., that all the naked laterite masonry should be plastered with mortar; an estimate was sanctioned for the purpose and the work executed under the immediate supervision of Overseer Iyaacootty Pillay, who has, I have no hesitation in saying, carried it out most disgracefully; in many places even the moss on the masonry has not been properly removed, while in no place does any attempt appear to have been made to rake out the joints of the masonry previous to plastering; the consequence

is that, in this first season after the work has been ... patches of the plaster have fallen and the remainder is found not to be adher... the masonry, with a slight blow from my riding cane I removed quantities of it; the specification for the work clearly states all joints should be raked out, and a copy of the specification was furnished to Overseer Iyaacootty Pillay, who has neglected to pay the slightest attention to its instructions; this man has been long employed on this line of road, and it is under his immediate personal supervision that all the masonry work was constructed; he is an intelligent man and thoroughly understands what good work is, and should therefore, I consider, be severely punished for what I can only look upon as the result of downright neglect of duty on his part.

13. In regards to letter No. 79, dated 11th August 1873, from the District Engineer of Malabar, also herewith returned, I do not agree with him in regards to the destruction of the minor bridges in question being due to insufficiency of waterway; the chief cause being, to my mind, the wretched materials used, and that most of the work sanctioned under the estimate of Rupees 2,500, for substituting granite for timber platforms, has been badly done; many of the granite slabs have very little bearing, and impinging on the very edge of the abutments have in some instances stripped the face of the abutments, and in most of the places where the masonry has collapsed the want of all attempt at bond is very evident. It is true that some of the beds of the streams have been scoured out below these bridges, but, I believe, had the Overseer in charge of the road taken the ordinary precaution of using a little rough stone for flooring them, scouring would have been effectually stopped.

14. In regards to the materials used for bridges and drains in Malabar, that is laterite and ordinary shell-chunam, I would urge the use of laterite being entirely prohibited, while all surface masonry exposed to the action of water should be laid in Portland cement.

15. The remainder of the road to Calicut from Areacode to Candoty, Manvelly, and Calicut is, without exception, in first rate order, and generally from Goodaloor to Calicut, before the end of November, the whole line will be open for cart traffic.

From Captain H. BAILEY, Acting District Engineer, Malabar, to Colonel G. W. WALKER, R.E., Chief Engineer, Public Works Department, dated Calicut, 11th August 1873, No. 79.

I HAVE the honour to report that on inspecting the road from Eddawanna to the foot of the Carcoor Ghaut I found four of the small bridges had fallen.

2. In April 1872 an estimate, amounting to Rupees 2,500, was sanctioned by the Local Fund Board for giving granite covering stones instead of wooden platforms to the small bridges on this line.

Revenue Board's Procs., No. 557, dated 9th April 1872.

3. Some of these were however of too great a width to cover with granite slabs; a pier was therefore built in the centre, thus dividing the bridges into two openings.

4. It seems, however, to have been forgotten when altering them in this way that putting a pier in the centre reduced the effective waterway to nearly one-half as taking one of those of 12 feet span by 6 feet high the waterway would be 12×3 hydraulic mean depth, whereas as altered it would be $10 \times 1\frac{1}{17}$.

5. The result has been that of those so altered, two have fallen owing to the scour caused by the deficient waterway. In the case of the other two bridges, I regret to be forced to say that the failure is entirely due to the Taluq Overseer's neglect; no notice appears ever to have been taken by him, the foundations have therefore been scoured out and the bridges have given way.

Proceedings of the Madras Government, Public Works Department,

...hat subs... 20th December 1873.

...ctor's estin...

6. The bridge clo... got out pri... of 25 feet high, 25 feet span at springing, 17 at bottom o... abutments is very danger... ...racked; there was too much water in the nullah to see what had caused the failure, but from the way the bridge has gone it would seem as if it had sunk bodily. It may be possible to keep it up, but I am very doubtful of this, the abutments being cracked in half a dozen different places.

7. Of another bridge of 15 × 15 near Areacode the sloping wing-walls and about one-third the width of the arch has fallen; in this case also there can be no doubt that the failure is due to the foundations having been scoured out, as it was erected in 1867, and must have been in good order just before the commencement of the monsoon, as it was then plastered.

TRANSFERRED to the Inspecting Engineer for Ports and Communications, with special reference to Mr. Ouchterlony's letter on the Carcoor Ghaut and road.

10th October 1873. (Signed) G. W. WALKER, Colonel, R.E.,
Secretary to Government, P.W.

No. 408. ORDER THEREON, 20th December 1873, No 3,069.

CIVIL WORKS, No. 28.

ORDERED that Mr. Ouchterlony's letter and the report of the Inspecting Engineer for Communications be communicated, through the Financial Department, to the Calicut Local Fund Board, in the hope that ample provision will be made for completing, and maintaining in good order, the road by the Carcoor Ghaut to the coast.

2 Also that Mr. Ouchterlony be informed that, although it is not considered safe to place the iron superstructure in position on the abutments and pier of the Cherupoya bridge till late in the current season, yet that a substantial temporary bridge is expected to be ready in November; in addition to which a jungar will be maintained at the river crossing. A substantial temporary bridge already spans the other stream beyond Mambat, alluded to in Mr. Ouchterlony's letter, pending reconstruction of the damaged bridge; and in general terms it is stated that no interruption to cart traffic along the whole line from Goodalur to Calicut need be anticipated after the end of November.

3. The Chief Engineer will take notice of Overseer Iyaacooty Pillay's negligence, brought to notice in paragraphs 12 and 13 of the Inspecting Engineer's report, by such reduction in grade as he may consider appropriate.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Financial Department.
" District Engineer, Malabar.
" Executive Engineer, Wynaad.
To Mr. Ouchterlony.

Fxd. S. T. Austin.
Spare Copies

The Secretary to Government
of
Public Works Department.
Fort St. George.

Sir.

I regret to have to trouble Government again on the subject of the Carcoor high road. But another coffee season is coming round, and the condition of this road remains as great a stumbling block as ever.

I beg respectfully to refer
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to my former letters of the 25th January, 25th August & 21. November 1871. to show the grievous injury that is inflicted on my interests as a cultivator by this road being kept closed against traffic for a portion of the (always short) working season of the year. Briefly to recapitulate; there is — first, the inability to engage tonnage whether under steam or canvas on this side, because of the uncertainty when Coffee can be got ready on the Malabar coast for shipment: 2nd the imminent risk of injury to the Coffee from over crowding in the Cotdahs' Stores owing to the only road of transport being closed: 3rd the loss of early opportunities of transit; 4th the risk of the limited dry season on the Western coast proving insufficient for the preparation of the Coffee, and the resulting unequivocal injury from any part of this

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3°. I am now informed that the chief impediments to the through traffic by the Cavcoor high road are, the non Construction of the Bridge over the Cherapoya Stream, and the falling down of some bridges on the other side of Mambat.

4. In regard to the first I have invariably entertained a blind confidence that this Bridge was long since completed. In the Proceedings of Government of the 4th April 1872, that I had the honor to receive subsequent to the date of a letter from the President of the Local Funds Board, dated Calicut 23° February 1872, an enhancement of the terms originally agreed upon with the Contractor for this Bridge had been assented to (paras 1, 2 and 3) and sanctioned by Government (para 2 of order of 4th April 1872). Thus the question respecting the Completion of the Cherapoya Bridge remained as stated in the original letter of the President of the Local Fund Board, dated 23° January 1872; and which may be given in the following paras.

(3) "The pressing necessity is the Completion of the Cherapoya and Eddakurra bridges before next Coffee season"

(4) "The completion of the Masonry work is already provided for"

(5) "The plans and Estimates are herewith submitted, and if now approved by Government there is still time to admit of the work being carried on before the next Casting season Commences"

(7) "The iron would thus be landed before the end of May, floated to site and put up during the Monsoon, and the Bridges would be ready for traffic in October."

5. It is possible that subsequent delays, owing to the necessitated amendment of the Contractor's estimate, may have prevented the iron superstructure for the Bridge being got out prior to the Monsoon of 1872; but it is difficult to understand how, with funds provided for the work (paras 3 and 4 Government order of 4th April, 1872) and with terms of Contract agreed upon and an advance made (Recd Local Funds Board letter of 23° Feby 1872 para 1.), a period of 18 months should have elapsed without, apparently, anything being done

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having erected a temporary Bridge over the Cheruplya at a Cost of Rs 150/, which was "opened" on the 18th Dec. 1871, and breached at the end of April: thus shewing, as this officer emphatically states, (para 14) that the Carcoor high road in its unbridged state "can be only considered safely open for cart traffic 4½ months in the year"!

I humbly ask Government whether this is a state of things that should continue; and whether traffic along this high road is to be thus circumscribed, because from whatever cause, the local authorities fail to grapple with the not very arduous work of making a bridge over a stream of 100 feet wide.

I have the honor to be,

Sir,

Your most obedient Servant

Lord Ulick Browne

London Dec. 10, 1873

Referred to the Inspecting Engineer for Roads & Communications for report after personal inspection of the actual state of the Road & Bridges referred to and returned by 2 December next when the Collector will be moving

J. Dec 1873

Inspecting Engineer's Office for
Ports & Communications
Chepauk - Madras.
12th November 1873

From

Lieut. Colonel W. T. F. Farewell,
Inspecting Engineer for
Ports & Communications.

To

Colonel G. W. Walker R.E.,
Chief Engineer and
Secretary to Government.
Public Works Department.

Sir,

With reference to your indorsement on a letter from James Orchterlony Esquire dated London August 15th 1873, I have the honor to report that I have closely inspected the whole of the line of road noticed therein, from Goodaloor in South East Wynaad viâ Nadagany, Carcoor Ghaut, Attacode and Condoty to

Enclosures:-

1 Letter from James Orchterlony Esq dt 15th August 73

1 Letter from the Dist. Engineer Malabar No 79 dt 11th August 73.

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3. The Carcoor Ghaut, ten and a half miles in length, is in very fair order: it is not metalled nor do I think under the present condition of the traffic on the Ghaut, such is necessary. I observed the almost total absence of under-drains on the ghaut as also that should the traffic be found to increase, the Ghaut will require to be

widened in some places.

4. From the foot of the Ghaut to the Eddacarrah River, 4 miles the road is in capital order, where necessary good river shingle and gravel have been used for the road surface. Over the Eddacarrah River, a handsome Iron lattice girder bridge of 97 feet clear span, has just been constructed, the work appeared to me to reflect great credit on the Contractor who built it. (L. Maylor Esquire M. I. M. E.) the approaches and asphalte flooring of the bridge are to be put in hand immediately and the bridge will, in all probability, be opened for traffic before the end of November; the slight crack in the brick work of the wing wall of the right abutment noticed in my report № 204 dated 20th December 1871, shows no signs of increase. I pointed out to the

District

District Engineer the advisability
of plastering the abutments and
wings to height of at least
8 feet from the bed of
the river with Portland
cement and the remainder
with good hydraulic mortar.

5. From the Bridge to the
Bungalow, about half a mile,
the surface of the road is
very good and the Bungalow
itself in very fair order.

6. From Eddacarnah to
Neelumboor Bungalow, a
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9. To the Mundat River, a distance of three miles, the road is very good, this river is spanned by a single arch of 25' span. The arch is of brick and is arched

Last inspected the bridge, the

arch and lateritè abutments were intact, though the laterite wing walls showed slight cracks; I regret now to have to notice that this bridge shows signs of being much shattered. the right abutment has cracked seriously and a portion of it up stream collapsed. the wingwalls and arch are cracked, and the arch evidently has sunk; On examining the portion of the work that has fallen, the front coursè showed no attempt at bond, all the stones were laid as stretchers and both the stone and mortar used, were bad; the District Engineer proposes to have the injured abutment shored up and underpinned immediately, adding an invert flooring with a loaded arch ten feet above to resist the thrust of the made earth (some 23 feet in height)

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13. In all the bridges reported as injured, the mortar in the masonry joints close to the bed of the streams has been scoured out, and thus the laterite stones becoming thoroughly saturated have simply been unable to bear the superincumbent weight of masonry and crush. - Ed. In 1871, when reporting on these bridges, I noted that the laterite obtainable in the vicinity of the road was a most unreliable material and I recommended for the better preservation of the stone &c &c that all the naked laterite masonry should be plastered with mortar, an Estimate was sanctioned for the purpose and the work executed under the immediate supervision of Overseer Syadacotty Pilla

Pilla, who has, I have no hesitation in saying, carried it out most disgracefully; in many places even the mass on the masonry has not been properly removed, while in no place, does any attempt appear to have been made to rake out the joints of the masonry previous to plastering; the consequence is that in this first reason after the work has been done, large patches of the plaster have fallen and the remainder is found not to be adhering to the masonry; with a slight blow from my riding cane I removed quantities of it: the specification for the work clearly states all joints should be raked out and a copy of the specification was furnished to Overseer Iyaacootty Pilla who has neglected to pay

pay the slightest attention to its instructions; this man has been long employed on this line of road and it is under his immediate personal supervision that all the masonry work was constructed; he is an intelligent man and thoroughly understands what good work is and should therefore, I consider, be severely punished for what I can only look upon as the result of downright neglect of duty on his part.-

4th. In regards to letter No 79 dated 11th August 1873 from the District Engineer of Malabar, also herewith returned, I do not agree with him in regards to the destruction of the minor bridges in question being due to insufficiency of water way; the chief cause being, to my mind, the wretched materials used

used, and that most of the work sanctioned under the Estimate of Rs 2,500, for substituting granite for timber platforms has been badly done; in many of the granite slabs have very little bearing, and impinging on the very edge of the abutments, have in some instances stripped the face of the abutments, and in most of the places where the masonry has collapsed, the want of all attempt at bond is very evident. It is true that some of the beds of the streams have been scoured out below these bridges, but, I believe, had the Overseer in charge of the road taken the ordinary precaution of using a little rough stone for flooring them, scouring would have been effectually stopped.—

5. In regards to the materials used

used for bridges and drains in Malabar, that is, laterite and ordinary shell chunam, I would urge the use of laterite being entirely prohibited while all surface masonry exposed to the action of water should be laid in portland cement.

6. The remainder of the road to Calicut from Kreacode to Candoty, Manvelly and Calicut is, without exception, in first rate order, and generally from Goodaloor to Calicut, before the end of November, the whole line will be open for cart traffic.

I have the honor to be
Sir
Your most Obedt Servt.
Maisworth Lieut Colonel.
Inspecting Engineer for
Ports & Communications.

P. W. 1873 Depart.

From No. 6183.

The Inspecting Engr for Ports & Commns

To

The Chief Engr &
Secretary to Govt.
Public Works Dept.

Dated 12th November/73
Recd. 13th —

Reports on the line of road from Goorlaloor in South East Wynaad viâ Nadagany, Carcoor Ghaut, Area-code and Candoty to Calicut.

No. 407.

No. 3069. 20th Nov/73.

Cir'd Dec/73

failure is entirely due to the Taluq Overseer's neglect, no notice appears ever to have been taken by him, the foundations have therefore been scoured out and the Bridge have given way

6. The Bridge close to Mamba of 25 ft. high 25 ft. Span at Springing 17 at bottom of abutments is very dangerously cracked, there was too much water in the Nullah to see what had caused the failure but from the way the Bridge has gone, it would seem as if it had sunk bodily, It may be possible to keep it up for but I am very doubtful of this, the abutments being cracked in half a dozen different places.

7. Of another Bridge of 15 x 15 near Cherunda the sloping Wing walls & about one third of the width of the arch has fallen, in this case also time can be no doubt that the failure is due to the foundations having been scoured out as it was erected in 1869 & must have been finished order just before the commencement of the monsoon as it was then plastered.

I have the honor to be
Sir
Your most obed.t Serv.t
W.m Taylor Captn
Ag.g Dist.t Engineer, Nairn

Nb

Public Works Department

No. 3069

Proceedings of the Madras Government

Read the following

From J. Ouchterlony Esqr. (A. E. D. 15th August 1873)

From The Inspecting Engineer for Roads & Communications (" — " No 364 of 12th Nov 73.)

Ordered that Mr. Ouchterlony's letter and the Report of the Inspecting Engineer for Communications be communicated through the Financial Department to the Calicut Local Fund Board, in the hope that ample provision will be made for completing and

C. W. 1873 Department

Malabar District

From No. 4190.
The Ag. District Engr.
Malabar

To
The Chief Engineer
P. W.
Madras

Dated 11th August 73
Rec'd 13
E. Ord: 3069-20-12-73

No. 79
P. W. 6183/73.

Reporting the fall of certain Bridges on the Road from Edavanna to the foot of the Cancoor Ghaut

No. 306 in 29 of letter 73.

Transferred Office Copy for Road Communication with Abstract, expenditure, Estimates, Tender & Agreement Forms.

No. 10 of 73

Copy

for Ch. Sec. to Govt 7/13 Aug 73

and maintaining in good
order, the road by the
Parkoor Ghaut to the
Coast.

Also that Mr.
Ouchterlony be informed
that although it is not
considered safe to place
the Iron superstructure
in position on the abut-
ments and Pier of the
Cherapoya Bridge till
late in the current season,
yet that a substantial
temporary Bridge is expected
to be ready in all November;
in addition to which a
dungar will be maintained
at the River crossing. A
substantial temporary

Bridge

Bridge already spans
the other Stream beyond
Manbeth alluded to
in Mr. Ouchterlony's
letter, pending reconstruc-
-tion of the damaged
bridge. And in general
terms it is stated that
no interruption to Cart
traffic along the whole
line from Gudalur to
Calicut need be antici-
-pated after the end
of November.

G.H.M.

The Chief Engr:
-neer will take no-
-tice of Overseer
Ignorance & Pillay's
negligence brought
to notice in para
13 and 14 of the
Inspr:
Inspecting

7.

Chw. 6183

Govt. of [illegible] Colonies.

PUBLIC WORKS.

To The Chief Engineer & Surveyor

Dated 15/12/73

Recd. 20 Dec 1873 Encl. 2

G. O. 20 Dec 1873 No. 3069.

Nos. 407 & 408

Road. Papers relative

to letter from the Chief Engr reporting on the line of road from Goodalore via Nadagany, Carcass Chaut & Candoly to Calicut.

= neis Report,
by such reduction
in grade as he
may consider
appropriate

Govt

Dr Lee
Actg Chief Engr

Jr
Actg
Chief Engr
13/12-73

* desp 30/1/74.

To The Fin.l Despr
" D. Engr Malabar
" Lt: Engr Wynaad
× Asst Collr Calicut
* Asst Engr for Port Canning
Wynaad Collr 13/12/73
× Lieut to whom instructions may be issued
desd to the Assist Collr

No 407-8.

Civil Dec/73

Bridge